
VERIFICATION AND CERTIFICATION REPORT

Vish Wind Infrastructure LLP

Wind Energy Project in Gujarat

UN PA 6484

Monitoring Period 1: 01/10/2012 – 31/03/2013

(Both days inclusive)

SGS Climate Change Programme

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Project Title:		
Wind Energy Project in Gujarat		
Organisation:	Client:	
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Publication of Monitoring Report:		
Monitoring Period:	01/10/2012 – 31/03/2013	
First Monitoring Version and Date:	Version 01 dated 27/04/2013	
Final Monitoring Version and Date:	Version 05 dated 02/08/2013	
Summary:		
<p>SGS United Kingdom Ltd has performed the first periodic verification of the CDM project “Wind Energy Project in Gujarat”, with UNFCCC reference number of 6484, registration date of 10/09/2012 and crediting period from 01/10/2012 to 30/09/2022. The verification includes confirming the implementation of the monitoring plan of the registered PDD version 4.0 dated 04/09/2012; revised PDD version 6.0 dated 23/07/2013 and the application of the monitoring methodology as per ACM0002 version 13.0.0 dated 11/05/2012. A site visit was conducted to verify the data submitted in the monitoring report. SGS confirms the following has been reviewed:</p> <ul style="list-style-type: none"> (a) The registered PDD^{/1/}, revised PDD^{/2/}, including the monitoring plan and the corresponding validation report^{/7/}; (b) Monitoring report^{/3/}; (c) The applied monitoring methodology^{/5/}; (d) Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board; (e) All information and references relevant to the project activity’s resulting in emission reductions. <p>The project activity involves electricity generation by WTGs and supplying the same to the NEWNE regional electricity grid. This is renewable energy generation which can replace the fossil fuel dominated grid connected electricity generation. The project activity consists of the installation of 63 WTGs, each with the capacity of 0.8 MW at Kutch (33 WTGs) and Jamnagar (30 WTGs) district of Gujarat, India, reaching a total installed capacity of 50.4 MW. These WTGs are of Enercon make E-53. The generated electricity is evacuated to the Gujarat state grid.</p> <p>SGS confirms that the project is implemented in accordance with the validated and registered Project Design Document and the revised Project Design Document. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 34,757 tCO₂e emission reductions during period 01/10/2012 up to 31/03/2013.</p>		
Subject:		
CDM Verification		
Verification Team:		
Ravi Kant Soni- Lead Assessor; Local Assessor and Technical Area Expert (TA 1.2) Rekibuddin Ahmed – Assessor		<input checked="" type="checkbox"/> No Distribution (without permission from the Client or responsible organisational unit)
Technical Review: Date: 05/08/2013 Name: Vikas Bankar		
Authorised Signatory:		<input type="checkbox"/> Limited Distribution
Name: Siddharth Yadav Date: 09/08/2013		<input type="checkbox"/> Unrestricted Distribution

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Abbreviations

ABT	Availability-based tariff
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CL	Clarification Request
CMP or COP/MOP	Conference of Parties serving as the Meeting of the Parties
CMS	Central Monitoring Station
CO ₂	Carbon Dioxide
CoP	Conference of the Parties
DOE	Designated Operational Entity
DR	Document Review
EB	Executive Board
EF	Emission Factor
EIL	Enercon India Limited
ER	Emission Reduction
FAR	Forward Action Request
GEDA	Gujarat Electricity Development Authority
GETCO	Gujarat Electricity Transmission Company
GHG	Greenhouse Gas(es)
GUVNL	Gujarat Urja Vikas Nigam Limited
ISO	International Organization for Standardization
JMR	Joint Meter Reading
kWh	Kilo watt hour
MP	Monitoring Plan
MR	Monitoring Report
MW	Mega watt
MWh	Mega Watt hour
NEWNE	Northern, Eastern, Western and North Eastern
O&M	Operation and Maintenance
OM	Operating Margin
PDD	Project Design Document
PP	Project Participant
PPA	Power Purchase Agreement
QA/QC	Quality Assurance/Quality Control
SLDC	State Load Dispatch Center
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
VCB	Vacuum Circuit Breaker
WTG	Wind Turbine Generator

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1. Introduction

1.1 Objective

SGS United Kingdom Ltd has been contracted by Vish Wind Infrastructure LLP to perform an independent verification of its CDM project “Wind Energy Project in Gujarat”. CDM projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Certified Emission Reductions (CERs).

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The emissions report conforms with the requirements of the monitoring plan in the registered PDD and the approved methodology; and
- The data reported are complete and transparent.

1.2 Scope

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on the validated and registered project design document and the monitoring report. The project is assessed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance.

SGS has, based on the recommendations in the Validation and Verification Standard, employed a risk-based approach in the verification, focusing on the identification of significant reporting risks and the reliability of project monitoring.

Due professional care has been exercised and ethical conduct has been followed by the assessment team during the verification process. The verification report is a fair presentation of the verification activity.

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 Project Activity and Period Covered

This engagement covers emissions and emission reductions from anthropogenic sources of greenhouse gases included within the project boundary of the following project and period.

Title of Project Activity:	Wind Energy Project in Gujarat
UNFCCC Registration Number:	6484
Monitoring Period Covered in this Report:	01/10/2012 to 31/03/2013
Project Participants:	Host Country: India Vish Wind Infrastructure LLP Annex I Country: Not Applicable
Location of the Project Activity:	District: Kutch and Jamnagar State: Gujarat Country: India.

The project activity involves electricity generation by WTGs and supplying the same to the NEWNE regional grid. This is a renewable energy generation which can replace the fossil fuel dominated, grid connected electricity generation. The project activity consists of the installation of 63 WTGs, each WTG has the capacity of 0.8 MW, at Kutch (33 WTGs) and Jamnagar (30 WTGs) district of Gujarat, India, reaching a total installed capacity of 50.4 MW. These WTGs are of Enercon make E-53. The generated electricity is evacuated to Gujarat state grid. All WTGs in Kutch district were commissioned on 31/03/2012 and the WTGs in Jamnagar district were commissioned on 02/10/2011 and 03/10/2011 as mentioned in the MR^{3/} and the commissioning certificates^{14/}.

All 63 WTGs are fully functional and this was verified by the assessment team during the site visit. Technical details of the WTGs with respect to places of installation and capacity have been verified during the site visit and found to be consistent with the details provided in the registered/revised PDD^{/1&2/}.

2. Methodology

2.1 General Approach

SGS performs the verification work using a Periodic Verification Checklist prepared following the VVS. The Periodic Verification Checklist describes the verification approach and the sampling plan.

The checklist gives the assessment team a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

Using the Periodic Verification Checklist, SGS verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit and a desk review of the monitoring report. This verification report describes the findings of this assessment.

Only verification activities undertaken after the publication of the monitoring report on the UNFCCC CDM website were used as a basis for SGS to conclude our verification and submit a request for issuance of CERs to the Board.

2.2 Verification Team for this Assessment

A team of competency has been selected to perform the verification of the project.

Name	Role
Ravi Kant Soni (From 31/07/2013 - Current)	Lead Assessor; Local Assessor and Technical Area expert (TA 1.2)
Sudeep Kodialbail (From 03/05/2013 to 31/07/2013)	Lead Assessor; Local Assessor and Technical Area expert (TA 1.2)
Rekibuddin Ahmed	Assessor

2.3 Means of Verification

2.3.1 Review of Documentation

The validated PDD, the monitoring report submitted by the client and additional background documents related to the project performance were reviewed. A complete list of all documents reviewed is attached in section 8 of this report.

2.3.2 Site Visits

As part of the verification, the following on-site inspections have been performed by Sudeep Kodialbail (Lead Assessor, Local assessor and Technical Area Expert at the time of the site visit).

Location: Districts - Kutch and Jamnagar; State - Gujarat; India	
Date: 22/05/2013 to 24/05/2013	
Coverage:	Source of Information / Persons Interviewed
<ul style="list-style-type: none"> Monitoring report Project design and implementation Conformance with Registered PDD Monitoring procedure Emission reduction calculations 	Mr. Bhupendra Verma (Consultant, Enercon)
<ul style="list-style-type: none"> Technical equipment and operation Data collection, operations and monitoring procedure Monitoring equipment testing and calibration Data uncertainty QA/QC procedures 	Mr. Kishor Vasara (Dy. Manager, Enercon) Mr. Umesh T Mane (Engineer, Enercon) Mr. Ritesh N Chauhan (Senior Engineer, Enercon)

2.4 Reporting of Findings

As an outcome of the verification process, the team can raise different types of findings.

In general, where insufficient or inaccurate information is available and clarification or new information is required the team shall raise a Clarification Request (CL) specifying what additional information is required.

Where a non-conformance arises the team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- I. Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- II. Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- III. Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- IV. Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants

The verification process may be halted until this information has been made available to comply with the requirements of the CDM Executive Board. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

A clarification request (CL) will be raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met. All CARs and CLs raised during verification shall be resolved prior to submitting a request for issuance.

Corrective Action Requests and Clarification Requests are raised in the Periodic Verification Checklist. The Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period, which are for the benefit of future projects and future verification activities. These have no impact upon the completion of the verification activity.

All CARs, CLs and FARs for this verification period are included in this report.

2.5 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment Team, all documentation will be forwarded to a Technical Review Team. The task of the Technical Review Team is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team.

