

PROJECT TITLE

8MW Waste Heat Recovery Based Power Project by Sree Rengaraaj Power India Private Limited.

MONITORING REPORT

Ver. 02, 02/07/2010

[This Monitoring period is for the period 28/03/2006 to 27/12/2009 both days included]

Net Emission Reductions: 1,04,586 tCO₂e

Registered Office	Project Site's
Sree Rengaraaj Power India Pvt. Ltd. No 99, Sankagiri Main Road, Salem 636002, Tamilnadu	Sipcot Industrial Complex , Perundurai, Erode, Tamil Nadu.

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1. Introduction

This project activity generates electricity from the utilisation of waste heat of flue gases generated in DRI Kilns of Sponge iron plants. The Capacity of the generated electricity from waste heat of flue gas is 8MW. This project activity is developed by Sree Rengaraaj Power India Private Limited (SRPIPL) and it is located in Perundurai taluka of Erode District, Tamilnadu. The electricity generated by this project activity is used within the industrial facility for captive usage and the remaining surplus power is wheeled to its sister concern through southern regional grid.

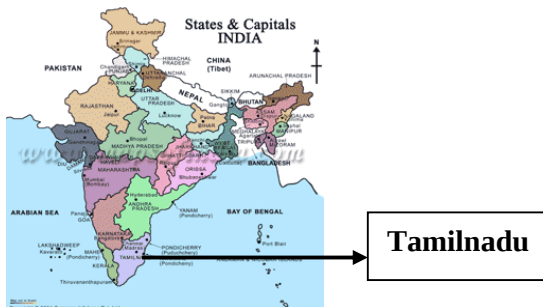
2. Reference

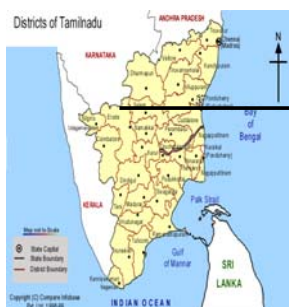
The methodology applied for this project activity is

Sectoral Scope : 1 & 4
Category : **ACM0012**“Consolidated baseline methodology for GHG Emission Reduction from waste energy recovery projects”.
Version : 3.1
Date : 16th August 2008

3. General Description of the Project

The Main Objective of this project activity is to utilize the waste heat content of flue gases from the DRI Kilns of Sponge Iron Plant. The Capacity of the generated electricity from waste heat of flue gas is 8MW. This project activity is developed by SRPIPL and it is located in Perundurai taluka of Erode District, Tamilnadu. The electricity generated by this project activity is used within the industrial facility for captive usage and the remaining surplus power is wheeled to its sister concern through southern regional grid. The Generated electricity is green house gas neutral. If the absence of this project activity both Rengaraaj steel and its sister concern will import power from southern regional grid dominated by the fossil fuel based power generation. Rankine Cycle Technology is selected for this power plant, wherein waste heat of sponge iron kiln is used in steam generator to produce high pressure steam, which is then expanded in a steam turbine to generate power. Rankine Technology is efficient and mostly practiced in many power plants.





Erode District



Perundurai Taluka

4. Details of Major Equipment of the Project

Technical Specifications of the Main equipments in this project activity is

Waste Heat Recovery Boiler:

Type	:	Natural Circulation, Water Tube Boiler
Steam Output	:	36 Tonnes per Hour
Steam Pressure	:	67 Kg/ Cm2
Steam Temperature	:	485°c
Make	:	Cethar Vessels Limited

Turbine:

Capacity	:	8 MW
Inlet Steam Pressure	:	64 Kg/Cm2
Inlet Steam flow	:	33.90 Tonnes per Hour
Inlet Steam Temperature	:	480 °c
RPM	:	7555
Make	:	ABB Limited

Alternator:

Make	:	BHEL
Capacity	:	8 MW
Generator Voltage	:	11 KV
Frequency	:	50 HZ
Full Load Current	:	525 Amps
Phase	:	3
RPM	:	1500
Connection	:	Star

The other accessories installed in this project activity are air cooled condenser, induced draft fan, air compressor system, de-aerator, de-mineralization plant, Cooling Tower etc.

