VALIDATION REPORT

Shree Jai Ambe Associates (Power Division)

3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India.

SGS Climate Change Programme
SGS United Kingdom Ltd
SGS House
217-221 London Road
Camberley Surrey
GU15 3EY
United Kingdom

Date of Issue:	**Project Number:**
15/07/2009	CDM.VAL2138
Project Title:	
3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India	
Organisation:	**Client:**
SGS United Kingdom Limited	Shree Jai Ambe Associates (Power Division)
Publication of PDD for Stakeholders Consultation	
Commenting Period:	30/09/2008 to 29/10/2008
First PDD Version and Date:	01, dated 20/05/2008
Final PDD Version and Date:	07, dated 03/04/2009

Summary:

Shree Jai Ambe Associates (Power Division) has commissioned SGS to perform the validation of the project: 3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India.

Methodology Used: AMS I.D

Version and Date: 13, valid from 14th December 2007.

The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and applicable CDM requirements.

The report is based on the assessment of the project design document undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, follow up actions (e.g. site visit, telephone or e-mail interviews) and also the review of the applicable simplified methodology and underlying formulae and calculations.

The report and the annexed validation describes a total of 09 findings which include:

- (05) Corrective Action Requests (CARs);
- (04) Clarification Requests (CLs);
- (00) Forward Action Requests (FARs).

All findings have been closed satisfactorily. The project will be recommended to the CDM Executive Board with a request for registration

Subject:		**Document Distribution**
CDM Validation		
Validation Team:		
Ramkrishna Patil – Lead Assessor Ravi Kant Soni– Assessor Abhishek Mahawar – Financial Expert		☒ No Distribution (without permission from the Client or responsible organisational unit)
Technical Review:	**Trainee Technical Reviewer:**	
Date: 09/06/2009, 07/07/2009 and 15/07/2009 Name: Aurea Nardelli	Name: N/A	☐ Limited Distribution
Authorised Signatory:		
Name: Siddharth Yadav Date: 5th August 2009		☐ Unrestricted Distribution

Revision Number:	**Date:**	**Number of Pages:**
0	07/05/2009	72
1	01/07/2009	76
2	15/07/2009	72

Abbreviations

A/D	Analogue to Digital
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reduction
CL	Clarification request
CM	Combined Margin
CMS	Central Monitoring System
CT	Current Transformer
DNA	Designated National Authority
DOE	Designated Operational Entity
EIA	Environment Impact Assessment
EPC	Engineering Procurement and Construction
ER	Emission Reductions
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GPEA	Green Power Entrepreneurs Association
I/O	Input /Output
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate Return
ISHC	International Stakeholder Consultation
ISO	International Organization Standards
KWh	Kilo Watt hour
MEDA	Maharashtra Energy development Agency
MERC	Maharashtra Electricity Regulatory Commission
MNES	Ministry of Non-Conventional Energy Sources
MOC	Modalities of Communication
MoEF	Ministry of Environment and Forests
MoM	Minutes of Meeting
MSEB	Maharashtra State Electricity Board
MSEDCL	Maharashtra State Electricity Distribution Company Ltd
MWh	MegaWatt hour
NGO	Non Government Organizations
O&M	Operation and Maintenance
ODA	Official Development Assistance
OM	Operating Margin
PDD	Project Design Document
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PP	Project Participant
PT	Power Transformer
QA/QC	Quality Assurance and Quality Control
RBI	Reserve Bank of India
SJAA	Shree Jai Ambe Associates (Power Division)
UNFCCC	United Nations Framework Convention on Climate Change
WTG	Wind Turbine Generator

Table of Content

1. Validation Opinion 5
2. Introduction 6
2.1 Objective 6
2.2 Scope 6
2.3 GHG Project Description 6
2.4 The Names and Roles of the Validation Team Members 6
3. Methodology 7
3.1 Review of CDM-PDD and Additional Documentation 7
3.2 Use of the Validation Protocol 7
3.3 Findings 7
3.4 Internal Quality Control 8
4. Validation Findings 9
4.1 Approval 9
4.2 Participation Requirements 9
4.3 Project Design Document including Project Description 9
4.4 Eligibility as a Small Scale Project 10
4.5 Applicability of selected methodology to the project activity 10
4.6 Project Boundary 10
4.7 Baseline Selection and Additionality 10
4.8 Application of Baseline Methodology and Calculation of Emission Factors 16
4.9 Application of Monitoring Methodology and Monitoring Plan 17
4.10 Environmental Impacts 17
4.11 Local Stakeholder Comments 17
4.12 Description of How and When the PDD was Made Publicly Available 18
4.13 Compilation of all Comments Received 18
4.14 Explanation of How Comments Have Been Taken into Account 18
5. List of Persons Interviewed 19
6. Document References 20

Annexes:

A.1 Annex 1: Local Assessment 23
A.2 Annex 2: Validation Checklist 25
A.3 Annex 3: Overview of Findings 58
Annex 4: Team Members Statements of Competency 71

1. Validation Opinion

SGS United Kingdom Ltd has been contracted by Shree Jai Ambe Associates (Power Division) to perform a validation of the project: 3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India.

The Validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism (CDM), Validation and Verification Manual version 1 and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

By installation of four Wind Turbo-Generators (WTGs) of 0.75 MW capacity each with total capacity of 3.0 MW in the state of Maharashtra and supplying the generated electricity to the Western Grid (Now integrated Northern, Eastern, Western and North Eastern grid), the project activity will result in avoidance of greenhouse gas (GHG) emission generations, that are real, measurable and give long-term benefits to the mitigation of climate change.

In our opinion, the project meets all relevant UNFCCC, CDM criteria and all relevant host country criteria. The project correctly applies methodology AMS I D version 13. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

The total emission reductions from the project are estimated to be 53, 130 t of CO2e over a 10 year crediting period, averaging 5,313 t of CO2e annually. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given the underlying assumptions do not change.

The project will hence be recommended by SGS for registration with the UNFCCC.

Signed on Behalf of the Validation Body by Authorized Signatory

Signature: 

Name: Siddharth Yadav

Date: 5th August 2009

2. Introduction

2.1 Objective

Shree Jai Ambe Associates (Power Division) has commissioned SGS to perform the validation of the project: 3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India with regard to the relevant requirements for Clean Development Mechanism (CDM) project activities. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP) and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reduction (CER). UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation 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.

2.3 GHG Project Description

The project activity involves the installation of 4 wind mills of 0.75 MW capacities each for generation of electricity from renewable source namely wind energy. The electricity generated will be fed to Western regional grid of India. The project activity will result in avoidance of greenhouse gas (GHG) emission generations, which would have otherwise occurred due to CO_2 emissions from electricity generation by fossil fuel, based power plants that is supplied to the same grid. The project activity is located at Dhule district of Maharashtra state in India. The project activity was already commissioned. The project activity involves installation of 4 Wind Electricity Generator of 0.75 MW capacities each in Brahmanvel village, Dhule District, which was commissioned on 23/01/2007 (Ref.30).

2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate
Ramkrishna Patil	Lead Assessor	SGS India
Ravi Kant Soni	Assessor	SGS India
Abhishek Mahawar	Financial Expert	SGS India

3. Methodology

3.1 Review of CDM-PDD and Additional Documentation

The validation is performed primarily as a document review of the publicly available project document version 01 dated 20/05/2008 and the subsequent versions 02, 03, 04, 05, 06 and version 07 dated 03/04/2009 (final version). The assessment is performed by trained assessors using a validation protocol attached as Annex 2 Table 2

A site visit was performed on 05/11/2008. The results are summarised as annex 1in the validation report. The validation team has checked the statements mentioned in the PDD through review of documents and contacts with stakeholders.

3.2 Use of the Validation Protocol

The validation protocol used for the assessment is designed in accordance with the Validation and Verification Manual; Version 1 dated 28 November 2008. It serves the following purposes:

- it organises, details and clarifies the requirements the project is expected to meet; and
- it documents both how a particular requirement has been validated and the result of the validation (reporting).

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of Verification (MoV)	Comment	Conclusion/ CARs/CLs
The various requirements are linked to checklist questions the project should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CL) is used when the validation team has identified a need for further clarification.

The completed validation protocol for this project is attached as Annex 2 to this report

3.3 Findings

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

A Clarification Request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met

Where a non-conformance arises the Assessor shall raise a **Corrective Action Request (CAR).** A CAR

is issued, where:

I. The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
II. The CDM requirements have not been met;
III. There is a risk that emission reductions cannot be monitored or calculated.

The validation process may be halted until this information has been made available to the assessors' satisfaction. 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 Forward Action Request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.

Corrective Action Requests and Clarification Requests are raised in the draft validation protocol and detailed in a separate form (Annex A.3). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs and FARs.

3.4 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 Reviewer. The task of the Technical Reviewer 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. Findings can be raised at this stage and client must address them within agreed timeline.

4. Validation Findings

4.1 Approval

The host Party for this project is India. India has ratified the Kyoto protocol on 26th August 2002. A Letter of Approval (LoA) from Indian DNA was not submitted by the Project Participant (PP) hence **CAR #1 was raised**. In response to CAR #1, the Letter of Approval issued by Indian DNA "The Ministry of Environment and Forest (MoEF), dated 07/01/2009 has been provided by PP. The LoA provided by the PP having reference number F. No. 4 /15/2008-CCC dated 07/01/2009 (Ref.3) has been checked. The name indicated in the HCA and in section A.1 of the PDD was found be the same. The LoA clearly confirms that Government of India has ratified the Kyoto Protocol in August 2002; participation is voluntarily for the project activity and clearly mentioned that project activity contributes to Sustainable Development of India. It has been confirmed that LoA is unconditional with respect to party to the Kyoto Protocol, voluntarily participation, contribution towards sustainable development and title of the project activity. Thus Letter of Approval is in accordance with paragraphs 45-48 of the Validation and Verification Manual (VVM) and **CAR #1 was closed out.**

4.2 Participation Requirements

The host Party for this project is India. India has ratified the Kyoto protocol on 26th August 2002. This was checked from the UNFCCC website http://maindb.unfccc.int/public/country.pl?country=IN.

The PP has provided the Host country DNA approval letter as mentioned above in section 4.1.No Annex I Party has been identified in the PDD and therefore no further Letter of Approval was available. It is observed that the CDM EB has agreed that the registration of a CDM project activity can take place without an Annex I Party being involved at the stage of registration although it should be noted that before CER can be transferred to an Annex 1 Party, a Letter of Approval from Annex 1 Party will need to be submitted.

The proposed CDM project has been web hosted in the UNFCCC website (http://cdm.unfccc.int/Projects/Validation/DB/IL2MM1XXCX7DP619HLJI33SQ4O1FFJ/view.html) for global stakeholder's process to invite comment as per the CDM requirements. As per the CDM EB guidelines the proposed CDM project has been web hosted from 30/09/2008 to 29/10/2008.

4.3 Project Design Document including Project Description

The project design document is in conformance with the UNFCCC SSC PDD format (version 3) and has been prepared in accordance with the guidelines for completion of CDM-SSC-PDD.

The PDD mentions the unique name of the project activity: "3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India". It has made the project identifiable by unique name. The name of Project activity was also checked from the UNFCCC website http://cdm.unfccc.int/Projects/Validation/DB/IL2MM1XXCX7DP619HLJI33SQ4O1FFJ/view.html and found to be matching and hence accepted by the validation team.

Applicable ownership documents or licenses which allow the implementation of the project activity at the project site were not provided by the PP, thus CAR #2 was raised. In response to CAR #2, project participant submitted documents like supply agreement, O&M agreement, PPA and Land agreements (Ref. 5) for the ownership of the project activity. The information's provided through these documents have been cross verified with revised PDD (Ref.1c, Ref.1g), revised financial excel spreadsheets (Ref.13) and found satisfactory, thus **CAR #2 was closed out.**

Technical specifications and purchase orders for all equipments used in the project activity were not submitted by the project proponent, thus **CAR #3 was raised**. In response to CAR #3 the project participant submitted the supply agreement orders and technical specifications (Ref.4). The technical description of the project activity mentioned in the revised PDD was again validated physically during the site visit carried out on 05/11/2008. These documents have been checked and found acceptable, thus **CAR #3 was closed out.**

Operational lifetime and the technical specifications mentioned for the project activity were checked with the purchase orders and were acceptable. The operation lifetime was accepted as 20 years after reviewing the

technical specifications for the project activity. Project proponent has submitted a letter dated 21/11/2008 (Ref.11) of undertaking mentioning that the project technology will not be substituted or replaced by more efficient technology during the crediting period and it was accepted.

4.4 Eligibility as a Small Scale Project

Project participant has used AMS I.D version 13, which is an approved simplified methodology, which has been verified from the web site CDM: Small Scale CDM Methodologies.

The proposed CDM project activity is Type I: The capacity of the proposed project activity is 3.00 MW which does not exceed the 15 MW limit for small scale project activity. The same has been verified from the name plate data of the wind turbines during the site visit carried out on 05/11/2009 and also crosschecked from technical specification for the wind turbines mentioned in the Purchase Order. Hence the proposed CDM project activity qualifies as a small scale project activity.

The PDD mentions that the project proponent does not have any other registered or applied for registration CDM project activity in the 1 km area from the present project activity or by the same project participant within 2 years in same project category and technology. The project activity is not a de-bundled project activity as mentioned in the PDD; this has been checked by the validation team through UNFCCC website and during the site visit.
In fact the project activity is a bundled project activity. It is bundled project activity of Shree Jai Ambe Associates (Power Division), Automotive Valves Pvt. Ltd., M.G. Patel & Brothers (Power Division), Gayson & Company Pvt. Ltd and each owner has one WTG of 0.75 MW capacity.

4.5 Applicability of selected methodology to the project activity

The proposed project activity is confirmed to apply the methodology AMS I D, version 13, under sectoral scope 1 (Energy industries Renewable/Non-renewable sources) and justification for the applicability criteria has been properly mentioned in the PDD. The proposed CDM project involves generation of electricity from wind mills and the same will be exported to the Western regional grid of India. The capacity of the project is 3.00 MW which is below 15 MW (the limit of small scale projects). The project is based on renewable energy of wind and is a grid connected project activity which was physically verified during the site visit. Thus the project meets the applicability criteria of the selected approved methodology AMS I D, version 13.

4.6 Project Boundary

As per the guidelines mentioned in Type I. D. of Annex B of the simplified modalities and procedures for small-scale CDM project activities, project boundary should encompasses the physical and geographical site of the renewable generation source. In this project activity, the project boundary is composed of the Wind Energy Generators and the metering equipment for each generator and substation, and the grid (Western regional grid) which is used to transmit the generated electricity (Ref. 1g).

4.7 Baseline Selection and Additionality

The project has applied baseline as mentioned in the approved small scale methodology AMS I D, version 13 ”Grid connected renewable electricity generation”. The project activity generates electricity from wind mills and supplies the same to the Western grid (Now NEWNE grid) in India and thus replaces electricity which would have been generated by fossil fuel dominated grid connected power plants.

As per the approved methodology AMD I D, version 13, paragraph 9: …”the baseline is the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO2e/kWh) calculated in a transparent and conservative manner as (a) A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the ‘Tool to calculate the emission factor for an electricity system’ or (b) The weighted average emissions (in kg CO2e/kWh) of the current generation mix. The data of the year in which project generation occurs must be used”.

The proposed CDM project falls under the above mentioned condition as the power generated by the project activity has been exported to the grid. The power in the grid is the mixes of various sources such as coal, natural gas, hydro etc. but the majority of power is being contributed by fossil sources. Thus, the baseline of the project activity is the electricity produced by the renewable generating unit multiplied by an emission coefficient of the fuel generation mix in the grid. PP has adopted the option (a) of the methodology. The development of the baseline for the project activity has been explained in detailed in section 4.8 of this report.