Technical Review Team

Name	Role
Vikas Bankar	Technical Reviewer and Technical Area expert (TA 1.2)

3. Verification Findings

3.1 Project Implementation

This project activity is the generation of electricity from WTGs supplying the generated electricity to the NEWNE grid of India. The project is located at Kutch (33 WTGs) and Jamnagar (30 WTGs) districts of Gujarat state in India and has an installed capacity of 50.4 MW (63 WTGs x 0.8 MW/WTG). The PP has signed two PPAs^{/15/} with GUVNL for the sale of electricity to the grid. The project was registered as a CDM project on 10/09/2012^{/6/}. The PP has considered a fixed crediting period for the project activity from 01/10/2012 to 30/09/2022. This is the first verification of the project activity covering the period from 01/10/2012 to 31/03/2013.

The project has been implemented; equipment installed and is being operated as described in the registered PDD^{/1/} and the revised PDD^{/2/}. The monitoring plan implemented during the current monitoring period is in compliance with the monitoring plan of the registered PDD^{/1/}; revised PDD^{/2/} and the applied methodology^{/5/}. This was verified during the site visit.

The project activity WTGs have been commissioned between 02/10/2011 and 31/03/2012 as mentioned in the Monitoring Report. The details of the WTGs installed have been verified against the commissioning certificates^{/14/} and the share certificate^{/11/} issued by GETCO. In addition to the physical inspection of the site, the following documents have been reviewed by the assessment team during the site visit to verify the project implementation:

- i. Commissioning certificates^{/14/}
- ii. Power Purchase Agreements^{/15/}
- iii. Invoices^{/12/} raised by the PP to GUVNL
- iv. Testing certificates^{/9/} of all energy meters

The information relating to the project implementation, provided in the Monitoring Report^{/3/} is consistent with that stated in the registered PDD^{/1/} and revised PDD^{/2/}. The data and variables provided in the monitoring report are the same as stated in the revised PDD^{/2/}.

The estimated emission reduction for the current monitoring period as per the registered PDD^{/1/} and revised PDD^{/2/} is 50,478 tCO₂e; while the verified emission reductions^{/4/} is 34,757 tCO₂e. A 31.14% decrease was observed in the actual value. Hence **CAR #1** (point 5) was raised requesting the PP to clarify the decrease, which has been discussed later in this section. The justification provided by the PP for the difference in the emission reductions has been checked and accepted.

In section E.5 of the MR, the PP has correctly calculated the estimated emission reductions for the current monitoring period from the annual estimate in the registered PDD^{/1/} and revised PDD^{/2/}.

The project was checked against the applicability criteria in the applied methodology ACM0002 Version 13.0.0^{/5/} and it is confirmed that the methodology^{/5/} is still applicable to the project activity. The data and variables provided in the Monitoring Report^{/3/} are the same as stated in the registered and revised monitoring plan^{/1/}.

The verification of the metering systems is covered in section 3.6 of this report.

Based on the requirements of paragraph 226 to 228 of the VVS version 03.0^{/16/} the assessment team confirms that the project has been implemented and is being operated as described in the registered PDD^{/1/} and the revised PDD^{/2/}.

It is found that border lines of a few tables in the monitoring report disappear on conversion from word to PDF. However the disappeared lines would re-materialise if the zoom level of document (MR) increases up to 200% or more. The assessment team are able to confirm that in line with paragraph 11 and 12 of EB 70 annex 11 and of latest updated version 3.2 of Guideline for completing the monitoring report form, there is no modification done in the monitoring report, hence accepted.

Discussion of CARs/CLs

CAR #1 (point 1) – In section B.1 of the MR Version 1 dated 27/04/2013; in the table: “Commissioning details for Lalpur site” The date of commissioning for S. No. 25, 26 and 28 was inconsistent with the commissioning certificate. In response, the PP has corrected the dates of commissioning for S. No. 25, 26 and 28 to “2-Oct-11” in section B.1; in the table: “Commissioning details for Lalpur site”. The dates of commissioning are now consistent with the commissioning certificate. Hence Car #1 (point 1) was closed out. For detailed discussions please refer CAR #1 in section 9 of this report.

CAR #1 (point 2) – It was observed during the site visit that at the Enercon sub-station at Lalpur and Kutch sites the electricity is stepped up to 66kV and 220kV respectively. Hence the PP was requested to clarify the appropriateness of the following statement in Section B.1 of the MR Version 1 dated 27/04/2013: “At the Enercon sub-station the electricity is stepped up to 132 kV”. In response, the PP has deleted the following statement in Section B.1 of the MR Version 2: “At the Enercon sub-station the electricity is stepped up to 132 kV”. This is appropriate, since the statement was incorrect. Hence CAR #1 (point 2) was closed out. For detailed discussions please refer CAR #1 in section 9 of this report.

CAR #1 (point 3) – The entire project description and monitoring was described in the MR Version 1 dated 27/04/2013 in future tense as mentioned in the registered PDD. In response, the PP has correctly revised the project description and monitoring, using the proper tense, wherever relevant. This has been checked and is accepted. Hence CAR #1 (point 3) was closed out. For detailed discussions please refer CAR #1 in section 9 of this report.

CAR #1 (point 4) – The notations of the parameters in section D.1 of the MR Version 1 dated 27/04/2013 were inconsistent with the notations mentioned in section B.6.2 of the registered PDD. In response, the PP has revised the notations of the parameters in section D.1 of the MR Version 2 to make it consistent with the notations mentioned in section B.6.2 of the registered PDD. Hence CAR #1 (point 4) was closed out. For detailed discussions please refer CAR #1 in section 9 of this report.

CAR #1 (point 5) – The difference between the estimated and actual values of emission reductions was not justified in section E.6 of MR Version 1 dated 27/04/2013 with objective evidence. In response, the PP has revised the justification for the difference between the estimated and actual values of emission reductions in section E.6 of MR Version 2. The difference has been justified giving reference to the actual PLF attained during the current monitoring period and the PLF considered during the validation. This justification is objective and appropriate. Hence CAR #1 (point 5) was closed out. For detailed discussions please refer CAR #1 in section 9 of this report.

CAR #4 (point 1) – In section C of the MR Version 3, the Layout of Metering arrangement for the project activity installed at Kutch site mentions Lalpur site. In response, the PP has replaced the word “Lalpur” by “Kutch”. This is correct since the metering diagram describes the Kutch site. Hence CAR #4 (point 1) was closed out.

CAR #4 re-opened due to following issues:

- i. PP did not submit revised PDD in VVS format
- ii. Page number 1 of MR was not consistent with MR template

In response the PP has provided the revised PDD^{/2/} in VVS format, the same is checked and found to be acceptable. It is confirmed that the PDD is materially the same as the information in the registered PDD. The changes that are the subject of the request for approval are to be highlighted in track changes in the revised PDD.

Also clarified that additional row added at page one in line with paragraph 12 of EB 70 annex 11, the same is found to be satisfactory, hence CAR #4 was closed. For detailed discussions please refer CAR #4 in section 9 of this report.

3.2 Post registration changes

The following post registration changes have been carried out:

1. The calibration frequency of the meters has been revised
2. A correction has been made in the terminology used to refer to the main meter and check meter

3. A statement which has been repeated in the QA/QC procedures has been deleted

The above changes do not require prior approval as per Appendix 1 of the CDM Project Standard (EB 70 Annex 2). These changes have been assessed and described in detail in the further sections below.

3.2.1 Temporary deviations from registered monitoring plan or applied methodology

There are no temporary deviations from registered monitoring plan or applied methodology^{/5/}. It was verified and confirmed from the registered PDD^{/1/}; the applied methodology^{/5/} and the on-site verification.

3.2.2 Corrections

The PP has made the following corrections in the revised PDD version 6 dated 13/06/2013.

1. The PP has deleted the following statement in section B.7.2 of the PDD since this statement has been repeated twice "The apportioning procedure is performed by GEDA personnel based on the meter reading taken at cluster meter at project site & GETCO meter installed at Enercon sub-station.". This is just a deletion of repetitive information and does not affect the project design.
2. The registered PDD correctly mentioned that there are two meters (main and check) at the sub-station. This was verified during the site visit. It was observed during the site visit that both the main and check meters have been installed by GETCO and the terminology used to refer to the main meter is ABT meter and check meter is GETCO meter. This was inconsistent with the registered PDD and MR Version1 dated 27/04/2013 which referred to the main meter as the GETCO meter. In the revised PDD, the PP has correctly referred to the main meter as the ABT meter and the check meter as the GETCO meter. This correction in the terminology of the meters, has been made in section B.7.1; B.7.2 and Annex 4 of the revised PDD. This correction does not affect the project design.
3. The diagrams indicating the layout of the metering arrangement in the MR Version 1 and registered PDD indicates that the meters are present on the transformer while it was observed during the site visit that the meters are present on line 1 and line 2. Also lines 1 and line 2 was not indicated in both the metering arrangement diagrams. In Section B.7.2 of the revised PDD the PP has correctly revised the diagrams indicating the metering arrangement. The PP has now mentioned the terms line 1 and line 2 in the diagrams. The diagrams also correctly indicate that the meters are present on line 1 and line 2 at the sub-station. This correction to the project information does not affect the design of the project activity.
4. In section B.7.2 of the revised PDD, the PP has changed ISO 9001:2000 to ISO 9001:2008 to reflect the latest certification received by the O&M contractor; Enercon. This is just an update in the certification and does not affect the project design.

The above described corrections to the information in the registered PDD^{/1/} are in line with the actual scenario observed at the site and represent the current scenario at the time of submission of the revised PDD^{/2/}. This is in line with paragraph 257-259 of the VVS version 3.0^{/16/}. The assessment team confirms that these changes do not affect the project design and hence do not require prior approval as per paragraph 1 of Appendix 1 of Project Standard version 3.0^{/19/}.