5. Statement to what extent the Project has been implemented as planned

The project commissioned in the year of 2005. From the date of Starting it is in continuous operation. The Capacity of the generated electricity from waste heat of flue gas is 8MW and is also being operated and maintained by OEG India Private Limited. The electricity generated by this project activity is used within the industrial facility for captive usage and the remaining surplus power is wheeled to its sister concern through southern regional grid.

6. Sustainability – Economic and Social Well Being

The project activity has resulted in sustainable development in the region as follows:

- Employment opportunities are increased for both skilled and unskilled labors and local people in the surrounding villages are employed for civil and mechanical works during implementation of the project and subsequently for operation and maintenance of plant. All Services such as transport, housing and canteen for the project personnel are provided by local villagers, which have become a source of livelihood for them. Electrical Supply position has improved in the vicinity. The project activity has led to the improvement in infrastructural systems in terms of roads etc.
- In India most of the power generation is based on the fossil fuel like coal, oil and gas but the proposed project activity generates the electricity from the waste flue gas and thereby reducing the GHG Emissions from the fossil fuel based power generation in the regional grid.
- The Project activity utilizes the enthalpy of the hot flue gas, which will protect the environment from thermal pollution.
- Creates employment opportunities in the project vicinity during erection & commissioning

7. Parameters being monitored according to monitoring plan

Description details:

Data / Parameter:	EG_{gross}
Data unit:	MWh
Description:	Total quantity of electricity generated by the project activity.
Source of data to be used:	Monthly Report
Value of data applied for the purpose of calculating expected emission reductions	132946.272
Description of measurement methods and procedures to be applied:	<u>Monitoring:</u> Trivector meter will be used for monitoring <u>Data Type:</u> Measured <u>Frequency:</u> daily measured <u>Recording:</u> Monthly Report <u>Archiving Policy:</u> Paper & Electronic <u>Responsibility:</u> General Manager would be responsible for regular calibration of the meter. <u>Calibration Frequency:</u> Once in a year.
QA/QC procedures to be applied:	The energy meter is calibrated once in a year.
Any comment:	Data will be archived during the whole crediting period + 2 years.

Data / Parameter:	EG_{Aux-fromCPP}
Data unit:	MWh
Description:	Auxiliary consumption of electricity by the project activity from its own generation.
Source of data to be used:	Monthly Report
Value of data applied for the purpose of calculating expected emission reductions	10290.70
Description of measurement methods and procedures to be applied:	<u>Monitoring:</u> Trivector meter will be used for monitoring <u>Data Type:</u> Measured <u>Frequency:</u> daily measured <u>Recording:</u> Monthly Report <u>Archiving Policy:</u> Paper & Electronic <u>Responsibility:</u> General Manager would be responsible for regular calibration of the meter. <u>Calibration Frequency:</u> Once in a year.
QA/QC procedures to be applied:	The energy meter is calibrated once in a year.
Any comment:	Data will be archived during the whole crediting period + 2 years.

Monitoring Report

Data / Parameter:	EG_{Aux-fromGrid}
Data unit:	MWh
Description:	Import of power from TNEB grid
Source of data to be used:	Monthly Report
Value of data applied for the purpose of calculating expected emission reductions	410.234
Description of measurement methods and procedures to be applied:	<u>Monitoring:</u> Trivector meter will be used for monitoring <u>Data Type:</u> Measured <u>Frequency:</u> daily measured <u>Recording:</u> Monthly Report <u>Archiving Policy:</u> Paper & Electronic <u>Responsibility:</u> General Manager would be responsible for regular calibration of the meter. <u>Calibration Frequency:</u> Once in a year.
QA/QC procedures to be applied:	The meters used are calibrated periodically by state electricity board.
Any comment:	Data will be archived during the whole crediting period + 2 years.

Data / Parameter:	EG_{Aux}
Data unit:	MWh
Description:	Auxiliary consumption of electricity from the Project activity and the Grid. Calculated from EG_{Aux – from CPP} and EG_{Aux – from Grid}.
Source of data to be used:	Monthly Report
Value of data applied for the purpose of calculating expected emission reductions	10700.94
Description of measurement methods and procedures to be applied:	<u>Monitoring:</u> Trivector meter will be used for monitoring <u>Data Type:</u> calculated <u>Frequency:</u> daily <u>Recording:</u> Monthly Report <u>Archiving Policy:</u> Paper & Electronic <u>Responsibility:</u> General Manager would be responsible this data. <u>Calibration Frequency:</u> Once in a year.
QA/QC procedures to be applied:	----
Any comment:	Data will be archived during the whole crediting period + 2 years.

