
Revised Livermore Seismic Hazard Estimates for 69 Nuclear Power Plant Sites East of the Rocky Mountains

Draft Report for Comment

U.S. Nuclear Regulatory Commission

Office of Nuclear Reactor Regulation

P. Sobel



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Manuscript Completed: October 1993
Date Published: October 1993

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ABSTRACT

This report presents updated Lawrence Livermore National Laboratory (LLNL) probabilistic seismic hazard analysis estimates for 69 nuclear power plant sites in the region of the United States east of the Rocky Mountains. LLNL performed a re-elicitation of seismicity and ground motion experts to improve their estimates of uncertainty in seismicity parameters and ground motion models. Using these revised inputs, LLNL updated the seismic hazard estimates documented in NUREG/CR-5250 (1989). These updated hazard estimates will be used in future NRC actions. A detailed summary of the revised probabilistic hazard methodology, the seismicity and ground motion inputs, and sensitivity studies is presented in a report by J. Savy (1993, LLNL Report UCRL-ID-115111). This report summarizes the Savy (1993) report and documents the 1993 LLNL hazard results for the 69 sites. For the purpose of comparing these probabilistic seismic hazard estimates to the seismic design of the nuclear power plants, a table of safe-shutdown earthquake spectral values is included.

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FOREWORD

The information in this report will be considered by the U.S. Nuclear Regulatory Commission staff in future licensing actions such as safety evaluation reports, reviews of individual plant examination of external events submittals, and early site reviews. The study described in this report is an update of a Lawrence Livermore National Laboratory probabilistic seismic hazard analysis study presented in NUREG/CR-5250.

Any interested party may submit comments on this report for consideration by the staff. To be certain of consideration, comments on this report must be received by the due date published in the Federal Register notice. Comments received after the due date will be considered to the extent practical. Comments should be sent to the Chief, Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Mail Stop P-223, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Further technical information can be obtained from Dr. Phyllis Sobel, Office of Nuclear Reactor Regulation, Mail Stop 7-H-15, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 504-2738.

1 INTRODUCTION

The study described in this report is an update of a probabilistic seismic hazard analysis (PSHA) study presented in NUREG/CR-5250. Probabilistic evaluations are intended to capture the uncertainties in estimating seismic hazard in the Eastern United States (EUS), the region east of the Rocky Mountains. These uncertainties include those encountered in the selection of seismic source zones, rates of seismicity, upper magnitudes, ground motion models, and site correction models.

The U.S. Nuclear Regulatory Commission (NRC) has been sponsoring the development of PSHA methodology by Lawrence Livermore National Laboratory (LLNL) since the 1970's (NUREG/CR-1582). In the 1980's NRC sponsored an LLNL study to develop a seismic hazard methodology for all operating nuclear power plant sites in the EUS (NUREG/CR-3756, NUREG/CR-5250). These probabilistic estimates were conducted, in part, as a result of a 1982 letter from the U.S. Geological Survey (USGS) to the NRC. In that letter the USGS suggested that deterministic and probabilistic evaluations of seismic hazard should be made for sites in the EUS to assess the likelihood of large earthquakes along the eastern seaboard.

The 1980's LLNL methodology included input data provided by 11 seismicity experts and 5 ground motion experts. The seismicity experts defined maps of source zones of uniform seismicity and then described the seismicity of each zone in terms of the rate of earthquakes versus magnitude for each zone. The ground motion experts each provided several attenuation models for predicting ground motion as a function of distance from the earthquake source. LLNL developed a seismic hazard model that used the experts' input and a Monte Carlo simulation approach to provide an estimate of the probability of exceeding a level of ground motion (peak ground acceleration and spectral acceleration values) at a given site. LLNL applied its methodology to develop probabilistic seismic hazard estimates at all 69 EUS operating plant sites (NUREG/CR-5250).

In conjunction with funding LLNL to perform a PSHA study, NRC recommended that the nuclear power industry perform an independent study to provide a coordinated utility position on PSHA estimates and to provide NRC with comparative information. A consortium of nuclear power utilities (the Seismicity Owners Group) funded the Electric Power Research Institute (EPRI) to perform a seismic hazard study. EPRI developed its own PSHA methodology and PSHA estimates at 56 of the EUS sites (EPRI NP-4726, EPRI-NP-6395-D). The differences between the LLNL and EPRI seismic hazard estimates were addressed in NUREG/CR-4885. For example, the EPRI seismicity information was provided by six teams of geoscience experts as opposed to the 11 individual seismicity experts used in the LLNL methodology. The LLNL study described in this report did not examine the differences between the LLNL and EPRI seismic hazard estimates. Instead, this study concentrated on improving the elicitation of data and its associated uncertainty from the experts to better capture the true uncertainty in our state of knowledge.

In the past few years LLNL has applied its methodology to studies at Department of Energy (DOE) sites. During these recent applications, LLNL re-examined the expert opinion elicitation process used in the 1980's LLNL methodology to better characterize uncertainty. On the basis of insights gained from these applications, NRC sponsored a limited re-elicitation of the LLNL experts to refine the estimates of uncertainty in seismicity and ground motion estimates. In 1992 and 1993 LLNL re-elicited input data from the seismicity and ground motion experts using a revised elicitation procedure. Then LLNL revised the PSHA computer code and produced updated PSHA estimates at EUS sites. The results presented here are the improved and updated estimates. A detailed description of the updated methodology is contained in LLNL Report UCRL-ID-115111.

These updated hazard estimates will be considered by the NRC staff in future licensing actions such as safety evaluation reports, reviews of individual plant examination of external events (IPEEE) submittals (NUREG-1407), and early site reviews.

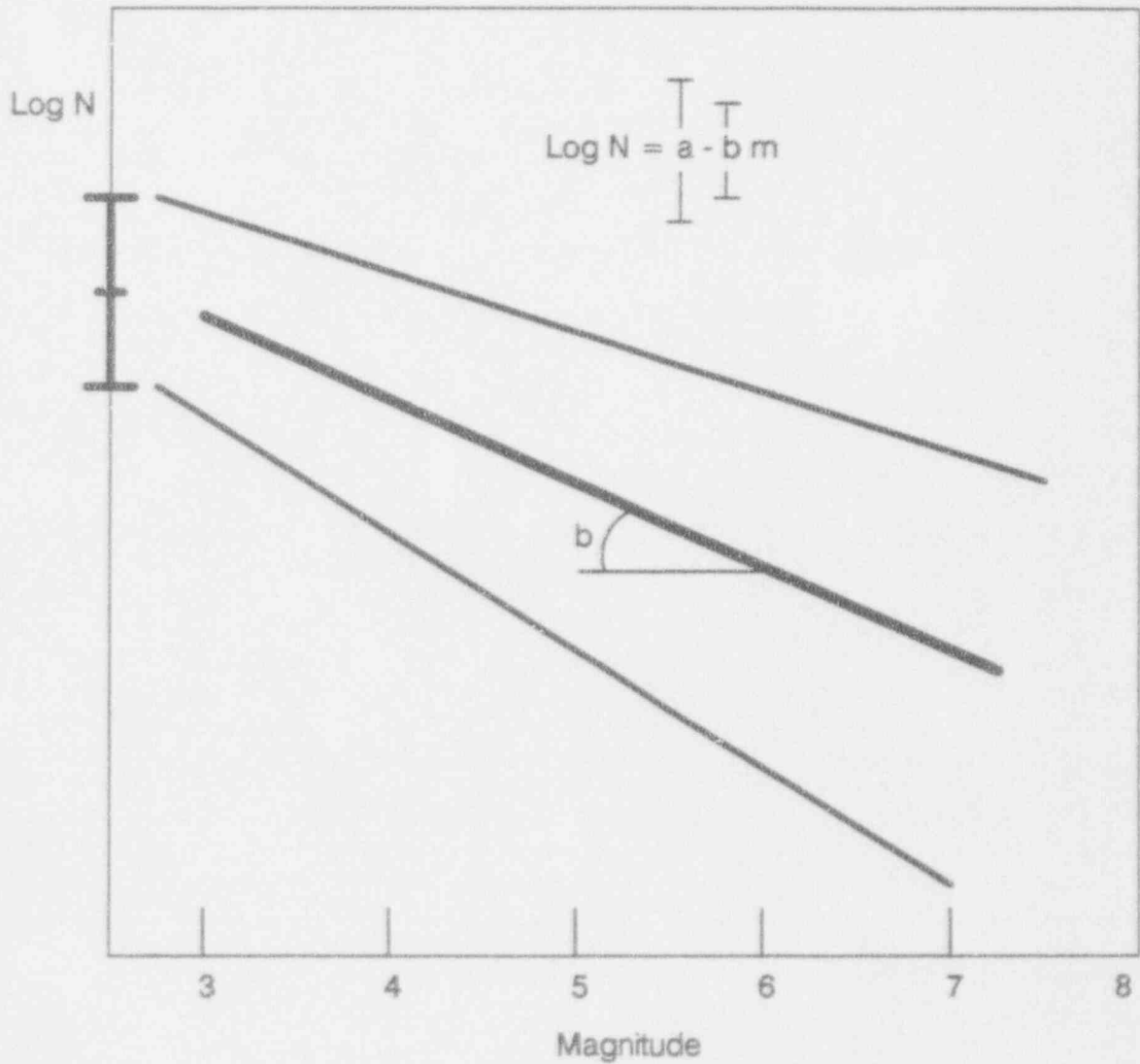
2 SEISMICITY INPUTS TO HAZARD ANALYSIS

In probabilistic seismic hazard analyses, the experts define maps of source zones and then describe the seismicity of each zone in terms of the rate of earthquakes versus magnitude for each source zone. The Gutenberg-Richter relationship ($\log N(m) = a - bm$) describes the number of earthquake (N) expected as a function of magnitude (m) (Figure 1). As reported in NUREG/CR-5250, the seismicity experts were asked to provide a and b values (the intercept on the y -axis and the slope of the rate of earthquakes versus magnitude) for each source zone. The experts were asked to then estimate the uncertainties associated with these a and b values. This procedure led to large uncertainties for the seismicity recurrence rates at the larger magnitudes.

The 1992 elicitation of seismicity experts improved the modeling of uncertainty in seismic recurrence rates, especially at the larger magnitudes. In the current approach, experts were interviewed individually at interactive meetings, instead of filling in questionnaires as they did in the 1980's. Before the interview, each expert was provided with a package of materials that included recurrence curves based on observed seismicity and recurrence estimates based on the a and b values provided by the experts in the 1980's study. The recurrence curves based on the instrumental period (last 30 to 40 years of recorded seismicity) were more helpful because they provided information on the frequency of smaller magnitude earthquakes. The curves for the entire historical period (last 300 years) were more helpful for the larger magnitude earthquakes.

At the interview, LLNL explained the problem with the earlier elicitation of a and b values and described the revised elicitation procedure. The experts were then given the opportunity to revise the maximum magnitudes for each source zone on the basis of recent information. Seismicity recurrence rates, including uncertainty, were elicited by asking the experts their preferred estimate of $N(m)$ at two magnitude values - magnitudes 3.75 and a magnitude value $3/4$ of the way between magnitude 3.75 and the expert's best estimate of

Figure 1 - Earthquake recurrence rates - number of earthquakes versus magnitude. Uncertainties in estimates of a (y-intercept) and b (slope) can lead to unrealistically large estimates of recurrence rates at larger magnitudes.



the upper magnitude. LLNL used data diagnostic tools to check the seismicity inputs for consistency with historical seismicity data. The 1992 elicitation was limited to the seismicity recurrence rates and upper magnitude values. Zonation was not re-elicited.

All the seismicity experts were more comfortable with the revised approach. The result of the elicitation was that the uncertainties associated with every expert's seismicity recurrence curves were reduced significantly at all magnitudes, although there was little change in the preferred values. The estimates of maximum magnitude were generally unchanged.

3 GROUND MOTION INPUTS TO HAZARD ANALYSIS

For the 1980's LLNL study reported in NUREG/CR-5250, five ground motion experts provided models that estimated ground motion as a function of earthquake magnitude and distance from the site. LLNL combined the inputs from all pairs of seismicity and ground motion experts individually to develop an uncertainty distribution estimate of hazard for each pair of experts. In the recent elicitation of ground motion experts, emphasis was placed on uncertainty estimates and the state-of-the-art ground motion models.

To improve the elicitation of ground motion information, a workshop on elicitation was held in May 1992 on elicitation of expert opinion. The workshop participants considered the type of information needed, the format of the elicitation (questionnaires or interviews) and the aggregation of expert opinion. The recent elicitation procedures used by LLNL followed the recommendations developed during this workshop.

The workshop participants suggested that the most appropriate form for eliciting ground motion variability is to elicit the probability distribution of ground motion, with uncertainty, for selected values of magnitude and distance from the site. The workshop participants recommended that the elicitation process involve a meeting to disseminate ground motion information, individual elicitation of the experts and a group feedback meeting. The workshop participants also recommended that the ground motion inputs be aggregated to derive an aggregated ground motion distribution.

A workshop was held in August 1992 to disseminate the most recent research results for ground motion in the EUS and elicit ground motion information. Each expert was elicited individually in interactive meetings with LLNL. LLNL used data diagnostic tools to check the ground motion inputs for consistency. The ground motion elicitation resulted in estimates of ground motion (peak ground acceleration and spectral acceleration) at specific earthquake magnitudes and distances from a site (e.g., for magnitude 5.0 at a distance of 10 km). After the workshop there were additional discussions with the ground motion experts.

LLNL combined the individual ground motion estimates into a composite ground motion model to be used as input for the hazard calculations. The ground motion inputs were combined to form an empirical uncertainty distribution for median estimates of ground motion. Then an empirical conditional uncertainty distribution was developed for the standard deviation of ground motion.

Sensitivity tests showed the hazard estimates were the same if the composite of the ground motion models was used or if individual expert's ground motion models were used in the hazard analysis.

4 HAZARD ESTIMATES AND COMPARISON TO PREVIOUS RESULTS

Using the updated inputs and following the Monte Carlo procedure, which was used in their previous studies, LLNL calculated PSHA estimates for all operating plant sites east of the Rocky Mountains. A public meeting was held on March 9, 1993, to present the LLNL preliminary hazard results. The LLNL report describing the updated methodology (UCRL-ID-115111) is available in the NRC Public Document Room (memorandum from P. Sobel to G. Bagchi, dated October 8, 1993). The 1993 LLNL hazard results for the 69 sites are documented in Appendix A (peak ground acceleration estimates) and Appendix B (uniform hazard response spectra). For the purpose of comparing these estimates to the seismic design at nuclear power plant sites, a table of safe-shutdown earthquake spectral values is documented in Appendix C.

Although the comparison of LLNL and EPRI hazard estimates was not an objective of this program, we find that the updated LLNL methodology reduced the LLNL hazard estimates, thus reducing the differences between the LLNL and EPRI hazard estimates. Figures 2 and 3 show a comparison of the 1989 LLNL, 1993 LLNL and EPRI peak ground acceleration hazard estimates at two plant sites. The largest differences between the 1993 LLNL and EPRI hazard estimates are at low seismicity sites and soil sites.

Figures 4 and 5 show a comparison of the 1989 and 1993 LLNL spectral velocity hazard estimates at two plant sites. The 15th, 50th, and 85th percentile and mean hazard estimates were all reduced. The updating reduced the mean hazard estimate by a factor of 5 to 30 at a peak ground acceleration of 0.2g. The uncertainty in the hazard estimates (e.g., the difference between the 85th and 50th percentiles) was lowered substantially (Figure 6, which is the same as Figure 5 except the y-axis is linear).

Sensitivity studies were performed to determine the effects of using the updated seismicity and ground motion inputs. Updating the seismicity inputs reduced the mean hazard estimates substantially (by a factor of 5) at a peak ground acceleration of 0.2g. Updating the ground motion inputs reduced the mean hazard estimates by a factor of 1 to 10 at a peak ground acceleration of 0.2g; this reduction appears to be site dependent. Further sensitivity studies are planned for 1994 to allow us to better understand the effects of the updated seismicity and ground motion inputs.

Figure 2 - Comparison of 1989 LLNL, 1992 LLNL and EPRI estimates of probability of exceeding peak ground acceleration per year versus acceleration - Pilgrim site.

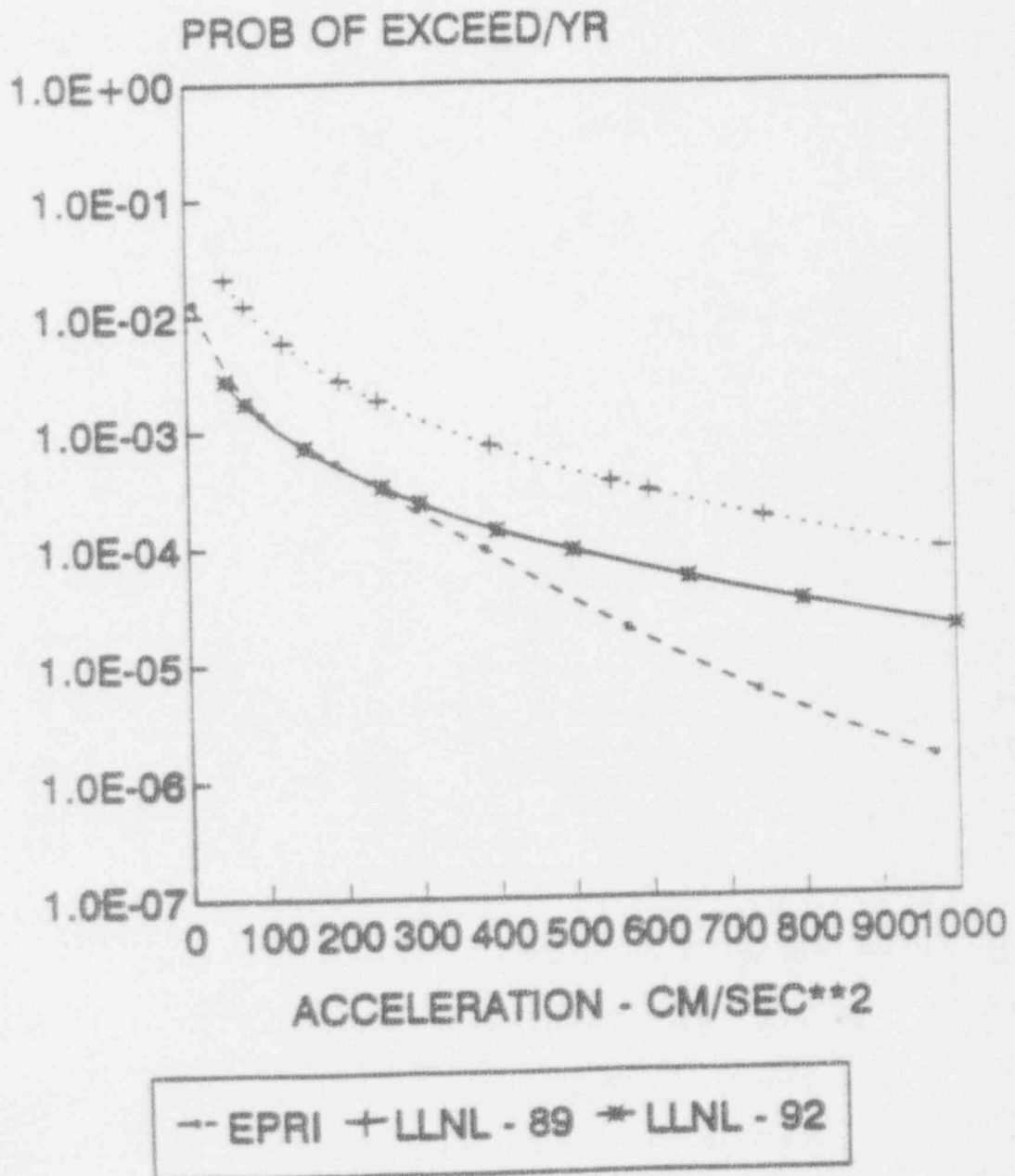


Figure 3 - Comparison of 1989 LLNL, 1992 LLNL and EPRI estimates of probability of exceeding peak ground acceleration per year versus acceleration - Shearon Harris site.