Discussion of CARs/CLs

CAR #3 (point 2) – It was observed during the site visit that both the main and check meters have been installed by GETCO and the terminology used to refer to the main meter is ABT meter and check meter is GETCO meter. This was inconsistent with the registered PDD and MR Version1 dated 27/04/2013 which refers to the GETCO meter as the main meter. In response, the PP has revised the MR and has submitted a revised PDD to correctly indicate that terminology used for the main meter is ABT meter and the check meter is GETCO meter. This is consistent with the observation on the site. The registered PDD correctly mentions that there are two meters (main and check) at the sub-station. This has been verified during the site visit. The PDD refers to the main meter as the GETCO meter which is incorrect. In the revised PDD, the

PP has correctly referred to the main meter as the ABT meter and the check meter as the GETCO meter. This correction to the project information does not affect the design of the project activity. Hence as per paragraph 1 of appendix 1 of EB 70, Annex 2 (Project Standard), this correction in the project information does not require prior approval by the board. Hence, accepted and CAR #3 (point 2) was closed out. For detailed discussions please refer CAR #3 in section 9 of this report.

CAR #3 (point 3) – The term ABT meter (i.e. the main meter) present at the site was not reflected in the registered PDD and the MR Version 1 dated 27/04/2013. In response, the PP has correctly revised the PDD and the MR to reflect the term ABT meter (i.e. the main meter) present at the site. The PP has also indicated this change in section B.2 of the MR. Hence CAR #3 (point 3) was closed out. For detailed discussions please refer CAR #3 in section 9 of this report.

CAR #3 (point 4) – The diagrams indicating the layout of the metering arrangement (MR and registered PDD), indicated that the meters are present on the transformer while it was observed during the site visit that the meters are present on line 1 and line 2. Also, the lines 1 and line 2 was not indicated in both the metering arrangement diagram. In response, the PP has correctly revised the diagrams indicating the layout of the metering arrangements in the PDD and the MR. The diagrams now correctly indicate that the meters are present on line 1 and line 2 at the sub-station. This correction to the project information does not affect the design of the project activity. Hence as per paragraph 1 of appendix 1 of EB 70, Annex 2 (Project Standard), this correction in the project information does not require prior approval by the board. This correction has been indicated in section B.2 of the MR. Hence CAR #3 (point 4) was closed out. For detailed discussions please refer CAR #3 in section 9 of this report.

3.2.3 Permanent changes from registered monitoring plan or applied methodology

The registered PDD mentions that the meters will be calibrated and tested once in a year. In the revised PDD the PP has mentioned that the meters will be tested and calibrated once in three years.

The notification^{/10/} dated 21/02/2011 issued by the state utility states that – “As per the provision of the relevant code, all meters are to be tested at least once in five years, unless any problem is observed. However as per the GUVNL, the ABT meters will have to be tested once in 3 years.” This was verified through the letter^{/13/} issued by the state utility to the O&M contractor (Enercon) stating that “this is to clarify that all meters at the power evacuation sites are calibrated and tested once in a period of 3 (three) years”. This letter has been specifically written by the state utility to clarify the “ABT meter testing/calibration frequency for wind farms”. Hence it is observed from the guidelines issued by the state utility that the meters will be tested/calibrated once in 5 years and the ABT meters will be tested/calibrated once in three years.

The national guidelines issued by the Central Electricity Authority, Ministry of Power, Government of India Notification No. 502/70/CEA/DP&D dated 17/03/2006^{/17/} which is considered as national standard, mentions that “All interface meters shall be tested at least once in five years.” The PPA signed specifically for this project activity between the state utility and the PP also states in section 7.2 paragraph (iv) that “All the main and check meters shall be calibrated at least once in a period of three years”. Hence, the calibration frequency of once in 3 years for the meters is considered appropriate.

Section 7.2 paragraphs (i) and (iii) of the PPA, signed specifically for this project activity, states that the meters shall be sealed in the presence of the representative of GETCO and that any meter seal shall be broken only by the representative of GETCO whenever the metering systems is to be inspected, tested, adjusted, repaired or replaced. This confirms that the meters are sealed and in control of the state utility who calibrates/tests the meters. Hence it is not possible for the PP to calibrate the meters at a frequency less than that specified by the state utility. Hence the revised calibration frequency of “once in three years” is appropriate.

Therefore it is confirmed that the calibration frequency of the meters are not in control of the PP. Hence as per paragraph 5(a) of the Project Standard version 3.0^{/19/} this change does not require prior approval of the board and will be submitted along with the request for issuance for this monitoring period.

In line with the guidelines prescribed under paragraph 280 of VVS version 03, the assessment team able to confirm that:

(a) The proposed revisions ensure that the level of accuracy and completeness in the monitoring and verification process is not reduced as a result of the revision.

(b) The proposed revisions are in accordance with the monitoring methodology ACM 0002 Version 13.

A revised PDD^{/2/} reflecting this permanent change in the monitoring system is being submitted as per procedure. This is also in line with the paragraph 267 of VVS version 3.0^{/16/}.

Discussion of CARs/CLs

CAR #2 (point 2) – The installation certificates of the main meter (ABT meter) were not submitted during the site visit. In response, the PP has submitted the meter test certificates (Lalpur site) and the meter installation certificates (Kutch site) of the main meter (ABT meter). The dates mentioned in the MR are consistent with the submitted documents. However, the dates of meter testing do not cover the entire monitoring period. Hence, for the current monitoring period the PP has applied the error factor of 0.4% for the delay in calibration. This is conservative and therefore accepted. The PP has also submitted a revised PDD in which the calibration frequency has been changed to ‘once in three years’. This revision in the PDD has been assessed and described above. Hence CAR #2 (point 2) was closed out. For detailed discussions please refer CAR #2 in section 9 of this report.

3.2.4 Changes to project design of registered project activity

There are no changes to the project design of the registered project activity or applied methodology^{/5/}. It was verified and confirmed from the registered PDD^{/1/}, revised PDD^{/2/} and on-site verification.

3.2.5 Changes to start date of crediting period

There is no change to the start date of the crediting period. It was verified and confirmed from the UNFCCC project webpage^{/6/}.

3.3 Remaining Issues, CAR's, FAR's from Previous Validation or Verification

This is the first verification of this project activity. The validation report^{/7/} was checked to confirm that there are no outstanding issues from the validation of the project activity.

3.4 Completeness and accuracy of Monitoring

3.4.1 Verification of monitoring of parameters

The project has been registered with the “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” ACM0002 version 13.0.0 as per the registered PDD. In compliance with the CDM guidelines, the project is being verified against ACM0002 version 13.0.0, dated 11/05/2012^{/5/}. The assessment team verified the registered monitoring plan against the applied methodology^{/5/}, and confirms that the monitoring plan of the registered PDD^{/1/} and revised PDD^{/2/} is in accordance with the approved methodology^{/5/} applied by the project activity.

The monitoring parameter relevant to this project activity listed in the applied methodology^{/5/} is:

$EG_{\text{facility},y}$ – Quantity of net electricity generation supplied by the project plant/unit to the grid in year y

The monitoring parameters defined in the registered^{/1/} and revised PDD^{/2/} is:

$EG_{\text{facility},y}$ – Quantity of net electricity generation supplied by the project plant/unit to the grid in year y

As per the applied methodology $EG_{\text{facility},y} = EG_{PJ,y}$. This has been correctly mentioned in section B.6.1 of the registered PDD.

The parameter $EG_{\text{facility},y}$ is calculated by the state utility using an apportioning procedure described in section C of the MR^{/3/}; the registered^{/1/} and revised PDD^{/2/} (sections B.7.1 and B.7.2). The calculation is carried out using the directly measured values of import and export measured at the substation meters (main and check) and cluster meters present at the site. This procedure has been checked and confirmed with the representatives of the O&M provider at the site. This value is conveyed to the PP through the monthly “Certificate for Share of Electricity”^{/11/} issued by GETCO to each WTG owner. This was confirmed through the PPA^{/15/} signed with the state utility specifically for this project activity.

This parameter is used for the emission reduction calculations and the values are sourced directly from the monthly certificate^{/11/} for the share of electricity. The PP has reported the values from the monthly certificates^{/11/} in the emission reduction spreadsheet^{/4/}. The values have been checked against the original

certificates^{/11/} and are found to be consistent. The value of this parameter has also been checked against the monthly invoices^{/12/} raised by the PP and are found to be consistent. The value of this parameter for the current monitoring period is 36,635.433 MWh. This value has been derived after applying the error due to delay in calibration. The value prior to applying the calibration error was 36,782.563 MWh. This value was found to be lower than the controller meter readings, which is appropriate and this difference is due to transmission losses.

It was observed during the site visit that there are a number of WTGs connected to the sub-station meters. Hence, to calculate the net electricity exported by the WTGs of the project activity alone, the state electricity utility uses an apportioning procedure which has been correctly described in section C of the MR^{/3/} and the registered PDD^{/4/} and revised PDD^{/2/} (section B.7.1 and B.7.2). This was verified by interviewing the staff at the sub-station and the officials of the state electricity utility. This procedure is carried out by the state utility and the PP has no role in this calculation. It was confirmed from the representatives of the O&M provider during the site visit, that the procedure to derive the electricity exported to the grid by each WTG owner is in control of the state utility. The PP has no control on the same. This was also confirmed through the "Certificate for Share of Electricity"^{/11/} which mentions that share of wind farm in the electricity received at the sub-station is computed by GEDA and that the certificate is issued by the GETCO based on the submissions of GEDA. Hence, the monitoring plan of the registered project is in accordance with the applied methodology^{/5/}.

