

Prairie Island (44.62° N, 92.63° E), Control Point Hazard

SA (g)	AFE 0.5 Hz	AFE 1 Hz	AFE 2.5 Hz	AFE 5 Hz	AFE 10 Hz	AFE 25 Hz	AFE 100 Hz
0.001000	2.627810e-03	3.306450e-03	4.191375e-03	4.357173e-03	4.375337e-03	4.297550e-03	3.987293e-03
0.001122	2.614249e-03	3.303156e-03	4.191375e-03	4.357150e-03	4.374979e-03	4.297539e-03	3.987293e-03
0.001259	2.579533e-03	3.275737e-03	4.191355e-03	4.356956e-03	4.373599e-03	4.297006e-03	3.987291e-03
0.001413	2.522935e-03	3.230782e-03	4.190909e-03	4.355882e-03	4.369074e-03	4.290078e-03	3.987043e-03
0.001585	2.456341e-03	3.168556e-03	4.186928e-03	4.351972e-03	4.355325e-03	4.260703e-03	3.980372e-03
0.001778	2.387236e-03	3.090317e-03	4.170914e-03	4.341776e-03	4.325925e-03	4.204188e-03	3.935436e-03
0.001995	2.315900e-03	3.000329e-03	4.135430e-03	4.320494e-03	4.282185e-03	4.130112e-03	3.832770e-03
0.002239	2.241245e-03	2.905551e-03	4.080081e-03	4.283361e-03	4.224777e-03	4.042125e-03	3.701501e-03
0.002512	2.162346e-03	2.809214e-03	4.008465e-03	4.230139e-03	4.153166e-03	3.938598e-03	3.554352e-03
0.002818	2.078005e-03	2.711525e-03	3.924640e-03	4.163624e-03	4.066775e-03	3.818626e-03	3.390967e-03
0.003162	1.987404e-03	2.611580e-03	3.830770e-03	4.084225e-03	3.964887e-03	3.682077e-03	3.212142e-03
0.003548	1.889773e-03	2.508703e-03	3.727299e-03	3.990636e-03	3.846644e-03	3.529153e-03	3.019850e-03
0.003981	1.784878e-03	2.401639e-03	3.613942e-03	3.881542e-03	3.711579e-03	3.360761e-03	2.816201e-03
0.004467	1.672724e-03	2.289614e-03	3.490175e-03	3.755861e-03	3.559791e-03	3.178706e-03	2.603793e-03
0.005012	1.553862e-03	2.171495e-03	3.355434e-03	3.612817e-03	3.392155e-03	2.985572e-03	2.385978e-03
0.005623	1.429329e-03	2.046825e-03	3.209193e-03	3.452195e-03	3.210176e-03	2.784316e-03	2.166510e-03
0.006310	1.300622e-03	1.915190e-03	3.051059e-03	3.274545e-03	3.016004e-03	2.578205e-03	1.949166e-03
0.007079	1.169779e-03	1.776935e-03	2.880898e-03	3.081232e-03	2.812355e-03	2.370565e-03	1.737450e-03
0.007943	1.039431e-03	1.632869e-03	2.698979e-03	2.874411e-03	2.602323e-03	2.164659e-03	1.534669e-03
0.008913	9.133708e-04	1.484380e-03	2.506185e-03	2.657037e-03	2.389329e-03	1.963474e-03	1.343499e-03
0.010000	7.927350e-04	1.333602e-03	2.304132e-03	2.432720e-03	2.176776e-03	1.769605e-03	1.166213e-03
0.011220	6.791969e-04	1.182834e-03	2.095261e-03	2.205549e-03	1.968012e-03	1.585141e-03	1.004243e-03
0.012589	5.738772e-04	1.034980e-03	1.882734e-03	1.979791e-03	1.765983e-03	1.411675e-03	8.585092e-04
0.014125	4.779344e-04	8.926183e-04	1.670314e-03	1.759594e-03	1.573296e-03	1.250318e-03	7.291372e-04
0.015849	3.922642e-04	7.588362e-04	1.462081e-03	1.548699e-03	1.391948e-03	1.101712e-03	6.157985e-04
0.017783	3.170096e-04	6.356331e-04	1.262111e-03	1.350231e-03	1.223435e-03	9.660588e-04	5.165712e-04
0.019953	2.521609e-04	5.245048e-04	1.074120e-03	1.166565e-03	1.068635e-03	8.426585e-04	4.275027e-04
0.022387	1.973863e-04	4.262044e-04	9.011691e-04	9.992452e-04	9.279668e-04	7.279340e-04	3.488702e-04
0.025119	1.521463e-04	3.411161e-04	7.454545e-04	8.490277e-04	8.013476e-04	6.197667e-04	2.833595e-04
0.028184	1.154532e-04	2.687637e-04	6.081948e-04	7.159628e-04	6.883763e-04	5.228537e-04	2.301753e-04
0.031623	8.628950e-05	2.085018e-04	4.897114e-04	5.995250e-04	5.882231e-04	4.391169e-04	1.872853e-04
0.035481	6.349330e-05	1.592456e-04	3.895173e-04	4.987435e-04	4.996491e-04	3.674925e-04	1.527570e-04
0.039811	4.603792e-05	1.197819e-04	3.064250e-04	4.123889e-04	4.219958e-04	3.065966e-04	1.249448e-04
0.044668	3.288459e-05	8.871211e-05	2.386850e-04	3.390973e-04	3.548115e-04	2.551035e-04	1.024784e-04
0.050119	2.316133e-05	6.474642e-05	1.843055e-04	2.774419e-04	2.972135e-04	2.117753e-04	8.425286e-05
0.056234	1.608101e-05	4.659313e-05	1.412689e-04	2.260170e-04	2.481697e-04	1.754759e-04	6.939426e-05
0.063096	1.102187e-05	3.309854e-05	1.076583e-04	1.834829e-04	2.066482e-04	1.451787e-04	5.722003e-05
0.070795	7.457291e-06	2.323479e-05	8.171562e-05	1.485380e-04	1.716746e-04	1.199710e-04	4.718361e-05
0.079433	4.989996e-06	1.614376e-05	6.189008e-05	1.199880e-04	1.423488e-04	9.905046e-05	3.878282e-05
0.089125	3.304422e-06	1.112208e-05	4.685682e-05	9.677694e-05	1.178563e-04	8.172287e-05	3.165616e-05
0.100000	2.171363e-06	7.616180e-06	3.552046e-05	7.798503e-05	9.746795e-05	6.741109e-05	2.567214e-05
0.112202	1.418283e-06	5.198115e-06	2.699835e-05	6.282017e-05	8.054102e-05	5.565802e-05	2.069808e-05
0.125893	9.244510e-07	3.545613e-06	2.059733e-05	5.061070e-05	6.651607e-05	4.603620e-05	1.662166e-05
0.141254	6.031844e-07	2.425004e-06	1.578460e-05	4.079376e-05	5.491330e-05	3.811981e-05	1.330571e-05
0.158489	3.955906e-07	1.668950e-06	1.215536e-05	3.290245e-05	4.532159e-05	3.156411e-05	1.061646e-05

