



# VALIDATION REPORT

M/S ALLGROW VENTURES

1.5 MW WIND POWER PROJECT IN  
MAHARASHTRA BY M/S. ALLGROW  
VENTURES

**Report No: : 8105998794 – 09/333**

**Date: 2011-08-12**

TÜV NORD CERT GmbH  
JI/CDM Certification Program  
Langemarckstraße, 20  
45141 Essen, Germany  
Phone: +49-201-825-3335  
Fax: +49-201-825-3290  
[www.tuev-nord.de](http://www.tuev-nord.de)  
[www.global-warming.de](http://www.global-warming.de)

<b>Validation Report:</b>	<b>Report No.</b>	<b>Rev. No.</b>	<b>Date of 1<sup>st</sup> issue:</b>	<b>Date of this rev.</b>
	8105998794 – 09/333 V01	0	2011-08-12	2011-08-12
<b>Project:</b>	<b>Title:</b>	<b>Initial PDD Version:</b>	<b>Final PDD Version</b>	
	1.5 MW Wind Power Project in Maharashtra by M/s. Allgrow ventures	2009-05-30	2011-06-29	
<b>Client:</b>	M/s. Allgrow Ventures	<b>Client ref:</b>	Mrs. G. D. Mehta	
<b>Project Participant(s):</b>	<b>Host Party:</b>	<b>Other involved parties:</b>		
	M/s Allgrow Ventures	NA		
<b>Applied methodology/ies:</b>	<b>Title:</b>	<b>No.:</b>	<b>Scope / TA:</b>	
	Grid connected renewable electricity generation	AMS I D V 16	01 / 1.2	
<b>Validation team / Technical Review and Final Approval</b>	<b>Validation Team:</b>	<b>Technical review:</b>	<b>Final approval:</b>	
	Mr Pankaj Patel (TL), Mr Sanjay Kandari (OT) Mr Hemang Shah (TM) Mr Saroj Sahoo, (TM)	Mr. Ingo Klein Mr. Samir Beqqal	Mr. Stefan Winter	
<b>Expected Emission reductions: [t CO<sub>2</sub>e]</b>	<b>Expected emission reductions over the fixed crediting period:</b>	<b>Expected project starting date:</b>		
	24860 t CO <sub>2</sub> e	2011-09-01		
<b>Confidential content:</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
<b>Summary of Validation Opinion:</b>	<input checked="" type="checkbox"/> Positive validation opinion <input type="checkbox"/> Negative validation opinion			
<p>M/s Allgrow Ventures has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the project: "1.5 MW Wind Power Project in Maharashtra by M/s. Allgrow ventures" with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board</p> <p>In the course of the pre-validation 32 Corrective Action Requests (CARs) and 07 Clarification Requests (CLs) were raised and successfully closed.</p> <p>The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.</p> <p>In detail the conclusions can be summarised as follows:</p> <ul style="list-style-type: none"> <li>- The project is in line with all relevant host country criteria (India) and all relevant UNFCCC requirements for CDM. Project activity approval have been obtained from DNA of India vide the Letter of Approval (HCA) dated 15/09/2009 from DNA of India.</li> <li>- The project additionality is sufficiently justified in the PDD.</li> <li>- The monitoring plan is transparent and adequate.</li> <li>- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 24,860 tCO<sub>2</sub>e are most likely to be achieved within the fixed crediting period.</li> </ul> <p>The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.</p>				

---

<b>Document information:</b>	<i>Filename:</i>	<i>No. of pages:</i>
	S01-VA010-A1	129

## Abbreviations

<b>BAU</b>	Business as usual
<b>CA</b>	Corrective Action / Clarification Action
<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CER</b>	Certified Emission Reduction
<b>CL</b>	Clarification Request
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2e</sub></b>	Carbon dioxide equivalent
<b>CP</b>	Certification Program
<b>DNA</b>	Designated National Authority
<b>EB</b>	CDM Executive Board
<b>EIA</b>	Environmental Impact Assessment
<b>FAR</b>	Forward Action Request
<b>GHG</b>	Greenhouse gas(es)
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>PDD</b>	Project Design Document
<b>QC/QA</b>	Quality control/Quality assurance
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>VVM</b>	Validation and Verification Manual
<b>WTG</b>	Wind Turbine Generator

<b>Table of Contents</b>	<b>Page</b>
1 OBJECTIVE / SCOPE .....	7
2 GHG PROJECT DESCRIPTION.....	8
2.1 Project Characteristics	8
2.2 Involved Parties and Project Participants	8
2.3 Project Location	9
2.4 Technical Project Description	9
3 METHODOLOGY AND VALIDATION SEQUENCE.....	10
3.1 Validation Steps	10
3.2 Contract review	11
3.3 Appointment of team members and technical reviewers	11
3.4 Consideration of Public Stakeholder Comments	12
3.5 Validation Protocol	13
3.6 Review of Documents	13
3.7 Follow-up Interviews	14
3.8 Project comparison	14
3.9 Resolution of Clarification and Corrective Action Requests	15
3.9.1 Definition	15
3.9.2 Draft Validation	15
3.9.3 Final Validation	15
3.10 Technical review	16
3.11 Final approval	16
4 VALIDATION FINDINGS .....	17
5 VALIDATION ASSESSMENT SUMMARY .....	45
5.1 General Description of the Project Activity	45
5.1.1 Participation	45
5.1.2 Contribution to Sustainable Development	45
5.1.3 PDD editorial Aspects	45
5.1.4 Technology to be employed.	45
5.1.5 Small Scale Projects	46
5.2 Project Baseline, Additionality and Monitoring Plan	46
5.2.1 Application of the Methodology	46
5.2.2 Project Boundary	46
5.2.3 Baseline Identification	46
5.2.4 Calculation of GHG Emission Reductions	46
5.2.5 Additionality Determination	47
5.2.6 Monitoring Methodology	57
5.2.7 Monitoring Plan	57
5.2.8 Project Management Planning	58
5.2.9 Crediting Period	58



---

5.2.10	Environmental Impacts	58
5.2.11	Comments by Local Stakeholders	58
6	VALIDATION OPINION .....	60
7	REFERENCES .....	61
	ANNEX 1: VALIDATION PROTOCOL.....	67
	ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION.....	118
	ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS.....	119
	ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS .....	125
	ANNEX 5: OUTCOME OF THE GSCP.....	126
	ANNEX 6: STATEMENTS OF COMPETENCE OF TEAM MEMBERS.....	127

## 1 OBJECTIVE / SCOPE

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

- the requirements of Article 12 of the Kyoto Protocol;
- the CDM modalities and procedures as agreed in the Marrakech Accords under decision 3/CMP.1
- the annex to the decision;
- subsequent decisions made by COP/MOP & CDM Executive Board and
- other relevant rules, including the host country legislation and sustainability 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 on the quality of the project and its intended generation of certified emission reductions (CERs).

The validation scope is given as a thorough independent and objective assessment of the project design including especially: the correct application of the methodology, the project's baseline study, additionality justification, local stakeholder commenting process, environmental impacts and monitoring plan, which are included in the PDD and other relevant supporting documents, to ensure that the proposed CDM project activity meets all relevant and applicable CDM criteria.

The information included in the PDD and the supporting documents were reviewed against the requirements as set out by the UNFCCC. The validation team has, based on the requirements in the Validation and Verification Manual<sup>VVM</sup>, carried out a full assessment of all evidences to assess the compliance of the project with the key areas as outlined in section V.E. and V.F. of the VVM (version 01.2, EB 55).

The validation is based on the information made available to TÜV NORD JI/CDM CP and on the contract conditions. TÜV NORD JI/CDM CP can not be held liable by any entity for making its validation opinion based on any false or misleading information supplied to it during the course of validation.

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

## 2 GHG PROJECT DESCRIPTION

### 2.1 Project Characteristics

Essential data of the project is presented in the following Table 2-1.

