

Pollution Prevented by Black Nubble Wind Farm

Per Year compared to Maine's current power plants.....

Pollutant	Pollution per MWh (pounds)	Pounds	Tons
Carbon dioxide	1027	146,039,400	73,020
Sulphur oxides	0.64	91,008	46
Nitrous oxides	0.24	34,128	17
Total...	1,028	146,164,536	73,082
MWh per turbine per yr:	7,900	Number of days:	365
Number of turbines:	18	Total MWh	142,200

Per Day compared to Maine's current power plants...

Pollutant	Pollution per MWh (pounds)	Pounds	Tons
Carbon dioxide	1027	400,108	200
Sulphur oxides	0.64	249	0
Nitrous oxides	0.24	94	0
Total...	1,028	400,451	200
MWh per turbine per yr:	7,900	Number of days:	1
Number of turbines:	18	Total MWh	390

One turbine operating one day compared Maine's current power plants....

Pollutant	Pollution per MWh (pounds)	Pounds	Tons
Carbon dioxide	1027	22,228	11
Sulphur oxides	0.64	14	0
Nitrous oxides	0.24	5	0
Total...	1,028	22,247	11
MWh per turbine per yr:	7,900	Number of days:	1
Number of turbines:	1	Total MWh	22

Electricity consumption per home:	6,600 kWh a year (Source:..Dennis Bergeron MPUC 5/06)
Number of homes served:	21,545
Percentage of Maine's total electricity:	1.19%

<u>Equivalent Oil Consumption</u>	
AWEA data:	14.5 kwh per gallon of oil burned
	389,589 kwh a day produced by wind farm
	26,868 gallons per day
	9,806,897 gallons per year

<u>Cars off the Road</u>	
Pollution per car / yr:	12,140 Including CO2, NOx, CO, HCs (Source:www.epa.gov/otaq/consumer/f00013.htm)
Pollution avoided/yr.	146,164,536
	12,040 cars taken off the road

<u>COAL</u>	
Btus of fossil fuel required to generate each kWh, 2000	10,419
Length of standard railroad coal car, feet	53
Capacity of standard railroad coal car, pounds	238,500
kWh that a coal car full of coal can produce	232,738
kWh that a mile-long train full of coal can produce	23,149,700
Miles of coal train needed to equal wind farm annual output...	6.1 miles of coal cars
	611.0 number of coal cars

*pollution avoided chart uses averages based on the December 2004 annual report NEPOOL Marginal Emissions Rate Analysis produced by the Independent System Operator of New England – published in May, 2006.