

VERIFICATION REPORT

WIND ENERGY PROJECT IN SAMANA, GUJARAT AND SAUNDATTI, KARNATAKA



Document Prepared By: URS Verification Private Limited (URS)

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Summary:

- **A brief description of the verification and the project:**

URS Verification Private Limited (URS), have been commissioned by CLP Wind Farms (India) Private Limited, to verify the greenhouse gas emission reductions reported for the project “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka”, for the period from 01-July-2012 to 31-December-2012 (both days inclusive), with regard to the relevant requirements for VCS and CDM activities. The verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable VCS and CDM requirements in order to be certified.

- **The purpose and scope of verification:**

The purpose of verification is to have an independent third party assessment of the monitoring period. In particular, the monitoring plan, and the project’s compliance with relevant VCS criteria are verified in order to confirm that the project implementation as documented, is sound and reasonable and meets the identified criteria.

- **The method and criteria used for verification:**

The verification consists of the following three phases:

- I) A desk review of the VCS PD, MR and ER spreadsheet and validation report
- II) On-site visit and follow-up interviews with project stakeholders
- III) The resolution of outstanding issues and the issuance of the final verification report and opinion.

- **Any findings, restrictions of uncertainties related to the verification:**

There are no restrictions of uncertainties related to this verification. There were 1 CAR and 1 CL were raised which were closed satisfactorily. The details of the findings (CARs & CLs) are provided in section 2.5 below.

- **Summary of the verification conclusion:**

The GHG emission reductions were calculated on the basis of the approved methodology ACM0002 version 13, “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” and the monitoring plan included in the registered VCS-PD, version 03 of 19/06/2012.

In conclusion, it is URS’s opinion that the project “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka” as described in the Monitoring Report version 03 of 02/06/2014, meets all relevant requirements for VCS and CDM activities and all relevant host Party criteria and correctly applies the baseline and monitoring methodology ACM0002 version 13, “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”. Hence URS is able to certify that the emission reductions from the project during the monitoring period 01-July-2012 to 31-December-2012 (both days inclusive) amount to 42,074 tCO₂e.

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1 INTRODUCTION

1.1 Objective

The purpose of this verification, to have an independent checking of objective evidence, is as follows:

- to verify that the project is implemented as described in the registered VCS PD;
- to confirm that the monitoring system is implemented and fully functional to generate Voluntary Emission Reductions (VCUs) without any double counting, and
- to establish that the data reported
- are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation.

1.2 Scope and Criteria

The verification of this VCS project is based on the monitoring report, VCS PD and supporting documents made available to the verifier and information collected through performing interviews during the on-site assessment. Furthermore publicly available information was considered as far as available and required. The URS has employed a risk-based approach in the verification, focusing on the identification of significant risks and reliability of project monitoring and generation of emission reductions. However, stated requests for clarifications and/or corrective actions may have been provided input for improvement of the project design.

The verification is carried out on the basis of the following requirements, applicable for this project activity:

- VCS Standard version v3.4, 08/10/2013
- VCS Validation & Verification Manual v3.1, 08/10/2013
- VCS Program Guide v3.4, 08/10/2013
- VCS Program Definitions v3.5, 08/10/2013
- VCS registration and issuance process v3.5, 08/10/2013
- ACM0002 version 13.0, dated 11/05/2012
- Registered VCS PD ver 3 dated 19/06/2012
- Other relevant rules, including the host country legislation
- Monitoring plan as given in the registered VCS-PD

The information included in the monitoring report and the supporting documents were reviewed against the requirements and criteria mentioned above. The verification is carried out based on the information made available to URS and on the contract conditions.

1.3 Level of Assurance

The verification has been carried out by reviewing the monitoring report, site visit, VCS-PD documents and evidences submitted to the verification team. Based on review of above mentioned documents, the assessment team is of the opinion that level of assurance is in reasonable level and that the GHG assertions are free of material errors, omissions and misrepresentations. The verification opinion is assured provided the credibility of all above document.

1.4 Summary Description of the Project

The project activity involves two sub-projects i.e. installation and operation of 12 Wind Turbine Generators (WEG) at Samana site in Gujarat and 55 WTGs at Saundatti site in Karnataka. The individual capacity of the WTG is 800 kW. Description of WEGs and connected grids are listed below:

Site	No. of WTGs	Capacity of each WTG (MW)	Total Installed capacity (MW)	Connected Electricity Grid
Samana, Gujarat	12	0.8	9.6	NEWNE
Saundatti, Karnataka	55	0.8	44.0	Southern
Total	67	-	53.6	-

The Project has been implemented by CLP Wind Farms (India) Private Limited ("CLP") in the state of Gujarat and Karnataka. The Wind Turbine Generators ("WEG") have been supplied by Enercon (India) Ltd (Enercon). Enercon will be responsible for technology and equipment supply, as well as the operation and maintenance of the WEGs. The Project activity involves generation of electric power using Wind Energy Generators (WEG). The Project is supplying the power generated from this project activity to the North-East-West-North East (NEWNE) and Southern Regional grids. The unique identification of the machines is as below:

For Samana site:

Sr. No.	Unique Identification No.	GEDA Ref No.	Latitude	Longitude	Date of Commissioning
1	CLPSM-38	EIL/800/09-10/1615	22° 06' 20.1" N	70° 20' 13.1" E	12-Jul-10
2	CLPSM-39	EIL/800/09-10/1616	22° 03' 00.8" N	70° 04' 21.9" E	12-Jul-10
3	CLPSM-40	EIL/800/09-10/1695	22° 05' 45.4" N	70° 05' 46.2" E	28-Jan-11
4	CLPSM-44	EIL/800/09-10/1696	22° 05' 35.8" N	70° 05' 53.6" E	28-Jan-11
5	CLPSM-45	EIL/800/09-10/1697	22° 05' 27.8" N	70° 05' 46.6" E	28-Jan-11
6	CLPSM-47	EIL/800/09-10/1699	22° 05' 13.5" N	70° 05' 44.2" E	28-Jan-11
7	CLPSM-48	EIL/800/09-10/1700	22° 05' 04.8" N	70° 05' 40.8" E	28-Jan-11
8	CLPSM-49	EIL/800/09-10/1701	22° 04' 57.9" N	70° 05' 42.1" E	28-Jan-11
9	CLPSM-46	EIL/800/09-10/1698	22° 05' 22.0" N	70° 05' 44.3" E	31-Jan-11
10	CLPSM-50	EIL/800/09-10/1702	22° 05' 05.5" N	70° 05' 09.2" E	31-Jan-11
11	CLPSM-51	EIL/800/09-10/1703	22° 05' 00.0" N	70° 05' 06.9" E	31-Jan-11