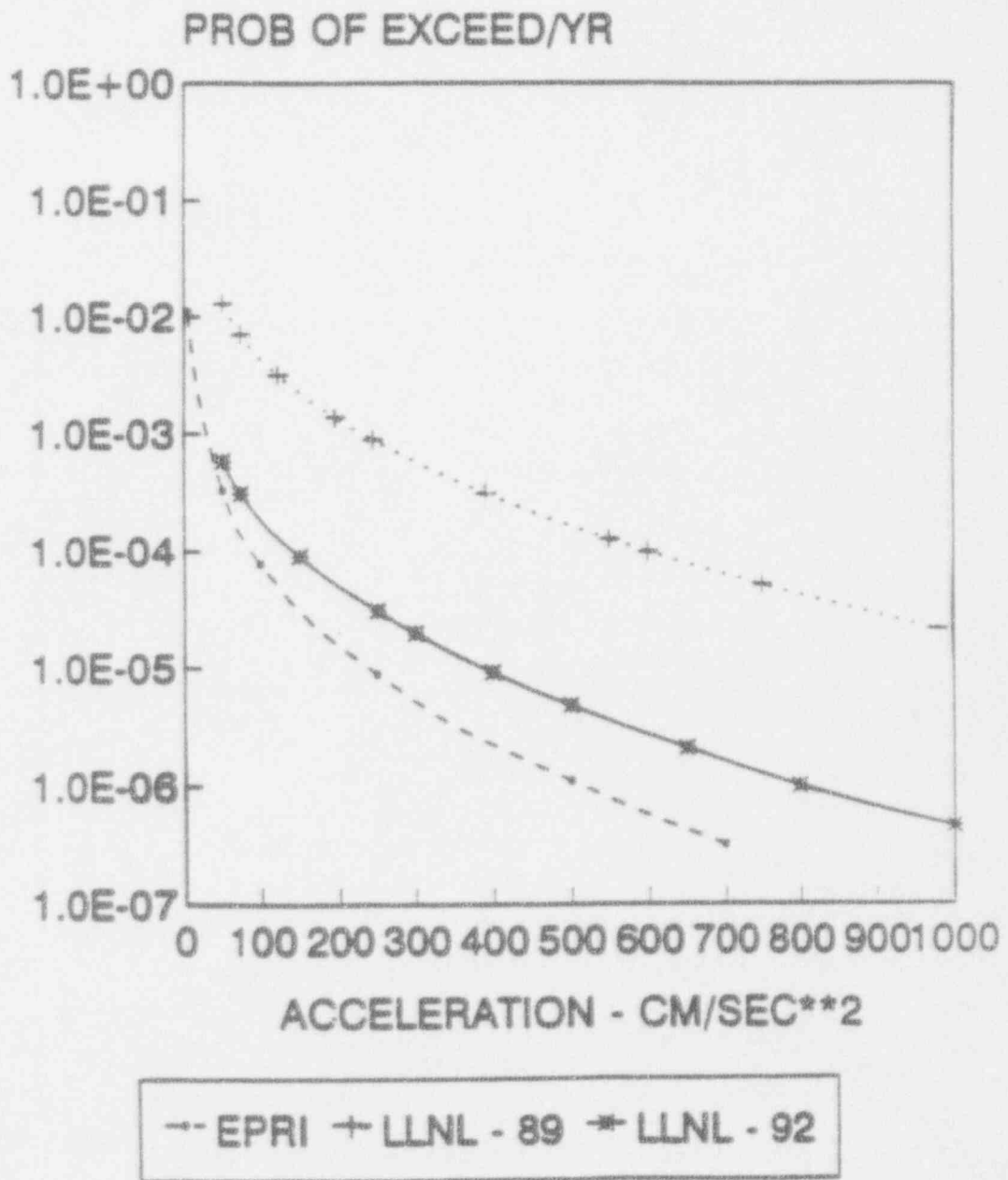
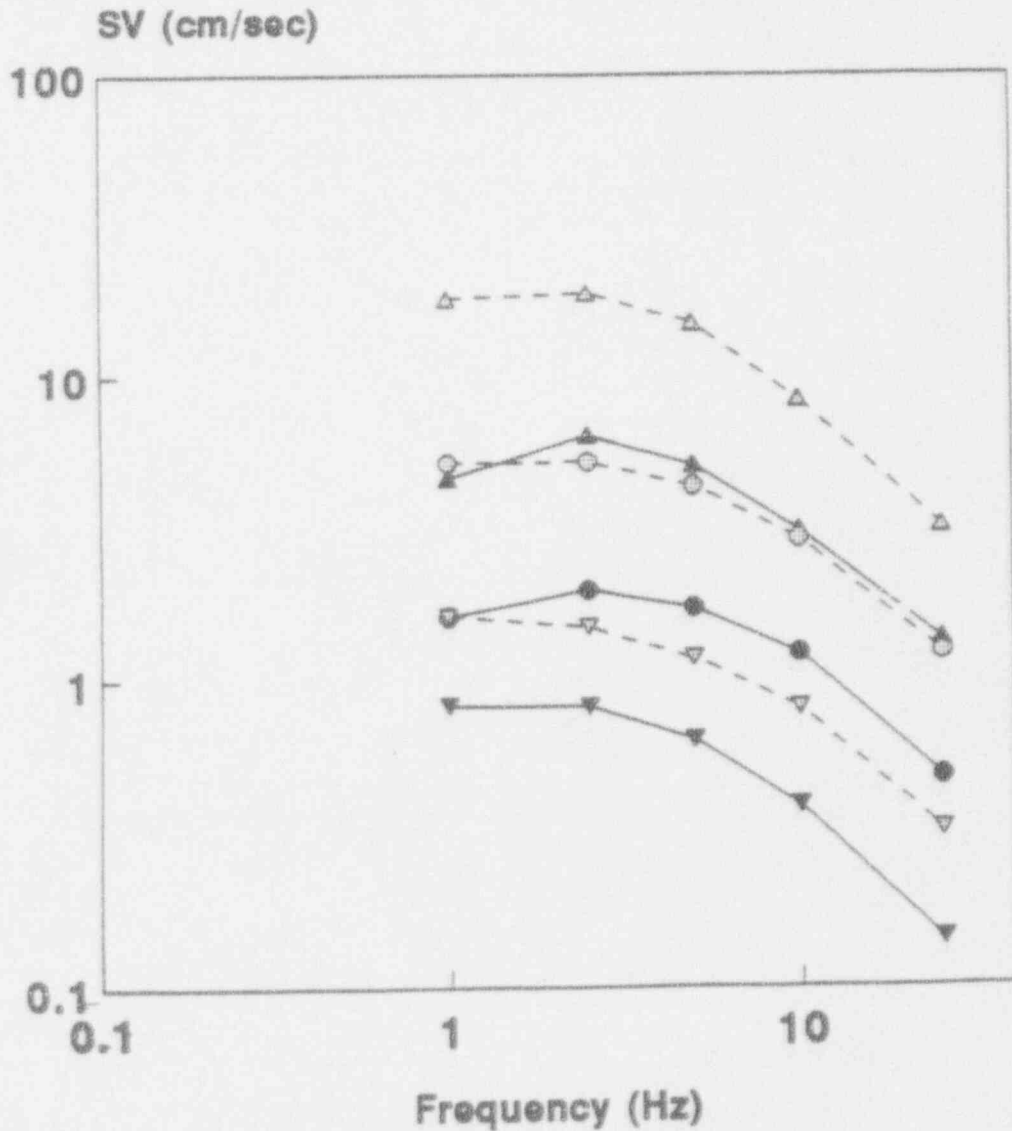
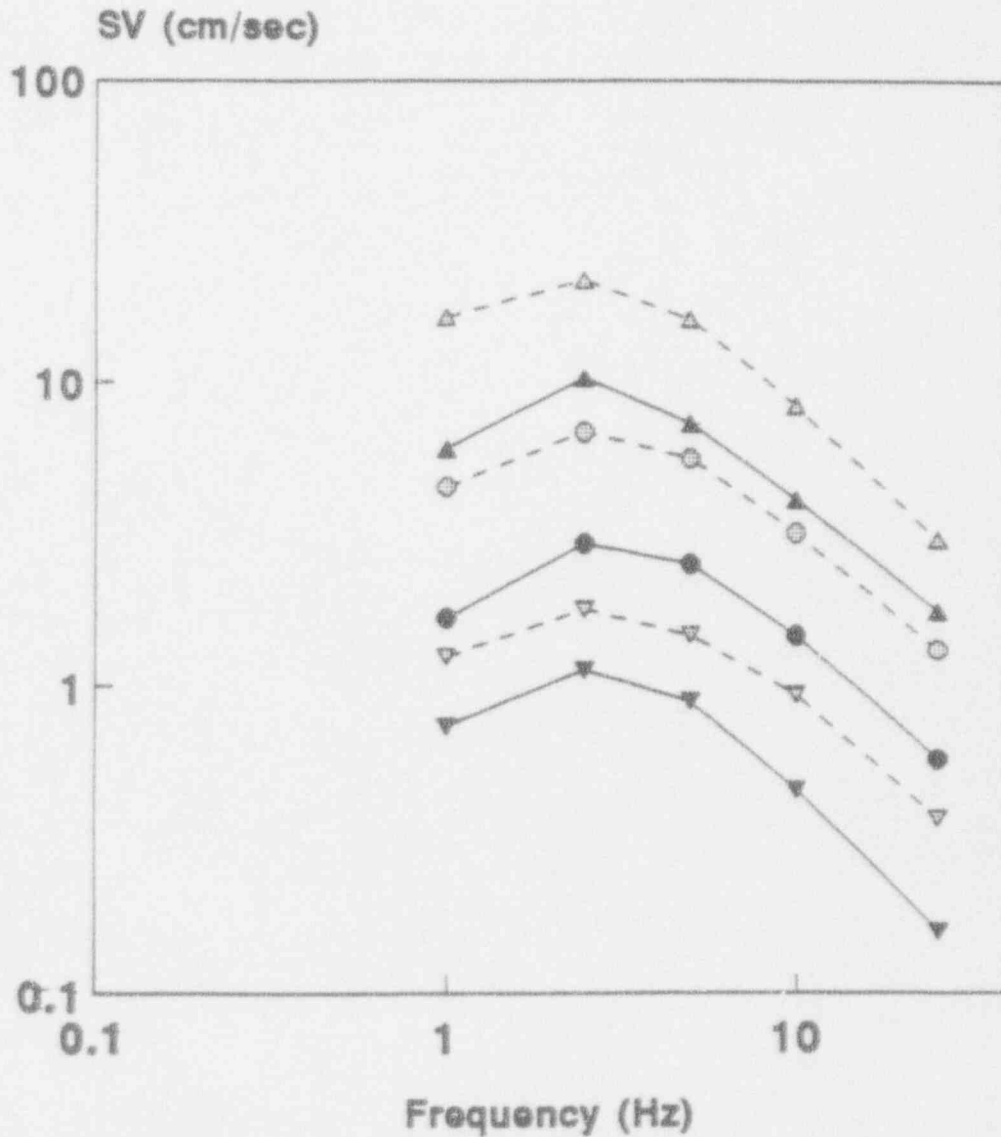


Figure 4 - Seabrook 1,000 Year
Uniform Hazard Response Spectra -
1989 versus 1993 LLNL Hazard Estimates



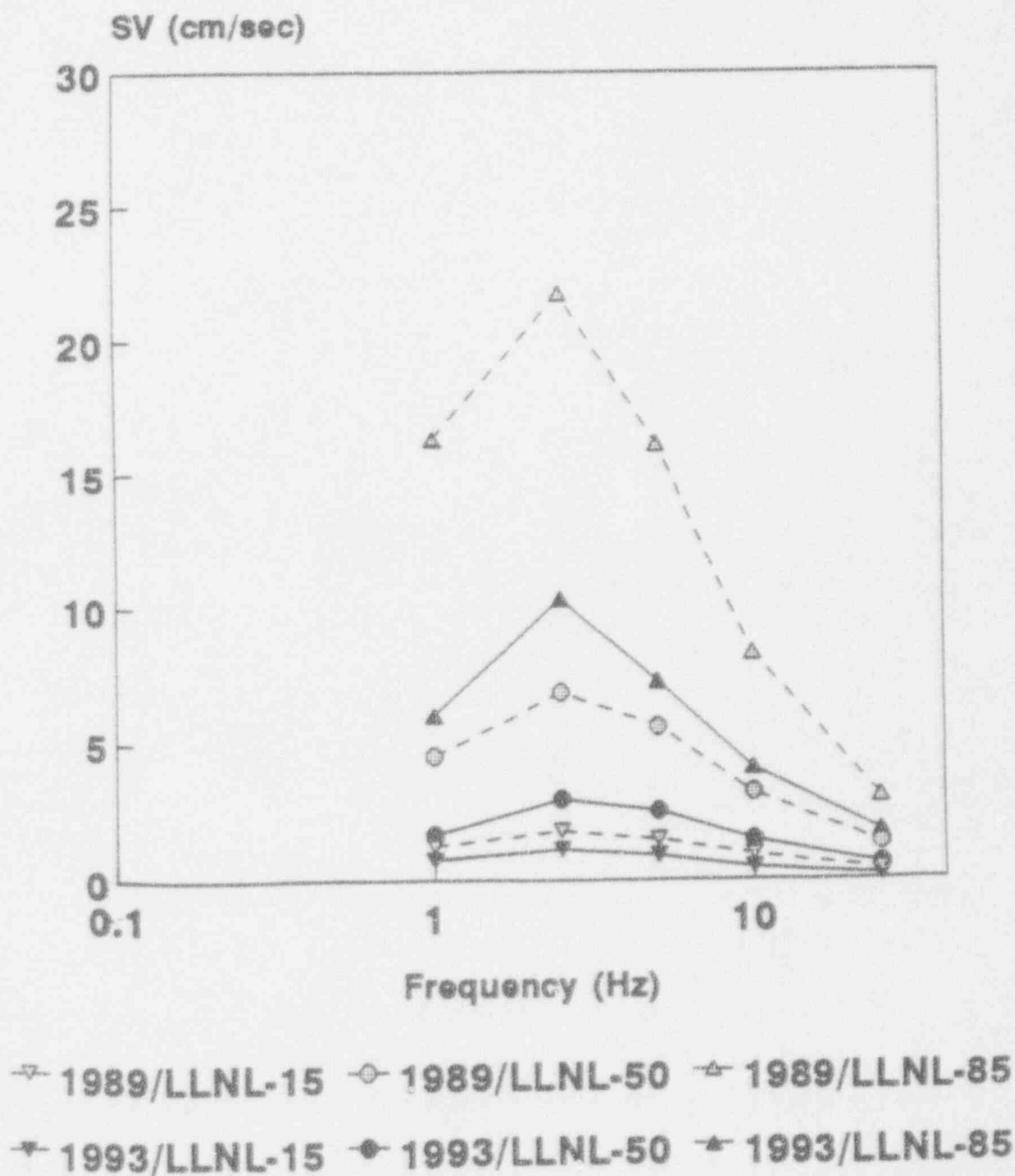
▽ 1989/LLNL-15 ○ 1989/LLNL-50 △ 1989/LLNL-85
 ▼ 1993/LLNL-15 ● 1993/LLNL-50 ★ 1993/LLNL-85

Figure 5 - Pilgrim 1,000 Year
Uniform Hazard Response Spectra -
1989 versus 1993 LLNL Hazard Estimates



▽ 1989/LLNL-15 ◊ 1989/LLNL-50 △ 1989/LLNL-85
 ▽ 1993/LLNL-15 ▸ 1993/LLNL-50 ★ 1993/LLNL-85

Figure 6 - Pilgrim 1,000 Year
Uniform Hazard Response Spectra -
1989 versus 1993 LLNL Hazard Estimates



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APPENDIX A

PEAK GROUND ACCELERATION HAZARD ESTIMATES

ANNUAL PROBABILITY OF EXCEEDANCE
FOR PEAK GROUND ACCELERATION

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
ARKANSAS				
50.	.1273E-02	.7820E-04	.5400E-03	.2010E-02
75.	.6698E-03	.3090E-04	.2480E-03	.1050E-02
150.	.2016E-03	.6030E-05	.5580E-04	.3040E-03
250.	.7274E-04	.1420E-05	.1650E-04	.1140E-03
300.	.4858E-04	.7830E-06	.1040E-04	.7430E-04
400.	.2442E-04	.2760E-06	.4630E-05	.3640E-04
500.	.1369E-04	.1100E-06	.2260E-05	.1990E-04
650.	.6568E-05	.3220E-07	.9020E-06	.9020E-05
800.	.3522E-05	.1030E-07	.4210E-06	.4630E-05
1000.	.1729E-05	.2600E-08	.1660E-06	.2070E-05
BEAVER VALLEY				
50.	.8778E-03	.3970E-04	.3260E-03	.1630E-02
75.	.4919E-03	.1890E-04	.1660E-03	.8960E-03
150.	.1686E-03	.3980E-05	.4920E-04	.2920E-03
250.	.7056E-04	.9650E-06	.1810E-04	.1230E-03
300.	.5056E-04	.5780E-06	.1220E-04	.8600E-04
400.	.2901E-04	.1920E-06	.6410E-05	.4780E-04
500.	.1832E-04	.6650E-07	.3670E-05	.2970E-04
650.	.1027E-04	.1890E-07	.1680E-05	.1600E-04
800.	.6292E-05	.5740E-08	.8400E-06	.9400E-05
1000.	.3589E-05	.1330E-08	.3580E-06	.5020E-05
BELLEFONTE				
50.	.1234E-02	.2050E-03	.7240E-03	.2200E-02
75.	.6891E-03	.1040E-03	.3840E-03	.1230E-02
150.	.2205E-03	.2780E-04	.1130E-03	.3970E-03
250.	.7939E-04	.7830E-05	.3570E-04	.1420E-03
300.	.5243E-04	.4500E-05	.2240E-04	.9360E-04
400.	.2564E-04	.1710E-05	.9450E-05	.4640E-04
500.	.1396E-04	.7570E-06	.4510E-05	.2470E-04
650.	.6418E-05	.2440E-06	.1780E-05	.1080E-04
800.	.3304E-05	.8130E-07	.7860E-06	.5440E-05
1000.	.1541E-05	.2290E-07	.2860E-06	.2450E-05
BIG ROCK POINT				
50.	.2498E-03	.1210E-04	.1120E-03	.4660E-03
75.	.1472E-03	.6050E-05	.6120E-04	.2750E-03
150.	.5375E-04	.1380E-05	.1970E-04	.9650E-04
250.	.2307E-04	.3540E-06	.7470E-05	.4090E-04
300.	.1661E-04	.1910E-06	.4900E-05	.2900E-04
400.	.9553E-05	.6130E-07	.2410E-05	.1640E-04
500.	.6020E-05	.1980E-07	.1300E-05	.1030E-04
650.	.3357E-05	.4790E-08	.5510E-06	.5630E-05
800.	.2043E-05	.1500E-08	.2770E-06	.3310E-05
1000.	.1156E-05	.3430E-09	.1170E-06	.1720E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
BRAIDWOOD				
50.	.4297E-03	.2360E-04	.2270E-03	.8440E-03
75.	.2313E-03	.1180E-04	.1160E-03	.4610E-03
150.	.7032E-04	.3180E-05	.3280E-04	.1390E-03
250.	.2448E-04	.8470E-06	.1040E-04	.4810E-04
300.	.1595E-04	.4640E-06	.6310E-05	.3150E-04
400.	.7622E-05	.1500E-06	.2730E-05	.1460E-04
500.	.4067E-05	.5630E-07	.1300E-05	.7750E-05
650.	.1825E-05	.1200E-07	.4790E-06	.3490E-05
800.	.9232E-06	.3310E-08	.2040E-06	.1710E-05
1000.	.4239E-06	.6130E-09	.7150E-07	.7330E-06
BROWNS FERRY				
50.	.9121E-03	.1030E-03	.4620E-03	.1610E-02
75.	.4560E-03	.4070E-04	.1930E-03	.7950E-03
150.	.1247E-03	.7600E-05	.3910E-04	.2110E-03
250.	.4190E-04	.1550E-05	.1030E-04	.7090E-04
300.	.2724E-04	.7890E-06	.6000E-05	.4490E-04
400.	.1309E-04	.2270E-06	.2400E-05	.2050E-04
500.	.7065E-05	.7670E-07	.1040E-05	.1010E-04
650.	.3231E-05	.1810E-07	.3780E-06	.4360E-05
800.	.1663E-05	.4740E-08	.1570E-06	.2020E-05
1000.	.7792E-06	.8540E-09	.5350E-07	.8820E-06
BRUNSWICK				
50.	.1527E-02	.1150E-03	.6090E-03	.2660E-02
75.	.8013E-03	.5930E-04	.2990E-03	.1400E-02
150.	.2428E-03	.1430E-04	.8760E-04	.4220E-03
250.	.9380E-04	.4230E-05	.3080E-04	.1550E-03
300.	.6580E-04	.2440E-05	.2070E-04	.1070E-03
400.	.3692E-04	.9800E-06	.1040E-04	.5960E-04
500.	.2316E-04	.4350E-06	.5710E-05	.3520E-04
650.	.1306E-04	.1640E-06	.2770E-05	.1950E-04
800.	.8121E-05	.6730E-07	.1440E-05	.1170E-04
1000.	.4751E-05	.2260E-07	.6610E-06	.6720E-05
BYRON				
50.	.5091E-03	.2390E-04	.1850E-03	.9990E-03
75.	.2864E-03	.1230E-04	.9950E-04	.5520E-03
150.	.9093E-04	.3190E-05	.3010E-04	.1750E-03
250.	.3227E-04	.8300E-06	.9750E-05	.6280E-04
300.	.2116E-04	.4380E-06	.6070E-05	.4000E-04
400.	.1021E-04	.1510E-06	.2530E-05	.1910E-04
500.	.5489E-05	.4740E-07	.1230E-05	.1030E-04
650.	.2488E-05	.9570E-08	.4690E-06	.4390E-05
800.	.1269E-05	.2490E-08	.1880E-06	.2150E-05
1000.	.5885E-06	.4540E-09	.6600E-07	.9370E-06

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
CALLAWAY				
50.	.1083E-02	.8790E-04	.4140E-03	.1690E-02
75.	.4763E-03	.3070E-04	.1630E-03	.7500E-03
150.	.9878E-04	.4330E-05	.2740E-04	.1640E-03
250.	.2739E-04	.8000E-06	.6470E-05	.4160E-04
300.	.1684E-04	.3990E-06	.3740E-05	.2450E-04
400.	.7532E-05	.1120E-06	.1440E-05	.1010E-04
500.	.3900E-05	.3810E-07	.6370E-06	.4850E-05
650.	.1723E-05	.8380E-08	.2230E-06	.2020E-05
800.	.8721E-06	.2220E-08	.8980E-07	.9650E-06
1000.	.4048E-06	.4440E-09	.3160E-07	.4070E-06
CALVERT CLIFFS				
50.	.7674E-03	.6850E-04	.3090E-03	.1300E-02
75.	.4321E-03	.3100E-04	.1620E-03	.7160E-03
150.	.1459E-03	.6460E-05	.4310E-04	.2340E-03
250.	.5891E-04	.1470E-05	.1350E-04	.8490E-04
300.	.4141E-04	.8270E-06	.8380E-05	.5590E-04
400.	.2292E-04	.2720E-06	.3780E-05	.2830E-04
500.	.1402E-04	.1040E-06	.1900E-05	.1570E-04
650.	.7565E-05	.2860E-07	.7710E-06	.7510E-05
800.	.4498E-05	.9010E-08	.3370E-06	.4000E-05
1000.	.2490E-05	.2220E-08	.1290E-06	.1900E-05
CATAWBA				
50.	.1199E-02	.1490E-03	.6110E-03	.2130E-02
75.	.6295E-03	.7050E-04	.3050E-03	.1140E-02
150.	.1840E-03	.1740E-04	.7770E-04	.3280E-03
250.	.6334E-04	.5030E-05	.2360E-04	.1120E-03
300.	.4130E-04	.3020E-05	.1470E-04	.7220E-04
400.	.1987E-04	.1160E-05	.6220E-05	.3430E-04
500.	.1072E-04	.4610E-06	.2960E-05	.1760E-04
650.	.4910E-05	.1350E-06	.1110E-05	.7900E-05
800.	.2546E-05	.4580E-07	.4780E-06	.3720E-05
1000.	.1215E-05	.1250E-07	.1720E-06	.1580E-05
CLINTON				
50.	.1547E-02	.4560E-04	.4650E-03	.2940E-02
75.	.8083E-03	.1710E-04	.1910E-03	.1520E-02
150.	.2457E-03	.2700E-05	.3930E-04	.4100E-03
250.	.9422E-04	.5150E-06	.1150E-04	.1290E-03
300.	.6543E-04	.2660E-06	.7210E-05	.8450E-04
400.	.3573E-04	.8260E-07	.3080E-05	.4120E-04
500.	.2171E-04	.3000E-07	.1540E-05	.2270E-04
650.	.1165E-04	.7090E-08	.6230E-06	.1110E-04
800.	.6894E-05	.1830E-08	.2750E-06	.5810E-05
1000.	.3794E-05	.3590E-09	.1050E-06	.2700E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
COMANCHE PEAK				
50.	.1407E-03	.1820E-04	.7510E-04	.2350E-03
75.	.6785E-04	.8100E-05	.3610E-04	.1210E-03
150.	.1877E-04	.1780E-05	.9380E-05	.3440E-04
250.	.6417E-05	.4240E-06	.2780E-05	.1160E-04
300.	.4188E-05	.2310E-06	.1660E-05	.7560E-05
400.	.2023E-05	.8210E-07	.6690E-06	.3540E-05
500.	.1097E-05	.2910E-07	.2970E-06	.1860E-05
650.	.5077E-06	.7330E-08	.9830E-07	.7850E-06
800.	.2659E-06	.2250E-08	.4080E-07	.3750E-06
1000.	.1283E-06	.5270E-09	.1430E-07	.1650E-06
COOK				
50.	.5010E-03	.2260E-04	.2010E-03	.8760E-03
75.	.2729E-03	.1010E-04	.1050E-03	.4700E-03
150.	.8900E-04	.2330E-05	.2930E-04	.1510E-03
250.	.3578E-04	.5510E-06	.1050E-04	.5910E-04
300.	.2528E-04	.3240E-06	.6660E-05	.4200E-04
400.	.1421E-04	.1160E-06	.3130E-05	.2360E-04
500.	.8843E-05	.4470E-07	.1690E-05	.1450E-04
650.	.4890E-05	.1470E-07	.7450E-06	.7910E-05
800.	.2969E-05	.4720E-08	.3660E-06	.4710E-05
1000.	.1681E-05	.1120E-08	.1550E-06	.2470E-05
COOPER				
50.	.1155E-02	.6630E-04	.4240E-03	.1860E-02
75.	.7283E-03	.3510E-04	.2460E-03	.1190E-02
150.	.2924E-03	.9310E-05	.8200E-04	.4640E-03
250.	.1335E-03	.2930E-05	.3170E-04	.2020E-03
300.	.9828E-04	.1800E-05	.2100E-04	.1470E-03
400.	.5867E-04	.8020E-06	.1100E-04	.8150E-04
500.	.3813E-04	.3350E-06	.6020E-05	.5170E-04
650.	.2211E-04	.1130E-06	.2820E-05	.2700E-04
800.	.1392E-04	.4510E-07	.1380E-05	.1630E-04
1000.	.8187E-05	.1300E-07	.6140E-06	.8830E-05
CRYSTAL RIVER				
50.	.1482E-03	.3400E-05	.5190E-04	.2740E-03
75.	.8403E-04	.1760E-05	.2780E-04	.1520E-03
150.	.2765E-04	.4950E-06	.8150E-05	.4690E-04
250.	.1039E-04	.1370E-06	.2260E-05	.1680E-04
300.	.7035E-05	.7610E-07	.1360E-05	.1100E-04
400.	.3625E-05	.2350E-07	.5660E-06	.5450E-05
500.	.2083E-05	.8820E-08	.2510E-06	.2990E-05
650.	.1039E-05	.2060E-08	.9030E-07	.1360E-05
800.	.5796E-06	.5890E-09	.3590E-07	.6930E-06
1000.	.2992E-06	.1350E-09	.1250E-07	.3110E-06

