MONITORING REPORT
Version 05, 28/02/2011

FOR THE PERIOD
28th March 2006 TO 1st August 2009
(Both Days Included)

Project
"2.45 MW Wind Power Project in Rajasthan, India by Yamuna Power & Infrastructure Ltd"

Project Site
District Jaisalmer, Rajasthan, *India*

M/s Yamuna Power & Infrastructure Ltd.
(*Formerly Yamuna Gases and Chemicals Ltd.)*
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1. General Description of the Project

1.1 Project activity

The project activity is a Wind energy based power generation project of capacity 2.45 MW. It consists of three Wind Turbine Generators (WTGs) of different rated capacities ranging between 600 KW to 1250 KW belonging to Yamuna Power & Infrastructure Ltd. in the state of Rajasthan, India. The generated electricity will be supplied to NEWNE Grid under a long-term power purchase agreement (PPA) signed with Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPN) for the WTGs located in Rajasthan. Thereby the electricity exported from the project to the NEWNE grid will replaces an equivalent amount of power generation at the grid connected power plants which are primarily fossil fuel based. Therefore the project activity results in an equivalent amount of CO_2 emission reduction which otherwise would have resulted equivalent to the carbon intensity (Grid Emission Factor in tCO2e/MWh) of the NEWNE Grid.

The relevant details of the individual components of the project activity have been tabulated below:

S.No.	WEG No.	Capacity (MW)	Technology	Location			Site Coordinates
				Village	District	State	
1	YGCL-01	0.6	Enercon	Gorera	Jaisalmer	Rajasthan	26°44'29"N 70°51'20"E
2	YGCL-02	0.6	Enercon	Gorera	Jaisalmer	Rajasthan	26°44'29"N 70°51'20"E
3	J-215	1.25	Suzlon	Soda Mada	Jaisalmer	Rajasthan	26° 41'15.0" N 70° 53' 23.6" E

The main purpose of the project activity is to generate electrical energy through sustainable means using wind power resources, to utilize the generated output for selling it to the state electricity utility and to contribute to climate change mitigation efforts.

1.2 Technical description of the project

The project installs one Suzlon make (S-66) and two Enercon make (E-40) WEGs of individual capacity 1.25 MW and 0.6 MW respectively. The specifications of the various WTG models S-66 and E-40 employed by the project activity are presented below:

Technical Specification for Suzlon make (1250 KW) WTGs.

S/No	Particulars	Suzlon S-66 WTG
	Rotor	
1.	Rotor diameter	66 m
2.	Hub Height	65 m
3.	Installed electrical output	1250 kW
4.	Rotor swept area	3421.19 m^2
5.	Rotational speed	13.9 / 20.8 rpm
6.	Rotor material	GRP (Glass Reinforced Epoxy)
7.	Regulation	Pitch
	Operational Data	
8.	Cut-in wind speed	3.0 m/s
9.	Rated wind speed	13.0 m/s
10.	Cut-out wind speed	25.0 m/s
	Generator	
11.	Type	Asynchronous Generator
12.	Poles	4/6 poles
13.	Rated output	250/1250 kW
14.	Rotational speed	1010/1515 rpm
15.	Operating voltage	690 V
16.	Frequency	50 Hz
17.	Insulation class	Class H
18.	Protection	IP 56
19.	Cooling system	Air cooled
	Gear Box	
20.	Type	Integrated 3-stage gearbox
21.	Gear Types	1 planetary & 2 helical.
22.	Manufacturer	Flender
23.	Gear ratio	1.74.917
24.	Nominal load	1390 kW
25.	Type of cooling	Oil cooling system
	Yaw Drive	
26.	Motor	4 Active Electrical Yaw Motors
27.	Yaw bearing	Polyamide slide bearing
	Safety System	
28.	Aerodynamic Brake	3 Independent systems with blade Pitching
29.	Mechanical Brake	Spring Powered Disc Brake, Hydraulically Released
	Tower	
30.	Type	Free Standing; Lattice tower; Hot dip galvanised
31.	Erection	With Crane
32.	Design Standard	GL Special Class

Technical Specification for Enercon make (600 KW) WTG.

S/No	Particulars	Enercon E-40 WTG
1.	Rated Power	600 KW
2.	Rotor Diameter	44 m
3.	Hub Height	56.85 m
4.	Turbine Type	Gearless horizontal axis wind turbine with

		variable rotor speed
5.	Power Regulation	Independent electromechanical pitch system for each blade
6.	Design Lifetime	20 years
7.	Cut-in Wind Speed	3.0 m/s
8.	Rated Wind Speed	11.6 m/s
9.	Cut-out Wind Speed	25.0 m/s
10.	Extreme Wind Speed	57.6 m/s
11.	Rated Rotational Speed	32.5 rpm
12.	Operating Range Rotational Speed	18.0-33.0 rpm
13.	Orientation	Upwind
14.	No. of Blades	3
15.	Blade Material	Glass Fibre Reinforced Epoxy
16.	Gear box Type	Gear less
17.	Generator Type	Synchronous Generator
18.	Braking	Aero dynamical
19.	Output Voltage	400 V
20.	Yaw System	Active yawing with 4 electrical yaw drives with brake motor and friction bearing.
21.	Tower	56 m in 5 Sections.

2. Statement to What Extent the Project has been implemented as Planned

The plant is in operation continuously since it commissioning during 3rd March 2004 (1.2 MW) and 14th March 2004 (1.25 MW), with planned & forced outages.