**Table 2-1:** Project Characteristics

Item	Data
Project title	1.5 MW Wind Power Project in Maharashtra by M/s. Allgrow ventures
Project size	<input type="checkbox"/> Large Scale <input checked="" type="checkbox"/> Small Scale
Project Scope (according to UNFCCC sectoral scope numbers for CDM)	<input checked="" type="checkbox"/> 1 Energy Industries (renewable- /non-renewable sources)
	<input type="checkbox"/> 2 Energy distribution
	<input type="checkbox"/> 3 Energy demand
	<input type="checkbox"/> 4 Manufacturing industries
	<input type="checkbox"/> 5 Chemical industry
	<input type="checkbox"/> 6 Construction
	<input type="checkbox"/> 7 Transport
	<input type="checkbox"/> 8 Mining/Mineral production
	<input type="checkbox"/> 9 Metal production
	<input type="checkbox"/> 10 Fugitive emissions from fuels (solid, oil and gas)
	<input type="checkbox"/> 11 Fugitive emissions from production and consumption of halocarbons and hexafluoride
	<input type="checkbox"/> 12 Solvents use
	<input type="checkbox"/> 13 Waste handling and disposal
	<input type="checkbox"/> 14 Afforestation and Reforestation
	<input type="checkbox"/> 15 Agriculture
Applied Methodology	AMS I D V 16: Grid connected renewable electricity generation
Technical Area(s)	TA 1.2: Energy generation from renewable energy sources
Crediting period	<input type="checkbox"/> Renewable Crediting Period (7 y) <input checked="" type="checkbox"/> Fixed Crediting Period (10 y)
Start of crediting period	2011-09-01

### 2.2 Involved Parties and Project Participants

The following parties to the Kyoto Protocol and project participants are involved in this project activity (Table 2-2).

**Table 2-2:** Project Parties and project participants

Characteristic	Party	Project Participant
Host party	India	M/s Allgrow Ventures



## 2.3 Project Location

The details of the project location are given in table 2-3:

**Table 2-3:** Project Location

No.	Project Location
Host Country	India
Region:	Maharashtra
Project location address:	District: Nashik Village: Adwadi Taluka: Sinner
Latitude:	19° 43' .8.33 "
Longitude:	73°54' 5.42"

## 2.4 Technical Project Description

The project activity involves setting up one (1 X 1.5 MW) number of S-82 wind energy generators supplied by Suzlon with an aggregated installed capacity of 1.5 MW in village Adwadi, Taluka : Sinner, Dist Nashik, Maharashtra. The generated electricity is exported to Northern Eastern Western and North-Eastern (NEWNE) grid of India and sold to Maharashtra State Electricity Board (MSEDCL). WTG of the project activity was commissioned on 31.03.2009. The project is estimated to generate 2.89 GWh and exports approximately 2.74 GWh of annual net electricity after deduction of transmission losses as permitted by state electricity regulatory commission and is based on loan application submitted to the Axis bank. Validation team has confirmed the same from loan application letter<sup>/LA/</sup>, MERC order and third party PLF assessment report<sup>/PLF-AR/</sup>. This project is intended to reduce CO<sub>2</sub> emissions to the extent of electricity displaced from the regional grid. The estimated amount of emission reductions over the chosen 10-years "fixed period" is 24,860 tCO<sub>2</sub>e (acc. to the PDD). The estimated amount of emission reductions per annum are 2,486 tCO<sub>2</sub>e.

The technical key data are provided in table 2-4 below

**Table 2-4:** Technical data of the project activity

Items	Specifications
Manufacturer / Model	Suzlon/S-82
Nominal electrical output	1500 kW
Rotor diameter	82 Meters
Rotor Speed	16.3 rpm
Swept Area	5278 m2
No. of rotor blade	3
Generator	Asynchronous; 4 Pole
Rated Power	1500 kW
Rated Voltage	690V
Braking system	Spring powered disc brake, hydraulically released fail safe
Gearbox	3 Stage

### 3 METHODOLOGY AND VALIDATION SEQUENCE

#### 3.1 Validation Steps

The validation of the project consisted of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the project design document (PDD)
- Desk review of the PDD and supporting documents
- Validation planning
- On-Site assessment
- Background investigation and follow-up interviews with personnel of the project developer and its contractors
- Draft validation reporting
- Resolution of corrective actions (if any)
- Final validation reporting
- Technical review
- Final approval of the validation

The sequence of the validation is given in the table 3.1 below:

**Table 3.1:** Validation sequence

Topic	Time
Assignment of validation	2009-07-09
Submission of PDD for global stakeholder commenting process	2009-09-10
On-site visit	2009-10-29
Draft reporting finalised	2009-11-11
Final reporting finalised	2011-08-12
Technical review on final reporting finalised	2011-08-12

## 3.2 Contract review

To assure that

- the project falls within the scopes for which accreditation is held,
- the necessary competences to carry out the validation can be provided,
- Impartiality issues are clear and in line with the CDM accreditation requirements

a contract review was carried out before the contract was signed.

## 3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a validation team, consistent of one team leader and three additional team members were appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

**Table 3-2:** Involved Personnel

	Name	Company	Function <sup>1)</sup>	Qualification Status <sup>2)</sup>	Scheme competence	Technical competence <sup>4)</sup>	Host country Competence	Team Leading competence
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Pankaj Patel	TUV-India	TL	LA	<input checked="" type="checkbox"/>	–	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Hemang Shah	TUV-India	TM	LA	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Saroj Sahoo	TUV-India	TM	A	<input checked="" type="checkbox"/>	–	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Sanjay Kandari	TUV-India	TM	A	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Klein Ingo	TUV-Nord	TR <sup>3)</sup>	LA	<input checked="" type="checkbox"/>	1.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Beqqal Samir	TUV-Nord	TR <sup>3)</sup>	A	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>

	Name	Company	Function <sup>1)</sup>	Qualification Status <sup>2)</sup>	Scheme competence	Technical competence <sup>4)</sup>	Host country Competence	Team Leading competence
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Stefan Winter	TUV-Nord	FA	SA	<input checked="" type="checkbox"/>	1.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>1)</sup> TL: Team Leader; TM: Team Member, TR: Technical review; OT: Observer-Team, OR: Observer-TR, FA: Final approval

<sup>2)</sup> GHG Auditor Status: A: Assessor; E: Expert; SA: Senior Assessor; T: Trainee; TE: Technical Expert

<sup>3)</sup> No team member

<sup>4)</sup> As per S01-MU03 or S01-VA070 A2 (such as A, B, C.....)

Certificates of appointment for the above mentioned team members are enclosed in annex 6 of this report.

### 3.4 Consideration of Public Stakeholder Comments

Acc. to the modalities and procedures the draft PDD, as received from the project participants, has been made publicly available on the dedicated UNFCCC CDM website prior to the validation activity commenced. Stakeholders have been invited to comment on the PDD within the 30 days public commenting period.

In case comments are received, they are taken into account during the validation process. The comments and the discussion of the same are documented in annex 5 of this report.

### 3.5 Validation Protocol

In order to ensure consideration of all relevant assessment criteria, a validation protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of validation and the results from pre-validating the identified criteria. The validation protocol reflects the generic CDM requirements each CDM project has to meet as well as project specific issues as applicable. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements that a CDM project is expected to meet;
- It ensures a transparent validation process where the validating entity will document how a particular requirement has been validated and the result of the determination.

The validation protocol is described in Figure 1.

<b>Validation Protocol Table A-1: Requirement checklist</b>				
<b>Checklist Item</b>	<b>Validation Team Comment</b>	<b>Reference</b>	<b>Draft Conclusion</b>	<b>Final Conclusion</b>
<i>The checklist items in Table A-1 are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further sub-divided as per the requirements of the topic and the individual project activity.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the validation team and how the assessment was carried out. The reporting requirements of the VVM shall be covered in this section.</i>	<i>Gives reference to the information source on which the assessment is based on</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft validation stage.</i>	<i>In case a corrective action or a clarification the final assessment at the final validation stage is given.</i>

**Figure 1:** Validation protocol table

The completed validation protocol is enclosed in Annex 1 to this report.

### 3.6 Review of Documents

The published PDD (version 1) and supporting background documents related to the project design and baseline were reviewed.

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

### 3.7 Follow-up Interviews

The validation team has carried out interviews in order to assess the information included in the project documentation and to gain additional information regarding the compliance of the project with the relevant criteria applicable for CDM.

During validation the validation team has performed interviews to confirm selected information and to resolve issues identified in the document review. The main topics of the interviews are summarized in table 3-3.

**Table 3-3:** Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
Project proponent representatives <sup>/IM01/</sup> : M/s Allgrow Ventures Project consultant <sup>/IM02/</sup> : Gensol Consultants Private Limited	<ul style="list-style-type: none"> <li>- Chronological description of the project activity with documents of key steps of the implementation.</li> <li>- Current status of plant design</li> <li>- Technical details of the project realization, project feasibility, designing, operational life time, monitoring of the project</li> <li>- Host Government Approval</li> <li>- Approval procedures and status</li> <li>- Monitoring and measurement equipment and system.</li> <li>- Financial aspects</li> <li>- Crediting period</li> <li>- Project activity starting date</li> <li>- CER allocation / ownership</li> <li>- Baseline study assumptions</li> <li>- Additionality</li> <li>- Sustainable development issues</li> <li>- Monitoring</li> <li>- Analysis of local stakeholder consultation</li> <li>- Roles &amp; responsibilities of the project participants w.r.t. project management, monitoring and reporting</li> <li>- National Legislation</li> <li>- Editorial issues of the PDD</li> </ul>

A comprehensive list of all interviewed persons is part of section 7 'References'.

