

WAC 173-407-050 – CO₂ Mitigation Emissions

Step 1 Annual CO ₂ Emissions (F*K*T)	GE 7FA.05			GE 7FA.04			Siemens SGT6-5000F4			GE LMS100		
	Nat Gas	ULSD	Total	Nat Gas	ULSD	Total	Nat Gas	ULSD	Total	Nat Gas	ULSD	Total
F = Max Design Firing Rate (MMBtu/hr, HHV):	2124	2252		1858	2012		2102	1933		899	870	
K = Conversion/Emission Factor (lb CO ₂ /MMBtu):	117.6	158.16		117.6	158.16		117.6	158.16		117.6	158.16	
T = Max Annual Hours:	2062	347	2409	2050	347	2397	2069	349	2418	2848	354	3202
Number of units	1			1			1			2		
CO ₂ Emissions (CO _{2rate})												
lb/yr	5.15E+08	1.24E+08	6.39E+08	4.48E+08	1.10E+08	5.58E+08	5.11E+08	1.07E+08	6.18E+08	6.02E+08	9.74E+07	7.00E+08
Tons _{metric} /yr			289,687			253,265			280,388			317,343

Notes:
 No supplemental firing.
 Based on vendor data for site conditions at full load (100%) operation and 51F.
 K are WAC emission factors.
 Estimated annual start-up and shutdown times are included in the maximum annual operating hours cited in this table. Applying the maximum design firing rate for such hours results in overstated annual fuel consumption and CO₂ emissions.

Step 2 Total CO₂ Emissions to Mitigate

Total CO ₂ Emissions (Tons _{metric} over 30 years @ 60%)	5,214,370	4,558,772	5,046,991	5,712,179
Step 3 Cogeneration Credit	N/A	N/A	N/A	N/A

Step 4 Apply 20% Mitigation Factor

CO ₂ Mitigation Quantity (Tons _{metric} /yr)	1,042,874	911,754	1,009,398	1,142,436
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WAC 173-407-060 – Mitigation Plan

Selected Mitigation Plan Option: Payment to a Third Party

Lump Sum Payment @ \$1.60/Ton _{metric} (due 120 days after start of operation)	\$1,668,598.51	\$1,458,807.03	\$1,615,037.25	\$1,827,897.37
Partial Payments (assuming \$1.60/Ton _{metric})				
1st Annual Payment	\$333,719.70	\$291,761.41	\$323,007.45	\$365,579.47
2nd Annual payment	\$333,719.70	\$291,761.41	\$323,007.45	\$365,579.47
3rd Annual Payment	\$333,719.70	\$291,761.41	\$323,007.45	\$365,579.47
4th Annual Payment	\$333,719.70	\$291,761.41	\$323,007.45	\$365,579.47
5th Annual Payment	\$333,719.70	\$291,761.41	\$323,007.45	\$365,579.47