



VOLUNTARY CARBON STANDARD 2007.1

SUPPLEMENTARY VALIDATION REPORT

WIND BASED RENEWABLE ENERGY PROJECT IN GUJARAT

Report No: 8106640805 – 10/99

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Report Title:	Approved by:
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Client:	Project Title:
Gujarat Paguthan Energy Corporation Private Limited (GPEC)	Wind based renewable energy project in Gujarat
Summary:	
Gujarat Paguthan Energy Corporation Private Limited has commissioned the TÜV NORD JI/CDM Certification Program to carry out the supplementary validation of the project "Wind based renewable energy project in Gujarat", with regard to the relevant requirements of VCS 2007.1 Standard. The project activity undertaken by Gujarat Paguthan Energy Corporation Private Limited (GPECL) utilizes the kinetic energy present in wind to generate electrical power in the state of Gujarat. To do so, GPECL has installed 63 Wind Electric Generators (WEGs) of individual capacity 800 kW that have been supplied by Enercon India Ltd. totalling an installed capacity of 50.4 MW. The project activity displaces an equivalent amount of electricity, which would have otherwise been generated by the fossil fuel dominating power plants for electricity generation. The methodology used in the project is ACM 0002 version 08. This project which was earlier validated by TÜV NORD CERT GmbH as a CDM project activity was given a positive validation opinion (Validation report. No. 53202408-08/68) and the project has been accepted and registered in the UNFCCC (Ref No. 2925, registration date: 13/02/2010). Thus as per the VCS policy announcement dated 19 March 2008, only supplementary validation is done here. A risk based approach has been followed to perform this limited validation covering the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD. As a result of the validation of the VCS PD, the validation team confirm that: the project follows the VCS 2007.1 The project activity meets the criteria of the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD as per VCS 2007.1 and is likely to achieve the estimated emission reductions.	
Work carried out by:	Number of pages:
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Abbreviations

CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CO₂	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
CL	Clarification Request
DGVCL	Dakshin Gujarat Vij Company Limited
DNA	Designated National Authority
EB	CDM Executive Board
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
PDD	Project Design Document
QC/QA	Quality control/Quality assurance
TPL	Torrent Power Limited
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard
VCS - PD	VCS - Project Description
VCU	Voluntary Carbon Unit
VVM	Validation and Verification Manual
WEG	Wind Electric Generator

Table of Contents	Page
1 INTRODUCTION	5
1.1 Objective	5
1.2 Scope and Criteria.....	5
1.3 VCS project Description	5
1.4 Level of Assurance	5
2 METHODOLOGY	6
2.1 Review of Document	6
2.2 Resolution of any material discrepancy	6
3 ASSESSMENT OF VCS-PD.....	7
3.1 VCS PD Template Section - 1.12	7
3.2 VCS PD Template Section - 1.13	8
3.3 VCS PD Template Section - 1.14	8
3.4 VCS PD Template Section – 8.1	9
3.5 VCS PD Template Section – 8.2	9
4 SUPPLEMENTARY VALIDATION STATEMENT	11
5 REFERENCES	12

1 INTRODUCTION

1.1 Objective

The objective of the validation is to assess whether the VCS PD follows the VCS 2007.1 standard particularly the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD.

This supplementary validation report is only valid in conjunction with the CDM registered documents for the project” Wind based renewable energy project in Gujarat”, reference No. 2925.

1.2 Scope and Criteria

The scope of the validation covers the clauses of 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD as required by the Policy Announcement from VCS Association on 19th March 2008.

This VCS project, which was earlier validated by TÜV NORD CERT GmbH as a CDM project activity was given a positive validation opinion (Validation report. No. 53202408 - 08/68) and the project has been accepted and registered in the UNFCCC (Ref No. 2925, registration date: 13/02/2010).

1.3 VCS project Description

A brief description of the VCS project has been described in the CDM PDD of the project registered as CDM project activity with the CDM EB, reference No 2925¹.

1.4 Level of Assurance

The verification has been planned and organized to achieve a

- ☒ reasonable level of assurance
- ☐ limited level of assurance.

¹ <http://cdm.unfccc.int/Projects/DB/RWTUV1250689673.15/view>

2 METHODOLOGY

The supplementary validation of the project consisted of the following steps:

2.1 Review of Document

The Supplementary VCS PD^{/PD/} and supporting background documents related to the project design and baseline were reviewed.

Furthermore, the validation team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

The references used in the course of this validation are summarized in section 5.