Sr. No.	Unique Identification No.	GEDA Ref No.	Latitude	Longitude	Date of Commissioning
12	CLPSM-53	EIL/800/09-10/1704	22° 04' 51.6" N	70° 05' 04.3" E	31-Jan-11

For Saundatti site:

Sr. No.	Unique Identification No.	CEIG Ref. No.	Latitude	Longitude	Date of Commissioning
1	CLPSN-36	CLP-40	15° 47' 40.6" N	75° 09' 56.9" E	23-Jun-10
2	CLPSN-37	CLP-41	15° 47' 46.2" N	75° 09' 54.9" E	23-Jun-10
3	CLPSN-38	CLP-43	15° 48' 01.1" N	75° 09' 57.5" E	23-Jun-10
4	CLPSN-39	CLP-51	15° 49' 56.4" N	75° 11' 29.8" E	23-Jun-10
5	CLPSN-40	CLP-52	15° 50' 04.2" N	75° 11' 30.6" E	23-Jun-10
6	CLPSN-41	CLP-53	15° 50' 11.7" N	75° 11' 31.6" E	23-Jun-10
7	CLPSN-42	CLP-54	15° 50' 19.2" N	75° 11' 34.2" E	23-Jun-10
8	CLPSN-43	CLP-55	15° 50' 26.5" N	75° 11' 35.6" E	23-Jun-10
9	CLPSN-44	CLP-56	15° 50' 35.7" N	75° 11' 40.9" E	23-Jun-10
10	CLPSN-45	CLP-65	15° 50' 42.6" N	75° 11' 32.3" E	23-Jun-10
11	CLPSN-46	CLP- 66	15° 50' 48.6" N	75° 11' 32.8" E	23-Jun-10
12	CLPSN-47	CLP- 67	15° 50' 55.9" N	75° 11' 29.8" E	23-Jun-10
13	CLPSN-48	CLP- 68	15° 51' 02.2" N	75° 11' 28.6" E	23-Jun-10
14	CLPSN-49	CLP- 69	15° 51' 08.8" N	75° 11' 27.2" E	23-Jun-10
15	CLPSN-50	CLP- 59	15° 50' 58.8" N	75° 11' 45.5" E	23-Jun-10
16	CLPSN-51	CLP-60	15° 51' 04.7" N	75° 11' 44.1" E	23-Jun-10
17	CLPSN-52	CLP- 61	15° 51' 09.9" N	75° 11' 41.7" E	23-Jun-10
18	CLPSN-53	CLP-62	15° 51' 19.1" N	75° 11' 47.5" E	23-Jun-10
19	CLPSN-54	CLP-63	15° 51' 27.9" N	75° 11' 53.0" E	23-Jun-10
20	CLPSN-55	CLP-64	15° 51' 34.7" N	75° 11' 52.0" E	23-Jun-10
21	CLPSN-56	CLP – 58	15° 50' 51.7" N	75° 11' 47.4" E	03-Aug-10
22	CLPSN-57	CLP – 70	15° 51' 24.3" N	75° 12' 21.2" E	03-Aug-10
23	CLPSN-58	CLP – 71	15° 51' 17.9" N	75° 12' 34.6" E	03-Aug-10
24	CLPSN-59	CLP – 72	15° 51' 25.7" N	75° 12' 35.4" E	03-Aug-10
25	CLPSN-60	CLP – 73	15° 51' 32.0" N	75° 12' 34.2" E	03-Aug-10
26	CLPSN-61	CLP – 74	15° 51' 38.2" N	75° 12' 31.3" E	03-Aug-10
27	CLPSN-62	CLP – 75	15° 51' 46.8" N	75° 12' 36.6" E	03-Aug-10
28	CLPSN-63	CLP – 76	15° 51' 55.1" N	75° 12' 39.8" E	03-Aug-10
29	CLPSN-64	CLP – 77	15° 52' 03.0" N	75° 12' 42.8" E	03-Aug-10
30	CLPSN-65	CLP – 79	15° 51' 31.9" N	75° 13' 42.2" E	03-Aug-10
31	CLPSN-66	CLP – 80	15° 51' 38.3" N	75° 13' 40.6" E	03-Aug-10
32	CLPSN-67	CLP – 81	15° 51' 44.0" N	75° 13' 37.6" E	03-Aug-10
33	CLPSN-68	CLP – 82	15° 51' 50.3" N	75° 13' 35.1" E	03-Aug-10
34	CLPSN-69	CLP – 83	15° 51' 56.6" N	75° 13' 34.2" E	03-Aug-10

Sr. No.	Unique Identification No.	CEIG Ref. No.	Latitude	Longitude	Date of Commissioning
35	CLPSN-70	CLP – 84	15° 52' 02.1" N	75° 13' 29.8" E	03-Aug-10
36	CLPSN-71	CLP – 85	15° 52' 08.5" N	75° 13' 29.0" E	03-Aug-10
37	CLPSN-72	CLP – 86	15° 52' 15.4" N	75° 13' 29.2" E	03-Aug-10
38	CLPSN-73	CLP-92	15° 52' 22.9" N	75° 13' 40.0" E	03-Aug-10
39	CLPSN-74	CLP-91	15° 52' 18.3" N	75° 13' 46.5" E	03-Aug-10
40	CLPSN-75	CLP-90	15° 52' 13.4" N	75° 13' 51.8" E	03-Aug-10
41	CLPSN-76	CLP-95	15° 52' 42.3" N	75° 13' 42.6" E	15-Sep-10
42	CLPSN-77	CLP-96	15° 52' 51.0" N	75° 13' 44.7" E	15-Sep-10
43	CLPSN-78	CLP-97	15° 52' 56.5" N	75° 13' 44.3" E	15-Sep-10
44	CLPSN-79	CLP-98	15° 53' 03.1" N	75° 13' 46.0" E	15-Sep-10
45	CLPSN-80	CLP-99	15° 53' 10.3" N	75° 13' 46.1" E	15-Sep-10
46	CLPSN-81	CLP-57	15° 50' 45.3" N	75° 11' 49.2" E	15-Sep-10
47	CLPSN-82	CLP-103	15° 53' 19.3" N	75° 14' 02.9" E	03-Dec-10
48	CLPSN-83	CLP-102	15° 53' 12.6" N	75° 14' 05.0" E	03-Dec-10
49	CLPSN-84	CLP-2	15° 49' 15.8" N	75° 06' 31.1" E	03-Dec-10
50	CLPSN-85	CLP-3	15° 49' 23.5" N	75° 06' 47.8" E	03-Dec-10
51	CLPSN-86	CLP-4	15° 49' 17.1" N	75° 06' 49.1" E	03-Dec-10
52	CLPSN-87	CLP-5	15° 49' 10.4" N	75° 06' 49.8" E	03-Dec-10
53	CLPSN-88	CLP-8	15° 48' 50.9" N	75° 06' 48.4" E	03-Dec-10
54	CLPSN-89	CLP-9	15° 48' 43.7" N	75° 06' 46.6" E	03-Dec-10
55	CLPSN-90	CLP-10	15° 48' 46.3" N	75° 06' 40.2" E	03-Dec-10

