

GOLD STANDARD MONITORING REPORT
Version 1

MONITORING REPORT

Title of the project activity	Enercon Wind Farm (Hindustan) Ltd in Rajasthan
Reference number of the project activity	GS 2483
Version number of the monitoring report	~~324~~
Completion date of the monitoring report	~~22307/11097~~ /2016
Registration date of the project activity	
Monitoring period number and duration of this monitoring period	2 nd Verification, 01/09/2013 to 31/01/2015 & 01/02/2015 to 31/05/2016
Project participant(s)	Wind World (India) Limited (Previously Enercon (India) Limited)
Host Party(ies)	India
Sectoral scope(s) and applied methodology(ies)	Energy industries (renewable/ non-renewable sources). <i>Consolidated methodology for grid-connected electricity generation from renewable sources, ACM0002, Version 6</i>
Estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PDD	=261,038 tCO ₂
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period	89,017 + 86,1 ~~6798~~ = 1,75,1 ~~84215~~ tCO ₂

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

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- (a) *Purpose of the project activity and the measures taken for GHG emission reductions or net anthropogenic GHG removals by sinks;*

The purpose of the project activity is to utilize renewable wind energy for generation of electricity. The project activity replaces anthropogenic emissions of greenhouse gases (GHG's) into the atmosphere, by displacing the equivalent amount of electricity generation through the operation of existing fuel mix in the grid comprising mainly fossil fuel based power plants and future capacity expansions connected to the grid. In the absence of the project activity the equivalent amount of electricity would have been generated from the connected/ new power plants in the NEWNE grid, which are/ will be predominantly based on fossil fuels. Whereas the electricity generation from operation of Wind Energy Convertors (WEC's) is emission free.

- (b) *Brief description of the installed technology and equipments;*

The Project involves 75-wind energy converters (WECs) of Enercon make (800 kW E-48) with internal electrical lines connecting the Project with local evacuation facility. The WECs generates 3-phase power at 400V, which is stepped up to 33 KV. The Project can operate in the frequency range of 47.5–51.5 Hz and in the voltage range of 400 V $\pm$ 12.5%. The other salient features of the state-of-art-technology are referred in Appendix 4. The line diagram of wind farm including metering points and substations is attached as Appendix 1.

- (c) *Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods, etc.);*

The first WEC under the project activity was commissioned on 26 November 2006 and the last WEC under the project activity was commissioned on 25 December 2006. The expected operational lifetime of the project is for 20 years. The length of the Crediting period of the project activity as per registered GS PDD is 10 years (Fixed). The first monitoring period considered is from 01 Jul 2012 to 31 Aug 2013.

- (d) *Total GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period.*

The total emission reductions achieved under this monitoring period (01 Sep 2013 to 31 May 2016) is = 175, ~~184215~~ tCO₂.

Net Amount of CERs after adjusting the contributions to CDM adaptation fund is 171, 680.

A.2. Location of project activity

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- (a) *Host Party(ies);*

India

- (b) *Region/State/Province, etc.;*

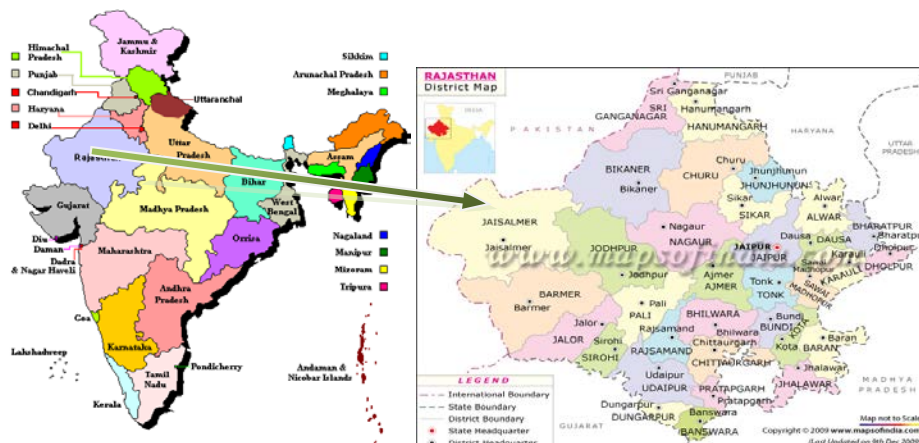
Northern Region/Rajasthan State

- (c) *City/Town/Community, etc.;*

The Project is located at Kita and Pithodai Ki Dhani village, in Jaisalmer District of Rajasthan state in India.

- (d) *Physical/ Geographical location.*

The project area extends between latitude 26° 40' 47.5'' & 26° 45' 48.3'' North and longitude 70° 58' 19.3'' & 71° 3' 32.5'' East. The Project is connected to 33/132/220 kV Akal RRVPN substation. The sites are located at a distance of 25 km from Jaisalmer by road. The nearest railway station is at Jaisalmer.



Individual WEG location numbers and coordinates are detailed out in below Table 1: -

S. No	EWHPL UNIQUE ID	Loc No	Latitude			Longitude		
			Deg.	Minute	Second	Deg.	Minute	Second
1	EWHP1 01	322	26	40	47.5	70	58	58.2
2	EWHP1 02	323	26	40	55.3	70	58	54.6
3	EWHP1 03	145	26	41	2.5	70	58	49.5
4	EWHP1 04	146	26	41	7.7	70	58	43.9
5	EWHP1 05	147	26	41	12.8	70	58	38.4
6	EWHP1 06	148	26	41	18	70	58	32.8
7	EWHP1 07	150	26	41	27	70	58	48.3
8	EWHP1 08	151	26	41	32.1	70	58	42.7
9	EWHP1 09	152	26	41	37.3	70	58	37.2
10	EWHP1 10	153	26	41	38.5	70	59	8.6
11	EWHP1 11	154	26	41	43.6	70	59	3.1
12	EWHP1 12	155	26	41	48	70	58	57.5
13	EWHP1 13	156	26	41	54.1	70	58	52.1
14	EWHP1 14	157	26	41	56.6	70	58	41.5
15	EWHP1 15	307	26	42	12	70	58	24.8
16	EWHP16	306	26	42	17.2	70	58	19.3
17	EWHP1 17	300	26	42	47.4	70	58	24.4

18	EWHPL 18	301	26	42	43.9	70	58	30.7
19	EWHPL 19	304	26	42	26.8	70	58	46.6
20	EWHPL 20	305	26	42	21.7	70	58	52.2
21	EWHPL 21	161	26	42	16.5	70	58	57.7
22	EWHPL 22	160	26	42	9	70	59	2.2
23	EWHPL 23	159	26	42	1.3	70	59	6.7
24	EWHPL 24	324	26	42	5.7	70	59	23.9
25	EWHPL 25	167	26	42	38.3	70	59	0.2
26	EWHPL 26	168	26	42	42.9	70	58	56.3
27	EWHPL 27	169	26	42	49.6	70	58	54.4
28	EWHPL 28	170	26	42	56.5	70	58	52.7
29	EWHPL 29	326	26	43	22.4	70	58	50.2
30	EWHPL 30	177	26	42	54.5	70	59	29.3
31	EWHPL 31	178	26	42	49.4	70	59	34.9
32	EWHPL 32	179	26	42	44.2	70	59	40.5
33	EWHPL 33	181	26	42	32.2	70	59	50.9
34	EWHPL 34	183	26	42	59	70	59	50.6
35	EWHPL 35	184	26	43	5.8	70	59	45.8
36	EWHPL 36	186	26	43	17.8	70	59	35.4
37	EWHPL 37	190	26	43	25.1	70	59	50.1
38	EWHPL 38	191	26	43	18.3	70	59	54.9
39	EWHPL 39	192	26	43	13.2	71	0	0.5
40	EWHPL 40	193	26	43	8	71	0	6.1
41	EWHPL 41	194	26	43	2.9	71	0	11.6
42	EWHPL 43	218	26	45	31.3	71	0	32
43	EWHPL 42	219	26	45	17.2	71	0	23.1
44	EWHPL 44	220	26	44	52.6	71	0	38.2
45	EWHPL 45	221	26	44	52.5	71	0	47.2
46	EWHPL 46	222	26	44	45.9	71	0	55.9

47	EWHPL 47	223	26	44	56.1	71	1	5.4
48	EWHPL 48	224	26	45	1.9	71	1	16.3
49	EWHPL 49	225	26	44	43.9	71	1	23
50	EWHPL 50	226	26	44	38.8	71	1	35.9
51	EWHPL 51	230	26	44	24.9	71	1	55.5
52	EWHPL 52	232	26	44	19.9	71	2	1.7
53	EWHPL 53	233	26	44	14.1	71	2	7.3
54	EWHPL 54	329	26	44	30.1	71	2	16
55	EWHPL 55	234	26	44	20.5	71	2	27.9
56	EWHPL 56	236	26	43	57.4	71	2	22.2
57	EWHPL 57	237	26	43	55.8	71	2	30.9
58	EWHPL 58	238	26	43	56.9	71	2	39.7
59	EWHPL 59	328	26	44	8.9	71	2	56.5
60	EWHPL 60	241	26	43	58.7	71	2	59.9
61	EWHPL 61	242	26	43	51.8	71	3	5.1
62	EWHPL 62	245	26	44	30.5	71	3	32.5
63	EWHPL 63	246	26	44	32.5	71	3	22.5
64	EWHPL 64	249	26	45	9.4	71	3	14.1
65	EWHP 65	302	26	44	51.4	71	2	56.1
66	EWHPL 66	250	26	44	58.1	71	2	52.3
67	EWHPL 67	251	26	45	0.4	71	2	44.6
68	EWHPL 68	252	26	45	0.8	71	2	32.4
69	EWHPL 69	253	26	45	4.3	71	2	25.6
70	EWHPL 70	254	26	45	14.2	71	2	15.9
71	EWHPL 71	256	26	45	23.8	71	2	25.8
72	EWHPL 72	257	26	45	39.3	71	2	47.5
73	EWHPL 73	258	26	45	42.8	71	2	37.2
74	EWHPL 74	259	26	45	46.6	71	2	26.5
75	EWHPL 75	260	26	45	48.3	71	2	18.7

A.3. Parties and project participant(s)

Name of Party involved ((host) indicates a host Party)	Private and/or public entity(ies) project participants (*) (as applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
Government of India (Host)	Wind World (India) Ltd	No

A.4. Reference of applied methodology

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Consolidated methodology for grid-connected electricity generation from renewable sources, ACM0002, Version 6

Further information with regards to the methodology / tools can be obtained at <http://cdm.unfccc.int/methodologies/DB/UB3431UT9I5KN2MUL2FGZXZ6CV71LT>

A.5. Crediting period of project activity

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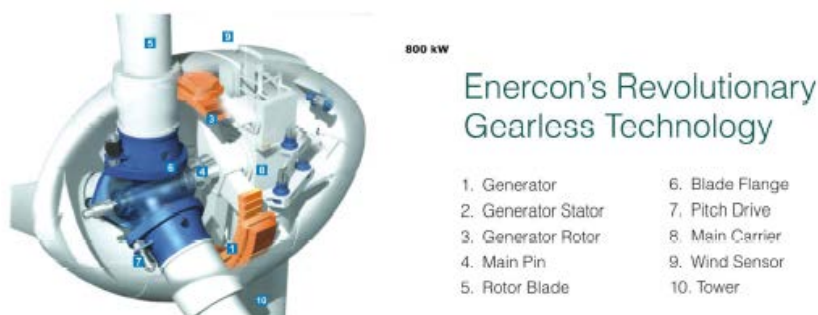
The length of the Crediting period of the project activity as per registered PDD is 10 years (Fixed).

SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

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The Project involves 75-wind energy converters (WECs) of Enercon make (800 kW E-48) with internal electrical lines connecting the Project with local evacuation facility. The WECs generates 3-phase power at 400V, which is stepped up to 33 KV. The Project can operate in the frequency range of 47.5–51.5 Hz and in the voltage range of 400 V $\pm$ 12.5%. The other salient features of the state-of-art-technology are referred in Appendix 4.



For project activities that consist of more than one site, the report shall clearly describe the status of implementation and starting date of operation for each site. For project activities with phased implementation, the report shall indicate the progress of the proposed project activity achieved in each phase.

The starting date of operation of the project activity

The first WEC under the project activity was commissioned on 26th November 2006 and last WEC under the project activity was commissioned on 25th December 2006. The commissioning date for all the WECs included in the project activity is given in the table below.

Table 2:

S.No	EWHPL UNIQUE ID	Loc No	Commissioning date
1	EWHPL 01	322	20-Dec-06
2	EWHPL 02	323	20-Dec-06
3	EWHPL 03	145	20-Dec-06
4	EWHPL 04	146	20-Dec-06
5	EWHPL 05	147	20-Dec-06
6	EWHPL 06	148	20-Dec-06
7	EWHPL 07	150	20-Dec-06

8	EWHPL 08	151	20-Dec-06
9	EWHPL 09	152	20-Dec-06
10	EWHPL 10	153	20-Dec-06
11	EWHPL 11	154	20-Dec-06
12	EWHPL 12	155	20-Dec-06
13	EWHPL 13	156	20-Dec-06
14	EWHPL 14	157	20-Dec-06
15	EWHPL 15	307	21-Dec-06
16	EWHPL16	306	21-Dec-06
17	EWHPL 17	300	20-Dec-06
18	EWHPL 18	301	20-Dec-06
19	EWHPL 19	304	21-Dec-06
20	EWHPL 20	305	21-Dec-06
21	EWHPL 21	161	20-Dec-06
22	EWHPL 22	160	20-Dec-06
23	EWHPL 23	159	20-Dec-06
24	EWHPL 24	324	21-Dec-06
25	EWHPL 25	167	20-Dec-06
26	EWHPL 26	168	26-Nov-06
27	EWHPL 27	169	26-Nov-06
28	EWHPL 28	170	26-Nov-06
29	EWHPL 29	326	21-Dec-06
30	EWHPL 30	177	25-Dec-06
31	EWHPL 31	178	25-Dec-06
32	EWHPL 32	179	25-Dec-06
33	EWHPL 33	181	25-Dec-06
34	EWHPL 34	183	25-Dec-06
35	EWHPL 35	184	25-Dec-06
36	EWHPL 36	186	25-Dec-06
37	EWHPL 37	190	25-Dec-06
38	EWHPL 38	191	25-Dec-06
39	EWHPL 39	192	25-Dec-06
40	EWHPL 40	193	25-Dec-06
41	EWHPL 41	194	25-Dec-06
42	EWHPL 43	218	21-Dec-06
43	EWHPL 42	219	21-Dec-06
44	EWHPL 44	220	25-Dec-06
45	EWHPL 45	221	25-Dec-06
46	EWHPL 46	222	25-Dec-06
47	EWHPL 47	223	21-Dec-06
48	EWHPL 48	224	21-Dec-06
49	EWHPL 49	225	21-Dec-06
50	EWHPL 50	226	21-Dec-06
51	EWHPL 51	230	21-Dec-06

52	EWHP 52	232	21-Dec-06
53	EWHP 53	233	21-Dec-06
54	EWHP 54	329	21-Dec-06
55	EWHP 55	234	21-Dec-06
56	EWHP 56	236	21-Dec-06
57	EWHP 57	237	21-Dec-06
58	EWHP 58	238	20-Dec-06
59	EWHP 59	328	20-Dec-06
60	EWHP 60	241	20-Dec-06
61	EWHP 61	242	20-Dec-06
62	EWHP 62	245	20-Dec-06
63	EWHP 63	246	26-Nov-06
64	EWHP 64	249	26-Nov-06
65	EWHP 65	302	21-Dec-06
66	EWHP 66	250	26-Nov-06
67	EWHP 67	251	21-Dec-06
68	EWHP 68	252	21-Dec-06
69	EWHP 69	253	21-Dec-06
70	EWHP 70	254	26-Nov-06
71	EWHP 71	256	26-Nov-06
72	EWHP 72	257	26-Nov-06
73	EWHP 73	258	26-Nov-06
74	EWHP 74	259	21-Dec-06
75	EWHP 75	260	21-Dec-06

The information regarding the actual operation of the project

The project activity consists of 75 WECs (800 kW) of Enercon make E-48 totaling to a capacity of 60 MW. During the monitoring period, the WECs were operating normally. Hence no major breakdown was found during this period.

A brief description of: (i) events or situations that occurred during the monitoring period (ii) how the issues resulting from these events or situations are being addressed.

Enercon Wind Farms (Hindustan) Pvt. Ltd. has appointed Wind World (India) Limited as their operation & maintenance contractor. Hence Wind World (India) limited is responsible for operation and maintenance activities for Enercon Wind Farms (Hindustan) Pvt. Ltd. Wind World (India) limited operation and maintenance activities are ISO 9001:2008 certified and all the events are recorded in the log book available at the project site. Referring to the data available it can be inferred that there have not been any major special events for any of the WECs that are included in the project activity. As a part of regular maintenance the WECs are stopped for mechanical and electrical maintenance for 16 to 18 hours annually and for visual inspection for 6 to 7 hours quarterly.

B.2. Post registration changes

B.2.1. Temporary deviations from registered monitoring plan or applied methodology

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Not Applicable

B.2.2. Corrections

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Not Applicable

B.2.3. Permanent changes from registered monitoring plan or applied methodology

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Revision in the monitoring plan was requested. The same has been approved by UNFCCC on 3rd Aug 2011.

The Location of backup meter as per the registered PDD has been changed. The backup meter is located in Akal substation. The same has been reflected in the revised PDD version 11 dated 17 Sep 2012. The same was approved on 14 Jan 2013 by UNFCCC.

Due to change in mode of payment, from Cheque to electronic fund the transfer the crosschecking source (payment Cheque) will no longer be available to PP. Hence, the PDD is revised to change of information regarding the source of data & the crosschecking source. The request for implementing this change from the registered PDD has been submitted along with the issuance request of fifth verification. The same is reflected in the PDD version 12 dated 14/11/2013. The same was approved on 21 Mar 2014.

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B.2.4. Changes to project design of registered project activity

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1. Notification with regards to change of village name and change of DISCOM name was sent to UNFCCC. The same was accepted on 3 Aug 2011 by UNFCCC. The same has been reflected in the revised PDD version 07 dated 16 Feb 2010.
2. Notification with regard to the change in the substation from Amarsagar substation to Akal substation was sent to UNFCCC. The same has been accepted on 1 Mar 2012 by UNFCCC. The same has been accepted on 1 Mar 2012 by UNFCCC. The same has been reflected in the revised PDD version 09 dated 27 Jun 2011.

B.2.5. Changes to start date of crediting period

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Not Applicable

B.2.6. Types of changes specific to afforestation or reforestation project activity

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Not Applicable

SECTION C. Description of monitoring system

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Approved monitoring methodology ACM0002 / Version 06 Sectoral Scope: 1, "Consolidated monitoring methodology for grid-connected electricity generation from renewable sources.", by CDM - Meth Panel has been used to monitor the emission reductions.

This approved monitoring methodology requires monitoring of the following:

- Electricity generation from the project activity; and
- Operating margin emission factor and build margin emission factor of the grid, where *ex post* determination of grid emission factor has been chosen

Since the baseline methodology is based on *ex ante* determination of the baseline, the monitoring of operating margin emission factor and build margin emission factor is not required.

Wind World (India) Ltd. is managing the project operation.

EG_y for the project activity is being derived as follows:-

The electricity generated from the project activity is transmitting to Bhu substation through 4 feeders. The WECs of the project activity and WECs of other power producers are connected to Bhu Substation which is further connected to Akal substation. In addition to the project activity, the WECs located at Kita, Jodha, Pithoda Ki Dhani are connected to Bhu substation which are further connected to the Akal substation.

An Energy meter at 220 kV (accuracy Class-0.2) at Bhu Substation is termed secondary 'Back up meter' and Energy meters at 220 kV (accuracy Class-0.2) at Akal substation has one 'Main Meter' & one back up meter. Net Electricity supplied by the WECs is being metered at a common metering/delivery point. The common metering/delivery point comprises of one main meter that is installed at 220 kV metering point at the Akal substation and one backup meter which is also installed at 220kV at Akal substation. Consequently, the main meter reading reflects the aggregate electricity supplied by all these WECs, including the project activity. The net electricity supplied by individual WEC is being determined by following a process of allocating the total electricity recorded at the main meter to the individual WEC in proportion of the electricity generation recorded by the LCS meters at the individual WEC. The apportioning for electricity export and import is done by Enercon based on which invoices are raised for individual customers. These invoices can be cross verified by cheque copies by the DOE.

The procedure for allocation is detailed below:

$E_{JMR,Export}$ = Gross Electricity exported, as recorded by the main meter at the substation. This data represents the total gross electricity exported by all the WECs (project and non project) at substation point.

$E_{JMR,Import}$ = Gross Electricity imported, as recorded by the main meter at the substation. This data represents the total gross electricity imported by all the WECs (project and non project) at substation point.