4.7.1 Additionality

The additionality of the project activity is explained on the basis of barrier analysis mentioned in Attachment A to Appendix B of Simplified modalities and procedures for small scale project activities.

CAR #6 was raised to ask clarification about the following issues regarding additionality discussion:

1. Project participant did not clarify how the high capital expenditure was project specific barrier also sources for capital cost and average PLF was not provided;
2. As per section B.5 of PDD It was not clear whether selected benchmark is the project IRR or the equity IRR;
3. Project participant did not clarify about applicability of regulatory barriers project activity and rationale behind selection of maximum 10% variation for sensitivity analysis;
4. Project participant did not follow the “Guidance on the assessment of Investment analysis”, version 02 to consider the Government bond rates and the effect of changes in RBI policies on project activity was also not clear;
5. Reference of registered PDD for selection of benchmark did not justified and increase in tariff was considered up to 12 years only which was inconsistent as per PPA;
6. Appropriate documentary evidences for tax calculation was not submitted by project participant;
7. MEDA charges as per Vestas proposal (dated 04/09/2006) for Gayson & Company Private Limited were not considered in total project cost, also project participant did not provide appropriate sources/evidences for 11% interest rate on loan considered for Gayson & Co. Pvt Ltd and Insurance cost 2.17 lakhs considered for each wind mill of project activity;
8. The source for market risk premium was from CRISIL report dated 13/04/2000 published for discussion purpose only; project participant did not clarify how such old report was applicable at the time of decision taken;
9. Participation of other wind mill owners in CDM consideration for project activity was not clear;
10. The sources for divisible factor ”Pre/Post September Installation (1/2)” and the value “depreciation on which tax benefit is availed” was not clear.

In response to CAR #6 the project participants made the following clarifications, which were verified by the validation team:

1. Project participant submitted the revised IRR calculation excel spreadsheets (Ref.13) and explained that the high capital expenditure was one of the project barriers (Ref.1c). However the barrier like technological barrier, barrier due to prevailing practice and other barriers such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources as mentioned in the PDD were not found strong enough to specific to project and not convincing therefore project participant has removed it from the PDD. Thus it is accepted.
2. As per section B.5 of revised PDD (Ref.1c, Ref.1g) it is stated that the selected benchmark is project IRR , the same has been crosschecked through revised IRR calculation excel spreadsheets (Ref:13) and found acceptable.
3. Regulatory barriers for project activity have been removed as per revised PDD (Ref.1c) because project participant realized that these barriers were not strong enough; the variation of 10% used in for sensitivity analysis is selected as per “Guidance on the assessment of investment analysis

(Version 02)" as per paragraph 17 where it is stated that the sensitivity analysis must cover at least a range of -10% to +10%.

4. Barrier due to change in RBI policies has been removed in section B.5 of revised PDD (Ref.1c, Ref.1d) and three year data has been considered for Government Bond Rate; as it is found conservative and inline as per "Guidance on the assessment of investment analysis (Version 02)", hence accepted.

5. Reference of registered PDD has been removed (Ref.1c) and selection of benchmark is made as per "Tool for the demonstration and assessment of additionality (Version 05.2)", Step 2, Sub-step 2b: Option III – Apply benchmark analysis, point 6 (a) (Ref:http://cdm.unfccc.int/Reference/tools/ls/meth_tool01.pdf) which is found satisfactory. The increase in tariff is considered for 13 years which has been checked through the documents (Ref.13) submitted by project participant and found satisfactory.

6. All the relevant documentary evidences/sources for tax calculation have been provided (Ref.8) by project participant are found satisfactory

7. The sources for the Project cost, MEDA charges are taken from Techno Commercial Offer from Vestas (Ref.28), for 11% interest rate on loan considered for Gayson & Co. Pvt Ltd is taken from Loan Sanction Document of Federal Bank; dated 29/12/2006, Point No. 04 - Facility Details and Insurance cost were found appropriate and defined prior to the conceptualization of the project activity. The loan sanction is the inference of the final negotiated values and investors knows it at the time of decision made and hence is accepted. All the input values used in the financial calculations are available at the time decision made for the project activity and is accepted as per paragraph 6 of the guidance of the investment analysis.

8. The reference of the CRISIL report has been removed and Government bond rates (Ref.16) increased by suitable risk premium considering 3 years data (year 2004 to year 2006) prior to conceptualization of project activity have been considered as a benchmark for the project activity. This is as per Clause (a) of Sub-step 2b: Option III of the Tool for the demonstration and assessment of additionality (Version 05.2). Government Bond rates has been taken from Reserve Bank of India as three years average of yield for 20 years maturity period. The average value comes to be 7.2%. The market risk premium has been taken from paper of "A first Cut Estimate of the equity Risk premium in India" by Indian Institute of Management, Ahmedabad, http://www.iimahd.ernet.in/~jrvarma/papers/WP2006-06-04.pdf. (Page 09, first Paragraph, first line, risk premium on geometric basis). The value of market risk premium from this document is 8.75%. Thus the benchmark of Government Bond rates increased by suitable risk premium is 15.95% (7.2%+8.75%) and is accepted. The project activity is promoted by Shree Jai Ambe Associates. The selected benchmark is calculated from the publicly available data; hence the selected benchmark is applicable to all investors.

9. The board resolution for all investors (Ref. 24, 25 and 27) has been submitted. The CDM consideration for all investors has been checked and found that all investors have considered CDM revenues at the time of decision to implement the project activity.

10. The parameter"Pre/Post September Installation (1/2) is divisible factor to be applied to full year depreciation. (As per Income Tax Act 1961 depreciations on addition to assets put to use for less than 180 days are to be allowed depreciation at half the rates.) and is taken as per Chapter 04, Section 32, line 14 of Income Tax Act 1961 as amended by Finance Act 2006 fn=/DitTaxmann/IncomeTaxActs/2006ITAct/section32.htm and the value "depreciation on which tax benefit is availed" is taken from MERC Order Page No: 174 and as per rates specified in Schedule to Company's Act 1956 and same sources has been mentioned in excel spreadsheet.

The financial calculations have been checked for each investor and found that the project IRR is below the selected benchmark of 15.95%. Hence the project activity is additional due to investment analysis. The guidance of investment analysis (paragraph 16) states that the variables that constitute more than 20% of either total project cost or total project revenue should be subjected to reasonable variation. As per O&M agreement, the O&M cost for the first five years is constant and varies after 5th year. As per MERC tariff order the tariff up to 13th years is defined and tariff after 13th year is uncertain. Thus there is variation tariff rate after 13thyear. The PP has considered the project cost from proposals, thus there are chances of the

variation of the project cost. Thus project participant has considered PLF, O&M cost after 5th year, tariff rate after 13th year and project cost for the sensitivity analysis. The sensitivity analysis for the project activity has been carried out with increase and decrease in variables by 10% to the base value.

The PPA was only for 13 years and after 13th year tariff rate was uncertain, however project participant has considered tariff of INR 3.50 per KWh for remaining life of project activity. To check this applicability of tariff rate, following excerpts taken from MERC order - Case No. 17(3), 3, 4 & 5 of 2002 dated 24/11/2003 & MSEB Policies on Wind Energy: Deviations from the Policies of GOM & Guidelines of MNES has been checked for the tariff rate that would be applicable after 13th year.

"The Commission notes that in Cost Plus Approach, which the Commission has adopted for tariff proposal, rate per unit charged by such projects during initial period of 10 years is bound to be higher as during this period the project has various debt related obligations. However, it is essential that the consumer is able to enjoy the benefit of cheaper power once all debt related obligations are paid off and project has virtually no variable costs." [1]

"The rate payable gets reduced after 10 years (i.e. after repayment of loan) so that the net average cost of energy gets reduced."[2]

"To ensure that developer does not remove the machine after availing higher purchase rate for 10 years, an agreement may be signed allowing MSEB to have second charge for first 10 years (when the lender institution shall have first charge on the machine) and subsequently MSEB shall have first charge for the balance 10 years."[3]

The above extracts indicate that the tariff rate will reduce after the 13th year and the due to this uncertainty the considered tariff rate after the 13th year as INR 3.50/kWh is acceptable.

The sensitivity analysis results indicate that increase in 10% electricity generation will improve the project IRR values but less than the benchmark (15.95%). The decrease in O&M cost by 10% does not cross the benchmark and increase in tariff by 10% also does not cross the benchmark. Also the decrease in the project cost by 10%, project IRR does not cross the benchmark. The results of sensitivity analysis with variation in saleable electricity generation, O&M cost, tariff rate after 13th year and project cost are as follows

Variation in the generation	**-10.0%**	**0%**	**10.0%**
Shree Jai Ambe Associates	11.88	13.72%	15.44
Automotive Valves	11.50	13.23%	14.86
M.G. Patel & Brother	11.88	13.72%	15.44
Gayson & Company	10.49	12.18%	13.76
Variation in O & M cost after 5th year	**-10.0%**	**0%**	**10.0%**
Shree Jai Ambe Associates	13.85	13.72%	13.58
Automotive Valves	13.37	13.23%	13.10
M.G. Patel & Brother	13.85	13.72%	13.58
Gayson & Company	12.33	12.18%	12.03
Variation in Tariff rate after 13th year with base value as INR 3.50 /KWh	**-10.0%**	**0%**	**10.0%**

[1] http://mercindia.org.in/pdf/Detail_Wind_Energy_Order.pdf – Refer Page No. 14, Paragraph 2 of the document.

[2] http://mercindia.org.in/pdf/Annexures.pdf – Refer Page No. 135, Paragraph 2 of the document.

[3] MSEB http://mercindia.org.in/pdf/Annexures.pdf – Refer Page No. 141, Point No. 15 of the document.

Shree Jai Ambe Associates	13.59	13.72%	13.84
Automotive Valves	13.10	13.23%	13.36
M.G. Patel & Brother	13.59	13.72%	13.84
Gayson & Company	12.04	12.18%	12.32
Variation in Project cost	**-10.0%**	**0%**	**10.0%**
Shree Jai Ambe Associates	15.34	13.72%	12.32
Automotive Valves	14.78	13.23%	11.9
M.G. Patel & Brother	15.34	13.72%	12.32
Gayson & Company	13.69	12.18%	10.89

All relevant documentary evidences and sources provided by project participant regarding to issues raised under CAR #6 are found satisfactory.

The project has adopted the investment barrier to discuss the additionality of the present project activity. An investment analysis of the project activity was conducted by all the project proponents with the Project Internal Rate of Return (Project IRR) as the financial indicator. The project lifetime is 20 years thus the IRR calculations are done for 20 years as per guidance 3 of annex 45 of EB 41.The excel spreadsheets (Ref.13) for each investor has been checked for the assumptions and values used for the calculations. The relevant benchmark value has been determined according to "Tool for the demonstration and assessment of additionality Version 05.2" (http://cdm.unfccc.int/Reference/tools/ls/meth_tool01.pdf) Clause (a) of Sub-step 2b: Option III – Apply Benchmark Analysis, which states that - benchmarks shall be derived from Government bond rates, increased by a suitable risk premium. The sources for benchmark calculations are discussed in point 8 of above.

Based on the above discussion it can be concluded that the project activity without CDM funds is not a financially viable alternative as the financial returns from the project are not crossing the referred benchmark for the investment. Thus the project can be termed as additional due to investment analysis and hence thus **CAR #6 was closed out.**

The Project participant has not submitted the evidence for the start date of project activity and start date of crediting period was not appropriate. Thus **CAR #8 was raised** and in response to that project participant has submitted the "Supply Agreement" signed to purchase the first windmill of the bundled activity. The agreement was signed by Shree Jai Ambe Associates and M.G. Patel & Brother with Vestas Wind Technology Pvt. Ltd on 30/08/2006. This agreement indicates the financial commitment of the project participant to go ahead with the project activity. Thus this is the earliest real action for the project activity as per para 67 of EB 41 and is accepted.

The start date of crediting period is mentioned as 01/08/2009 and is appropriate at present and is accepted. Thus **CAR #8 was closed out.**

4.7.2 Prior Consideration of the Clean Development Mechanism

CAR#6 was raised asking the project participant to submit evidences regarding the prior knowledge about the CDM, seriousness of CDM consideration and the chronology of events for the parallel actions taken to secure the CDM status as per Annex 46 of EB 41.
In response to CAR #6 the project participant submitted all relevant documents regarding the seriousness of CDM consideration (Ref. 20 to 42) and the chronology of events for the parallel actions taken to secure the CDM status mentioned in the revised PDD along with appropriate sources/evidences. The parallel actions taken to secure the CDM status are as follows.

Sr. No.	Events or action taken for the project activity	Date
1	Shree Jai Ambe Associates (Power Division) had got prior knowledge about CDM through WTG supplier (Ref:29)	1/08/2006
2	Board resolution by Shree Jai Ambe Associates (Power Division) for their one WTG (Ref.24)	08/08/2006
3	Board resolution by Automotive Valves for their one WTG (Ref.25)	28/08/2006
4	Board resolution by M.G. Patel & Brother for their one WTG (Ref.25)	29/08/2006
5	Shree Jai Ambe Associates and M.G. Patel & Brother has released the purchase order for WTG. It is the project activity start date. (Ref.4)	30/08/2006
6	Supply agreement by Automotive Valves for their one WTG (Ref.4)	02/09/2006
7	Board resolution by Gayson & Company for their one WTG (Ref.27)	07/09/2006
8	Supply agreement is signed by Gayson & Co. Pvt Ltd. for one WTG (Ref.4)	19/09/2006
9	All WTG owners form the bundle of the project activity. (Ref.18)	3/10/2006
10	The CDM consultant (Energetic Consultancy Pvt. Ltd) is appointed (Ref.21)	25/10/2006
11	All WTGs are commissioned by MSEDCL in presence of representative of project participant and electricity generation started (Ref. 30)	23/01/2007
12	Project participant has cancelled the work order of CDM consultant due to not following terms and conditions (Ref.22)	07/02/2007
13	Received proposal from Vestas (Ref.31)	14/02/2007
14	PP decided to join "Wind Power Association" for future interest and for forming larger group to proceed for CDM	March 2007
15	PP informed the other members of association about CDM and asked to form large group for CDM activity. (Ref.32)	05/04/2007
16	Mr. S. Balaji of Vestas had sent a draft CDM agreement to PP (Ref.33)	20/04/2007
17	Association named as Green Power Entrepreneurs Association (GPEA) got registered and became a responsible group for CDM activities in the name of association itself. (Ref.34)	17/05/2007
18	VESTAS upper management forced Vestas CDM team to refuse GPEA for CDM Project activities (Ref.35)	06/06/2007
19	Some parties of GPEA association had left the association and new group of enduring investors had been shaped and PP was one of the members of this group. GPEA received the quotation from FICCI for CDM consultancy (Ref.36)	25/10/2007
20	GPEA received the proposal from PwC (Ref.37)	08/11/2007
21	Secretary of GPEA requested to their members to sign the agreement and to grant the authority to him regarding the CDM activities (Ref.38)	12/11/2007
22	No affiliate had agreed to sign the agreement proposed by GPEA. In the Meantime GPEA received the proposal from ITCOT through one of their group member. (Ref.39)	07/01/2008
23	Secretary of GPEA requested to sign the agreement and to give the authority to him. Meantime GPEA received the proposal from SEE-Tech Solutions Pvt. Ltd (Ref.40)	12/01/2008
24	GPEA has again decided to go with Vestas as CDM consultant (Ref.41)	16/01/2008
25	PP had offered Work Order to SEE-Tech Solution Pvt. Ltd and work order is released on 18/02/2008 (Ref.23)	14/02/2008
26	PP has been invited to attend meeting of the National CDM Authority on 13th August 2008 (Ref.42)	04/08/2008
27	The DOE is appointed for validation work (Ref.26)	29/07/2008
28	The PDD is web hosted on UNFCCC site for global stakeholders comment	30/09/2008 to 29/10/2008

The project activity start date is 30/08/2006 which is the date mentioned on the purchase order for the first wind mill of the project activity. The above chronology of events indicates that project participant had prior knowledge about CDM through the Vestas WTG supplier and that CDM revenue was considered seriously in the decision to implement the project. The seriousness of CDM consideration has been checked through the

board resolution and is accepted. The project participant had done parallel actions to secure the CDM status while implementing the project activity. The CDM consultant was appointed within two months of decision made to go ahead with project activity and within four months work order was cancelled due to delay and not following terms and condition of the agreement.
To reduce transaction cost WTG supplier has suggested forming a larger group. Thus delay was happened due to formation of large group and not convincing of all investors. The above chronology of events indicates that the PP has done parallel actions to secure the CDM status. Thus the project participant has continued the real actions to secure the CDM status in parallel with its implementation. The same have been cross checked with the documents submitted by the PP and are found inline as per annex 46 of EB41.