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification consists of the following steps:

- A desk review of the VCS PD, Validation report, Monitoring report and supporting documents with the use of the relevant sections of a customised protocol according to the VCS Standard: VCS Version 3.4;
- A desk review of the Monitoring Report and additional supporting documents which were submitted by the client. The relevant sections of the above mentioned customised protocol according to the VCS Standard version 3.4 were used;
- Verification audit planning;
- On-Site assessment;
- Background investigation and follow-up interviews with personnel of the project developer; and

- Verification reporting (Draft Verification Report and Final Verification Report).

The criteria of this verification include the relevant rules and steps as set out in VCS criteria refers to VCS Standard: VCS Standard (8 October 2013, v3.4) and VCS Programme Guide, (8 October 2013, v3.5), VCS Validation Verification Manual, v3.1 Program Definitions, v3.5. Full data has been verified as per Verification audit planning and hence no sampling is required.

2.2 Document Review

The monitoring report, version 01 dated 15/11/2013, version 02 dated 14/05/2014 and version 03 dated 02/06/2014 and the emission reduction calculations provided in the form of a spreadsheet were assessed as part of the verification along with the related documents. In addition the registered Project Description (VCS PD) in particular the baseline estimations and the monitoring plan, and the validation report dated 19/06/2012 for the project were reviewed.

The following table lists the documentation that was reviewed during the verification.

Ref. No	List of documents
1.	- CLPWFPL: Monitoring report for project activity “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka” version 01 dated 15/11/2013 - CLPWFPL: Monitoring report for project activity “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka” version 02 dated 14/05/2014 - CLPWFPL: Monitoring report for project activity “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka” version 03 dated 02/06/2014
2.	- CLPWFPL: Spread sheets for emission reduction calculations corresponding to /01/ version 1 dated 15/11/2013 - CLPWFPL: Spread sheets for emission reduction calculations corresponding to /01/ version 2 dated 14/05/2014 - CLPWFPL: Spread sheets for emission reduction calculations corresponding to /01/ version 3 dated 02/06/2014
3.	VCS: Registered VCS-PD for project activity “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka” version 03 dated 19/06/2012
4.	VCS: Validation report of registered project activity “Wind Energy Project in Samana, Gujarat and Saundatti, Karnataka” version 03 dated 22/06/2012
5.	- GETCO: Certificate for share of electricity generated by wind farm for the month of July dated 17/08/2012 for Samana, Gujarat site - GETCO: Certificate for share of electricity generated by wind farm for the month of August dated 17/09/2012 for Samana, Gujarat site - GETCO: Certificate for share of electricity generated by wind farm for the month of September dated 17/10/2012 for Samana, Gujarat site

Ref. No	List of documents
	• GETCO: Certificate for share of electricity generated by wind farm for the month of October dated 20/11/2012 for Samana, Gujarat site • GETCO: Certificate for share of electricity generated by wind farm for the month of November dated 15/12/2012 for Samana, Gujarat site • GETCO: Certificate for share of electricity generated by wind farm for the month of December dated 19/01/2013 for Samana, Gujarat site • Hubli Electricity Supply Corporation Limited: Joint Meter Reading for the month of July, 2012 for Saundatti, Karnataka site • Hubli Electricity Supply Corporation Limited: Joint Meter Reading for the month of August, 2012 for Saundatti, Karnataka site • Hubli Electricity Supply Corporation Limited: Joint Meter Reading for the month of September, 2012 for Saundatti, Karnataka site
6.	• CLPWFPL: Invoice raised for the month of July-2012 dated 20/08/2012 for Samana, Gujarat site • CLPWFPL: Invoice raised for the month of August-2012 dated 17/09/2012 for Samana, Gujarat site • CLPWFPL: Invoice raised for the month of September-2012 dated 18/10/2012 for Samana, Gujarat site • CLPWFPL: Invoice raised for the month of October-2012 dated 21/11/2012 for Samana, Gujarat site • CLPWFPL: Invoice raised for the month of November-2012 dated 17/12/2012 for Samana, Gujarat site • CLPWFPL: Invoice raised for the month of December-2012 dated 21/01/2013 for Samana, Gujarat site • CLPWFPL: Invoice raised for the month of July-2012 dated 04/08/2012 for Saundatti, Karnataka site. • CLPWFPL: Invoice raised for the month of August-2012 dated 04/09/2012 for Saundatti, Karnataka site. • CLPWFPL: Invoice raised for the month of September-2012 dated 05/10/2012 for Saundatti, Karnataka site.

Ref. No	List of documents
7.	- Gujarat Energy Development Agency: Commissioning certificate for WTG no EIL/800/09-10/1615 and EIL/800/09-10/1616 dated 17/07/2010 - Gujarat Energy Development Agency: Commissioning certificate for WTG no EIL/800/09-10/1695, EIL/800/09-10/1696, EIL/800/09-10/1697, EIL/800/09-10/1699, EIL/800/09-10/1700, EIL/800/09-10/1701, EIL/800/09-10/1698, EIL/800/09-10/1702, EIL/800/09-10/1703 and EIL/800/09-10/1704 dated 05/02/2011 - Karnataka Power Transmission Corporation Limited: Commissioning certificate for 20 WTG of 800 kW dated 24/06/2010 - Karnataka Power Transmission Corporation Limited: Commissioning certificate for 20 WTG of 800 kW dated 04/08/2010 - Karnataka Power Transmission Corporation Limited: Commissioning certificate for 6 WTGs of 800 kW dated 16/09/2010 - Karnataka Power Transmission Corporation Limited: Commissioning certificate for 9 WTGs of 800 kW dated 04/12/2010
8.	- Paschim Gujarat Vij Company Limited: Calibration certificate of meter no GJU01470 dated 17/01/2012 - Paschim Gujarat Vij Company Limited: Calibration certificate of meter no GJU04175 dated 17/01/2012 - Paschim Gujarat Vij Company Limited: Calibration certificate of meter no GJU04176 dated 17/01/2012 - Paschim Gujarat Vij Company Limited: Calibration certificate of meter no KAB11082 dated 17/01/2012 - Karnataka Power Transmission Corporation Limited: Calibration certificate of meter no 9141842 dated 28/03/2012
9.	UNFCCC: Consolidated baseline methodology for grid-connected electricity generation from renewable sources, ACM0002, Version 13 (http://cdm.unfccc.int/methodologies/DB/MPY3HVJIMTKE5P0UNTYE827D6Q7EHB).
10.	CLPWFPL: Undertaking provided by the PP dated 08/05/2014 regarding no double counting of VCUs, no major break down of the project activity and that the meters are functioning well

2.3 Interviews

Verification team interviewed the project proponent M/s. CLP Wind Farms (India) Private Limited and the WTG supplier (Enercon) for the verification and details of the project implementation and its activity. Assessment team visited the Saundatti site on 24/01/2014 and Samana site on 26/01/2014.