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
DAVIS BESSE				
50.	.1070E-02	.2660E-04	.2720E-03	.1690E-02
75.	.5745E-03	.1090E-04	.1380E-03	.9450E-03
150.	.1631E-03	.2250E-05	.3670E-04	.2910E-03
250.	.5326E-04	.5860E-06	.1140E-04	.9910E-04
300.	.3413E-04	.3210E-06	.7100E-05	.6180E-04
400.	.1604E-04	.1060E-06	.3130E-05	.2880E-04
500.	.8537E-05	.3790E-07	.1510E-05	.1570E-04
650.	.3868E-05	.8680E-08	.5740E-06	.6970E-05
800.	.1990E-05	.2910E-08	.2540E-06	.3510E-05
1000.	.9390E-06	.7230E-09	.9050E-07	.1580E-05
DRESDEN				
50.	.4576E-03	.2270E-04	.2280E-03	.8950E-03
75.	.2539E-03	.1180E-04	.1210E-03	.5020E-03
150.	.8120E-04	.3150E-05	.3540E-04	.1570E-03
250.	.2927E-04	.8480E-06	.1120E-04	.5730E-04
300.	.1929E-04	.4570E-06	.6980E-05	.3870E-04
400.	.9355E-05	.1490E-06	.3010E-05	.1840E-04
500.	.5034E-05	.5550E-07	.1460E-05	.9800E-05
650.	.2272E-05	.1240E-07	.5390E-06	.4480E-05
800.	.1150E-05	.3290E-08	.2240E-06	.2240E-05
1000.	.5266E-06	.5690E-09	.8130E-07	.9730E-06
DUANE ARNOLD				
50.	.1548E-03	.1090E-04	.8360E-04	.2640E-03
75.	.8105E-04	.5260E-05	.4370E-04	.1370E-03
150.	.2378E-04	.1340E-05	.1210E-04	.3870E-04
250.	.8208E-05	.3880E-06	.3660E-05	.1350E-04
300.	.5359E-05	.2040E-06	.2270E-05	.8740E-05
400.	.2584E-05	.6820E-07	.9130E-06	.4160E-05
500.	.1397E-05	.2120E-07	.4280E-06	.2170E-05
650.	.6421E-06	.4500E-08	.1540E-06	.9380E-06
800.	.3338E-06	.1060E-08	.6330E-07	.4740E-06
1000.	.1594E-06	.1530E-09	.2120E-07	.2180E-06
FARLEY				
50.	.1995E-03	.1400E-04	.8980E-04	.3720E-03
75.	.1092E-03	.6840E-05	.4540E-04	.1940E-03
150.	.3463E-04	.1670E-05	.1280E-04	.6300E-04
250.	.1268E-04	.3980E-06	.4150E-05	.2290E-04
300.	.8459E-05	.2110E-06	.2620E-05	.1500E-04
400.	.4230E-05	.7580E-07	.1150E-05	.7570E-05
500.	.2357E-05	.2640E-07	.5460E-06	.4170E-05
650.	.1124E-05	.6960E-08	.2010E-06	.2030E-05
800.	.6009E-06	.2190E-08	.8560E-07	.9920E-06
1000.	.2947E-06	.5490E-09	.3090E-07	.4630E-06

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
FERMI				
50.	.6010E-03	.1450E-04	.1940E-03	.1060E-02
75.	.2980E-03	.6900E-05	.9440E-04	.5210E-03
150.	.7740E-04	.1570E-05	.2470E-04	.1360E-03
250.	.2493E-04	.3620E-06	.7490E-05	.4320E-04
300.	.1603E-04	.1840E-06	.4340E-05	.2710E-04
400.	.7622E-05	.5320E-07	.1810E-05	.1280E-04
500.	.4108E-05	.1880E-07	.8320E-06	.6670E-05
650.	.1894E-05	.4640E-08	.2940E-06	.2900E-05
800.	.9902E-06	.1220E-08	.1330E-06	.1480E-05
1000.	.4769E-06	.2140E-09	.4810E-07	.6620E-06
FITZPATRICK				
50.	.7335E-03	.6910E-04	.2730E-03	.1110E-02
75.	.3537E-03	.2730E-04	.1220E-03	.5180E-03
150.	.8831E-04	.4970E-05	.2580E-04	.1260E-03
250.	.2764E-04	.1070E-05	.6920E-05	.3650E-04
300.	.1761E-04	.5380E-06	.4130E-05	.2210E-04
400.	.8284E-05	.1700E-06	.1700E-05	.9890E-05
500.	.4444E-05	.5620E-07	.7970E-06	.4910E-05
650.	.2048E-05	.1250E-07	.2900E-06	.2140E-05
800.	.1075E-05	.3420E-08	.1200E-06	.1060E-05
1000.	.5206E-06	.6400E-09	.4100E-07	.4310E-06
FT CALHOUN				
50.	.8778E-03	.3880E-04	.2610E-03	.1200E-02
75.	.5580E-03	.1810E-04	.1450E-03	.7300E-03
150.	.2306E-03	.4250E-05	.4670E-04	.2760E-03
250.	.1080E-03	.1120E-05	.1730E-04	.1210E-03
300.	.8024E-04	.6490E-06	.1180E-04	.8880E-04
400.	.4854E-04	.2360E-06	.6150E-05	.5080E-04
500.	.3187E-04	.8760E-07	.3420E-05	.3180E-04
650.	.1870E-04	.2610E-07	.1560E-05	.1700E-04
800.	.1187E-04	.8110E-08	.7530E-06	.1000E-04
1000.	.7043E-05	.2170E-08	.3310E-06	.5340E-05
GINNA				
50.	.8483E-03	.4170E-04	.2820E-03	.1260E-02
75.	.4657E-03	.2050E-04	.1380E-03	.6470E-03
150.	.1457E-03	.4470E-05	.3470E-04	.1790E-03
250.	.5283E-04	.1050E-05	.1020E-04	.5840E-04
300.	.3516E-04	.5500E-06	.6200E-05	.3610E-04
400.	.1742E-04	.1740E-06	.2710E-05	.1650E-04
500.	.9558E-05	.6220E-07	.1290E-05	.8800E-05
650.	.4403E-05	.1520E-07	.4960E-06	.3780E-05
800.	.2255E-05	.3570E-08	.1990E-06	.1820E-05
1000.	.1041E-05	.7590E-09	.7450E-07	.7930E-06

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
GRAND GULF				
50.	.3306E-03	.1420E-04	.9010E-04	.4490E-03
75.	.1765E-03	.6650E-05	.4430E-04	.2330E-03
150.	.5513E-04	.1240E-05	.1150E-04	.6720E-04
250.	.2103E-04	.2470E-06	.3590E-05	.2300E-04
300.	.1448E-04	.1300E-06	.2130E-05	.1510E-04
400.	.7745E-05	.3920E-07	.9110E-06	.7770E-05
500.	.4613E-05	.1200E-07	.4050E-06	.4410E-05
650.	.2409E-05	.2990E-08	.1440E-06	.2020E-05
800.	.1395E-05	.8250E-09	.5840E-07	.9850E-06
1000.	.7485E-06	.1660E-09	.2090E-07	.4690E-06
HADDAM NECK				
50.	.1114E-02	.1380E-03	.5170E-03	.2010E-02
75.	.6349E-03	.6520E-04	.2690E-03	.1130E-02
150.	.2085E-03	.1740E-04	.7630E-04	.3760E-03
250.	.7697E-04	.4760E-05	.2490E-04	.1350E-03
300.	.5146E-04	.2760E-05	.1550E-04	.8830E-04
400.	.2577E-04	.1000E-05	.6880E-05	.4340E-04
500.	.1435E-04	.4020E-06	.3340E-05	.2350E-04
650.	.6817E-05	.1210E-06	.1360E-05	.1080E-04
800.	.3624E-05	.4020E-07	.6080E-06	.5750E-05
1000.	.1762E-05	.1120E-07	.2330E-06	.2470E-05
HATCH				
50.	.6133E-03	.3400E-04	.2230E-03	.1120E-02
75.	.3186E-03	.1460E-04	.1030E-03	.5460E-03
150.	.9661E-04	.2550E-05	.2500E-04	.1580E-03
250.	.3713E-04	.5390E-06	.7590E-05	.5650E-04
300.	.2583E-04	.2700E-06	.4600E-05	.3740E-04
400.	.1416E-04	.9050E-07	.2020E-05	.1860E-04
500.	.8644E-05	.3360E-07	.9610E-06	.1070E-04
650.	.4680E-05	.9150E-08	.3660E-06	.5310E-05
800.	.2801E-05	.2630E-08	.1600E-06	.2890E-05
1000.	.1567E-05	.5880E-09	.6020E-07	.1420E-05
HOPE CREEK				
50.	.9721E-03	.9990E-04	.3990E-03	.1680E-02
75.	.5512E-03	.4420E-04	.2060E-03	.9370E-03
150.	.1836E-03	.8760E-05	.5530E-04	.3030E-03
250.	.7227E-04	.1900E-05	.1780E-04	.1110E-03
300.	.5028E-04	.9970E-06	.1090E-04	.7550E-04
400.	.2735E-04	.3100E-06	.4790E-05	.3810E-04
500.	.1651E-04	.1070E-06	.2350E-05	.2190E-04
650.	.8770E-05	.2890E-07	.9040E-06	.1050E-04
800.	.5156E-05	.8920E-08	.3870E-06	.5570E-05
1000.	.2826E-05	.2240E-08	.1450E-06	.2750E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
INDIAN POINT				
50.	.1152E-02	.2320E-03	.7650E-03	.2170E-02
75.	.6552E-03	.1200E-03	.4170E-03	.1210E-02
150.	.2123E-03	.2930E-04	.1200E-03	.4000E-03
250.	.7736E-04	.8200E-05	.3630E-04	.1470E-03
300.	.5148E-04	.4850E-05	.2260E-04	.9720E-04
400.	.2562E-04	.1810E-05	.9670E-05	.4910E-04
500.	.1421E-04	.7340E-06	.4770E-05	.2640E-04
650.	.6738E-05	.2220E-06	.1970E-05	.1210E-04
800.	.3583E-05	.7780E-07	.8750E-06	.6090E-05
1000.	.1749E-05	.2230E-07	.3330E-06	.2970E-05
KEWAUNEE				
50.	.3040E-03	.3660E-04	.1520E-03	.5400E-03
75.	.1777E-03	.1860E-04	.8570E-04	.3140E-03
150.	.6422E-04	.5010E-05	.2800E-04	.1180E-03
250.	.2748E-04	.1400E-05	.1050E-04	.5200E-04
300.	.1979E-04	.8090E-06	.6940E-05	.3700E-04
400.	.1141E-04	.3150E-06	.3580E-05	.2160E-04
500.	.7212E-05	.1360E-06	.1990E-05	.1320E-04
650.	.4043E-05	.4040E-07	.8950E-06	.7030E-05
800.	.2474E-05	.1520E-07	.4440E-06	.4230E-05
1000.	.1409E-05	.4800E-08	.1950E-06	.2300E-05
LACROSSE				
50.	.3158E-03	.1960E-04	.1570E-03	.5860E-03
75.	.1874E-03	.9790E-05	.8500E-04	.3370E-03
150.	.6996E-04	.2420E-05	.2670E-04	.1200E-03
250.	.3074E-04	.6450E-06	.1000E-04	.5090E-04
300.	.2236E-04	.3810E-06	.6580E-05	.3700E-04
400.	.1311E-04	.1580E-06	.3290E-05	.2110E-04
500.	.8421E-05	.5910E-07	.1840E-05	.1340E-04
650.	.4821E-05	.1540E-07	.8130E-06	.7390E-05
800.	.3007E-05	.5150E-08	.3980E-06	.4270E-05
1000.	.1750E-05	.1170E-08	.1740E-06	.2430E-05
LASALLE				
50.	.8251E-03	.3520E-04	.3410E-03	.1660E-02
75.	.4633E-03	.1610E-04	.1780E-03	.9260E-03
150.	.1616E-03	.4290E-05	.5200E-04	.3230E-03
250.	.6797E-04	.1030E-05	.1800E-04	.1290E-03
300.	.4859E-04	.5590E-06	.1180E-04	.8890E-04
400.	.2765E-04	.2100E-06	.5770E-05	.4820E-04
500.	.1728E-04	.8860E-07	.3170E-05	.2900E-04
650.	.9548E-05	.2190E-07	.1430E-05	.1470E-04
800.	.5773E-05	.5750E-08	.6880E-06	.8460E-05
1000.	.3244E-05	.1200E-08	.2860E-06	.4380E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
LIMERICK				
50.	.1222E-02	.1930E-03	.7040E-03	.2210E-02
75.	.6993E-03	.1030E-03	.3830E-03	.1260E-02
150.	.2286E-03	.2870E-04	.1150E-03	.4020E-03
250.	.8353E-04	.8790E-05	.3850E-04	.1430E-03
300.	.5554E-04	.5380E-05	.2430E-04	.9510E-04
400.	.2751E-04	.2170E-05	.1100E-04	.4680E-04
500.	.1516E-04	.9360E-06	.5520E-05	.2590E-04
650.	.7100E-05	.3020E-06	.2180E-05	.1200E-04
800.	.3727E-05	.1170E-06	.9770E-06	.6000E-05
1000.	.1787E-05	.3330E-07	.3990E-06	.2840E-05
MAINE YANKEE				
50.	.1328E-02	.1490E-03	.7040E-03	.2290E-02
75.	.7214E-03	.7430E-04	.3480E-03	.1270E-02
150.	.2230E-03	.1730E-04	.9750E-04	.4000E-03
250.	.8094E-04	.4910E-05	.3220E-04	.1470E-03
300.	.5414E-04	.2950E-05	.2010E-04	.9550E-04
400.	.2733E-04	.1150E-05	.9120E-05	.4770E-04
500.	.1540E-04	.4780E-06	.4620E-05	.2670E-04
650.	.7462E-05	.1650E-06	.1910E-05	.1240E-04
800.	.4047E-05	.5900E-07	.8840E-06	.6440E-05
1000.	.2019E-05	.1670E-07	.3580E-06	.3110E-05
MCGUIRE				
50.	.1084E-02	.1530E-03	.6310E-03	.1960E-02
75.	.5582E-03	.6890E-04	.3020E-03	.1010E-02
150.	.1568E-03	.1660E-04	.7690E-04	.2770E-03
250.	.5192E-04	.4580E-05	.2270E-04	.8970E-04
300.	.3329E-04	.2730E-05	.1390E-04	.5560E-04
400.	.1553E-04	.1040E-05	.5820E-05	.2540E-04
500.	.8136E-05	.4160E-06	.2680E-05	.1310E-04
650.	.3580E-05	.1180E-06	.1010E-05	.5400E-05
800.	.1785E-05	.3780E-07	.4240E-06	.2590E-05
1000.	.8089E-06	.9620E-08	.1590E-06	.1110E-05
MILLSTONE				
50.	.9965E-03	.1180E-03	.4890E-03	.1720E-02
75.	.5635E-03	.6000E-04	.2590E-03	.9750E-03
150.	.1823E-03	.1500E-04	.7570E-04	.3130E-03
250.	.6635E-04	.4360E-05	.2500E-04	.1160E-03
300.	.4410E-04	.2540E-05	.1560E-04	.7580E-04
400.	.2189E-04	.1000E-05	.6700E-05	.3790E-04
500.	.1211E-04	.4050E-06	.3350E-05	.2040E-04
650.	.5713E-05	.1290E-06	.1350E-05	.9180E-05
800.	.3025E-05	.4440E-07	.6070E-06	.4650E-05
1000.	.1469E-05	.1220E-07	.2430E-06	.2180E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
MONTICELLO				
50.	.3562E-03	.4240E-04	.1950E-03	.6490E-03
75.	.2131E-03	.2260E-04	.1090E-03	.3880E-03
150.	.7981E-04	.6680E-05	.3530E-04	.1430E-03
250.	.3511E-04	.2260E-05	.1400E-04	.6290E-04
300.	.2556E-04	.1470E-05	.9740E-05	.4550E-04
400.	.1500E-04	.6500E-06	.5250E-05	.2610E-04
500.	.9522E-05	.2940E-06	.2990E-05	.1690E-04
650.	.5493E-05	.1020E-06	.1410E-05	.9460E-05
800.	.3411E-05	.4250E-07	.7350E-06	.5750E-05
1000.	.1976E-05	.1320E-07	.3300E-06	.3160E-05
NINE MILE POINT				
50.	.7302E-03	.6970E-04	.2710E-03	.1100E-02
75.	.3525E-03	.2650E-04	.1210E-03	.5130E-03
150.	.8831E-04	.4850E-05	.2510E-04	.1250E-03
250.	.2772E-04	.1040E-05	.6730E-05	.3670E-04
300.	.1769E-04	.5250E-06	.4070E-05	.2220E-04
400.	.8339E-05	.1670E-06	.1690E-05	.9780E-05
500.	.4483E-05	.5490E-07	.7820E-06	.4970E-05
650.	.2073E-05	.1210E-07	.2830E-06	.2120E-05
800.	.1090E-05	.3360E-08	.1160E-06	.1030E-05
1000.	.5298E-06	.6230E-09	.4080E-07	.4400E-06
NORTH ANNA				
50.	.1153E-02	.2190E-03	.6500E-03	.1960E-02
75.	.6606E-03	.1150E-03	.3510E-03	.1120E-02
150.	.2139E-03	.3260E-04	.1070E-03	.3540E-03
250.	.7505E-04	.9410E-05	.3320E-04	.1260E-03
300.	.4871E-04	.5520E-05	.2070E-04	.8430E-04
400.	.2301E-04	.1940E-05	.8770E-05	.3960E-04
500.	.1213E-04	.7720E-06	.4230E-05	.2110E-04
650.	.5362E-05	.2490E-06	.1620E-05	.9120E-05
800.	.2675E-05	.8400E-07	.7200E-06	.4360E-05
1000.	.1209E-05	.2190E-07	.2780E-06	.1890E-05
OCONEE				
50.	.1280E-02	.1780E-03	.7630E-03	.2310E-02
75.	.6937E-03	.8640E-04	.3860E-03	.1260E-02
150.	.2104E-03	.1960E-04	.1050E-03	.3890E-03
250.	.7353E-04	.5040E-05	.3080E-04	.1350E-03
300.	.4815E-04	.3050E-05	.1900E-04	.8960E-04
400.	.2328E-04	.1100E-05	.7700E-05	.4240E-04
500.	.1257E-04	.4340E-06	.3600E-05	.2230E-04
650.	.5725E-05	.1240E-06	.1250E-05	.9710E-05
800.	.2930E-05	.4530E-07	.5390E-06	.4710E-05
1000.	.1360E-05	.1250E-07	.2050E-06	.2010E-05

Acceleration (cm/sec/sec)	Percentiles			
	Mean	15th	50th	85th
GISTER CREEK				
50.	.8528E-03	.8790E-04	.3520E-03	.1500E-02
75.	.4839E-03	.4070E-04	.1720E-03	.8100E-03
150.	.1626E-03	.8650E-05	.4700E-04	.2570E-03
250.	.6463E-04	.1960E-05	.1540E-04	.1030E-03
300.	.4510E-04	.1050E-05	.9580E-05	.7000E-04
400.	.2461E-04	.3580E-06	.4230E-05	.3680E-04
500.	.1486E-04	.1340E-06	.2040E-05	.2040E-04
650.	.7875E-05	.3690E-07	.7960E-06	.1050E-04
800.	.4606E-05	.1160E-07	.3330E-06	.5840E-05
1000.	.2499E-05	.2860E-08	.1280E-06	.2860E-05
PALISADES				
50.	.3924E-03	.1710E-04	.1620E-03	.7250E-03
75.	.2109E-03	.7570E-05	.7900E-04	.3870E-03
150.	.6870E-04	.1690E-05	.2310E-04	.1240E-03
250.	.2824E-04	.4120E-06	.8220E-05	.5090E-04
300.	.2019E-04	.2350E-06	.5480E-05	.3720E-04
400.	.1159E-04	.7910E-07	.2650E-05	.2080E-04
500.	.7331E-05	.3260E-07	.1460E-05	.1300E-04
650.	.4129E-05	.8430E-08	.6600E-06	.7180E-05
800.	.2540E-05	.2610E-08	.3230E-06	.4170E-05
1000.	.1455E-05	.6750E-09	.1420E-06	.2140E-05
PEACH BOTTOM				
50.	.1058E-02	.1840E-03	.6240E-03	.1920E-02
75.	.6043E-03	.9690E-04	.3470E-03	.1110E-02
150.	.1982E-03	.2800E-04	.1070E-03	.3720E-03
250.	.7229E-04	.8340E-05	.3640E-04	.1340E-03
300.	.4793E-04	.4900E-05	.2300E-04	.8950E-04
400.	.2357E-04	.1950E-05	.1030E-04	.4560E-04
500.	.1288E-04	.8350E-06	.5050E-05	.2470E-04
650.	.5953E-05	.2690E-06	.2000E-05	.1130E-04
800.	.3085E-05	.9510E-07	.8960E-06	.5860E-05
1000.	.1454E-05	.2700E-07	.3620E-06	.2720E-05
PERRY				
50.	.4477E-03	.2020E-04	.1750E-03	.7840E-03
75.	.2466E-03	.9540E-05	.9120E-04	.4260E-03
150.	.7663E-04	.2010E-05	.2580E-04	.1350E-03
250.	.2710E-04	.4700E-06	.8420E-05	.4680E-04
300.	.1780E-04	.2450E-06	.5270E-05	.3010E-04
400.	.8628E-05	.8230E-07	.2270E-05	.1410E-04
500.	.4671E-05	.3070E-07	.1060E-05	.7190E-05
650.	.2142E-05	.7080E-08	.3820E-06	.3240E-05
800.	.1107E-05	.1750E-08	.1690E-06	.1630E-05
1000.	.5224E-06	.3510E-09	.6280E-07	.7070E-06

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
PILGRIM				
50.	.2814E-02	.2400E-03	.1090E-02	.4520E-02
75.	.1777E-02	.1210E-03	.6110E-03	.2820E-02
150.	.7154E-03	.3260E-04	.1990E-03	.1060E-02
250.	.3272E-03	.9780E-05	.7750E-04	.4510E-03
300.	.2410E-03	.6530E-05	.5320E-04	.3320E-03
400.	.1441E-03	.2830E-05	.2800E-04	.2000E-03
500.	.9379E-04	.1310E-05	.1680E-04	.1250E-03
650.	.5446E-04	.4650E-06	.7930E-05	.6980E-04
800.	.3430E-04	.1760E-06	.4150E-05	.4250E-04
1000.	.2016E-04	.5780E-07	.1970E-05	.2330E-04
POINT BEACH				
50.	.3125E-03	.3930E-04	.1590E-03	.5760E-03
75.	.1825E-03	.1950E-04	.8960E-04	.3460E-03
150.	.6573E-04	.5340E-05	.2970E-04	.1230E-03
250.	.2804E-04	.1570E-05	.1120E-04	.5260E-04
300.	.2017E-04	.9320E-06	.7560E-05	.3730E-04
400.	.1160E-04	.3500E-06	.3900E-05	.2140E-04
500.	.7319E-05	.1480E-06	.2180E-05	.1320E-04
650.	.4089E-05	.5460E-07	.9900E-06	.7010E-05
800.	.2493E-05	.2070E-07	.4950E-06	.4210E-05
1000.	.1414E-05	.5750E-08	.2270E-06	.2280E-05
PRAIRIE ISLAND				
50.	.3154E-03	.3220E-04	.1680E-03	.5650E-03
75.	.1907E-03	.1690E-04	.9510E-04	.3350E-03
150.	.7272E-04	.5370E-05	.3140E-04	.1240E-03
250.	.3233E-04	.1710E-05	.1210E-04	.5240E-04
300.	.2361E-04	.1050E-05	.8180E-05	.3790E-04
400.	.1394E-04	.4680E-06	.4240E-05	.2210E-04
500.	.8998E-05	.2210E-06	.2410E-05	.1440E-04
650.	.5185E-05	.7680E-07	.1130E-05	.7970E-05
800.	.3251E-05	.3160E-07	.5770E-06	.4850E-05
1000.	.1905E-05	.1090E-07	.2370E-06	.2690E-05
QUAD CITIES				
50.	.3658E-03	.7860E-04	.1310E-03	.6470E-03
75.	.1948E-03	.8030E-05	.6530E-04	.3520E-03
150.	.5727E-04	.1580E-05	.1650E-04	.9640E-04
250.	.1965E-04	.3720E-06	.5020E-05	.3200E-04
300.	.1280E-04	.2080E-06	.3070E-05	.2010E-04
400.	.6139E-05	.6140E-07	.1270E-05	.9190E-05
500.	.3295E-05	.2230E-07	.6030E-06	.4860E-05
650.	.1492E-05	.5040E-08	.2210E-06	.2100E-05
800.	.7603E-06	.1170E-08	.9020E-07	.1030E-05
1000.	.3519E-06	.2190E-09	.3180E-07	.4590E-06