$E_{Controller,Export,i}$ = Gross Electricity exported (at WEC point at the site) by a WEC (project or non project), as measured at the LCS meter. Each WEC has exclusive LCS meter that records gross electricity export from the WEC (project or non project). This gross electricity exported by the WEC (at WEC point at the site)

$E_{Controller,Export,j}$ and $E_{Controller,Export,k}$ are subsets of $E_{Controller,Export,i}$

where i is any value between 1 to j+k

j represents WECs of the project activity (1 to 75) connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.

k represents WECs of the non project (76 to 290) connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.

$\sum E_{Controller,Export,i}$ = Summation of gross electricity exported (at WEC point at the site) by all the WECs (project and non project) connected to the main meter at the substation, measured at the LCS meter of each WEC. This is summation of gross electricity exported by the WECs (at WEC point at the site) including WECs of the project and non project.

$E_{WEC,Export,j}$ = Gross Electricity exported (at substation point) by an individual WEC of the project to the grid that is connected to main meter & backup meter. Thus this data can be used to compute electricity export (at substation point) for individual WEC.

$E_{WEC,Import,j}$ = Gross Electricity imported (at substation point) by an individual WEC of the project from the grid that is connected to main meter & backup meter. Thus this data can be used to compute electricity import (at substation point) for individual WEC.

$\sum_{Project} E_{WEC,Export,j}$ = Summation of gross electricity exported (at substation point) by all the WECs of the project activity.

$\sum_{Project} E_{WEC,Import,j}$ = Summation of gross electricity imported (at substation point) by all the WECs of the project activity.

Gross Electricity exported by each WEC is apportioned on the basis of gross electricity export recorded at the LCS meter of each WEC and the gross electricity export recorded at the main meter mentioned in the JMR. The export multiplication factor is calculated as follows-

$$\text{Export Multiplication factor} = \frac{E_{JMR,Export}}{\sum E_{Controller,Export,i}} \dots\dots\dots(1)$$

Thus the energy exported by an individual WEC of the project activity to the grid is given by the equation-

$$E_{WEC,Export,j} = \text{Export Multiplication factor} \times E_{Controller,Export,j} \dots\dots\dots(2)$$

As the LCS meter doesn't record import, the apportioning of energy import by each WEC is also done on the basis of electricity export recorded at the LCS meter of each WEC and the electricity import recorded at the main meter and mentioned in the JMR. The import multiplication factor is calculated as follows-

$$\text{Import Multiplication factor} = \frac{E_{JMR,import}}{\sum E_{Controller,Export,i}} \dots\dots\dots(3)$$

Thus the energy imported by an individual WEC of the project activity to the grid is given by the equation-

$$E_{WEC,Import,j} = \text{Import Multiplication factor} \times E_{Controller,Export,j} \dots\dots\dots(4)$$

The net electricity supplied by the WECs of the project is given by the equation-

$$EG_y = \sum_{Project} E_{WEC,Export,j} - \sum_{Project} E_{WEC,Import,j} \dots\dots\dots(5)$$

The summation is done on the WECs belonging to the project activity.

The apportioning for electricity export and import is done by Enercon based on which invoices are raised for individual customers. These invoices can be cross verified by the cheque copies by the DOE.

Joint Meter Reading is generated on 1st day of every month. Representatives of RRVPN/Ajmer & Jaipur DISCOM and Enercon jointly take the main & backup reading and sign the meter reading on the first day of every month. Simultaneously, the joint meter reading at the 220 kV level of the secondary backup metering system at Akal substation is also being taken by representatives of RRVPN/Ajmer & Jaipur DISCOM and Enercon.

Metering system details:

The details of meters installed at the site for measuring export and import by project activity are provided below in Table 3:

<u>Meter Type</u>	<u>Meter Sr. number</u>	<u>Sub-station</u>	<u>Accuracy class</u>	<u>Make</u>	<u>Calibration in 2015</u>	<u>Calibration in 2016</u>	<u>Calibration due date(As per the PPA & PDD frequency of the calibration of main & back up meters are annual)</u>
<u>Main Meter</u>	<u>11068579</u>	<u>Akal</u>	<u>0.2</u>	<u>L & T</u>	<u>14 Feb 2015</u>	<u>9 Apr 2016</u>	<u>08 Apr 2017</u>
<u>Backup Meter</u>	<u>11068580</u>	<u>Akal</u>	<u>0.2</u>	<u>L & T</u>	<u>14 Feb 2015</u>	<u>9 Apr 2016</u>	<u>8 Apr 2017</u>
<u>Secondary Backup Meter</u>	<u>15197055</u>	<u>Bhu</u>	<u>0.2</u>	<u>L & T</u>	<u>11 Feb 2015</u>	<u>9 Apr 2016</u>	<u>08 Apr 2017</u>

Meter Type						Calibration in 2013	Calibration in 2015	Calibration in 2016	Calibration due date (As per the PPA & PDD frequency of the calibration of main & back-up meters are annual)
Meter Type									
Main Meter									
Backup Meter									
Secondary Backup Meter									
	Meter Sr. number	Sub-station	Accuracy class	Make	Last Calibration done as per first Verification period 2012				
Main Meter	11068579	Akal	0.2	L & T	20-Mar-2012	26-Dec-2013	14-Feb-2015	—9-Apr-2016	08-Apr-2017

Backup Meter	1106 8580	Akal	0.2	L & T	20-Mar-2012	26-Dec-2013	14-Feb-2015	—9-Apr-2016	8-Apr-2017
Secondary Backup Meter	RJB 00050	Bhu	0.2	L & T	20-Mar-2012	28-Dec-2013	11-Feb-2015	—9-Apr-2016	08-Apr-2017

The secondary backup meter RJB00050 got changed to new meter 15197055 on 24 Nov 2015.

There has been delay in calibration for the period (01 Feb 2015 to 14 Feb 2015 and from 15 Feb 2016 to 09 Feb 2016) for both main and check meters. Hence the error factor +0.2 in import & -0.2% in export has been applied for the month Feb 2015, Feb 2016, Mar 2016 & Apr 2016.

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SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data / Parameter	$EF_{OM,y}$		
Unit	tCO ₂ e/MWh		
Description	Simple Operating Margin Emission Factor of Northern Regional Electricity Grid version 1.1 dated 21 st December 2006.		
Source of data	“CO2 Baseline Database for Indian Power Sector” published by the Central Electricity Authority, Ministry of Power, Government of India. The “CO2 Baseline Database for Indian Power Sector” is available at www.cea.nic.in		
Value(s) applied	2002 – 03	0.9993	
	2003 – 04	0.9869	
	2004 – 05	0.9756	
	Average Operating Margin of last three years	0.9873	
Purpose of data	Baseline Emission Calculations		
Additional comment	None		

Data / Parameter	$EF_{BM,y}$		
Unit	tCO ₂ e/MWh		
Description	Build Margin Emission Factor of Northern Regional Electricity Grid		
Source of data	“CO ₂ Baseline Database for Indian Power Sector” published by the Central Electricity Authority, Ministry of Power, Government of India. The “CO ₂ Baseline Database for Indian Power Sector” is available at www.cea.nic.in		
Value(s) applied	0.5335		
Purpose of data	Baseline Emission Calculations		
Additional comment	None		

Data / Parameter	$EF_{CM,y}$		
Unit	tCO ₂ e/MWh		
Description	Combined Margin Emission Factor of Northern Regional Electricity Grid version 1.1 dated 21 st December 2006.		
Source of data	“CO ₂ Baseline Database for Indian Power Sector” published by the		

	Central Electricity Authority, Ministry of Power, Government of India.
	The "CO2 Baseline Database for Indian Power Sector" is available at www.cea.nic.in
Value(s) applied	0.87387
Purpose of data	Baseline Emission Calculations
Additional comment	None

D.2. Data and parameters monitored

Data / Parameter	EGy
Unit	MWh (Mega-Watt hour)
Description	Net electricity supplied to the grid by the Project
Measured /Calculated /Default	Calculated by applying apportioning procedure better described in C.
Source of data	Electricity supplied to the grid as per the tariff invoices raised on RRVPNL/Ajmer & Jaipur DISCOM (State Utility). These invoices can be cross verified by cheque copies.
Value(s) of monitored parameter	Annual electricity supplied to the grid by the Project $= 101866.091 + 98,63049.443618 = 200470505.534709$ MWh
Monitoring equipment	Calculated as per formulae better described under section C.
Measuring/ Reading/ Recording frequency	Monthly: The apportioning is done as per the procedure described in section C.
Calculation method (if applicable)	The WECs of the project activity and WECs of other power producers are connected to Bhu Substation which is further connected to Akal substation. In addition to the project activity, the WECs located at Kita, Jodha, Pithoda ki Dhani are also connected to Bhu substation which are further connected to the Akal substation. Net Electricity supplied by all these WECs is metered at a common metering/delivery point. The common metering/delivery point comprises one main meter and one backup meter that are installed at 220 kV metering/delivery point at the Akal substation. Consequently, the main meter reading reflects the aggregate electricity supplied by all these WECs, including the project activity. The net electricity supplied by individual WEC is determined by a process of allocating the total electricity recorded at the main meter to the individual WEC in proportion to the electricity generation recorded by the LCS meters at the individual WEC. Allocation plan for calculating net electricity supplied to the grid is explained in section C above.
QA/QC procedures	Meters were not calibrated annually, therefore correction factor has been applied.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

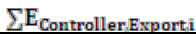
Data / Parameter:	E_{JMR}Export
Unit	MWh (Mega-Watt hour)
Description	Gross Electricity exported (at substation point), as recorded by the main meter & backup meter at the Akal substation. This data represents the total gross electricity exported by all the WECs (project and non project) at substation point.
Measured /Calculated /Default	Measured: The Export reading is jointly noted from the main meter installed at the Akal substation.