### 3.8 Project comparison

The validation team has compared the proposed CDM project activity with similar projects or technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Project technology

- Additionality issues
- Reasons for reviews, requests for reviews and rejections within the CDM registration process.

## 3.9 Resolution of Clarification and Corrective Action Requests

### 3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

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

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

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

### 3.9.2 Draft Validation

After reviewing all relevant documents and taken all other relevant information into account, the validation team issues all findings in the course of a draft validation report and hands this report over to the project proponent in order to respond on the issues raised and to revise the project documentation accordingly.

### 3.9.3 Final Validation

The final validation starts after issuance of the proposed corrective action (CA) of the CARs CLs and FARs by the project proponent. The project proponent has to reply on those and the requests are “closed out” by the validation team in case the response is assessed as sufficient. In case of raised FARs the project proponent has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first verification. The validation team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project proponent or the proposed action related to the FARs raised cannot be assessed as adequate, no positive validation opinion can be issued by the validation team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

### **3.10 Technical review**

Before submission of the final validation report a technical review of the whole validation procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the validation team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the validation opinion and the topic specific assessments as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

### **3.11 Final approval**

After successful technical review of the final report an overall (esp. procedural) assessment of the complete validation will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for registration can be started (in case of a positive validation opinion).



## 4 VALIDATION FINDINGS

In the following table the findings from the desk review of the published PDD, visits, interviews and supporting documents are summarised:

**Table 4-1:** Summary of CARs, CLs and FARs issued

Validation topic <sup>1)</sup>	No. of CAR	No. of CL	No. of FAR
General description of project activity (A) - Project specification - Technical project description - Participation - Contribution to sustainable development - PDD editorial aspects - Technology to be employed	4	1	-
Project Baseline, Additionality and Monitoring Plan (B) - Application of the Methodology - Project Boundary - Baseline identification - Calculation of GHG emission reductions Project emissions Baseline emissions Leakage - Additionality determination - Monitoring Methodology - Monitoring Plan - Project management planning	27	6	-
Duration of the Project / Crediting Period (C)	1	-	-
Environmental impacts (D)	-	-	-
Stakeholder Comments (E)	-	-	-
<b>SUM</b>	<b>32</b>	<b>07</b>	<b>00</b>

<sup>1)</sup> The letters in brackets refer to the validation protocol

The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all validation items it should be referred to the validation protocols (see Annex 1).

The findings of validation process are summarized in the tables below.

Finding	A1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Host Country Approval is not yet submitted to DOE for verification.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Host Country Approval has been received and copy of the same has been provided.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Host country approval from Indian DNA is received and verified by validation team. CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	A2		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Technical details described in section A.4 are not relevant for section A.4. Instead it should be specified in section A.4.2 as per Cp guidelines for completing CDM- SSC-PDD		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Technical Details described in section A.4 have been shifted to section A.4.2.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Technical description of the project activity is now described under section A.4.2 of the PDD as per Cp guidelines for completing CDM-SSC-PDD. Same is cross checked by the validation team with the technical specifications of the WTG. CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	A3		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Under section A.2 it is stated that the power is generated at 33 KV and it will be stepped up to 132 kV to nearest substation. Generation of power by wind mill at 33 KV is not correct. Corrections requested.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Generation of power by wind mills at 33 kV has been corrected as 690 Volts.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Section A.2 of the PDD is revised to include correct voltage at which power is generated at WTG end. Same is verified to be correct. CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	A4		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Under section A.2 of the PDD, Power grid is defined as “NWENE”. Notation used is not correct. Necessary corrections should be made in entire PDD. Also full description of the same should be given in section A.2 of the PDD.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Notation has been corrected; Description has been given in the PDD as footnote.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Regional power grid is now defined correctly as NEWNE grid and described at foot note 2 under section A.2 of the PDD and same is verified and cross checked from the CEA database <sup>/CEA/</sup> . CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. Latest version of “Tool to calculate the emission factor for an electricity system” should be referred in section A.4.2 and elsewhere in PDD. ( section B.1)  2. The reference to version 10 of ACM0002 on page 13 under section B.4 of the PDD is not correct. Also reference to “ tool to calculate emission factor for an electricity system” needs to be given along with.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	1. Tool to calculate the emission factor for an electricity system, version 2.0 has been referred in the PDD. 2. The reference of ACM0002 has been removed. The reference to “tool to calculate emission factor for an electricity system” has been mentioned.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Latest version of the Tool is referred in the section A.4.2 and B.4 of the revised PDD. Same is cross checked from the UNFCCC web site by the validation team and confirmed that the latest version of the tool is used by the PP. CAR is closed		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B2		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Under section B.3 of the PDD, name of the grid should be specified where net power from WTG is exported.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The name of Grid has been mentioned as NEWNE grid.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Name of the regional grid is now defined in the revised PDD. Same is verified by the validation team during the site visit. CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B3		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Under section B.4 of the PDD it is not stated as to what approach has been used for selecting the baseline emission factor $EF_{\gamma}$ . i.e. whether it is ex-ante or ex-post.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Project Proponent has shown the ex-ante approach, same has been included in the PDD.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Same is now included in the PDD. Validation team is convinced that the same is in line with the applied methodology. CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B4		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<ol style="list-style-type: none"> <li>1. The write-up under section B.4 of the PDD needs to be corrected for use of terminology such as “Grid tool”, “Approximate operating margin”</li> <li>2. The description given against Operating margin, build margin in section B.4 of the PDD is not in line with the tool to calculate emission factor for an electricity system version 2.</li> <li>3. Justification for the use of “Simple Operating Margin” has not been provided in the PDD.</li> </ol>		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<ol style="list-style-type: none"> <li>1. The terminology has been corrected from Grid Tool to "Tool to calculate the emission factor for an electricity system", and Approximate operating margin to "Simple Operating Margin".</li> <li>2. Description of Operating Margin and Build Margin has been given the tool to calculate emission factor for an electricity system version 2.</li> <li>3. Justification for the use of “Simple Operating Margin” has been provided in the PDD.</li> </ol>		

Finding	B4
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<ol style="list-style-type: none"> <li>1. Terminology is corrected</li> <li>2. The description against Operating margin, build margin is modified in line with the Tool to calculate emission factor for an electricity system version 2.</li> <li>3. Necessary justification for the use of Simple operating margin is provided and is in conformity with the Tool to calculate emission factor for an electricity system version 2.</li> </ol> <p>CAR is closed</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B5
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	For calculating simple operating margin ( $EF_{OM,Y}$ ), simple average of the three years i.e. 2005-06, 2006-07 & 2007-08 has been taken. The generation weighted average has to be used. Accordingly table B.6.2 and annex-3 of the PDD has to be corrected.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The generation weighted average has been used to calculate the simple operating margin and the same has been modified in B.6.2 and annex-3
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Generation weighted average of emission factor for including import should be considered as a conservative approach. CAR is open.
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Generation weighted average of emission factor for including import have been considered as a conservative approach.
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Calculation of the baseline emission factor is cross checked by the validation team and convinced that the values used are taken correctly from CEA CO <sub>2</sub> database version 04 <sup>/CEA-R/</sup> . Generation weighted average emission factor is considered for calculation of emission reduction. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements



Finding	B6		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	1. The notation of the parameter in the equation of baseline emission ( $BE_Y$ ) under section B.6.1 needs to be consistent thorough out the PDD and should be as per applied methodology AMS I D.  2. In the equation shown on page 17 of the PDD under section B.6.1. for calculating $ER_Y$ the leakage is added to the baseline emission. The same needs to be corrected.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	1. Notation parameters have been changed in the PDD, as per the methodology AMS ID version 16.  2. Formula has been corrected by subtracting leakage from Baseline instead of adding both of them.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. Under section B.6., formula for calculating baseline emission needs to be defined as per the methodology AMS I D Version 16. CAR is open  2. Corrections made CAR is closed		
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	1. The formula for calculating baseline emission has been defined as per the AMS ID version 16,		
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	1. Formula for calculating baseline emission is now correctly defined in the revised PDD. CAR is closed.  2. Corrections made CAR is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B 7		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The value for $EF_{OM, Y}$ for all the three years needs to be stated in the table B.6.2. Also the corresponding generation for all the three years have to be shown under table B.6.2.		