4.7.3 Identification of alternatives (if applicable)

Not applicable, as the project activity has applied methodology AMS I D, version 13, which does not mention any alternatives to the project activity. The project activity generates electricity from wind mills and supplies the same to the Western grid (Now NEWNE grid) in India and thus replaces electricity which would have been generated mainly by fossil fuels or current generation mix by grid connected power plants.

4.7.4 Investment analysis (if applicable)

Project participant has demonstrated the investment analysis for the additionality discussion and the same is presented in the section 4.7.1 of this report.

4.7.5 Barrier analysis (if applicable)

The additionality of the project activity is explained on the basis of barrier analysis mentioned in Attachment A to Appendix B of Simplified modalities and procedures for small scale project activities. The discussion of barriers to investment was provided in the section 4.7.1 of this report. It was concluded that the project activity is additional due to financial infeasibility as the project IRR is found less than the benchmark IRR.

4.7.6 Common practice analysis

The methodology does not require the common practice analysis. The additionality of the project is supported by the analysis of barriers, in particular investment barrier.

4.8 Application of Baseline Methodology and Calculation of Emission Factors

The proposed CDM project activity uses the simplified baseline methodology AMS I D, version 13 as the project activity involves generation of electrical power by using wind energy and exporting the same to the state grid. For determination of baseline emission factor, the proposed CDM project uses “Tool to calculate the emission factor for an electricity system”, version 1.1. As per the applied methodology AMS I D, version 13 , Point 9 is applicable for the project activity, so the PP has chosen the option (a) i.e. combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) for the purpose of calculation of baseline. The value has been used from the latest available version of Baseline Carbon Dioxide Emissions from Power Sector provided by the Central Electricity Authority (CEA), Government of India at the time of PDD submission for validation.

CAR #5 was raised to ask for the clarification for the following issues:

1. It was not clear why project participant has referred to ACM 0002 methodology instead of “Tool to calculate the emission factor for an electricity system”;
2. Recent three years data were not considered for the calculation of simple operating margin factor;
3. Value of grid emission factor was not found consistent as per PDD and excel spreadsheets for emission reduction calculations provided to the validation team.

In response to CAR #5 the project participant clarified that for calculation of baseline emission factor actually “Tool to calculate the emission factor for an electricity system, Version 0.1.1” has been used and the previous reference to ACM 0002 was removed, as confirmed in the revised PDD (Ref.1c and Ref.1g) and in the ER calculation spreadsheet (Ref.14). It was also verified that recent three years (2004-2007) data has considered for the calculation of simple operating margin factor and the inconsistency regarding the grid emission factor has been corrected in the PDD (Ref.1c and Ref 1g) and in the revised ER calculation Excel spreadsheets (Ref.14). As per version 03 of “Baseline Carbon Dioxide Emissions from Power Sector”

provided by the Central Electricity Authority (CEA), Government of India, the value of OM is 1.00 tCO_2/MWh and value of BM is 0.59 tCO_2/MWh.Thus the combined margin emission factor is 0.8975 tCO_2/MWh. The value of emission factor is fixed throughout the crediting period. These values were found acceptable, thus **CAR #5 was closed out.**

4.9 Application of Monitoring Methodology and Monitoring Plan

The monitoring methodology applies consistently the choice of the option selected for monitoring both the project and baseline emissions. However, project participant did not submit evidence for the personnel training and calibration certificates for instruments; hence **CL #4 was raised**. In response to CL #4 project participant submitted the training schedule and calibration report (Ref.12 and Ref.6).The calibration test results were found to be satisfactory and hence **CL #4 was closed out.**

Project participant did not include all parameters used to calculate the net electricity supplied to grid by project activity in section B.7.1 of PDD; in addition, the calibration procedure of panel meter (controller meter) was not clear, thus **CAR #7 was raised**. In response to CAR #7 the project participant submitted the revised PDD (Ref.1c, Ref.1g) incorporating all parameters used to calculate the net electricity supplied to grid in respective section of PDD and undertaking by wind mill manufacturer for calibration procedure of panel meter which stated that the controller is micro processor based and designed to control functions. The micro processor controls entire turbine operation and calculates energy generation with basic signal of CT and PT connected to through I/O. The analogue signal is converted into digital signal through A/D converter. A software programme reads these values and displays instantaneous reading. Thus it does not require calibration. This clarification is found satisfactory and **CAR #7 was closed out**.

The parameter “Net Electricity supplied to the grid by the project activity” is a calculated parameter and used for the emission reduction calculation. To calculate this parameter, apportioning method is used and PP is monitoring all required parameter as mentioned in monitoring section B.7.1 of PDD and is accepted. The QA/QC procedures as mentioned in section B.7.1, B.7.2 and Annex 4 are found to be consistent and followed as per ISO standards. PDD mentioned that the standard meters will be calibrated once in a year by MSEDCL as per terms and conditions and the same has been checked during the site visit by interviewing the concerned persons and as per PPA with MSEDCL.

4.10 Environmental Impacts

The wind power project does not require an Environmental Impact Assessment (EIA) as per the notification of Ministry of Environment and Forest, Government of India (Ref: http://envfor.nic.in/legis/eia/so1533.pdf). Also, in the redefined EIA notification i.e. S.O. 1533, dated 14th September 2006, Ministry of Environment & Forests (MoEF), Government of India, the wind projects are not included in the list of projects that has to get Prior Environmental Clearance (EC) either from State or Central Government authorities and hence no EIA study was conducted.

Also, there is no significant environmental impact due to the project activity which has been physically verified during the site visit.

4.11 Local Stakeholder Comments

The PDD, version 1, mentions that local governmental representatives, residents of neighbouring villages, Maharashtra Energy Development Agency (MEDA) representatives, and representative of MSEDCL have been selected as the stakeholders. **CAR #9 was raised** asking for evidences /MoMs of the stakeholder Consultation Meeting to ascertain relevant stakeholders were consulted. In response to CAR #9, project participant submitted the attendance sheet (Ref.7) for the stakeholder meeting conducted at wind mill sites on 11/03/2008 and 12/03/2008 and it has been cross checked by interviewing local people during the site visit and found to be satisfactory. **CAR #9 was closed.**
Comments from local stakeholders such as local villagers, sarpanch of Gram Panchayat were gathered by survey. This has been confirmed during the site visit by interviewing the local people. Stakeholder consultation is not required by host country regulation; however the project proponent has carried the same as a part of CDM requirements. Comments by Parties, Stakeholders and NGOs in accordance with sub-paragraphs 40 (b) and (c) of the CDM modalities and procedures, the project design document of a

proposed CDM project activity shall be made publicly available and the DOE invited comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and made them publicly available.

4.12 Description of How and When the PDD was Made Publicly Available

The Project Design Document for this project was made available on the UNFCCC website http://cdm.unfccc.int/Projects/Validation/DB/IL2MM1XXCX7DP619HLJI33SQ4O1FFJ/view.html and was open for comments from 30/09/2008 to 29/10/2008 on UNFCCC CDM homepage

4.13 Compilation of all Comments Received

No comments were received

4.14 Explanation of How Comments Have Been Taken into Account

No comments were received

5. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
05/11/2008	Bunny Azmi	Project Consultant	Additionality, Baseline and Monitoring procedure.
05/11/2008	Mr. M. Udayasankar	Site In charge	O & M, monitoring procedures, Technical description of project activity and data monitoring for project activity
05/11/2008	Dharmesh Patel	Project Participant, Jai Ambe	CDM consideration and discussion for the chronology of events
05/11/2008	Arun Roopchand Nikam	Farmer, Brahmanvel village	Social and economic development
05/11/2008	Vinod Prakash Shinde	Villagers, Brahmanvel village	Employment generation

6. Document References

Category 1 Documents (documents provided by the Client that relate directly to the GHG components of the project, (i.e. the CDM Project Design Document, confirmation by the host Party on contribution to sustainable development and written approval of voluntary participation from the designated national authority) :

/1.a/ PDD, version 01, dated 20/05/2008 (Submitted for Global stakeholders consultation)
/1.b/ PDD, version 02, dated 15/11/2008
/1.c/ PDD, version 03, dated 09/01/2009
/1.d/ PDD, version 04, dated 04/02/2009
/1.e/ PDD, version 05, dated 14/02/2009
/1.f/ PDD, version 06, dated 24/02/2009
/1.g/ PDD, version 07, dated – 03/04/2009 (final version submitted for request for registration)
/2/ Modalities of Communications dated 13/07/2009
/3/ HCA letter(Ref: Ministry letter No:4/15/2008-CCC,dated: 07/01/2009)

Category 2 Documents (background documents used to check project assumptions and confirm the validity of information given in the Category 1 documents and in validation interviews):

/4/ **Supply Agreement for all wind mills(along with technical specifications) are submitted** :

- M/s. Shree Jai Ambe Associates(Power Division) Dated 30/08/2006
- M/s. M.G. Patel & Brothers(Power Division) Dated 30/08/2006
- M/s. Automotive Valves Pvt Ltd. Dated 02/09/2006
- M/s. Gayson & Co. Pvt Ltd. Dated 19/09/2006

/5/ **Supply Agreement, between**

- M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 30/08/2006
- M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 30/08/2006
- M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 02/09/2006
- M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 19/09/2006

O&M agreement between

- M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 01/09/2006
- M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 01/09/2006
- M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 02/09/2006
- M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. (25/09/2006))

and PPA between

- M/s. Shree Jai Ambe Associates (Power Division) & M.S.E.D.Co. Ltd. Dated 04/04/2007
- M/s. M.G. Patel & Brothers (Power Division) & M.S.E.D.Co. Ltd. Dated 04/04/2007
- M/s. Automotive Valves Pvt Ltd. & M.S.E.D.Co. Ltd. Dated 04/04/2007
- M/s. Gayson & Co. Pvt Ltd. & M.S.E.D.Co. Ltd. Dated 04/04/2007

Land agreements for

- M/s. Shree Jai Ambe Associates (Power Division) & M/s. NEG Micon(India) Pvt Ltd. Location (D-1) on date 07/11/2006
- M/s. M.G. Patel & Brothers (Power Division) & M/s. NEG Micon(India) Pvt Ltd. Location (D-6) on date 07/11/2006
- M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Location (D-2) on

date 19/04/2007
M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Location (AA) on date 25/11/2006

/6/ Calibration report dated 15/07/2008 (Ref:EE/TDD/TECH/30)
/7/ Letter for completion of stakeholder comments dated 14/03/2008
/8/ Reference documents for tax calculation
/9/ Documentary evidence for 80% depreciation on asset
/10/ Bundling form
/11/ Undertaking letter for no change in technology, dated 21/11/2008
/12/ Personnel training schedule, dated 28/11/2008
/13/ IRR calculation excel spreadsheets for each Investor (version 06)
/14/ CER calculations spreadsheet version 06
/15/ No ODA undertaking dated 21/11/2008
/16/ Government Bond Rate 3 year's data references
http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/74675.pdf
http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/67219.pdf
http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/59442.pdf
/17/ ISO 9001:2000 Certificate for VESTAS EPC contractor dated 22/04/2008 valid till 05/01/2011
/18/ Back to back agreements among wind mill owners for all 4 sub-bundles dated 03/10/2006
/19/ Loan sanction letter (Ref: RMCPC: ADV) dated 20/02/2007
/20/ Mail conversations supporting to seriousness of CDM consideration
/21/ Work order to Energetic consulting Pvt Ltd dated 25/10/2006
/22/ Termination of Work order to Energetic consultanting Pvt Ltd dated 07/02/2007
/23/ Work Order to SEE-Tech Solutions Pvt. Ltd. Dated 18/02/2008
/24/ Board resolution (Shree Jai Ambe Associates) dated 08/08/2006
/25/ Board resolution (M.G. Patel & Automotive Valves) on 29 August 2006 and 28 August 2006 respectively
/26/ Contract for validation of the project with SGS, dated 29/07/2008
/27/ Broad Resolution for M/s. Gayson & Co. Pvt. Ltd, dated 07/09/2006
/28/ Techno- commercial Offers
1. Techno- commercial Offer from Vestas (formally NEG Micon) to Jai Ambe Associates, dated 25th Aug. '06
2. Techno- commercial Offer from Vestas (formally NEG Micon) to Automotive Valves, dated 25th Aug. '06
3. Techno- commercial Offer from Vestas (formally NEG Micon) to M.G Patel & Brothers, dated 25th Aug. '06
4. Techno Commercial Offer from Vestas (formally NEG Micon) to Gayson & Co, dated 4th Sept. '06

/29/ Mail from WTGs supplier to PP ,dated 01/08/2006
/30/ Commissioning certificates for 1 WTG belongs to:
1. M/s. Shree Jai Ambe Associates (Power Division), Dated29/01/2007(Ref:SE/DHL/TECH/WIND/699)
2. M/s. M.G. Patel & Brothers(Power Division)Dated29/01/2007(Ref:SE/DHL/TECH/WIND/701)
3. M/s. Automotive Valves Pvt Ltd., Dated 29/01/2007(Ref:SE/DHL/TECH/WIND/698)
4. M/s. Gayson & Co. Pvt Ltd., Dated 29/01/2007(Ref:SE/DHL/TECH/WIND/699)

/31/ Mail from Vestas to PP regarding pre-feasibility study in view of CDM for project activity
/32/ Mail from PP to Mr. Lakhanpal (secretary "Wind Power Association"), dated 05/04/2007
/33/ Mail from Vestas to PP regarding draft CDM agreement and letter in principal, dated 20/04/2007

/34/ Mail to regarding to registration of wind power association named as GPEA, dated 17/05/2007

/35/ Mail from VESTAS upper management forced Vestas CDM team to refuse GPEA for CDM Project activities, dated 06/06/2007

/36/ Mail regarding quotation from FICCI for CDM consultancy to GPEA, dated 25/10/2007

/37/ Mail regarding the proposal from PwC to GPEA for CDM consultancy, dated 08/11/2008

/38/ Mail from Secretary of GPEA requesting to their members to sign the agreement for CDM consultancy

/39/ GPEA received the proposal from ITCOT through one of their group member, mail dated 07/01/2008

/40/ GPEA received the proposal from SEE-Tech Solutions Pvt. Ltd, mail dated 12/01/2008

/41/ GPEA decided to go with Vestas as CDM consultant, mail dated 16/01/2008

/42/ Office memorandum from MoEF, dated 04/08/2008

- o0o -

A.1 Annex 1: Local Assessment

This checklist is designed to provide confirmation of in-country data and information provided in the Project Design Document **3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India**.
It serves as a "**reality check**" on the project that is completed by a local assessor from SGS India.