2.4 Site Inspections

On 24/01/2014 and 26/01/2014, verification team visited Saundatti and Samana site respectively. During the on-site assessment of the project, URS assessed the implementation and operation of the proposed project, reviewed the information flows for generating, aggregating and reporting the monitoring parameters, interviewed key personnel of the plant to confirm the operational and data collection procedures, cross-checked between information provided in the monitoring report and data of the plant, checked the monitoring equipment including calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions, checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

The key personnel interviewed during the site inspection and the main topics of the interviews are summarized in the table below:

Sr. No.	Date	Name and Role	Organization	Topic
/a/	24/01/2014	Mr. P. Srinivas, Assistant Manager	CLP	Review of all relevant documents i.e., Monitoring reports, Baseline emission reduction sheet, Monitoring parameters, Management structure, review and records
/b/	24/01/2014	Mr. Shantanu Bhattacharya, Technician	WWIL	O&M record, Daily Generation from the WEGs, Break down in the machines and maintenance
/c/	24/01/2014	Mr. Manoj Kumar Banik	WWIL	O&M, Project implementation status, O&M status
/d/	24/01/2014	Mr. Irshad	WWIL	QA/QC procedures, review of internal audit, Technical description, Project implementation status, O&M status, management review, Emergency preparedness plan
/e/	24/01/2014	Mr. Sadananda Manna	WWIL	QA/QC procedures, review of internal audit, Technical description, Project implementation status, O&M status, management review, Emergency preparedness plan

Sr. No.	Date	Name and Role	Organization	Topic
/f/	26/01/2014	Ms. Natasha, Assistant Manager	CLP	Review of all relevant documents i.e., Monitoring reports, Baseline emission reduction sheet, Monitoring parameters, Management structure, review and records
/g/	26/01/2014	Mr. Kishlay Parashar, Assistant Manager	CLP	Review of all relevant documents i.e., Monitoring reports, Baseline emission reduction sheet, Monitoring parameters, Management structure, review and records
/h/	26/01/2014	Mr. Naimish Vaghamshi, Technical	WWIL	O&M, Project implementation status, O&M status
/i/	26/01/2014	Mr. Jignesh Nandaniya, Supervisor	WWIL	QA/QC procedures, review of internal audit, Technical description, Project implementation status, O&M status, management review, Emergency preparedness plan
/j/	26/01/2014	Mr. Mukesh Toda, Technical	WWIL	QA/QC procedures, review of internal audit, Technical description, Project implementation status, O&M status, management review, Emergency preparedness plan

2.5 Resolution of Findings

Summary of Findings	CAR	CL	FAR
	01	01	NIL

Date:	15/02/2014	Raised by:		Manoj Kumar Srivastava	
Type of Finding	CL	S. No. of Finding	01	Reference	MR
Details of the Finding:					
1. PP is requested to provide declaration for claiming carbon credit for this monitoring period from VCS only. 2. PP is requested to provide declaration for its claim in section 2.1 of monitoring report that there has been no major breakdown or events during the present monitoring period. 3. PP is requested to provide declaration for main meter not being faulty during present monitoring period. 4. Summary of description provided, section 1.1 of MR, is not consistent with registered PDD and VCS PD.					
Project Participant Response			07/05/2014		

1. Declaration for claiming carbon credit for this monitoring period from VCS only provided 2. Declaration that there has been no major breakdown or events during the present monitoring period has been provided 3. Declaration that main meter was not faulty during present monitoring period has been provided. 4. Summary of description provided, section 1.1 of MR, has been made consistent with the VCS PD.	
Documents/ information provided by the Project Participant:	
Declaration letter for the above mentioned issue.	
Reasoning for acceptance or non-acceptance:	16/05/2014
1. Assessment team checked the declaration provided by the PP dated 08/05/2014 and found that PP has mentioned that the project neither has nor intended to generate any other form of GHG related environmental credit for GHG emission reduction claimed under the VCS programme. Thus, same is acceptable to the assessment team. Thus, this point of the CL is closed. 2. Assessment team checked the declaration provided by the PP dated 08/05/2014 and found that PP has mentioned that the project has not faced any major breakdown during this monitoring period. Thus, same is acceptable to the assessment team. Thus, this point of the CL is closed. 3. Assessment team checked the declaration provided by the PP dated 28/02/2014 and found that PP has mentioned that the main meters were working as per the requirement and have not experienced any fault during this monitoring period. Thus, same is acceptable to the assessment team. Thus, this point of the CL is closed. 4. Assessment team has checked the revised monitoring report and found that PP has now revised the section 1.1 of the monitoring report and mentioned that the project activity is comprising of the project activity includes two sub-projects i.e. installation of 12 WEGs at Samana site in Gujarat and 55 WEGs at Saundatti site in Karnataka. The WEGs have an individual capacity of 800 kW and are supplied by Enercon (India) Ltd. Thus, all the information are in line with the registered VCD-PD. Thus, same is acceptable to the assessment team. Thus, this point of the CL is closed.	
Close out by Lead Assessor	16/05/2014