Finding	B 7
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The value of $EF_{OM, Y}$ and corresponding generation for all the three years has been mentioned in the table B.6.2.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Required details for calculating $EF_{OM, Y}$ is included in the PDD. Same is cross checked with the CEA, CO <sub>2</sub> database version 04 <sup>/CEA-R/</sup> which is available at the time of submission of the PDD for validation. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B8
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Emission reduction has been wrongly shown as 30, 130 tCO <sub>2eq</sub> /year on page 19 section B.6.3 of the PDD
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Since the calculation of Emission Factor has been revised as the generation weighted average, the corresponding change in the Emission reduction has been done in the PDD.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Emission reduction are now correctly calculated and revised in the PDD. Same is verified by the validation team. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B 9
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Calibration frequency as stated in section B.7.1 of the PDD is not consistent with frequency stated in the section B.7.2. of the PDD. I.e. in B.7.1 it is stated as six months and in section B.7.2 it is stated as quarterly.



Finding	B 9
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Calibration frequency has been modified as annually and the Power Purchase Agreement has been provided to Validator as a backup source.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Calibration frequency is corrected as per the power purchase agreement <sup>/PPA/</sup> . Same is cross checked by document review by validation team. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B10
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Clarity needs to be incorporated with regards to the metering arrangement in section B.7.2. / annex 4 of the PDD.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Metering arrangement has been elaborated more in the section B.7.2 and annex 4.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Detailed description regarding metering arrangement is included in the PDD. Same is cross checked and verified during the site visit. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B11
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Measurement and recording frequency for parameter $EG_y$ is not specified under section B.7 of the PDD to meet the requirement of methodology AMS I D.

Finding	B11
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Joint Meter Reading would be done at the end of each month with the buyer of the electricity i.e. Maharashtra State Electricity Distribution Licensee (MSEDCL), to ascertain the exact amount of electricity exported. (The same has been included in the PDD.)
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	As per the requirements of the approved methodology, Continuous monitoring, hourly measurement and monthly recording is required for net electricity exported to the grid. Necessary clarification is required for the same.  CAR is open
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Electricity generated from the wind mills are continuously monitored and hourly measured through tri vector energy meters. Monthly recording is done through joint meter readings at interface meter at substation.
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	As verified during the site visit, validation team is convinced that the energy meters installed for the measurement are capable of continuous monitoring, hourly measurement. In addition, representatives of the PP and MSEDCL are taking Joint Meter readings <sup>/JMR/</sup> every month. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B12
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.5 does not provide alternatives to the project activity (Step 1 of Additionality Tool Ver 05.2).
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	In accordance with para 2 of Additionality Tool Version 05.2, use of Additionality tool is mandatory only if tool is included in approved small scale methodology.  Methodology AMS ID does not refer to Additionality Tool.  Additionality for the proposed project activity has been demonstrated in accordance with Attachment A to Appendix B of Simplified modalities and Procedures for Small Scale CDM project Activities, which does require discussion on alternative scenarios.

Finding	B12
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>As per para 10 of the approved methodology AMS I D V 16, baseline is clearly defined for renewable projects hence it is acceptable. Justification for the same is included in the PDD.</p> <p>CAR is closed</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Appropriate action was taken</p> <p><input type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>

Finding	B13
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>The PLF assumed should strictly conform to Annex 11 of EB 48 and documentary evidence therefor should be submitted.</p>
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>As per the requirement of the EB 48, Annex-11, PP has carried out third party PLF assessment specifically for their wind mills (19.56 %). Also PLF submitted to the bank is 22 %. Out of two options available (PLF submitted to bank and third party assessment) PP has chosen the most conservative value of 22% i.e. PLF submitted to Bank.</p> <p>PP had assumed 3.5 GWh/year generation in the PDD before webhosting which was based on the general quotation received from the supplier and is not regional specific. Hence PP has made a corrective action in the PLF in accordance with the Annex 11 of EB 48</p> <p>Hence it can be justified that the PLF assumed by the PP at the time of webhosting was not correct and neither supporting the scenario at the time of investment decision nor the current scenario of Project activity.</p>
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Web hosted PDD mentions the PLF of 26 % i.e. 3.5 GWh/year is based on the general quotation supplied by the wind mill manufacturer as a budgetary estimates. Validation team has reviewed the same and found that it is neither a project specific nor regional specific hence does not meet the EB requirement of EB 48, Annex-11.</p> <p>Based on the local and sectoral expertise, DOE has reviewed the PLF considered for the project activity based on the review of the following documents available.</p> <p>1. Tariff Order of MERC itself states PLF as 20%,</p>

Finding	B13																					
	<p>2. Investment decision was taken considering the PLF of 22% (2.889 GWh/year) and the same was submitted to bank for loan application.</p> <p>3. Third Party assessment of PLF study was conducted and which further supports that the Project activity can achieve only 19.56% PLF.</p> <p>4. Actual generation from the Wind mill is only able to achieve 8.89% PLF for the period April 2009 – March 10 and 19.48 % PLF for the period 01/04/2010 to 28/02/2011.</p> <p>Validation team has reviewed the MERC order. Maharashtra Electricity Regulatory Commission after robust study of the wind pattern and local environmental conditions in the state of Maharashtra arrived at PLF estimates of 20 %. Hence it is convinced that the chances of crossing the PLF for the project activity beyond 22 % are very rare.</p> <p>Validation team also reviewed the PLF considered by the wind mills situated in the state of Maharashtra from the UNFCCC web site and confirm that the average PLF remains less than 22 %.</p> <table><tr><td>1</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/SDGDZ9BEGT85WFKJKC594C4TE4DYLI/view.html">http://cdm.unfccc.int/Projects/Validation/DB/SDGDZ9BEGT85WFKJKC594C4TE4DYLI/view.html</a></td><td>20.70%</td></tr><tr><td>2</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/FJL6RC8GED3P2JUTTPXKTMZ3BYJN7J/view.html">http://cdm.unfccc.int/Projects/Validation/DB/FJL6RC8GED3P2JUTTPXKTMZ3BYJN7J/view.html</a></td><td>18.34%-20.63%</td></tr><tr><td>3</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/XVMAOFLHRWPZ69XHOD1HDXF8H3306D/view.html">http://cdm.unfccc.int/Projects/Validation/DB/XVMAOFLHRWPZ69XHOD1HDXF8H3306D/view.html</a></td><td>20%</td></tr><tr><td>4</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/LJE36W2FWJO0ER4D3B3DFUY8G0789B/view.html">http://cdm.unfccc.int/Projects/Validation/DB/LJE36W2FWJO0ER4D3B3DFUY8G0789B/view.html</a></td><td>20%</td></tr><tr><td>5</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/8U7CTE616QYUQXL3BQT1EV7K6CVK6/view.html">http://cdm.unfccc.int/Projects/Validation/DB/8U7CTE616QYUQXL3BQT1EV7K6CVK6/view.html</a></td><td>20%</td></tr><tr><td>6</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/0X5R1BSD4DQ9X1JUO821LP4XVHNNL8/view.html">http://cdm.unfccc.int/Projects/Validation/DB/0X5R1BSD4DQ9X1JUO821LP4XVHNNL8/view.html</a></td><td>19.20%</td></tr><tr><td>7</td><td><a href="http://cdm.unfccc.int/Projects/Validation/DB/P10PKVK2K9772M41RL1R81MRJJ0J5D/view.html">http://cdm.unfccc.int/Projects/Validation/DB/P10PKVK2K9772M41RL1R81MRJJ0J5D/view.html</a></td><td>20%</td></tr></table> <p>As per EB 48 Annex 11, PP has arrived at the plant load factor considering option 3 (a). Same is correctly defined in the PDD.</p> <p>Based on the local and sectoral expertise Validation team is convinced that the PLF considered by the PP is appropriate for the</p>	1	<a href="http://cdm.unfccc.int/Projects/Validation/DB/SDGDZ9BEGT85WFKJKC594C4TE4DYLI/view.html">http://cdm.unfccc.int/Projects/Validation/DB/SDGDZ9BEGT85WFKJKC594C4TE4DYLI/view.html</a>	20.70%	2	<a href="http://cdm.unfccc.int/Projects/Validation/DB/FJL6RC8GED3P2JUTTPXKTMZ3BYJN7J/view.html">http://cdm.unfccc.int/Projects/Validation/DB/FJL6RC8GED3P2JUTTPXKTMZ3BYJN7J/view.html</a>	18.34%-20.63%	3	<a href="http://cdm.unfccc.int/Projects/Validation/DB/XVMAOFLHRWPZ69XHOD1HDXF8H3306D/view.html">http://cdm.unfccc.int/Projects/Validation/DB/XVMAOFLHRWPZ69XHOD1HDXF8H3306D/view.html</a>	20%	4	<a href="http://cdm.unfccc.int/Projects/Validation/DB/LJE36W2FWJO0ER4D3B3DFUY8G0789B/view.html">http://cdm.unfccc.int/Projects/Validation/DB/LJE36W2FWJO0ER4D3B3DFUY8G0789B/view.html</a>	20%	5	<a href="http://cdm.unfccc.int/Projects/Validation/DB/8U7CTE616QYUQXL3BQT1EV7K6CVK6/view.html">http://cdm.unfccc.int/Projects/Validation/DB/8U7CTE616QYUQXL3BQT1EV7K6CVK6/view.html</a>	20%	6	<a href="http://cdm.unfccc.int/Projects/Validation/DB/0X5R1BSD4DQ9X1JUO821LP4XVHNNL8/view.html">http://cdm.unfccc.int/Projects/Validation/DB/0X5R1BSD4DQ9X1JUO821LP4XVHNNL8/view.html</a>	19.20%	7	<a href="http://cdm.unfccc.int/Projects/Validation/DB/P10PKVK2K9772M41RL1R81MRJJ0J5D/view.html">http://cdm.unfccc.int/Projects/Validation/DB/P10PKVK2K9772M41RL1R81MRJJ0J5D/view.html</a>	20%
1	<a href="http://cdm.unfccc.int/Projects/Validation/DB/SDGDZ9BEGT85WFKJKC594C4TE4DYLI/view.html">http://cdm.unfccc.int/Projects/Validation/DB/SDGDZ9BEGT85WFKJKC594C4TE4DYLI/view.html</a>	20.70%																				
2	<a href="http://cdm.unfccc.int/Projects/Validation/DB/FJL6RC8GED3P2JUTTPXKTMZ3BYJN7J/view.html">http://cdm.unfccc.int/Projects/Validation/DB/FJL6RC8GED3P2JUTTPXKTMZ3BYJN7J/view.html</a>	18.34%-20.63%																				
3	<a href="http://cdm.unfccc.int/Projects/Validation/DB/XVMAOFLHRWPZ69XHOD1HDXF8H3306D/view.html">http://cdm.unfccc.int/Projects/Validation/DB/XVMAOFLHRWPZ69XHOD1HDXF8H3306D/view.html</a>	20%																				
4	<a href="http://cdm.unfccc.int/Projects/Validation/DB/LJE36W2FWJO0ER4D3B3DFUY8G0789B/view.html">http://cdm.unfccc.int/Projects/Validation/DB/LJE36W2FWJO0ER4D3B3DFUY8G0789B/view.html</a>	20%																				
5	<a href="http://cdm.unfccc.int/Projects/Validation/DB/8U7CTE616QYUQXL3BQT1EV7K6CVK6/view.html">http://cdm.unfccc.int/Projects/Validation/DB/8U7CTE616QYUQXL3BQT1EV7K6CVK6/view.html</a>	20%																				
6	<a href="http://cdm.unfccc.int/Projects/Validation/DB/0X5R1BSD4DQ9X1JUO821LP4XVHNNL8/view.html">http://cdm.unfccc.int/Projects/Validation/DB/0X5R1BSD4DQ9X1JUO821LP4XVHNNL8/view.html</a>	19.20%																				
7	<a href="http://cdm.unfccc.int/Projects/Validation/DB/P10PKVK2K9772M41RL1R81MRJJ0J5D/view.html">http://cdm.unfccc.int/Projects/Validation/DB/P10PKVK2K9772M41RL1R81MRJJ0J5D/view.html</a>	20%																				