Acceleration (cm/sec/sec)	Percentiles			
	Mean	15th	50th	85th
RIVER BEND				
50.	.1965E-03	.8920E-05	.7020E-04	.3520E-03
75.	.1072E-03	.3710E-05	.3530E-04	.1800E-03
150.	.3426E-04	.6390E-06	.9070E-05	.5270E-04
250.	.1322E-04	.1180E-06	.2760E-05	.1880E-04
300.	.9138E-05	.5970E-07	.1600E-05	.1260E-04
400.	.4913E-05	.1630E-07	.6380E-06	.6220E-05
500.	.2932E-05	.4810E-08	.3120E-06	.3550E-05
650.	.1531E-05	.9480E-09	.1140E-06	.1690E-05
800.	.8842E-06	.2470E-09	.4620E-07	.8820E-06
1000.	.4737E-06	.5170E-10	.1610E-07	.4020E-06
ROBINSON				
50.	.2717E-02	.1620E-03	.7960E-03	.4430E-02
75.	.1565E-02	.7160E-04	.3910E-03	.2320E-02
150.	.5469E-03	.1430E-04	.1030E-03	.6680E-03
250.	.2256E-03	.3070E-05	.3140E-04	.2530E-03
300.	.1600E-03	.1690E-05	.1940E-04	.1740E-03
400.	.8990E-04	.5390E-06	.8330E-05	.8450E-04
500.	.5574E-04	.2040E-06	.4030E-05	.4900E-04
650.	.3062E-04	.5740E-07	.1630E-05	.2390E-04
800.	.1849E-04	.1930E-07	.7410E-06	.1250E-04
1000.	.1043E-04	.5440E-08	.3020E-06	.6210E-05
SALEM				
50.	.9589E-03	.9740E-04	.3990E-03	.1660E-02
75.	.5429E-03	.4370E-04	.2060E-03	.9160E-03
150.	.1805E-03	.8690E-05	.5470E-04	.2920E-03
250.	.7102E-04	.1840E-05	.1730E-04	.1080E-03
300.	.4940E-04	.9820E-06	.1090E-04	.7320E-04
400.	.2686E-04	.2990E-06	.4810E-05	.3670E-04
500.	.1620E-04	.1050E-06	.2340E-05	.2110E-04
650.	.8599E-05	.2800E-07	.9110E-06	.1010E-04
800.	.5051E-05	.8890E-08	.4060E-06	.5660E-05
1000.	.2764E-05	.2220E-08	.1540E-06	.2750E-05
SEABROOK				
50.	.2339E-02	.2160E-03	.1080E-02	.4070E-02
75.	.1372E-02	.1130E-03	.5930E-03	.2460E-02
150.	.4617E-03	.3110E-04	.1820E-03	.8140E-03
250.	.1714E-03	.9240E-05	.5820E-04	.2930E-03
300.	.1147E-03	.5240E-05	.3590E-04	.1920E-03
400.	.5739E-04	.2050E-05	.1570E-04	.9440E-04
500.	.3188E-04	.9130E-06	.7980E-05	.5150E-04
650.	.1504E-04	.3080E-06	.3320E-05	.2370E-04
800.	.7923E-05	.1110E-06	.1530E-05	.1230E-04
1000.	.3797E-05	.3280E-07	.5780E-06	.5480E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
SEQUOYAH				
50.	.1330E-02	.2440E-03	.8300E-03	.2350E-02
75.	.7541E-03	.1250E-03	.4480E-03	.1330E-02
150.	.2436E-03	.3320E-04	.1370E-03	.4300E-03
250.	.8798E-04	.9430E-05	.4430E-04	.1580E-03
300.	.5817E-04	.5470E-05	.2760E-04	.1060E-03
400.	.2849E-04	.2150E-05	.1210E-04	.5180E-04
500.	.1552E-04	.9320E-06	.6000E-05	.2770E-04
650.	.7139E-05	.3000E-06	.2350E-05	.1290E-04
800.	.3676E-05	.1080E-06	.1000E-05	.6310E-05
1000.	.1715E-05	.3110E-07	.3760E-06	.2860E-05
SHEARON HARRIS				
50.	.5845E-03	.9410E-04	.3740E-03	.1090E-02
75.	.3062E-03	.4090E-04	.1840E-03	.5620E-03
150.	.9052E-04	.9050E-05	.4970E-04	.1710E-03
250.	.3077E-04	.2210E-05	.1480E-04	.5700E-04
300.	.1980E-04	.1260E-05	.9140E-05	.3620E-04
400.	.9224E-05	.4750E-06	.3900E-05	.1680E-04
500.	.4806E-05	.1890E-06	.1880E-05	.8630E-05
650.	.2091E-05	.4980E-07	.7280E-06	.3600E-05
800.	.1030E-05	.1620E-07	.3010E-06	.1730E-05
1000.	.4597E-06	.4490E-08	.1060E-06	.7880E-06
SHOREHAM				
50.	.1217E-02	.1160E-03	.5090E-03	.2170E-02
75.	.7314E-03	.5640E-04	.2660E-03	.1260E-02
150.	.2711E-03	.1260E-04	.7470E-04	.4230E-03
250.	.1158E-03	.2960E-05	.2470E-04	.1700E-03
300.	.8293E-04	.1630E-05	.1540E-04	.1170E-03
400.	.4722E-04	.5540E-06	.6990E-05	.5990E-04
500.	.2947E-04	.2290E-06	.3580E-05	.3550E-04
650.	.1623E-04	.6750E-07	.1490E-05	.1810E-04
800.	.9777E-05	.2450E-07	.6800E-06	.9540E-05
1000.	.5474E-05	.6350E-08	.2680E-06	.4730E-05
SOUTH TEXAS				
50.	.1628E-03	.2830E-05	.5400E-04	.3170E-03
75.	.9408E-04	.1390E-05	.2790E-04	.1860E-03
150.	.3256E-04	.3120E-06	.7340E-05	.6200E-04
250.	.1312E-04	.6480E-07	.2250E-05	.2350E-04
300.	.9179E-05	.3140E-07	.1390E-05	.1620E-04
400.	.5024E-05	.8830E-08	.5360E-06	.8130E-05
500.	.3038E-05	.2630E-08	.2410E-06	.4530E-05
650.	.1613E-05	.5140E-09	.8540E-07	.2100E-05
800.	.9453E-06	.1070E-09	.3310E-07	.1120E-05
1000.	.5144E-06	.1860E-10	.1170E-07	.5100E-06

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
ST. LUCIE				
50.	.1470E-03	.2720E-05	.5210E-04	.2750E-03
75.	.8565E-04	.1250E-05	.2800E-04	.1580E-03
150.	.3037E-04	.2760E-06	.7900E-05	.5640E-04
250.	.1263E-04	.6770E-07	.2360E-05	.2240E-04
300.	.8974E-05	.3780E-07	.1460E-05	.1580E-04
400.	.5047E-05	.1040E-07	.6030E-06	.8310E-05
500.	.3125E-05	.3350E-08	.2920E-06	.4950E-05
650.	.1711E-05	.7440E-09	.1150E-06	.2440E-05
800.	.1030E-05	.1930E-09	.5020E-07	.1370E-05
1000.	.5790E-06	.4050E-10	.1780E-07	.6620E-06
SUMMER				
50.	.1833E-02	.1830E-03	.7420E-03	.3130E-02
75.	.9731E-03	.8780E-04	.3720E-03	.1660E-02
150.	.2842E-03	.2040E-04	.9150E-04	.4570E-03
250.	.9814E-04	.5440E-05	.2890E-04	.1540E-03
300.	.6448E-04	.3220E-05	.1800E-04	.9380E-04
400.	.3170E-04	.1130E-05	.7900E-05	.4430E-04
500.	.1755E-04	.4490E-06	.3810E-05	.2220E-04
650.	.8392E-05	.1300E-06	.1450E-05	.9610E-05
800.	.4535E-05	.4340E-07	.6130E-06	.4720E-05
1000.	.2274E-05	.1170E-07	.2160E-06	.2110E-05
SURRY				
50.	.6033E-03	.6370E-04	.2810E-03	.1060E-02
75.	.3363E-03	.2890E-04	.1470E-03	.5860E-03
150.	.1104E-03	.6210E-05	.4130E-04	.1850E-03
250.	.4322E-04	.1460E-05	.1330E-04	.7160E-04
300.	.2998E-04	.7180E-06	.8460E-05	.4970E-04
400.	.1621E-04	.2210E-06	.3890E-05	.2680E-04
500.	.9713E-05	.8430E-07	.1890E-05	.1520E-04
650.	.5097E-05	.2210E-07	.7790E-06	.7260E-05
800.	.2955E-05	.7020E-08	.3500E-06	.4110E-05
1000.	.1586E-05	.1980E-08	.1380E-06	.2070E-05
SUSQUEHANNA				
50.	.8457E-03	.8360E-04	.3810E-03	.1580E-02
75.	.4681E-03	.4110E-04	.1930E-03	.8690E-03
150.	.1474E-03	.9800E-05	.5270E-04	.2750E-03
250.	.5287E-04	.2670E-05	.1580E-04	.9790E-04
300.	.3490E-04	.1560E-05	.9830E-05	.6350E-04
400.	.1707E-04	.5850E-06	.4360E-05	.3070E-04
500.	.9283E-05	.2420E-06	.2140E-05	.1620E-04
650.	.4260E-05	.7600E-07	.8560E-06	.7170E-05
800.	.2189E-05	.2700E-07	.3770E-06	.3470E-05
1000.	.1019E-05	.7610E-08	.1510E-06	.1540E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
THREE MILE ISLAND				
50.	.1108E-02	.1660E-03	.5930E-03	.2060E-02
75.	.6339E-03	.8820E-04	.3280E-03	.1160E-02
150.	.2076E-03	.2580E-04	.1010E-03	.3720E-03
250.	.7622E-04	.7630E-05	.3260E-04	.1290E-03
300.	.5082E-04	.4560E-05	.2060E-04	.8470E-04
400.	.2532E-04	.1790E-05	.9220E-05	.4280E-04
500.	.1404E-04	.8000E-06	.4780E-05	.2390E-04
650.	.6627E-05	.2700E-06	.1970E-05	.1090E-04
800.	.3504E-05	.1040E-06	.9010E-06	.5590E-05
1000.	.1693E-05	.3130E-07	.3460E-06	.2500E-05
TURKEY POINT				
50.	.1227E-03	.3120E-05	.5140E-04	.2530E-03
75.	.7052E-04	.1680E-05	.2770E-04	.1430E-03
150.	.2361E-04	.4660E-06	.7780E-05	.4600E-04
250.	.8904E-05	.1180E-06	.2340E-05	.1690E-04
300.	.6013E-05	.6450E-07	.1420E-05	.1150E-04
400.	.3074E-05	.2410E-07	.5850E-06	.5670E-05
500.	.1750E-05	.8820E-08	.2690E-06	.3070E-05
650.	.8616E-06	.2320E-08	.9760E-07	.1360E-05
800.	.4751E-06	.6700E-09	.4120E-07	.7250E-06
1000.	.2425E-06	.1310E-09	.1430E-07	.3390E-06
VERMONT YANKEE				
50.	.1293E-02	.2040E-03	.7060E-03	.2040E-02
75.	.6738E-03	.9150E-04	.3310E-03	.1040E-02
150.	.1963E-03	.1990E-04	.7680E-04	.2920E-03
250.	.6913E-04	.4870E-05	.2320E-04	.1010E-03
300.	.4583E-04	.2710E-05	.1400E-04	.6620E-04
400.	.2286E-04	.9840E-06	.6060E-05	.3220E-04
500.	.1279E-04	.3990E-06	.3010E-05	.1720E-04
650.	.6148E-05	.1200E-06	.1190E-05	.7570E-05
800.	.3315E-05	.4270E-07	.5300E-06	.3880E-05
1000.	.1644E-05	.1140E-07	.2010E-06	.1780E-05
VOGTLE				
50.	.2500E-02	.1490E-03	.7000E-03	.4290E-02
75.	.1356E-02	.6530E-04	.3280E-03	.2210E-02
150.	.4152E-03	.1320E-04	.8040E-04	.6140E-03
250.	.1546E-03	.2960E-05	.2450E-04	.2160E-03
300.	.1060E-03	.1630E-05	.1510E-04	.1450E-03
400.	.5677E-04	.5470E-06	.6850E-05	.6960E-04
500.	.3415E-04	.2170E-06	.3220E-05	.3970E-04
650.	.1830E-04	.6100E-07	.1320E-05	.1770E-04
800.	.1094E-04	.1880E-07	.5760E-06	.1010E-04
1000.	.6181E-05	.4890E-08	.2170E-06	.4930E-05

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
WATERFORD				
50.	.2863E-03	.4820E-05	.7870E-04	.4970E-03
75.	.1655E-03	.2110E-05	.4140E-04	.2780E-03
150.	.5704E-04	.4090E-06	.1210E-04	.8910E-04
250.	.2291E-04	.8350E-07	.3710E-05	.3220E-04
300.	.1604E-04	.4190E-07	.2320E-05	.2240E-04
400.	.8804E-05	.1180E-07	.9460E-06	.1170E-04
500.	.5350E-05	.3990E-08	.4610E-06	.6720E-05
650.	.2865E-05	.6410E-09	.1730E-06	.3320E-05
800.	.1694E-05	.1290E-09	.7100E-07	.1700E-05
1000.	.9316E-06	.2440E-10	.2440E-07	.8050E-06
WATTS BAR				
50.	.1258E-02	.2680E-03	.8000E-03	.2220E-02
75.	.7128E-03	.1380E-03	.4340E-03	.1260E-02
150.	.2301E-03	.3620E-04	.1300E-03	.4030E-03
250.	.8298E-04	.1000E-04	.4240E-04	.1450E-03
300.	.5483E-04	.5840E-05	.2650E-04	.9520E-04
400.	.2686E-04	.2110E-05	.1140E-04	.4820E-04
500.	.1465E-04	.9060E-06	.5620E-05	.2580E-04
650.	.6754E-05	.2950E-06	.2140E-05	.1190E-04
800.	.3488E-05	.1050E-06	.9370E-06	.5950E-05
1000.	.1634E-05	.3110E-07	.3500E-06	.2740E-05
WOLF CREEK				
50.	.3290E-03	.2240E-04	.1240E-03	.5810E-03
75.	.1664E-03	.9280E-05	.6000E-04	.2730E-03
150.	.4581E-04	.1870E-05	.1470E-04	.7140E-04
250.	.1526E-04	.3780E-06	.4280E-05	.2350E-04
300.	.9857E-05	.1950E-06	.2540E-05	.1510E-04
400.	.4666E-05	.5820E-07	.9810E-06	.6900E-05
500.	.2480E-05	.1940E-07	.4640E-06	.3410E-05
650.	.1110E-05	.3970E-08	.1650E-06	.1520E-05
800.	.5607E-06	.9530E-09	.6860E-07	.7040E-06
1000.	.2569E-06	.1700E-09	.2310E-07	.2970E-06
YANKEE ROWE				
50.	.2297E-02	.2390E-03	.1010E-02	.4040E-02
75.	.1289E-02	.1120E-03	.5220E-03	.2310E-02
150.	.4281E-03	.2260E-04	.1450E-03	.6990E-03
250.	.1725E-03	.6100E-05	.4910E-04	.2670E-03
300.	.1219E-03	.3510E-05	.3210E-04	.1900E-03
400.	.6851E-04	.1310E-05	.1550E-04	.1040E-03
500.	.4266E-04	.5460E-06	.8180E-05	.6290E-04
650.	.2365E-04	.1700E-06	.3610E-05	.3380E-04
800.	.1442E-04	.6530E-07	.1800E-05	.1970E-04
1000.	.8230E-05	.2270E-07	.7790E-06	.1080E-04

Acceleration (cm/sec/sec)	Mean	Percentiles		
		15th	50th	85th
ZION				
50.	.6848E-03	.2620E-04	.2560E-03	.1240E-02
75.	.4120E-03	.1270E-04	.1390E-03	.7480E-03
150.	.1536E-03	.3160E-05	.4330E-04	.2560E-03
250.	.6659E-04	.8400E-06	.1580E-04	.1080E-03
300.	.4814E-04	.4480E-06	.1050E-04	.7670E-04
400.	.2791E-04	.1460E-06	.5200E-05	.4200E-04
500.	.1772E-04	.5270E-07	.2690E-05	.2560E-04
650.	.9971E-05	.1260E-07	.1160E-05	.1380E-04
800.	.6112E-05	.3030E-08	.5540E-06	.8170E-05
1000.	.3481E-05	.6170E-09	.2270E-06	.4230E-05

APPENDIX B

UNIFORM HAZARD RESPONSE SPECTRA

1993 LLNL SPECTRAL HAZARD ESTIMATES
 VARIABLE IS SPECTRAL VELOCITY (CM/SEC)

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
ARKANSAS	500	1.0	2.973	.723	1.850	4.710
		2.5	2.972	.698	1.780	4.490
		5.0	2.016	.520	1.280	2.710
		10.0	1.097	.267	.714	1.500
		25.0	.359	.076	.204	.505
	1000	1.0	4.887	1.110	2.810	7.470
		2.5	4.854	1.080	2.600	6.430
		5.0	3.150	.808	1.790	4.100
		10.0	1.638	.394	1.110	2.210
		25.0	.584	.117	.304	.809
	2000	1.0	7.716	1.490	4.280	9.970
		2.5	7.291	1.450	3.790	8.890
		5.0	4.924	1.140	2.500	5.780
		10.0	2.446	.581	1.530	3.200
		25.0	.949	.162	.453	1.230
	5000	1.0	12.270	2.200	7.210	14.600
		2.5	12.390	2.150	5.790	13.600
		5.0	7.983	1.600	3.900	8.320
		10.0	3.934	.970	2.350	4.750
		25.0	1.564	.250	.768	2.020
	10000	1.0	17.440	2.960	8.850	19.500
		2.5	18.520	2.890	7.420	18.900
		5.0	11.480	2.080	5.300	11.000
		10.0	5.491	1.280	3.200	6.390
		25.0	2.261	.346	1.110	2.950
BEAVER VALLEY	500	1.0	1.142	.291	.692	1.600
		2.5	1.291	.255	.750	1.830
		5.0	1.395	.261	.703	2.020
		10.0	.855	.152	.437	1.330
		25.0	.247	.036	.126	.367
	1000	1.0	1.750	.423	1.060	2.350
		2.5	2.142	.372	1.140	2.830
		5.0	2.352	.387	1.100	3.150
		10.0	1.424	.227	.715	2.050
		25.0	.433	.065	.204	.608
	2000	1.0	2.683	.616	1.410	3.440
		2.5	3.554	.544	1.580	4.380
		5.0	3.965	.573	1.570	4.930
		10.0	2.285	.340	1.120	3.130
		25.0	.756	.110	.332	1.010
	5000	1.0	4.718	1.010	2.060	5.690
		2.5	6.739	.897	2.420	7.190
		5.0	7.441	.965	2.520	7.790
		10.0	4.048	.578	1.820	5.090
		25.0	1.416	.182	.632	1.750

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
BEAVER VALLEY (CONTINUED)						
	10000	1.0	7.200	1.220	2.750	7.990
		2.5	10.680	1.200	3.340	10.300
		5.0	11.710	1.300	3.590	11.000
		10.0	6.048	.863	2.610	7.360
		25.0	2.162	.268	1.020	2.660
BELLEFONTE						
	500	1.0	2.464	.695	1.700	3.970
		2.5	2.473	.698	1.550	4.310
		5.0	1.773	.526	1.190	2.860
		10.0	1.021	.280	.694	1.550
		25.0	.355	.100	.244	.624
	1000	1.0	4.015	1.070	2.470	6.720
		2.5	4.125	1.080	2.270	6.670
		5.0	2.863	.838	1.690	4.730
		10.0	1.575	.444	1.140	2.410
		25.0	.627	.159	.412	1.070
	2000	1.0	6.540	1.400	3.590	9.420
		2.5	6.473	1.460	3.300	9.890
		5.0	4.623	1.210	2.400	6.730
		10.0	2.429	.703	1.680	3.540
		25.0	1.066	.251	.696	1.530
	5000	1.0	10.610	1.990	5.880	14.400
		2.5	11.180	2.150	5.290	16.600
		5.0	7.554	1.800	3.800	10.500
		10.0	3.962	1.210	2.800	5.450
		25.0	1.709	.459	1.220	2.450
	10000	1.0	15.070	2.600	7.800	19.900
		2.5	16.910	2.890	6.840	24.100
		5.0	10.790	2.440	5.280	14.600
		10.0	5.528	1.720	3.830	7.550
		25.0	2.442	.726	1.690	3.290
BIG ROCK POINT						
	500	1.0	.488	.140	.312	.766
		2.5	.522	.142	.319	.821
		5.0	.466	.125	.283	.799
		10.0	.270	.054	.169	.453
		25.0	.084	.012	.041	.156
	1000	1.0	.826	.194	.489	1.250
		2.5	.957	.206	.527	1.470
		5.0	.866	.184	.481	1.420
		10.0	.517	.099	.292	.869
		25.0	.163	.022	.087	.285
	2000	1.0	1.375	.269	.766	1.950
		2.5	1.719	.300	.871	2.600
		5.0	1.535	.272	.816	2.430
		10.0	.991	.154	.503	1.490
		25.0	.303	.039	.155	.521

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES			
				15TH	50TH	85TH	
BIG ROCK POINT (CONTINUED)							
	5000	1.0	2.665	.416	1.220	3.520	
		2.5	3.720	.492	1.460	5.350	
		5.0	3.213	.455	1.450	4.930	
		10.0	2.048	.275	1.030	2.910	
		25.0	.687	.087	.315	1.110	
	10000	1.0	4.398	.577	1.590	5.500	
		2.5	6.461	.716	2.080	8.040	
		5.0	5.483	.672	2.160	7.080	
		10.0	3.444	.427	1.550	4.400	
		25.0	1.190	.139	.539	1.710	
	BRAIDWOOD						
		500	1.0	1.429	.383	1.090	2.020
			2.5	1.309	.311	.849	1.970
			5.0	.928	.217	.554	1.410
			10.0	.485	.125	.299	.747
25.0			.174	.024	.107	.276	
1000		1.0	2.167	.591	1.460	3.130	
		2.5	2.079	.463	1.240	3.180	
		5.0	1.482	.307	.891	2.210	
		10.0	.822	.177	.479	1.220	
		25.0	.294	.038	.173	.461	
2000		1.0	3.284	.910	1.980	4.850	
		2.5	3.303	.689	1.710	5.100	
		5.0	2.337	.436	1.290	3.440	
		10.0	1.299	.252	.767	1.850	
		25.0	.497	.059	.279	.770	
5000		1.0	5.691	1.280	2.940	8.090	
		2.5	5.960	1.100	2.600	8.190	
		5.0	4.265	.693	1.990	5.820	
		10.0	2.253	.399	1.330	3.160	
		25.0	.994	.105	.527	1.320	
10000	1.0	8.385	1.610	3.960	10.900		
	2.5	9.004	1.410	3.580	11.700		
	5.0	6.300	.984	2.770	7.950		
	10.0	3.323	.566	1.950	4.400		
	25.0	1.418	.165	.853	1.870		
BROWNS FERRY							
	500	1.0	2.853	.804	1.930	4.240	
		2.5	2.715	.777	1.820	4.260	
		5.0	1.804	.557	1.290	2.630	
		10.0	1.017	.280	.714	1.380	
		25.0	.308	.097	.204	.459	
	1000	1.0	4.677	1.160	2.900	7.010	
		2.5	4.368	1.140	2.650	6.310	
		5.0	2.746	.860	1.770	4.110	
		10.0	1.481	.415	1.100	2.020	
		25.0	.490	.139	.300	.738	

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
BROWNS FERRY (CONTINUED)						
	2000	1.0	7.426	1.490	4.360	9.510
		2.5	6.489	1.480	3.840	8.890
		5.0	4.181	1.170	2.410	5.850
		10.0	2.157	.615	1.490	2.960
		25.0	.780	.198	.441	1.120
	5000	1.0	11.340	2.100	7.230	14.200
		2.5	10.500	2.100	5.750	14.000
		5.0	6.732	1.610	3.650	8.470
		10.0	3.442	1.020	2.220	4.390
		25.0	1.311	.315	.735	1.720
	10000	1.0	15.620	2.710	8.840	19.300
		2.5	15.120	2.730	7.240	19.700
		5.0	9.380	2.050	4.990	11.200
		10.0	4.688	1.340	3.010	5.900
		25.0	1.847	.449	1.060	2.370
BRUNSWICK						
	500	1.0	1.917	.254	.870	2.800
		2.5	2.605	.297	1.150	3.780
		5.0	2.428	.316	1.110	3.540
		10.0	1.488	.235	.680	2.150
		25.0	.427	.067	.208	.605
	1000	1.0	3.245	.388	1.340	4.610
		2.5	4.529	.470	1.730	6.060
		5.0	4.023	.523	1.650	5.520
		10.0	2.361	.387	1.150	3.330
		25.0	.713	.122	.335	.995
	2000	1.0	5.493	.593	1.940	7.380
		2.5	7.085	.745	2.600	9.010
		5.0	6.195	.866	2.450	7.690
		10.0	3.601	.636	1.710	4.760
		25.0	1.141	.191	.538	1.490
	5000	1.0	9.752	1.020	3.190	11.400
		2.5	12.420	1.250	4.470	15.200
		5.0	10.190	1.390	4.140	11.900
		10.0	5.946	1.150	2.890	7.640
		25.0	1.902	.347	1.010	2.520
	10000	1.0	14.330	1.330	4.640	15.900
		2.5	18.980	1.730	6.140	22.400
		5.0	14.840	1.920	5.790	16.600
		10.0	8.671	1.620	4.040	10.400
		25.0	2.799	.545	1.470	3.590
BYRON						
	500	1.0	1.256	.291	.859	1.800
		2.5	1.066	.215	.632	1.630
		5.0	.793	.159	.418	1.230
		10.0	.412	.067	.230	.781
		25.0	.155	.014	.080	.284