The Share certificate issued by GETCO, is prepared and endorsed by an external government agency i.e. the State Electricity Board and the PP has no influence in the entire procedure. Hence the data issued by the state electricity board through the Share certificate is considered to be authentic.

A comparison between the requirement of the methodology^{/5/}, registered/revised monitoring plan^{/1& 2/} and actual implementation for the monitored parameter is provided in the table below:

Monitoring Report, onsite checks Registered and revised PDD Monitoring Plan & Approved Methodology	Requirement in the applicable methodology and relevant EB Documents	Requirement in the registered and revised PDD monitoring plan	Implementation of the project	Conclusion on the compliance of the implementation with the monitoring plan & applicable methodology.
Data/Parameter	EG _{facility,y}	EG _{facility,y}	EG _{facility,y}	In compliance
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y	In compliance
Measured/Calculated /Default	Measured	Calculated	Calculated	In compliance The apportioning procedure used by GEDA to calculate this parameter using directly measured values has been verified in the paragraphs above this table.
Source of data	Electricity meter	Share certificate issued by GETCO	Share certificate issued by GETCO	
Monitoring equipment	Electricity meter	Electricity meter (Used by state utility to measure import and export values used in the apportioning procedure)	Electricity meter (Used by state utility to measure import and export values used in the apportioning procedure)	
Measuring/Reading/ Recording frequency	Continuous measurement and at least monthly recording	Continuous measurement and Monthly recording The meters are capable of continuous measurement. The share certificate issued	Continuous measurement and Monthly recording The meters are capable of continuous measurement. The share certificate issued	In compliance

		by GETCO records this parameter on a monthly basis.	by GETCO records this parameter on a monthly basis.	
Calculation method (if applicable)	Not Applicable	The net electricity supplied to the grid is calculated using an apportioning procedure described in section B.7.2 of the registered PDD.	The net electricity supplied to the grid is calculated using an apportioning procedure described in section C of the MR for the current monitoring period.	In compliance The apportioning procedure used to calculate this parameter has been verified in the paragraphs above this table.
QA/QC procedures	Cross check measurement results with records for sold electricity	This parameter is calculated from the measured values and QA/QC procedure for the measured values is provided in relative sections.	This parameter is calculated from the measured values and QA/QC procedure for the measured values is provided in relative sections.	In compliance

In summary, the actual monitoring for $EG_{\text{facility},y}$ is in compliance with the applied methodology^{/5/} and registered/revised monitoring plan^{/1 & 2/}.

In accordance with paragraphs 233-236 of the VVS version 03.0^{/16/}, the assessment team confirms that the actual monitoring activities observed on site are in compliance with the registered monitoring plan^{/1/}. The applicable parameters stated in the registered/revised monitoring plan^{1 & 2/} and the applied methodology^{/5/} have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the registered monitoring plan^{/1/}. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameter to be monitored, including its values in the final version of the MR^{/3/} have been correctly reported and confirmed by the assessment team.

Based on the above discussion, the assessment team is of the opinion that the monitoring plan of the registered project is in accordance with the applied methodology^{/5/} and registered/revised Monitoring plan^{/1&2/}.

Based on the requirements of paragraph 229 to 232 of the VVS version 03.0^{/16/} the assessment team confirms that the registered/revised monitoring plan is in compliance with the monitoring methodology^{/5/}.

3.4.2 Verification of implementation of sampling plan

Not Applicable.

3.5 Accuracy of Equipment

The project activity metering has been physically inspected during the site visit. The details of monitoring equipments involved in the project activity and their calibration dates^{/9/} are mentioned in Section C of the MR^{/3/} and are summarised in the tables below. All the cluster meters are of Secure make; accuracy class of 0.2s and a calibration frequency of once in three years. The meter make of the sub-station meters are mentioned in the table below; their accuracy class is 0.2s and calibration frequency is once in three years.

Cluster Meters (Kutch Site)

Sr. No.	Meter Serial No.	Date of last calibration	Sr. No.	Meter Serial No.	Date of last calibration
1	GJU64407	24-Dec-11	5	GJU64406	24-Dec-11
2	GJU64650	29-Dec-11	6	GJU65845	30-Apr-12
3	GJU900077	7-Jan-13	7	GJU65846	30-Apr-12
4	GJU64652	29-Dec-11		-	-

Cluster Meters (Lalpur Site)

Sr. No.	Meter Serial No.	Date of last calibration	Sr. No.	Meter Serial No.	Date of last calibration
1	GJU62414	30-Jun-11	8	GJU62405	30-Jun-11
2	GJU62406	30-Jun-11	9	GJU62463	30-Jun-11
3	GJU61312	18-Dec-10	10	GJU62416	30-Jun-11
4	GJU61318	5-Feb-11	11	GJU62411	30-Jun-11
5	GJU61319	5-Feb-11	12	GJU60957	3-Sep-10
6	GJU61308	18-Dec-10	13	GJU62415	30-Jun-11
7	GJU62457	5-Jul-11	14	GJU62413	30-Jun-11

Sub-station meters

Serial No.	Make	Date of last calibration	Due date of calibration
GJ0947-A	L&T	30-Mar-11	30-Mar-14
GJU62417	Secure	28-Aug-12	28-Aug-15
GJ0950-A	L&T	30-Mar-11	30-Mar-14
GJU62418	Secure	6-Jul-12	6-Jul-15
GJ0978-A	L&T	10-Dec-11	10-Dec-14
GJU63159	Secure	2-Jul-12	2-Jul-15
GJ0979-A	L&T	10-Dec-11	10-Dec-14
GJU63158	Secure	2-Jul-12	2-Jul-15

The above meter details have been verified through the following means:

- Physical inspection of the meters during the site visit
- Interviewing the staff at the sub-station
- The CMS of the O&M service provider located at the site
- Calibration certificates^{/9/}

The installation and working condition of the meters were checked during the on-site inspection and it was found to be satisfactory. It is evident from the above table that calibration for all monitoring equipment involved in the project activity are valid for current monitoring period and there is no delay in calibration as per the calibration frequency mentioned in the revised PDD.

These meters are duly approved, installed, tested, sealed and in the custody of the state utility. The PP has no control over the same. This was verified as discussed in section 3.2.3.

CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006^{/17/} which is considered as national standard mentions that "All interface meters shall be tested at least once in five years." Hence, the calibration frequency of once in 3 years, mentioned in the revised PDD for the meters is appropriate. The calibration frequency has been checked against the notifications^{/10/ /13/} issued by the state utility. The calibration frequency is also consistent with the revised PDD^{/2/}. The same notification also mentions that for voltage of 650 V up to 33 kV, 0.5s accuracy class or above is recommended. Hence, the accuracy classes of 0.2s for the energy meters installed at the project activity site are found to be appropriate.

Since the registered PDD mentions that the calibration frequency will be annual, while it actually is once in three years, the PP has conservatively applied an error factor of 0.4% to the value of net generation

mentioned in the certificate of share of electricity issued by the state utility. Since the PP does not have access to the calculations to arrive at the net value hence the application of error to the net value mentioned in the certificate is appropriate. As per paragraph 238 (a) of the VVS Version 3.0 the error factor has to be applied to the measured values. Hence, the application of 0.4% error to net value (0.2% for import and 0.2% for export) is conservative and appropriate. The PP has correctly applied the error factor in the emission reduction excel spreadsheet.

The assessment team has already verified above, that the meters are not in control of the PP. It is also observed that the PP receives payment, for the electricity supplied to the grid, from the state utility (which is a Government Organisation and a 3rd party with respect to this CDM project). This electricity supplied is obtained from the apportioning calculations carried out by GEDA using directly measured values at the energy meters. Hence the state utility ensures that the energy meters are in proper working condition, since it has to make payments based on these meter readings.

Based on the above mentioned means of verification, the assessment team confirms that:

- The meter details are correctly mentioned in the MR^{3/}
- The meter details are consistent throughout all verified documents
- The entire metering system is in the custody of the state utility. The PP has no control on the same
- The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the registered/revised monitoring plan^{1 & 2/}.
- The accuracy of the equipment used for monitoring is in accordance with the relevant guidance provided by the CDM Executive Board
- The monitoring equipment are controlled and calibrated in accordance with the monitoring plan in the revised PDD^{2/}.

As per paragraph 234 (c) to (e) of the VVS, version 03.0^{16/}, the verification team confirms that

- The equipment used for monitoring is in accordance with the relevant guidance provided by the CDM Executive Board and it is controlled and calibrated in accordance with the monitoring plan
- Monitoring results are consistently recorded as per approved frequency
- Quality assurance and quality control procedures have been applied in accordance with the monitoring plan

Discussion of CARs/CLs

CAR #2 (point 1) – All meters (cluster meters and main meters i.e. ABT meters) were not reported in the table in section C of the MR Version 1 dated 27/04/2013. In response, the PP has reported all meters (cluster meters and main meters i.e. ABT meters) in the table in section C of the MR. The meter details are consistent with the observations during the site visit. Hence accepted and CAR #2 (point 1) was closed out. For detailed discussions please refer CAR #2 in section 9 of this report.

CAR #2 (point 3) – The PP was requested to clarify if the dates mentioned in the table column with header “2012” in section C of the MR Version 1, are the dates of meter testing or calibration. In response, the PP has clarified that the dates mentioned in the table with meter details in section C of the MR are dates of meter testing. This is consistent with the meter test certificates submitted by the PP. Hence accepted and CAR #2 (point 3) was closed out. For detailed discussions please refer CAR #2 in section 9 of this report.