Finding	B13
	project activity which is situated in the state of Maharashtra.  CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B14
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Documentary evidence should be submitted to prove that the investment decision was taken in December 2008, lest the PLR prevailing at the time - January end/ February beginning should be considered as benchmark.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>Following documents are being submitted to the DOE supporting that investment decision was taken in December 2008</p> <ul style="list-style-type: none"> <li>Declaration from the Project Proponent, has been submitted to the Bank.</li> <li>Loan Sanction letter, which clearly states that all the proposals and parameters submitted to the bank have been crystallized on December 2008</li> </ul>
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Accepted; However, the PLR considered is for the period August 2008 to October 2008. Weekly Statistical Bulletin released every week provides much later PLR. Since decision was taken in December 2008, considering PLR of August to October, particularly when the latest rates are available, is not appropriate. CAR is open

Finding	B14								
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>PP has modified the benchmark considering latest available weekly bulletin of RBI (12/12/2008) at the time of investment decision (14/12/2008), average of lowest (13.00%) and highest value (14.00%) of PLR during previous month (November-2008) has been assumed by the PP.</p> <table border="1"> <tr> <td>7/11/2008</td><td>13.75%-14.00%</td></tr> <tr> <td>14/11/2008</td><td>13.00%-13-50%</td></tr> <tr> <td>21/11/2008</td><td>13.00%-13-50%</td></tr> <tr> <td>28/11/2008</td><td>13.00%-13-50%</td></tr> </table> <p>Hence the PLR of 13.50% has been assumed as benchmark by PP.</p>	7/11/2008	13.75%-14.00%	14/11/2008	13.00%-13-50%	21/11/2008	13.00%-13-50%	28/11/2008	13.00%-13-50%
7/11/2008	13.75%-14.00%								
14/11/2008	13.00%-13-50%								
21/11/2008	13.00%-13-50%								
28/11/2008	13.00%-13-50%								
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Benchmark is revised to 13.5 % based on the latest available weekly bulletin at the time of decision making.</p> <p>CAR is closed.</p>								
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p> <input type="checkbox"/> To be checked during the first periodic verification  <input checked="" type="checkbox"/> Appropriate action was taken  <input type="checkbox"/> Project documentation was corrected correspondingly  <input type="checkbox"/> Additional action should be taken  <input checked="" type="checkbox"/> The project complies with the requirements         </p>								

Finding	B15
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	PDD does not contain any discussion on common practice analysis
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>UNFCCC simplified modalities seek to establish additionality of the project activity as per Attachment A to Appendix B, which listed various barriers, out of which, at least one barrier shall be identified due to which the project would not have occurred any way. Project participants therefore identified the most affecting barrier for the proposed project activity i.e. Investment Barrier only.</p>



Finding	B15
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Accepted. As per the Attachment A to Appendix B, common practice analysis is not required for small scale projects. As project activity is only 1.5 MW capacity falls under small scale project, common practice is not required to be included in the PDD. CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B16
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Financial years like 2008-09, 2009-10, 2010-11 etc. should be used instead of 1, 2, 3 etc. in all the worksheets
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Worksheet has been modified according to the Financial years mentioned as 2008-09, 2009-10, 2010-11.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Financial years have been used. CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B17
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Since the order was placed on 18.2.2009, WEG must have commenced generation before March 31, 2009. Hence, the generation, revenue and cost for the first year (2008-09) should be in conformity with the commencement date of generation of WEG.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Worksheet has been modified according to the Financial years mentioned as 2008-09, 2009-10, 2010-11 and the generation, revenue and cost for the first year (2008-09) has been taken in conformity with the commencement date of generation of WEG which is 31/03/2009, and the one day generation has been taken as the inflow for first financial year only. Other parameters like O&M Cost etc. also have been modified in the worksheet.

Finding	B17
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Worksheet has been modified and the projections commence from 2008-09 with the first year generation, revenue and cost being accounted on prorated basis. CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B18
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Though it does not make a major difference, land cost being advance lease rental paid, the appropriate accounting treatment would be to amortize the cost over the life time of the project and not depreciate it along with other assets
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Land cost is not the lease rental paid in advance but it is the sale deed and project proponent owns this land.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Agreed. Since land cost has been taken as salvage value, CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B19
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	O&M cost should be in conformity with P.O./O&M contract
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	O&M cost has been taken as per the O&M agreement signed between PP and Technology supplier, also service tax has been included in the cost.  The document titled " O & M (O & M Agreement)" has been provided to the validator.