Monitoring Report

Data / Parameter:	EG _y
Data unit:	MWh
Description:	Net quantity of electricity generated by the project activity. Calculated from EG _{gross} and EG _{Aux}
Source of data to be used:	Monthly Report
Value of data applied for the purpose of calculating expected emission reductions	122245.3312
Description of measurement methods and procedures to be applied:	<u>Monitoring:</u> Trivector meter will be used for monitoring <u>Data Type:</u> calculated <u>Frequency:</u> daily <u>Recording:</u> Monthly Report <u>Archiving Policy:</u> Paper & Electronic <u>Responsibility:</u> General Manager would be responsible this data. <u>Calibration Frequency:</u> Once in a year.
QA/QC procedures to be applied:	----
Any comment:	Data will be archived during the whole crediting period + 2 years.

Technical details of Monitoring Instruments

Description	Generation Meter	CPP-Auxiliary Meter	Grid-Auxiliary Meter
Make	SOCOMEK	ENERCON	L&T
Accuracy Class	1.0	0.5	0.5
Serial No.	050332069	63174/134-5104	03122801
Date of Calibration	19/01/2006	19/01/2006	26/12/2006
	14/12/2006	14/12/2006	04/03/2008
	27/11/2007	27/11/2007	20/04/2009
	21/11/2008	21/11/2008	
	22/11/2009	22/11/2009	

8. GHG Calculations

The emission factor is 0.85573754 tCO₂/MWh, which is arrived based on the data published by CEA's CO₂ Baseline Database Version 04, dated Sep 2008. Published by Government of India, Ministry of Power Central Electricity Authority, Government of India. The values are presented below:

Parameter	As per CEA Data ¹
Operating Margin (OM) in t CO ₂ / MWh	0.998157296
Build Margin (BM), in t CO ₂ / MWh	0.71331778
Combined Margin (CM) Simple average of OM and BM in t CO ₂ / MWh	0.85573754

¹ (<http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>)

The project has taken the emission factor 0.85573754 tCO₂/MWh for estimation of baseline emission reductions as conservative.

The emission reduction is calculated by baseline emissions minus the project emissions and leakage. The following formula is adopted for calculating emission reductions generated by the project activity:

Emission reduction by this project is

$$ER_Y = BE_Y - PE_Y$$

$$PE_Y = \text{Emissions from the project activity during the year } y \text{ in tons of CO}_2$$

There is no emission from this project activity.

$$PE_Y = 0$$

$$\text{Emission reduction } ER_Y = BE_Y$$

The baseline emissions for the year y shall be determined as follows:

$$BE_Y = BE_{En,y} + BE_{flst,y}$$

$$BE_Y = \text{The total baseline emissions during the year } y \text{ in tons of CO}_2$$

$$BE_{En,y} = \text{The baseline emissions from energy generated by project activity during the year } y \text{ in tons of CO}_2$$

$$BE_{flst,y} = \text{Baseline emissions from steam generation, if any, using fossil fuel that would have been used for flaring the waste gas in absence of the project activity (tCO}_2\text{e per year), calculated as per equation 1c. This is relevant for those project activities where in the baseline steam is used to flare the waste gas}$$

This project activity is generating electricity from waste flue gas generated from sponge iron plant. If the absence of this project activity the captive power will be import from southern grid. There is no fossil fuel consumption in this project activity. The power will be generated from waste flue gas from sponge

iron plant. Hence $BE_{flst,y}$ is not applicable for this project activity. The above equation will be simplified in to

$$BE_y = BE_{En,y}$$

As per the methodology the project activity generating electricity

$$BE_{Eny} = BE_{Elec,y} + BE_{Ther,y}$$

$$BE_{Elec,y} = \text{Baseline emissions from electricity during the year } y \text{ in tons of CO}_2$$

$$BE_{Ther,y} = \text{Baseline emissions from thermal energy (due to heat generation by element process) during the year } y \text{ in tons of CO}_2$$