Date:	15/02/2014	Raised by:	Manoj Kumar Srivastava		
Type of Finding	CAR	S. No. of Finding	02	Reference	MR
Details of the Finding:					
1. Section 1.4 of MR is left blank PP is requested to fill as appropriate. 2. PP is requested to mention source of data used in section 1.5 of MR. 3. Section 1.9 of MR does not contain complete information as per VCS-MR version03. 4. Under section 3.2 of MR in table 'value monitored' not mentioned. 5. Under section 4.4 of the monitoring report in the table year for crediting period is identified					

as 2012 and period is not identified.	
Project Participant Response	09/05/2014
1. Section 1.4 has been updated 2. Section 1.5 has been updated 3. Section 1.9 has been updated 4. Section 3.2 has been updated 5. Section 4.4 has been updated	
Documents/ information provided by the Project Participant:	
Revised Monitoring report	
Reasoning for acceptance or non-acceptance:	16/05/2014
1. Assessment team checked the revised monitoring report and found that PP has incorporated the table for "other entity" involved in the project in line with the template. Thus, same is acceptable to the assessment team. Thus, this point of the CAR is closed. 2. Assessment team checked the revised monitoring report and found that PP has mentioned the start date of the project which is considered in line with the earliest commissioning of WEGs on 23/06/2010 at Samana site in Gujarat. Thus, same is acceptable to the assessment team. Thus, this point of the CAR is closed. 3. Assessment team checked the section 1.9 of the revised monitoring report and found that PP has mentioned the net GHG Emission reductions or removals generated by the project activity will not be used for compliance with an emission trading program or to meet binding limits on GHG Emissions. Thus, same is acceptable to the assessment team. Thus, this point of the CAR is closed. 4. Assessment team checked the section 3.2 of the revised monitoring report and found that PP has now incorporated monitored net Quantity of electricity generated by <i>ith</i> WTG at Samana site i.e. 11,202 MWh. Same has been checked with the emission reduction sheet and found correct. Thus, same is acceptable to the assessment team. Thus, this point of the CAR is closed. 5. Assessment team checked the section 4.4 of the revised MONITORING REPORT and found that PP has now incorporated the duration of the crediting period i.e. from 01-Jul-2012 to 31-Dec-2012 which is found correct and acceptable to the assessment team. Thus, same is acceptable to the assessment team. Thus, this point of the CAR is closed.	
Following issues have been identified during ITR:	
1) The CEIG Ref. No. of the WTGs does not match with the same mentioned in the registered VCS PD. 2) The start date of the crediting period of CDM project titled "Wind Energy Project in Saundatti,	

Karnataka” is not correct in section 1.9 of the VCS-MR.

3) Net energy exported by WTGs of project activity under 8 MW segment at Samana site are not in accordance with the share certificate.

4) The number of days calculated from 01/09/2012 to 01/10/2012 in the ER sheet is not correct (cell number D34, in work sheet ‘Samana & Saundatti WTG wise’).

5) The monitored data by LCS as mentioned in the tables in section 3.2 of the MR (for Samana site) is not reflected in the ER calculation sheet.

Project Participant Response

03/06/2014

1. CEIG Ref. No. of the WTGs has been corrected as per the registered PD
2. The start date of the crediting period of CDM project titled “Wind Energy Project in Saundatti, Karnataka” in section 1.9 of the VCS-MR has been corrected
3. Energy exported by WTGs of project activity under 8 MW segment at Samana has been made in accordance with share certificate
4. The number of days calculated from 01/09/2012 to 01/10/2012 in the ER sheet has been corrected.
5. The monitored data by LCS for total (8 MW + 1.6 MW) has been updated in MR

Documents/ information provided by the Project Participant:

Revised MR

Revised ER sheet

Reasoning for acceptance or non-acceptance:

05/06/2014

1. Assessment team has checked the revised monitoring report and found that PP has now incorporated the CEIG Ref. No. of the WTGs for Saundatti site appropriately. Thus, this point of the CAR is closed.
2. Assessment team has checked the revised monitoring report and found that PP has now revised the start date of the crediting period of CDM project titled “Wind Energy Project in Saundatti, Karnataka” in section 1.9 of the VCS-MR i.e. 24 – Sep – 2012. Same is checked from the UNFCCC website and found correct. Thus, this point of the CAR is closed.
3. Assessment team has checked the revised ER sheet and found that PP has now revised the energy exported by WTGs of project activity under 8 MW segment at Samana in line with share certificate. Total energy exported by 8 MW project is 9,123,694 kWh. Same is checked and found correct. Thus, this point of the CAR is closed.
4. Assessment team has checked the revised ER sheet and found that PP has now revised the number of days calculated from 01/09/2012 to 01/10/2012 in the ER sheet i.e. 31 days. Same is checked and found correct. Thus, this point of the CAR is closed.
5. Assessment team has checked the revised ER sheet and found that PP has now incorporated the LCS readings for 8 MW bundle. Total energy exported according to the 8 MW bundle is

93,91,269 kWh. Same is checked and found correct. Thus, this point of the CAR is closed.	
Close out by Lead Assessor	05/06/2014

2.5.1 Forward Action Requests

During the verification process no FAR has been raised. Thus, this clause is not applicable to this project activity.

2.6 Eligibility for Validation Activities

URS Verification Private Limited holds accreditation of validation and verification in the sectoral scope of 1 and 13 (<http://cdm.unfccc.int/DOE/list/DOE.html?entityCode=E-0055>). URS has registered and issued several projects in said sectoral scopes. Thus, URS is authorized to conduct the verification and gap validation of this project activity.

3 VALIDATION FINDINGS

The project activity is a VCS validated project as per report ID URS/12/VCS/01 version 03 dated 26-June-2012 and no sampling was involved in the validation.

3.1 Participation under Other GHG Programs

The project activity is a VCS registered project as per report ID URS/12/VCS/01 version 03 dated 22-June-2012. The project activity is also listed on VCS Project Database at the weblink with project ID 910 (<https://vcsprojectdatabase2.apx.com/myModule/Interactive.asp?Tab=Projects&a=2&i=910&lat=22%2E105581&lon=70%2E336967&bp=1>).

Further, PP has also registered this project under Clean Development Mechanism of UNFCCC. This project activity is registered as two separate CDM project activities. Details of the same are mention below:

Project Name	UN Ref no	Date of Registration	Duration of Crediting Period in CDM
Wind Energy Project in Saundatti, Karnataka (http://cdm.unfccc.int/Projects/DB/BVQI1343049611.03/view)	6794	01-August-2012	24-September-2012 to 23-September-2019 (Renewable)
Wind based renewable energy project by CLP Wind Farms India Private Limited in Gujarat (http://cdm.unfccc.int/Projects/DB/RWTUV1355987533.33/view)	8955	24-December-2012	01-January-2013 to 31-December-2019 (Renewable)

3.2 Methodology Deviations

The project uses the approved large scale methodology ACM0002, version 13: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" dated 28/06/2012, <http://cdm.unfccc.int/methodologies/DB/MPY3HVJIMTKE5P0UNTYE827D6Q7EHB>. There is no deviation applied w.r.t. methodology applied to the project activity.

3.3 Project Description Deviations

Verification team has been carried out an onsite visit for this project on 24/01/2014 and on 26/01/2014, also reviewed the all the supporting documents share certificate by GETCO^{/5/}, JMR by Hubli Electricity Supply Corporation Limited^{/6/}, invoices^{/6/}, Commissioning certificate^{/7/} and calibration certificate^{/8/}. Once reviewing all the said documents and conducting site visit it reveals that project is implemented as per registered VCS-PD and hence it confirms that no project description deviations are found in this project.

