

MERRIMACK STATION

S. DEMEO 3-13-14

Emissions Calculations

Gross Load (MW-h) (2011)	Unit 1	637009.25
	Unit 2	1478888.28

Unit 1 Rated 110 MW x 8760 hrs/yr. = 963600 MW-h
 Unit 2 " 330 MW x " " = 2890800 MW-h

REDACTED

$$\frac{637009.25}{963600} = 0.66 \quad 66\% \text{ capacity}$$

$$\frac{1478888.28}{2890800} = 0.51 \quad 51\% \text{ capacity}$$

Unit 1 generated 692673.059 tons CO₂ - 2011
 Unit 2 " 1523636.424 " " "

$$692673.059 / 0.66 = 1049504.635 \sim 1,050,000 \text{ tons CO}_2 \text{ yr.}$$

$$1523636.424 / 0.51 = 2987522.4 \sim 2,990,000 \text{ "}$$

at near full capacity → 4,040,000 "

Unit 1 $\frac{692673.059 \text{ tons CO}_2}{637009.25 \text{ MW-h}} = 1.09 \text{ tons CO}_2 \text{ MW-h}$

Unit 2 $\frac{1523636.424 \text{ tons CO}_2}{1478888.28 \text{ MW-h}} = 1.03 \text{ tons CO}_2 \text{ MW-h}$

highest for 2011-2013

CONTAINS
CBI MATERIAL

$$1.09 \frac{\text{tons CO}_2}{\text{MW-h}} \times \text{MW} \times \frac{8760 \text{ hrs}}{\text{yr.}} = \text{tons CO}_2$$

$$\frac{\quad}{4,000,000} = \quad \times 100 = \quad \% (\leq 1\%)$$

$$2013 \text{ Unit 1 } \frac{418425.6}{404936.63} = 1.03$$

$$\text{Unit 2 } \frac{1086049.468}{1032003.16} = 1.05$$