

Enclosure-A:Calculation of Emission Reduction Units from "APCL proposed 7.5 MW Mustard Crop Residue based Power Project"		
Year	2003-04	
<b>Generation Mix</b>		
Sector	mJ	%
Thermal Coal based(State)	13808.13	49.85
Thermal Coal based(Central)	4140.00	14.95
Thermal Coal based(Partnership Project)	630.00	2.27
Gas Based (State)	221.80	0.80
Gas Based (Central)	1715.00	6.19
Hydro (State)	650.82	2.35
Hydro (Central)	521	1.88
Hydro (Partnership Project)	3280.00	11.84
Nuclear (Central)	2609.00	9.42
Renewable -Wind and Biomass	122.39	0.44
Total	27698.14	100.00
Total generation excluding Nuclear projects, Hydro and RE projects	20514.93	74.07
% of generation by coal out of total gen.exl. RE, Hydro & Nuclear		90.56
% of generation by gas out of total gen.exl. RE, Hydro & Nuclear		9.44
<b>Baseline Emissions (tCO<sub>2</sub>/TJ)</b>		
<b>Operating Margin</b>		
Standard emission factor for coal	96.10000	
Standard emission factor for Gas	56.10000	
Thermal efficiency of coal based power plants (%)	35.26	
Thermal efficiency of gas based power plants (%)	50.00	
Net emission factor for thermal (coal) (tCO <sub>2</sub> /TJ input)		246.82
Net emission factor for thermal (gas) (tCO <sub>2</sub> /TJ input)		10.59
<b>Net Operating margin factor (Kg CO<sub>2</sub>/kWh)</b>		<b>0.93</b>
<b>Built Margin Factor</b>		
Biomass	30.857	
Coal	2731.24	
Gas	213	
Chamera II	99.5	
<b>Total</b>	<b>3074.597</b>	
% generation by coal out of total generation		88.83245512
% generation by gas out of total generation		6.927737196
Standard emission factor for coal	96.10000	
Standard emission factor for Gas	56.10000	
Thermal efficiency of coal based power plants (%)	35.26	
Thermal efficiency of gas based power plants (%)	50.00	
Net emission factor for thermal (coal) (tCO <sub>2</sub> /TJ input)		242.11
Net emission factor for thermal (gas) (tCO <sub>2</sub> /TJ input)		7.77
<b>Net Built margin factor (Kg CO<sub>2</sub>/kWh)</b>		<b>0.90</b>
<b>Combined Margin Factor (Avg of OM &amp; BM)</b>		<b>0.92</b>
<b>Credit Period</b>	<b>kWh</b>	<b>Baseline emissions</b>
2005-2006	38400.00	35328.00
2006-2007	41400.00	38088.00
2007-2008	44300.00	40756.00
2008-2009	44300.00	40756.00
2009-2010	44300.00	40756.00
2010-2011	44300.00	40756.00
2011-2012	44300.00	40756.00
<b>Total</b>	<b>301300.00</b>	<b>277196.00</b>