CAR #3 (point 1) – The metering arrangement at the sub-station was not clearly mentioned in section C of MR Version 1 dated 27/04/2013. In response, the PP has revised the metering description in section C of the MR to reflect the actual metering arrangement at the sub-station i.e. a main meter (ABT meter) and check meter (GETCO meter) each on line 1 and line 2 at both the sub-stations. This is consistent with the metering arrangement observed at the sub-station during the site visit. Hence CAR #3 (point 1) was closed out. For detailed discussions please refer CAR #3 in section 9 of this report.

3.6 Summary of compliance with the calibration frequency requirements for measuring instruments.

As per the monitoring plan in the revised PDD^{/2/} the meters are to be tested and calibrated once in three years. This frequency has been followed for the current monitoring period. Hence the assessment team has confirmed that the testing of the meters cover the entire monitoring period. The meter calibration reports^{/9/} have been checked to confirm that the errors observed were within permissible limits.

There is no delay in meter testing during the current monitoring period. The meter test certificates^{/9/} have been checked to confirm the same. This is in line with the paragraph 243 of VVS version 3.0^{/16/}.

Discussion of CARs/CLs

CAR #4 (point 2) – The PP was requested to clarify the appropriateness of ‘Guidelines for Assessing Compliance with the Calibration Frequency Requirements’ – Annex 60 to EB 52 for VVS track projects used in section C of the MR Version 3. In response, the PP has revised the reference of EB 52 Annex 60 to the VVS Version 3.0 in section C of the MR. This is appropriate since it is the latest available guideline for VVS track projects and has replaced the previous guideline (EB 52 Annex 60). Hence CAR #4 (point 2) was closed out. For detailed discussions please refer CAR #4 in section 9 of this report.

CAR #4 (point 3) –Section C of the MR Version 3 did not specify why error of 0.4% was applied to net value. In response, the PP has now clarified the usage of 0.4% error in Section C of the MR under footnote 5. The justification provided is appropriate and conservative. Hence accepted and CAR #4 (point 3) was closed out. For detailed discussions please refer CAR #4 in section 9 of this report.

3.7 Accuracy of Emission Reduction Calculations

The calculation of emission reductions in the latest excel spreadsheet^{/4/} submitted by the PP is found to be correct. The details of the reported and the verified values for all parameters are listed in section 4, ‘Calculation of Emission Reductions’.

The parameter $EG_{\text{facility},y}$ is used for the emission reduction calculations. The PP has provided the monthly data for $EG_{\text{facility},y}$ in the ER spreadsheet^{/4/}. This data has been verified as described in section 3.5.1 above. The formulae & method used to calculate the baseline emissions, project emissions and leakage are appropriate and in line with the approved methodology ACM0002 version 13.0.0^{/5/}.

The baseline emission factor has been calculated as per the guidance provided in ACM0002 version 13.0.0^{/5/}. The Grid Emission Factor of 0.94881 tCO₂/MWh has been validated and reported in the registered PDD^{/1/}. This is an ex-ante parameter and remains constant throughout the crediting period.

As per the CER excel spreadsheet^{/4/} submitted by the PP, the net emission reductions for the current monitoring period was verified as 34,757 tCO₂ for the current monitoring period. The difference between the estimated and verified ERs has been discussed under section 3.1 of this report.

According to the assessment in section 3.5, 3.7, 3.11; and as per the requirements of paragraphs 244 to 246 of the VVS version 03.0^{/16/} it has been confirmed by the assessment team that in the final version of the MR and the ER calculation spreadsheet:

- (a) All the data requested for the ER calculation in this monitoring period were monitored and recorded in a complete manner
- (b) All the reported data have been checked against the original data source where they were quoted from
- (c) The methods and formulae for calculation of baseline emissions, project emissions and leakage specified in the registered/revised PDD^{/1 & 2/} have been followed
- (d) The emission factors has been applied correctly in accordance with the registered/revised PDD^{/1 & 2/}.

3.8 Quality of Evidence to Determine Emission Reductions

Critical parameters used for the determination of the Emission Reductions are discussed in section 3.4 above. All the data recorded is in compliance with the monitoring report.

3.9 Management and operational System and Quality Assurance

The companies involved in the project have ISO 9001:2008 quality assurance systems implemented; therefore we can affirm that the management system of the CDM project is in place with the responsibilities properly identified and in place. The CDM co-ordinator and site in-charge for the project activity were interviewed during the site visit to confirm the same.

In order to verify data quality, the Companies involved in the project, work in accordance with a quality assurance procedure, which establishes the operational and management structure implemented.

3.10 Data from External Sources

The baseline emission factor was determined ex-ante and fixed for the entire crediting period as mentioned in section B.6.2 of registered/revised PDD^{/1 & 2/}. Emission factor was calculated by the combined margin approach with 75% and 25% weights for OM & BM respectively, using data available in CO₂ Baseline Database for the Indian Power Sector version 6 published by Central Electricity Authority^{/8/} (CEA).

The value of baseline emission factor used in emission reduction calculations reported in the Monitoring Report for current monitoring period is 0.94881 tCO₂/ MWh. It is found to be consistent with the value of EF mentioned in the registered /revised PDD^{/1 & 2/}. This data is publicly available and verified to be acceptable.

4. Calculation of Emission Reductions

Parameter	Reported Value (MR Version 01 dated 27/04/2013)	Verified Value (MR Version 05 dated 02/08/2013)
EG _{facility,y} (MWh)	36,782.563	36,635.433
Grid Emission Factor (tCO ₂ e/MWh)	0.94881	0.94881

The baseline emissions (BE_y) are calculated as follows:

$$\begin{aligned}
 BE_y &= EG_{\text{facility},y} \text{ (MWh)} \times \text{Grid emission Factor (tCO}_2\text{e/MWh)} \\
 &= 36,635.433 \times 0.94881 \\
 &= 34,760 \text{ tCO}_2\text{e}
 \end{aligned}$$

The actual value obtained from the above calculation of $36,635.433 \times 0.94881$ is 34,760.065 tCO₂e. However, the baseline emissions for the current monitoring period have been calculated by the PP as the sum of the baseline emissions of each month in the current monitoring period and the PP has rounded down the baseline emissions for each month. The summation of these rounded down values is 34,757 tCO₂e. This value is conservative and hence accepted. The detailed calculation of the baseline emissions, provided in the emission reduction spreadsheet, has been verified. Hence,

$$BE_y = 34,757 \text{ tCO}_2\text{e}$$

As per methodology and as described in section B.6.1 of the registered PDD, Project emissions (PE_y) and leakage (LE_y) are zero.

Thus emission reductions are calculated as follow:

$$\begin{aligned}
 ER_y &= BE_y - PE_y - LE_y \\
 &= 34,757 - 0 - 0 \\
 &= 34,757 \text{ tCO}_2\text{e}
 \end{aligned}$$

Emission Reduction:

Period	Reported Value (as per the web hosted MR) tCO ₂ e MR Version 01	Verified Value (as per final MR) tCO ₂ e MR Version 03	If Different, Summary of Issues That Caused the Difference
01/10/2012 to 31/03/2013 (first and last days included)	34,897	34,757	The difference between the reported value and the verified value is due to the applied correction factor discussed under CAR #1 (point 5).
CERs (Up to 31 December 2012 (1st commitment period)	15,015	14,955	

Period	Reported Value (as per the web hosted MR) tCO ₂ e MR Version 01	Verified Value (as per final MR) tCO ₂ e MR Version 03	If Different, Summary of Issues That Caused the Difference
CERs (From 1 January 2013 onwards)	19,882	19,802	

5. Recommendations for Changes in the Monitoring Plan

A permanent change in the monitoring system of the project activity has been made by the PP. The calibration frequency has been changed. This change has been assessed and reported under section 3.2 above.

6. Overview of Results

Assessment Against the Provisions of Decision 17/CP.7:

Is the project documentation in accordance with the requirements of the registered PDD and relevant provision of decision 17/CP.7, EB decisions and guidance and the COP/MOP?

Yes. The results of the compliance assessment are recorded in the verification checklist which is used as an internal report only.

Have on-site inspections been performed that may comprise, inter alia, a review of performance records, interviews with project participants and local stakeholders, collection of measurements, observations of established practices and testing of the accuracy of monitoring equipment?

Yes. Assessment team visited the sites and undertook interviews, collected data, audited the implementation of procedures, checked calibration certificates and checked data, inter alia.

The results of the site visit are recorded in the verification checklist which is used as an internal report only.

The evidences have been checked and collected. The final monitoring report is attached with this verification report.

Has data from additional sources been used? If yes, please detail the source and significance.

Emission Factor of the Grid used for emission reduction calculation has been determined ex-ante from version 6 of CO₂ baseline database for the Indian power sector published by Central Electricity Authority (CEA), Ministry of Power, Government of India. The value used is 0.94881 tCO₂/MWh fixed for the entire crediting period. This data is publicly available and verified to be acceptable.

Please review the monitoring results and verify that the monitoring methodologies for the estimation of reductions in anthropogenic emissions by sources have been applied correctly and their documentation is complete and transparent.

Yes. The monitoring methodology has been correctly applied and the monitoring report and supporting references are complete and transparent.

Have any recommendations for changes to the monitoring methodology for any future crediting period been issued to the project participant?

No.

Determine the reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the CDM project activity, based on the data and information using calculation procedures consistent with those contained in the registered project design document and the monitoring plan.