Source of data	Export value from Joint meter reading taken at Akal Substation in the presence of representatives of Enercon and state utility.
Value(s) of monitored parameter	Please refer Appendix 3 for month wise details.
Monitoring equipment	Please refer section C & Table 3
Measuring/ Reading/ Recording frequency:	The recording of the data is on continuous basis. The reading is jointly noted by the representatives of state utility and Enercon on monthly basis.
Calculation method (if applicable):	NA
QA/QC procedures	Meters were not calibrated annually; therefore correction factor has been applied.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter	$E_{JMR,Import}$
Unit	MWh (Mega-Watt hour)
Description	Gross Electricity imported (at substation point), as recorded by the main meter at the Akal Substation. This data represents the total gross electricity imported by all the WECs (project and non project) at substation point
Measured /Calculated /Default	Measured: The import reading is jointly noted from the main meter installed at the Akal substation.
Source of data	Import value from Joint meter reading taken at Akal Substation in the presence of representatives of Enercon and state utility
Value(s) of monitored parameter:	Please refer Appendix 3 for month wise detail.
Monitoring equipment	Please refer section C & Table 3
Measuring/ Reading/ Recording frequency	The recording of the data is on continuous basis. The reading is jointly noted by the representatives of state utility and Enercon on monthly basis
Calculation method (if applicable)	NA
QA/QC procedures	Meters were not calibrated annually, therefore correction factor has been applied.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter	$E_{Controller,Export,i}$
Unit	MWh (Mega-Watt hour)
Description	Gross Electricity export (at WEC point at the site) by a WEC (project or non project), as measured at the LCS meter. Each WEC has exclusive LCS meter that records gross electricity export from the WEC (project or non project). This represents gross electricity export by individual WEC (at WEC point at the site) where i is any WEC between 1 to j+k j is any WEC between 1 to 75 of the project activity connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.

	k is any WEC between 76 to 290 of the non project connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.
Measured /Calculated /Default	Measured: The value is recorded continuously by the online monitoring station. This value can also be checked from the electronic panel installed inside the WEC tower.
Source of data	This reading is monitored continuously by the online monitoring station (online monitoring station is located at the project site where all the data [historical and instantaneous] from the LCS meters of all WECs is retrieved) at the project site.
Value(s) of monitored parameter	Please refer ER sheet for the individual WEC panel generation
Monitoring equipment	Meter Type: NZR Meter Serial No: Refer Appendix 2 The LCS meters are do not require calibration as the energy readings of electricity generated at the LCS meter is cross verified by the energy calculated by inverting system installed in the WECs. In case there is any mismatch in the energy values recorded by the LCS meter and the energy values calculated by the inverting system; the WEC will stop working and generate the error report.
Measuring/ Reading/ Recording frequency:	The value is recorded continuously by the online monitoring station. This value can also be checked from the electronic panel installed inside the WEC tower.
Calculation method (if applicable)	NA
QA/QC procedures	During the monitoring period there is no mismatch found in the electricity generated at the LCS meter & the inverting system. Therefore there is no data uncertainty.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter	
Unit	MWh (Mega-Watt hour)
Description	Summation of gross electricity exported (at WEC point at the site) by all the WECs (project and non project) connected to the main meter at the substation, measured at the LCS meter of each WEC. This is summation of gross electricity exported by the WECs (at WEC point at the site) including WECs of the project and non project. where i is any WEC between 1 to j+k j is any WEC between 1 to 75 of the project activity connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation. k is any WEC between 76 to 290 of the non project connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.
Measured /Calculated /Default	Measured: The value is recorded continuously by the online monitoring station. This value can also be checked from the electronic panel installed inside the WEC tower.
Source of data	This reading is monitored continuously by the online monitoring station (online monitoring station is located at the project site where all the data [historical and instantaneous] from the LCS meters of all WECs is retrieved) at the project site.
Value(s) of monitored	=788,162.877 + 785,164.819= 1573327.696 MWh

parameter	
Monitoring equipment	Meter Type: NZR Meter Serial No: Refer Appendix 2 The LCS meters are do not require calibration as the energy readings of electricity generated at the LCS meter is cross verified by the energy calculated by inverting system installed in the WECs. In case there is any mismatch in the energy values recorded by the LCS meter and the energy values calculated by the inverting system; the WEC will stop working and generate the error report.
Measuring/ Reading/ Recording frequency	The value is recorded continuously by the online monitoring station. This value can also be checked from the electronic panel
Calculation method (if applicable)	NA
QA/QC procedures	During the monitoring period there is no mismatch found in the electricity generated at the LCS meter & the inverting system. Therefore there is no data uncertainty.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter	$E_{WECExportj}$
Unit	MWh (Mega-Watt hour)
Description	Gross Electricity exported (at substation point) by an individual WEC (j of the project activity) to the grid that is connected to main meter & backup meter at Akal substation. Where j is any WEC between 1 to 75 of the project activity connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.
Measured /Calculated /Default	$E_{WECExportj}$ denotes the electricity exported by individual WEC of the project activity to the grid. The value is calculated based on the formula mentioned in Section C
Source of data	Calculated using formula mentioned in Section C
Value(s) of monitored parameter	Please refer ER sheet for the individual WEC export value.
Monitoring equipment	Calculated using the formulae better described under section C. Please refer equation 2 under section C of the MR.
Measuring/ Reading/ Recording frequency	Calculated using the formulae better described under section C.
Calculation method (if applicable)	Refer to Section C for details and description of the above variables.
QA/QC procedures	Values is calculated.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter	$E_{WECImportj}$
Unit	MWh (Mega-Watt hour)
Description	Gross Electricity imported (at substation point) by an individual WEC of the project activity to the grid that is connected to main meter & backup meter at Akal substation. Where j is any WEC between 1 to 75 of the project activity connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.
Measured /Calculated /Default	$E_{WECImportj}$ denotes the gross electricity imported by individual

	WEC of the project activity from the grid. The value is calculated based on the formula mentioned in section C.
Source of data	Calculated using formula mentioned in Section C.
Value(s) of monitored parameter	Please refer ER sheet for the individual WEC import value.
Monitoring equipment	Calculated using the formulae better described under section C. Please refer equation 4 under section C of the MR.
Measuring/ Reading/ Recording frequency	Calculated using the formulae better described under section C.
Calculation method (if applicable)	Refer to Section C for details and description of the above variables.
QA/QC procedures	Values is calculated.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter:	$\sum_{\text{Project}} E_{\text{WEC, Export},j}$
Unit	MWh (Mega-Watt hour)
Description	Summation of gross electricity exported (at substation point) by all the WECs of the project activity. Where j is any WEC between 1 to 75 of the project activity connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.
Measured /Calculated /Default	$\sum_{\text{Project}} E_{\text{WEC, Export},j}$ denotes summation of the gross electricity exported (at substation point) to the grid by a WECs included in the project activity. The value is calculated based on the formula mentioned in section C.
Source of data	Summation of data values of $E_{\text{WEC, Export},j}$ for all the WECs included in the project activity.
Value(s) of monitored parameter	=101954.703+ <u>98705.572</u> = <u>200660.275</u> ~~+09398.691~~ MWh
Monitoring equipment	Calculated using the formulae better described under section C.
Measuring/ Reading/ Recording frequency	Calculated using the formulae better described under section C.
Calculation method (if applicable)	$\sum_{\text{Project}} E_{\text{WEC, Export},j}$ denotes summation of the gross electricity exported (at substation point) to the grid by a WECs included in the project activity. Refer to Section C for details and description.
QA/QC procedures	The value is calculated and can be cross checked from the invoices raised on the state utility.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

Data / Parameter:	$\sum_{\text{Project}} E_{\text{WEC, Import},j}$
Unit	MWh (Mega-Watt hour)
Description	Summation of electricity imported (at substation point) by all the WECs of the project activity. Where, j is any value between 1 to 75 representing WECs of the project activity connected to main meter & backup meter at Akal substation and secondary backup meter at Bhu substation.
Measured /Calculated /Default	$\sum_{\text{Project}} E_{\text{WEC, Import},j}$ denotes summation of the gross electricity imported (at substation point) to the grid by a WECs included in the project activity. The value is calculated based on the formula

	mentioned in section C.
Source of data	Summation of data values of $E_{WEC,Import,j}$ for all the WECs included in the project activity.
Value(s) of monitored parameter	=88.612 + ~~10188.130612~~ = 18929.74264 MWh
Monitoring equipment	Calculated using the formulae better described under section C.
Measuring/ Reading/ Recording frequency	Calculated using the formulae better described under section C.
Calculation method (if applicable)	$\sum_{Project} E_{WEC,Import,j}$ denotes summation of the gross electricity imported (at substation point) to the grid by a WECs included in the project activity. Refer to Section C for details and description.
QA/QC procedures	The value is calculated and can be cross checked from the invoices raised on the state utility.
Purpose of data	Baseline Emissions calculations
Additional comment	Not Applicable

D.3. Implementation of sampling plan

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No sampling plan is followed by PP.

D.4 Sustainability Monitoring Plan

No	1
Indicator	Quality of employment
Mitigation measure	N/A
Chosen parameter	Training records, categories of jobs created, working conditions of the project activity, occupation health management, safeguards put in place and living standards of the plant staff.
Current situation of parameter	1. Following training programs have been conducted in order to enhance the safety awareness , operational skill levels and occupational health management for the local staff: i. Safety and First Aid Training in Salaka on 07-03-2016. ii. First Aid Training at Jaisalmer Site office on 27-10-2014 iii. SHE training at Jaisalmer Site office on 19-09-2014 iv. CAPA Action to be taken for the slip prevention during the cable installation in location 478 at Salakha site office on 02-12-2013 v. Checking of Safety item at Salakha site 10-10-2013 Please refer Annex K for details 2. Jobs created by the project activity for the local people have been broadly classified in three categories: WWIL staff at site, security guards and contractual workers. Please refer Annex A, J , L & M for details.

Future target for parameter		Skill enhancement exercise would be undertaken for the local staff by providing them will be training on the technical aspects of the project operation. They will receive professional certificates. - All aspects of occupational health and working conditions would be strengthened through capacity building and awareness generation activities. The project proponent shall work in collaboration with local health authorities and medical centres to conduct regular health check - ups and provide better medical facilities to the local staff.
Way of monitoring	How	Checking documentation pertaining to training programmes, awareness generation activities etc. , photographs , interviews
	When	Annual/Once in monitoring period
	By who	Project Proponent

No		2
Indicator		Access to affordable and clean energy services
Mitigation measure		N/A
Chosen parameter		Electricity generation from the wind power plant
Current situation of parameter		Electricity supplied to the grid by the Project during the current monitoring period =101866.091+ 98,639.618 = 200505.709MWh . Continued efforts are being made by Project proponent to enhance the operational efficiency of the project so as to generate more clean energy
Future target for parameter		More electricity generation from wind power plants
Way of monitoring	How	Quantity of electricity generation
	When	Annual/Once in monitoring period
	By who	Project Proponent

No	3
Indicator	Livelihood of the poor
Mitigation measure	N/A
Chosen parameter	Total no of local villagers employed for project related activities
Current situation of parameter	The project activity is connected to BHU substation. Total operational connected load with BHU substation is 220 MW. Local staff is hired by the project proponent for multiple projects which are connected to BHU sub-station. In order to justifiably arrive at employment generation which can be attributed to the project activity under consideration, number of local people hired have been apportioned w.r.t the total operational capacity connected to BHU substation. For additional clarity, Jobs created have been broadly classified in three categories. Accordingly, number of jobs which have been created for local people under each category as a result of the project activity are given below: 1. WWIL staff : 35 2. Security Guard: 59 3. Contractual labor : 10

		Please refer Annex A, J, L & M for details and documentation.
Future target for parameter		Ten additional job opportunities
Way of monitoring	How	Attendance register
	When	Annually/Once in the monitoring period
	By who	Project Proponent