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
BYRON (CONTINUED)						
	1000	1.0	2.015	.445	1.240	2.750
		2.5	1.915	.315	1.050	2.640
		5.0	1.429	.228	.693	1.960
		10.0	.803	.110	.393	1.300
		25.0	.287	.026	.146	.514
	2000	1.0	3.234	.681	1.680	4.220
		2.5	3.439	.461	1.480	4.270
		5.0	2.497	.327	1.110	3.120
		10.0	1.366	.168	.669	1.970
		25.0	.531	.047	.248	.930
	5000	1.0	6.045	1.100	2.500	7.290
		2.5	6.838	.763	2.330	7.410
		5.0	5.149	.528	1.800	5.510
		10.0	2.527	.293	1.260	3.320
		25.0	1.111	.101	.499	1.520
	10000	1.0	9.215	1.370	3.390	9.960
		2.5	10.820	1.080	3.280	11.000
		5.0	7.482	.759	2.610	7.600
		10.0	3.721	.448	1.880	4.580
		25.0	1.591	.163	.847	2.160
CALLAWAY						
	500	1.0	2.900	.780	1.760	4.330
		2.5	2.904	.770	1.670	4.520
		5.0	1.934	.555	1.220	2.750
		10.0	1.087	.273	.630	1.450
		25.0	.314	.100	.194	.434
	1000	1.0	4.629	1.160	2.580	7.020
		2.5	4.593	1.140	2.390	6.380
		5.0	2.866	.872	1.650	4.140
		10.0	1.519	.402	.995	2.030
		25.0	.471	.136	.276	.650
	2000	1.0	7.243	1.540	3.790	9.220
		2.5	6.582	1.490	3.410	8.670
		5.0	4.247	1.170	2.220	5.720
		10.0	2.124	.593	1.340	2.840
		25.0	.705	.185	.390	.974
	5000	1.0	10.710	2.240	6.290	13.200
		2.5	10.280	2.130	5.280	13.000
		5.0	6.519	1.590	3.290	7.990
		10.0	3.242	.989	1.970	4.000
		25.0	1.133	.278	.619	1.380
	10000	1.0	14.390	2.980	8.070	17.400
		2.5	14.400	2.790	6.570	17.700
		5.0	8.735	2.000	4.430	10.300
		10.0	4.229	1.280	2.640	5.130
		25.0	1.489	.377	.876	1.780

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
CALVERT CLIFFS	500	1.0	2.085	.436	1.180	3.240
		2.5	2.158	.379	1.110	3.770
		5.0	1.314	.243	.692	2.120
		10.0	.530	.124	.283	.900
		25.0	.208	.045	.131	.319
	1000	1.0	3.581	.695	1.680	5.540
		2.5	3.929	.620	1.670	6.200
		5.0	2.227	.384	1.150	3.540
		10.0	1.005	.188	.478	1.420
		25.0	.354	.093	.205	.531
	2000	1.0	6.149	1.060	2.390	8.730
		2.5	6.669	1.010	2.490	9.390
		5.0	3.774	.606	1.650	5.570
		10.0	1.564	.287	.805	2.160
		25.0	.602	.139	.321	.886
	5000	1.0	11.330	1.510	3.820	14.600
		2.5	12.610	1.530	4.230	16.200
		5.0	6.836	1.070	2.660	8.580
		10.0	2.806	.500	1.400	3.570
		25.0	1.146	.227	.582	1.460
	10000	1.0	17.680	1.980	5.440	21.600
		2.5	20.420	2.090	5.910	24.200
		5.0	10.160	1.420	3.830	11.900
		10.0	4.074	.761	2.020	4.930
		25.0	1.667	.329	.912	2.070
CATAWBA	500	1.0	2.176	.481	1.290	3.180
		2.5	2.498	.507	1.340	3.890
		5.0	1.822	.424	1.110	2.670
		10.0	1.012	.248	.619	1.460
		25.0	.343	.091	.229	.547
	1000	1.0	3.554	.763	1.780	5.080
		2.5	4.234	.831	1.900	6.030
		5.0	2.912	.684	1.550	4.210
		10.0	1.520	.387	1.040	2.180
		25.0	.567	.144	.359	.908
	2000	1.0	5.803	1.100	2.470	7.760
		2.5	6.589	1.190	2.720	8.680
		5.0	4.655	1.060	2.160	6.070
		10.0	2.283	.604	1.490	3.210
		25.0	.938	.219	.562	1.310
	5000	1.0	9.872	1.510	3.790	11.900
		2.5	11.230	1.740	4.340	14.100
		5.0	7.457	1.520	3.360	9.180
		10.0	3.690	1.060	2.390	4.800
		25.0	1.499	.381	1.010	2.040

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
CATAWBA (CONTINUED)						
	10000	1.0	14.230	1.920	5.240	16.500
		2.5	16.800	2.310	5.770	20.200
		5.0	10.500	1.990	4.690	12.500
		10.0	5.072	1.460	3.310	6.510
		25.0	2.103	.580	1.370	2.840
CLINTON						
	500	1.0	5.004	1.010	2.450	7.230
		2.5	5.118	1.030	2.650	7.300
		5.0	3.112	.535	1.520	4.670
		10.0	1.235	.198	.586	1.830
		25.0	.421	.061	.184	.630
	1000	1.0	8.100	1.350	3.700	10.200
		2.5	7.790	1.390	4.040	10.600
		5.0	5.016	.832	2.140	6.510
		10.0	1.845	.282	.928	2.720
		25.0	.691	.101	.265	1.040
	2000	1.0	11.860	1.800	5.580	14.400
		2.5	11.860	1.870	5.680	15.400
		5.0	7.465	1.150	3.000	8.860
		10.0	2.755	.400	1.260	3.800
		25.0	1.102	.136	.383	1.440
	5000	1.0	19.640	2.640	8.340	22.600
		2.5	20.660	2.760	7.970	24.500
		5.0	12.630	1.600	4.720	13.300
		10.0	4.372	.636	1.830	5.780
		25.0	1.824	.202	.623	2.230
	10000	1.0	28.750	3.530	10.500	31.800
		2.5	30.120	3.700	10.300	33.100
		5.0	18.790	2.050	6.020	18.100
		10.0	6.140	.904	2.420	7.930
		25.0	2.672	.271	.900	3.070
COMANCHE PEAK						
	500	1.0	1.060	.262	.618	1.190
		2.5	1.132	.193	.439	1.170
		5.0	.720	.153	.304	.867
		10.0	.343	.079	.177	.438
		25.0	.151	.018	.052	.147
	1000	1.0	1.475	.415	1.010	1.740
		2.5	1.578	.290	.718	1.760
		5.0	1.114	.226	.486	1.280
		10.0	.501	.131	.276	.675
		25.0	.215	.032	.098	.229
	2000	1.0	2.052	.657	1.330	2.530
		2.5	2.200	.435	1.110	2.650
		5.0	1.552	.333	.777	1.840
		10.0	.731	.195	.432	1.030
		25.0	.306	.056	.153	.357

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
COMANCHE PEAK (CONTINUED)						
	5000	1.0	3.175	1.090	1.920	4.150
		2.5	3.412	.743	1.680	4.550
		5.0	2.406	.557	1.280	2.960
		10.0	1.189	.331	.779	1.670
		25.0	.488	.112	.274	.644
	10000	1.0	4.417	1.370	2.540	6.050
		2.5	4.755	1.080	2.310	6.480
		5.0	3.353	.820	1.740	4.250
		10.0	1.688	.492	1.170	2.400
		25.0	.694	.163	.426	1.000
COOK	500	1.0	1.517	.346	1.070	2.180
		2.5	2.076	.395	1.210	3.010
		5.0	1.322	.264	.790	1.880
		10.0	.670	.133	.350	.989
		25.0	.204	.030	.113	.295
	1000	1.0	2.332	.532	1.470	3.330
		2.5	3.424	.621	1.710	4.760
		5.0	2.123	.396	1.200	2.930
		10.0	1.152	.198	.560	1.530
		25.0	.339	.052	.180	.492
	2000	1.0	3.585	.819	2.010	5.070
		2.5	5.576	.977	2.420	6.980
		5.0	3.408	.593	1.680	4.550
		10.0	1.832	.295	.896	2.370
		25.0	.563	.089	.287	.819
	5000	1.0	6.328	1.200	3.050	8.280
		2.5	10.080	1.390	3.850	11.500
		5.0	6.196	1.010	2.610	7.530
		10.0	3.334	.500	1.520	3.970
		25.0	1.082	.147	.530	1.460
	10000	1.0	9.253	1.490	4.170	11.200
		2.5	15.770	1.800	5.340	16.700
		5.0	9.416	1.310	3.640	10.900
		10.0	5.021	.745	2.240	5.690
		25.0	1.625	.210	.844	2.180
COOPER	500	1.0	1.469	.288	.868	2.160
		2.5	1.495	.249	.733	2.580
		5.0	1.381	.216	.662	2.110
		10.0	.951	.108	.396	1.590
		25.0	.265	.021	.122	.497
	1000	1.0	2.476	.459	1.280	3.510
		2.5	2.774	.395	1.200	4.720
		5.0	2.676	.345	1.150	3.800
		10.0	1.738	.182	.743	2.880
		25.0	.563	.049	.226	1.040

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
COOPER (CONTINUED)						
	2000	1.0	4.174	.731	1.780	5.680
		2.5	5.115	.627	1.790	7.360
		5.0	5.131	.551	1.730	6.130
		10.0	3.097	.304	1.270	4.450
		25.0	1.116	.108	.416	1.610
	5000	1.0	8.053	1.160	2.770	9.400
		2.5	9.733	1.090	3.030	12.900
		5.0	9.566	1.010	2.980	10.200
		10.0	5.478	.601	2.290	7.760
		25.0	2.065	.215	.936	2.870
	10000	1.0	12.280	1.460	3.860	13.100
		2.5	15.830	1.450	4.500	19.800
		5.0	15.320	1.390	4.510	14.900
		10.0	8.433	1.000	3.450	10.800
		25.0	3.213	.361	1.400	3.920
CRYSTAL RIVER						
	500	1.0	.449	.127	.289	.738
		2.5	.383	.102	.246	.647
		5.0	.273	.061	.178	.461
		10.0	.144	.027	.094	.252
		25.0	.045	.007	.023	.094
	1000	1.0	.791	.190	.469	1.210
		2.5	.693	.151	.400	1.130
		5.0	.500	.106	.281	.836
		10.0	.264	.047	.155	.452
		25.0	.101	.010	.045	.170
	2000	1.0	1.330	.285	.762	1.840
		2.5	1.240	.224	.651	1.780
		5.0	.915	.154	.444	1.370
		10.0	.484	.080	.250	.810
		25.0	.181	.017	.092	.299
	5000	1.0	2.536	.486	1.240	3.170
		2.5	2.615	.377	1.160	3.220
		5.0	1.888	.252	.811	2.470
		10.0	1.062	.139	.472	1.520
		25.0	.392	.031	.185	.634
	10000	1.0	4.131	.729	1.660	4.800
		2.5	4.598	.558	1.620	5.040
		5.0	3.242	.367	1.210	3.850
		10.0	1.705	.202	.762	2.340
		25.0	.704	.050	.308	1.070
DAVIS BESSE						
	500	1.0	1.501	.305	.788	1.840
		2.5	1.787	.245	.652	2.270
		5.0	1.442	.182	.490	1.810
		10.0	.772	.094	.289	1.140
		25.0	.291	.021	.128	.458

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
DAVIS BESSE (CONTINUED)						
	1000	1.0	2.593	.462	1.170	2.920
		2.5	3.359	.371	1.070	3.830
		5.0	2.485	.276	.834	2.840
		10.0	1.331	.147	.494	1.750
		25.0	.516	.046	.204	.811
	2000	1.0	4.482	.699	1.580	4.630
		2.5	5.873	.559	1.560	5.950
		5.0	4.282	.419	1.280	4.460
		10.0	2.060	.226	.844	2.690
		25.0	.914	.100	.325	1.240
	5000	1.0	8.504	1.100	2.330	8.050
		2.5	10.450	.964	2.550	9.530
		5.0	7.207	.729	2.100	6.880
		10.0	3.475	.399	1.480	4.210
		25.0	1.452	.159	.603	1.930
	10000	1.0	12.490	1.360	3.130	11.200
		2.5	16.160	1.270	3.700	13.600
		5.0	10.250	1.070	3.050	9.260
		10.0	4.780	.613	2.180	5.770
		25.0	1.999	.227	.962	2.700
DRESDEN						
	500	1.0	1.395	.357	1.060	2.010
		2.5	1.275	.289	.853	1.970
		5.0	.904	.209	.555	1.420
		10.0	.481	.118	.299	.797
		25.0	.174	.024	.101	.289
	1000	1.0	2.142	.546	1.440	3.170
		2.5	2.071	.429	1.260	3.270
		5.0	1.486	.297	.912	2.300
		10.0	.834	.172	.487	1.310
		25.0	.305	.039	.168	.504
	2000	1.0	3.288	.834	1.960	4.980
		2.5	3.363	.637	1.750	5.320
		5.0	2.408	.423	1.320	3.700
		10.0	1.342	.249	.794	2.020
		25.0	.534	.062	.278	.881
	5000	1.0	5.793	1.230	2.940	8.420
		2.5	6.218	1.050	2.690	8.770
		5.0	4.557	.675	2.090	6.230
		10.0	2.402	.408	1.400	3.430
		25.0	1.077	.115	.541	1.520
	10000	1.0	8.642	1.550	3.990	11.700
		2.5	9.584	1.350	3.730	12.800
		5.0	6.731	.962	2.950	8.560
		10.0	3.543	.592	2.080	4.770
		25.0	1.552	.177	.897	2.220

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
DUANE ARNOLD	500	1.0	1.007	.242	.678	1.420
		2.5	.686	.184	.455	1.070
		5.0	.447	.130	.289	.633
		10.0	.226	.060	.152	.337
		25.0	.080	.013	.043	.126
	1000	1.0	1.480	.366	1.070	2.090
		2.5	1.147	.271	.734	1.630
		5.0	.758	.188	.446	1.050
		10.0	.378	.100	.243	.563
		25.0	.141	.024	.085	.207
	2000	1.0	2.174	.552	1.420	3.090
		2.5	1.804	.400	1.110	2.500
		5.0	1.239	.272	.687	1.660
		10.0	.635	.151	.389	.941
		25.0	.230	.044	.145	.339
	5000	1.0	3.615	.952	2.050	5.150
		2.5	3.282	.670	1.650	4.400
		5.0	2.249	.445	1.160	3.040
		10.0	1.197	.261	.724	1.600
		25.0	.438	.096	.275	.653
10000	1.0	5.310	1.210	2.720	7.440	
	2.5	5.145	.988	2.230	6.520	
	5.0	3.530	.646	1.620	4.810	
	10.0	1.793	.394	1.130	2.370	
	25.0	.714	.145	.446	1.050	
FARLEY	500	1.0	1.019	.311	.786	1.470
		2.5	.743	.238	.509	1.200
		5.0	.498	.175	.338	.760
		10.0	.262	.092	.182	.418
		25.0	.098	.019	.055	.159
	1000	1.0	1.530	.488	1.180	2.200
		2.5	1.247	.362	.825	1.860
		5.0	.853	.253	.525	1.260
		10.0	.442	.136	.279	.712
		25.0	.167	.031	.101	.269
	2000	1.0	2.299	.766	1.590	3.290
		2.5	2.001	.549	1.210	2.890
		5.0	1.400	.366	.815	1.970
		10.0	.744	.195	.429	1.170
		25.0	.283	.050	.158	.457
	5000	1.0	3.937	1.180	2.370	5.600
		2.5	3.736	.955	1.840	5.140
		5.0	2.630	.597	1.320	3.580
		10.0	1.394	.314	.758	2.060
		25.0	.566	.098	.285	.917

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
FARLEY (CONTINUED)						
	10000	1.0	5.915	1.490	3.210	7.980
		2.5	5.904	1.240	2.530	7.490
		5.0	4.236	.865	1.810	5.440
		10.0	2.167	.450	1.140	3.130
		25.0	.956	.142	.445	1.360
FERMI						
	500	1.0	1.229	.299	.682	1.580
		2.5	1.382	.229	.557	1.820
		5.0	1.122	.165	.423	1.390
		10.0	.537	.088	.250	.841
		25.0	.213	.018	.101	.315
	1000	1.0	2.015	.449	1.070	2.440
		2.5	2.437	.341	.922	2.890
		5.0	1.832	.245	.709	2.120
		10.0	1.021	.136	.422	1.340
		25.0	.348	.037	.163	.520
	2000	1.0	3.303	.675	1.430	3.740
		2.5	4.299	.507	1.360	4.600
		5.0	2.992	.363	1.120	3.240
		10.0	1.519	.201	.713	1.990
		25.0	.569	.074	.264	.857
	5000	1.0	6.347	1.080	2.090	6.610
		2.5	7.701	.859	2.190	7.620
		5.0	5.489	.611	1.780	5.490
		10.0	2.571	.339	1.290	3.270
		25.0	1.057	.134	.499	1.370
	10000	1.0	9.423	1.340	2.800	9.290
		2.5	11.590	1.180	3.150	11.000
		5.0	7.708	.906	2.520	7.580
		10.0	3.633	.502	1.890	4.420
		25.0	1.458	.187	.808	1.870
FITZPATRICK						
	500	1.0	1.729	.440	1.000	2.250
		2.5	2.007	.406	1.010	2.740
		5.0	1.489	.331	.708	2.020
		10.0	.772	.191	.411	1.120
		25.0	.263	.058	.157	.360
	1000	1.0	2.765	.670	1.340	3.440
		2.5	3.334	.614	1.410	4.310
		5.0	2.330	.489	1.100	3.030
		10.0	1.229	.283	.659	1.590
		25.0	.411	.101	.232	.546
	2000	1.0	4.423	1.010	1.800	5.250
		2.5	5.398	.928	1.970	6.370
		5.0	3.646	.723	1.510	4.560
		10.0	1.793	.420	1.040	2.250
		25.0	.644	.142	.343	.828

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES			
				15TH	50TH	85TH	
FITZPATRICK (CONTINUED)							
	5000	1.0	7.875	1.330	2.650	8.560	
		2.5	8.919	1.330	3.050	10.300	
		5.0	6.092	1.130	2.280	6.880	
		10.0	2.954	.707	1.600	3.440	
		25.0	1.108	.221	.576	1.280	
	10000	1.0	11.090	1.630	3.560	11.700	
		2.5	13.040	1.710	4.250	14.800	
		5.0	8.394	1.430	3.110	9.210	
		10.0	3.983	1.030	2.220	4.540	
		25.0	1.501	.309	.853	1.690	
	FORT CALHOUN						
		500	1.0	1.315	.221	.633	1.680
			2.5	1.341	.169	.534	1.710
			5.0	1.260	.159	.511	1.520
			10.0	.822	.086	.292	1.070
25.0			.275	.017	.106	.323	
1000		1.0	2.411	.352	1.050	2.700	
		2.5	2.802	.265	.958	3.070	
		5.0	2.516	.254	.947	2.680	
		10.0	1.686	.150	.552	1.840	
		25.0	.640	.043	.185	.639	
2000		1.0	4.419	.563	1.450	4.350	
		2.5	5.649	.415	1.430	5.360	
		5.0	5.019	.407	1.470	4.730	
		10.0	3.213	.255	1.030	3.150	
		25.0	1.271	.105	.322	1.170	
5000	1.0	9.259	1.020	2.230	7.790		
	2.5	12.000	.752	2.370	9.350		
	5.0	9.491	.759	2.560	8.230		
	10.0	6.243	.513	1.850	5.520		
	25.0	2.489	.185	.673	2.170		
10000	1.0	15.220	1.260	3.080	10.800		
	2.5	21.190	1.100	3.480	14.200		
	5.0	15.370	1.130	3.890	12.400		
	10.0	10.000	.871	2.870	8.430		
	25.0	3.736	.284	1.120	3.300		
GINNA							
	500	1.0	1.531	.387	.841	2.210	
		2.5	1.827	.355	.909	2.840	
		5.0	1.407	.277	.656	2.160	
		10.0	.759	.156	.383	1.080	
		25.0	.270	.041	.145	.370	
	1000	1.0	2.563	.582	1.200	3.620	
		2.5	3.237	.534	1.310	5.010	
		5.0	2.350	.408	1.070	3.530	
		10.0	1.274	.226	.633	1.660	
		25.0	.466	.071	.226	.627	

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
GINNA (CONTINUED)						
2000		1.0	4.290	.877	1.590	5.950
		2.5	5.545	.803	1.810	7.360
		5.0	3.927	.601	1.470	5.470
		10.0	1.963	.328	1.030	2.540
		25.0	.801	.115	.354	1.030
5000		1.0	8.114	1.210	2.310	9.860
		2.5	9.798	1.210	2.780	12.200
		5.0	6.805	1.000	2.260	8.280
		10.0	3.366	.534	1.620	3.940
		25.0	1.380	.186	.638	1.560
10000		1.0	12.080	1.460	3.050	13.900
		2.5	15.070	1.530	3.840	18.000
		5.0	9.774	1.280	3.120	11.300
		10.0	4.719	.773	2.290	5.280
		25.0	1.963	.268	.998	2.120
GRAND GULF						
500		1.0	2.899	.628	1.780	4.620
		2.5	2.268	.395	1.190	3.120
		5.0	1.183	.204	.553	1.600
		10.0	.398	.084	.198	.524
		25.0	.155	.020	.061	.176
1000		1.0	4.941	1.020	2.680	7.570
		2.5	3.922	.619	1.720	5.040
		5.0	1.952	.297	.897	2.410
		10.0	.670	.127	.296	.841
		25.0	.270	.032	.104	.282
2000		1.0	8.065	1.380	4.030	10.500
		2.5	6.548	.971	2.480	7.320
		5.0	3.220	.432	1.260	3.640
		10.0	1.102	.179	.441	1.280
		25.0	.468	.053	.160	.454
5000		1.0	13.840	2.060	6.910	16.200
		2.5	12.430	1.400	4.040	12.000
		5.0	6.023	.710	1.870	5.960
		10.0	1.918	.283	.747	2.130
		25.0	.970	.101	.282	.851
10000		1.0	20.820	2.780	8.720	22.500
		2.5	20.180	1.820	5.520	17.400
		5.0	9.174	1.020	2.520	8.210
		10.0	2.917	.400	1.090	3.110
		25.0	1.468	.146	.434	1.270
HADDAM NECK						
500		1.0	1.616	.397	1.030	2.480
		2.5	1.956	.391	1.120	3.120
		5.0	1.542	.325	.921	2.320
		10.0	.892	.202	.508	1.340
		25.0	.328	.071	.201	.537

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
HADDAM NECK (CONTINUED)						
	1000	1.0	2.779	.620	1.420	4.200
		2.5	3.551	.623	1.620	5.340
		5.0	2.663	.515	1.370	3.880
		10.0	1.482	.320	.895	2.180
		25.0	.600	.127	.330	.995
	2000	1.0	4.780	.967	1.950	7.080
		2.5	6.098	.992	2.360	8.010
		5.0	4.598	.817	1.970	5.980
		10.0	2.377	.508	1.380	3.390
		25.0	1.059	.200	.543	1.450
	5000	1.0	9.121	1.310	2.990	11.600
		2.5	11.290	1.470	3.880	13.700
		5.0	7.864	1.310	3.200	9.520
		10.0	4.027	.933	2.330	5.410
		25.0	1.738	.365	1.030	2.380
	10000	1.0	13.990	1.630	4.130	16.800
		2.5	17.980	1.970	5.470	20.500
		5.0	11.590	1.770	4.610	13.500
		10.0	5.745	1.340	3.330	7.720
		25.0	2.528	.575	1.410	3.280
HATCH						
	500	1.0	3.337	.699	1.760	5.180
		2.5	2.536	.367	1.320	3.600
		5.0	1.538	.233	.732	2.260
		10.0	.543	.111	.292	.841
		25.0	.207	.031	.108	.305
	1000	1.0	5.721	1.120	2.650	8.200
		2.5	4.257	.600	1.970	5.730
		5.0	2.451	.362	1.160	3.560
		10.0	.934	.165	.462	1.300
		25.0	.330	.056	.167	.494
	2000	1.0	9.055	1.510	3.990	11.800
		2.5	6.614	.983	2.920	8.540
		5.0	3.908	.562	1.620	5.410
		10.0	1.412	.246	.729	1.920
		25.0	.526	.101	.256	.801
	5000	1.0	15.600	2.260	6.870	19.100
		2.5	11.310	1.470	4.930	14.500
		5.0	6.780	1.000	2.520	8.300
		10.0	2.378	.415	1.230	3.170
		25.0	.974	.160	.453	1.350
	10000	1.0	23.540	3.050	8.680	27.400
		2.5	16.980	1.970	6.470	21.500
		5.0	9.953	1.310	3.510	11.500
		10.0	3.443	.618	1.720	4.280
		25.0	1.417	.227	.696	1.910

