

Air pollution inputs for three natural gas turbine power plants with back up generators were averaged for this report.

These were approximately 450MW, 550 MW, and 600 MW in size. Inputs taken from MO DNR Air-related Permit site applications and permits.

Potential to emit emissions sitewise

EPA CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA)

Emission inputs:			
	Particulate Matter PM2.5	215.77	tons/year
	Sulfur Oxides (SOx):	39.04	tons/year
	Nitrogen Oxides (NOx)	536.16	tons/year
	Volatile Organic Compounds (VOCs)	661.22	tons/year

Total Health Benefits	
-\$372,396	-\$703,619
Low Value	High Value

	Change in Incidence	Nodaway County Baseline Estimates	Monetary Value
Total Mortality	-0.024 / -0.047	173.036	-\$352,134 / -\$683,357
Mortality, All Cause (PM)	-0.019 / -0.042	n/a	-\$282,876 / -\$614,099
Mortality, O3 Short-term Exposure (O3)	-0.000	n/a	-\$2,981
Mortality, O3 Long-term Exposure (O3)	-0.005	n/a	-\$66,277
Nonfatal Heart Attacks (PM)	-0.014	n/a	-\$1,160
Infant Mortality (PM)	-0.000	n/a	-\$2,486
Total Hospital Admits, All Respiratory	-0.003	0.712	-\$78
Hospital Admits, All Respiratory (PM)	-0.002	n/a	-\$69
Hospital Admits, All Respiratory (O3)	-0.000	n/a	-\$9
Total Emergency Room Visits, Respiratory	-0.031	2.492	-\$50
Emergency Room Visits, Respiratory (PM)	-0.018	n/a	-\$30
Emergency Room Visits, Respiratory (O3)	-0.013	n/a	-\$21
Total Asthma Onset	-0.074	89.042	-\$5,676
Asthma Onset (PM)	-0.049	n/a	-\$3,720
Asthma Onset (O3)	-0.026	n/a	-\$1,957
Total Asthma Symptoms	-14.160	5.728	-\$1,332
Asthma Symptoms, Albuterol Use (PM)	-10.726	307.760	-\$7
Asthma Symptoms, Chest Tightness (O3)	-0.946	1,803.179	-\$365
Asthma Symptoms, Cough (O3)	-1.116	1,803.179	-\$431
Asthma Symptoms, Shortness of Breath (O3)	-0.477	1,802.489	-\$184
Asthma Symptoms, Wheeze (O3)	-0.894	1,765.854	-\$345
Emergency Room Visits, Asthma (O3)	-0.000	0.380	-\$0
Lung Cancer (PM)	-0.001	1.600	-\$59
Hospital Admits, Cardio-Cerebro/Peripheral Vascular Disease (PM)	-0.003	0.832	-\$86
Hospital Admits, Alzheimers Disease (PM)	-0.020	0.019	-\$454
Hospital Admits, Parkinsons Disease (PM)	-0.001	0.003	-\$32
Stroke (PM)	-0.001	15.514	-\$73
Total Hay Fever/Rhinitis	-0.540	792.277	-\$602
Hay Fever/Rhinitis (PM)	-0.355	n/a	-\$395
Hay Fever/Rhinitis (O3)	-0.186	n/a	-\$207
Cardiac Arrest, Out of Hospital (PM)	-0.000	0.009	-\$17
Emergency Room Visits, All Cardiac (PM)	-0.006	1.304	-\$14
Minor Restricted Activity Days (PM)	-18.864	n/a	-\$2,372
School Loss Days (O3)	-2.809	36,012.850	-\$4,771
Work Loss Days (PM)	-3.161	86.589	-\$1,000
Total PM Health Effects	-33.242 / -33.265		-\$294,849 / -\$626,071
Total O3 Health Effects	-6.473		-\$77,547