No	4	
Indicator	Human and Institutional capacity	
Mitigation measure	N/A	
Chosen parameter	Total no of local villagers directly as well as indirectly impacted by the CSR initiatives undertaken by the Project Proponent	
Current situation of parameter	Several programmes pertaining to capacity building, health, education and provision of clean drinking water have been initiated by the Project Proponent. Objective of these initiatives is to enhance the access to basic amenities for the local populace, which would ultimately help in alleviating their socio-economic status, Some of the initiatives undertaken have been listed below: a. Sum of Rs 9 lac donated for Village Welfare Fund to Madarsa letter dated 26 Feb 2014. b. Sum of Rs 11lakh donated for Village Welfare Fund to Sati Mata Seva and Vikas Samiti Dujasar. Letter dated 07 Jun 2013 c. Sum of Rs 11 lac donated for Village Welfare Fund to Salkha Vikas Samiti letter dated 27 Jul 2013 d. Sum of Rs 2.5 lac donated for Village Welfare Fund to Salkha Vikas Samiti Cheque dated 23 Dec 2015 e. Sum of Rs lac donated for Village Welfare Fund to Salkha Vikas Samiti Cheque dated 23 Dec 2015 f. Sum of Rs 11 lac donated for Village Welfare Fund to Salkha Vikas Samiti Cheque dated 29 Dec 2015 Please refer Annex B Theses donations were given as contribution in the development of schools , Contribution for organizing medical health checkup. contribution in purchase water purifier in village schools, providing basic amenities to Boy’s Hostel, arranging camp for educational promotion activities, arranging blood donation camp. Since these social initiatives follow a long-term, broad-based and continual approach, it is difficult to exactly quantify the number of beneficiaries. However, it has been conservatively estimated that 1000 people/students have been directly or indirectly benefitted by the initiatives undertaken during the monitoring period under consideration. Same can be established through interviews of local stakeholders by the DOE.	
Future target for parameter	Scale of the CSR activities would be enhanced so that the number of direct as well as indirect beneficiaries increase by 100.	
Way of monitoring	How	CSR programme documentary evidence

	When	Annually/Once in monitoring period
	By who	Project Proponent
No	5	
Indicator	Quantitative employment and income generation	
Mitigation measure	N/A	
Chosen parameter	Number of employment opportunities created	
Current situation of parameter	The project activity is connected to BHU substation. Total operational connected capacity with BHU substation is 220 MW. Local staff is hired by the project proponent for multiple projects which are connected to BHU sub-station. In order to justifiably arrive at employment generation which can be attributed to the project activity under consideration, number of local people hired have been apportioned w.r.t the total operational capacity connected to BHU substation. For additional clarity, jobs created have been broadly classified in three categories. Accordingly, number of jobs which have been created for local people under each category as a result of the project activity are given below: 1. WWIL staff : 35 2. Security Guard: 59 3. Contractual labor : 10 Please refer Annex A, J, L & M for details and documentation. In addition to the direct job creation for local people due to the project activity, it may be noted that the representatives of various stakeholders of the project visit the project site frequently, which requires support services. Project Proponent encourages that this additional opportunity for income generation is leveraged by the local people. This leads to additional livelihood/income generation avenues for the local people, who are otherwise dependant only on agriculture or other conventional means of livelihood. Since this is an indirect benefit of the project activity in terms of income generation, it is not possible to exactly quantify the same. However, it can be conservatively stated that around 100 people have got additional livelihood/income generation opportunities because of the project activity. Same can be established through interviews with various local stakeholders by the DOE.	
Future target for parameter	Ten additional job opportunities to be created for the local population. Income generation to be enhanced by creating relatively high value job opportunities through training and capacity building	
Way of monitoring	How	Documentation pertaining to employment, attendance register and documentary details of training/capacity building
	When	Annual/Once in monitoring period
	By who	Project Proponent

Grievance Mechanism Monitoring:

No formal complaints were received as part of the grievance mechanism during the monitoring period under consideration. However, as part of organizational policy, continuous interactions have been undertaken by Project Participant's officials with local community stakeholders and there were

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few common observations and comments which were given by villagers during those discussions. The register has been maintained for the said purpose at site office.

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SECTION E. Calculation of emission reductions or GHG removals by sinks

E.1. Calculation of baseline emissions or baseline net GHG removals by sinks

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The baseline is the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO₂e/kWh) calculated in a transparent and conservative manner as the weighted average emissions (in kg CO₂e/kWh) as described in registered PDD.

$$BE_y = EG_y * EF_y$$

Where,

BE_y is baseline emissions in year y, tCO₂e

EG_y is the net electricity supplied to the grid in year y and is applied directly from the invoice certified by state utility. This value can also be cross checked from the invoice.

EF_y is the CO₂ emission factor of the grid (0.87387 tCO₂e/MWh fixed ex-ante).

Emission reduction calculation for the period 01 Sep 2013 to 01 Jan 2015:

$$\begin{aligned} \text{Emission Reductions (ER)} &= 101866.091 \text{ (MWh)} * 0.87387 \text{ (tCO}_2\text{e /MWh)} \\ &= \mathbf{89,017 \text{ tCO}_2\text{e}} \end{aligned}$$

Emission reduction calculation for the period 01 Feb 2015 to 31 May 2016:

$$\begin{aligned} \text{Emission Reductions (ER)} &= \mathbf{98604100672.443295} \text{ (MWh)} * 0.87387 \text{ (tCO}_2\text{e /MWh)} \\ &= \mathbf{867,167974 \text{ tCO}_2\text{e}} \end{aligned}$$

Total Emission reduction= 1756,99184 tCO₂e

<u>Vintage</u>				
<u>Breakup (Year)</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>CERs</u>	<u>15,653</u>	<u>70,115</u>	<u>70,029</u>	<u>19,387</u>

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E.2. Calculation of project emissions or actual net GHG removals by sinks

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The project activity is a renewable energy project which generates electricity using wind power and hence does not result in project emissions.

E.3. Calculation of leakage

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No leakage is considered from the project activity as per approved methodology ACM0002.

E.4. Summary of calculation of emission reductions or net anthropogenic GHG removals by sinks

The total emission reductions achieved during the monitoring period is **176,991tCO₂e**.

Total baseline emissions: **1756,99184 tCO₂e**

Total project emissions: Zero

Total leakage: Zero

Total Emission reductions, ER = BEy – PEy - LEy

= ~~1756,99184~~tCO₂e

Time Period	Baseline emissions or baseline net GHG removals by sinks (tCO ₂ e)	Project emissions or actual net GHG removals by sinks (tCO ₂ e)	Leakage (tCO ₂ e)	Emission reductions or net anthropogenic GHG removals by sinks (tCO ₂ e)
Total	~~1756,99184~~	0	0	~~1756,99184~~

E.5. Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Item	Values estimated in ex-ante calculation of registered PDD	Actual values achieved during this monitoring period
Emission reductions or GHG removals by sinks (tCO ₂ e)	~~277476,879994~~	~~1756,99184~~

E.6. Remarks on difference from estimated value in registered PDD

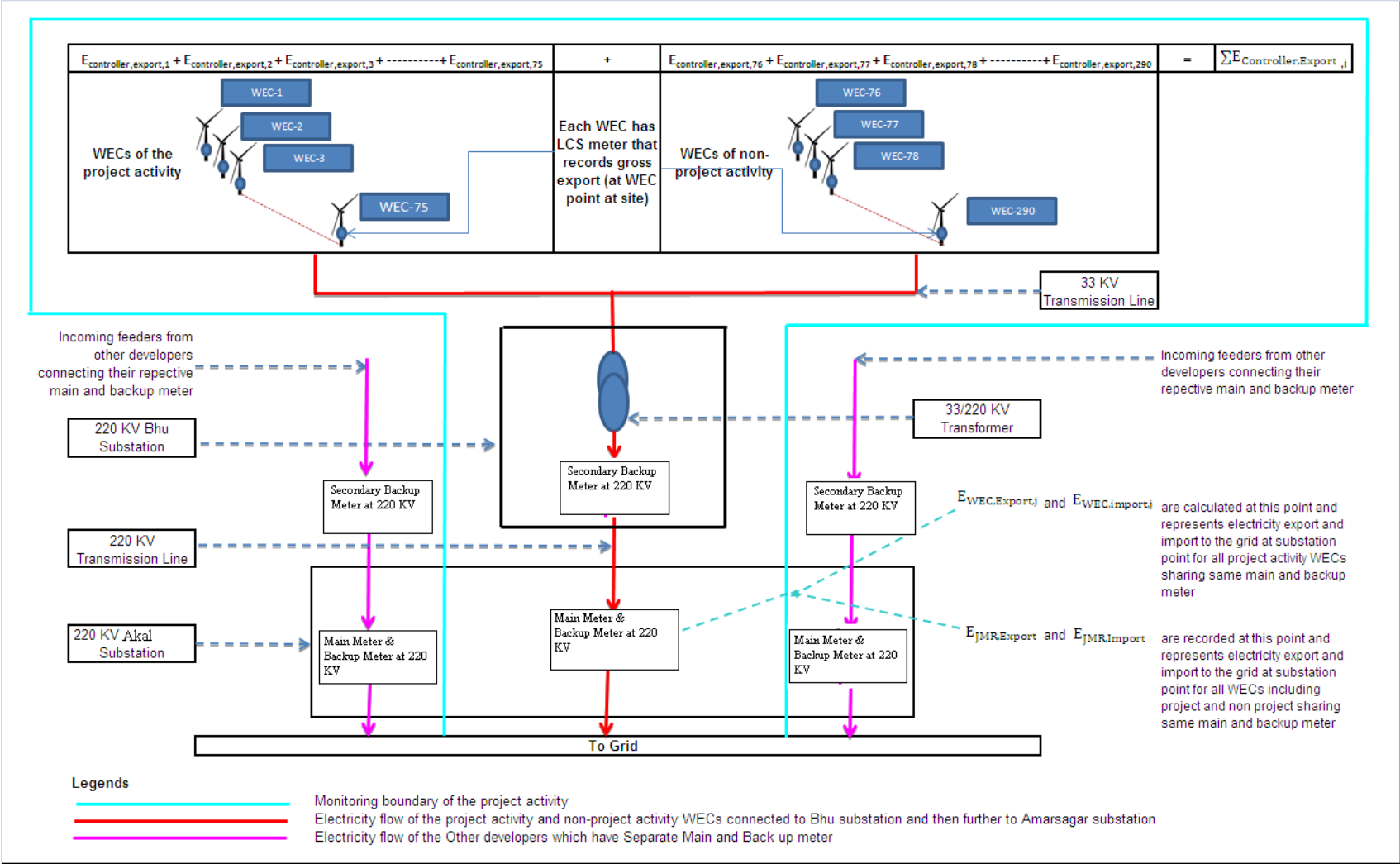
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There is change of ~~3648.969~~% in the expected and annual emission reductions.