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
HOPE CREEK	500	1.0	2.255	.481	1.280	3.600
		2.5	2.363	.397	1.240	4.010
		5.0	1.450	.259	.798	2.330
		10.0	.615	.135	.342	1.050
		25.0	.231	.052	.143	.349
	1000	1.0	3.976	.785	1.840	6.230
		2.5	4.478	.657	1.890	6.620
		5.0	2.497	.425	1.280	4.010
		10.0	1.142	.216	.597	1.600
		25.0	.406	.110	.229	.603
	2000	1.0	7.008	1.150	2.630	9.540
		2.5	7.490	1.060	2.880	10.300
		5.0	4.299	.699	1.880	6.130
		10.0	1.795	.345	1.030	2.440
		25.0	.714	.165	.366	1.030
	5000	1.0	12.760	1.660	4.230	16.000
		2.5	14.280	1.680	5.020	18.500
		5.0	7.461	1.210	3.110	9.660
		10.0	3.204	.642	1.710	3.940
		25.0	1.304	.284	.680	1.670
	10000	1.0	20.080	2.180	6.050	23.700
		2.5	22.910	2.380	6.740	26.900
		5.0	10.950	1.650	4.570	13.600
		10.0	4.558	1.020	2.520	5.450
		25.0	1.882	.429	1.050	2.410
INDIAN POINT	500	1.0	1.565	.401	.985	2.790
		2.5	1.907	.430	1.130	3.750
		5.0	1.508	.353	1.010	2.660
		10.0	.873	.221	.596	1.450
		25.0	.323	.093	.230	.585
	1000	1.0	2.732	.623	1.390	4.830
		2.5	3.517	.716	1.710	6.380
		5.0	2.636	.593	1.510	4.700
		10.0	1.459	.379	1.090	2.300
		25.0	.596	.155	.402	1.060
	2000	1.0	4.771	.969	1.940	7.970
		2.5	6.108	1.120	2.570	10.000
		5.0	4.607	.996	2.240	6.880
		10.0	2.334	.648	1.650	3.480
		25.0	1.059	.251	.702	1.520
	5000	1.0	9.188	1.360	3.030	13.400
		2.5	11.380	1.690	4.410	18.100
		5.0	7.896	1.520	3.790	11.000
		10.0	3.957	1.210	2.880	5.540
		25.0	1.719	.474	1.240	2.460

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
INDIAN POINT (CONTINUED)						
	10000	1.0	14.110	1.730	4.250	20.000
		2.5	18.220	2.330	6.030	26.200
		5.0	11.650	2.100	5.390	15.800
		10.0	5.623	1.730	3.920	7.880
		25.0	2.481	.767	1.680	3.330
KEWAUNEE						
	500	1.0	.618	.160	.422	1.040
		2.5	.562	.135	.358	1.080
		5.0	.545	.121	.329	.963
		10.0	.280	.046	.188	.526
		25.0	.088	.010	.049	.154
	1000	1.0	1.062	.228	.697	1.620
		2.5	1.015	.194	.602	1.800
		5.0	1.020	.176	.552	1.630
		10.0	.529	.078	.329	1.020
		25.0	.167	.016	.107	.279
	2000	1.0	1.670	.325	1.090	2.520
		2.5	1.748	.278	1.010	3.000
		5.0	1.794	.257	.926	2.750
		10.0	.998	.128	.577	1.670
		25.0	.304	.032	.181	.505
	5000	1.0	3.038	.518	1.610	4.520
		2.5	3.583	.449	1.630	5.690
		5.0	3.787	.422	1.590	5.350
		10.0	1.940	.237	1.160	3.170
		25.0	.674	.082	.365	1.080
	10000	1.0	4.777	.738	2.170	7.010
		2.5	6.030	.646	2.330	8.490
		5.0	6.317	.615	2.350	7.940
		10.0	3.171	.376	1.790	4.720
		25.0	1.162	.136	.620	1.670
LACROSSE						
	500	1.0	1.000	.209	.623	1.530
		2.5	1.071	.208	.628	1.810
		5.0	.672	.137	.382	1.150
		10.0	.319	.049	.176	.605
		25.0	.111	.010	.052	.200
	1000	1.0	1.553	.318	1.040	2.360
		2.5	1.868	.318	1.060	2.980
		5.0	1.236	.204	.649	1.960
		10.0	.627	.084	.310	1.130
		25.0	.207	.021	.112	.372
	2000	1.0	2.411	.483	1.410	3.650
		2.5	3.257	.486	1.560	4.910
		5.0	2.194	.302	1.080	3.330
		10.0	1.175	.136	.545	1.800
		25.0	.387	.041	.195	.693

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES			
				15TH	50TH	85TH	
LACROSSE (CONTINUED)							
LACROSSE (CONTINUED)	5000	1.0	4.314	.841	2.110	6.480	
		2.5	6.687	.853	2.600	8.500	
		5.0	4.681	.509	1.820	6.210	
		10.0	2.339	.249	1.110	3.300	
		25.0	.882	.101	.406	1.380	
	10000	1.0	6.698	1.130	2.850	9.120	
		2.5	11.340	1.190	3.820	12.900	
		5.0	7.624	.754	2.710	9.150	
		10.0	3.762	.394	1.700	4.900	
		25.0	1.429	.155	.708	2.140	
	LASALLE						
	LASALLE	500	1.0	1.902	.468	1.260	2.790
			2.5	2.713	.589	1.520	4.620
			5.0	1.508	.294	.829	2.200
			10.0	.753	.142	.413	1.150
25.0			.249	.034	.134	.397	
1000		1.0	3.029	.736	1.770	4.330	
		2.5	4.556	.946	2.210	7.000	
		5.0	2.503	.432	1.250	3.440	
		10.0	1.275	.204	.670	1.800	
		25.0	.447	.055	.222	.692	
2000		1.0	4.824	1.080	2.500	6.720	
		2.5	7.345	1.290	3.220	10.400	
		5.0	4.155	.636	1.780	5.320	
		10.0	2.068	.291	1.070	2.810	
		25.0	.803	.092	.366	1.150	
5000		1.0	8.649	1.460	3.930	10.400	
		2.5	13.650	1.870	5.210	17.500	
		5.0	7.679	1.040	2.830	8.610	
		10.0	3.777	.468	1.790	4.680	
		25.0	1.505	.160	.711	2.000	
10000		1.0	12.970	1.830	5.540	14.300	
		2.5	21.750	2.490	6.890	25.300	
		5.0	12.030	1.360	4.020	12.400	
		10.0	5.727	.670	2.640	6.820	
		25.0	2.316	.241	1.120	3.020	
LIMERICK							
LIMERICK		500	1.0	1.405	.359	.804	2.170
			2.5	1.780	.377	1.010	2.920
			5.0	1.452	.314	.838	2.210
			10.0	.843	.197	.476	1.410
	25.0		.320	.080	.194	.583	
	1000	1.0	2.487	.568	1.220	3.720	
		2.5	3.321	.646	1.510	5.240	
		5.0	2.534	.545	1.340	3.700	
		10.0	1.435	.343	.884	2.230	
		25.0	.593	.146	.338	1.050	

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
LIMERICK (CONTINUED)						
	2000	1.0	4.402	.901	1.700	6.380
		2.5	5.867	1.060	2.250	8.040
		5.0	4.422	.944	1.990	5.800
		10.0	2.300	.597	1.400	3.370
		25.0	1.057	.239	.590	1.520
	5000	1.0	8.679	1.330	2.630	10.900
		2.5	10.850	1.660	3.830	14.100
		5.0	7.586	1.530	3.360	9.290
		10.0	3.900	1.160	2.460	5.220
		25.0	1.711	.459	1.130	2.470
	10000	1.0	13.230	1.720	3.660	16.000
		2.5	17.270	2.320	5.490	21.600
		5.0	11.080	2.180	5.000	13.300
		10.0	5.511	1.710	3.530	7.250
		25.0	2.463	.752	1.560	3.310
MAINE YANKEE						
	500	1.0	1.913	.569	1.190	2.640
		2.5	2.239	.582	1.310	3.160
		5.0	1.708	.451	1.090	2.320
		10.0	1.008	.260	.620	1.430
		25.0	.356	.103	.234	.558
	1000	1.0	3.111	.931	1.660	4.150
		2.5	3.808	.965	1.890	5.130
		5.0	2.783	.720	1.560	3.660
		10.0	1.549	.412	1.050	2.220
		25.0	.610	.157	.382	.957
	2000	1.0	5.059	1.230	2.310	6.510
		2.5	6.157	1.320	2.750	7.630
		5.0	4.537	1.100	2.230	5.570
		10.0	2.379	.652	1.540	3.330
		25.0	1.029	.240	.623	1.390
	5000	1.0	9.039	1.710	3.590	10.300
		2.5	10.830	1.950	4.480	12.900
		5.0	7.516	1.640	3.570	8.740
		10.0	3.907	1.150	2.550	5.200
		25.0	1.649	.422	1.120	2.240
	10000	1.0	13.360	2.190	5.000	14.300
		2.5	16.610	2.620	6.040	19.200
		5.0	10.810	2.220	5.070	12.300
		10.0	5.478	1.640	3.550	7.300
		25.0	2.356	.646	1.540	3.130
MCGUIRE						
	500	1.0	2.026	.504	1.290	3.070
		2.5	2.308	.509	1.300	3.770
		5.0	1.701	.429	1.060	2.500
		10.0	.936	.252	.610	1.370
		25.0	.322	.106	.228	.492

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
MCGUIRE (CONTINUED)						
	1000	1.0	3.253	.806	1.760	4.870
		2.5	3.868	.836	1.840	5.920
		5.0	2.695	.691	1.500	3.940
		10.0	1.424	.393	1.020	2.020
		25.0	.528	.157	.354	.811
	2000	1.0	5.225	1.130	2.410	7.490
		2.5	6.100	1.190	2.600	8.460
		5.0	4.270	1.060	2.080	5.770
		10.0	2.118	.613	1.460	2.970
		25.0	.864	.233	.551	1.210
	5000	1.0	9.004	1.540	3.650	11.300
		2.5	10.290	1.720	4.110	13.600
		5.0	6.934	1.530	3.200	8.580
		10.0	3.444	1.070	2.330	4.420
		25.0	1.403	.392	.987	1.890
10000	1.0	12.870	1.950	4.990	15.500	
	2.5	15.290	2.270	5.530	19.400	
	5.0	9.684	2.020	4.430	11.600	
	10.0	4.694	1.480	3.230	5.960	
	25.0	1.950	.581	1.340	2.640	
MILLSTONE						
	500	1.0	1.522	.388	.965	2.290
		2.5	1.847	.377	1.050	2.980
		5.0	1.472	.318	.861	2.220
		10.0	.850	.192	.488	1.310
		25.0	.318	.068	.197	.528
	1000	1.0	2.618	.604	1.340	3.790
		2.5	3.348	.600	1.530	5.160
		5.0	2.540	.509	1.340	3.680
		10.0	1.435	.309	.868	2.100
		25.0	.583	.124	.329	.977
	2000	1.0	4.503	.940	1.820	6.270
		2.5	5.820	.957	2.250	7.590
		5.0	4.382	.814	1.960	5.720
		10.0	2.303	.496	1.360	3.280
		25.0	1.042	.195	.550	1.430
5000	1.0	8.707	1.290	2.730	10.600	
	2.5	10.760	1.440	3.730	12.600	
	5.0	7.596	1.310	3.260	9.010	
	10.0	3.931	.926	2.310	5.210	
	25.0	1.708	.355	1.050	2.330	
10000	1.0	13.380	1.600	3.720	15.300	
	2.5	17.140	1.950	5.330	18.600	
	5.0	11.190	1.770	4.790	12.700	
	10.0	5.601	1.340	3.330	7.400	
	25.0	2.481	.558	1.450	3.230	

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
MONTICELLO						
500		1.0	.405	.093	.238	.690
		2.5	.468	.069	.281	.998
		5.0	.481	.071	.287	1.010
		10.0	.284	.029	.180	.572
		25.0	.095	.008	.047	.174
1000		1.0	.748	.134	.377	1.220
		2.5	.951	.121	.497	1.830
		5.0	1.013	.127	.530	1.780
		10.0	.597	.058	.345	1.150
		25.0	.188	.012	.112	.335
2000		1.0	1.360	.185	.597	2.010
		2.5	1.755	.179	.879	3.340
		5.0	1.830	.198	.978	3.120
		10.0	1.179	.112	.660	1.940
		25.0	.365	.025	.199	.646
5000		1.0	2.937	.284	1.060	3.890
		2.5	3.911	.303	1.550	6.580
		5.0	4.002	.357	1.700	6.040
		10.0	2.411	.213	1.350	3.680
		25.0	.878	.067	.422	1.330
10000		1.0	5.258	.393	1.440	6.390
		2.5	6.659	.451	2.310	10.000
		5.0	6.634	.556	2.560	8.950
		10.0	3.888	.346	2.080	5.590
		25.0	1.454	.125	.746	2.050
NINE MILE POINT						
500		1.0	1.725	.438	1.000	2.250
		2.5	2.001	.405	1.010	2.720
		5.0	1.485	.330	.707	2.020
		10.0	.769	.191	.409	1.110
		25.0	.262	.057	.156	.356
1000		1.0	2.758	.668	1.340	3.440
		2.5	3.323	.612	1.410	4.270
		5.0	2.323	.488	1.100	3.040
		10.0	1.226	.283	.655	1.580
		25.0	.410	.101	.231	.539
2000		1.0	4.410	1.010	1.790	5.270
		2.5	5.384	.924	1.960	6.330
		5.0	3.635	.721	1.500	4.570
		10.0	1.788	.419	1.030	2.230
		25.0	.642	.141	.342	.815
5000		1.0	7.859	1.330	2.640	8.570
		2.5	8.899	1.330	3.040	10.200
		5.0	6.080	1.120	2.270	6.900
		10.0	2.947	.705	1.590	3.420
		25.0	1.107	.220	.574	1.260

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
NINE MILE POINT (CONTINUED)						
	10000	1.0	11.070	1.630	3.530	11.700
		2.5	13.010	1.710	4.240	14.700
		5.0	8.381	1.430	3.100	9.240
		10.0	3.978	1.030	2.200	4.520
		25.0	1.500	.309	.848	1.680
NORTH ANNA						
	500	1.0	1.357	.351	.730	2.250
		2.5	1.726	.384	.920	2.910
		5.0	1.402	.335	.791	2.260
		10.0	.806	.212	.495	1.250
		25.0	.315	.089	.201	.507
	1000	1.0	2.348	.542	1.130	3.870
		2.5	3.123	.634	1.390	5.210
		5.0	2.386	.563	1.260	3.840
		10.0	1.369	.365	.920	1.940
		25.0	.575	.153	.349	.906
	2000	1.0	4.061	.839	1.530	6.650
		2.5	5.482	1.030	2.050	8.000
		5.0	4.062	.945	1.830	5.920
		10.0	2.160	.627	1.420	3.000
		25.0	1.027	.248	.605	1.330
	5000	1.0	7.984	1.250	2.310	11.100
		2.5	9.866	1.610	3.410	14.100
		5.0	6.992	1.510	3.000	9.260
		10.0	3.650	1.190	2.410	4.640
		25.0	1.625	.472	1.140	2.080
	10000	1.0	11.920	1.610	3.150	16.000
		2.5	15.390	2.250	5.000	21.500
		5.0	10.020	2.110	4.360	13.000
		10.0	5.059	1.750	3.420	6.470
		25.0	2.299	.767	1.550	2.920
OCONEE						
	500	1.0	2.094	.642	1.400	3.200
		2.5	2.356	.641	1.410	3.930
		5.0	1.754	.460	1.160	2.740
		10.0	1.006	.267	.702	1.510
		25.0	.356	.109	.255	.575
	1000	1.0	3.356	1.030	1.960	5.180
		2.5	3.980	1.040	2.010	6.190
		5.0	2.849	.740	1.650	4.490
		10.0	1.539	.421	1.150	2.320
		25.0	.610	.165	.422	1.000
	2000	1.0	5.378	1.320	2.740	7.950
		2.5	6.331	1.400	2.860	9.090
		5.0	4.626	1.120	2.350	6.440
		10.0	2.355	.663	1.690	3.420
		25.0	1.028	.250	.697	1.420

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
OCONEE (CONTINUED)						
	5000	1.0	9.329	1.830	4.260	12.400
		2.5	11.000	2.050	4.570	15.100
		5.0	7.520	1.660	3.770	9.900
		10.0	3.834	1.160	2.780	5.230
		25.0	1.621	.433	1.190	2.240
	10000	1.0	13.590	2.350	5.950	17.400
		2.5	16.710	2.750	6.080	22.100
		5.0	10.690	2.230	5.240	13.700
		10.0	5.313	1.640	3.750	7.200
		25.0	2.287	.656	1.580	3.090
OYSTER CREEK						
	500	1.0	2.243	.475	1.270	3.870
		2.5	2.256	.366	1.160	3.740
		5.0	1.377	.234	.695	2.140
		10.0	.529	.120	.279	.921
		25.0	.215	.040	.138	.333
	1000	1.0	3.949	.772	1.810	6.800
		2.5	4.243	.599	1.750	6.310
		5.0	2.440	.374	1.170	3.610
		10.0	1.026	.186	.481	1.470
		25.0	.378	.087	.220	.573
	2000	1.0	6.951	1.130	2.570	10.100
		2.5	7.277	.980	2.630	9.890
		5.0	4.324	.597	1.710	5.700
		10.0	1.623	.287	.830	2.290
		25.0	.664	.139	.349	.985
	5000	1.0	12.720	1.620	4.100	17.000
		2.5	14.220	1.520	4.530	17.900
		5.0	7.763	1.070	2.820	9.030
		10.0	2.975	.510	1.440	3.800
		25.0	1.250	.236	.643	1.590
	10000	1.0	20.060	2.130	5.830	25.100
		2.5	23.280	2.120	6.250	26.300
		5.0	11.720	1.450	4.110	12.800
		10.0	4.276	.788	2.090	5.280
		25.0	1.821	.352	1.010	2.270
PALISADES						
	500	1.0	1.396	.304	.947	1.990
		2.5	1.849	.323	1.040	2.720
		5.0	1.245	.228	.669	1.830
		10.0	.565	.106	.294	.924
		25.0	.173	.022	.098	.243
	1000	1.0	2.119	.455	1.320	3.040
		2.5	3.029	.491	1.460	4.310
		5.0	2.017	.333	1.070	2.880
		10.0	.986	.156	.464	1.450
		25.0	.287	.038	.155	.402

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
PALISADES (CONTINUED)						
	2000	1.0	3.217	.682	1.800	4.660
		2.5	4.963	.747	2.060	6.460
		5.0	3.266	.486	1.490	4.530
		10.0	1.531	.229	.732	2.220
		25.0	.476	.065	.244	.666
	5000	1.0	5.587	1.080	2.700	7.800
		2.5	8.822	1.170	3.240	10.700
		5.0	6.041	.802	2.300	7.480
		10.0	2.728	.380	1.270	3.760
		25.0	.928	.122	.446	1.250
	10000	1.0	8.258	1.320	3.680	10.500
		2.5	13.620	1.510	4.560	15.600
		5.0	9.290	1.130	3.210	10.800
		10.0	4.048	.558	1.830	5.420
		25.0	1.426	.182	.702	1.910
PEACH BOTTOM						
	500	1.0	1.417	.347	.751	2.240
		2.5	1.810	.362	.925	2.990
		5.0	1.462	.298	.789	2.270
		10.0	.820	.190	.457	1.330
		25.0	.315	.070	.189	.559
	1000	1.0	2.530	.540	1.160	3.900
		2.5	3.401	.606	1.420	5.370
		5.0	2.570	.511	1.290	3.900
		10.0	1.413	.332	.861	2.170
		25.0	.583	.137	.333	1.030
	2000	1.0	4.520	.839	1.620	6.790
		2.5	6.000	1.010	2.130	8.480
		5.0	4.516	.874	1.930	6.090
		10.0	2.275	.580	1.400	3.360
		25.0	1.046	.230	.587	1.500
	5000	1.0	8.906	1.270	2.520	11.500
		2.5	11.140	1.580	3.630	15.500
		5.0	7.736	1.460	3.280	9.830
		10.0	3.882	1.140	2.500	5.260
		25.0	1.708	.456	1.140	2.460
	10000	1.0	13.610	1.650	3.510	17.100
		2.5	17.800	2.220	5.300	23.600
		5.0	11.340	2.080	4.890	14.100
		10.0	5.498	1.700	3.580	7.390
		25.0	2.474	.767	1.600	3.320
PERRY						
	500	1.0	.972	.257	.583	1.270
		2.5	1.098	.202	.542	1.590
		5.0	.858	.158	.410	1.270
		10.0	.440	.078	.241	.741
		25.0	.168	.020	.079	.276

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
PERRY (CONTINUED)						
	1000	1.0	1.617	.369	.922	2.010
		2.5	1.920	.288	.884	2.560
		5.0	1.479	.230	.663	1.990
		10.0	.806	.126	.390	1.230
		25.0	.293	.035	.137	.475
	2000	1.0	2.680	.531	1.270	3.200
		2.5	3.357	.410	1.290	4.150
		5.0	2.466	.334	1.050	3.110
		10.0	1.326	.192	.630	1.870
		25.0	.511	.062	.221	.816
	5000	1.0	5.230	.857	1.860	5.910
		2.5	6.525	.655	2.020	7.180
		5.0	4.849	.549	1.670	5.430
		10.0	2.371	.336	1.150	3.180
		25.0	1.041	.122	.417	1.390
	10000	1.0	8.276	1.120	2.490	8.770
		2.5	10.100	.934	2.840	10.600
		5.0	7.030	.799	2.360	7.510
		10.0	3.500	.512	1.670	4.360
		25.0	1.484	.181	.674	1.960
PILGRIM						
	500	1.0	2.291	.460	1.180	3.550
		2.5	3.965	.700	1.880	6.510
		5.0	3.235	.512	1.600	4.910
		10.0	1.723	.269	.907	2.620
		25.0	.694	.097	.317	1.110
	1000	1.0	4.057	.740	1.680	6.030
		2.5	6.964	1.130	2.960	10.300
		5.0	5.768	.888	2.530	7.280
		10.0	3.027	.458	1.470	4.110
		25.0	1.276	.159	.585	1.770
	2000	1.0	7.144	1.100	2.390	9.070
		2.5	11.640	1.580	4.670	16.300
		5.0	9.139	1.320	4.000	10.700
		10.0	4.658	.777	2.290	6.250
		25.0	2.056	.258	1.050	2.820
	5000	1.0	12.900	1.530	3.800	14.600
		2.5	22.670	2.480	7.350	27.300
		5.0	16.790	2.100	6.440	17.900
		10.0	8.234	1.380	3.890	10.500
		25.0	3.627	.490	1.760	4.340
	10000	1.0	20.170	1.970	5.400	20.900
		2.5	34.710	3.480	10.200	37.700
		5.0	25.510	3.000	8.740	25.500
		10.0	11.890	2.030	5.580	14.600
		25.0	5.189	.794	2.600	5.920

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
POINT BEACH	500	1.0	.641	.162	.430	1.050
		2.5	.570	.133	.359	1.090
		5.0	.549	.125	.333	.943
		10.0	.285	.047	.184	.533
		25.0	.089	.010	.048	.154
	1000	1.0	1.093	.232	.710	1.630
		2.5	1.026	.192	.600	1.790
		5.0	1.022	.184	.559	1.620
		10.0	.537	.078	.320	1.030
		25.0	.168	.016	.104	.278
	2000	1.0	1.706	.333	1.100	2.540
		2.5	1.757	.277	1.000	2.950
		5.0	1.793	.271	.937	2.750
		10.0	1.009	.128	.556	1.680
		25.0	.307	.033	.176	.503
	5000	1.0	3.073	.536	1.630	4.550
		2.5	3.579	.448	1.630	5.560
		5.0	3.767	.454	1.600	5.380
		10.0	1.956	.236	1.120	3.180
		25.0	.679	.081	.354	1.070
	10000	1.0	4.796	.768	2.200	7.050
		2.5	5.999	.645	2.350	8.340
		5.0	6.271	.669	2.360	7.830
		10.0	3.187	.374	1.720	4.680
		25.0	1.169	.135	.601	1.660
PRAIRIE ISLAND	500	1.0	.526	.138	.356	.891
		2.5	.665	.144	.409	1.300
		5.0	.513	.101	.317	1.010
		10.0	.239	.030	.159	.455
		25.0	.080	.008	.043	.155
	1000	1.0	.916	.202	.587	1.470
		2.5	1.243	.219	.719	2.350
		5.0	1.006	.156	.566	1.760
		10.0	.477	.052	.289	.923
		25.0	.163	.013	.101	.296
	2000	1.0	1.500	.297	.967	2.380
		2.5	2.242	.331	1.170	4.250
		5.0	1.798	.239	1.010	3.080
		10.0	.951	.091	.525	1.570
		25.0	.311	.025	.180	.567
	5000	1.0	2.834	.494	1.460	4.490
		2.5	4.888	.574	1.960	8.180
		5.0	3.870	.421	1.750	5.960
		10.0	1.938	.173	1.120	3.060
		25.0	.732	.059	.386	1.220