Finding	B19
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	O&M cost conforms to the O&M agreement. CAR is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B20
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Loan amount, interest, repayment and initial holiday should all be in conformity with loan sanction letter. Depending upon the commencement date, interest provision and reckoning of interest in the projections should get corrected
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>As per the loan sanction letter, repayment will start on March 2010 whereas loan is sanctioned on March 2009 that means there is 12 months of Moratorium Period. Other parameters like loan amount, interest and repayment schedule are taken from the loan sanction letter.</p> <p>All the parameters like interest provision and reckoning of interest have been corrected as per the commencement date i.e. 31/3/2009.</p>
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Accepted. Interest computation is in conformity with loan sanction letter. However, there are two mistakes. In the first place, since WTG was in operation for only one day in 2008-09, providing interest for entire month is not in conformity with accepted accounting principles. Secondly there is a small mistake in the computation of total repayment period during the year, though it does not affect additionality. CAR is open
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Interest Rate on Loan has been modified as zero for the financial year 2008-09
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Mistakes have been corrected. CAR is closed

Finding	B20
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B21
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Installation & commissioning cost and MEDA processing charges have neither been depreciated nor amortized. The cost has not even been accounted for as residual value either.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Installation & commissioning cost and MEDA processing charges are depreciated and accounted for as residual value.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Installation and commissioning cost have been depreciated for book profit purposes. However, the installation charges appear to have been removed while computing IT depreciation, which does not appear to be correct. CAR is open
<b>Corrective Action #2</b>	MEDA processing charges and the installation charges have been capitalized while computing IT depreciation
<b>DOE Assessment #2</b>	IT depreciation is now correctly computed. CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B22
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Depreciating civil works at 5.28% (book depreciation) does not appear to be in conformity with Schedule XIV of Companies Act. Book depreciation provided exceeds the cost.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	According to the Schedule XIV of Company's Act 1956, Depreciation has been taken, under the Head "Factory Building", as 3.34%.  Book depreciation calculation has been modified in sheet "Projection"

Finding	B22
<b>DOE Assessment #1</b>	Depreciation of the civil works now confirms to the schedule XIV of the companies Act.  Also book depreciation calculation is modified.  CAR is closed.
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B23
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	IT Depreciation provision in the first year might not be correct, in case the WEG commenced generation before 31.3.2009.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The Project Participant (from his past three years performance as well as the balance sheet till the date of investment decision) was well aware of the fact that it would not be able to absorb all the IT depreciation in first year and any how he would have to carry forward his profits/Losses for the next consecutive years. However PP has now considered equal depreciation of 25% of project cost i.e. 22.08 Million/year upto 4 years to follow the conservative approach.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	IT depreciation rate for the first year has been taken at 25 % of the project cost. Validation team has reviewed the balance sheet and confirmed that PP had incurred loss and could not be able to absorb the depreciation. Hence IT depreciation provision made by the PP is appropriate. CAR is closed

Finding	B24
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The regular tax rate prevailing at the time of taking investment decision was 33.99% and not 33.66% as given in the worksheet.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The tax rate prevailing at the time of taking investment decision has been modified at 33.99%.

Finding	B24
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Tax rate has been corrected. CAR is closed</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p> <input type="checkbox"/> To be checked during the first periodic verification  <input type="checkbox"/> Appropriate action was taken  <input checked="" type="checkbox"/> Project documentation was corrected correspondingly  <input type="checkbox"/> Additional action should be taken  <input checked="" type="checkbox"/> The project complies with the requirements         </p>

Finding	B25
<b>Classification</b>	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Deduction under 80IA was claimed on carry forward profit which implies that tax exemption has been claimed on total carry forward profit of that year</p> <p>Tax computation is incorrect and does not conform to IT Act and the ruling given on Sec. 80IA.</p>
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The exemption under 80IA has been claimed on Carry forward profit or Profit before Tax (PBT) (Whichever is minimum).</p> <p>Tax computation has been corrected in conformity with ruling of IT Act;</p>
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Tax computation has been corrected in conformity with ruling of IT Act.</p> <p>CAR is closed.</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p> <input type="checkbox"/> To be checked during the first periodic verification  <input checked="" type="checkbox"/> Appropriate action was taken  <input type="checkbox"/> Project documentation was corrected correspondingly  <input type="checkbox"/> Additional action should be taken  <input checked="" type="checkbox"/> The project complies with the requirements         </p>

Finding	B26		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Cash flow for IRR suffer from following inadequacies: <ul style="list-style-type: none"> <li>a) tax shield enjoyed by the PP on account of accelerated depreciation has not been included</li> <li>b) Evacuation deposit refund has not been accounted for as cash inflow</li> <li>c) salvage value has not been provided</li> </ul>		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<ul style="list-style-type: none"> <li>a) Project Proponent has assumed the Wind Project as a separate entity and the losses have been carry forwarded for the next consecutive year. Resulting of it the project proponent is not liable to pay corporate tax for 8 years, and from 9th to 15th year the project proponent have claimed tax holidays. Since the project proponent has present the wind project as a separate entity, the tax shield enjoyed by the parent company has not taken into account of accelerated depreciation while computing the IRR.</li> <li>b) Evacuation deposit refund has been accounted as the five equal instalments for consecutive five years after commissioning in cash inflow</li> <li>c) Salvage Value has been considered in project inflow.</li> </ul>		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<ul style="list-style-type: none"> <li>a) Since it is a proprietorship concern, the concept of 'separate entity' is not correct. Such concepts apply only if it is a Registered. firm or a corporate entity. From the income of Proprietor the accelerated depreciation would be set off and to that extent tax would be saved and this should be accounted for as cash inflow. CAR is open</li> <li>b) Evacuation deposit refund has been accounted appropriately. CAR is closed</li> <li>c) Salvage value including total land cost plus 5 % of the remaining project cost has been considered. Same is appropriate. Most assets commonly seen in structured finance transactions will have a <i>scrap value assumption of 5-10% of original cost</i>. Since for Income Tax computation, the asset has been fully depreciated in the first 4 years itself, 5% salvage value represents potential profit and therefore it conforms to guidance 4 of Annex 58, EB 51. Therefore, the validation team considers the salvage value appropriate. CAR is closed</li> <li>d) Moreover, since the cash inflow commence in the same year as cash outflow (2008-09), the cash outflow should be netted out with cash inflow of 2008-09. New CAR</li> </ul>		

Finding	B26
<b>Corrective Action #2</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>a) The Project Participant (from his past three years performance as well as the balance sheet till the date of investment decision) was well aware of the fact that it would not be able to absorb all the IT depreciation in first year and any how he would have to carry forward his profits/Losses for the next consecutive years. Which can also be substantiated by the fact that project participant has not even considered the accelerated depreciation benefits in the financial analysis submitted to bank. Supporting documents i.e. Three years tax returns prior to the purchase order of WTG.</p> <p>d) The cash outflow has been netted out with cash inflow of 2008-09.</p>
<b>DOE Assessment #2</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>a) Besides IT Returns, the Profit and Loss account submitted as a part of IT Returns is also required to ascertain whether the accelerated depreciation was considered in IT computation or not. PP/Consultant may submit the P&amp;L account as submitted to IT for DOE to decide on this issue</p> <p>d) Cash flow has been netted.</p> <p>e) It is observed that in the revised worksheet now presented, salvage value has been accounted for in terminal year +1. It should be accounted in the terminal year only.</p> <p>CAR is open for (a) and new CAR (e)</p>
<b>Corrective Action #3</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>a) Profit and loss accounts along with the IT returns prior to the purchase order of WTG have been submitted to DOE. However PP has now considered equal depreciation of 25% of project cost i.e. 22.08 Million/year upto 4 years to follow the conservative approach.</p> <p>e) Salvage value has been accounted in the terminal year.</p>
<b>DOE Assessment #3</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>a) Profit and loss accounts are submitted to DOE. On reviewing income tax returns it is evident that the depreciation due to wind mill can not be absorbed as company is making loss at the time of decision making. Hence consideration of 25 % depreciation distributed over four years is appropriate. CAR is closed.</p> <p>e) Salvage value is accounted in terminal year.</p> <p>CAR is closed.</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input type="checkbox"/> The project complies with the requirements</p>



Finding	B27		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The worksheet does not contain sensitivity analysis and hence it does not conform to Annex 45 of EB 41.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Sensitivity Analysis has been performed in respect to the PLF, power tariff after 13 years, O&M charges and Project Cost.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Sensitivity is appropriately conducted on critical parameters as per Annex 45 of EB 41.. CAR is closed		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	C1		
<b>Classification</b>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	In section C.1.1. the start date of the project has been shown as 18/02/09 (Date of Purchase order raised for WTGs). However on review of purchase order it was observed that the date is 19/02/2009. The same needs to be corrected.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Start Date has been Modified as 19/02/2009.		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Start date has been corrected. CAR is closed		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	A1		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Under section A.2 in “Economic well-being” it is stated that the generation of electricity by the project activity will improve availability of electricity to the NEWNE grid. Please explain how this will affect the economic well being of the region.		
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The paragraph has been removed from the PDD		
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	As this is removed from the PDD, CL is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B1		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	It may be clarified how the CDM revenues were considered essential to overcome the investment barrier to this project activity, in particular that the benchmark represents a rate below which the investment could not be made.		
<b>Corrective Action #1</b>	The IRR of Project activity is reaching near to its benchmark after considering CER revenue and making the project more viable than before.		
<b>DOE Assessment #1</b>	As CER revenue improving the IRR and making project more viable, CL is closed.		
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Finding	B2		
<b>Classification</b>	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The capital cost works out to Rs.27 per kWh of power exported, which is high compared to the MERC recommendation. The reasons for the high cost, unaccompanied by a pro rata increase in the generation may be stated.		