History of the document

Version	Date	Nature of revision
02.0	EB-66 13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB-66, Annex 20).
01	EB-54, Annex 34 28 May 2010	Initial adoption.
Decision Class: Regulatory Document Type: Form Business Function: Issuance		

Appendix 1: Line Diagram Showing Relevant Metering



Appendix 2: Controller Meter Details

Equipment Name	Meter Number
EWHPLPD-01	475500
EWHPLPD-02	475330
EWHPLPD-03	475293
EWHPLPD-04	475488
EWHPLPD-05	475077
EWHPLPD-06	475557
EWHPLPD-07	1215614
EWHPLPD-08	475490
EWHPLPD-09	475512
EWHPLPD-10	475703
EWHPLPD-11	475725
EWHPLPD-12	475548
EWHPLPD-13	475483
EWHPLPD-14	475498
EWHPLPD-15	475075
EWHPLPD-16	475550
EWHPLPD-17	475292
EWHPLPD-18	475112
EWHPLPD-19	475356
EWHPLPD-20	475102
EWHPLPD-21	474937
EWHPLPD-22	475682
EWHPLPD-23	475735
EWHPLPD-24	475358
EWHPLPD-25	475024
EWHPLPD-26	474943
EWHPLPD-27	474951
EWHPLPD-28	466271
EWHPLPD-29	475099
EWHPLPD-30	475511
EWHPLPD-31	475086
EWHPLPD-32	475495
EWHPLPD-33	475496
EWHPLPD-34	475492
EWHPLPD-35	475479
EWHPLPD-36	475503
EWHPLPD-37	475738
EWHPLPD-38	475486
EWHPLPD-39	466298
EWHPLPD-40	466256
EWHPLPD-41	475513
EWHPLPD-42	475510
EWHPLPD-43	475113
EWHPLPD-44	475497
EWHPLPD-45	475518
EWHPLPD-46	475350
EWHPLPD-47	475485
EWHPLPD-48	475061

Equipment Name	Meter Number
EWHPLPD-49	475114
EWHPLPD-50	475059
EWHPLPD-51	475290
EWHPLPD-52	475329
EWHPLPD-53	475502
EWHPLPD-54	475076
EWHPLPD-55	475296
EWHPLPD-56	475332
EWHPLPD-57	475347
EWHPLPD-58	475326
EWHPLPD-59	475501
EWHPLPD-60	475593
EWHPLPD-61	475070
EWHPLPD-62	475651
EWHPLPD-63	475091
EWHPLPD-64	475621
EWHPLPD-65	475517
EWHPLPD-66	475100
EWHPLPD-67	475335
EWHPLPD-68	475064
EWHPLPD-69	475062
EWHPLPD-70	475087
EWHPLPD-71	475289
EWHPLPD-72	475321
EWHPLPD-73	475499
EWHPLPD-74	475352
EWHPLPD-75	475481



Appendix 3: Net Electricity Exported to Grid (EGy)

Table 1:

Month	Export Multiplication Factor	Import Multiplication Factor	$E_{\text{Controller, Export},i}$ (kWh)	$E_{\text{WEG, Export},j}$ (kWh)	$E_{\text{WEG, Import},j}$ (kWh)	$E_{\text{JMR, Export}}$ (kWh)	$E_{\text{JMR, Import}}$ (kWh)	$\sum_{\text{Project}} E_{\text{WEC, Export},j}$ (kWh)	$\sum_{\text{Project}} E_{\text{WEC, Import},j}$ (kWh)	EGy in kWh
Sep-13	0.9619	0.0004	8873524	8535322	3255	55941298	21333	8535322	3255	8532067
Oct-13	0.9568	0.0031	3574562	3420043	10957	23306652	74667	3420043	10957	3409086
Nov-13	0.9556	0.0016	3176292	3035371	4938	22949319	37333	3035371	4938	3030433
Dec-13	0.9665	0.0020	3049894	2947710	6168	22938653	48000	2947710	6168	2941542
Jan-14	0.9652	0.0006	5560088	5366685	3408	41989307	26667	5366685	3408	5363277



Feb-14	0.9628	0.0011	4611399	4439884	5182	31983980	37333	4439884	5182	4434702
Mar-14	0.9629	0.0005	4910580	4728556	2215	34154645	16000	4728556	2215	4726341
Apr-14	0.9649	0.0016	4581297	4420391	7118	23183986	37333	4420391	7118	4413273
May-14	0.9706	0.0006	7282253	7068007	4404	42794640	26667	7068007	4404	7063603
Jun-14	0.9458	0.0000	14853512	14049139	678	110367932	5333	14049139	678	1404846 1
Jul-14	0.9465	0.0003	12135164	11485566	3263	93882608	26667	11485566	3263	1148230 3
Aug-14	0.9568	0.0003	9565793	9152351	3309	73754621	26667	9152351	3309	9149042
Sep-14	0.9607	0.0002	9825507	9439668	1488	67674624	10667	9439668	1488	9438180



Oct-14	0.9551	0.0019	4802554	4586830	9326	31477314	64000	4586830	9326	4577504
Nov-14	0.9492	0.0026	2885527	2738846	7480	21482653	58667	2738846	7480	2731366
Dec-14	0.9562	0.0028	2950476	2821146	8239	25567984	74667	2821146	8239	2812907
Jan-15	0.9612	0.0018	3882825	3732295	7153	30613314	58667	3732295	7153	3725142
			106521247	101967810	88581	754063530	650668	101967810	88581	101879229



Table 2:



Month	Export Multiplication Factor	Import Multiplication Factor	$E_{\text{Controller, Export},i}$ (kWh)	$E_{\text{WEG, Export},j}$ (kWh)	$E_{\text{WEG, Import},j}$ (kWh)	$E_{\text{JMR, Export}}$ (kWh)	$E_{\text{JMR, Import}}$ (kWh)	$\sum_{\text{Project}} E_{\text{WEC, Export},j}$ (kWh)	$\sum_{\text{Project}} E_{\text{WEC, Import},j}$ (kWh)	EGy in kWh
Feb-15	0.9634	0.0005	6371318	6138103	2929	44709305	21334	6138103	2929	6135174
Mar-15	0.9527	0.0005	5744839	5472896	2845	41039974	21333	5472896	2845	5470051
Apr-15	0.9583	0.0007	7347413	7041000	4992	45135972	32000	7041000	4992	7036008
May-15	0.9589	0.0006	11262913	10800033	7251	71493289	48000	10800033	7251	10792782
Jun-15	0.9576	0.0008	8826745	8452579	7100	63493294	53333	8452579	7100	8445479
Jul-15	0.9544	0.0010	11624064	11093902	11929	84319947	90667	11093902	11929	11081973
Aug-15	0.9598	0.0003	10722934	10291338	3704	74095954	26667	10291338	3704	10287634
Sep-15	0.9588	0.0010	6290508	6031069	6432	45013305	48000	6031069	6432	6024637
Oct-15	0.9563	0.0018	5753902	5502203	10468	42047974	80000	5502203	10468	5491735
Nov-15	0.9608	0.0012	3588766	3448218	4155	30986647	37333	3448218	4155	3444063
Dec-15	0.9533	0.0045	2341654	2232404	10601	19093321	90667	2232404	10601	2221803
Jan-16	0.9516	0.0040	2282588	2172101	9193	18901322	80000	2172101	9193	2162908
Feb-16	0.9468	0.0022	2323752	2200037	5071	25450651	58667	2200037	5071	2194966
Mar-16	0.9596	0.0009	5100687	4894510	4732	38618643	37333	4894510	4732	4889778
Apr-16	0.9545	0.0013	4565571	4357625	5911	35386645	48000	4357625	5911	4351714
May-16	0.9547	0.0004	9021300	8612735	3822	71507282	31733	8612735	3822	8608913
			103168954	98740753	101135	751293525	805067	98740753	101135	98639618

**Appendix 4:**

Wind World (India) Ltd has secured and facilitated the technology transfer for wind based renewable energy generation from Enercon GmbH and has established a manufacturing plant at Daman in India where, along with other components the "Synchronous Generators" using "Vacuum Impregnation" technology are manufactured. The other salient features of the state-of-art-technology are as follows:

- Gearless Construction - Rotor & Generator Mounted on same shaft eliminating the Gearbox.
- Variable speed function – has the speed range of 18 to 33 RPM thereby ensuring optimum efficiency at all times.
- Variable Pitch functions ensuring maximum energy capture.
- Near Unity Power Factor at all times.
- Minimum drawl (less than 1% of kWh generated) of Reactive Power from the grid.
- No voltage peaks at any time.
- Operating range of the WEC with voltage fluctuation of -20 to +20%.
- Less Wear & Tear since the system eliminates mechanical brake, which are not needed due to low speed generator, which runs at maximum speed of 33 rpm and uses Air Brakes.
- Three Independent Braking System.
- Generator achieving rated output at only 33 rpm.
- Incorporates lightning protection system, which includes blades.
- Starts Generation of power at wind speed of 3 m/s.



Annex A:



Staff working at Site



Staff working at substation

Appointment of Guard for siteAnnex B

IDBI BANK
Gopi Chamber, Link Road Opp. Citi Mall Andheri
Mumbai Maharashtra- 400053
IFSC : IBKL0000174

23-Dec-2015
D D M M Y Y Y Y

A/C PAYEE

PAY **Salkha Vikas Samiti** या धारक को OR BEARER

रुपये **RUPEES Two Lacs Fifty Thousand only.**

अदा करें ₹ *******250000/-**

खाता सं. **0174102000014225**
A/C No.

WIND WORLD (INDIA) LIMITED
Please sign above

Payable at Par at All IDBI Bank Branches

NORMAL / 50 / 847557 / 21-Dec-2015
SESHASAI (M) / CTS -2010

॥ 68 7 28 9 ॥ 4 0 0 2 5 9 0 2 5 : 0 1 7 4 0 0 ॥ 2 9



UNFCCC/CDM



CDM - Executive Board

Page 28

IDBI BANK
Gopi Chamber, Link Road Opp. Citi Mall Andheri
Mumbai Maharashtra- 400053
IFSC : IBKL0000174

The instrument is valid for three months from the date of

23-Dec-2015
D D M M Y Y Y Y

A/C PAYEE

PAY **Salkha Vikas Samiti** या धारक को OR BEARER

रुपये RUPEES **One Lac only.**

अदा करें ₹ ****100000/-

खाता सं. **0174102000014225**
A/C No.