The data used in anthropogenic emission reduction calculation is consistent with those contained in the registered PDD and monitoring plan. The emission reduction was 50,478 tCO₂ for the period 01/10/2012 to 31/03/2013 (first and last days included) as per the estimation made in the registered PDD. The actual emission reduction has been verified as 34,757 tCO₂ for the same period.

Identify and inform the project participants of any concerns related to the conformity of the actual project activity and its operation with the registered project design document. Project participants shall address the concerns and supply relevant additional information.

"No such non conformity of the actual project activity and its operation with the registered project design document has been observed."

Post monitoring report on the UNFCCC website

Yes, the monitoring report is available at ref. 6484 on the UNFCCC website

<http://cdm.unfccc.int/Projects/DB/DNV-CUK1340349635.01/view>

7. Verification and Certification Statement

SGS United Kingdom Ltd has been contracted by Vish Wind Infrastructure LLP to perform the verification of the emission reductions reported for the CDM project Wind Energy Project in Gujarat UNFCCC Ref. No. 6484 in the period 01/10/2012 to 31/03/2013 (first and last days included) .

The verification is based on the validated and registered project design document and the monitoring report for this project. Verification is performed in accordance with section I of Decision 3/CMP.1, and relevant decisions of the CDM EB and CoP/MoP. The scope of this engagement covers the verification and certification of greenhouse gas emission reductions generated by the above project during the above mentioned period, as reported in the Monitoring Report version 05 dated 02/08/2013.

The management of Vish Wind Infrastructure LLP is responsible for the preparation, calculation and determination of GHG emission reductions from the project. The development and maintenance of records and reporting procedures are in accordance with the monitoring report.

It is our responsibility to express an independent GHG verification opinion on the GHG emissions and on the calculation of GHG emission reductions from the project for the period 01/10/2012 to 31/03/2013 (first and last days included) based on the reported emission reductions in the Monitoring Report version 05 dated 02/08/2013 for the same period.

Based on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these, SGS planned and performed our work to obtain the information and explanations that we considered necessary to provide sufficient evidence for us to give reasonable assurance that this reported amount of GHG emission reductions for the period is fairly stated.

SGS confirms that the project is implemented as described in the validated and registered project design documents. Based on the information we have seen and evaluated, we confirm the following:

Project Title:	Wind Energy Project in Gujarat
UNFCCC Reference Number:	6484
Registered PDD and Approved Used for Verification:	Version 04 dated 04/09/2012 Revised PDD Version 06 dated 23/07/2013 (Submitted for approval along with the request for issuance)
Methodology Used for Verification:	ACM0002 version 13.0.0 dated 11/05/2012.
Applicable Period:	01/10/2012 to 31/03/2013 (first and last days included)
Total GHG Emission Reductions Verified:	34,757 tCO ₂ e

Signed on behalf of the Verification Body by Authorised Signatory

Signature:



Name: Siddharth Yadav

Date: 09/08/2013

8. Document References

1.	Registered PDD version 04 dated 04/09/2012 (Project UNFCCC ref.No-6484)
2.	Revised PDD <ul style="list-style-type: none"> a. Version 05 dated 29/05/2013 b. Version 06 dated 13/06/2013 c. Version 06 dated 23/07/2013 (PP has revised the PDD in VVS format updating the date but the version number kept the same as version 06)
3.	Monitoring report <ul style="list-style-type: none"> a. Version 01 dated 27/04/2013 b. Version 02 dated 04/06/2013 c. Version 03 dated 13/06/2013 d. Version 04 dated 05/07/2013 e. Version 05 dated 02/08/2013
4.	Emission reduction spreadsheet <ul style="list-style-type: none"> a. Version 01 dated 27/04/2013 b. Version 02 dated 13/06/2013
5.	Methodology - Approved Consolidated Methodology ACM0002, Version 13.0.0 dated 11/05/2012 (web link: http://cdm.unfccc.int/methodologies/DB/UB3431UT9I5KN2MUL2FGZXZ6CV71LT)
6.	CDM Project Webpage (UN No. 6484) (Web link: http://cdm.unfccc.int/Projects/DB/DNV-CUK1340349635.01/view)
7.	CDM Validation Report No. 2012–9065 Revision 02 dated 04/09/2012 issued by DNV (Available at project web page, UN No-6484)
8.	CEA database (Version 6.0) (Web link: http://www.cea.nic.in/reports/planning/cdm_co2/cdm_co2.htm)
9.	Meter test / installation certificates <ul style="list-style-type: none"> a. Cluster Meters – Test certificates for all 21 meters issued by Secure Meters Limited b. Sub-station meters (Lalpur Site) <ul style="list-style-type: none"> i. Line 1 – Main meter (GJ0947-A) Test report issued by Larsen & Toubro Limited with date of testing 30/03/2011 ii. Line 1 – Check meter (GJU62417) Installation Checking sheet issued by PGVCL with date of testing 28/08/2012 iii. Line 2 – Main meter (GJ0950-A) Test report issued by Larsen & Toubro Limited with date of testing 30/03/2011 iv. Line 2 – Check meter (GJU62418) Installation Checking sheet issued by PGVCL with date of testing 06/07/2012 c. Sub-station meters (Kutch Site) <ul style="list-style-type: none"> i. Line 1 – Main meter (GJ0978-A) Meter Installation certificate jointly signed by GETCO; PGVCL; GEDA and Enercon with date of meter testing 10/12/2011 ii. Line 1 – Check meter (GJU63159) Meter test report issued by PGVCL with date of testing 02/07/2012 iii. Line 2 – Main meter (GJ0979-A) Meter Installation certificate jointly signed by GETCO; PGVCL; GEDA and Enercon with date of meter testing 10/12/2011 iv. Line 2 – Check meter (GJU63158) Meter test report issued by PGVCL with date of testing 02/07/2012
10.	Letter issued by GETCO with Ref No. ACE(R&C)/SE/Telecom/GSECL/431 dated 21/02/2011 issued by GETCO

11. Monthly Share certificates for electricity produced by wind farm issued by GETCO for the entire monitoring period (01/10/2012 – 31/03/2013)
12. Monthly Invoices for the project activity for the entire monitoring period (01/10/2012 – 31/03/2013)
13. Letter with Ref No. ACE(R&C)/SE/Telecom/ABT Meter/37/10 dated 04/01/2012 issued by GETCO to the O&M contractor
14. Commissioning certificates issued by GEDA (for all 63 WTGs) <ul style="list-style-type: none"> a. GEDA/VISH WIND/PWF/LALPUR/2011-12/2329 dated 19/10/2011 (30 WTGs i.e. 24 MW commissioned on 02/10/2011 and 03/10/2011) b. GEDA/VWILLP/PWF/Kutch/2011-12/147 dated 13/04/2012 (29 WTGs i.e. 23.2 MW commissioned on 31/03/2012) c. GEDA/VWILLP/PWF/Kutch/2011-12/148 dated 13/04/2012 (4 WTGs i.e. 3.2 MW commissioned on 31/03/2012)
15. Power Purchase Agreement between GUVNL and Vish Wind infrastructure LLP <ul style="list-style-type: none"> a. Dated 15/09/2011 for 24 MW b. Dated 30/03/2012 for 26.4 MW
16. Clean Development Mechanism Validation and Verification Standard version 03.0 dated 23/11/2012 (Web link: http://cdm.unfccc.int/Reference/Standards/accr_stan02.pdf)
17. CEA Notification No. 502/70/CEA/DP&D dated 17/03/2006 (Web link: http://www.powermin.nic.in/whats_new/pdf/Metering_Regulations.pdf)
18. MONITORING REPORT FORM (F-CDM-MR) version 03.1 dated 02/01/2013 (Web link: http://cdm.unfccc.int/Reference/PDDs_Forms/Issuance/iss_form07.pdf)
19. Clean Development Mechanism Project Standard version 03.0 dated 12/04/2013
20. Gujarat Electricity Regulatory Commission Distribution Code dated 25/08/2004 www.pgvcl.com/regulations/DistributionCode.pdf

Key changes in the final MR against the webhosted version of MR

MR Version	Date of Revision	Main changes reason for Revision
01	27/04/2013	<ul style="list-style-type: none"> • Webhosted MR
02	04/06/2013	<ul style="list-style-type: none"> • Title page, Section B.1; D.1 and E.6 were revised due to CAR #1. • Section C was revised due to CAR #2 • Section C and D.2 were revised due to CAR #3
03	13/06/2013	<ul style="list-style-type: none"> • Title page and Section C were revised due to CAR #2 • Section B.2, E.1 and E.4 were revised due to CAR #3
04	05/07/2013	<ul style="list-style-type: none"> • Section C was revised due to CAR #4
05	02/08/2013	<ul style="list-style-type: none"> • Footnote at page number 1 added against CAR #4