2.2 Resolution of any material discrepancy

Material discrepancies identified in the course of the validation are addressed either as CARs, CLs or FARs.

A **Corrective Action Request (CAR)** is established where:

- mistakes have been made in assumptions, application of the methodology or the project documentation which will have a direct influence on the project results,
- the requirements deemed relevant for validation of the project with certain characteristics have not been met or
- there is a risk that the project would not be registered or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to project implementation should be reviewed during the first verification.

3 ASSESSMENT OF VCS-PD

In this section the assessments and findings from the desk review of the VCS PD, site visit, interviews and supporting documents as well as the final assessments are summarised. Table 3-1 includes an overview of all raised CARs, CLs and FARs.

Table 3-1: Overview of CARs, CLs and FARs issued

No.	Topic / Chapter	CAR	CL	FAR
3.1	VCS PD Template Section - 1.12	-	-	-
3.2	VCS PD Template Section - 1.13	-	-	-
3.3	VCS PD Template Section - 1.14	-	-	-
3.4	VCS PD Template Section - 8.1	-	-	-
3.5	VCS PD Template Section - 8.2	-	-	-
3.6	VCS PD Template Section - 1.12	-	-	-
-	SUM	0	0	0

3.1 VCS PD Template Section - 1.12

Description

The demonstration is clear in the PD^{/PD/}. It has been mentioned in the PD^{/PD/} that the project involves energy generation from wind using Wind electric generators. Electricity generation from WEG does not involve any GHG emission. In the absence of the project the energy would have been derived from the fossil fuel based power plants in the NEWNE grid. This was verified during the desk review of documents such as commissioning certificate^{/cc/}, site visit and subsequent interviews and found to be true. So this was not a case where emissions were first generated so as to remove it later on^{/UND 1.12/}. So it is concluded that the demonstration to confirm that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction, has been satisfactorily explained in the PD.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

It is very clear from the above description that there was no such activity found to show that earlier GHG emissions were created for the subsequent reductions of the same by this project. Moreover validation team checked the undertaking^{/UND 1.12/} submitted by the PP and found satisfactory.

3.2 VCS PD Template Section - 1.13

Description

The project is a registered CDM project activity under, UNFCCC (reference no. 2925) and has not applied for any other form of environmental credit for this particular monitoring period. The project proponents were interviewed by the DOE. An undertaking^{/UND 1.13/} from the Project proponent is provided in this regard.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

The undertaking^{/UND 1.13/} and interview of PP lead to the conclusion that PP has not applied and will not apply for any kind of environmental credit apart from this VCS application before the date of registration in CDM i.e. 13 February 2010.

3.3 VCS PD Template Section - 1.14

Description

The project was given a positive validation opinion (Validation report. No. 53202408 - 08/68) and the project has been registered in the UNFCCC (Ref No. 2925, registration date: 13/02/2010). Moreover project has not been applied for any other GHG programme.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

The project is not rejected by any GHG programme.

3.4 VCS PD Template Section – 8.1

Description

The project is owned by M/s Gujarat Paguthan Energy Corporation Private Limited (GPECL) and was cross-checked by the Host Country approval^{/PT/} letter for the project activity.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

The host country approval^{/HCA/} is issued by the DNA India i.e. which is a government body and thus considered authentic. Moreover DOE has crosschecked the purchase order^{/PO/} and power purchase agreement^{/PPA/}, which further support the ownership of GPECL.

3.5 VCS PD Template Section – 8.2

Description

The project activity i.e. electricity generation from WTG is not involved in any kind of emission trading programme. Thus this section is not applicable.

Related Findings

- ☒ No CARs, CLs or FARs have been identified in this context
- ☐ The following finding(s) have been addressed:

Final Assessment

n.a.

4 SUPPLEMENTARY VALIDATION STATEMENT

The supplementary validation statement will be provided as part of the final validation report.

The project activity meets the criteria of the clauses 1.12, 1.13, 1.14, 8.1 and 8.2 of the VCS PD as per VCS 2007.1 and is likely to achieve the estimated emission reductions.

Delhi, 2010-08-30

A handwritten signature in blue ink, appearing to read "Archak Pattanaik".

TÜV NORD JI/CDM Certification
Program

Validation Team Leader

Mr. Archak Pattanaik

Essen, 2010-08-30

A handwritten signature in blue ink, appearing to be a stylized "E" followed by a flourish.