Finding	B2
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The MERC order was issued in November 2003, i.e., 6 years before the project placed the order, the prices have gone up, the value is valid and conservative, in as much as it is backed by purchase orders.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Validation team has reviewed the quotation and purchase orders and confirmed that the capital cost considered is appropriate for the project activity. Submission is accepted. CL is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B3
<b>Classification</b>	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Clarify the reasons for bringing down the tariff from Rs.5.30/kWh to Rs.3.50/kWh from 14 <sup>th</sup> year onwards.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The Project Participant has considered Rs. 3.50/KWh as tariff rate after 13th year. The power purchase agreement signed between project participants and the utility is only for 13 years from the date of commercial operation, beyond which there is no commitment from the Discom to buy electricity from the project. Since there is significant amount of uncertainty over the project being able to sale electricity beyond the 13th year period. In the absence of clear-cut guidelines on the tariff for the further period, the project participant considered the lowest reference tariff value i.e Rs. 3.5/Kwh for project return calculations.
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The response is not satisfactory. PP has to state evidence for such an apprehension. CL is open

Finding	B3
<b>Corrective Action #2</b>	<p>The explanation given by the PP is based on the proceedings between wind farm developers of Group II category (whose PPA has been expired after 10 years) and MSEDCL in front of MERC. In this respect a petition by wind farm developers was filed in front of MERC against MSEDCL for non payment of dues.</p> <p>Order released by MERC date 10/12/2008, and clearly defines the six options accepted by MSEDCL for determination of tariff after expiry of PPA.</p> <p>Now the PP has calculated the tariff based on all these six options. As a result of which the maximum tariff which can be availed is Rs. 2.11/kWh (<i>Calculation has been provided in financial sheet</i>). Whereas the tariff assumed by the PP is Rs. 3.5/kWh. Hence it can be concluded that the PP is highly conservative in its approach while calculating the financial return from the project. And there is no further scope of increasing tariff beyond Rs. 3.5/kWh. which leads to unrealistic scenario.</p> <p><i>Source: Order released by MERC date 10/12/2008</i></p>
<b>DOE Assessment #2</b>	<p>Explanation provided by the PP is convincing. Further maximum tariff calculated by all six approaches as per the MERC order is Rs 2.11 /kWh. Validation team has cross checked the tariff calculated by the PP as various approaches. Hence consideration of tariff of Rs 3.50 /kWh after 13<sup>th</sup> year is convincing. Also sensitivity analysis reveals that even after 100 % increase in assumed value of tariff after 13 years does not render the project non-additional.</p> <p>CL is closed.</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

Finding	B4
<b>Classification</b>	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Installation & commissioning charges and MEDA processing fee have not been capitalized. Reasons for the same be stated.
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Installation & commissioning charges and MEDA processing fee have been capitalized for Book depreciation.

Finding	B4
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Installation &amp; commissioning charges and MEDA processing fee have been capitalized. CL is closed</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p> <input type="checkbox"/> To be checked during the first periodic verification  <input checked="" type="checkbox"/> Appropriate action was taken  <input checked="" type="checkbox"/> Project documentation was corrected correspondingly  <input type="checkbox"/> Additional action should be taken  <input type="checkbox"/> The project complies with the requirements         </p>

Finding	B5
<b>Classification</b>	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Book depreciation provided exceeds the value of investment. Moreover, clarify whether sole proprietary concerns provide for book depreciation and for what purpose.</p>
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>Book depreciation calculation has been modified as per the considering the investment value of the project.</p> <p>Book depreciation is considered by the Proprietary Concern for the Company's performance analysis.</p>
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Book depreciation has been modified. CL is closed</p>
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<p> <input type="checkbox"/> To be checked during the first periodic verification  <input checked="" type="checkbox"/> Appropriate action was taken  <input checked="" type="checkbox"/> Project documentation was corrected correspondingly  <input type="checkbox"/> Additional action should be taken  <input checked="" type="checkbox"/> The project complies with the requirements         </p>

Finding	B6
<b>Classification</b>	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
<b>Description of finding</b> <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Following documents/documentary evidence should be submitted: <ul style="list-style-type: none"> <li>a) Purchase Orders for each component of the project cost</li> <li>b) Loan sanction letter</li> <li>c) PPA</li> <li>d) O&amp;M agreement</li> <li>e) Insurance premium</li> <li>f) Commencement of generation certificate</li> <li>g) Copies of the acknowledgement received from UNFCCC and DNA</li> <li>h) CER price</li> <li>i) Evidence in support of point number 1, 2 and 3 under heading "Prior CDM Awareness" on page 14 of the PDD under section B.5 .</li> <li>j) Confirmation received from UNFCCC and DNA related to information about CDM consideration or the project activity.</li> <li>k) Annual Report (Ministry of Power 2007-08)</li> </ul>
<b>Corrective Action #1</b> <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<ul style="list-style-type: none"> <li>a) Provided</li> <li>b) Provided</li> <li>c) Provided</li> <li>d) Provided</li> <li>e) Provided</li> <li>f) Provided</li> <li>g) Copy of Snapshot from UNFCCC website, regarding the prior consideration of CDM has been provided</li> <li>h) CER price (Link has been given in PDD, Spread sheet of Historical prices by ECX has been provided. Price as 15 Euro has been taken conservatively, as the average settlement price from March 2008 December 2008 is 18 Euro.</li> <li>i) provided</li> <li>j) Provided</li> <li>k) Provided</li> </ul>
<b>DOE Assessment #1</b> <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	All documents have been submitted. CL is closed
<b>Conclusion</b> <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements

## 5 VALIDATION ASSESSMENT SUMMARY

### 5.1 General Description of the Project Activity

#### 5.1.1 Participation

##### LOA

Host Party for this project activity is India. India has ratified the Kyoto protocol in August 2002. Same has been confirmed from the UNFCCC web site. Link [http://unfccc.int/kyoto\\_protocol/status\\_of\\_ratification/items/2613.php](http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php) Host country approval<sup>/HCA/</sup> dated 15/09/2009 issued by DNA of India confirm voluntary participation by M/s Allgrow ventures in proposed CDM project activity entitle “1.5 MW Wind Power Project in Maharashtra by M/s. Allgrow ventures”. Host country approval was checked and found that it confirms the EB guidelines.

##### Project Participants

Project participant M/s. Allgrow ventures is correctly specified in section A.3, annex-I of the PDD as per Host Country Approval<sup>/HCA/</sup> received from DNA of India (party to Kyoto protocol).

#### 5.1.2 Contribution to Sustainable Development

Host Government i.e. DNA of India vide Host Country Approval<sup>/HCA/</sup> dated 15/09/2009 approved that the project will contribute to sustainable development in India.

#### 5.1.3 PDD editorial Aspects

As verified, the latest version 03 of small scale CDM-SSC-PDD format is used by Project Participant and filled up as per the guidelines for completing CDM-SSC-PDD version 05 dated 14/09/2007, EB 34, Annex 09.

#### 5.1.4 Technology to be employed.

Based on site visit and document review, Validation team confirms that the project activity involves installation of new 1 no of wind turbine generators of 1.5 MW capacity in Village Adwadi, Taluka Sinner and District Nashik to reduce GHG emission. Detailed description of the project activity is given in Section A.2 and A.4.2 of the PDD is adequate. Technology used is clean and uses renewable source of energy which is environmentally safe and sound.

### **5.1.5 Small Scale Projects**

In accordance with decision 17/CP.7 as project activity is a renewable energy project and total installed capacity is 1.5 MW which is less than 15 MW falls under small scale CDM project activity. Project activity has applied methodology AMS I-D version 16 and tool to calculate emission factor for an electricity system version 2.0 correctly.

By reviewing the conditions stipulated in EB-36, Annex 27 compendium of guidance on the Debundling for SSC project activities, it is confirmed that the project activity is not a debundled component of any large scale project.

Validation team has reviewed Purchase orders<sup>/PO/</sup>, Commissioning Certificates<sup>/CC/</sup>, Share of electricity certificate<sup>/SE/</sup> and confirmed that the total installed capacity of the project activity is 1.5 MW which is less than 15 MW and also there is no other project under the name of the PP within the same wind farm.

## **5.2 Project Baseline, Additionality and Monitoring Plan**

### **5.2.1 Application of the Methodology**

The selected baseline methodology for the project activity is the approved baseline methodology “Grid connected renewable electricity generation” (AMS-I.D: Version 16). The selected baseline methodology, i.e., AMS-I.D, Version 16 and Tool to calculate the emission factor for an electricity system version 2.0 is correctly applied to this type of grid connected renewable generation by wind.