3.4 Grouped Project

In this project activity, CLP Wind Farms (India) Private Limited has installed the 53.6 MW wind power project and acts as the project participant for the project activity. This, it is not a grouped project activity and this clause is not applicable to this project activity.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The existence of any material discrepancies between project implementation and the project description:

The project involves generation of electricity by using wind energy as a source. Thus the project avoids generation of CO₂ from fossil fuel that would have been used for power generation.

The verification team visited the project sites of the project and confirmed that the project proponent has installed 9.6 MW (12 x 0.8 MW) WEGs in Samana, Gujarat and 44 MW (55*0.8 MW) in Saundatti, Karnataka. These WEGs are installed in Kalavad, Jamjodhpar, Upleta talukas of Jamnagar and Rajkot district in Gujarat and in Katamalli, Hooli, Vatnal, Gorbala, Basidoni, Mallapur, Goravanakolla, Haletorga villages of Belgaum district in Karnataka in India as mentioned in the registered VCS PD and the same is in operation.

The electricity generated through WEGs in Gujarat location are supplied to the NEWNE grid and the electricity generated through WEGs in Karnataka location are supplied to the Southern regional grid. The first WEG was commissioned on 23/06/2010 at Saundatti site in Karnataka for commercial operation and this has been confirmed by verifying the commissioning certificate issued by the SEB.

The crediting period for this project starts from 23/06/2010 as per the registered VCS PD^{/06/}. The project boundary covers the physical, geographical site of the renewable energy generation source. This includes the WEGs installation, main transformer, sub-stations and the respective grid. The proposed project evacuates all the power generated by the WEGs in this project to the Southern grid. The same was confirmed by the verification team by assessing “Joint meter reading report” and “Generation report” of all the WEGs. During the site visit, the following equipments as addressed in the validated VCS PD were found operational:

WEGs of 9.6 MW (12 x 0.8 MW) WEGs in Samana, Gujarat and 44 MW (55*0.8 MW) in Saundatti, Karnataka, control panels of the respective WEGs, EB meters for measuring and monitoring the electricity supplied to the grid by WEGs have been checked.

Main meters at Samana site and the Saundatti site has two main and two check meters installed at the grid interconnection point in the substation. The Samana site has four main meters installed at the grid interconnection point in the substation maintained by Enercon (India) Limited. In case any meter becomes defective, the load is switched to the other operational meters so that there is no lapse in recording of electricity generation data. The Saundatti site has two main and two check meters installed at the grid interconnection point in the substation. In case a main meter becomes defective, the readings of the check meter are used for the purpose of billing and calculation of emission reductions. These meters are in full control of respective SEB (State Electricity Board) and the PP has no control on the calibration and maintenance of the meters. In addition to that each WEGs is equipped with a LCS which measures electricity continuously on real time basis.

During the site verification, the team cross checked the generation data through the “Joint Meter Reading” report (for Saundatti site), Share certificates (for Samana site) and respective invoices of the project activity to note that the generation is well within the stated capacity of 53.6 MW only. Thus it is confirmed that the project boundaries and all the equipments related to the project activity are in line with what is described in the registered VCS PD, version 03 dated 19/06/2012.

The project activity is reducing CO₂ emissions to the extent of electricity displaced from the regional grid. The achieved amount of emission reductions for this verification that covers from 01-July-2012 to 31-December-2012 (both days inclusive) is 42,074 tCO₂e as per the baseline emission reduction sheet. Verification team has checked the calculations provided in the ER sheet /02/ and confirms that PP has quantified the values accurately. Based on the site observation and the documents assessed during the site visit, URS confirms that project is implemented fully and accurately as described in the registered VCS PD, version 03 dated 28/06/2012.

Monitoring plan and the completeness of monitoring:

Monitoring plan is implemented as per the applied monitoring methodology ACM2 version 13 /05/. As per the monitoring methodology, the following parameters are to be monitored:

Data and parameters monitored at the Samana site, Gujarat

- a) Quantity of electricity generated by ith WTG at Samana site ($EG_{\text{Samana,WTG},i}$)

The WTGs is having in-built LCS meter which continuously records the electricity generated by the turbine.

- b) Quantity of net electricity generation supplied by the project activity to the grid in year y ($EG_{NEWNE, facility, y}$)

Net electricity generated by the wind farm is monitored by main meter at the grid interconnection point in the substation maintained by Enercon (India) Limited. There are numerous WTGs apart from the project WEG are connected to the main meter. The net electricity delivered by the Samana sub-project would be calculated by proportionally dividing the metered net generation among the connected WTGs on the basis of the pro-data readings taken at the WTG controller end by Gujarat Energy Transmission Corporation Limited (GETCO).

The net electricity supplied by the wind farm to the NEWNE grid is determined as the difference between the quantity of electricity supplied by the wind farm to the grid and the quantity of electricity delivered to the wind farm from the grid.

Joint meter readings for the net energy generation by the wind farm are taken in the presence of Enercon (India) Limited and grid officials every month.

Data and parameters monitored at the Saundatti site, Karnataka

- c) Quantity of electricity generated by i^{th} WTG at Saundatti site ($EG_{Saundatti, WTG, i}$)

The quantity of electricity generated by i^{th} WTG at Saundatti site is measured and recorded by the LCS meter at the WTG controller end.

The WTGs is having in-built LCS meter which continuously records the electricity generated by the turbine.

- d) Quantity of net electricity generation supplied by the project activity to the grid in year y ($EG_{south, facility, y}$)

As discussed in the above section, main and check meter are installed near WTG to monitor the net electricity supplied to the grid from the connected windmills. These meters are sealed and are in custody of respective SEB. The power exported and imported from the grid is monitored continuously by the main meter and recorded monthly by the state utility personnel in presence of representative from PP's side at a specific time mutually agreed by both the parties. The main meter at substation records total generation, total export, and total import by all the connected WTGs to the sub-station through a particular feeder.

PP raises invoice against the joint meter reading report for which payment is made by the state utility. Verification team conducted the site visit on 24/01/2014 at Saundatti site. Verification team, visited Katamalli, Hooli, Vatnal, Gorbala, Basidoni, Mallapur, Goravanakolla, Haletorgal villages in Belgaum district of Karnataka state. Further, on 26/01/2014 verification team visited at Samana site. Verification team visited Kalavad, Jamjodhpur, Upleta villages in Jamnagar & Rajkot districts of Gujarat state in India and confirms that the procedure mentioned above is the actual scenario, followed at site and is in compliance with the VCS PD, version 03 dated 19/06/2012.

