

TABLE VI: Signal and background interaction rates at 1300 Km (Fermilab-HOMESTAKE) using different WBLE beam energies and off-axis angles. The rates integrated over the neutrino energy range of 0 - 20 GeV. Rates are given per MW.10<sup>7</sup>s.kT. For  $\nu_\mu \rightarrow \nu_e$  oscillations a value of  $\sin^2 2\theta_{13} = 0.04$  and  $\Delta m_{31}^2 = 2.5 \times 10^{-3} \text{ eV}^2$  is used. No detector model is used.

Degrees off-axis	$\nu_\mu$ CC	$\nu_\mu$ CC osc	$\nu_e$ CC beam	$\nu_e$ QE beam	NC- $1\pi^0$	$\nu_\mu \rightarrow \nu_e$ CC	$\nu_\mu \rightarrow \nu_e$ QE
WBLE 120 GeV at 1300 km with decay pipe 2m radius 380 m length							
0°	198.2	104.9	1.89	0.179	9.11	2.85	0.408
0.5°	89.9	37.9	1.22	0.140	5.62	1.62	0.300
1.0°	34.2	19.5	0.621	0.095	2.95	0.470	0.129
2.5°	4.66	2.36	0.116	0.032	0.550	0.094	0.049
WBLE 60 GeV at 1300 km with decay pipe 2m radius 380 m length							
0°	151.0	69.2	1.34	0.169	7.83	2.53	0.403
0.5°	77.2	28.7	0.906	0.134	5.33	1.52	0.305
1.0°	33.3	18.4	0.520	0.098	3.08	0.480	0.141
2.5°	5.05	2.56	0.120	0.035	0.611	0.105	0.058
WBLE 40 GeV at 1300 km with decay pipe 2m radius 380 m length							
0°	110.4	44.4	1.02	0.159	6.50	2.05	0.357
WBLE 28 GeV at 1300 km with decay pipe 2m radius 180 m length							
0°	52.5	19.4	0.374	0.074	3.87	1.05	0.223