9. Findings Overview

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	4	0	0

Date:	24/05/2013	Raised by:	Assessment Team		
Type:	CAR	Number:	#1	Reference:	Checklist
Lead Assessor Comment:			Date: 24/05/2013		
<div>1. In section B.1 of MR Version 1 dated 27/04/2013; in the table: “Commissioning details for Lalpur site” The date of commissioning for S. No. 25, 26 and 28 is inconsistent with the commissioning certificate.</div> <div>2. It was observed during the site visit that at the Enercon sub-station at Lalpur and Kutch sites the electricity is stepped up to 66kV and 220kV respectively. Please clarify the appropriateness of the following statement in Section B.1 of the MR Version 1 dated 27/04/2013: “At the Enercon sub-station the electricity is stepped up to 132 kV”.</div> <div>3. The entire project description and monitoring has been described in the MR Version 1 dated 27/04/2013 in future tense as mentioned in the registered PDD. Please clarify.</div> <div>4. The notations of the parameters in section D.1 of the MR Version 1 dated 27/04/2013 are inconsistent with the notations mentioned in section B.6.2 of the registered PDD.</div> <div>5. The difference between the estimated and actual values of emission reductions has not been justified in section E.6 of MR Version 1 dated 27/04/2013 with objective evidence.</div>					
Project Participant Response:			Date: 29/05/2013		
<div>1. Commissioning dates has been corrected in section B.1 for S. No. 25, 26 & 28.</div> <div>2. Correction has been made under section B.1. of revised MR.</div> <div>3. Complete MR has been corrected to remove the future tense.</div> <div>4. Notations of the parameters in section D.1 of the MR has been corrected in line with the notations mentioned in section B.6.2 of the registered PDD.</div> <div>5. Justification on difference between the estimated and actual values of emission reductions has been provided in section E.6 of revised MR.</div>					
Documentation Provided as Evidence by Project Participant:					
Revised MR version 2.0					
Information Verified by Lead Assessor:					
The revised MR version 2 dated 04/06/2013 have been checked for the revisions made by the PP					
Reasoning for not Acceptance or Acceptance and Close Out:					

1.	In the MR Version 2, the PP has corrected the dates of commissioning for S. No. 25, 26 and 28 to “2-Oct-11” in section B.1; in the table: “Commissioning details for Lalpur site”. The dates of commissioning are now consistent with the commissioning certificate. Hence accepted and closed out.
2.	The PP has deleted the following statement in Section B.1 of the MR Version 2: “At the Enercon sub-station the electricity is stepped up to 132 kV”. This is appropriate, since the statement was incorrect. Hence accepted and closed out.
3.	The PP has correctly revised the project description and monitoring using the proper tense, wherever relevant. This has been checked and is accepted. Hence closed out.
4.	The PP has revised the notations of the parameters in section D.1 of the MR Version 2 to make it consistent with the notations mentioned in section B.6.2 of the registered PDD. Hence closed out.
5.	The PP has revised the justification for the difference between the estimated and actual values of emission reductions in section E.6 of MR Version 2. The difference has been justified giving reference to the actual PLF attained during the current monitoring period and the PLF considered during the validation. This justification is objective and appropriate. Hence closed out.
CAR #1 is closed out.	
Acceptance and Close out by Lead Assessor: Closed	
Date: 10/06/2013	

Date:	24/05/2013	Raised by:	Assessment Team		
Type:	CAR	Number:	#2	Reference:	Checklist
Lead Assessor Comment:			Date: 24/05/2013		
Please clarify the following points related to the meter details mentioned in section C of the MR Version1 dated 27/04/2013:					
1. All meters (cluster meters and main meters i.e. ABT meters) have not been reported in the table.					
2. The installation certificates of the main meter (ABT meter) were not submitted during the site visit.					
3. Please clarify if the dates mentioned in the table column with header “2012” are the dates of meter testing or calibration.					
Project Participant Response:			Date: 29/05/2013		
1. All meters (cluster meters and main meters i.e. ABT meters) have been reported in the table under section C of MR.					
2. The installation certificates of the main meter (ABT meter) are being submitted to DOE along with response.					
3. We would like to clarify to DOE that the dates mentioned in the table column with header “2012” are the dates of meter testing.					
Documentation Provided as Evidence by Project Participant:					
Revised MR version 2.0					
Information Verified by Lead Assessor:					
The revised MR version 2 dated 04/06/2013 have been checked for the revisions made by the PP					
The following meter installation/test certificates were checked:					
1. Meter No. GJ0947A, meter test report issued by L&T (manufacturer) dated 30/03/2011					
2. Meter No. GJ0950A, meter test report issued by L&T (manufacturer) dated 30/03/2011					
3. Meter No. GJ0978A, meter installation report jointly signed (state utility and O&M contractor) dated 07/03/2012					
4. Meter No. GJ0979A, meter installation report jointly signed (state utility and O&M contractor) dated 07/03/2012					
Reasoning for not Acceptance or Acceptance and Close Out:					

<p>1. The PP has now reported all meters (cluster meters and main meters i.e. ABT meters) in the table in section C of the MR. The meter details are consistent with the observations during the site visit. Hence accepted and closed out.</p> <p>2. PP has now submitted the meter test certificates (Lalpur site) and the meter installation certificates (Kutch site) of the main meter (ABT meter). The dates mentioned in the MR are consistent with the submitted documents. However, the dates of meter testing do not cover the entire monitoring period. (The current MP is from 01/10/2012 to 31/03/2013 and the frequency of meter testing is annual as per the registered PDD.) Hence open.</p> <p>3. The PP has clarified that the dates mentioned in the table with meter details in section C of the MR are dates of meter testing. This is consistent with the meter test certificates submitted by the PP. Hence accepted and closed out.</p>	
Acceptance and Close out by Lead Assessor: Open	Date: 10/06/2013
Project Participant Response:	Date: 13/06/2013
<p>2. We would like to submit to DOE that as per the 'Guidelines For Assessing Compliance With The Calibration Frequency Requirements' – Annex 60 to EB 52, Paragraph 4(a), being conservative PP has applied correction factor of -0.4% (0.2% for export and 0.2% for import) for net quantity of electricity generation supplied by the project activity for entire monitoring period (Oct 12 to Mar 13). Also, the calibration frequency is being changed to "once in 3 years", in the revised PDD, as per the notification by the state utility.</p>	
Documentation Provided as Evidence by Project Participant:	
<p>Revised MR, version 3.0 Revised PDD, version 6.0 Letter with Ref No. ACE(R&C)/SE/Telecom/GSECL/431 dated 21/02/2011 issued by GETCO Letter with Ref No. ACE(R&C)/SE/Telecom/ABT Meter/37/10 dated 04/01/2012 issued by GETCO</p>	
Information Verified by Lead Assessor:	
<p>The revised MR version 3 dated 13/06/2013; the revised ER sheet version 2 dated 13/06/2013; and revised PDD Version 6 dated 13/06/2013 have been checked for the revisions made by the PP. The following documents issued by the state utility were checked to confirm the calibration frequency set by the state utility:</p> <ol style="list-style-type: none"> 1. Letter with Ref No. ACE(R&C)/SE/Telecom/GSECL/431 dated 21/02/2011 issued by GETCO 2. Letter with Ref No. ACE(R&C)/SE/Telecom/ABT Meter/37/10 dated 04/01/2012 issued by GETCO 	
Reasoning for not Acceptance or Acceptance and Close Out:	

2.

The PP has revised the frequency of meter testing and calibration to once in three years. This is consistent with the notification dated 21/02/2011 issued by the state utility which states that - As per the provision of the relevant code, all meters are to be tested at least once in five years, unless any problem is observed. However as per the guidelines of GUVNL, the ABT meters will have to be tested once in 3 years. The same has been mentioned in the letter, dated 04/01/2012 issued by GETCO to the O&M contractor, which has been specifically written to clarify the ABT meter testing/calibration frequency for Wind Farms.

The registered PDD states that "All the meters will be calibrated once in a year as per the metering code prevalent in the state of Gujarat." However, as per the letters issued by the state utility the meters are to be calibrated once in five years as per the provisions of the metering code. And the ABT meters will be calibrated once in three years. Also, the meters are sealed and in control of the state utility who calibrates/tests the meters. Hence the calibration frequency of once in three years is correct and appropriate. Hence the revision made by the PP in the revised PDD, regarding the calibration frequency is appropriate and accepted.

For the current monitoring period the PP has applied the error factor of 0.4% for the delay in calibration. As per para 238 (a) of the VVS version 3 the maximum possible error of the instrument has to be applied to the measured values. In this case, the net electricity supplied by the project activity is directly obtained from the share certificate of electricity issued by the state utility. As stated in the registered monitoring plan, the PP does not have access to the measured values which are used by the state utility in arriving at the values in the share certificate. Hence the PP has conservatively applied 0.4% i.e. 0.2% for export and 0.2% for import. This is appropriate. The application of the error factor has been verified in the excel sheet. Hence accepted.

CAR #2 is closed out.