0.177828	2.620419e-07	1.159907e-06	9.405903e-06	2.655225e-05	3.738643e-05	2.610976e-05	8.436878e-06
0.199526	1.760910e-07	8.161074e-07	7.311081e-06	2.143136e-05	3.081212e-05	2.155635e-05	6.669372e-06
0.223872	1.205055e-07	5.822385e-07	5.705191e-06	1.729438e-05	2.536142e-05	1.775942e-05	5.239152e-06
0.251189	8.408788e-08	4.214698e-07	4.465940e-06	1.395066e-05	2.084105e-05	1.460078e-05	4.090269e-06
0.281838	5.994362e-08	3.094033e-07	3.503443e-06	1.124724e-05	1.709055e-05	1.197438e-05	3.174400e-06
0.316228	4.358359e-08	2.300514e-07	2.751722e-06	9.058739e-06	1.397911e-05	9.791507e-06	2.448256e-06
0.354813	3.229206e-08	1.729060e-07	2.162126e-06	7.284519e-06	1.140291e-05	7.975484e-06	1.874267e-06
0.398107	2.429162e-08	1.310916e-07	1.698130e-06	5.845768e-06	9.275205e-06	6.466995e-06	1.422220e-06
0.446684	1.854138e-08	1.000134e-07	1.332089e-06	4.680027e-06	7.520204e-06	5.216430e-06	1.069295e-06
0.501187	1.430029e-08	7.663844e-08	1.043050e-06	3.736292e-06	6.073266e-06	4.184084e-06	7.960915e-07
0.562341	1.110199e-08	5.890486e-08	8.147921e-07	2.972839e-06	4.882265e-06	3.337009e-06	5.862540e-07
0.630957	8.641684e-09	4.535912e-08	6.346572e-07	2.356094e-06	3.905233e-06	2.644296e-06	4.267903e-07
0.707946	6.730454e-09	3.496072e-08	4.927037e-07	1.859089e-06	3.106235e-06	2.079986e-06	3.065938e-07
0.794328	5.237849e-09	2.695224e-08	3.810227e-07	1.459581e-06	2.454591e-06	1.622236e-06	2.169755e-07
0.891251	4.066774e-09	2.077505e-08	2.933508e-07	1.139200e-06	1.925027e-06	1.253122e-06	1.510645e-07
1.000000	3.144482e-09	1.599002e-08	2.247517e-07	8.831146e-07	1.496896e-06	9.580198e-07	1.033468e-07
1.122019	2.418180e-09	1.224910e-08	1.712596e-07	6.792243e-07	1.152907e-06	7.244952e-07	6.928970e-08
1.258925	1.845272e-09	9.294333e-09	1.296840e-07	5.176292e-07	8.784473e-07	5.408865e-07	4.549846e-08
1.412538	1.394171e-09	6.944833e-09	9.751575e-08	3.903392e-07	6.615378e-07	3.979685e-07	2.912263e-08
1.584893	1.041433e-09	5.088744e-09	7.274277e-08	2.909112e-07	4.921136e-07	2.880659e-07	1.803737e-08
1.778279	7.679020e-10	3.673756e-09	5.374518e-08	2.141293e-07	3.612070e-07	2.050109e-07	1.075096e-08
1.995262	5.583199e-10	2.642568e-09	3.926338e-08	1.556328e-07	2.610465e-07	1.433092e-07	6.018131e-09
2.238721	3.998904e-10	1.907876e-09	2.832565e-08	1.116358e-07	1.852249e-07	9.774656e-08	3.173852e-09
2.511886	2.820388e-10	1.380938e-09	2.016063e-08	7.890399e-08	1.286115e-07	6.412345e-08	1.607219e-09
2.818383	1.956816e-10	9.962416e-10	1.413258e-08	5.481824e-08	8.709164e-08	3.962858e-08	7.934885e-10
3.162278	1.422239e-10	7.482547e-10	1.038515e-08	3.981094e-08	6.176663e-08	2.662172e-08	4.135214e-10
3.548134	8.876623e-11	5.002677e-10	6.637725e-09	2.480363e-08	3.644162e-08	1.361486e-08	3.355438e-11