TÜV NORD JI/CDM Certification
Program

Final Approval

Mr. Eric Krupp

5 REFERENCES

Table 5-1: Documents provided by the project participant

Reference	Document
/CCI/	Commissioning Certificates of 10 WEGs out of 63 in chronological order : • 2X0.8 kW Wind Electric Generator in respect of M/s GPECPL at village Makrani, Sanosara, Tal- kalavad, Dist- Jamnager on 16-06-08 • 8X0.8 kW Wind Electric Generator in respect of M/s GPECPL at village Machharda, Tal- kalavad, Dist- Jamnager on 19-06-08
/CMI/	• Release of action plan on climate change in “Our Manifesto on Air Quality & Climate Change” • Proof of Initial discussions with CDM consultants for project activity dated 22nd June 2007 • Proof of appointment of consultant dated 18th August 2007 • Proof of Commissioning certificates
/PPA/	• Wind Energy Purchase Agreement between GPEC and Torrent Power Limited (TPL) dated 14th October 2008 for 49.6 MW • Wind Energy Purchase Agreement between GPEC and Dakshin Gujarat Vij Company Limited (DGVCL) dated 24th September 2008 for 0.8 MW
/GRD/	Proof of grid connection: Latest Electricity bill dated 26 th April 2009
/HCA/	Host Country Approval dated 17 th April 2009 - “Wind based renewable energy Project in Gujarat”
/ISO/	ISO 9000:2000 certificate for the project site.
/LSC/	Proof of local stakeholder consultation • Invitation letter sent to the local stakeholders dated 01 October 2007). • Consent from the villagers • Minutes of the Meeting of the local stakeholders’ consultation held on 25th October 2007.
/MD/	Certified true copy of the resolutions passed by the Board of Directors of the Company in its meeting dated 25 th June, 2007.

Reference	Document
/MOC/	Modalities of Communication dated 19 th May 2009
/O& M/	Warranty Operations & Maintenance Agreement between GPEC and Enercon India dated 6 th July 2007.
/PDD/	Registered Project Design Document for the proposed project activity.
/PO/	Purchase Order for ex-factory supply of 63 Enercon E-53 WEGs, rated at 800 kW for Phase-I dated 17 th August 2007.
/PT/	Host Country Approval (LoA) is considered as proof of title vide 4/4/2009-CCC dated 2009-04-17.
/SC/	- Permission Letter of Grid Connection from Gujarat Energy Transmission Corporation Limited for 100 MW wind project at village Samana, Tal. – Kalavad, Jamjodhpur, Dist. Jamnager dated 26th June 2007. - Permission from Gujarat Energy Development Agency (GEDA) for setting up of 0.8 MW windfarm at village Narinana, Dist : Jamnagar dated 11 February 2008 - Permission for Gujarat Energy Development Agency (GEDA) setting up of 12.8 MW windfarm at village: Bodi, Dist : Jamnagar dated 11 February 2008
/SD/	- Facilitation Agreement between Gujarat Paguthan Energy Corporation Private Limited and Enercon (India) Limited dated 6th July 2007. - Proof of expected operational lifetime 20 Years, page 53 of the above agreement
/TD/	- Technical Specifications of - 800 kW Wind Electric Generator Model E53 - Micro Siting for the 63 WEGs of GPECL at Samana site.
/UND/	- Undertaking by GPECL requires as per section 1.12 of the VCS PD dated 2010-05-18. - Undertaking by GPECL requires as per section 1.13 of the VCS PD dated 2010-05-18. - Undertaking by GPECL requires as per section 8.1 of the VCS PD dated 2010-05-18.
/XCS/	Excel sheet for CER calculation.

Table 5-2: Background investigation and assessment documents

Reference	Document
/ACM 0002/	- Grid connected electricity generation from renewable sources : ACM 0002 (version 08)
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/IPPC/	1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book
/ISO 14064/	- Greenhouse gases -- Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals - Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements - Greenhouse gases -- Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions
/ISO14065/	Greenhouse gases -- Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition
VCS	Voluntary Carbon Standard 2007.1
/VDS-PD-T/	VCS PD Template
/VVM/	Validation and Verification Manual (Version as per EB 51)

Table 5-3: Websites used

Reference	Link	Organisation
/cd4cdm/	www.cd4cdm.org	UNEP Riso Centre
/GPECPL/	www.clpgroup.com	GPEC Pvt. Ltd.
/ipcc/	www.ipcc-nggip.iges.or.jp	IPCC publications
/vcs/	www.v-c-s.org	VCSA
/unfccc/	http://cdm.unfccc.int	UNFCCC