Issue	Findings	Source/Means of Verification	Further Action / Clarification / Information Required?
Purchase order for all WTGs of the project activity	PP has provided the supply agreement copies for all WTGs	Supply agreement. copy for WTGs (Ref:/4/)	Appropriate and accepted
Bundling form with information related to bundled project	PP has provided the bundling form	Copy of bundling form (Ref:/10/)	Appropriate and accepted
Ownership documents or Licenses	All relevant ownership documents submitted by PP	Land documents, Purchase orders, Commissioning certificates (Ref:/5/,/4/)	Appropriate and accepted
Host Country Approval(HCA)	PP has submitted the Host Country Approval(HCA)	Copy Host Country Approval(HCA) (Ref:/3/)	CAR 1 was closed out
Excel sheet for calculation of emission reduction with sources of data	PP has submitted CER calculations sheet	CER calculations excel sheet version 05(Ref:/14/)	Appropriate and accepted
Evidence for no use of ODA for each wind mill	PP has provided the undertaking that No ODA was involved in the project activity.	Undertaking letter (Ref:/15/)	Appropriate and accepted
Power Purchase Agreement between wind mill owner and electricity board	PP has provided the power purchase agreement document between client and the MSEDCL.	Power purchase agreement (Ref:/5/)	Appropriate and accepted
Financial calculation sheets, IRR calculations and source of each assumptions used ,Suitability of Benchmark	IRR calculations excel sheet submitted by PP	IRR calculations excel sheet (Ref:/13/)	Appropriate and accepted

Issue	Findings	Source/Means of Verification	Further Action / Clarification / Information Required?
Proof for CDM consideration for wind mill	PP submitted chronology of events with evidences right from start date of project activity	Hard copies of documents (Ref:/20/ to /42/)	Appropriate and accepted
Evidence is required to be submitted that the technology used would not be changed during the crediting period	PP has provided an undertaking letter stating that the technology involved in the project activity will not change during the crediting period.	Undertaking letter(Ref:/11/)	Appropriate and accepted
Calibration certificates of instruments for all wind mills	PP submitted Calibration certificates of instruments for all wind mills	Calibration certificates (Ref:/6/)	Appropriate and accepted
Evidence for start date of the project	PP submitted the copy of first purchase order placed for wind mill as an evidence	Purchase order (Ref:/4/)	Appropriate and accepted
Baseline data to establish a consistent baseline prior to start of the project activity	CEA data has been used for baseline determination.	Interviewed	Appropriate and accepted
Local stakeholder consultation is required.	PP has submitted invitation letter, attendance sheet has been submitted.	Document Review	Appropriate and accepted
QA/QC procedures for data monitoring or ISO certificates for the company (if applicable) and personnel training programme, Operation & maintenance	PP submitted ISO 9001:2000 certificate awarded to Vestas(EPC contractor)	Copy of ISO 9001:2000 certificate(Ref:/17/)	Appropriate and accepted
Modalities of Communication for the project activity	PP has provided an undertaking letter	Undertaking letter(Ref:/2/)	Appropriate and accepted
Debundling criteria	During the site visit it has found that the project is not a Debundled component of a large scale project and checked from UNFCCC site.	Site visit	Appropriate and accepted

A.2 Annex 2: Validation Checklist

Table 1 Participation Requirements for Clean Development Mechanism (CDM) Project Activities (Ref PDD, Letters of Approval and UNFCCC website)

Requirement	Reference	Comments	Conclusion/CARs/CLs
1. All Parties involved have approved the project activity 1.1. Has the DNA of each Party involved in the proposed CDM project activity in section A.3 of the PDD provided a written letter of approval which confirms 1.1.1. The country is a Party to the Kyoto Protocol 1.1.2. Participation is Voluntary 1.1.3. The Host Party confirming that the proposed CDM project activity contributes to sustainable development of the country Non-Annex 1 Party shall submit a letter of approval 1.1.4. It refers to the precise proposed CDM project activity title in the PDD being submitted for registration	Annex 3, Clean Development Mechanism, Validation and Verification Manual, Version 01 (from this point forwarded referenced as VVM) - 49a-d /54a-b/125 Paragraph 37 CDM Modalities and procedures	India has ratified the Kyoto protocol on 26th August 2002 and is allowed to participate. http://maindb.unfccc.int/public/country.pl?country=IN PP need to provide the Host country DNA approval letter for the proposed CDM project. HCA provided by PP;	CAR #1 closed Y
○ The letter/s of approval are unconditional with respect to 1.1.1 to 1.1.4 above	VVM Para. 49/54	Pending CAR #1	CAR #1 closed Y

Requirement	Reference	Comments	Conclusion/CARs/CLs
2. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for a minimum of 30 days, and the project design document and comments have been made publicly available	VVM Para. 128 Marrakech Accords, CDM Modalities, §40	Provide information on the global stakeholder process: website: http://cdm.unfccc.int/Projects/Validation/DB/IL2MM1XXCX7DP619HLJI33SQ4O1FFJ/view.html Starting date :- 30/09/2008 Closing date:- 29/10/2008 Number of comments received: 0	Y
3. The project design document is in accordance with the applicable CDM requirements for completing PDDs.	VVM Para. 57 Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	The PDD is in conformance with the UNFCCC SSC PDD format and current version.	Y
4. The project participants shall submit a letter on the modalities of communication (MoC) before submitting a request for registration	EB-09 F_CDM_REG form	PP provided the MOC letter.	Y

Table 2PDD

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
A. General Description of Project Activity				
A.1. Project Title				
A.1.1. Does the used project title clearly enable the reader to identify the unique CDM activity?	VVM Para.56 Guidelines for completing a CDM-PDD (PDD) section A.1	DR	3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India and the title is unique.	Y
A.1.2. Is there an indication of a revision number and the date of the revision?	VVM Para.56 PDD section A.1	DR	This is the version 1 of the PDD, dated – 20/05/2008; final version is version 7, dated 03/04/2009.	Y
A.2. Description of the Project Activity				
A.2.1. Does the description of the proposed CDM project activity as contained in the PDD sufficiently cover all relevant elements accurately?	VVM Para.59 PDD section A.2 see also A.4, A.4.3 and B.3	DR	Technical description along with details of the project activity is to be incorporated in section A.4 of PDD.	Y.
A.2.2. Does the information provide the reader with a clear understanding of the proposed CDM activity?	VVM Para.60 PDD section A.2 see also A.4, A.4.3 and B.3	SV	Proposed CDM project activity is a bundled small scale projects, each with emission reductions not exceeding 15,000 tones per year	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
A.2.3. Is all information provided consistent and in compliance with the actual situation or planning?	VVM Para.64 PDD section A.2 see also A.4, A.4.2 and B.3	DR	The chronology of planning and implementation of the project activity was verified during site visit. The project use of state of the art technology or a technology resulting in a significantly better performance than any commonly used technologies	Y
A.2.4. Is all information provided consistent with details provided in further chapters of the PDD?	VVM Para.64 PDD section A.2	DR	All figures and facts provided and mentioned in PDD are consistent.	Y
A.3. Project Participants				
A.3.1. Is the table required for the indication of project participants correctly applied?	VVM Para. 51 PDD section A.3	DR	Yes, the project participant correctly applied the required table. Name of the PP is Shree Jai Ambe Associates (Power Division).	Y
A.3.2. Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	VVM Para. 51 PDD section A.3	DR	Annex 1 provides the correct information	Y
A.4. Technical Description of the Project Activity				
A.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)? Are the latitude and	VVM Para.64 PDD section A.4	DR	Project is located at Village Brahmanvel, Dist. - Dhule in the state of Maharashtra. WEGs location details are as follows: Latitude: 21°8'60 N Longitude: 74°13'0 E	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
longitude of the site indicated (decimal points)				
A.4.2. Does the proposed CDM project activity involve the alteration of existing installations or process?	VVM Para.64 PDD section A.4	DR	The proposed CDM project is a green field project. Project participant submitted the purchase orders for the same.	CL #3 Closed Y
A.4.3. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	VVM Para.64 PDD section A.4	DR	Applicable ownership documents or Land agreement document which allows the implementation of the project activity at the project has to be submitted by Project Participant. Relevant ownership documents submitted by PP	CL #2 Closed Y
A.4.4. Is the category(ies) of the project activity correctly identified?	VVM Para.64 PDD section A.4	DR	The PDD mentioned that the proposed CDM project activity falls under sectoral scope 01, type – I, and project category is I.D. Grid connected renewable electricity generation.	Y
A.4.5. Is all information provided in compliance with actual situation or planning as available by the project participants?	VVM Para.64 PDD section A.4	DR, site visit	The project activity is already commissioned.	. Y
A.4.6. Is the table required for the indication of projected emission reductions correctly applied?	VVM Para.64 PDD section A.4	DR	The table for emission reduction calculations correctly applied.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
A.5. Debundling				
A.5.1. Is the small-scale project activity a debundled component of a large scale project activity	VVM Para. 134c	SV	The PDD mentions that the project proponent does not have any other registered or applied for registration CDM project activity in the 1 km area from the present project activity by same project participant within 2 years in same project category and technology. The same has been checked during the site visit.	Y
A.5.2. If the project is a debundled component of a larger project, does the larger project fall within the limits for small-scale CDM project activities	VVM Para. 134c	SV	The project activity is not a de-bundled project activity as mentioned in the PDD.the same has been checked as per rules defined in appendix C of the simplified modalities and procedures for small-scale CDM project activities during site visit	Y
A.6. Public Funding				
A.6.1. Does the information on public funding provided conform to the actual situation or planning as presented by the project participants?	PDD section A.4.4	DR, SV	There is no public funding used in the project activity .The declaration letter for no ODA diversion has to be provided by PP during site visit. The loan documents are checked for the project activity.	Y
A.6.2. Is all information provided consistent with details provided by further chapters of the PDD (in particular annex 2)?	PDD section A.4.4	DR	Annex 2 of PDD says that no public funding has been used in the project activity.	Y
A.6.3. In case of public funding from Annex I	PDD section A.4.4	DR, SV	There is no public funding used in the project activity .The declaration letter for no ODA diversion provided by PP during site visit	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
Parties is it confirmed that such funding does not result in a diversion of official development assistance				
B. Baseline and Monitoring Methodology				
B.1. Choice and Applicability				
B.1.1. Is the baseline methodology previously approved by the CDM Methodology Panel?	VVM Para.68 PDD section B.1	DR	Project participant has used AMS I D, version 13, which is an approved simplified methodology and is valid.	Y
B.1.2. Has the methodology (incl. the tools) been altered from the original version as referenced in the PDD?	VVM Para.69 PDD section B (B.1-B.2)	DR	The methodology AMS I.D has been applied correctly without any alteration from the original version. The project activity has used AMS I.D version 13 and "Tool to calculate the Emission Factor for an Electricity System", Version 1.1	Y
B.1.3. Does the project activity qualify as small scale project?	VVM Para. 134a	DR, SV	The proposed CDM project activity is Type I: The capacity of the proposed project activity is 3.00 MW which does not exceeds 15 MW. Same was verified from the name plate data/ technical specification data during the site visit.	Y
B.1.4. Is the category(ies) of the project activity correctly identified in accordance with Appendix B to the simplified modalities and procedures for small-scale CDM project activities?		DR	The PDD mentioned the category of the project activity which has been correctly identified in accordance with Appendix B to the simplified modalities and procedures for small-scale CDM project activities.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.1.5. Is the selected simplified methodology applicable to the project activity in the PDD?	VVM Para.75/66a/68/73 PDD section B (B.1-B.2)	DR	PDD, section A.4.2. discuss the applicability of the simplified methodology AMS I D, version 13. The proposed CDM project activity will supply electricity to the regional grid from a renewable source (wind) and the capacity of the project activity is below 15 MW (3.00 MW <15 MW). Hence, the project applicability has been justified.	Y
B.1.6. Does the project activity conform to one of the approved small-scale categories?	VVM Para. 134b	DR	The proposed project activity confirms to AMS I D, under sectoral scope -01(Energy industries renewable-. Non- renewable sources) and justification for the applicability criteria has been mentioned in the PDD.	Y
B.1.7. Is the project activity a bundle of several small scale activities and if so does it contain any sub-bundles?		SV	The project activity is a bundle of 4 wind mills as per PDD and confirmed on-site.	Y
B.1.8. If the project activity is a bundle of several small scale activities, does the sum of the total bundle (including any subbundles) fall within the limits for small scale projects		SV	The project activity is a bundle of several small scale activities and the sum of the total bundle (including any sub bundles) fall within the limits for small scale projects as per PDD (15 MW).	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.1.9. If the project activity is a bundle of several small scale activities, has the form with information related to the bundle been submitted and is it correctly used	Ref /10/	SV	Bundling form with information's related to the bundle has been submitted by PP	Y
B.1.10. Is the discussion in the PDD in conformance with all applicability criteria of the applied methodology?	VVM Para.75/66b/68 PDD section B (B.1-B.2)	SV	The PDD discuss all the applicability criteria of the applied methodology AMS I D, version 13, in relation to the proposed CDM project activity and provide the justification. However, the applicability criteria for the project activity need to be checked during the site visit.	Y
B.2. Project Boundary				
B.2.1. Are all emission sources and gases related to the baseline scenario, project scenario and leakage clearly identified and described in a complete and transparent manner? Is there information on GHG emissions in proposed CDM project activity boundary as a result of the implementation of the proposed CDM project activity which	VVM Para.79/76/67a PDD section B.3	DR	The PDD correctly describes the project boundary, including the physical delineation of the proposed CDM project activity and all emissions included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.				
B.2.2. In case of grid connected electricity projects: Is the relevant grid correctly identified in accordance with the tool to calculate emission factor of electricity system (wherever applicable) and the underlying methodology?	VVM Para.79 PDD section B.3	DR	Project activity involves generation of renewable electricity by wind mills, electricity generated is fed to Western regional grid of India, this grid is identified accordance with the tool to calculate emission factor of electricity system(version 01.1) which is underlying in methodology AMS-I.D ,version 13	Y
B.2.3. Does the project boundary include the physical delineation of the proposed CDM project activity?	VVM Para.78/79 PDD section B.3 also see section A.4.2	DR	The proposed CDM project activity has been clearly described in the project boundary. The delineation in the PDD of the project boundary is correct and meets the requirements of the selected baseline methodology AMS-I.D ,version 13	Y
B.2.4. Are the project's geographical boundaries and the project's system boundaries (components and facilities used to	VVM Para.76/79 PDD section B.3 also see section A.4.2	DR	As project activity is wind based electricity based generation. No sources of gases are included within the project boundary. There is no specific requirement for the justification for the inclusion of the gases within the project boundary. In baseline, the gas involved in CO2 as the baseline is the current generation mix by grid connected power plants.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
mitigate GHGs) clearly defined?				
B.3. Identification of the Baseline Scenario				
B.3.1. Does the PDD discuss the identification of the most likely baseline scenario? Does the PDD follow the steps to determine the baseline scenario required by the methodology and is the application of the methodology and the discussion and determination of the chosen baseline transparent?	VVM Para.67b.80/82/86 PDD Section B.4/B.5	DR	The identification of most likely baseline has been discussed in section B.4 of PDD. The baseline scenario is the continuation of current generation mix from the fossil fuel dominated grid connected electricity generation.	Y
B.3.2. Are all tools/procedures in the methodology correctly applied to identify the most reasonable baseline scenario? This includes all potential realistic and credible baseline scenarios in the discussion taking into account relevant national and/or sectoral policies, macro-	VVM Para.81/82/86a-d/83/84 PDD Section B.4/B.5	DR	PP has used the AMS I.D version 13 and used the "Tool to calculate the emission factor for an electricity system (Version 01.1) for the calculation of emission factor. The most likely baseline scenario is the continuation of current generation mix from the fossil fuel dominated grid connected electricity generation. The discussion and determination of the chosen baseline transparent and supported by the available data which is the present western grid and data are available from CO_2 Baseline Database for the Indian Power Sector, Version 03, and December 2007.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
economic trends and political aspirations?				
B.3.3. Is the choice of the baseline compatible with the available data?	VVM Para.86b-c/95 PDD Section B.4/B.5	DR	The selected baseline is appropriate with the available data .Fossil fuel based electrical energy generation is the most compatible baseline scenario	Y
B.3.4. Is conservativeness addressed in the way of identifying the baseline?	VVM Para.90 PDD Section B.4/B.5	DR	All data available interpreted in conservative manner and selected baseline provides a conservative determination of the emission reductions	Y
B.3.5. Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	VVM Para.90/91 PDD Section B.4/B.5	DR	The methodology AMS-I.D ,version 13 does not requires the identification of other possible scenarios	Y
B.3.6. Is there a verifiable description of the baseline scenario? Does this include a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity?	VVM Para.86e/85 PDD Section B.4/B.5	DR	Not required as per methodology AMS-I.D ,version 13	Y
B.4. Additionality				
B.4.1. Does the PDD clearly demonstrate the	VVM Para.67d/95	DR	The PDD in section .B.5. address the additionality as per the methodology. However some clarifications regarding to additionality have been asked from project participant	CAR#6 Closed