2.1 Monitoring Period

VCS Project start date:

For the project activity, the project start date is the earliest date of the commissioning of any wind mill. As evident from the table below, the earliest commissioning date is 03/03/2004 for the WTGs Location No. YGCL 01 and YGCL 02.

Project Proponent	WTG No.	Installed Capacity	Location	Commissioning Date
Yamuna Power & Infrastructure Ltd.	YGCL-01	0.6 MW	Rajasthan	3rd Mar 04
Yamuna Power & Infrastructure Ltd.	YGCL-02	0.6 MW	Rajasthan	3rd Mar 04
Yamuna Power & Infrastructure Ltd.	J-215	1.25 MW	Rajasthan	14th Mar 04

Note: Yamuna Power & Infrastructure Ltd. was earlier known are Yamuna Gases and Chemicals Ltd. and therefore the WTGs are in the name of Yamuna Gases and Chemicals Ltd.

Crediting period start date:

The Crediting Period start date for the VCS project activity under consideration is 28th March 2006 and the length of first crediting period would be maximum of 10 years i.e. up to 31st Mar 2016. However no emissions Reductions are being considered for the period starting from 28 March 2006 till 01 April 2006.

Monitoring Period:

The present monitoring period is chosen from 28th March 2006 to 1st August 2009 (Both days included)

3. Sustainability –Economic and Social Well-being

Contribution of the Project Activity to Sustainable Development:

The contribution of the project activity to the sustainable development of the host country 'India' is evident from the following:

Social well being:

Activities such as site preparation, construction, building, operation and maintenance etc required significant amount of skilled and unskilled manpower. This has (and still is) resulted in significant employment generation. Furthermore, as the locations of some of the WTGs incorporated in the project activity are in the remotest areas, it is a great opportunity for people in the interiors to come face to face with modern technologies. This will surely lead to capacity building in terms of technical knowledge and long-term skills.

Economic well being:

The renewable energy project will supply electricity to the grid thereby not only reducing the load on an already deficit electricity grid but also result in an indirect saving of non-renewable fossil fuels such as coal that are consumed by thermal power stations. In addition, the generation of employment opportunities also promotes the Economic well-being of the region. Lastly, the development of infrastructure of the region is imminent as such WTGs, riding on their success will invite more investments for the region.

Technological well being

This project activity incorporates WTGs that have rated outputs ranging from 600 KW to 1.25 MW. Moreover, although the technology for each of them is more or less similar, these WTGs are placed in different locations. Since, the parameters such as Wind densities, wind

speeds and 'swept-areas' of rotors are different in each case, the project activity will also yield very useful data in terms of plant load factors (PLFs) achieved in each case. These data will be very useful to technology providers, project participants, developers, wind power enthusiasts and students etc., the analysis of which may help in bringing about further improvements in technology.

Environmental well being

This is the fundamental intent behind the project activity. All the participants of the project activity had desired to produce electrical power, by using renewable resources, the utilization or consumption of which would not create environmental pollution. As such, not only does the project avoid any GHG emissions, but also avoids any form of pollution.

4. Monitoring Methodology and Plan

For the project, following parameters were monitored on a continuous basis:

4.1 Net Power Export to Grid:

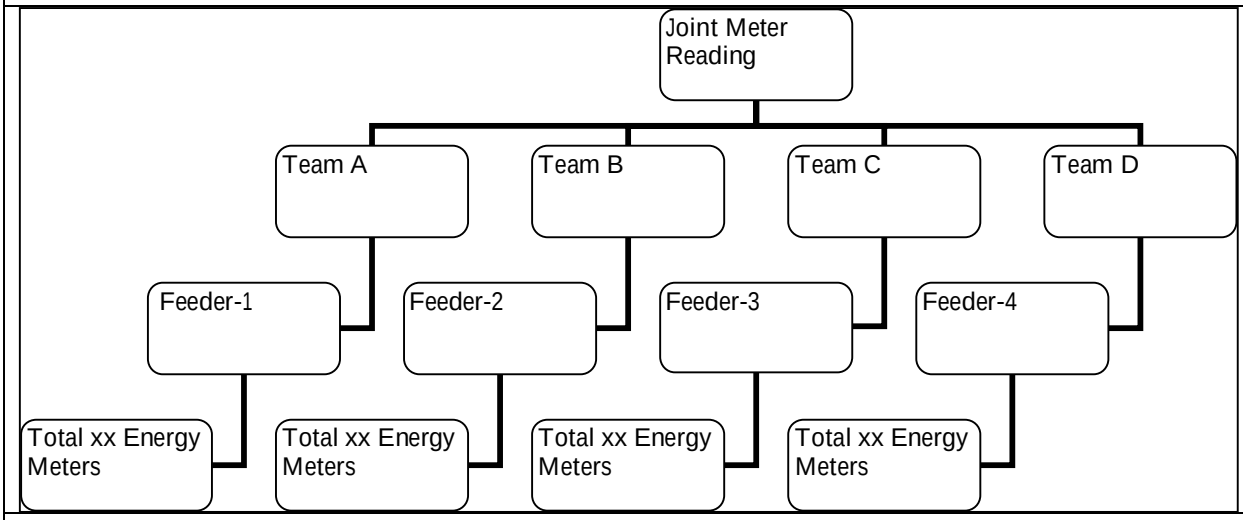
Power exported to the grid is monitored through the invoices raised by the company to Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPN) against the net power exported to the grid for each month. The net power exported to the grid is calculated as a difference of 'Power Exported' to the Grid and the 'Power Imported' from the Grid. Electricity exported and imported is continuously measured by the controller, daily recorded and monthly aggregated. Since the meter is common for the WTG considered under the project activity and other wind turbines that are not under this project activity, the apportioning of net electricity is done based on electricity generated from individual wind turbines. The export & import of power is recorded during the Joint Meter Reading by the representatives of RVPN in the presence of company representatives, at the meters installed near the WTG during the assigned date of every month. These meter readings are the basis of the invoices raised by the company after the deduction of transmission losses. Thus the net power export figures mentioned in the invoices are the most conservative values.