Acceptance and Close out by Lead Assessor: Closed | **Date: 21/06/2013**

Date:	24/05/2013	Raised by:	Assessment Team		
Type:	CAR	Number:	#3	Reference:	Checklist
Lead Assessor Comment:			Date: 24/05/2013		
The registered PDD mentions that the metering points at the sub-stations consist of two meters each. The same has been checked and confirmed during the site visit. Please clarify the following:					
1. The metering arrangement at the sub-station is not clearly mentioned in section C of MR Version 1 dated 27/04/2013.					
2. It was observed during the site visit that both the main and check meters have been installed by GETCO and the terminology used to refer to the main meter is ABT meter and check meter is GETCO meter. This is inconsistent with the registered PDD and MR Version1 dated 27/04/2013 which refers to the GETCO meter as the main meter.					
3. The term ABT meter (i.e. the main meter) present at the site is not reflected in the registered PDD and the MR Version1 dated 27/04/2013.					
4. The diagrams indicating the layout of the metering arrangement (MR and registered PDD) indicates that the meters are present on the transformer while it was observed during the site visit that the meters are present on line 1 and line 2. Also, the lines 1 and line 2 is not indicated in both the metering arrangement diagram.					
Project Participant Response:			Date: 29/05/2013		
1. Metering arrangement at the sub-station has been clearly mentioned in section C of revised MR which includes details of line 1 & 2 along with ABT & GETCO meters.					
2. Inconsistency has been corrected both in revised MR & Revised PDD.					
3. Both MR & PDD has been revised to incorporate the details of ABT meter (i.e the main meter)					
4. Layout of metering arrangement has been revised in both MR & revised PDD to include the details of line 1 & line 2.					
Documentation Provided as Evidence by Project Participant:					

Revised MR, version 2.0 Revised PDD, version 5.0	
Information Verified by Lead Assessor:	
The revised MR Version 2 dated 04/06/2013 and revised PDD Version 5 dated 29/05/2013 have been checked for the revisions made by the PP.	
Reasoning for not Acceptance or Acceptance and Close Out:	
<ol style="list-style-type: none"> 1. The PP has revised the metering description in section C of the MR to reflect the actual metering arrangement at the sub-station i.e. a main meter (ABT meter) and check meter (GETCO meter) each on line 1 and line 2 at both the sub-stations. This is consistent with the metering arrangement observed at the sub-station during the site visit. Hence closed out. 2. The PP has revised the MR and the PDD to correctly indicate that terminology used for the main meter is ABT meter and the check meter is GETCO meter. This is consistent with the observation on the site. The registered PDD correctly mentions that there are two meters (main and check) at the sub-station. This has been verified during the site visit. The PDD refers to the main meter as the GETCO meter which is incorrect. In the revised PDD the PP has correctly referred to the main meter as the ABT meter and the check meter as the GETCO meter. This correction to the project information does not affect the design of the project activity. Hence as per paragraph 1 of appendix 1 of EB 70 Annex 2 (Project Standard), this correction in the project information does not require prior approval by the board. Hence, accepted and closed out. 3. The PP has correctly revised the PDD and the MR to reflect the term ABT meter (i.e. the main meter) present at the site. This is correct, but this correction has not been discussed in section B.2 of the MR. Hence open. 4. The PP has correctly revised the diagrams indicating the layout of the metering arrangements in the PDD and the MR. The diagrams now correctly indicate that the meters are present on line 1 and line 2 at the sub-station. This correction to the project information does not affect the design of the project activity. Hence as per paragraph 1 of appendix 1 of EB 70 Annex 2 (Project Standard), this correction in the project information does not require prior approval by the board. Hence, accepted. However, this correction has not been discussed in section B.2 of the MR. Hence open. 	
Acceptance and Close out by Lead Assessor: Open	Date: 10/06/2013
Project Participant Response:	Date: 13/06/2013
<ol style="list-style-type: none"> 3. The correction has been mentioned under section B.2 of MR. 4. The correction has been mentioned under section B.2 of MR. 	
Documentation Provided as Evidence by Project Participant:	
Revised MR, version 3.0 Revised PDD, version 6.0	
Information Verified by Lead Assessor:	
The revised MR version 3 dated 13/06/2013 and the revised PDD version 6 dated 13/06/2013 have been checked for the revisions made by the PP.	
Reasoning for not Acceptance or Acceptance and Close Out:	
The PP has described the post registration changes in section B.2 of the MR. Hence accepted. CAR #3 closed out.	
Acceptance and Close out by Lead Assessor: Closed	Date: 21/06/2013

Date:	03/07/2013		Raised by:	Assessment Team		
Type:	CAR	Number:	#4	Reference:	TR Comments	
Lead Assessor Comment:				Date: 03/07/2013		
1. Section C of the MR Version 3: Layout of Metering arrangement for project activity installed at Kutch site mentions about Lalpur site.						
2. Please clarify the appropriateness of 'Guidelines for Assessing Compliance with the Calibration Frequency Requirements' – Annex 60 to EB 52 for VVS track projects used in section C of the MR Version 3.						
3. Section C of the MR Version 3 does not specify why error of 0.4% is applied to net value.						

Project Participant Response:	Date: 05/07/2013
1. Correction in layout has been made. 2. Reference of guidance has been corrected in line with VVS. 3. Explanation on application of error of 0.4% has been mentioned under section C of revised MR.	
Documentation Provided as Evidence by Project Participant:	
Revised MR version 4.0.	
Information Verified by Lead Assessor:	
The revised MR Version 4 dated 05/07/2013 has been checked for the revisions made by the PP	
Reasoning for not Acceptance or Acceptance and Close Out:	
1. The Layout of Metering arrangement for project activity installed at Kutch site, in Section C of the MR, has been corrected to mention Kutch instead of Lalpur. This is correct and hence accepted. 2. The PP has revised the reference of EB 52 Annex 60 to the VVS Version 3.0 in section C of the MR. This is appropriate since it is the latest available guideline for VVS track projects and has replaced the previous guideline (EB 52 Annex 60). Hence accepted. 3. The PP has now clarified the usage of 0.4% error in Section C of the MR under footnote 5. The justification provided is appropriate and conservative. Hence accepted.	
CAR #4 closed out	
Acceptance and Close out by Lead Assessor: Closed	Date: 10/07/2013 Re-opened on 23/07/2013 to address comments raised during the completeness check
Lead Assessor Comment:	Date: 23/07/2013
The revised PDD has not been updated to the VVS format. CAR #4 open	
Project Participant Response:	Date: 23/07/2013
PDD has been updated to the VVS format	
Documentation Provided as Evidence by Project Participant:	
PDD_version 6.0 Track mode (VVS)	
PDD_version 6.0 clean mode (VVS)	
Information Verified by Lead Assessor:	
Revised PDD version 6.0 is checked 23/07/2013	
Reasoning for not Acceptance or Acceptance and Close Out:	
Revised PDD submitted in VVS track is found acceptable. But the first page of MR is not consistent with MR template, please clarify. Also on page 7 there is a diagram with parts to the key, however on the diagram all the components are not labelled.	
Acceptance and Close out by Lead Assessor: Open	Date: 03/08/2013
Project Participant Response:	Date: 03/08/2013
We would like to clarify to DOE that additional rows have been added on first page of MR template as per point 12 of MR completion guideline version 3.2. As per point 12, "Tables and their columns in the F-CDM-MR may not be modified or deleted, but rows may be added as needed. Additional appendices may be added." Same explanation has been added in foot note on first page of revised MR. It was missed by mistake, all the components have been labelled at page 7 of MR.	
Documentation Provided as Evidence by Project Participant:	
MR version 5.0, dated 02/08/2013	
Reasoning for not Acceptance or Acceptance and Close Out:	

PP has added additional row to provide information, which is in line with MR completion guidelines, hence accepted. PP has labelled all the points at page number 7, hence issue closed. CAR # 4 is closed out.	
Acceptance and Close out by Lead Assessor: Closed	Date: 03/08/2013

10. Statement of Competence

Name: Ravi Kant
Soni

Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	x

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): TA 1.2 Energy generation from renewable energy sources	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 12/10/2012

Name: Sudeep
Kodialbail

Status

- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): <i>TA 1.2 Energy generation from renewable energy sources</i>	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 06/02/2012

Name: Ahmed
Rekibuddin

Status

- Lead Assessor		- Expert	
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	

Scopes of Expertise

1. Energy Industries (renewable / non-renewable)	
Technical Area(s):	
2. Energy Distribution	
Technical Area(s):	
3. Energy Demand	
Technical Area(s):	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	

Approved Member of Staff by: Siddharth Yadav Date: 02/11/2012

Name: **Vikas Bankar**

Status


- Lead Assessor	x	- Expert	x
- Assessor	x	- Financial Expert	
- Local Assessor	India	- Technical Reviewer	x


Scopes of Expertise


1. Energy Industries (renewable / non-renewable)	x
Technical Area(s): <i>TA 1.2 Energy generation from renewable energy sources</i>	
2. Energy Distribution	x
Technical Area(s): <i>TA 2.1 Electricity distribution TA 2.2 Heat distribution</i>	
3. Energy Demand	x
Technical Area(s): <i>TA 3.1 Energy Demand</i>	
4. Manufacturing	
Technical Area(s):	
5. Chemical Industry	
Technical Area(s):	
6. Construction	
Technical Area(s):	
7. Transport	
Technical Area(s):	
8. Mining/Mineral Production	
Technical Area(s):	
9. Metal Production	
Technical Area(s):	
10. Fugitive Emissions from Fuels (solid, oil and gas)	
Technical Area(s):	
11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride	
Technical Area(s):	
12. Solvent Use	
Technical Area(s):	
13. Waste Handling and Disposal	
Technical Area(s):	
14. Afforestation and Reforestation	
Technical Area(s):	
15. Agriculture	
Technical Area(s):	


Approved Member of Staff by: **Siddharth Yadav** Date: **17/07/2012**

11. Photographic Evidence

Unique reference number: GJ0978-A	Parameter: Electricity import and export
Name of equipment: Energy Meter	Date: 23/05/2013
	

Unique reference number: GJU63159	Parameter: Electricity import and export
Name of equipment: Energy Meter	Date: 23/05/2013
	

Unique reference number: GJ0979-A	Parameter: Electricity import and export
Name of equipment: Energy Meter	Date: 23/05/2013
	

Unique reference number: GJU63158	Parameter: Electricity import and export
Name of equipment: Energy Meter	Date: 23/05/2013
	

Note: Assessment team has checked all the meters involved in the project activity by means of site visit verification and through the calibration certificates. The photographs provided in this section are a representative sample only.

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History

Version	EB Requirement	Nature of revision	Validity
Issue 7	VVS version 03.0	Update to checklist to include VVS procedures	23 rd November 2012
Issue 6	VVs Version 02.0	Update to checklist to include VVS procedures	25 th May 2012
Issue 5.4	VVM Version 01.2	Update to checklist	24 th February 2011