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
additionality using the approach as specified in the methodology and by following all the required steps?	PDD Section B.1/B.4/B.5			Y
B.4.2. In case of using the additionality tool: Is the 'Additionality Tool' used in the PDD latest version? If an earlier version has been used, do the changes impact the discussion in the PDD? Are all steps followed in a transparent manner?	PDD Section B.1/B.4/B.5	DR	PP has not used any Additionality tools. However "Tool for the demonstration and assessment of additionality (Version 05.2), Clause (a) of Sub-step 2b: Option III – Apply Benchmark Analysis has been referred for benchmark analysis only Refer also to CAR #6	CAR #6 Closed Y
B.4.3. Has all information been backed up with references, sources and certification? Is the data presented credible and reliable with complete transparency to all available data and documentation?	VVM Para.93/91 PDD Section B	DR	This need to be discussed during the site visit. Refer also to CAR #6	CAR #6 Closed Y
B.4.4. Is the discussion on additionality and the evidence provided consistent with the starting date of the project?	VVM Para.102b PDD Section B.5	DR	Refer also to CAR 6. Please justify the delay in preparation of PDD and submission of the same for validation with documentary evidences	CAR #6 Closed Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
If the project activity start date is prior to the validation is it discussed how the CDM was taken into account in the decision to go ahead with the project activity				
B.4.5. If an investment analysis has been used, has it been shown that the proposed project activity is economically or financially less attractive than at least one other alternative without the revenue from the sale of CERs?	VVM Para. 106, 107, 109 112a-c PDD Section B.5	DR	Investment analysis has been involved in the project activity; the same has been described as per section B.5 of PDD. Refer to CAR 6	CAR #6 Closed Y
B.4.6. If a benchmark is used, is it ensured that it is selected in accordance with the requirements of the tool /methodology and it represents standard returns in the market (not linked to the subjective profitability expectation or risk	VVM Para. 110 PDD Section B.5	DR	The benchmark was not clear for the project activity. Refer to CAR 6	CAR #6 Closed Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
profile of a particular project developer).				
B.4.7. If a barrier analysis has been used, has it been shown that the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity but would not have prevented the implementation of at least one of the alternatives?	VVM Para. 114 115a-b/116 PDD Section B.5	DR	Investment barrier is used. Not required for the AMS I.D methodology	Not Applicable Y
B.4.8. Is the discussion on additionality consistent with the identification of all plausible and credible baseline scenarios?	VVM Para. 105 PDD Section B.5	DR	The discussion on additionality is based on a comparison with realistic and credible alternatives which is the continuation of the fossil fuel dominated grid connected power plants.	Y
B.4.9. Do the identified baseline scenarios include technologies and practices that include outputs or services comparable with the proposed CDM project activity? Do they also abide by the same	VVM Para. 105 PDD Section A.4.2/B.5	DR	The project activity involves generation of electricity by the renewable energy, which is wind energy in this project. In the absence of the project activity equivalent amount of electricity would have been taken from the grid, which is predominately connected by the thermal power stations. Therefore current grid is taken as baseline scenario	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
applicable laws and legislations?				
B.4.10. Has it been shown that the project is not common practice?	VVM Para. 119a/b PDD Section B.5	DR	Not required for the AMS I.D methodology	Not Applicable
B.4.11. What are they key distinctions between the project activity and any similar projects that are widely used as common practice?	VVM Para. 118, 119c/d PDD Section B.5	DR	Not required for the AMS I.D methodology	Not Applicable
B.5. Application of the Simplified Methodology				
B.5.1. Has the simplified methodology been applied correctly for determining **baseline emissions**?	VVM Para. 91d PDD Section B (B.6.1 -B.71)	DR	The methodology AMS I D, version 13, has been applied correctly for determining the baseline emission. Project participant needs to clarify why ACM 0002 methodology has referred to calculate baseline emission factor instead of Tool to calculate the emission factor for an electricity system It is not clear whether grid emission factor is ex-ante parameter or monitoring as ex-post. Response to CL5 was provided and accepted.	CL #5 Closed Y
B.5.2. Has the simplified methodology been applied correctly for determining **project**	VVM Para. 90/91d PDD Section B	DR	The methodology AMS I D, version 13, has been applied correctly to determine the project emission. The project activity is wind based electricity generation and involves no project emission. Thus project emissions are zero. The same is clearly mentioned in the PDD.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
emissions?	(B.6.2-B.71)			
B.5.3. Has the simplified methodology been applied correctly for determining **leakage**?	VVM Para. 91d PDD Section B (B.6.2 -B.71)	DR	The methodology AMS I D, version 13, has been applied correctly to determine the project emission. The PDD clearly mentioned that there is no project emissions due to wind based electricity generation and is accepted.	Y
B.5.4. Where applicable, has the simplified methodology been applied correctly for the **direct calculation of emission reductions?**	VVM Para 88/91d PDD Section B (B.6.2 -B.71)	DR	All the methodological choices have been explained. The OM, BM and CM are properly justified and are correct.	Y
B.5.5. Where there is an option between different equations or parameters, has the methodological choices for the project been explained, have they been properly justified and are they correct?	VVM Para.89/90/91 PDD Section B (B.6.2 -B.71)	DR	The PDD has described the methodological choices as per applied methodology AMS I D, version 13.	Y
B.5.6. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	PDD Sections B.5-C	DR	Not applicable	Not Applicable
B.6. Ex-ante Data and Parameters Used				
B.6.1. Are the data provided in compliance with the	VVM Para.	DR	It is not clear whether the grid emission factor is ex-ante parameter or monitoring as ex-post. CL#5 was raised.	CL #5

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
methodology?	91/67c PDD Section B.6.3B.6.4		The data provided are in compliance with the methodology.	closed Y
B.6.2. Is all the data derived from official data sources or replicable records and have these been correctly quoted?	VVM Para. 91a/b PDD Section B.6.3/B.6.4	DR	All the data is derived from official data sources or replicable records and have these been correctly quoted. PP has used "Baseline Carbon Dioxide Emissions from Power Sector" provided by the Central Electricity Authority (CEA), Government of India for the calculation of emission factor.	Y
B.6.3. Is the vintage of the baseline data correct?	PDD Section B.6.3/B.6.4	DR	The vintage of the baseline data is correct as PP has used the latest version of CO_2 Baseline Database for the Indian Power Sector, Version 03 which was available at the time of PDD submission.	Y
B.6.4. Is all the data appropriate and correctly applied to the CDM project activity?	VVM Para. 91c PDD Section B.6.3/B.6.4	DR	PP has applied all the data appropriately and correctly to the CDM project activity.	Y
B.6.5. Are data and parameters that are not being monitored and remained fixed throughout the crediting period appropriately assessed, correct, and will they result in conservative estimates?	VVM Para. 90 PDD Section B.6.3/B.6.4	DR	The CEA data, OM, BM and CO2 emission factor has been fixed throughout the crediting period and are correct and conservative.	Y
B.7. Calculation of Emissions Reductions				
B.7.1. Has the simplified	VVM Para.	DR	Excel sheet/ worksheet required for CERs calculation to ascertain that the emission	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
methodology been applied correctly for determining **emission reductions**?	91d PDD Section A.4.3/B.6		reductions determined are in accordance with the methodology described.	
B.7.2. Are the emission reduction calculations documented in a complete and transparent manner?	VVM Para. 91e PDD Section B.6	DR	All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PDD and CER calculations excel sheet	Y
B.7.3. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	PDD Section B.6	DR	Project participant provides a transparent *ex ante* calculation of baseline emissions expected during the crediting period, applying all relevant equations provided in the approved methodology AMS I D, version 13	Y
B.7.4. Is the calculation of the emission reduction correct?	VVM Para. 91e PDD Section B.6	DR	All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD	Y
B.8. Emission Reductions				
B.8.1. Is the form/table required for the indication of projected emission reductions correctly applied?	PDD Section A.4.3/ Section B.6	DR	Table used for indication of projected emission reductions correctly applied	Y
B.8.2. Is the projection in line with the envisioned time schedule for the project's implementation and the	PDD Section A.4.3/ Section B.6	DR	The same was discussed during the site visit	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
indicated crediting period?				
B.9. Monitoring Methodology				
B.9.1. Does the monitoring methodology provide a consistent approach in the context of all parameters to be monitored and further information provided by the PDD? Are all parameters and data that are available at validation consistent with the simplified methodology. Has this data been interpreted and applied correctly?	VVM Para. 67e PDD Section B.7-B.8 see also Annex 4	DR	Project participant needs to include all the parameters used to calculate the net electricity supplied to grid by project activity The monitoring methodology has been applied correctly in representing all the parameters to be monitored.	CAR #7 closed Y
B.9.2. Does the monitoring methodology apply consistently the choice of the option selected for monitoring both of project and baseline emissions?	PDD Sections B and C	DR	The monitoring plan has been applied correctly for monitoring of both project and baseline emission.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.10. Data and Parameters Monitored				
B.10.1. Does the monitoring plan in the PDD comply with the simplified methodology? Provide for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period?	VVM Para. 91a/91d/121/79 PDD Section B.7-B.7.2	DR	Monitoring plan contains all necessary parameters and means of monitoring described in the plan complies with the requirements of the methodology AMS ID version 13	Y .
B.10.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the simplified methodology applied?	PDD Section B.7-B.7.2/B.6.2	DR	Choices of project GHG indicators are not required as per methodology AMS I D version 13	Y
B.10.3. Will it be possible to determine the specified project GHG indicators?	PDD Section B.6.2-B.8	DR	Choices of project GHG indicators are not required as per methodology AMS I D version 13	Y
B.10.4. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper	PDD Section B.6.2-B.7.1	DR	The information given for each monitoring variable to calculate the net electricity supplied to grid by the presented table is sufficient to ensure the verification of a proper implementation of the monitoring plan. The all required parameters used for apportioning are mentioned in section B.7.1 of the PDD.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
implementation of the monitoring plan?				
B.10.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	PDD Section B.6.2-B.7.1	DR	The information given for each monitoring variable by the presented table is sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records.	Y
B.10.6. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	PDD Section B.5-B.7.2	DR	The monitoring approach will deliver data in a reliable and reasonably acceptable accuracy.	Y
B.10.7. Are all formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology.	PDD Section B.6.2-B.7.1	DR	The proposed project activity is the generation of electricity using wind energy, so project emission has not been taken into account that is inline with methodology AMS I.D version 13	Y
B.11. Quality Control (QC) and Quality Assurance (QA) Procedures				
B.11.1. Is the selection of data undergoing quality control and quality	VVM Para. 121 Refer to all data	DR	The QA/QC procedures as mentioned in section B.7.1, B.7.2 and Annex 4 are found to be inline with ISO procedure.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
assurance procedures complete?	within the PDD Inc. B.6.2-B.7.1			
B.11.2. Is the belonging determination of uncertainty levels done correctly for each ID in a correct and reliable manner?	Refer to all data within the PDD Inc. B.4/B.7.2/Annex 4	DR	The uncertainty levels have been done for each ID.	Y
B.11.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?	VVM Para 121	DR	The WTG supplier is ISO certified and followed the QA/QC procedure for the monitoring data.	Y
B.11.4. Is it ensured that data will be bound to national or internal reference standards?	VVM Para. 86d	DR	Yes, the data will be bound to national standards.	Y
B.11.5. Is it ensured that data provisions will be free of potential conflicts of interests resulting in a tendency of overestimating emission reductions?	VVM Para. 19	DR	The data provision will be free of potential conflicts of interests.	Y
B.12. Operational and Management Structure				
B.12.1. Is the authority and responsibility of project management clearly described?	PDD Section B.8/Annex 1	DR	The authority and responsibility of project management has been clearly described in the PDD.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.12.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	PDD Section B.8/Annex 1	DR	Annex 4 of PDD describes it.	Y
B.12.3. Are procedures identified for training of monitoring personnel?	PDD Section B.8/Annex 1	DR	Project participant need to submit evidence for the personnel training The training of the monitoring personnel has been mentioned in section B.7.2	CL #4 closed Y
B.13. Monitoring Plan (Annex 4)				
B.13.1. Is the monitoring plan developed in a project specific manner clearly addressing the unique features of the CDM activity?	VVM Para. 122a	DR	The monitoring plan has clearly addressed the unique requirement of the CDM project activity.	Y
B.13.2. Does the monitoring plan completely describe all measures to be implemented for monitoring all parameter required, including measures to be implemented for ensuring data quality?	VVM Para. 122b	DR	The monitoring plan completely describes all measures to be implemented for monitoring all parameter required The organizational structure and roles and responsibility has been addressed for the monitoring of the project activity.	Y
B.13.3. Does the monitoring plan provide information on monitoring equipment	VVM Para. 122b	DR	Monitoring plan provide information on monitoring equipment and respective positioning in order to safeguard a proper installation. The O& M contact with the EPC contractor ensures the safeguard of the monitoring equipment.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
and respective positioning in order to safeguard a proper installation?				
B.13.4. Are procedures identified for calibration of monitoring equipment?	VVM Para. 122a-c	DR	Project participant did not describe the calibration procedure for panel meter. Project participant submitted undertaking from wind mill manufacturer regarding the calibration procedure of panel meter	CAR #7 closed Y CAR #7 Closed Y
B.13.5. Are procedures identified for maintenance of monitoring equipment and installations?	VVM Para. 122a-c	DR	The maintenance and installation of monitoring equipments were checked during site visit	Y
B.13.6. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	VVM Para. 122a-c	DR, SV	The data is monitored on day to day basis by the plant officials and the data has been archived manually as hard copy.	Y
B.13.7. Are procedures identified for dealing with possible monitoring data adjustments and missing data allowing	VVM Para. 122a-c	DR, SV	The procedure has been identified for dealing with possible monitoring data adjustments and missing data allowing redundant reconstruction of data in case of monitoring problems. The EPC contractor is taking the data from control panel in case of failure of Central Monitoring system (CMS). CMS gives a signal in case of redundancy in the operation of the WTG and WTG will shut down in case of emergency. The same has been checked physically during site and from records of	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
redundant reconstruction of data in case of monitoring problems?			operational time.	
B.13.8. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	VVM Para.122a-c	DR, SV	This was checked during site visit.	Y
B.13.9. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	VVM Para. 122a-c	DR	The procedure has been identified for the project performance reviews	Y
B.13.10. Describe the ability of the project participants to implement the monitoring plan.	VVM Para. 122c	DR	The project participant has implemented the monitoring plan for the project activity.	Y
B.14. Baseline Details				
B.14.1. Is there any indication of a date when determining the baseline?	PDD Section B.8/Annex 3	DR	The date of completion of the baseline determination is 20/05/2008	Y
B.14.2. Is this consistent with the time line of the PDD history?	Also see revision history of the PDD	DR	There is no inconsistency with the time line of the PDD history	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
B.14.3. Is all data required provided in a complete manner by annex 3 of the PDD?	PDD Annex 3	DR	All data required is provided in a complete manner by annex 3 of the PDD	Y
C. **Duration of the Project / Crediting Period**				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	VVM Para. 102a-c PDD Section C.1.1/C.1.2	DR	Yes the project start date is 30/08/2006 and the operational lifetime is 20 years. The evidence was provided by project participant (refer to CAR 8)	CAR 08 closed Y
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	VVM Para. 102a PDD Section C.2/C.2.1/C.2.2	DR	Fixed crediting period of 10 years has been selected for the project activity and it is reasonable.	Y
C.1.3. Does the project's operational lifetime exceed the crediting period	VVM Para. 102a PDD Section C.1.2/C.2.1.1/C.2.1.2	DR	The project operational life is expected to be 20 years which exceed the crediting period of 10 years.	Y
C.1.4. Does the start date indicate whether this is a new project activity or a pre-existing project activity?	VVM Para. 102a/ 98 PDD Section C.1.1/C.2.1.1	DR	The start date of the project activity 30/08/2006 which is before 2nd August 2008 and thus it is a pre –existing project activity.	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
D. Environmental Impacts				
D.1.1. Does the project comply with environmental legislation in the host country?	VVM Para. 131/134d PDD section D	DR	In the redefined EIA notification i.e. S.O. 1533, dated 14th September 2006, Ministry of Environment & Forests (MoEF), Govt. of India, the wind projects are not included in the list of projects that has to get Prior Environmental Clearance (EC) either from State or Central Govt. authorities and hence no EIA study required to be conducted.	Y
D.1.2. Has an analysis of the environmental impacts of the project activity been sufficiently described?	VVM Para. 131 PDD section D	DR	Copy of Notification has been checked for the requirement of EIA and found that EIA is not required for project activity.	Y
D.1.3. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	VVM Para. 131 PDD section D	DR	There is no host party requirement for the project activity.	Y
D.1.4. Will the project create any adverse environmental effects?	VVM Para. 131 PDD section D	DR	There are no adverse environmental effects due to project activity	Y
D.1.5. Are trans-boundary environmental impacts considered in the analysis?	VVM Para. 131 PDD section D	DR	There is no host party requirement for the project activity	Y
D.1.6. Have identified environmental impacts been addressed in the project design?	VVM Para. 131 PDD section D	DR	There is no adverse environmental impacts for the project activity	Y