This project activity is generating electricity from waste flue gas from sponge iron plant. Other than that there is no thermal energy application in this project activity. Hence baseline emission from thermal energy ($BE_{Ther,y}$) is not applicable for this project activity.

$$BE_{Eny} = BE_{Elec,y}$$

Baseline emissions from electricity ($BE_{electricity,y}$) Type-1 activities:

Case 1: Waste energy is used to generate electricity

$$BE_{Elec,y} = f_{cap} * f_{wcm} * \sum_j \sum_i (EG_{i,j,y} * EF_{i,j,y})$$

$$BE_{elec,y} = \text{Baseline emissions due to displacement of electricity during the year } y \text{ in tons of CO}_2$$

$$EG_{i,j,y} = \text{The quantity of electricity supplied to the recipient } j \text{ by generator, that in the Absence of the project activity would have been sourced from } i^{\text{th}} \text{ source (i can be either grid or identified source) during the year } y \text{ in MWh,}$$

$$f_{wcm} = \text{Fraction of total electricity generated by the project activity using waste energy. (This fraction is 1 if the electricity generation is purely from use of waste energy)}$$

$$f_{cap} = \text{Energy that would have been produced in project year } y \text{ using waste energy generated in base year expressed as a fraction of total energy produced using waste source in year } y. \text{ The ratio is 1 if the waste energy generated in project year } y \text{ is same or less than that generated in base year.}$$

As per the FAR the QWCM,y and number of operating days will be verified with the help of external expert to assess the appropriateness during the verification. Technical assessment on capping of baseline emissions prepared by Climate SD Services is submitted to the DOE. In this report the energy balance conducted on the basis of the data collected from plant indicate that the 6.67MW power that is generated at the steam turbine unit reflects the amount of steam generated at the WHRB which in turn reflects the kiln waste gas flow rate at the rotary kiln. The f_{cap} calculated on the basis of energy balance is equal to 1

$$\begin{aligned} BE_{Elec,y} &= EG_{i,j,y} * EF_{i,j,y} \\ &= 122245.3312 * 0.85573754 \\ &= 104,586 \end{aligned}$$

In this project activity Project Emission and Leakage Emission is considered to be Zero

Emission Reduction due to the project activity = **1, 04, 586 ton of CO₂**

Monitoring Report

As per the validated PD the Plant Load Factor for this project activity is 80%. Net Electricity generated from this project is 50,458 MWh/yr. But actual generation is 122245 MWh for monitoring period (28/03/2006 to 27/09/2009). The waste heat from sponge iron kiln is the source for power generation in this project activity. The quantity and quality of steam generated from the WHRB is not constant over the year. Thus the power generated from this project activity was reduced. The power generation depends upon the parameters such as temperature and volume of hot flue gases. The low temperature of hot flue gases affects the temperature of steam generated at the Superheater coils resulting of this power generation was reduced. The actual emission reductions during the monitoring period is less than the estimated emission reduction during validation of the project because of the above said reason. This will not impact the baseline and Additionality of the project activity.

Estimated Emission Reductions(tCO ₂ /year)	Actual Emission Reductions (from 28/03/06 to 27/12/2009) tCO ₂
43,179	104,586

9. Net Emission Reductions

The emission reductions for the chosen monitored period i.e. from 28th Mar 2006 to 27th December 2009 as given below:

Project Title:		8MW Waste Heat Recovery Based Power Project by Sree Rengaraaj Power India Private Limited.				
Name of the company:		Sree Rengaraaj Power India Private Limited				
S. No	Monitoring Period	Net Electricity Exported	Baseline Emission Factor	Baseline Emissions	Project Emission	Net Emission Reductions
		KWh	tCO ₂ /Mwh	tCO ₂	tCO ₂	tCO ₂
1	28.03.06 - 27.04.06	2339646.0	0.85573754	2002.00	0	2002.00
2	28.04.06 - 27.05.06	2632777.0	0.85573754	2252.00	0	2252.00
3	28.05.06 - 27.06.06	2133299.0	0.85573754	1825.00	0	1825.00
4	28.06.06 - 27.07.06	2061031.0	0.85573754	1763.00	0	1763.00
5	28.07.06 - 27.08.06	3430183.0	0.85573754	2935.00	0	2935.00
6	28.08.06 - 27.09.06	3655694.0	0.85573754	3128.00	0	3128.00
7	28.09.06 - 27.10.06	3997487.0	0.85573754	3420.00	0	3420.00
8	28.10.06 - 27.11.06	1817385.0	0.85573754	1555.00	0	1555.00
9	28.11.06 - 27.12.06	3780690.0	0.85573754	3235.00	0	3235.00
10	28.12.06 - 27.01.07	3614123.0	0.85573754	3092.00	0	3092.00
11	28.01.07 - 27.02.07	1868114.0	0.85573754	1598.00	0	1598.00

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12	28.02.07 - 27.03.07	3352407.0	0.85573754	2868.00	0	2868.00
13	28.03.07 - 27.04.07	4148506.0	0.85573754	3550.00	0	3550.00
14	28.04.07 - 27.05.07	729939.0	0.85573754	624.00	0	624.00
15	28.05.07 - 27.06.07	2822358.0	0.85573754	2415.00	0	2415.00
16	28.06.07 - 27.07.07	2580989.0	0.85573754	2208.00	0	2208.00
17	28.07.07 - 27.08.07	2996044.0	0.85573754	2563.00	0	2563.00
18	28.08.07 - 27.09.07	3125545.0	0.85573754	2674.00	0	2674.00
19	28.09.07 - 27.10.07	3567831.0	0.85573754	3053.00	0	3053.00
20	28.10.07 - 27.11.07	1262465.0	0.85573754	1080.00	0	1080.00
21	28.11.07 - 27.12.07	2711895.0 ¹	0.85573754	2320.00	0	2320.00
22	28.12.07 - 27.01.08	2926853.4	0.85573754	2504.00	0	2504.00
23	28.01.08 - 27.02.08	2731396.1	0.85573754	2337.00	0	2337.00
24	28.02.08 - 27.03.08	3503302.1	0.85573754	2997.00	0	2997.00
25	28.03.08 - 27.04.08	1185315.0	0.85573754	1014.00	0	1014.00
26	28.04.08 - 27.05.08	3284268.0	0.85573754	2810.00	0	2810.00
27	28.05.08 - 27.06.08	3452675.0	0.85573754	2954.00	0	2954.00
28	28.06.08 - 27.07.08	2995058.0	0.85573754	2562.00	0	2562.00
29	28.07.08 - 27.08.08	1160900.0	0.85573754	993.00	0	993.00
30	28.08.08 - 27.09.08	2674164.0	0.85573754	2288.00	0	2288.00
31	28.09.08 - 27.10.08	2528675.0	0.85573754	2163.00	0	2163.00
32	28.10.08 - 27.11.08	100930.0	0.85573754	86.00	0	86.00
33	28.11.08 - 27.12.08	2193127.0	0.85573754	1876.00	0	1876.00
34	28.12.08 - 27.01.09	2367042.0	0.85573754	2025.00	0	2025.00
35	28.01.09 - 27.02.09	2280112.0	0.85573754	1951.00	0	1951.00
36	28.02.09 - 27.03.09	1457025.6	0.85573754	1246.00	0	1246.00
37	28.03.09 - 27.04.09	3144164.0	0.85573754	2690.00	0	2690.00
38	28.04.09 - 27.05.09	1490210.0	0.85573754	1275.00	0	1275.00
39	28.05.09 - 27.06.09	2647616.0	0.85573754	2265.00	0	2265.00
40	28.06.09 - 27.07.09	3338108.0	0.85573754	2856.00	0	2856.00
41	28.07.09 - 27.08.09	4147503.0	0.85573754	3549.00	0	3549.00
42	28.08.09 - 27.09.09	4207743.0	0.85573754	3600.00	0	3600.00
43	28.09.09 - 27.10.09	2930424.0	0.85573754	2507.00	0	2507.00
44	28.10.09 - 27.11.09	2523374.0	0.85573754	2159.00	0	2159.00
45	28.11.09 - 27.12.09	4346938.0	0.85573754	3719.00	0	3719.00
	Total	122245331.2		104586		104586