The Standard JMR Procedure

- The JMR is carried out at 220 kV RSEB sub-station at Soda Mada in the presence of following
  1. Representative from J.V.V.N.L Jaisalmer
  2. Representative from R.V.P.N.L Jaisalmer and

3. Representative from Operation and Maintenance contractor (Suzlon/Enercon)

- The JMR is signed by all the three representatives from respective entities and the same is considered for the energy metering purpose. If Power Producer/ Developer's representative is not present for joint meter reading then the meter reading taken by RVPN and/or Discom shall be considered final provided a signed copy of the meter reading is sent to the Power Producer/Developer within twenty four (24) hours of such reading of the main metering system or back up metering system as the case may be

Procedure – Joint Meter Reading / Credit Report
1. Jointly readings of all XX Energy Meters fixed at Substation at 1st of every month with EB (Electricity Board representatives).

2. Preparation of JMR Readings in formats specified by EB.
3. Submission, Auditing & Signing the readings from JE & AE of all xx Sub-Divisions
4. Submission, Auditing & Signing the readings from AE & EE of all xx Division Offices
5. Inward of all JMR readings to respective Circle Office.
6. Time to time follow-up for Issuing Feeder-wise Credit Notes from JE (Circle Office - Technical Dept.) to Operation and Maintenance contractor.
7. Preparation of generation bifurcation & Individual Credit Reports, Feeder-wise & Customer-wise generation report after receiving Feeder-wise Credit Notes from Circle Office Technical Dept.

Formulas Of Generation Bifurcation	
Net Generation of a WTG @ for credit :	**Kwh individual @ Controller X Total (Import Kwh - Export Kwh) @ EB**
	Total Controller Generation of WTG's Connected On a Feeder

8. Submission of generation bifurcation & Individual Credit Reports to Circle Account Dept for auditing.
9. Auditing, Signing all the reports from Auditor, Asst. Auditor, Divisional Auditor, Accounts Officer & Superintending Engineer of Circle office.
10. Time to time follow-up for Auditing, Signing & releasing Credit Reports from Circle Office.
11. Releasing & Outward of Credit Reports.
12. Putting Outward No's & Dates on all received reports. & Handing over the CR's to CRM Dept.

4.2 Net Power Exported:

The month-wise net power exported to the grid from the project activity including 3 WTGs of 1.25 MW & (2x0.6) MW during the monitoring period is given in below:

Month	Yammuna Power & Infrastructure Ltd. (1.20 MW)	Yammuna Power & Infrastructure Ltd. (1.25 MW)
DOC	3rd Mar 2004	14th mar 04
Capacity	1.2	1.25
Location	YGCL 01 & YGCL 02	J-215
State	Rajasthan	Rajasthan
APR'06	131580	137438
MAY'06	298821	331603
JUNE'06	265623	272932
JULY'06	300666	352045
AUG'06	121753	165713
SEP'06	111776	134862
OCT'06	125456	131156
NOV'06	43224	38695
DEC'06	66457	81243
JAN'07	59276	74742
FEB'07	98515	105561
MAR'07	109140	104136
Sub Total 06-07	**1732286**	**1930124**
APR'07	135668	157293
MAY'07	252059	258218
JUNE'07	296896	345610
JULY'07	257981	273497
AUG'07	244140	260292
SEP'07	133050	154559
OCT'07	59975	69641
NOV'07	28394	32392
DEC'07	70229	81803
JAN'08	91977	112503
FEB'08	58183	68479
MAR'08	136189	163686
Sub Total 07-08	**1764742**	**1977972**
APR'08	86874	124267
MAY'08	380984	422825

Month	Yammuna Power & Infrastructure Ltd. (1.20 MW)	Yammuna Power & Infrastructure Ltd. (1.25 MW)
JUN'08	169198	212707
JULY'08	301777	333657
AUG'08	215610	253243
SEP'08	168674	193870
OCT'08	98237	115428
NOV'08	62259	74053
DEC'08	78539	99911
JAN'09	86076	113284
FEB'09	54289	64980
MAR'09	108087	117969
Sub Total 08-09	**1810604**	**2126194**
APR'09	145533	151022
MAY'09	266258	304301
JUN'09	239602	269054
JULY'09	180435	235004
Sub Total Apr 09- Jul 09	**831828**	**959381**
TOTAL	**6139459**	**6993671**

4.3 Data/parameter monitored with regard to emission reductions.

The monitoring of Voluntary Carbon Units (VCUs) generated by the project activity follows the Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories: I.D "Grid connected renewable electricity generation" (Version 14)