Checklist Question	Ref. ID	MoV*	Comments	Conclusion/ CARs/CLs
E. Stakeholder Comments				
E.1.1. Have relevant stakeholders been consulted?	VVM Para. 128a PDD Section E.1	SV	The PDD mentions that residents of neighboring villages, Maharashtra Energy Development Agency (MEDA) representatives, representative of MSEDCL, have been selected as the stakeholders, to be checked during the site visit. MoMs of the stake holder Consultation Meeting is required to ascertain relevant stakeholders were consulted	CAR #9 Closed Y.
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	VVM Para. 128a PDD Section E.1	DR	Stakeholders were consulted through survey, this is mentioned in section E.1 of PDD	Y
E.1.3. Is the undertaken stakeholder process described in a complete and transparent manner?	VVM Para. 128b PDD Section E.1	SV	Stakeholder consultation is not required by host country regulation; however the project proponent has carried the same as a part of CDM requirements. The same would be checked during the site visit.	Y
E.1.4. Is a summary of the stakeholder comments received provided?	VVM Para. 128b PDD Section E.2	SV	There were no negative comments for the project activity.	Y
E.1.5. Has due account been taken of any stakeholder comments received?	VVM Para. 128b PDD Section E.3	SV	PDD mentioned that all the queries of the local people were answered to their satisfaction and the project was signaled with positive response. This was checked during site visit.	Y

References

Reference ID	Title / Description	Comments
/1.a/	PDD, version 01, dated 20/05/2008 (Submitted for Global stakeholders comments)	Checked for CDM guidelines
/1.b/	PDD, version 02, dated 15/11/2008	Checked for findings responses
/1.c/	PDD, version 03, dated 09/01/2009	Checked for findings responses
/1.d/	PDD, version 04, dated 04/02/2009	Checked for findings responses
/1.e/	PDD, version 05, dated 14/02/2009	Checked for findings responses
/1.f/	PDD, version 06, dated 24/02/2009	Checked for findings responses
/1.g/	PDD, version 07(final version), dated – 03/04/2009 (Submitted for request for registration)	Checked for findings responses and CDM guidelines
/2/	Modalities of Communications dated 21/11/2008	Checked for contact details
/3/	HCA letter(Ref: Ministry letterNo:4/15/2008-CCC,dated: 07/01/2009)	Checked for project title and project participant
/4/	**Purchase orders for all wind mills(along with technical specifications)** : • M/s. Shree Jai Ambe Associates(Power Division) Dated 30/08/2006 • M/s. M.G. Patel & Brothers(Power Division) Dated 30/08/2006 • M/s. Automotive Valves Pvt Ltd. Dated 02/09/2006 • M/s. Gayson & Co. Pvt Ltd. Dated 19/09/2006	Checked for capacity, technical specifications and ownership of the WTGs
/5/	**Supply Agreement, between** • M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 30/08/2006 • M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 30/08/2006 • M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 02/09/2006 • M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 19/09/2006 **O&M agreement between** • M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 01/09/2006 • M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon (India) Pvt Ltd. Dated 01/09/2006	Checked for capacity, technical specifications and ownership of the WTGs

Reference ID	Title / Description	Comments
	• M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon (India) Pvt Ltd. Dated 02/09/2006 • M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. (date not found) **PPA between** • M/s. Shree Jai Ambe Associates (Power Division) & MSEDCL. Dated 04/04/2007 • M/s. M.G. Patel & Brothers (Power Division) & MSEDCL Dated 04/04/2007 • M/s. Automotive Valves Pvt Ltd. & MSEDCL Dated 04/04/2007 • M/s. Gayson & Co. Pvt Ltd. & MSEDCL. Dated 04/04/2007 **Land agreements for** • M/s. Shree Jai Ambe Associates (Power Division) & M/s. NEG Micon(India) Pvt Ltd. Location (D-1) on date 07/11/2006 • M/s. M.G. Patel & Brothers (Power Division) & M/s. NEG Micon(India) Pvt Ltd. Location (D-6) on date 07/11/2006 • M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Location (D-2) on date 19/04/2007 • M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Location (AA) on date 25/11/2006	
/6/	Calibration report dated 15/07/2008 (Ref:EE/TDD/TECH/30)	Checked for calibration of instruments
/7/	Letter for completion of stakeholder comments dated 14/03/2008	Checked for comments of local stakeholders
/8/	Reference documents for tax calculation	Checked for tax rate
/9/	Documentary evidence for 80% depreciation on asset	Checked for depreciation
/10/	Bundling form	Checked for guidelines for bundling form
/11/	Undertaking letter for no change in technology, dated 21/11/2008	Checked for no change in technology during crediting period
/12/	Personnel training schedule, dated 28/11/2008	Checked for training procedure
/13/	IRR calculation excel spreadsheets for each sub-bundle (version 05)	Checked for financial calculation
/14/	CER calculations spreadsheet version 05	Checked for emission reductions
/15/	No ODA undertaking dated 21/11/2008	Checked for no ODA involvement

Reference ID	Title / Description	Comments
/16/	Government Bond Rate 3 year's data references http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/74675.pdf http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/67219.pdf http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/59442.pdf	Checked for Government Bond rates
/17/	ISO 9001:2000 Certificate for VESTAS EPC contractor dated 22/04/2008 valid till 05/01/2011	Checked for QA/QC procedure
/18/	Back to back agreements among wind mill owners for all 4 sub-bundles dated 03/10/2006	Checked for authorization
/19/	Loan sanction letter (Ref: RMCPC: ADV) dated 20/02/2007	Checked for loan amount
/20/	Mail conversations supporting to seriousness of CDM consideration	Checked for Serious CDM consideration
/21/	Work order to Energetic consulting Pvt Ltd dated 25/10/2006	Checked for chronology of events
/22/	Termination of Work order to Energetic consulting Pvt Ltd dated 07/02/2007	Checked for chronology of events
/23/	Work Order to SEE-Tech Solutions Pvt. Ltd. Dated 18/02/2008	Checked for chronology of events
/24/	Board resolution (Shree Jai Ambe Associates) dated 08/08/2006	Checked for CDM consideration
/25/	Board resolution (M.G. Patel & Automotive Valves) on 29 August 2006 and 28 August 2006 respectively	Checked for CDM consideration
/26/	Contract for validation of the project with SGS, dated 29/07/2008	Checked for chronology of events
/27/	Broad Resolution for M/s. Gayson & Co. Pvt. Ltd, dated 07/09/2006	Checked for chronology of events
/28/	Techno- commercial Offers 1. Techno- commercial Offer from Vestas (formally NEG Micon) to Jai Ambe Associates, dated 25th Aug. '06 2. Techno- commercial Offer from Vestas (formally NEG Micon) to Automotive Valves, dated 25th Aug. '06 3. Techno- commercial Offer from Vestas (formally NEG Micon) to M.G Patel & Brothers, dated 25th Aug. '06 4. Techno Commercial Offer from Vestas (formally NEG Micon) to Gayson & Co, dated 4th Sept. '06	Checked for the input values available for the PP at the time of decision made for the project activity
/29/	Mail from WTGs supplier to PP ,dated 01/08/2006	Checked for prior knowledge of CDM for the project activity.

Reference ID	Title / Description	Comments
/30/	Commissioning certificates for 1 WTG belongs to: 1. M/s. Shree Jai Ambe Associates (Power Division), Dated29/01/2007(Ref:SE/DHL/TECH/WIND/699) 2. M/s. M.G. Patel & Brothers(Power Division)Dated29/01/2007(Ref:SE/DHL/TECH/WIND/701) 3. M/s. Automotive Valves Pvt Ltd., Dated 29/01/2007(Ref:SE/DHL/TECH/WIND/698) 4. M/s. Gayson & Co. Pvt Ltd., Dated 29/01/2007(Ref:SE/DHL/TECH/WIND/699)	Checked for commissioning of the project activity
/31/	Mail from Vestas to PP regarding pre-feasibility study in view of CDM for project activity	Checked for CDM parallel action
/32/	Mail from PP to Mr. Lakhanpal (secretary “Wind Power Association”), dated 05/04/2007	Checked for CDM parallel action
/33/	Mail from Vestas to PP regarding draft CDM agreement and letter in principal, dated 20/04/2007	Checked for CDM parallel action
/34/	Mail to regarding to registration of wind power association named as GPEA, dated 17/05/2007	Checked for CDM parallel action
/35/	Mail from VESTAS upper management forced Vestas CDM team to refuse GPEA for CDM Project activities, dated 06/06/2007	Checked for CDM parallel action
/36/	Mail regarding quotation from FICCI for CDM consultancy to GPEA, dated 25/10/2007	Checked for CDM parallel action
/37/	Mail regarding the proposal from PwC to GPEA for CDM consultancy, dated 08/11/2008	Checked for CDM parallel action
/38/	Mail from Secretary of GPEA requesting to their members to sign the agreement for CDM consultancy	Checked for CDM parallel action
/39/	GPEA received the proposal from ITCOT through one of their group member, mail dated 07/01/2008	Checked for CDM parallel action
/40/	GPEA received the proposal from SEE-Tech Solutions Pvt. Ltd, mail dated 12/01/2008	Checked for CDM parallel action
/41/	GPEA decided to go with Vestas as CDM consultant, mail dated 16/01/2008	Checked for CDM parallel action
/42/	Office memorandum from MoEF, dated 04/08/2008	Checked for CDM parallel action

A.3 Annex 3: Overview of Findings

Findings Overview

Findings from validation of **3.00 MW bundled Wind Power Project by Shree Jai Ambe Associates at Brahmanvel, Dist. Dhule (Maharashtra), India**
Each Table below represents a finding from the validation assessment. The findings are numbered consecutively, approximately in the order that they have been identified and irrespective of the nature of the findings, for eg.: CAR #1, CAR #2, CL #3, FAR #4 etc.
Description of Table:

Type	Findings are Corrective Action Requests (CARs), Clarification Requests (CLs), and Forward Action Request (FARs). A corrective action request (CAR) is raised if one of the following occurs: I. The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions; II. The CDM requirements have not been met; III. There is a risk that emission reductions cannot be monitored or calculated. A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met A forward action request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.
Lead Assessor Comments	Details the content of the finding
Ref	Refers to the item number in the Validation Protocol
Response	Please insert response to finding, starting with the date of entry.

Please Note: This is an open list and more findings may be added as validation progresses.
Responses to each Finding and relevant associated documentation should be recorded in this form by the Client and send back to the Lead Assessor in one submission to SGS (exception of finding linked to Letter of Approval, which can be submitted separately).
SGS reserves the right to review the associated fees and timeline if:

- more than one response submission is received from the Client
- a finding (CL/CAR), raised by the Lead Assessor prior to Technical Review stage, is not closed within 30 days of notification to the Client by SGS.

Rows for comments and further response will be appended to the table until the Findings has been addressed to the satisfaction of the Lead Assessor.