¹ The import Energy meter calibration has been delayed for the period of 26/12/2007 to 04/03/2008 and 04/03/2009 to 20/04/2009. The calibration error was found within the limit during the latest calibration, hence maximum permissible error of 0.5 % is considered for the non calibrated period for the above periods This is in line with "GUIDELINES FOR ASSESSING COMPLIANCE WITH THE CALIBRATION FREQUENCY REQUIREMENTS Annex: 60, EB52

Summary of Net Emission Reductions for the Monitored Period

Description	Unit	Total Year (28th Mar 06 to 27th December 09)
Electricity Generated by the Project Activity	kWh	132946272
Electricity Consumed by the Project Activity	kWh	10700940.9
Net Electricity Displaced	kWh	12224533.2
Baseline Emission Factor	tCO ₂ /MWh	0.85573754
Baseline Emissions	t CO ₂ e	104586
Net Emission Reductions	t CO₂e	104586

Period	Net Generation KWh/Month(Egy)	Emission Reduction tCO₂e
2006	25848192	22115.00
2007	32780216	28045.00
2008	28736663.6	24584.00
2009	34880259.6	29842.00
Total	122245331.2	104586

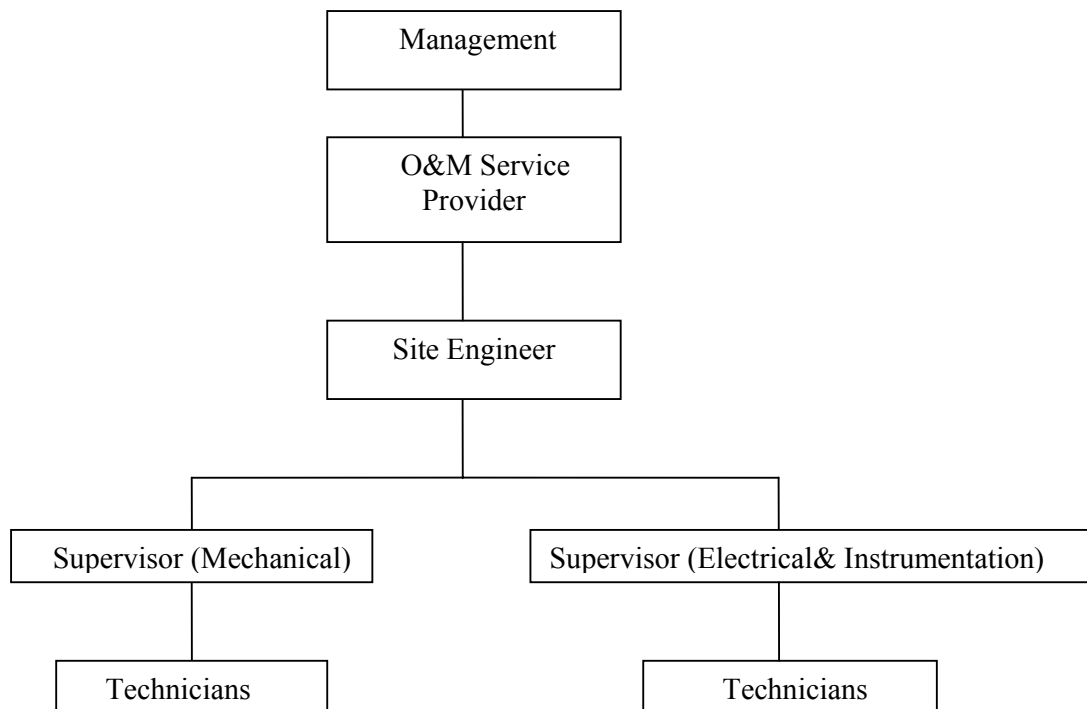
The details of calculation of emission reductions are presented as Excel spread sheets.