The following parameters have been monitored as per the procedures and practices mentioned in the tables presented below:

<table>
<tr><td>Data / Parameter:</td><td>EG_{Bly}</td></tr>
<tr><td>Data unit:</td><td>kWh /Year</td></tr>
<tr><td>Description:</td><td>Net Electricity Exported to grid by the WTGs in the year y</td></tr>
<tr><td>Source of data to be used:</td><td>Monthly Electricity Export Invoices raised to regional electricity utility company for all the WTGs</td></tr>
<tr><td>Value of data applied for the purpose of calculating expected</td><td>
<table>
<tr><td rowspan="2">Project Participant</td><td rowspan="2">WTG No.</td><td colspan="4">Year</td><td rowspan="2">Group Total</td><td rowspan="2">Grand Total</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>~~Yamuna~~</td><td>YGCL01</td><td>~~1732286~~</td><td>~~1764742~~</td><td>~~1810604~~</td><td>~~831828~~</td><td>~~6139459~~</td><td>~~13133131~~</td></tr>
</table>
</td></tr>
</table>

emission reductions	Infra. Ltd. | J215 | 1930124 | 1977972 | 2126194 | 959381 | 6993671 |
Description of measurement methods and procedures to be applied:	The data is calculated using the Joint Energy Meters (Tri vector meter of accuracy class 0.2) installed at the substation, together with the controller meter reading at the WTGs. The joint energy meter (Main meter and Check meter) are two way meters where RVPN officials take the readings (joint meter reading) on monthly basis. The joint energy metering reading report is issued by RVPN together with the O & M personal. The reading is used to estimate the net power exported to the grid. The energy generated from each of the individual WTGs is monitored continuously through SCS/LCS controller. Based on the data, the net electricity exported to the grid by each of the WTG and accordingly invoices are raised by the project proponent against the net electricity generated and exported by the individual machines.
QA/QC procedures to be applied:	The main meter as well as the check meter are maintained and calibrated once in a year to maintain the accuracy. In case of failure of main meters, check meters installed with the main meter used to record the generation.
Any comment:	EG_{Bly} would be monitored separately for each WTG included in the project. The relevant data will be recorded in electronic form and the same along with the electricity bills will be archived for two years beyond the crediting period.

5. Quality Control (QC) and Quality Assurance (QA)

5.1 QA/QC procedures

Uncertainty level of data is low. Electricity delivered to the NEWNE grid by the project is the electricity exported to the grid by the project minus the electricity imported from the project. Main meter with Real Time TOD meters of 0.2% accuracy class for monitoring has been installed at the wind farm to monitor the electricity exported to and imported from the grid. The calibration of the meters is carried out by RVPN once in a year. A check meter is also provided along with the main meter. The reading of both the meters is matched every month to ensure accuracy of the meters. In the event of malfunctioning of the main meter, check meter reading is used during the period.

Periodical electricity sales receipts are used for double check. Calibration and Testing of Meters are done annually. The Main meter and Check Meter are tested for accuracy by RVPN's testing division. The RVPN carry out calibration, periodical testing, sealing and maintenance of meters in the presence of authorized representative(s) of the seller and the representative(s) of the seller signs on the result thereof.

As a regular practice, the representatives of state electricity boards were informed for conducting the annual calibration for the all the meters for the monitoring period, however,

since calibration certificates for certain meters in certain years were not made available, therefore, as per the guideline "***Guidelines for assessing compliance with the calibration frequency requirements" EB 52, Annex-60; Para 4(a)*** the net electricity exported by the WTGs for the same periods have been corrected with the percentage of error as obtained from the immediate subsequent testing report. The maximum permissible error of the instrument (0.2-class of accuracy) has been applied to the measured values.

Calibration certificates of the energy meters have been provided to the verifier.

5.2 Measures to ensure the Results/Uncertainty:

Table: A: Chronology of Events during the period of monitoring:

1. Suzlon Energy Limited 220 KV Sub-Station SODA MADA, Jaisalmer (WTG No. J215)

Suzlon Energy Limited 220 KV Sub-Station SODA MADA, Jaisalmer (WTG No. J215)							
Period	Transformer 1		Transformer 2		Transformer 3		Calibration Certificate Status
	Main Meter	Back Up Meter	Main Meter	Back Up Meter	Main Meter	Back Up Meter	
Feb 09 Till July 09	RJB00316	RJB00317	TNU00956	RJU00327	TNU00957	RJU00318	Available
Jun 08 Till Feb 09	RJB00316	RJB00317	TNU00956	RJU00327	TNU00957	RJU01580	Available
Jun 07 Till Jun 08	-	-	TNU00956	RJU00327	TNU00957	RJU01580	Not Available
Apr 06 Till Jun 07	RJU01579	APU01000					Not Available

Calibration Certificate dated 29/01/09, 30/01/09 and 16/02/08 are available for all the energy meters for the year 2008 and 2009.