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	5	4	0

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CAR	Number:	01	Reference:	1.3
Lead Assessor Comment:					
The project proponent needs to submit the Host Country Approval for the project activity.					
Project Participant Response:			**Date:** 13/11/2008		
The Host Country Approval for the project activity is in process with MoEF.					
Documentation Provided by Project Participant:					

HCA is not submitted	
Information Verified by Lead Assessor:	
HCA is not submitted	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date**: 26/12/2008
Project participant has not submitted HCA for the project activity. Thus CAR 01 is open	
Project Participant Response:	**Date:** 24/01/2009
The Host Country Approval is been provided to DOE in soft format via mail dated 24th January 2009.	
Documentation Provided by Project Participant:	
Host country Approval Ministry letterNo:4/15/2008-CCC Dated: 07/01/2009	
Information Verified by Lead Assessor:	
HCA for project activity has been checked & title of project, project participant details are verified with PDD ver01 dated 02/09/2008 & found correct thus acceptable.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 30/01/2009
Project participant has submitted the Host Country Approval from Designated National Authority, MoEF for the proposed project activity. The reference number for the same is 4/15/2008-CCC dated 07/01/2009. The name of the project activity and project participant mentioned in HCA is the same as in the section A.1 and A.3 of the revised PDD and is accepted. Thus CAR #1 was closed out.	
Acceptance and Close out by Lead Assessor:	**Date:** 30/01/2009

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CL	Number:	02	Reference:	A.4.2
Lead Assessor Comment:					
Applicable ownership documents or licenses which allow the implementation of the project activity at the project site need to be submitted by Project Participant.					
Project Participant Response:			**Date:** 13/11/2008		
Ownership of the project activity by the project proponents (PPs) can be shown by Supply Agreement between seller of windmill and PPs, O&M agreement between seller & PPs and PPA signed between Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) & PPs.					
Documentation Provided by Project Participant:					

Supply Agreement, between

- M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 30/08/2006
- M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 30/08/2006
- M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 02/09/2006
- M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 19/09/2006

O&M agreement between

- M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 01/09/2006
- M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Dated 01/09/2006
- M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Dated 02/09/2006
- M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. (date not found)

and PPA between

- M/s. Shree Jai Ambe Associates (Power Division) & M.S.E.D.Co. Ltd. Dated 04/04/2007
- M/s. M.G. Patel & Brothers (Power Division) & M.S.E.D.Co. Ltd. Dated 04/04/2007
- M/s. Automotive Valves Pvt Ltd. & M.S.E.D.Co. Ltd. Dated 04/04/2007
- M/s. Gayson & Co. Pvt Ltd. & M.S.E.D.Co. Ltd. Dated 04/04/2007

Information Verified by Lead Assessor:

Ownership for the implementation of project activity has been verified through documents submitted by project participant.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008

Project participant has submitted ownership documents like supply agreement, O&M agreement, Power Purchase Agreement for the project activity. The documents checked and found acceptable.
However the project participants need to submit the land documents for the project activity.
Thus CL 02 is open.

Project Participant Response:	**Date:** 09/01/2009

The Land Documents for the project activity is being submitted to DOE.

Documentation Provided by Project Participant:

Land agreement for

- M/s. Shree Jai Ambe Associates(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Location (D-1) on date 07/11/2006
- M/s. M.G. Patel & Brothers(Power Division) & M/s. NEG Micon(India) Pvt Ltd. Location (D-6) on date 07/11/2006
- M/s. Automotive Valves Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Location (D-2) on date 19/04/2007
- M/s. Gayson & Co. Pvt Ltd. & M/s. NEG Micon(India) Pvt Ltd. Location (AA) on date 25/11/2006

Information Verified by Lead Assessor:

Land agreements for each wind mill have been checked.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 30/01/2009

Project participant has submitted the land documents for the all wind mills involved in project activity and is accepted. The land agreement gives the ownership of the WTGs and is accepted.
Thus CL 02 is closed.

Acceptance and Close out by Lead Assessor:	**Date:** 30/01/2009

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CL	Number:	03	Reference:	A.4.4
Lead Assessor Comment:					

The technical specifications and Purchase orders for all equipments used in the project activity needs to be submitted by the project proponent.	
Project Participant Response:	**Date:** 13/11/2008
The same has been submitted.	
Documentation Provided by Project Participant:	
Purchase orders for all wind mills(along with technical specifications) are submitted : • M/s. Shree Jai Ambe Associates(Power Division) Dated 30/08/2006 • M/s. M.G. Patel & Brothers(Power Division) Dated 30/08/2006 • M/s. Automotive Valves Pvt Ltd. Dated 02/09/2006 • M/s. Gayson & Co. Pvt Ltd. Dated 19/09/2006	
Information Verified by Lead Assessor:	
Purchase order & technical details for each wind mill has been checked for the project activity..	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008
Project participant has submitted the purchase orders and technical specifications for the project activity. The same are checked and found acceptable. Thus CL 03 was closed	
Acceptance and Close out by Lead Assessor:	**Date:** 26/12/2008

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CL	Number:	04	Reference:	A.4.8
Lead Assessor Comment:					
Project participant need to submit evidence for the personnel training and calibration certificates for instruments.					
Project Participant Response:			**Date:** 13/11/2008		
Calibration certificates for the instruments and Personnel Training Schedule have been submitted to DOE.					
Documentation Provided by Project Participant:					
Personnel training schedule Calibration report dated 15/07/2008					
Information Verified by Lead Assessor:					
Personnel training information, meter numbers verified with report and found acceptable.					
Reasoning for not Acceptance or Acceptance and Close Out:			**Date:** 26/12/2008		
Project participant has submitted the calibration report dated 15/07/2008 for the meters involved in the project activity. The reports has been checked for the test results and found to be satisfactorily. Project participant has submitted the personnel training schedule for the project activity and ISO certificates for the WTG supplier has been checked for QA/QC procedure for the project activity CL 04 was closed.					
Acceptance and Close out by Lead Assessor:			**Date:** 26/12/2008		

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CL	Number:	05	Reference:	B.5.1
Lead Assessor Comment:					
The Excel spreadsheet of the calculation of emission reductions need to be provided by the project proponent with evidences for each value used in calculation. It is not clear whether the grid emission factor is ex-ante parameter or monitoring as ex-post.					
Project Participant Response:			**Date:** 13/11/2008		
The Excel spreadsheet of the calculation of emission reductions are provided to DOE. The emission factor used for the calculation is taken as ex-ante.					
Documentation Provided by Project Participant:					
CER estimation excel sheet submitted on 04/12/2008 PDD version 02 dated 15/11/2008					

Information Verified by Lead Assessor:	
Emission reduction per year and for entire crediting period. Grid emission factor is ex-ante parameter.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008
Please check the sentence in section A.4.3, B.6.4 of PDD "In the above table the year 2009 corresponds to the period starting from 01.01.2009 to 31.12.2010" Thus CAR 05 is open.	
Project Participant Response:	**Date:** 09/01/2009
The sentence check is also being done.	
Documentation Provided by Project Participant:	
Excel sheet for emission reduction (CER_shree Jai Ambe version 02) Revised PDD version 03 dated 09/01/2009	
Information Verified by Lead Assessor:	
Revised PDD is checked for correction made by project participant.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 30/01/2009
Please clarify why project participant has referred ACM 0002 methodology instead of Tool to calculate the emission factor for an electricity system As per section B.6 of PDD version 03, it is stated that ACM0002 version 08 (Valid from 05 December 08 onwards) referred to calculate baseline emissions but as per excel sheet for emission reduction (CER_Jai Ambe version 02) the same calculations being done referring ACM0002 version 07.Please clarify the inconsistency observed. The revised PDD version 03 dated 09/01/2009 has mentioned the emission factor as 0.80 tCO_2/MWh, however the excel spreadsheet has mentioned as 0.90 tCO_2/MWh, please clarify the inconsistency observed. Please clarify why the recent three years data has not considered for the calculation of simple operating margin factor. Project participant need to use the latest version of"CO_2 baseline database for Indian power sector", available at the time of PDD submission for validation. Thus CL 05 is open	
Project Participant Response:	**Date:** 05/02/2009
For calculating baseline emission factor actually "Tool to calculate the emission factor for an electricity system" is used but ACM0002 were mentioned. Hence, the correction is been incorporated in the PDD version 04. The inconsistency in excel sheet and PDD is removed and reference of "Tool to calculate the emission factor for an electricity system, Version 01.1" is incorporated. The emission factor as 0.90 tCO2/MWh is calculated as ex-ante from "Tool to calculate the emission factor for an electricity system, Version 0.1.1" and now being incorporated in the PDD. In the revised PDD the recent three years data has considered for the calculation of simple operating margin factor.	
Documentation Provided by Project Participant:	
CER calculation excel sheet version 03, revised PDD version 04 dated 04/02/2009	
Information Verified by Lead Assessor:	
"Tool to calculate the emission factor for an electricity system" version 1.1 is used to calculate baseline emission factor Value of emission factor has been cross checked with CER calculation excel sheet and revised PDD Simple operating margin factor is calculated considering recent three year data in section 6.1 of revised PDD version 04	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 10/02/2009
1. Project participant has mentioned the ACM 0002 version 07 for the operating margin value in excel spreadsheet for the cell 'D8 ' please clarify it and check the unit mentioned for weighing for OM and BM. 2. Project participant need to correct the period (years) mentioned for Operating margin CO2 emission	

factor in excel spreadsheet of emission reduction version 03.

3. Project participant need to check the value of OM mentioned in PDD, Section B.62 has mentioned as 1.00, however the section B.6.1 has mention as 1.01 tCO_2/MWh, please clarify the inconsistency observed.
4. Project participant need to mention the consistent emission factor throughout the PDD.

CL #5 is open

Project Participant Response:	**Date:** 14/02/2009

1. The excel spreadsheet of Emission Reduction has been corrected and value of Operating Margin is made consistent with the revised PDD.
2. The source of ACM0002 Version 07 is removed and correct source is mentioned in CER Calculation sheet.
3. The period is corrected in Version 04 of Emission Reduction calculation sheet.
4. The value of OM is checked and inconsistency is removed from PDD.
5. The consistent Emission Factor is mentioned throughout the PDD.
6. The date of baseline completion is checked and corrected accordingly in section B.8 of the PDD.

Documentation Provided by Project Participant:

Revised excel spread sheet of emission reduction version 04
Revised PDD version 06

Information Verified by Lead Assessor:

Inconsistency reference to value of Operating Margin has been removed it has been verified with revised excel spread sheet of emission reduction version 04 & revised PDD version 06
Time period considered for Operating Margin has been corrected as per revised excel spread sheet of emission reduction version 04
Emission factor has been made consistent as per revised PDD version 06
The date of baseline completion has corrected as per section B.8 of the revised PDD version 06

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 16/02/2009

Correction made by project participant reference to Operating Margin value as per revised ER excel spread sheet ver 06 is found acceptable
The corrected period (2005-2007) for OM as per revised ER excel spread sheet ver 06 is found acceptable
Value of emission factor has been found consistent as per revised PDD version 06
The corrected date of baseline completion as per section B.8 of the revised PDD version 06 is acceptable
Thus CL #5 was closed out

Acceptance and Close out by Lead Assessor:	**Date:** 16/02/2009

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CAR	Number:	06	Reference:	B.4.3

Lead Assessor Comment:

Project participant need to demonstrate the additionality in line of starting date of project activity.
Project participant need to submit the evidences for each value used in financial calculation
Please clarify how the high capital expenditure was project specific barrier. Project participant need to submit the sources for capital cost and average PLF.
Project participant need to use the latest version of additionality tool.
It is not clear how the changes in policy of RBI affected the project activity.
Project participant need to follow the Guidance on the assessment of Investment analysis, version 02. The Government bond rates are after conceptualization of project activity. Please clarify it.
The source for market risk premium is from CRISIL report dated 13/04/2000 published for discussion purpose only ; please clarify how such old report was applicable at the time of decision taken .
It is not clear if selected benchmark is project IRR or equity IRR.
Project participant need to justify the selection of maximum 10% variation for sensitivity analysis.
Please clarify how the regulatory barriers are project specific.
It is not clear about the CDM consideration of other wind mill owners involved in project activity.
Please clarify why there was delay from start of project activity to submit for validation. Project participant need to mention the chronology of events in the PDD. Please clarify the seriousness of CDM consideration.

Project Participant Response:	**Date:** 13/11/2008

The additionality of the project activity is made in line with the starting date of project activity.
The evidence for each value in the IRR calculation sheet is given.
The high capital expenditure was one of the project barrier, which is already been stated in the PDD. Investments in such a high capital equipments (Windmills) are not a business as usual scenario as it leads to low percentage of returns. The source for these data is being stated in Footnote 11 in the PDD.
Latest tool for additionality i.e. "Tool for the demonstration and assessment of additionality (Version 05.2)" is used in the revised PDD.
The changes in the policies of RBI change the PLR of bank and which directly affects the interest rate for term loans of project proponents that is it got increase and hence increases the net outflow reducing the return on investments.
For the Investment analysis "Guidance on the assessment of investment analysis (Version 02)" is followed and accordingly IRR is being calculated. The Government Bond Rates now is being taken correctly of the time of project conceptualization date.
When the decision was taken by PPs at that time the only report available at Central Electricity Regulatory Commission (CERC) website for electricity sector was CRISIL Report dated 13/04/2000, hence this report is used for calculation.
The selected benchmark is for Project IRR and its reference can be seen in Registered Wind Project No. 1778 developed by M/s D.J. Malpani and also stated in PDD earlier.
The 10% variation for sensitivity analysis is selected as per "Guidance on the assessment of investment analysis (Version 02)" point no. 17 where it is stated that the sensitivity analysis must cover at least a range of -10% to +10%.
As it is known that lifetime of windmills are 20 years, mentioned in Supply Agreement (already submitted to DOE), while the Power Purchase Agreements (PPA) signed between PPs and MSEDCL are for 13 years only. As per current circumstances if PPA revised in future it would not be with same kind of tariff rather it would get reduce, hence reducing the inflow for PPs and affecting their returns on investments.
CDM consideration of other windmill owners is provided to DOE.
The chronology of events for PPs is submitted to DOE.

Documentation Provided by Project Participant:

IRR calculation excel sheets for each wind mill
Revised PDD version 02
Chronology of events

Information Verified by Lead Assessor:

Source and evidences mention in IRR sheets, seriousness of CDM consideration

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008

Project participant need to submit the following documents:

- Erection and commissioning agreement for each wind mill.
- Copy of land agreement for each wind mill.
- Copy of accounting standard issued by Institute of Chartered Accountants of India
- Copy of tax rate during project conceptualization(as per income tax act 1961)

Why O & M cost is not included in sensitivity analysis? Please clarify.
Please how the high capital expenditure is a project specific barrier.
Project participant has used the latest version of additionality tool and is accepted
Please clarify when the policy of RBI has changed; please provide the evidence for the same. Project participant need to check the guidance number six of investment analysis.
Please clarify how the CRISIL Report dated 13/04/2000 is appropriate at the time of conceptualization of project activity.
The precedence of the registered PDD is not acceptable as a reference; please justify the selection of benchmark in line with guidelines.
Please clarify why increase in tariff is considered up to 12 years only however PPA is for 13 years.
Please clarify how the regulatory barriers are project specific
Project participant need to mention the chronology of events date wise with source/evidences for each project participant separately. Please clarify how the project participant is serious about the project activity
Thus CAR 06 is open

Project Participant Response:	**Date:** 09/01/2009
Hard copy of Erection & Commissioning agreement and Land agreement is provided to DOE. Link for Accounting Standard used and Tax Rates during conceptualization is provided in IRR sheets along with the hard copy. O&M cost is now included in Sensitivity Analysis. Clarification for high capital expenditure is a project specific barrier is provided in the PDD. Evidence for change in RBI policy has been incorporated in section B.5 of the PDD. CRISIL Report was not available after the year 2000, hence as per the guideline the reference has been changed and the link of new reference during project conceptualization is provided in the PDD. Reference of registered PDD is being removed and selection of benchmark is made as per "Tool for the demonstration and assessment of additionality (Version 05.2)", Step 2, Sub-step 2b: Option III – Apply benchmark analysis, point 6 (a). Correction has been made and increase in tariff is considered for 13 years. Clarification is provided for regulatory barriers as project specific barrier in the PDD. Chronology of events for all PPs have mentioned separately with evidences. The seriousness of the project participant towards the CDM project activity could also be studied in "Annex 5 – Chronology of Events" of the PDD.	
Documentation Provided by Project Participant:	
Erection & commissioning certificate: • M/s. Shree Jai Ambe Associates (Power Division) document ref no.N 295270 Date of agreement 30/08/2006 • M/s. M.G. Patel & Brothers (Power Division) document ref no.N 294822 Date of agreement 30/08/2006 • M/s. Automotive Valves Pvt Ltd. document ref no.B 506883, Date of agreement 02/09/2006 • M/s. Gayson & Co. Pvt Ltd. document ref no. 634142, Date of agreement 21/09/2006 IRR calculation excel sheets version 02 for each wind will Revised PDD version 03 dated 09/01/2009 Hard copies of accounting standard used and tax rates during conceptualization	
Information Verified by Lead Assessor:	
Erection & commissioning certificates for each wind mill and revised PDD version 03 has been checked as per modifications/clarifications made by project participant. IRR calculation excel sheets(version 02) for each wind have been checked Sources provided reference to accounting standard used and tax rates during conceptualization also checked.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 30/01/2009

Project participant has submitted the Erection and commissioning agreement for each wind mill, Copy of land agreement for each wind mill, Copy of accounting standard issued by Institute of Chartered Accountants of India, Copy of tax rate during project conceptualization(as per income tax act 1961) and is accepted,

Project participant has included the O&M cost for the sensitivity analysis and is accepted.