Payable at Par at All IDBI Bank Branches

WIND WORLD (INDIA) LIMITE

Please sign above

687285 400259025 017400 29

IDBI BANK
NACHINA-HAVELI, HANUMAN CHOWRAHA
JAISALMER, RAJASTHAN - 345001
IFSC Code : IBKL0001653

The instrument is valid for three months from the date of iss

29102015
D D M M Y Y Y Y

A/c Payee Only

PAY **SALKHA VIKAS SAMITI** या धारक को OR BEARER

रुपये RUPEES **FOUR LACS FIFTY THOUSAND ONLY.**

अदा करें ₹ ****450000/-

खाता सं. **1653102000000587**
A/C No.

Payable at Par at All IDBI Bank Branches

WIND WORLD (INDIA) LIMITE

Please sign above

005027 345259002 165300 29

115 3000008278



Date: 26-Feb-14

Subject: Regarding CSR Activity – KKB

1. On start of operations in KKB village in a discussion was held with villagers on Feb-2013 regarding welfare activities. It was decided that a sum of Rs 09 Lakh will be paid as a village welfare fund.
2. The amount of Rs 09 Lakh may be sanctioned for payment to KKB. It may be paid in two installments of Rs 4.5 Lakh each.
3. Request you to release the payment of first installment of Rs 4.5 Lakh for the start of work in KKB village. Second installment may be released after the completion of work in all aspects.
4. Agreement documentation is attached to this cover letter.

Forwarded by

Recommended by

Approved by

Sanjay Verma

Lt Col (Retd) Debashis Nag

Wg Cdr (Retd) Vishal Sharma

Project Manager

DGM-Projects

Head Construction

26/Feb/14

26/2/14

Attach Village Agreement and
raise Fund Requisition from
Corporate for CSR.

(KKB 16 + 2 = 18
Lacs)



Date: - 27 July 13

Subject: - Regarding CSR Activity – Doojasar

1. On start of operations in Doojasar village in a discussion was held with villagers on Mar 2013 regarding welfare activities. It was decided that a sum of Rs 11 Lakh will be paid as a village welfare fund.
2. The amount of Rs 11 Lakh may be sanctioned for payment to Doojasar. It may be paid in two installments of Rs 5.5 Lakh each, one in July and one on completion of all works in Doojasar.
3. Requesting you to release the payment of first installment of Rs 5.5 Lakh as to expedite the work within the time frame.
4. Agreement documentation is attached to this cover letter.

Forwarded by

Recommended by

Approved by

Sanjay Verma

Liaison Manager

Lt Col (Retd) Debashis Nag

AGM – Projects

Wg Cdr (Retd) Vishal Sharma

Head Construction



Date: - 27 July 13

Subject: - Regarding CSR Activity – Salkha

1. On start of operations in Salkha village in a discussion was held with villagers on Dec 2011 regarding welfare activities. It was decided that a sum of Rs 11 Lakh will be paid as a village welfare fund.
2. The amount of Rs 11 Lakh would be given in two installments. As a first installment Rs 5.5 Lakh have been paid to the committee through cheque.
3. Requesting you to release the payment of second installment of Rs 5.5 Lakh as the work completed in all aspects in village Salkha.
4. Agreement documentation is attached to this cover letter.

Forwarded by

Sanjay Verma

Liaison Manager

Recommended by

Lt Col (Retd) Debashis Nag

AGM – Projects

Approved by

Wg Cdr (Retd) Vishal Sharma

Head Construction

Lt Col (Retd) Debashis Nag
AGM - Projects
WIND WORLD (INDIA) LTD.
RAJASTHAN

Wg Cdr (Retd) VISHAL SHARMA
Head Construction
Wind World (India) Ltd.
RAJASTHAN

Donation for Corporate Social Responsibility

**Annex J:**

STAFF ATTENDANCE REGISTER																										
NAME & ADDRESS OF CONTRACTOR/EMPLOYMENT: R.P. SINGH (200/33, K.V. D/O, RAO JAGANMUR)																										
Sl. No.	Name & Qualification	Title	MAY 2010													JUNE 2010										
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1	DEVENKA JYOTI SINGH (SUP.)	Supervisor																								
2	MANVEER SINGH (SR. TECH.)	Senior Technician																								
3	LADHU KAM JYOTI (SR. TECH.)	Senior Technician																								
4	BHAI KAM (TECH.)	Technician																								
5	VIKKAM CHANGANI (TECH.)	Technician																								
6	KRISHNA - NAND (TECH.)	Technician																								
7	PRANVINDER SINGH (TECH.)	Technician																								
8	KESARI JASTAL (TECH.)	Technician																								

Attendance sheet of contractual Worker



Annex K:

 WIND WORLD Clean Energy Forever	NATIONAL SAFETY WEEK MARCH-2016	WIND WORLD INDIA LTD. SIPLA, JAISALMER (R.J.)
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SPECIAL THANKS TO:-

Prateek Soni (Representative- CLP) for their presence & ultimate support to arrange the program.

Pradeep Swami (ASL-Sipla) for their initiation & motivation to all teams

And all teams of SIPLA area for support & energy with which they performed

Training attendance:-

Wind World India Ltd					C: WIND WORLD
TRAINING ATTENDANCE					Form No: WWO-001
Programme Name: Safety & First Aid Training (General)					Date: 18.03.2016
Venue: SIPLA					
Faculty: Pradeep Kumar & Prateek Soni					
Date & Time: 18.03.2016 8:30					
Sr. No.	Emp. Code	Name of the Participant	Designation	Department	Signature
1	91010311	MANAS KUMAR	WTF	WIND	[Signature]
2	91014530	DEEPA	WIS	WIND	[Signature]
3	91016008	Madhu Kumar	WIS	WIND	[Signature]
4	91014828	Shubh	WIS	WIND	[Signature]
5	91014512	Manish Kumar	WIS	WIND	[Signature]
6	91014528	Hemant Singh	WIS	WIND	[Signature]
7	91012241	Amir Kumar	WIS	WIND	[Signature]
8	91015028	Nitesh Kumar	WIS	WIND	[Signature]
9	91016316	Nitesh Shrivastava	WIS	WIND	[Signature]
10	9101516	Anurag Kumar	WIS	WIND	[Signature]
11	91015511	Thakur Raj	WIS	WIND	[Signature]
12	91013416	Rohit Kumar	WIS	WIND	[Signature]
13	9101065	Vidya Kumar	WIS	WIND	[Signature]
14	91014545	Ajay Chaudhary	WIS	WIND	[Signature]
15	91016748	Shubh Kumar	WIS	WIND	[Signature]
16	91016211	Pradeep Kumar	WIS	WIND	[Signature]
17	91016314	Shivraj Kumar	WIS	WIND	[Signature]
18	9101613	Nitesh Kumar	WIS	WIND	[Signature]
19	91015108	Pradeep Kumar	WIS	WIND	[Signature]
20	91016315	RAFUL KUMAR	WIS	WIND	[Signature]
21	91016091	Pradeep Kumar	WIS	WIND	[Signature]
22	91016317	Aishwarya	WIS	WIND	[Signature]
23					
24					
25					
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Wind World India Ltd

Form No: WWO-107

Page No: 02

Date: 27.04.2012

Programme Name: First Aid Training

Venue: City office

Faculty: Dinesh Malviya

Date & Timing: 22/4/14 - 10 am TO 15:00

Sr. No.	Emp. Code	Name of the Participant	Designation	Department	Signature	Initials
1	91016049	Rakesh get	S.H.E	WWD	Rakesh	JB
2	91003427	VASHIM SHAIKH	Wind mechanic	WWD	Vashim	JB
3	91008915	Abulqasim Verman	Q Tech	WWD	Abulqasim	JB
4	91008912	Shameen kumar	Q. Wind Mech	WWD	Shameen	JB
5	91015996	Rajesh Bissa	Sup. (S/S)	WWD	Rajesh	JB
6	91004970	Ramesh kumar	Engg.	WWD	Ramesh	JB
7	91011338	Rohit C.M.	Engg.	WWD	Rohit	JB
8	91013070	Amrit Mishra	Asst. Engg.	WWD	Amrit	JB
9	91014243	Anuraj Kumar Verma	Asst. Engg.	WWD	Anuraj	JB
10	91014239	M. Pulraj Rath	Asst. Engg.	WWD	M. Rath	JB
11	91015175	Auspendra Singh	Asst.	WWD	Auspendra	JB
12	91013253	Pradeep Kumar	Wind Tech	WWD	Pradeep	JB
13	91011971	Deepak Kumar	Tech	WWD	Deepak	JB
14	91015997	Ravi Singh Chakraborty	Asst. Engg.	WWD	Ravi Singh	JB
15	91015954	Mahesh Chandra	Asst. Engg.	WWD	Mahesh	JB
16	91014266	Vivek Pathak	Engg.	WWD	Vivek	JB
17	91014267	Kamal Kishore	Engineer	WWD MCE	Kamal	JB
18	91015334	Upendra Shukla	G.E.T.	WWD	Upendra	JB
19	91014135	Shubham Sar	Engineer	WWD (MCE)	Shubham	JB
20	91011645	Rishabh Kumar	Asst. Engg.	WWD	Rishabh	JB
21	91013863	Hareday Kumar Baul	Engineer	WWD	Hareday	JB
22	91015116	Deepak Neekhra	Engineer	WWD	Deepak	JB
23	91015343	Rupesh Pandey	G.E.T.	WWD	Rupesh	JB
24	91014922	Zameer Rahol	Tech	WWD	Zameer	JB
25	91008954	Sachin Patel	Wind Tech	WWD	Sachin	JB
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Wind World India Ltd					VAPD W/RE-1	
Date: WWO					Form No: WWO-1-01	
By: TRAINING ATTENDANCE					Rev. No: 02	
Programme Name: 9th Site Reference Training					Date: 01.04.2015	
Venue: Jalandhar Site office						
Faculty: Vijay Singh						
Date & Timing: 17/07/14 10:15 to 12:00						
Sr. No.	Emp. Code	Name of the Participant	Designation	Department	Signature	
1	91015105	Vivek Kumar Mishra	Supervisor	TS-300	<i>[Signature]</i>	
2	91015109	Anand Kumar Bhow	Supervisor	WWO	<i>[Signature]</i>	
3	91014922	Zoniscut Rahul	Jr Tech	WWO	<i>[Signature]</i>	
4	91015116	Deepak Neekhra	CDET	WWO	<i>[Signature]</i>	
5	91012020	Abhay Singh	Supervisor	WWO	<i>[Signature]</i>	
6	91013070	Amrit Mishra	Supervisor	WWO	<i>[Signature]</i>	
7	91012102	Deepak Kr. Bhow	TSI	WWO	<i>[Signature]</i>	
8	91012143	Victor Bhattacharya	Engineer	WWO	<i>[Signature]</i>	
9	91003484	Rakesh Kumar	Tech.	WWO	<i>[Signature]</i>	
10	91011338	Rohit S.M.	Asst. Eng.	WWO	<i>[Signature]</i>	
11	91010405	Rakesh Sharma	Engineer	Project	<i>[Signature]</i>	
12	91013829	Dinesh Kumar Singh	Sr. Engineer	Project	<i>[Signature]</i>	
13	91014243	Pratik Verma	Supervisor	WWO	<i>[Signature]</i>	
14	91008755	Sachin Patel	Analyst	WWO	<i>[Signature]</i>	
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WWD