2. 220 KV GSS Amarsagar, Enercon Feeder-1 and Feeder-2 Enercon (India) Ltd. Windfarms at Temedarai, Soda Bandhan & Korwan

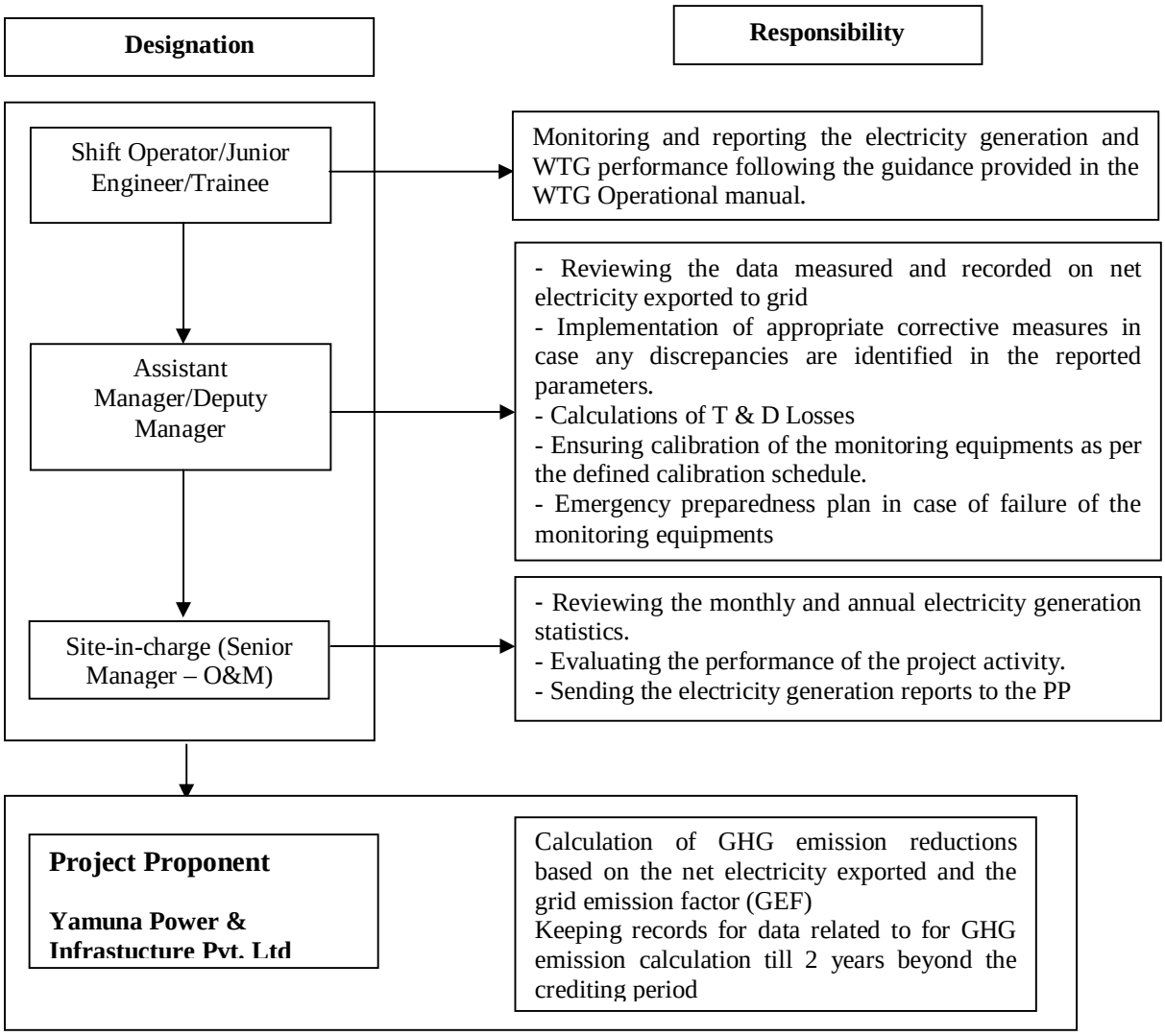
220 KV GSS Amarsagar, Enercon Feeder-1 and Feeder-2 Enercon (India) Ltd. Wind farms at Temedarai, Soda Bandhan & Korwan			
Period	Main Meter-1	Main Meter-2	Calibration Certificate Status
	132 KV Feeder 1	132 KV Feeder 2	
Apr 06 Till Dec 06	TNU 00946	TNU 00945	Not available
Apr 07 Till Dec 07	TNU 00946	TNU 00945	Not available
Apr 08 Till Dec 08	TNU 00946	TNU 00945	Not available
Apr 09 Till Dec 09	TNU 00946	TNU 00945	Available

Calibration Certificate dated 30/01/09 for the energy meters TNU 00945 & TNU 00946 is available for the year 2009.

5.3 Roles and Responsibilities

The project proponent have signed "Project Monitoring and Operation & Maintenance" agreement with the supplier of the Wind turbines i.e Suzlon Windfarm Services Ltd. and Enercon for the respective WTGs who are also in-charge for monitoring of the project activity and sending the reports to the project proponent.

The roles and responsibilities of the relevant personnel involved in monitoring, reporting and verification of various GHG performance related parameters in the project activity are explained in the following schematic diagram.



6. Emission Reductions

The emission reductions by the project activity during a given year y is the difference between Baseline emissions (BE_y), project emissions (PE_y) and emissions due to leakage (L_y).

$ER_y = BE_y – PE_y - L_y$

Where

ER_y = Emission reductin in year y (tCO_2)

BE_y = Baseline emissions in year *y* (tCO_2)

PE_y = Project emissions from the Project activity in year *y* (tCO_2).

L_y = Leakages from the Project activity in year *y* (tCO_2).