Prairie Island (44.62° N, 92.63° E), Response Spectra

Frequency (Hz)	UHRS 1E-4 (g)	GMRS (g)	UHRS 1E-5 (g)
0.500000	0.029832	0.033346	0.064931
0.561009	0.030627	0.034161	0.066480
0.629463	0.031966	0.035621	0.069306
0.706269	0.034205	0.038171	0.074294
0.792447	0.037221	0.041605	0.081011
0.889140	0.040298	0.044967	0.087519
0.997631	0.042618	0.047314	0.091971
1.000000	0.042663	0.047358	0.092054
1.122019	0.044301	0.049840	0.097203
1.258925	0.047703	0.054771	0.107365
1.412538	0.051662	0.060436	0.119025
1.584893	0.054168	0.064503	0.127599
1.778279	0.057535	0.069946	0.139084
1.995262	0.060901	0.075764	0.151525
2.238721	0.062814	0.080224	0.161503
2.500000	0.065070	0.085364	0.173005
2.805046	0.068790	0.094425	0.193547

3.147313	0.073674	0.105328	0.218102
3.531344	0.078817	0.116633	0.243603
3.962233	0.082153	0.125563	0.264383
4.445698	0.085567	0.134450	0.285059
4.988156	0.087575	0.140719	0.300026
5.000000	0.087606	0.140828	0.300289
5.610092	0.087727	0.144567	0.310181
6.294627	0.088269	0.148485	0.320231
7.062688	0.088197	0.151008	0.327112
7.924466	0.090924	0.157877	0.343193
8.891397	0.094131	0.164902	0.359260
9.976312	0.098342	0.174423	0.381181
10.000000	0.098458	0.174674	0.381754
11.220185	0.097519	0.173923	0.380613
12.589254	0.093843	0.168549	0.369504
14.125375	0.090511	0.163055	0.357727
15.848932	0.085542	0.153682	0.336934
17.782794	0.082085	0.147154	0.322450
19.952623	0.079835	0.143123	0.313616
22.387211	0.078979	0.142385	0.312439
25.000000	0.078273	0.139451	0.305095
28.050461	0.077092	0.135598	0.295716
31.473135	0.076028	0.132099	0.287204
35.313439	0.074703	0.127579	0.276186
39.622330	0.073324	0.123142	0.265465
44.456985	0.071898	0.118760	0.254958
49.881558	0.070322	0.114433	0.244752
55.968028	0.068050	0.109198	0.232741
62.797161	0.065198	0.103941	0.221175
70.459573	0.061735	0.098509	0.209663
79.056942	0.057726	0.092863	0.198048
88.703347	0.053367	0.087111	0.186458
99.526793	0.049284	0.082004	0.176370
100.000000	0.045316	0.075825	0.163311