

Daily 2019 State Fair Electric Energy (kWh) Needed and Production Equivalent to Oak Orchard WWTP Solar System

3,000,000 One third of annual electricity during August and September (kWh)

Assume State Fair days are ten times a normal day

13 State Fair Days

130 State Fair Day Weight

62 August and September Days

49 Other Day Weight

167,598 kWh per state fair day

16,759.8 kWh weight

2019 Dates	Daily Output (kWh)	Capacity Factor (%)	kWh from 1kW	Capacity Needed (kW)	Panels Sq. Ft Needed	Panels Acres Needed	Attendance
Wednesday, August 21, 2019	291	11.54	2.77	60,517	3,994,104	91.69	74,027
Thursday, August 22, 2019	337	13.35	3.20	52,296	3,451,519	79.24	77,242
Friday, August 23, 2019	595	23.60	5.66	29,589	1,952,892	44.83	98,238
Saturday, August 24, 2019	320	12.69	3.04	55,046	3,633,045	83.40	118,013
Sunday, August 25, 2019	579	22.96	5.51	30,415	2,007,395	46.08	119,301
Monday, August 26, 2019	576	22.83	5.48	30,588	2,018,779	46.34	103,842
Tuesday, August 27, 2019	281	11.13	2.67	62,766	4,142,561	95.10	92,387
Wednesday, August 28, 2019	102	4.06	0.97	171,943	11,348,244	260.52	61,477
Thursday, August 29, 2019	425	16.86	4.05	41,413	2,733,253	62.75	103,130
Friday, August 30, 2019	550	21.79	5.23	32,051	2,115,366	48.56	124,172
Saturday, August 31, 2019	532	21.09	5.06	33,119	2,185,883	50.18	147,749
Sunday, September 1, 2019	231	9.15	2.20	76,336	5,038,201	115.66	118,239
Monday, September 2, 2019	268	10.62	2.55	65,765	4,340,488	99.64	91,458