Baseline emissions:

The baseline emissions is calculated as the MWh produced by the renewable generating unit multiplied by an emission factor (measured in tCO_2/MWh) calculated in a transparent and conservative manner, as below.

$$\mathbf{BE_y = EG_y * EF_{GRID}}$$

Where

BE_y = Baseline emissions in year *y* (tCO2).

EG_y = Electricity generation by the project in year *y* (MWh).

EF_{GRID} = Combined margin emissions factor (Baseline emission factor) for the year *y* (tCO_2/MWh).

EG_y (Net energy exported during the monitoring period)	13,133 MWh
EF_{GRID} (Combined margin emissions factor as per the baseline adopted)	0.906 tCO2/MWh

Baseline emissions for the monitoring period

BE_y = 13,133 x 0.906

= 11,901 tCO_2

Further,

Project emissions (PE_y) = 0

Leakages (L_y) = 0

Emission reductions:

Baseline emissions – Project emissions – Leakages

= 11,901 – 0 – 0

= 11,901 ton CO_2

Therefore, the Emission Reduction for the Monitoring Period are:

= 11,901 ton CO_2

(Kindly refer Annexure-1 for Detailed Calculations)

Annexure-1

Calculation for Emission Reduction

Year	Month	Net Power Exported to Grid (in MWh)	Grid Emission Factor (tCO2/MWh)	Baseline Emission (tCO2)	Project Emission (tCO2)	Leakages (tCO2)	Emission Reduction (tCO2)
Apr 2006 to Mar 2007	APR'06	269	0.906	243.78	0	0	243.78
	MAY'06	630	0.906	571.28	0	0	571.28
	JUNE'06	539	0.906	488.03	0	0	488.03
	JULY'06	653	0.906	591.47	0	0	591.47
	AUG'06	287	0.906	260.50	0	0	260.50
	SEP'06	247	0.906	223.50	0	0	223.50
	OCT'06	257	0.906	232.54	0	0	232.54
	NOV'06	82	0.906	74.23	0	0	74.23
	DEC'06	148	0.906	133.84	0	0	133.84
	JAN'07	134	0.906	121.44	0	0	121.44
	FEB'07	204	0.906	184.93	0	0	184.93
	MAR'07	213	0.906	193.27	0	0	193.27
Sub Total		**3,662**		**3,319**			**3,319**
Apr 2007 to Mar 2008	APR'07	293	0.906	265.48	0	0	265.48
	MAY'07	510	0.906	462.40	0	0	462.40
	JUNE'07	643	0.906	582.23	0	0	582.23
	JULY'07	531	0.906	481.61	0	0	481.61
	AUG'07	504	0.906	457.11	0	0	457.11
	SEP'07	288	0.906	260.63	0	0	260.63
	OCT'07	130	0.906	117.46	0	0	117.46
	NOV'07	61	0.906	55.08	0	0	55.08
	DEC'07	152	0.906	137.77	0	0	137.77
	JAN'08	204	0.906	185.30	0	0	185.30
	FEB'08	127	0.906	114.78	0	0	114.78
	MAR'08	300	0.906	271.74	0	0	271.74
	Total for 2007	**3,743**		**3,392**	**0**	**0**	**3,392**
Apr 2008 to Mar 2009	APR'08	211	0.906	191.33	0	0	191.33
	MAY'08	804	0.906	728.40	0	0	728.40
	JUN'08	382	0.906	346.07	0	0	346.07
	JULY'08	635	0.906	575.82	0	0	575.82
	AUG'08	469	0.906	424.87	0	0	424.87
	SEP'08	363	0.906	328.53	0	0	328.53
	OCT'08	214	0.906	193.62	0	0	193.62
	NOV'08	136	0.906	123.52	0	0	123.52
	DEC'08	178	0.906	161.71	0	0	161.71
	JAN'09	199	0.906	180.66	0	0	180.66
	FEB'09	119	0.906	108.08	0	0	108.08
	MAR'09	226	0.906	204.85	0	0	204.85

Year	Month	Net Power Exported to Grid (in MWh)	Grid Emission Factor (tCO2/MWh)	Baseline Emission (tCO2)	Project Emission (tCO2)	Leakages (tCO2)	Emission Reduction (tCO2)
	Total for 2008	**3,937**		**3,567**	**0**	**0**	**3,567**
April 2009 to July 2009	APR'09	297	0.906	268.73	0	0	268.73
	MAY'09	571	0.906	517.03	0	0	517.03
	JUN'09	509	0.906	460.93	0	0	460.93
	JULY'09	415	0.906	376.46	0	0	376.46
	Total for 2009	**1,791**		**1,623**	**0**	**0**	**1,623**
Net power exported for the Monitoring Period		**13,133**		**11,901**			**11,901**

Annexure-2

Machine No-YGCL-01; YGCL-02 (DOC : 3rd-Mar-04)