The critical parameter for the determination of emission reductions is the net electricity exported by the project to grid. The net electricity exported to the grid by the project plant is determined as the difference of electricity exported and electricity imported by the project activity. A set of meters are installed at the high voltage side of the step up transformer installed at the project site at the common metering point i.e. substation (grid interconnection point), which are cumulative type online digital meters. The meters at the substation will be in custody of respective State Electricity Board.

Each WTG is equipped with individual controller which controls all activities of WTG and also records electricity generation. The electricity generation value is transmitted through (OFC) to Central Monitoring Station (CMS) where it is recorded in Supervisory Control and Data Acquisition (SCADA) system. The electricity generation data is monitored continuously and recorded at 24 hr frequency. The same reading is used to calculate ER for the project activity.

Each of these meters (being bidirectional meters) measures both export and import electricity in parallel. These meter readings are decisive for determining the electricity fed to the grid and emission reduction calculations. The electricity export and import readings are maintained at the plant site on daily basis in daily generation reports from LCS meter. Depending on availability of officer of BESCOM and GSEB, Joint Meter Reading (JMR) /07/ is taken for both export and import electricity for all the meters and duly signed by the representatives of CLP, Enercon and SEB for all main and check meters. Verification team has reviewed the same and is convinced that the same is adequate and will lead to correct measurement of the net electricity exported to the grid.

The calibration of LCS meter is not required due to auto calibration facility of these class of meters, the same is verified by assessment team from the clarification given by WTG manufacturer. Further, the main and check meters located in both the sites are calibrated by the respective SEB. PP is raising their invoice to respective SEB on the basis of these JMR. The difference of final reading and initial reading of the meter determines the exported electricity (in kWh). Based on these JMRS, energy bills (invoices) are raised by the PP every month. The monthly JMR readings are transposed in the ER calculation spread sheet and aggregated on annual basis to compute the power exported to the grid by the project activity and subsequently the emission reductions.

Daily import and export readings are noted by the site engineers of Enercon for all wind turbines at generation/ LCS meter and prepare the daily generation reports which are being regularly verified by site-in-charge. On the basis of these daily reports, monthly reports will be prepared by site in charge and send to PP on regular basis.

Also, the verification team cross-checked the electricity exported figures in the JMRS with the figures of monthly invoices. The same value is considered for the calculation of emission reduction. The verification team hereby confirms that there was no material misstatement in the calculation of emission reductions.

Any remaining issues from previous validation or verification:

There are no remaining issues from validation. The same has been verified and confirmed by the verification team for the entire verification period from 01-July-2012 to 31-December-2012 found to be correct and in line with the registered VCS PD.

There are no validated methodology deviations found to be in this project.

The existence of any material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology

PP has applied approved consolidated methodology ACM0002 ver 13 for this project activity. Further, the project was registered with VCS registry and PP has opted 10 years of crediting period with will be renewed twice. In line with the registered VCS-PD, "Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y" will be monitored to calculate the emission reduction. During site visit and discussion with the PP, verification team has confirmed that actual monitoring plan at the project site is exactly the same with the registered VCS-PD and applied methodology i.e. ACM0002 ver 13. Thus, verification team has confirmed that there is no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology

Net GHG emission reductions or removals generated by this project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions as the host country i.e. India. PP is not a participant in any emission trading programs except CDM or nor does it have any binding limits. PP has provided a declaration dated 08/05/2014 for the same which is acceptable to the assessment team.

The PP has also registered this project under Clean Development Mechanism of UNFCCC. This project activity is registered as two separate CDM project activities (UN ref no 6794 and 8955). Further, PP has submitted a declaration that the project activity is not rejected by any other GHG scheme. Verification team has checked the same and found correct.

Further, verification team has checked the project and found that there are no remaining issues from validation and previous verification. The same has been verified and confirmed by the verification team for the entire verification period from 01-July-2012 to 31-December-2012 (both days inclusive) in line with the registered VCS PD and found to be correct.

4.2 Accuracy of GHG Emission Reduction and Removal Calculations

The energy meter readings are noted daily and compared to controller data to check for accuracy in measurement. Monthly joint meter readings are taken jointly by representatives of clients and SEB and then it is used to estimate the quantity of energy exported by the WTGs to the grid.

The JMR report is the source for the values used to determine the net electricity supplied by the WTGs to the grid for Karnataka site and share certificate is the source for the values used to determine the net electricity supplied by the WTGs to the grid for Gujarat site. Same are in line with the requirement provided in the registered VCS PD. The formulas, summation and consistency of the data and parameters are correctly applied in ER spreadsheet.

The calculations and applied formulae and method for calculation of baseline emission are in accordance with the registered monitoring plan and are in line with the requirements of the applied methodology. The formulae and the methods referred in the monitoring report and the spreadsheets for estimation of GHG reduction comply with the corresponding formulae and methods in the registered PD. The calculation of emission reductions is based on subtracting project emissions and leakage from the baseline emissions. As the turbines run exclusively with wind energy without any usage of fossil fuel, the project emissions are considered as zero. Leakage is considered to be zero as per applied methodology and VCS-PD.

For the calculation of baseline emissions the ex-ante and validated fixed value of baseline parameters, i.e. Combined Margin CO₂ emission factor for NEWNE grid and Combined Margin CO₂ emission factor for Southern grid are taken into account which is a validated and registered value. The value of the emission reductions depends on the net electricity exported by the project activity.

The baseline emissions reductions are based on the net electricity supplied by the WTGs.

Therefore the baseline emission equals the Emission Reductions.

Baseline Emissions:

The formula used for the determination of baseline emissions which is line with the VCS-PD:

Baseline Emissions (tCO₂/yr) = Quantity of net electricity generation supplied by the project activity to the Southern grid in year y ($EG_{\text{South, facility, y}}$) (MWh) X Combined Margin CO₂ emission factor for Southern grid ($EF_{\text{South, grid, CM, y}}$) tCO₂/MWh + Quantity of net electricity generation supplied by the project activity to the NEWNE grid in year y ($EG_{\text{NEWNE, facility, y}}$) (MWh) X Combined Margin CO₂ emission factor for NEWNE grid ($EF_{\text{NEWNE, grid, CM, y}}$) (tCO₂/MWh)

i.e. $BE_y = EG_{\text{NEWNE, facility, y}} \times EF_{\text{NEWNE, grid, CM, y}} + EG_{\text{South, facility, y}} \times EF_{\text{South, grid, CM, y}}$

Data fixed ex-ante:

Combined margin emission factor of the NEWNE grid is 0.9528 tCO₂e/MWh and combined margin emission factor of the Southern grid is 0.8969 tCO₂e/MWh. The ex-ante parameter has been derived from CO₂ Baseline Database for the Indian Power Sector, User Guide (Version 7), and Gov. of India. URS has verified the appropriateness of the value for the crediting period

against the data source which is publicly available and found it to be correct and in line with the registered VCS-PD.