Wind World (India) Limited					WIND WORLD
Training Attendance					Form No. HRD-F-07
					Rev No. 00
					Date: 01/04/2012
Name of the Participant					Signature
S.H. Department					
Date & Time					
Sl. No.	Emp. Code	Name of the Participant	Designation	Department	Signature
1	91015343	PEEYUSH PANDEY	GET	WWD	Pandey
2	91015334	Upendra Shukla	GET	WWD	Upendra
3	91015092	Soumya Ranjan Das	Supervisor	WWD	Soumya
4	91015111	Sanjesh Kumar Bohara	Supervisor	WWD	Sanjesh
5	91014922	Zankar Rahul	Tr. Tech	WWD	Zankar
6	91014922	Sankar Kumar	Tech	WWD	Sankar
7	91014922	Vijay Kumar	Tech	WWD	Vijay
8	91014922	Kamesh Kumar	Tech	WWD	Kamesh
9	91014922	Bohara Sanjesh	Supervisor	WWD	Bohara Sanjesh
10	91014922	Sanjesh Kumar	Supervisor	WWD	Sanjesh
11	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
12	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
13	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
14	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
15	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
16	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
17	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
18	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
19	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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21	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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23	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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26	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
27	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
28	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
29	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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39	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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43	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
44	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
45	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
46	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
47	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
48	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
49	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
50	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
51	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
52	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
53	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
54	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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57	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
58	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
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64	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
65	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
66	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
67	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
68	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
69	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
70	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
71	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
72	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
73	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
74	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
75	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
76	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
77	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
78	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
79	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
80	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
81	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
82	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
83	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
84	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
85	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
86	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
87	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
88	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
89	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
90	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
91	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
92	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
93	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
94	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
95	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
96	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
97	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
98	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
99	91014922	Vijay Kumar	Wind mech.	WWD	Vijay
100	91014922	Vijay Kumar	Wind mech.	WWD	Vijay



Wind World India Ltd		WIND WORLD			
Dept.	HRD	Form No.	HRD-F-07	Rev. No.	02
Review Freq. : Yearly	TRAINING ATTENDANCE				
Programme Name :	CAPP action to be taken for the slip prevention during the cable installation in location 438				
Venue :	Sakha office				
Faculty :	Vikram Chatterjee (9101242) -				
Date & Timing :	07/02/2017, 10:30am				
Sr. No.	Emp. Code	Name of the Participant	Designation	Department	Signature
1	9101437	Ashish Sahu	Tech Support	WWD	Ashish
2	91012030	Abhay Singh	Superior	WWD	AB
3	91014897	Nishit	Tech Support	WWD	Nishit
4	91014231	Ravaliya Anjan m.	Jr. Tech.	WWD	Ravaliya
5	Ream-B	Ramana Ram	Tech.	WWD	Ramana
6	Ream-B	Dheeraj Chakraborty	Tech.	WWD	Dheeraj
7	IDP	Samir	IDP	WWD	Samir
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Wind World India Ltd		WIND WORLD			
Dept. : HRD	TRAINING ATTENDANCE			Form No. : HRD-F-01	Rev. No. : 02
Review Freq. : Yearly	Date : 01.04.2012				
Programme Name :	Checking of Safety Helm (PPES & Power Tools, Lifting tools & Trucks).				
Venue :	Salkha Site.				
Faculty :	Sachin Patel.				
Date & Timing :	10/10/13.				
Sr. No.	Emp. Code	Name of the Participant	Designation	Department	Signature
1	91014237	Prabin Sahu	Tr. Supervisor	WRO	[Signature]
2	91012020	Abhay Singh	Supervisor	WRO	[Signature]
3	9101443	Vikram Chaitanya	Engineer	WRO	[Signature]
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Training Records

Annex L:

[illegible]

Security Attendance Register

**Annex M:**

Annex M_WWIL employment records - Microsoft Excel

Emp Code	Employee Name	Gender	PSA	Birth date	Joining Date	Grade	Designation	Location	Department
91019524	Ram Kumar Sharma	Male	Rajasthan	1/2/1966	6/13/2014	M5	Senior Manager	BHAKHANI	OPS MAINT & SERVICE-WWO
91004426	SURAJ SINGH RANA	Male	Rajasthan	3/24/1967	9/25/2007	W7	Senior Wind Technician	BHJ KTA	WIND WORLD OPERATIONS
91004420	ANAND KUMAR	Male	Rajasthan	5/29/1967	9/20/2007	W7	Senior Wind Technician	BHJ KTA	WIND WORLD OPERATIONS
91015097	RAJESH KUMAR	Male	Rajasthan	7/1/1980	12/24/2009	J6	Assistant Engineer	BHJ KTA	WIND WORLD OPERATIONS
91015583	Unmesh Varma	Male	Rajasthan	6/2/1990	1/24/2012	W5	Junior Wind Technician	BHJ KTA	OPS MAINT & SERVICE-WWO
91004980	KAPIL CHAND	Male	Rajasthan	9/6/1987	8/16/2008	W6	Wind Technician	BHJ KTA	OPS MAINT & SERVICE-WWO
91012614	SURESH KUMAR	Male	Rajasthan	5/7/1989	3/8/2011	W5	Junior Wind Technician	BHJ KTA	WIND WORLD OPERATIONS
91004119	LACHMAN SINGH	Male	Rajasthan	9/1/1984	6/11/2007	W7	Senior Wind Mechanic	BHJ KTA	WIND WORLD OPERATIONS
91015566	Mahesh Kumar	Male	Rajasthan	10/20/1983	7/26/2012	J5	Supervisor	BHJ KTA	OPS MAINT & SERVICE-WWO
91011907	Chandrashekar	Male	Rajasthan	7/20/1990	5/25/2011	W6	Wind Mechanic	BHJ KTA	WIND WORLD OPERATIONS
91014865	HIMANT CHOUHAN	Male	Rajasthan	6/22/1985	7/26/2012	J5	Supervisor	BHJ KTA	OPS MAINT & SERVICE-WWO
91015569	Anil Aggarwal	Male	Rajasthan	6/26/1988	7/21/2010	J7	Engineer	THANER	WIND WORLD OPERATIONS
91012363	BAHAUDDIN SINGH	Male	Rajasthan	8/26/1991	8/1/2011	J6	Assistant Engineer	BHJ KTA	OPS MAINT & SERVICE-WWO
91012453	Sunil Kumar Swain	Male	Rajasthan	3/25/1991	8/8/2011	W5	Junior Technician	BHJ KTA	WIND WORLD OPERATIONS
91012616	Shivam	Male	Rajasthan	8/11/1989	3/6/2013	W5	Junior Wind Mechanic	THANER	OPS MAINT & SERVICE-WWO
91014331	Ravindra Arjun Muni	Male	Rajasthan	8/31/1993	6/9/2013	W5	Junior Wind Technician	SPLA	OPS MAINT & SERVICE-WWO
91011971	Deepak Kumar	Male	Rajasthan	6/16/1989	6/4/2011	W6	Wind Technician	BHAKHANI	OPS MAINT & SERVICE-WWO
91014203	Anil Kumar	Male	Rajasthan	12/16/1991	6/28/2012	W5	Junior Wind Technician	BHAKHANI	OPS MAINT & SERVICE-WWO
91014129	Maharshi Ramesh Rath	Male	Rajasthan	1/12/1994	6/9/2012	J6	Assistant Engineer	BHAKHANI	OPS MAINT & SERVICE-WWO
91014343	Parag Kumar Verma	Male	Rajasthan	10/16/1992	6/9/2012	J6	Assistant Engineer	BHAKHANI	OPS MAINT & SERVICE-WWO
91013555	Debanand Rout	Male	Rajasthan	7/12/1990	3/5/2012	J6	Assistant Engineer	BHAKHANI	WIND WORLD OPERATIONS
91014523	Chander Shekar	Male	Rajasthan	12/2/1992	9/21/2012	W5	Junior Wind Technician	SPLA	OPS MAINT & SERVICE-WWO
91004410	Mukesh Sharma	Male	Rajasthan	1/7/1985	9/20/2007	W7	Senior Wind Technician	SPLA	OPS MAINT & SERVICE-WWO
91014489	Kalwat A Basit	Male	Rajasthan	8/14/1992	8/21/2012	W5	Junior Wind Mechanic	SPLA	OPS MAINT & SERVICE-WWO
91012399	Jaganmoh Pradhan	Male	Rajasthan	8/5/1989	9/6/2013	W5	Junior Wind Technician	SPLA	WIND WORLD OPERATIONS
91014490	Shashank Tripathi	Male	Rajasthan	5/9/1990	8/23/2012	W5	Junior Wind Technician	SPLA	OPS MAINT & SERVICE-WWO
91014888	SHER SINGH	Male	Rajasthan	2/22/1992	1/29/2013	W5	Junior Wind Technician	JASALMER	OPS MAINT & SERVICE-WWO
91014897	KIRISH CHOUHARY	Male	Rajasthan	9/16/1990	2/14/2013	J6	Supervisor	JASALMER	OPS MAINT & SERVICE-WWO
91014923	ASHWIN CHOUHAN	Male	Rajasthan	10/23/1993	3/6/2013	W5	Junior Wind Technician	JASALMER	OPS MAINT & SERVICE-WWO
91014900	NAVEEN KUMAR	Male	Rajasthan	8/4/1991	1/29/2013	W5	Junior Wind Mechanic	JASALMER	OPS MAINT & SERVICE-WWO
91012393	Pradeep	Male	Rajasthan	12/28/1991	12/8/2011	W5	Junior Wind Mechanic	JASALMER	TECHNICAL SERVICES - WWO
91012153	Rajesh Kumar	Male	Rajasthan	5/4/1989	12/8/2011	W5	Junior Wind Mechanic	JASALMER	TECHNICAL SERVICES - WWO
91002441	FARUK GARF KHATIB	Male	Rajasthan	2/6/1991	8/22/2009	W6	Wind Mechanic	JASALMER	WIND WORLD OPERATIONS

WWIL Employment Records