220 KV GSS Amarsagar, Enercon Feeder-1 and Feeder-2 Enercon (India) Ltd. Windfarms at Temedarai, Soda Bandhan & Korwan

Year	Month	Export kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Import kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Net Power Exported TO Grid (in KWh)
2006-07	1st Apr 06 To 1st May 06	132133	99.8%	131868.7	288	100.2%	288.6	131580
	1st May 06 To 1st Jun 06	299465	99.8%	298866.1	45	100.2%	45.1	298821
	1st Jun 06 To 1st Jul 06	266332	99.8%	265799.3	176	100.2%	176.4	265623
	1st Jul 06 To 1st Aug 06	301485	99.8%	300882.0	216	100.2%	216.4	300666
	1st Aug 06 To 1st Sep 06	122199	99.8%	121954.6	201	100.2%	201.4	121753
	1st Sep 06 To 1st Oct 06	112261	99.8%	112036.5	260	100.2%	260.5	111776
	1st Oct 06 To 1st Nov 06	126070	99.8%	125817.9	361	100.2%	361.7	125456
	1st Nov 06 To 1st Dec 06	44132	99.8%	44043.7	818	100.2%	819.6	43224
	1st Dec 06 To 1st Jan 07	66889	99.8%	66755.2	298	100.2%	298.6	66457
	1st Jan 07 To 1st Feb 07	59718	99.8%	59598.6	322	100.2%	322.6	59276
	1st Feb 07 To 1st Mar 07	98970	99.8%	98772.1	257	100.2%	257.5	98515
	1st Mar 07 To 1st Apr 07	109800	99.8%	109580.4	440	100.2%	440.9	109140
Sub Total for the period Apr 06 Till Mar 07		1739454		1735975	3682		3689	1732286
2007-08	1st Apr 07 To 1st May 07	136127	99.8%	135854.7	186	100.2%	186.4	135668
	1st May 07 To 1st Jun 07	252730	99.8%	252224.5	165	100.2%	165.3	252059
	1st Jun 07 To 1st Jul 07	297548	99.8%	296952.9	57	100.2%	57.1	296896
	1st Jul 07 To 1st Aug 07	258609	99.8%	258091.8	111	100.2%	111.2	257981
	1st Aug 07 To 1st Sep 07	244743	99.8%	244253.5	113	100.2%	113.2	244140
	1st Sep 07 To 1st Oct 07	133564	99.8%	133296.9	246	100.2%	246.5	133050
	1st Oct 07 To 1st Nov 07	60658	99.8%	60536.7	561	100.2%	562.1	59975
	1st Nov 07 To 1st Dec 07	28920	99.8%	28862.2	467	100.2%	467.9	28394

Year	Month	Export kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Import kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Net Power Exported TO Grid (in KWh)
	1st Dec 07 To 1st Jan 07	70500	99.8%	70359.0	130	100.2%	130.3	70229
	1st Jan 08 To 1st Feb 08	92274	99.8%	92089.5	112	100.2%	112.2	91977
	1st Feb 08 To 1st Mar 08	58632	99.8%	58514.7	331	100.2%	331.7	58183
	1st Mar 08 To 1st Apr 08	136651	99.8%	136377.7	188	100.2%	188.4	136189
Sub Total for the period Apr 07 Till Mar 08		1770956		1767414	2667		2672	1764742
2008-09	1st Apr 08 To 1st May 08	87288	99.8%	87113.4	239	100.2%	239.5	86874
	1st May 08 To 1st Jun 08	381760	99.8%	380996.5	12	100.2%	12.0	380984
	1st Jun 08 To 1st Jul 08	169584	99.8%	169244.8	47	100.2%	47.1	169198
	1st Jul 08 To 1st Aug 08	302485	99.8%	301880.0	103	100.2%	103.2	301777
	1st Aug 08 To 1st Sep 08	216186	99.8%	215753.6	143	100.2%	143.3	215610
	1st Sep 08 To 1st Oct 08	169122	99.8%	168783.8	110	100.2%	110.2	168674
	1st Oct 08 To 1st Nov 08	98905	99.8%	98707.2	469	100.2%	469.9	98237
	1st Nov 08 To 1st Dec 08	62651	99.8%	62525.7	266	100.2%	266.5	62259
	1st Dec 08 To 1st Jan 08	78967	99.8%	78809.1	270	100.2%	270.5	78539
	1st Jan 09 To 1st Feb 09	86391	99.8%	86218.2	142	100.2%	142.3	86076
	1st Feb 09 To 1st Mar 09	54466	-	54466	177	-	177.0	54289
	1st Mar 09 To 1st Apr 09	108225	-	108225	138	-	138.0	108087
Sub Total for the period Apr 08 Till Mar 09		1816030		1812723	2116		2120	1810604
2009	1st Apr 09 To 1st May 09	145809	-	145809	276	-	276.0	145533
	1st May 09 To 1st Jun 09	266348	-	266348	90	-	90.0	266258
	1st Jun 09 To 1st Jul 09	239628	-	239628	26	-	26.0	239602
	1st Jul 09 To 1st Aug 09	180624	-	180624	189	-	189.0	180435
Sub Total for the period Apr 09 Till July 09		832409		832409	581		581	831828

*According to the monitoring report, the monitoring period starts from 28th March 2006. Also, the first day of every month has been considered twice, like 01/04/2006 to 01/05/2006 and 01/05/2006 to 01/06/2006 and so on. This is according to the dates mentioned in the joint meter reading sheet generated by the RVPNL. However, no double counting or overlapping in the values is possible as the initial and final readings for both the months are clearly mentioned in the JMR sheets.