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
PRAIRIE ISLAND (CONTINUED)	10000	1.0	4.587	.726	1.980	7.190
		2.5	8.180	.869	2.880	13.100
		5.0	6.482	.647	2.660	8.800
		10.0	3.232	.277	1.750	4.610
		25.0	1.261	.110	.687	1.900
QUAD CITIES	500	1.0	1.284	.309	.873	1.800
		2.5	1.061	.248	.577	1.600
		5.0	.738	.172	.375	1.140
		10.0	.379	.085	.205	.627
		25.0	.141	.018	.065	.222
	1000	1.0	1.987	.469	1.250	2.740
		2.5	1.796	.367	.954	2.580
		5.0	1.283	.241	.597	1.840
		10.0	.681	.131	.329	1.090
		25.0	.244	.031	.118	.381
	2000	1.0	3.076	.712	1.680	4.150
		2.5	3.042	.542	1.320	4.160
		5.0	2.147	.338	.950	2.960
		10.0	1.162	.193	.530	1.680
		25.0	.422	.052	.187	.652
	5000	1.0	5.481	1.120	2.500	7.140
		2.5	5.885	.909	1.990	7.040
		5.0	4.243	.528	1.480	5.340
		10.0	2.068	.321	.994	2.990
		25.0	.874	.103	.347	1.180
	10000	1.0	8.237	1.400	3.360	9.640
		2.5	9.051	1.180	2.710	10.100
		5.0	6.387	.741	2.050	7.180
		10.0	3.149	.472	1.430	4.050
		25.0	1.300	.155	.553	1.630
RIVER BEND	500	1.0	1.788	.393	1.150	2.760
		2.5	1.201	.224	.679	1.750
		5.0	.546	.125	.29?	.904
		10.0	.219	.039	.123	.331
		25.0	.078	.011	.032	.119
	1000	1.0	2.864	.631	1.670	4.430
		2.5	1.999	.340	1.100	2.800
		5.0	.956	.179	.465	1.430
		10.0	.381	.064	.192	.559
		25.0	.147	.016	.062	.202
	2000	1.0	4.587	1.010	2.450	7.060
		2.5	3.328	.516	1.560	4.490
		5.0	1.607	.255	.738	2.210
		10.0	.664	.103	.300	.943
		25.0	.261	.029	.112	.343

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
RIVER BEND (CONTINUED)						
	5000	1.0	8.162	1.420	4.040	10.700
		2.5	6.452	.898	2.490	7.570
		5.0	3.178	.408	1.240	3.920
		10.0	1.303	.171	.540	1.660
		25.0	.553	.061	.206	.691
	10000	1.0	11.710	1.840	5.900	14.600
		2.5	10.510	1.200	3.550	11.100
		5.0	5.267	.582	1.700	5.800
		10.0	2.049	.249	.842	2.520
		25.0	.978	.105	.326	1.110
ROBINSON						
	500	1.0	8.356	.797	2.310	9.880
		2.5	7.141	.711	2.180	8.760
		5.0	4.521	.399	1.350	5.220
		10.0	1.481	.200	.552	1.870
		25.0	.714	.080	.215	.935
	1000	1.0	14.250	1.210	3.660	15.400
		2.5	12.330	1.140	3.500	13.300
		5.0	7.389	.658	2.010	7.340
		10.0	2.424	.308	.961	2.870
		25.0	1.218	.131	.340	1.350
	2000	1.0	24.310	1.670	5.780	24.100
		2.5	21.250	1.590	5.380	20.200
		5.0	11.750	1.050	3.000	10.300
		10.0	3.732	.475	1.390	4.040
		25.0	1.864	.195	.538	1.880
	5000	1.0	47.310	2.560	8.930	42.400
		2.5	38.380	2.470	7.990	33.800
		5.0	21.520	1.540	5.050	16.200
		10.0	6.207	.842	2.220	6.250
		25.0	3.199	.328	.984	2.940
	10000	1.0	70.920	3.530	11.700	57.500
		2.5	54.780	3.440	10.800	45.000
		5.0	31.550	2.070	6.430	22.000
		10.0	9.034	1.190	3.120	8.670
		25.0	4.383	.487	1.320	3.750
SALEM						
	500	1.0	2.227	.483	1.270	3.510
		2.5	2.356	.399	1.200	3.950
		5.0	1.429	.262	.783	2.290
		10.0	.608	.136	.339	1.030
		25.0	.229	.050	.141	.346
	1000	1.0	3.913	.792	1.820	6.090
		2.5	4.467	.660	1.820	6.570
		5.0	2.451	.435	1.260	3.940
		10.0	1.131	.215	.590	1.580
		25.0	.401	.107	.224	.597

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
SALEM (CONTINUED)						
	2000	1.0	6.873	1.160	2.590	9.430
		2.5	7.499	1.060	2.750	10.300
		5.0	4.204	.722	1.850	6.070
		10.0	1.777	.340	1.020	2.410
		25.0	.704	.162	.355	1.020
	5000	1.0	12.580	1.670	4.150	16.000
		2.5	14.370	1.670	4.740	18.500
		5.0	7.336	1.240	3.060	9.600
		10.0	3.178	.625	1.710	3.890
		25.0	1.293	.281	.655	1.660
	10000	1.0	19.810	2.210	5.930	23.800
		2.5	23.110	2.360	6.490	27.300
		5.0	10.760	1.700	4.490	13.600
		10.0	4.524	.990	2.530	5.380
		25.0	1.867	.426	1.030	2.410
SEABROOK						
	500	1.0	2.025	.511	1.160	2.820
		2.5	2.586	.498	1.330	4.030
		5.0	2.073	.399	1.160	3.030
		10.0	1.282	.240	.721	1.940
		25.0	.512	.081	.275	.916
	1000	1.0	3.520	.831	1.630	4.640
		2.5	4.777	.827	1.990	6.410
		5.0	3.613	.644	1.740	5.100
		10.0	2.075	.391	1.230	3.110
		25.0	.995	.143	.485	1.370
	2000	1.0	6.118	1.180	2.280	7.450
		2.5	7.629	1.230	2.990	9.420
		5.0	5.833	1.030	2.620	7.180
		10.0	3.250	.637	1.870	4.330
		25.0	1.436	.235	.856	1.960
	5000	1.0	10.960	1.670	3.570	11.900
		2.5	13.950	1.900	5.070	15.700
		5.0	9.532	1.600	4.480	11.300
		10.0	5.112	1.170	3.190	6.710
		25.0	2.325	.457	1.390	3.100
	10000	1.0	16.620	2.180	5.000	16.900
		2.5	21.840	2.650	6.690	22.700
		5.0	13.820	2.240	6.000	15.900
		10.0	7.200	1.740	4.310	9.240
		25.0	3.208	.754	1.920	3.900
SEQUOYAH						
	500	1.0	2.235	.662	1.520	3.730
		2.5	2.357	.597	1.410	4.250
		5.0	1.742	.466	1.150	2.880
		10.0	1.015	.260	.688	1.570
		25.0	.363	.099	.257	.647

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
SEQUOYAH (CONTINUED)						
	1000	1.0	3.646	1.040	2.180	6.320
		2.5	4.045	.962	2.060	6.730
		5.0	2.907	.732	1.660	4.870
		10.0	1.601	.417	1.160	2.530
		25.0	.659	.159	.448	1.110
	2000	1.0	5.949	1.350	3.120	9.300
		2.5	6.506	1.320	3.000	10.200
		5.0	4.851	1.100	2.400	6.970
		10.0	2.525	.670	1.770	3.730
		25.0	1.114	.255	.781	1.610
	5000	1.0	10.150	1.890	5.010	14.800
		2.5	11.540	1.960	4.930	17.600
		5.0	7.903	1.650	3.900	11.100
		10.0	4.126	1.190	3.050	5.830
		25.0	1.790	.476	1.330	2.620
	10000	1.0	14.760	2.440	7.090	21.100
		2.5	17.800	2.650	6.440	25.600
		5.0	11.360	2.240	5.420	15.700
		10.0	5.783	1.720	4.110	8.180
		25.0	2.562	.763	1.850	3.430
SHEARON HARRIS						
	500	1.0	1.415	.356	.912	2.210
		2.5	1.605	.393	1.040	2.640
		5.0	1.204	.338	.757	1.890
		10.0	.607	.199	.413	1.010
		25.0	.227	.067	.156	.355
	1000	1.0	2.238	.549	1.290	3.550
		2.5	2.606	.629	1.460	4.350
		5.0	1.885	.530	1.170	3.010
		10.0	1.029	.302	.675	1.520
		25.0	.371	.116	.248	.591
	2000	1.0	3.542	.847	1.760	5.700
		2.5	4.232	1.000	2.060	6.590
		5.0	2.951	.831	1.620	4.770
		10.0	1.539	.458	1.080	2.300
		25.0	.608	.170	.393	.983
	5000	1.0	6.498	1.250	2.640	9.470
		2.5	7.392	1.450	3.240	10.900
		5.0	5.253	1.280	2.500	7.420
		10.0	2.618	.793	1.730	3.710
		25.0	1.112	.284	.724	1.540
	10000	1.0	9.459	1.590	3.590	13.300
		2.5	11.030	1.920	4.560	16.100
		5.0	7.374	1.680	3.460	10.300
		10.0	3.690	1.160	2.480	5.080
		25.0	1.562	.418	1.090	2.150

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
SHOREHAM	500	1.0	2.796	.565	1.440	4.590
		2.5	2.713	.441	1.370	4.830
		5.0	1.760	.309	.959	2.750
		10.0	.752	.142	.360	1.270
		25.0	.297	.056	.164	.477
	1000	1.0	4.949	.933	2.110	7.810
		2.5	5.161	.736	2.070	7.920
		5.0	3.180	.494	1.440	4.780
		10.0	1.349	.227	.633	2.020
		25.0	.561	.111	.272	.890
	2000	1.0	8.491	1.270	3.070	11.900
		2.5	8.734	1.140	3.150	12.900
		5.0	5.560	.790	2.140	7.090
		10.0	2.221	.362	1.080	3.150
		25.0	1.040	.174	.451	1.370
	5000	1.0	16.250	1.830	5.070	20.600
		2.5	17.510	1.750	5.320	23.700
		5.0	10.090	1.290	3.590	11.700
		10.0	3.947	.673	1.820	5.020
		25.0	1.805	.314	.878	2.290
	10000	1.0	26.570	2.410	7.270	31.300
		2.5	28.060	2.420	7.170	34.300
		5.0	15.840	1.770	5.220	17.100
		10.0	5.782	1.050	2.720	7.150
		25.0	2.740	.492	1.240	3.230
SOUTH TEXAS	500	1.0	.730	.140	.397	1.170
		2.5	.474	.096	.252	.856
		5.0	.280	.047	.158	.571
		10.0	.109	.014	.057	.208
		25.0	.037	.006	.017	.091
	1000	1.0	1.276	.210	.682	1.960
		2.5	.908	.148	.430	1.540
		5.0	.573	.097	.275	1.160
		10.0	.209	.025	.117	.407
		25.0	.101	.010	.039	.169
	2000	1.0	2.196	.317	1.100	3.290
		2.5	1.728	.224	.734	2.700
		5.0	1.136	.147	.479	1.950
		10.0	.402	.046	.200	.795
		25.0	.184	.014	.090	.303
	5000	1.0	4.503	.544	1.710	6.500
		2.5	4.040	.389	1.330	5.500
		5.0	2.436	.249	.996	3.870
		10.0	.954	.102	.404	1.550
		25.0	.406	.029	.180	.652

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
SOUTH TEXAS (CONTINUED)						
	10000	1.0	7.659	.819	2.390	9.890
		2.5	7.125	.590	1.950	8.530
		5.0	4.336	.371	1.450	5.980
		10.0	1.545	.152	.688	2.440
		25.0	.740	.052	.295	1.100
ST. LUCIE						
	500	1.0	.651	.120	.344	1.200
		2.5	.428	.075	.230	.815
		5.0	.241	.037	.136	.504
		10.0	.100	.014	.050	.196
		25.0	.032	.005	.015	.089
	1000	1.0	1.194	.196	.600	1.950
		2.5	.860	.130	.402	1.490
		5.0	.501	.072	.235	1.050
		10.0	.193	.024	.104	.378
		25.0	.088	.008	.035	.168
	2000	1.0	2.026	.319	1.030	3.160
		2.5	1.624	.198	.703	2.630
		5.0	1.033	.122	.403	1.790
		10.0	.371	.041	.177	.727
		25.0	.169	.011	.080	.302
	5000	1.0	4.077	.609	1.610	5.990
		2.5	3.675	.345	1.310	5.420
		5.0	2.262	.206	.825	3.650
		10.0	.883	.086	.358	1.440
		25.0	.377	.027	.169	.652
	10000	1.0	6.919	.991	2.260	9.150
		2.5	6.495	.525	1.940	8.440
		5.0	4.093	.306	1.270	5.790
		10.0	1.461	.135	.611	2.230
		25.0	.689	.051	.278	1.110
SUMMER						
	500	1.0	3.161	.502	1.310	4.640
		2.5	3.862	.479	1.440	5.410
		5.0	2.667	.405	1.200	3.710
		10.0	1.371	.242	.642	1.920
		25.0	.488	.093	.233	.712
	1000	1.0	5.648	.814	1.850	7.560
		2.5	6.483	.784	2.130	7.870
		5.0	4.545	.655	1.700	5.620
		10.0	2.143	.385	1.080	2.910
		25.0	.840	.147	.371	1.110
	2000	1.0	9.033	1.160	2.630	10.500
		2.5	10.160	1.170	3.150	11.500
		5.0	6.812	1.040	2.400	7.660
		10.0	3.263	.614	1.560	3.980
		25.0	1.269	.225	.592	1.550

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
SUMMER (CONTINUED)						
	5000	1.0	15.420	1.620	4.170	16.400
		2.5	18.390	1.770	5.160	18.800
		5.0	11.210	1.540	3.800	11.500
		10.0	5.121	1.100	2.550	5.940
		25.0	2.019	.396	1.060	2.410
	10000	1.0	23.100	2.090	5.920	22.800
		2.5	27.300	2.410	6.530	26.800
		5.0	16.330	2.070	5.230	15.800
		10.0	7.203	1.560	3.500	8.040
		25.0	2.867	.608	1.430	3.210
SURRY						
	500	1.0	1.945	.436	1.150	3.050
		2.5	1.846	.360	1.050	3.050
		5.0	1.097	.231	.579	1.560
		10.0	.475	.111	.248	.694
		25.0	.177	.037	.112	.243
	1000	1.0	3.294	.697	1.650	5.190
		2.5	3.311	.583	1.530	5.250
		5.0	1.836	.356	1.020	2.520
		10.0	.898	.172	.414	1.180
		25.0	.306	.073	.178	.411
	2000	1.0	5.579	1.060	2.350	8.290
		2.5	5.758	.944	2.230	7.960
		5.0	3.075	.546	1.490	4.060
		10.0	1.468	.265	.690	1.850
		25.0	.529	.124	.283	.693
	5000	1.0	10.470	1.490	3.770	13.900
		2.5	10.870	1.490	3.660	13.800
		5.0	5.807	.963	2.440	6.660
		10.0	2.702	.471	1.250	3.250
		25.0	1.063	.213	.523	1.260
	10000	1.0	16.450	1.930	5.390	20.500
		2.5	17.580	2.070	5.270	20.900
		5.0	8.619	1.320	3.550	9.220
		10.0	3.995	.726	1.820	4.550
		25.0	1.564	.319	.831	1.840
SUSQUEHANNA						
	500	1.0	1.232	.340	.760	1.840
		2.5	1.469	.320	.824	2.230
		5.0	1.180	.262	.654	1.770
		10.0	.629	.159	.371	1.110
		25.0	.242	.047	.147	.426
	1000	1.0	2.075	.511	1.150	2.930
		2.5	2.603	.494	1.280	3.640
		5.0	1.985	.409	1.090	2.790
		10.0	1.134	.250	.638	1.710
		25.0	.428	.094	.239	.759

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
SUSQUEHANNA (CONTINUED)						
	2000	1.0	3.497	.768	1.570	4.670
		2.5	4.612	.763	1.860	5.740
		5.0	3.340	.638	1.570	4.410
		10.0	1.780	.393	1.070	2.610
		25.0	.756	.149	.389	1.200
	5000	1.0	6.969	1.160	2.350	8.130
		2.5	8.504	1.230	3.060	9.610
		5.0	6.126	1.100	2.550	7.110
		10.0	3.175	.714	1.790	4.170
		25.0	1.350	.265	.742	1.900
	10000	1.0	10.550	1.450	3.200	11.300
		2.5	13.330	1.650	4.460	14.200
		5.0	8.882	1.490	3.680	9.970
		10.0	4.471	1.090	2.630	5.790
		25.0	1.940	.410	1.120	2.690
THREE MILE ISLAND						
	500	1.0	1.552	.350	.776	2.560
		2.5	2.008	.354	.961	3.500
		5.0	1.601	.290	.780	2.640
		10.0	.924	.177	.436	1.470
		25.0	.345	.065	.183	.643
	1000	1.0	2.778	.538	1.190	4.460
		2.5	3.815	.579	1.460	5.960
		5.0	2.824	.488	1.280	4.490
		10.0	1.524	.307	.800	2.330
		25.0	.644	.129	.320	1.120
	2000	1.0	4.973	.828	1.660	7.510
		2.5	6.517	.949	2.190	9.130
		5.0	4.981	.821	1.910	6.630
		10.0	2.442	.531	1.320	3.490
		25.0	1.114	.212	.560	1.590
	5000	1.0	9.483	1.260	2.570	12.500
		2.5	11.940	1.510	3.740	16.000
		5.0	8.179	1.390	3.240	10.600
		10.0	4.068	1.070	2.350	5.440
		25.0	1.803	.410	1.100	2.550
	10000	1.0	14.330	1.620	3.590	18.400
		2.5	18.880	2.120	5.420	23.700
		5.0	11.890	1.980	4.850	15.000
		10.0	5.737	1.590	3.440	7.600
		25.0	2.597	.676	1.550	3.370
TURKEY POINT						
	500	1.0	.205	.030	.129	.386
		2.5	.152	.018	.100	.333
		5.0	.109	.012	.072	.248
		10.0	.055	.007	.032	.141
		25.0	.016	.002	.012	.051

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
TURKEY POINT (CONTINUED)						
	1000	1.0	.382	.065	.213	.761
		2.5	.324	.038	.179	.719
		5.0	.244	.023	.149	.559
		10.0	.142	.010	.091	.298
		25.0	.053	.004	.026	.134
	2000	1.0	.711	.120	.352	1.330
		2.5	.693	.077	.319	1.380
		5.0	.549	.044	.276	1.150
		10.0	.298	.020	.175	.631
		25.0	.134	.007	.078	.251
	5000	1.0	1.536	.207	.684	2.480
		2.5	1.718	.150	.687	2.940
		5.0	1.396	.104	.626	2.250
		10.0	.797	.051	.396	1.410
		25.0	.302	.013	.179	.578
	10000	1.0	2.674	.313	1.070	3.970
		2.5	3.277	.229	1.140	5.130
		5.0	2.475	.163	1.090	3.730
		10.0	1.399	.100	.734	2.280
		25.0	.559	.028	.304	1.050
VERMONT YANKEE						
	500	1.0	2.015	.537	1.200	3.290
		2.5	2.438	.570	1.370	4.300
		5.0	1.834	.473	1.140	2.960
		10.0	1.045	.284	.681	1.590
		25.0	.363	.120	.242	.580
	1000	1.0	3.306	.864	1.660	5.340
		2.5	4.164	.948	1.970	6.730
		5.0	2.967	.775	1.600	4.810
		10.0	1.581	.454	1.120	2.400
		25.0	.599	.175	.381	.967
	2000	1.0	5.425	1.180	2.290	8.160
		2.5	6.610	1.300	2.830	10.100
		5.0	4.799	1.140	2.250	6.850
		10.0	2.392	.725	1.590	3.470
		25.0	.991	.255	.598	1.380
	5000	1.0	9.615	1.600	3.510	12.900
		2.5	11.580	1.920	4.580	17.300
		5.0	7.837	1.650	3.510	10.800
		10.0	3.897	1.210	2.540	5.300
		25.0	1.589	.421	1.050	2.180
	10000	1.0	14.250	2.030	4.860	18.200
		2.5	17.690	2.590	6.040	24.400
		5.0	11.270	2.170	4.930	15.200
		10.0	5.461	1.630	3.460	7.310
		25.0	2.267	.614	1.400	3.060

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
VOGTLE	500	1.0	6.973	.889	2.360	9.410
		2.5	6.372	.574	2.090	7.660
		5.0	3.675	.343	1.320	4.600
		10.0	1.295	.167	.538	1.800
		25.0	.518	.072	.211	.700
	1000	1.0	10.920	1.300	3.730	14.000
		2.5	10.330	.999	3.410	11.600
		5.0	5.961	.567	1.940	6.620
		10.0	1.995	.263	.931	2.660
		25.0	.884	.124	.325	1.100
	2000	1.0	17.090	1.810	5.880	20.700
		2.5	16.760	1.410	5.340	17.700
		5.0	8.737	.936	2.870	9.290
		10.0	3.057	.415	1.340	3.720
		25.0	1.309	.180	.499	1.530
	5000	1.0	30.870	2.790	8.960	34.900
		2.5	29.540	2.210	7.870	28.200
		5.0	14.480	1.440	4.790	14.500
		10.0	4.810	.759	2.070	5.580
		25.0	2.077	.295	.880	2.380
	10000	1.0	46.750	3.880	11.600	49.100
		2.5	42.580	3.110	10.600	39.500
		5.0	21.110	1.950	6.180	20.400
		10.0	6.776	1.130	2.890	7.580
		25.0	2.946	.430	1.210	3.220
WATERFORD	500	1.0	1.704	.318	1.050	2.770
		2.5	1.040	.182	.577	1.610
		5.0	.521	.110	.259	.863
		10.0	.200	.030	.104	.340
		25.0	.081	.008	.025	.138
	1000	1.0	2.840	.511	1.520	4.600
		2.5	1.853	.272	.999	2.630
		5.0	.977	.155	.418	1.430
		10.0	.378	.049	.165	.613
		25.0	.163	.011	.052	.244
	2000	1.0	4.733	.821	2.190	7.370
		2.5	3.301	.407	1.400	4.300
		5.0	1.712	.219	.677	2.280
		10.0	.715	.081	.264	1.080
		25.0	.304	.018	.104	.431
	5000	1.0	8.700	1.260	3.550	11.000
		2.5	6.883	.693	2.180	7.400
		5.0	3.578	.346	1.200	4.210
		10.0	1.451	.139	.489	1.950
		25.0	.695	.036	.196	.915