10. Measures to ensure the results/uncertainty analysis

The monitoring data of the equipments are recorded by labours/ supervisors and data are submitted to the shift incharges. The shift incharges report daily to the General Manager. The General Manager submits a monthly report to the management, which will be documented and stored in the project office. By this operational structure, the management can monitor the project activity and make amendments immediately, if needed. The monitored parameters have low level of uncertainty. Therefore the possible monitoring data adjustments are not envisaged for the project. Reported results and data will be compared with the previous results and data and will be thoroughly checked for any inconsistency.

11. Details of Monitoring team and Responsibilities

To address all O&M issues, the management signed a contract with the O & M Contractor. The O&M service provider for this project activity is OEG India Private Limited. The service provider has formed a team of Technicians; Supervisors headed by the Shift Incharges to effectively control and monitor the complete process in the plant area. The electricity generated by this project activity is used within the industrial facility for captive usage and the remaining surplus power is wheeled to its sister concern through southern regional grid. The Monitoring data of the equipments are recorded by the Technicians/ supervisors and the data are submitted to the shift incharges. The shift incharges report daily to the general manager of the OEG. The general manager submits a monthly report to the management which will be documented and stored in the project office. The management is reviewed generation details and operation control of the project activity from the monthly reports given by the OEG . The monitored parameters have low level of uncertainty. Therefore the possible monitoring data adjustments are not envisaged for the project.



Enclosure-I

BASE LINE INFORMATION

From Carbon Dioxide Baseline Data base, Version 04, Sep 2008 published by Government of India, Ministry of Power Central Electricity Authority, Government of India.

CENTRAL ELECTRICITY AUTHORITY: CO2 BASELINE DATABASE
VERSION 4.0
DATE Sep 2008
BASELINE METHODOLOGY ACM0002 / Ver 07

GENERATION DATA

Gross Generation Total (GWh)

	2005-06	2006-07	2007-08
NEWNE	470,037	499,380	531,539
South	147,355	161,897	167,379
India	617,392	661,277	698,918

Net Generation Total (GWh)

	2005-06	2006-07	2007-08
NEWNE	437,877	465,361	496,119
South	138,329	152,206	157,315
India	576,206	617,567	653,434

Share of Must-Run (Hydro/Nuclear) (% of Net Generation)

	2005-06	2006-07	2007-08
NEWNE	18.0%	18.5%	19.0%
South	27.0%	28.3%	27.1%
India	20.1%	20.9%	21.0%

Net Generation in Operating Margin (GWh)

	2005-06	2006-07	2007-08
NEWNE	359,271	379,471	401,642
South	100,978	109,116	114,702
India	460,249	488,587	516,343

20% of Net Generation (GWh)

	2005-06	2006-07	2007-08
NEWNE	87,575	93,072	99,224
South	27,666	30,441	31,463
India	115,241	123,513	130,687

Net Generation in Build Margin (GWh)

	2005-06	2006-07	2007-08
NEWNE	87,764	93,524	100,707
South	28,228	30,442	31,613
India	115,991	123,965	132,320

EMISSION DATA

Absolute Emissions Total (tCO2)

	2005-06	2006-07	2007-08
NEWNE	368,114,047	385,643,080	406,563,416
South	101,551,293	109,020,456	113,626,240
India	469,665,340	494,663,536	520,189,656

Absolute Emissions OM (tCO2)

	2005-06	2006-07	2007-08
NEWNE	368,114,047	385,643,080	406,563,416
South	101,551,293	109,020,456	113,626,240
India	469,665,340	494,663,536	520,189,656

Absolute Emissions BM (tCO2)

	2005-06	2006-07	2007-08
NEWNE	59,023,283	59,042,467	60,193,616
South	19,947,081	21,348,182	22,550,310
India	78,970,364	80,390,649	82,743,926

Emission Factor				
Operating Margin	2005-06	2006-07	2007-08	Average
Absolute Emissions (tCO2)	101,551,293	109,020,456	113,626,240	
Net Generation in Operating Margin (GWh)	100,978	109,116	114,702	
Operating Margin (tCO2/MWh)	1.00567366	0.999120924	0.990623514	0.998157296
Build Margin			2007-08	
Absolute Emissions (tCO2)			22,550,310	
Net Generation in Build Margin (GWh)			31,613	
Build Margin (tCO2/MWh)			0.71331778	0.71331778

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Combined Margin				0.85573754
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Source:

<http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>

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Enclosure II:

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