Machine No-J215 (DOC : 14.03.04)

Suzlon Energy Limited 220 KV Sub-Station SODA MADA, Jaisalmer (WTG No. J215)

Year	Month	Export kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Import kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Net Power Exported TO Grid (in KWh)
2006-07	1st Apr 06 To 1st May 06	138719	99.8%	138441.6	1002	100.2%	1004.0	137437.6
	1st May 06 To 1st Jun 06	332418	99.8%	331753.2	150	100.2%	150.3	331602.9
	1st Jun 06 To 1st Jul 06	273999	99.8%	273451.0	518	100.2%	519.0	272932.0
	1st Jul 06 To 1st Aug 06	353324	99.8%	352617.4	571	100.2%	572.1	352045.2
	1st Aug 06 To 1st Sep 06	166787	99.8%	166453.4	739	100.2%	740.5	165712.9
	1st Sep 06 To 1st Oct 06	136095	99.8%	135822.8	959	100.2%	960.9	134861.9
	1st Oct 06 To 1st Nov 06	132552	99.8%	132286.9	1129	100.2%	1131.3	131155.6
	1st Nov 06 To 1st Dec 06	40757	99.8%	40675.5	1977	100.2%	1981.0	38694.5
	1st Dec 06 To 1st Jan 07	82265	99.8%	82100.5	856	100.2%	857.7	81242.8
	1st Jan 07 To 1st Feb 07	75858	99.8%	75706.3	962	100.2%	963.9	74742.4
	1st Feb 07 To 1st Mar 07	106441	99.8%	106228.1	666	100.2%	667.3	105560.8
	1st Mar 07 To 1st Apr 07	105686	99.8%	105474.6	1336	100.2%	1338.7	104136.0
Sub Total for the period Apr 06 Till Mar 07		**1944901**		**1941011**	**10865**		**10887**	**1930124**
2007-08	1st Apr 07 To 1st May 07	158578	99.8%	158260.8	966	100.2%	967.9	157292.9
	1st May 07 To 1st Jun 07	259359	99.8%	258840.3	621	100.2%	622.2	258218.0
	1st Jun 07 To 1st Jul 07	346482	99.8%	345789.0	179	100.2%	179.4	345609.7
	1st Jul 07 To 1st Aug 07	274251	99.8%	273702.5	205	100.2%	205.4	273497.1
	1st Aug 07 To 1st Sep 07	261219	99.8%	260696.6	404	100.2%	404.8	260291.8

Year	Month	Export kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Import kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Net Power Exported TO Grid (in KWh)
	1st Sep 07 To 1st Oct 07	156046	99.8%	155733.9	1173	100.2%	1175.3	154558.6
	1st Oct 07 To 1st Nov 07	71568	99.8%	71424.9	1780	100.2%	1783.6	69641.3
	1st Nov 07 To 1st Dec 07	34196	99.8%	34127.6	1732	100.2%	1735.5	32392.1
	1st Dec 07 To 1st Jan 07	82608	99.8%	82442.8	639	100.2%	640.3	81802.5
	1st Jan 08 To 1st Feb 08	113126	99.8%	112899.7	396	100.2%	396.8	112503.0
	1st Feb 08 To 1st Mar 08	69835	-	69835	1356	-	1356	68479.0
	1st Mar 08 To 1st Apr 08	164666	-	164666	980	-	980	163686.0
Sub Total for the period Apr 07 Till Mar 08		**1991934**		**1988419**	**10431**		**10447**	**1977972**
2008-09	1st Apr 08 To 1st May 08	125592	-	125592	1325	-	1325	124267.0
	1st May 08 To 1st Jun 08	422857	-	422857	32	-	32	422825.0
	1st Jun 08 To 1st Jul 08	212853	-	212853	146	-	146	212707.0
	1st Jul 08 To 1st Aug 08	333907	-	333907	250	-	250	333657.0
	1st Aug 08 To 1st Sep 08	253754	-	253754	511	-	511	253243.0
	1st Sep 08 To 1st Oct 08	194218	-	194218	348	-	348	193870.0
	1st Oct 08 To 1st Nov 08	117100	-	117100	1672	-	1672	115428.0
	1st Nov 08 To 1st Dec 08	75214	-	75214	1161	-	1161	74053.0
	1st Dec 08 To 1st Jan 08	100609	-	100609	698	-	698	99911.0
	1st Jan 09 To 1st Feb 09	113812	-	113812	528	-	528	113284
	1st Feb 09 To 1st Mar 09	65803	-	65803	823	-	823	64980
	1st Mar 09 To 1st Apr 09	118709	-	118709	740	-	740	117969
Sub Total for the period Apr 08 Till Mar 09		**2134428**		**2134428**	**8234**		**8234**	**2126194**
2009	1st Apr 09 To 1st May 09	152014	-	152014	992	-	992	151022
	1st May 09 To 1st Jun 09	304593	-	304593	292	-	292	304301
	1st Jun 09 To 1st Jul 09	269192	-	269192	138	-	138	269054
	1st Jul 09 To 1st Aug 09	235681	-	235681	677	-	677	235004

Year	Month	Export kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Import kWh	Factor for Meter Calibration	Adjusted Generation due to unavailability of calibration report*	Net Power Exported TO Grid (in KWh)
Sub Total for the period Apr 09 Till July 09		**961480**		**961480**	**2099**		**2099**	**959381**

*As per the guideline " Guidelines for assessing compliance with the calibration frequency requirements" EB 52, Annex-60; Para 4(a) - The net electricity exported by the WTGs for the period 2006 & 2007 where calibration certificate are not available, have been corrected with the percentage of error as obtained from the immediate subsequent testing report.