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
WATERFORD (CONTINUED)	10000	1.0	12.870	1.620	5.120	14.900
		2.5	11.700	1.020	3.050	10.900
		5.0	5.910	.488	1.720	6.230
		10.0	2.318	.200	.781	3.040
		25.0	1.187	.061	.317	1.330
WATTS BAR	500	1.0	2.283	.722	1.520	3.680
		2.5	2.371	.657	1.410	4.210
		5.0	1.740	.481	1.120	2.810
		10.0	1.020	.274	.680	1.530
		25.0	.366	.098	.253	.633
	1000	1.0	3.686	1.090	2.170	6.150
		2.5	4.038	1.040	2.060	6.620
		5.0	2.904	.759	1.630	4.770
		10.0	1.611	.437	1.150	2.450
		25.0	.666	.159	.439	1.100
	2000	1.0	5.952	1.410	3.090	8.980
		2.5	6.489	1.410	3.010	9.880
		5.0	4.845	1.130	2.380	6.800
		10.0	2.544	.698	1.740	3.650
		25.0	1.121	.255	.762	1.580
	5000	1.0	10.120	1.970	4.940	14.000
		2.5	11.540	2.090	4.990	16.800
		5.0	7.911	1.670	3.920	10.600
		10.0	4.154	1.220	3.020	5.750
		25.0	1.799	.479	1.310	2.560
	10000	1.0	14.730	2.540	7.020	19.500
		2.5	17.830	2.810	6.460	24.400
		5.0	11.390	2.260	5.450	14.900
		10.0	5.829	1.760	4.070	8.120
		25.0	2.572	.770	1.800	3.380
WOLF CREEK	500	1.0	1.175	.367	.967	1.620
		2.5	.963	.274	.626	1.440
		5.0	.658	.196	.391	1.040
		10.0	.350	.104	.213	.543
		25.0	.129	.020	.072	.198
	1000	1.0	1.743	.572	1.300	2.380
		2.5	1.533	.410	1.000	2.250
		5.0	1.082	.288	.596	1.560
		10.0	.578	.154	.331	.893
		25.0	.209	.037	.124	.315
	2000	1.0	2.584	.892	1.730	3.480
		2.5	2.429	.615	1.350	3.510
		5.0	1.707	.421	.906	2.340
		10.0	.954	.229	.515	1.350
		25.0	.340	.070	.193	.500

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
WOLF CREEK (CONTINUED)						
	5000	1.0	4.350	1.260	2.510	5.780
		2.5	4.464	1.030	1.980	5.970
		5.0	3.122	.697	1.410	4.000
		10.0	1.627	.385	.923	2.270
		25.0	.646	.133	.346	.923
	10000	1.0	6.451	1.560	3.330	8.090
		2.5	6.773	1.320	2.660	8.340
		5.0	4.928	1.010	1.940	5.710
		10.0	2.417	.571	1.340	3.260
		25.0	1.033	.194	.537	1.300
YANKEE ROWE						
	500	1.0	2.984	.485	1.330	4.730
		2.5	5.271	.854	2.270	8.150
		5.0	3.212	.539	1.480	5.140
		10.0	1.541	.283	.777	2.130
		25.0	.536	.120	.296	.825
	1000	1.0	5.136	.769	1.860	7.610
		2.5	8.592	1.260	3.480	13.000
		5.0	5.444	.887	2.190	7.290
		10.0	2.465	.452	1.230	3.290
		25.0	.944	.182	.477	1.290
	2000	1.0	8.395	1.110	2.590	10.700
		2.5	14.010	1.750	5.220	20.600
		5.0	8.370	1.250	3.250	10.300
		10.0	3.718	.721	1.800	4.810
		25.0	1.421	.278	.771	1.920
	5000	1.0	14.670	1.520	4.000	16.900
		2.5	25.980	2.700	7.660	32.200
		5.0	14.780	1.860	5.300	16.400
		10.0	6.058	1.230	2.980	7.940
		25.0	2.381	.486	1.280	3.170
	10000	1.0	22.390	1.930	5.580	23.900
		2.5	39.210	3.750	10.200	44.600
		5.0	22.430	2.510	6.860	22.700
		10.0	8.729	1.710	3.960	11.000
		25.0	3.414	.741	1.750	4.240
ZION						
	500	1.0	1.415	.323	.952	2.070
		2.5	1.709	.316	1.080	2.740
		5.0	1.222	.224	.726	1.960
		10.0	.609	.101	.343	1.070
		25.0	.185	.021	.111	.324
	1000	1.0	2.228	.505	1.330	3.250
		2.5	2.885	.479	1.590	4.590
		5.0	2.154	.330	1.170	3.260
		10.0	1.101	.157	.586	1.730
		25.0	.353	.037	.187	.612

SITE	RETURN PERIOD (YEARS)	FREQ (HZ)	MEAN	PERCENTILES		
				15TH	50TH	85TH
ZION (CONTINUED)						
	2000	1.0	3.507	.790	1.830	5.100
		2.5	4.873	.726	2.340	6.990
		5.0	3.796	.484	1.720	5.320
		10.0	1.850	.244	1.000	2.790
		25.0	.671	.066	.317	1.100
	5000	1.0	6.388	1.190	2.780	8.500
		2.5	9.188	1.160	3.900	11.900
		5.0	7.277	.805	2.850	8.930
		10.0	3.536	.436	1.750	4.680
		25.0	1.363	.133	.634	1.940
	10000	1.0	9.481	1.490	3.820	11.700
		2.5	14.820	1.520	5.520	17.800
		5.0	11.400	1.130	4.190	13.200
		10.0	5.380	.677	2.660	6.850
		25.0	2.116	.212	1.050	2.980

APPENDIX C

SAFE-SHUTDOWN EARTHQUAKE SPECTRA

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
ARKANSAS 1	.30	34.3
	1.00	27.4
	2.50	18.5
	5.00	9.1
	10.00	3.6
	20.00	1.6
	25.00	1.3
	33.00	1.0
ARKANSAS 2	.10	14.7
	.21	32.1
	1.00	32.1
	2.00	32.1
	2.50	25.8
	5.00	13.0
	6.70	9.5
	10.00	5.6
	25.00	1.5
	33.00	1.0
BEAVER VALLEY 1	.10	4.8
	.50	24.1
	1.00	24.4
	2.00	25.4
	2.50	20.0
	5.00	10.4
	10.00	3.0
	20.00	.9
	25.00	.7
	33.00	.6
BEAVER VALLEY 2	.10	5.1
	.50	25.4
	1.00	25.4
	2.00	25.4
	2.50	21.0
	5.00	10.4
	6.00	8.6
	10.00	3.5
	20.00	1.0
	25.00	.8
	33.00	.6

<u>SITE</u>	<u>FREQUENCY (Hz)</u>	<u>SPECTRAL VELOCITY (CM/SEC)</u>
BELLEFONTE	.25	53.0
	1.00	41.0
	2.50	35.0
	5.00	15.8
	9.00	8.1
	10.00	6.6
	25.00	1.4
	33.00	.8
BIG ROCK POINT	.50	19.0
	1.00	19.6
	2.50	10.9
	3.33	9.6
	5.00	6.8
	10.00	2.9
	20.00	1.0
	25.00	.8
	33.00	.5
BRAIDWOOD	.25	58.9
	1.00	46.0
	2.50	38.9
	5.00	18.0
	9.00	9.0
	10.00	7.5
	25.00	1.5
	33.00	.9
BROWNS FERRY	.30	33.0
	1.00	26.2
	2.50	18.5
	5.00	9.7
	10.00	3.6
	20.00	1.6
	25.00	1.3
	33.00	1.0
BRUNSWICK	.30	32.5
	1.00	32.5
	1.90	32.5
	2.50	25.5
	5.00	12.6
	6.70	9.6
	10.00	4.1
	14.00	1.8
	20.00	1.3
	25.00	1.0
	33.00	.8

<u>SITE</u>	<u>FREQUENCY (Hz)</u>	<u>SPECTRAL VELOCITY (CM/SEC)</u>
BYRON	.25	58.9
	1.00	46.0
	2.50	38.9
	5.00	18.0
	9.00	9.0
	10.00	7.5
	25.00	1.5
	33.00	.9
CALLAWAY	.25	58.9
	1.00	46.0
	2.50	38.9
	5.00	18.0
	9.00	9.0
	10.00	7.5
	25.00	1.5
	33.00	.9
CALVERT CLIFFS	.10	12.4
	.20	23.4
	.30	26.7
	1.00	20.1
	2.00	15.7
	2.50	14.0
	5.00	6.6
	10.00	2.5
	20.00	1.2
	25.00	1.0
	33.00	.7
CATAWBA	.25	21.1
	.33	27.9
	1.00	27.9
	2.00	27.9
	2.50	22.7
	5.00	11.0
	6.00	9.4
	10.00	4.4
	20.00	1.6
	25.00	1.2
	33.00	.8

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
CLINTON	1.00	58.4
	1.20	58.4
	1.30	54.6
	1.50	55.9
	2.00	55.9
	2.50	52.1
	5.00	20.3
	9.00	10.4
	10.00	9.4
	20.00	3.0
	25.00	1.8
COMANCHE PEAK	33.00	1.0
	.10	16.0
	.25	35.6
	1.00	27.9
	2.50	23.5
	2.60	23.6
	5.00	11.0
	9.00	5.8
	10.00	4.7
	25.00	1.0
	33.00	.6
COOK	.10	15.7
	.20	27.9
	.30	30.5
	1.00	26.4
	2.00	20.8
	2.50	18.0
	4.00	12.7
	5.00	9.9
	10.00	3.6
	20.00	1.6
	25.00	1.3
COOPER	33.00	1.0
	.50	36.0
	1.00	29.5
	1.67	34.0
	2.00	34.0
	2.50	31.0
	3.30	24.0
	5.00	13.5
	10.00	4.9
	20.00	1.9
	25.00	1.4
33.00	1.0	

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
CRYSTAL RIVER	1.00	25.4
	1.25	24.4
	1.43	21.8
	2.50	11.2
	5.00	4.4
	10.00	1.8
	20.00	.8
	25.00	.6
	33.00	.5
DAVIS DESSE	.10	10.2
	.37	25.4
	1.00	25.4
	2.40	25.4
	2.50	23.9
	5.00	12.2
	8.00	7.4
	10.00	4.8
	20.00	1.2
	25.00	.9
33.00	.7	
DIABLO CANYON	.50	140.0
	1.00	140.0
	2.20	140.0
	2.50	125.0
	5.00	62.7
	7.80	40.2
	10.00	26.4
	25.00	6.0
	33.00	3.8
DRESDEN	1.00	24.8
	1.25	27.3
	1.67	26.0
	2.50	18.6
	5.00	10.0
	10.00	4.6
	25.00	1.3
	33.00	1.0

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
DUANE ARNOLD	.10	6.4
	.30	16.5
	.50	18.3
	1.00	15.2
	2.00	12.4
	2.50	12.4
	3.00	12.2
	5.00	9.1
	7.00	5.8
	10.00	2.8
	15.00	1.4
	20.00	1.0
	25.00	.8
	33.00	.6
FARLEY	.10	7.6
	.22	16.5
	1.00	16.5
	2.00	16.5
	2.50	13.0
	5.00	6.9
	6.70	5.1
	10.00	2.0
	12.50	1.1
	25.00	.6
33.00	.5	
FERMI	.10	12.2
	.40	24.9
	1.00	20.6
	2.00	15.8
	2.50	13.7
	5.00	7.6
	10.00	2.8
	20.00	1.2
	25.00	1.0
33.00	.7	
FITZPATRICK	.20	20.1
	1.00	20.1
	1.50	18.5
	2.00	16.0
	2.50	14.0
	5.00	6.9
	10.00	2.5
	25.00	1.0
	33.00	.7

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
FORT CALHOUN		
	.10	13.7
	.30	30.5
	1.00	22.9
	2.00	17.8
	2.50	15.7
	4.00	10.4
	5.00	7.9
	10.00	2.8
	20.00	1.3
	25.00	1.1
	33.00	.9
GINNA		
	1.00	24.3
	1.25	24.5
	2.50	19.5
	3.33	15.1
	5.00	9.1
	10.00	3.5
	25.00	1.2
	33.00	.9
GRAND GULF		
	.10	13.2
	.24	31.0
	1.00	31.0
	2.00	30.5
	2.50	24.9
	5.00	12.2
	6.67	9.1
	10.00	4.6
	22.73	1.0
	25.00	.9
	33.00	.7
HADDAM NECK		
	.50	23.4
	1.00	22.3
	2.50	16.7
	3.33	12.8
	5.00	7.8
	10.00	3.1
	25.00	1.2
	33.00	.8

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
HATCH 1	.33	24.1
	1.00	19.8
	2.00	15.5
	2.50	14.0
	5.00	6.9
	10.00	2.8
	25.00	.9
	33.00	.7
HATCH 2	.10	11.4
	.22	25.4
	1.00	25.4
	2.00	25.4
	2.50	20.1
	5.00	9.9
	5.80	8.4
	10.00	3.3
	15.00	1.5
	25.00	.9
HOPE CREEK	33.00	.7
	.25	58.9
	1.00	46.0
	2.50	38.9
	5.00	18.0
	9.00	9.0
	10.00	7.5
	25.00	1.5
INDIAN POINT	33.00	.9
	.50	22.7
	1.00	19.0
	1.67	16.9
	2.50	14.0
	3.00	12.5
	5.00	6.9
	10.00	2.6
25.00	.9	
33.00	.7	

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
KEWAUNEE	.10	9.4
	.30	20.3
	1.00	15.5
	2.00	12.2
	2.50	10.5
	5.00	5.6
	10.00	2.1
	25.00	.8
	33.00	.6
LASALLE	.10	11.2
	.37	43.2
	1.00	43.2
	2.00	43.2
	2.50	33.5
	5.00	17.3
	6.30	13.7
	10.00	6.1
	25.00	1.3
33.00	1.0	
LIMERICK	.20	10.4
	.54	30.5
	1.00	30.5
	2.10	30.5
	2.50	25.4
	5.00	13.0
	10.00	6.3
	25.00	1.2
	33.00	.7
MAINE YANKEE	.50	13.5
	1.00	13.5
	1.50	12.4
	2.00	10.7
	2.50	9.1
	3.00	7.9
	5.00	4.4
	10.00	1.9
	25.00	.6
33.00	.5	

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
MCGUIRE	.25	20.8
	.33	27.9
	1.00	27.9
	2.00	27.9
	2.50	22.3
	5.00	11.0
	6.00	9.4
	10.00	4.4
	25.00	1.1
	33.00	.7
MILLSTONE 1	.50	26.4
	1.00	25.3
	1.40	23.4
	2.50	16.6
	5.00	9.2
	10.00	4.3
	25.00	1.5
	33.00	1.2
MILLSTONE 2	.40	33.0
	1.00	25.4
	2.50	17.0
	5.00	9.6
	10.00	4.7
	20.00	2.0
	25.00	1.4
	30.00	.9
	33.00	.8
MILLSTONE 3	.10	6.9
	.55	35.6
	1.00	35.6
	2.00	35.6
	2.50	28.0
	5.00	14.5
	6.00	12.2
	10.00	4.8
	23.00	1.1
	25.00	1.0
	33.00	.8

<u>SITE</u>	<u>FREQUENCY (Hz)</u>	<u>SPECTRAL VELOCITY (CM/SEC)</u>
MONTICELLO	.50	18.6
	1.00	22.3
	1.67	20.4
	2.50	17.1
	3.30	14.1
	5.00	9.4
	10.00	3.6
	25.00	.8
	33.00	.6
NINE MILE POINT 1	.50	7.8
	1.00	10.9
	2.50	9.5
	5.00	7.0
	10.00	3.5
	25.00	.9
	33.00	.6
NINE MILE POINT 2	.10	18.5
	.25	44.2
	1.00	34.3
	2.50	29.2
	5.00	13.0
	9.00	6.8
	10.00	5.6
	25.00	1.1
	33.00	.7
NORTH ANNA	.10	2.8
	.40	10.9
	1.00	17.5
	2.00	25.4
	2.50	20.3
	5.00	10.2
	10.00	5.1
	25.00	1.0
	33.00	.6
OCONEE	.10	8.6
	.20	15.2
	1.00	13.2
	2.00	11.2
	2.50	9.6
	5.00	4.3
	10.00	1.8
	25.00	.6
	33.00	.5

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
OYSTER CREEK	.20	15.2
	.71	30.0
	1.00	31.0
	2.00	27.0
	2.50	23.0
	3.30	19.0
	5.00	12.0
	10.00	4.8
	20.00	1.9
	25.00	1.6
	33.00	1.3
PALISADES	.33	33.0
	1.00	25.4
	1.25	24.6
	2.50	17.8
	5.00	9.6
	10.00	3.6
	13.33	2.4
	25.00	1.2
	33.00	.9
PALO VERDE	.25	58.9
	1.00	46.0
	2.50	38.9
	5.00	18.0
	9.00	9.0
	10.00	7.5
	25.00	1.5
	33.00	.9
	PEACH BOTTOM	.10
.30		12.7
.60		16.0
1.00		17.0
1.50		16.8
2.00		15.2
2.50		13.5
5.00		6.9
10.00		3.1
25.00		1.0
33.00		.7

<u>SITE</u>	<u>FREQUENCY (Hz)</u>	<u>SPECTRAL VELOCITY (CM/SEC)</u>
PERRY	.25	44.2
	1.00	34.3
	2.50	29.2
	5.00	13.0
	9.00	6.8
	10.00	5.6
	25.00	1.1
	33.00	.7
PILGRIM	.10	11.7
	.30	26.7
	1.00	20.3
	2.50	14.5
	3.00	12.7
	5.00	6.9
	10.00	2.7
	20.00	1.1
	25.00	.9
	33.00	.7
POINT BEACH	.33	20.8
	1.00	16.8
	2.00	13.5
	2.50	11.7
	5.00	6.1
	10.00	2.3
	13.30	1.5
	20.00	.9
	25.00	.8
	33.00	.6
	PRAIRIE ISLAND	.10
.30		20.1
1.00		15.5
2.50		10.7
5.00		5.6
10.00		2.1
25.00		.8
33.00		.6
QUAD CITIES	1.00	4.7
	2.50	12.4
	5.00	23.6
	7.70	18.1
	10.00	12.9
	20.00	2.6
	25.00	1.9
	33.00	1.3

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
RIVER BEND	.25	29.4
	1.00	22.9
	2.50	19.4
	5.00	8.9
	9.00	4.5
	10.00	3.7
	25.00	.8
	33.00	.5
ROBINSON	.33	33.0
	.50	33.0
	1.00	27.9
	2.50	19.0
	5.00	9.9
	10.00	3.6
	20.00	1.5
	25.00	1.3
33.00	.9	
SALEM	.10	16.0
	.30	30.5
	1.00	25.9
	2.00	20.6
	2.50	18.3
	5.00	10.2
	10.00	3.7
	12.00	2.8
	25.00	1.3
	33.00	1.0
SAN ONOFRE 2,3	.50	238.8
	1.00	238.8
	2.50	96.5
	5.00	48.3
	10.00	17.0
	25.00	4.2
	30.00	3.2
	33.00	3.0
SEABROOK	.25	73.6
	1.00	57.0
	2.50	48.6
	5.00	22.3
	9.00	11.3
	10.00	9.4
	25.00	1.9
	33.00	1.2

<u>SITE</u>	<u>FREQUENCY (Hz)</u>	<u>SPECTRAL VELOCITY (CM/SEC)</u>
SEQUOYAH	.50	25.6
	1.00	23.1
	1.67	20.3
	2.50	16.3
	5.00	8.4
	10.00	3.0
	12.50	2.2
	25.00	1.1
	33.00	.8
SHEARON HARRIS	.25	44.2
	1.00	34.3
	2.50	29.2
	5.00	13.0
	9.00	6.8
	10.00	5.6
	25.00	1.1
	33.00	.7
SOUTH TEXAS	.25	29.4
	1.00	22.9
	2.50	19.4
	5.00	8.9
	9.00	4.5
	10.00	3.7
	25.00	.8
	33.00	.5
ST. LUCIE	.33	16.5
	1.00	13.2
	2.00	10.7
	2.50	9.1
	5.00	4.7
	10.00	1.8
	12.50	1.3
	25.00	.6
	33.00	.5

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
SUMMER	.30	17.5
	.56	30.5
	1.00	30.5
	2.00	30.5
	2.50	25.4
	5.00	12.7
	6.00	10.2
	10.00	4.1
	20.00	1.2
	25.00	.9
SURRY	33.00	.7
	.10	12.2
	.33	33.0
	1.00	24.1
	2.00	17.3
	2.50	15.0
	5.00	6.6
	10.00	2.5
	25.00	.9
	33.00	.7
SUSQUEHANNA	.10	7.4
	.22	16.5
	1.00	16.5
	2.00	16.5
	2.50	13.0
	5.00	6.3
	7.00	4.3
	10.00	2.5
	25.00	.7
	33.00	.5
THREE MILE ISLAND	1.00	26.4
	2.50	18.6
	5.00	12.2
	10.00	6.4
	20.00	1.9
	25.00	1.2
	33.00	.7

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
TURKEY POINT	.30	25.4
	.50	23.9
	1.00	20.3
	2.00	15.2
	2.50	13.5
	5.00	7.9
	10.00	2.8
	20.00	1.2
	25.00	1.0
33.00	.7	
VERMONT YANKEE	1.00	20.2
	2.00	16.1
	2.50	14.0
	5.00	7.6
	10.00	3.6
	25.00	1.2
	33.00	.9
VOGTLE	.25	58.9
	1.00	46.0
	2.50	39.0
	5.00	18.0
	9.00	9.0
	10.00	7.5
	25.00	1.5
	33.00	.9
WATERFORD	.30	19.0
	1.00	19.0
	2.00	19.0
	2.50	15.2
	5.00	7.5
	6.00	6.4
	10.00	2.9
	25.00	.7
	33.00	.5
WATTS BAR	.50	36.3
	1.00	36.3
	2.00	36.3
	2.50	28.5
	5.00	14.4
	6.70	10.9
	10.00	5.8
	25.00	1.4
33.00	.9	

SITE	FREQUENCY (Hz)	SPECTRAL VELOCITY (CM/SEC)
WNP-2	.40	47.5
	1.00	47.5
	2.00	47.5
	2.50	38.0
	5.00	18.5
	6.00	15.5
	10.00	6.2
	19.00	2.0
	25.00	1.5
	33.00	1.1
WOLF CREEK	.25	35.3
	1.00	27.7
	2.50	23.3
	5.00	10.4
	9.00	5.4
	10.00	4.4
	25.00	.9
	33.00	.6
ZION	.10	13.7
	.25	30.5
	.50	27.9
	1.00	22.9
	2.50	15.7
	5.00	8.1
	10.00	2.8
	25.00	1.1
33.00	.8	

BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse.)

1. REPORT NUMBER
(Assigned by NRC. Add Vol., Supp., Rev.,
and Addendum Numbers, if any.)

NUREG-1488

2. TITLE AND SUBTITLE

Revised Livermore Seismic Hazard Estimates for 69 Nuclear Power
Plant Sites East of the Rocky Mountains

Draft Report for Comment

3. DATE REPORT PUBLISHED

MONTH | YEAR

October | 1993

4. FIN OR GRANT NUMBER

5. AUTHOR(S)

P. Sobel

6. TYPE OF REPORT

Technical Draft for
Public Comment

7. PERIOD COVERED (Inclusive Dates)

March 1992-July 1993

8. PERFORMING ORGANIZATION - NAME AND ADDRESS (If NRC, provide Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address; if contractor, provide name and mailing address.)

Division of Engineering
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

9. SPONSORING ORGANIZATION - NAME AND ADDRESS (If NRC, type "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.)

Same as above.

10. SUPPLEMENTARY NOTES

Update of NUREG/CR-5250

11. ABSTRACT (200 words or less)

This report presents updated Lawrence Livermore National Laboratory (LLNL) probabilistic seismic hazard analysis estimates for 69 nuclear power plant sites in the region of the United States east of the Rocky Mountains. LLNL performed a re-elicitation of seismicity and ground motion experts to improve their estimates of uncertainty in seismicity parameters and ground motion models. Using these revised inputs, LLNL updated the seismic hazard estimates documented in NUREG/CR-5250 (1989). These updated hazard estimates will be used in future NRC actions. A detailed summary of the revised probabilistic hazard methodology, the seismicity and ground motion inputs, and sensitivity studies is presented in a report by J. Savy (1993, LLNL Report UCRL-ID-115111). This report summarizes the Savy (1993) report and documents the 1993 LLNL hazard results for the 69 sites. For the purpose of comparing these probabilistic seismic hazard estimates to the seismic design of the nuclear power plants, a table of safe-shutdown earthquake spectral values is included.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

Seismic hazard, Eastern U. S., ground motion

13. AVAILABILITY STATEMENT

Unlimited

14. SECURITY CLASSIFICATION

(This Page)

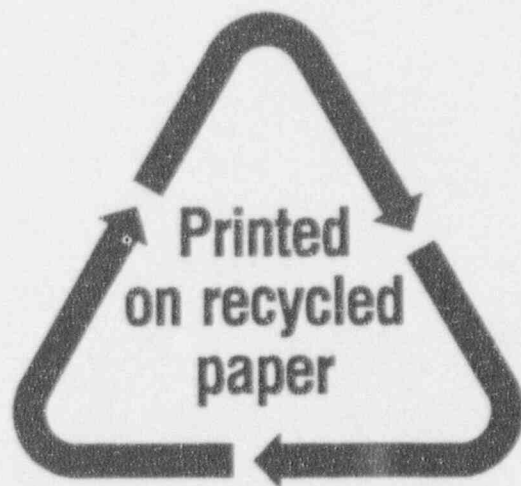
Unclassified

(This Report)

Unclassified

15. NUMBER OF PAGES

16. PRICE



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