PP has also registered this project under Clean Development Mechanism of UNFCCC. This project activity is registered as two separate CDM project activities. Thus, the duration of the projects considered under this VCS verification projects are listed below:

Project Name	UN Ref no	Date of Registration	Duration of Crediting Period in CDM	Period considered under this VCS project
Wind Energy Project in Saundatti, Karnataka (http://cdm.unfccc.int/Projects/D/B/BVQI1343049611.03/view)	6794	01-August-2012	24-September-2012 to 23-September-2019 (Renewable)	01-July-2012 to 23-September-2012
Wind based renewable energy project by CLP Wind Farms India Private Limited in Gujarat (http://cdm.unfccc.int/Projects/D/B/RWTUV1355987533.33/view)	8955	24-December-2012	01-January-2013 to 31-December-2019 (Renewable)	01-July-2012 to 31-December-2012

Considering the above duration, the net electricity exported to the grid from Samana site is 10,935 MWh and net electricity exported to the grid from Saundatti site is 35,294 MWh.

$$\begin{aligned}
 \text{Thus, BE}_y &= \text{EG}_{\text{NEWNE, facility, y}} \times \text{EF}_{\text{NEWNE, grid, CM, y}} + \text{EG}_{\text{South, facility, y}} \times \text{EF}_{\text{South, grid, CM, y}} \\
 &= 10,935 \text{ MWh} \times 0.9528 \text{ tCO}_2\text{e/MWh} + 35,294 \text{ MWh} \times 0.8969 \text{ tCO}_2\text{e/MWh} \\
 &= 42,074 \text{ tCO}_2\text{e}
 \end{aligned}$$

Project Emissions:

As the turbines run exclusively with wind potential without any usage of fossil fuel, the project emissions are considered as zero.

Leakage:

In accordance with ACM 0002 version 13, as no transfer of equipment has been carried out in the project, no leakage estimation is required.

An ER calculation was prepared by the PP and presented to the verification team. It is confirmed that the ER calculation is overall correct. The total emission reductions during the monitoring period are 42,074 tCO₂e.

No significant reporting risks have been identified for the data reported. The operational procedures for training, emergency preparedness, maintenance and calibration of monitoring equipments, monitoring measurements and reporting, record handling and maintenance, reviewing monitored data, internal audit, project performance reviews and corrective actions are available at the plant. All the monitored data are archived in electronic form. The data will be kept for the whole crediting period and additional 2 years thereby meeting the requirement of the VCS-PD.

4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

The source of net electricity generation, as reported in the registered VCS PD and the JMR sheets have been used by the project proponent to calculate $EG_{BL,y}$. URS has cross checked and verified the values against the JMR and invoices raised by PP to SEB. The JMR sheet and share of certificate are deemed to be the most appropriate source of data for net electricity supplied to the grid. Emission factor of the grid electricity of the NEWNE grid is 0.9528 tCO₂e/MWh and emission factor of the Southern grid is 0.8969 tCO₂e/MWh. The ex-ante parameter has been derived from CO₂ Baseline Database for the Indian Power Sector, User Guide (Version 7), and Gov. of India.

Meter accuracy: the accuracy of measurement of electricity delivered is determined by the equipment accuracy and frequency of its calibration. The calibration frequency of meter is defined as once in every three year as per the registered VCS PD.

All meters at both sites are 0.2s class, and were tested by GUVNL/GEDA for Samana and KPTCL for Saundatti.

The following table indicates the date, accuracy and frequency of meter testing:

Samana, Gujarat site:

Sr. No.	Meter No.	Type	Accuracy Class	Calibration Date	Due Date
1	GJU 01470	Main Meter	0.2s	17-Jan-12	16-Jan-15
2	GJU 04175	Main Meter	0.2s	17-Jan-12	16-Jan-15
3	GJU 04176	Main Meter	0.2s	17-Jan-12	16-Jan-15
4	KAB 11082	Main Meter	0.2s	17-Jan-12	16-Jan-15

Saundatti, Karnataka site:

Sr. No.	Meter No.	Type	Accuracy Class	Calibration Date	Due Date
1	9141842	Main Meter	0.2s	10-Feb-12	09-Feb-15
2	9141846	Check Meter	0.2s	10-Feb-12	09-Feb-15
3	9141848	Main Meter	0.2s	10-Feb-12	09-Feb-15
4	9141852	Check Meter	0.2s	10-Feb-12	09-Feb-15

The calibration documents provided by the Project proponent indicate that the energy meters were calibrated during this monitoring period. All the calibration report clearly indicates that the energy meters were performing satisfactorily and are within the permissible limit of error. It was found that the delivered electricity and the consequently emission reductions are found to be conservative.

These practices meet the requirements of the applied methodology and approved monitoring plan as in the registered VCS PD.

URS verified that the emission calculations are based on the authentic data from the joint meter reading sheets issued by the state electricity board. The source and reliability of the baseline ER sheet used to calculate the monthly emission reduction was checked and found to be.

4.4 Non-Permanence Risk Analysis

This project activity has already been commissioned and exporting electricity to the respective regional grid. After commissioning, project is in working condition except scheduled shut down period. Assessment team has not observed any other non-performance risk involved in this project activity.

5 VERIFICATION CONCLUSION

The scope of this verification covers the determination of voluntary greenhouse gas emission reductions generated by the above mentioned project. The verification is based on the registered VCS-PD, VCS validation report, monitoring report, supporting emission reduction calculation sheet and other supporting documents made available to the verifiers by the project proponent.

As a result of the verification, the verifier confirms that:

- All operations of the project are implemented and installed as planned and described in the project document. The installed equipment essential for generating emission reductions runs reliable.
- The monitoring plan is in accordance with the applied approved CDM methodology ACM0002 ver 13
- The installed equipment essential for measuring parameters required for calculating emission reductions are calibrated.
- The monitoring system is in place and functional. The project has generated GHG emission reduction and the emission reduction from the project activity is real, credible and long term for the whole crediting period
- GHG emission reductions are calculated without any material misstatements in a conservative and appropriate manner.

Also, all the documents checked during on-site visit and verification process will be kept confidential and will not be disclosed at any time other than the project proponent consent or as required by VCSA.

Verification period: From 01-July-12 to 31-December-2012 (inclusive both days)

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2012 (01-July-12 to 31-December-2012) (Both days inclusive)	42,074	0	0	42,074
Total	42,074	0	0	42,074