The explanation for the high capital expenditure is not a project specific barrier and not convincing, please substantiate the sentence that "PPs could have gone for other sources of power generation"

The barrier due to policy change of RBI is not convincing, please clarify it.

The barriers due to generation risk and regulatory barrier as short term PPA is not clear. If estimated PLF by wind mill supplier has been considered for electricity generation and same is related to financial calculation, then how this is separate barrier for the project activity. How 13 years PPA has been considered as a short term PPA for 20 year life of project activity and this is generic to all wind mills, and then please clarify how this is project specific.

The source for market risk premium is taken from Indian Institute of Management Ahmedabad (IIMA), working paper June 2006, which has mentioned that risk premium by Geometric mean is 8.75% and is accepted.

Project participant need to check the source for the Government Bond rate and please clarify why the last three years data has not considered for the calculation at the time of decision taken for the project activity.

Project Participant Response:	**Date:** 05/02/2009

All the non-convincing points in the PDD have been removed in the revised PDD Version 04.

The source of Government Bond Rate is checked and correct link for the source is incorporated. The three year data has been considered for Government Bond Rate as it is found conservative with value of 7.2% than the value of 7.8% for one year.

Documentation Provided by Project Participant:

Revised PDD version 04 dated 04/02/2009, IRR calculation excel sheets version 03 for each wind mill

Information Verified by Lead Assessor:

Modifications has been cross checked with section B.5 of revised PDD ,sources of government bond rate also checked with the link provided for the same
IRR calculation excel sheets have been checked as per corrections made in revised PDD

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 10/02/2009

1. Please clarify why MEDA charges as per Vestas proposal (dated 04/09/2006) for Gayson & Company Private Limited has not considered in total project cost.
2. The foot notes mentioned in PDD are not in sequential order; please clarify if any foot notes are missing.
3. Please provide appropriate source for 11% interest rate on loan considered for Gayson & Co. Pvt Ltd
4. Insurance cost 2.17 lakhs is considered for each wind mill for project activity ,but this figure does not clear with the source provided for the same, please clarify how this value has been considered
5. Please clarify in detail about the divisible factor" Pre/Post September Installation(1/2)" as per cell C27 of IRR calculation excel spreadsheets version 03 for each wind mill involved in project activity
6. As per IRR excel sheet version 03 (tax calculation) cell C 64, the value "depreciation on which tax benefit is availed" is not clear, please clarify about the source considered to calculate this figure for projects WTGs.

CAR #6 is open

Project Participant Response:	**Date:** 14/02/2009

1. The MEDA charges have been included in the IRR calculation sheet for Gayson & Company Pvt. Limited.
2. There are no foot notes which are missing. The PDD is in Track Change mode that is why the deleted foot notes are not completely omitted from the PDD and they are holding the missing number. Just put the track changes mode off and accept all changes in the document – all the foot notes will get in sequence.
3. The 11% interest rate taken on loan for Gayson & Co. Pvt. Ltd. was not communicated correctly and now the right value for rate of interest (i.e. 9.12%) is included in the IRR sheet of Gayson & Co. Pvt. Ltd. along with the correct source and calculation.
4. Correct values for Insurance for all four proponents are included in the IRR sheets as per the insurance documents which are already submitted to the DOE in hard form; for DOE's reference sending the highlighted sample copies of insurance documents for year 2007 and 2008, which will provide complete break up of the insurance values considered in the IRR calculation.
5. Clarification for the use of divisible factor as 2 for "Pre/Post September Installation" is in Section 32 of Income Tax Act 1961 and same can be found in "fn=/DitTaxmann/IncomeTaxActs/2006ITAct/section32.htm". The source is also mentioned in IRR sheets.
6. As per Appendix I to Income Tax Act 1961, assessment year 2006-07, Part A – Tangible Assets, Point III – Machinery and Plant, sub point 8(xiii) – Renewable Energy Devices; the asset considered for depreciation is 80% of the total asset and the same can be referred from "fn=/DitTaxmann/IncomeTaxRules/Rules2005/APPENDIXI_new.htm". The source is also mentioned in IRR sheets.

Documentation Provided by Project Participant:

Revised IRR calculation sheet for Gayson & Company Pvt. Limited version 04
Revised IRR calculation sheet _ Automotive valves_ version 04
Revised IRR calculation sheet_JaiAmbe Associates _version 04
Revised IRR calculation sheet_M.G Patel & Bro_version 04
Revised PDD version 06, dated 24/02/2009

Information Verified by Lead Assessor:

MEDA charges have been included in the IRR calculation sheet version 04 for Gayson & Company Pvt. Limited
Footnotes have been found consistent throughout the revised PDD ver. 06
Interest rate 9.12% on loan has been considered for Gayson & Co. Pvt. Ltd
Insurance cost for all four proponents have been corrected as per insurance documents
Clarification for the use of divisible factor as 2 for "Pre/Post September Installation" has been verified through web link "fn=/DitTaxmann/IncomeTaxActs/2006ITAct/section32.htm" & revised IRR calculation excel sheets for all four proponents
Depreciation is considered as 80% of the total asset, this is verified through source web link "fn=/DitTaxmann/IncomeTaxRules/Rules2005/APPENDIXI_new.htm" & revised IRR calculation excel sheets for all four proponents

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:**16/02/2009

Value of MEDA charges considered as per IRR calculation sheet version 04 for Gayson & Company Pvt. Limited has been cross checked with the PPA & found acceptable
Foot notes number corrected as per revised PDD version 06 is found acceptable
Revised interest rate 9.12% on loan has been considered for Gayson & Co. Pvt. Ltd ,that is found acceptable as per loan documents submitted by PP earlier
Clarification for the use of divisible factor as 2 for "Pre/Post September Installation" has been verified through the source provided for the same & found acceptable
Depreciation is considered as 80% of the total asset, the same has been verified through the source web link and found acceptable
Thus CAR #6 was closed out

Acceptance and Close out by Lead Assessor:	**Date:** 16/02/2009

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CAR	Number:	07	Reference:	B.10.1

Lead Assessor Comment:	
Project participant need to include all parameters used to calculate the net electricity supplied to grid by project activity in section B.7.1 of PDD.	
Project Participant Response:	**Date:** 13/11/2008
The same has been incorporated.	
Documentation Provided by Project Participant:	
Revised PDD version 02 (dated 15/11/2008)	
Information Verified by Lead Assessor:	
Section B.7.1 of PDD has been checked.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008
Project participant needs to incorporate all the parameters used to calculate net electricity supplied to the grid like Total export at substation, total import at substation, Generation of each wind mills connected to common meter. Please include all required parameters separately. Project participant need to mention the calibration procedure for the panel meter used to measure the electricity generated form wind mill. CAR 07 is open.	
Project Participant Response:	**Date:** 09/01/2009
All the required parameters have been included separately in section B.7.1 of the PDD. The Calibration Procedure for the panel meter which is used for billing is provided in section B.7.2 and in Annex 4 of the PDD.	
Documentation Provided by Project Participant:	
Revised PDD version 03 dated 09/01/2009	
Information Verified by Lead Assessor:	
The monitoring parameters have been checked for the project activity.	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:**30/01/2009
Please clarify why the generation of wind turbines connected to sub station has not included in section B.7.1 of revised PDD though it is useful parameter for the proportioning procedure. Please check if all required parameters are incorporated in section B.7.1 of PDD. Project participant need to mention the calibration procedure for the panel meter used for proportioning of net electricity supplied to grid by project activity. Thus CAR #7 is open.	
Project Participant Response:	**Date:** 05/02/2009
All the useful parameters required in the apportion method is incorporated in the PDD Version 04. The calibration procedure for the panel meter used for proportioning of net electricity supplied to grid is incorporated in the revised PDD.	
Documentation Provided by Project Participant:	
Revised PDD version 04 dated 04/02/2009	
Information Verified by Lead Assessor:	
Parameters useful for proportioning procedure has been incorporated in section B.7.1 of revised PDD & calibration procedure for the panel meter used for proportioning is mentioned in Annex 04	
Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 10/02/2009
Information provided reference to calibration procedure and parameters used for proportioning procedure is checked and found acceptable, Please clarify how the source of data for EGy is Power Purchase Agreement Project participant need to mention the QA/QC procedure for $EG_{PP, export, app,}$ and $EG_{PP, import, app.}$ Project participant need to mention source of data for $EG_{feeder, export}$ & $EG_{feeder, import}$ Please clarify how the source of data for $EG_{PP, export}$ & $EG_{PP, export}$ parameter is invoices of MSEDCL Project participant has not mentioned the name of instrument used for measuring the parameters, please mention it. Please clarify if the import readings are measured at the controller of WTG hence CAR #7 is open	
Project Participant Response:	**Date:** 23/02/2009

The source of data for EG_y is corrected and written as calculated as per the apportion method described in section B.7.2 of the PDD. The QA/QC procedure for $EG_{PP, export, app}$ and $EG_{PP, import, app}$ is in the section B.7.2 of the PDD and the same is mentioned in the section B.7.1 of the PDD. The source of data for $EG_{feeder, export}$ & $EG_{feeder, import}$ is mentioned in section B.7.1 of the PDD. The source of data for $EG_{PP, import}$ & $EG_{PP, export}$ is corrected in the section B.7.1 of PDD. The name of instruments used for measuring the parameters has been mentioned in section B.7.1 along with the QA/QC procedure in section B.7.2 in the PDD. The import readings are not measured at the controller or LCS of WTGs, but it is calculated. This calculation is mentioned in the section B.7.2 under heading – "Description of billing calculation from main meter to individual meters".
Documentation Provided by Project Participant:
Revised PDD version 07,dated 03/04/2009
Information Verified by Lead Assessor:
The revised PDD has been checked for the monitoring section B.7.1 and source of data for the parameters have been checked.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 04/04/2009

Project participant has corrected source of data for EG_y as per section B.7.1 of PDD and is acceptable QA/QC procedure for $EG_{PP, export, app}$ and $EG_{PP, import, app}$ is checked as per section B.7.1 and B.7.2 and found acceptable The source of data for $EG_{feeder, export}$ & $EG_{feeder, import}$ and $EG_{PP, import}$ & $EG_{PP, export}$ are corrected and acceptable Name of instruments used for measurement of parameters are mentioned in section B.7.1 of PDD and QA/QC procedure mentioned in section B.7.2 in the PDD is acceptable Project participant has mentioned that import readings are not monitored but calculated and calculations are mentioned in the PDD. Thus CAR #7 was closed

Acceptance and Close out by Lead Assessor:	**Date:** 04/04/2009

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CAR	Number:	08	Reference:	C.1.1

Lead Assessor Comment:
Project participant need to mention the start date of project activity as per para 67 of EB 41 meeting report. Project participant need to submit evidence for the start date of the project activity. Project participant need to mention the appropriate date for the starting date of crediting period.

Project Participant Response:	**Date:** 13/11/2008

The start date of the project activity is mentioned as per para 67 of EB 41 Meeting report and its evidence is 'Supply Agreement' signed to purchase first windmill, which is already submitted to DOE. The appropriate date for the starting date of crediting period has been incorporated
Documentation Provided by Project Participant:
Revised PDD version02 dated 15/11/2008 Purchase order for first wind mill dated 30/08/2006
Information Verified by Lead Assessor:
Start date of project activity verified with first purchase order And crediting period start date with revised PDD.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008

Starting date of project activity has been checked as per para 67 of EB 41. The supply agreement is the earliest real action for the project activity, the same is acceptable. The start date of crediting period is acceptable as per section C.2.2.1 of revised PDD Hence CAR #8 was closed out

Acceptance and Close out by Lead Assessor:	**Date:** 26/12/2008

Date:	31/10/2008		Raised by:	Ramkrishna Patil / Ravi Kant Soni	
Type:	CAR	Number:	09	Reference:	E.1.2

Lead Assessor Comment:

Project participant has not mentioned date of stakeholders meeting and mode of invitation in PDD version 01, Please clarify

Project participant need to submit evidence for the date, media of invitation, MoM of stakeholders meeting for project activity.

Project Participant Response:	**Date:** 13/11/2008

For stakeholder comments there are not any invitation done but the comments were taken through survey and date for this survey is between 11/03/2008 to 12/03/2008.
Copy of Stakeholder comments has been submitted to DOE.

Documentation Provided by Project Participant:

Copies of Stakeholder comment

Information Verified by Lead Assessor:

Stakeholder views about project as per documents submitted.

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 26/12/2008

It is not clear about the project specific stakeholder's consultation process. Project participant need to mention the date of stakeholder meeting and mode of invitation for stakeholders meeting in PDD. .
CAR 09 is open.

Project Participant Response:	**Date:** 09/01/2009

For stakeholder comments there are not any invitation done but the comments were taken through survey route between date 11/03/2008 to 12/03/2008. The same is being incorporated in the PDD Section E.1 last para.

Documentation Provided by Project Participant:

Letter for completion of stakeholder comments dated 14/03/2008

Information Verified by Lead Assessor:

Survey for gathering the comments from local stakeholders has been completed for two days i.e 11/03/2008 & 12/03/2008

Reasoning for not Acceptance or Acceptance and Close Out:	**Date:** 30/01/2009

Letter submitted by project participant for stakeholder consultation has cross checked with documents previously submitted , revised PDD and found acceptable,
Thus CAR 09 was closed

Acceptance and Close out by Lead Assessor:	**Date:** 30/01/2009

Annex 4: Team Members Statements of Competency

Statement of Competence

Name:Ramkrishna Patil SGS Affiliate:SGS India Pvt. Ltd.

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

	Validation	Verification
- Local Assessor	☒	☒
- Lead Assessor	☒	☒
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

1. Energy Industries (renewable / non-renewable) ☒
2. Energy Distribution ☒
3. Energy Demand ☒
4. Manufacturing ☒
5. Chemical Industry ☐
6. Construction ☐
7. Transport ☐
8. Mining/Mineral Production ☐
9. Metal Production ☐
10. Fugitive Emissions from Fuels (solid,oil and gas) ☐
11. Fugitive Emissions from Production and ☐

Consumption of Halocarbons and Sulphur Hexafluoride

12. Solvent Use ☐
13. Waste Handling and Disposal ☐
14. Afforestation and Reforestation ☐
15. Agriculture ☐

Approved Member of Staff by Sanjeev Kumar Date: 08/01/2009

Statement of Competence

Name:Ravikant Soni SGS Affiliate:SGS India Pvt. Ltd.

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

	Validation	Verification
- Local Assessor	☒	☒
- Lead Assessor	☐	☐
- Assessor / Trainee Lead Assessor	☒	☒

Scopes of Expertise

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

Approved Member of Staff by Sanjeev Kumar Date: 19/01/2009