Validation team has reviewed technical specification<sup>/TS/</sup>, purchase orders<sup>/PO/</sup>, conducted interview during site visit, Project design Document<sup>/PDD2/</sup> and convinced that the project meets all the applicability criteria specified in the methodology.

Validation team is convinced that as this being generation of electricity by using renewable source of energy i.e. wind, it does not resulted in any emission from project or leakages other than described in methodology.

### **5.2.2 Project Boundary**

The system boundaries of the project are clearly defined in the PDD. As per para 9 of the approved methodology, the physical, geographical site of the renewable generation source delineates the project boundary. As per the approved methodology project emission from renewable source of energy is zero. There are no other sources which are impacted by the project. Validation team has confirmed the same by conducting site visit and interview with project participants.

### **5.2.3 Baseline Identification**

Baseline alternative identified for the project activity is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid



connected power plants and by the addition of new generation sources, as reflected in the combined margin calculations described in the “Tool to calculate the emission factor for an electricity system”

According to approved methodology AMS –I D Version 16, the baseline emissions are the product of electrical energy baseline  $EG_{BL, y}$  expressed in kWh of electricity produced by the renewable generating unit multiplied by an emission factor.

Operating Margin (OM) and Build margin (BM) emission factors are correctly taken from the CO<sub>2</sub> database version 4.0 published by Central electricity Authority<sup>/CEA/</sup> and is available on public domain and is reliable data source available to PP at the time of submission of PDD for web hosting.

## 5.2.4 Calculation of GHG Emission Reductions

As per the approved methodology AMS I-D V 16, baseline emission are calculated by electrical energy baseline  $EG_{BL, y}$  expressed in kWh of electricity produced by the renewable generating unit multiplied by an emission factor.

Combined Margin emission factor of NEWNE grid is calculated based on combination of Operating Margin (OM) and Build Margin (BM) emission factors according to the procedures prescribed in the “Tool to calculate the emission factor for an electricity system” version 2.0 calculated in a transparent and conservative manner. Operating Margin (OM) and Build margin (BM) emission factors are correctly taken from the CO<sub>2</sub> database version 4.0 published by Central electricity Authority<sup>/CEA/</sup> and is available on public domain and is reliable data source. Validation team has reviewed that the version 4.0 is the latest available at the time of submission of PDD for validation i.e. at the time of webhosting of the PDD.

As the project involves installation of wind turbines using renewable source of energy, there is no project emission from the project activity which confirms to the methodology requirements.

Further validation team is convinced that all the applied equations for the calculation of the baseline emission are derived as per the guidelines provided in approved methodology AMS I D V 16 and Tool to calculate emission factor for an electricity system V 2.0.

The emission reduction excel calculation sheet<sup>/XLS2/</sup> submitted was checked by the validation team and found to be correct. The value of combined margin baseline emission factor taken as 0.9059 tCO<sub>2</sub>/MWh is fixed ex-ante for entire crediting period. The operating margin is generation weighted for the latest three years and Build Margin for latest one year was verified with the CO<sub>2</sub> database published by CEA report version 4.0 was found to be correct.

Project developer has submitted a copy of the application submitted to the bank<sup>/LA/</sup>, which confirms that the PLF was considered at 22% ( 2.89 GWh/year) while applying for project financing. In addition PP has also submitted third party PLF assessment report<sup>/PLF-AR/</sup> and accordingly WTG specific PLF estimated is 19.56 %. Moreover, MERC which is a state owned regulatory authority, after exhaustive study of wind



pattern and velocity, has recommended PLF of 20% for windmills located in Maharashtra. Hence the PLF conforms to the requirements of Annex 11, EB 48

Validation team has also reviewed the actual generation achieved by the project activity and confirmed that the PLF remains well below 20 %. Also refer DOE assessment of CAR B13 in this regard.

As the energy generating equipment is not transferred from another activity or the existing equipment is transferred to another activity, the leakages are not considered as per the guidelines of approved methodology.

Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

$ER_y$  Emission reductions in year  $y$  (t CO<sub>2</sub>/y)

$BE_y$  Baseline Emissions in year  $y$  (t CO<sub>2</sub>/y)

$PE_y$  Project emissions in year  $y$  (t CO<sub>2</sub>/y)

$LE_y$  Leakage emissions in year  $y$  (t CO<sub>2</sub>/y)

Emission Reductions (tCO<sub>2</sub>eq./year) = 2,486 – 0 – 0 = 2,486

The calculations of the project emission as well as baseline emission are documented in section B.6.3, B.6.1 and in Annex-3 of PDD<sup>PDD2/</sup> and assessment of baseline emission is documented in section B.4.

## 5.2.5 Additionality Determination

### Consideration of CDM in decision making (if project start before validation)

The project developer has stated the start date of the project activity is 19/02/2009 and has submitted a copy of the purchase order for the WTGs released to M/s Suzlon Energy Ltd. as evidence. The project developer has not undertaken any construction or any real action on the implementation of the project activity prior to this date. Since the *real action of the programme activity* had begun on 19/02/2009, as per Glossary of CDM terms (Version 05), this date has been treated as the start date of the project activity. Since the real action of the project activity had begun after 02 August 2008, the project activity falls under the category of *new project activity* as per paragraph 100 of VVM.

The PDD was web-hosted for public comments on 10/09/2009, i.e., after the start date of the project activity. Since the start date of the project activity was after 2<sup>nd</sup> August 2008 and the PDD was web-hosted after the start date, as per paragraph 2 of Annex 22, EB 49, project participant is required to inform the Host Party DNA and the UNFCCC secretariat in writing of the commencement of the project activity and of

their intention to seek CDM status and such notification must be made within six months of the project activity start date. Accordingly, the project developer had informed both UNFCCC and DNA on 06-07/03/2009 (start date being 19/02/2009) about the commencement of the project activity and their intention to seek CDM status. Copies of correspondence with UNFCCC and DNA have been submitted to validation team. Validation team checked the same and confirmed that PP has intimated DNA as well as UNFCCC regarding intention to seek CDM status. Besides, validation team also checked the UNFCCC website<sup>1</sup> (as required vide paragraph 101 of VVM) and satisfied itself that the project developer had informed UNFCCC within the stipulated 6 months period.

Since the project fulfills the condition stipulated vide paragraphs (2) of Annex 22 of EB 49, (and paragraph 101 of VVM) Validation Team concludes that *there was a prior consideration of CDM and CDM was seriously considered in the decision to implement the project activity.*

### Application of methodology / methodological tools

The project is small scale in size. Therefore, in accordance with § 28 of the simplified modalities and procedures for small-scale CDM project activities, the additionality of the project activity has been demonstrated using *Attachment A to Appendix B* and Guidance given vide Annex 58 of EB 51. As all requirements specified vide § 28 of the simplified modalities and procedures are complied with by the project activity, this approach has been assessed to be appropriate for the additionality assessment for this project activity.

Project developer had chosen investment barrier and to demonstrate the investment barrier had selected benchmark analysis and project IRR as financial indicator. Having regard to the fact that the project involves investment and is funded by a mix of debt and equity, project IRR is the most suited for the project type and decision making context. Since in this instant case, as subsequent section would reveal, baseline is outside the direct control of the project developer (grid connected power) and hence, the choice of the project developer is restricted to 'invest or not to invest', the benchmark approach is most suited as per Guidance 16 of Annex 58 of EB 51.

*In the above background Validation Team concludes that the additionality justification given by the project developer is in accordance with the requirements derived from the approved CDM methodology and the methodological tools referred therein and also conforms to guidance given by EB vide paragraph 109 (c) of VVM.*

### Alternatives

This is a wind energy project and is based on the Methodology AMS I-D Ver. 16. The methodology states,

<sup>1</sup> <http://cdm.unfccc.int/Projects/PriorCDM/notifications/index.html> (1.5 MW Suzlon make (model S-82) in India by Allgrow Ventures dated 06/03/2009)

*“If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources”.*

Paragraph 105 of VVM states that PDD is required to identify credible alternatives to the project activity in order to determine the most realistic baseline scenario, unless the approved methodology that is selected by the proposed CDM project activity prescribes the baseline scenario and no further analysis is required. Since the approved methodology AMS I-D used by the project activity prescribes the baseline scenario, no further analysis of alternatives is required for the project activity.

*Validation Team, therefore, concludes that the PDD and the validation report conforms to the guidance given by EB vide paragraph 105 of VVM*

### **Investment analysis**

In order to assess the claim of the project developer that the project scenario is not economically feasible without benefits from CER sales, Validation Team adopted a six-pronged strategy, viz.,

- a) determining the suitability of the investment analysis, benchmark applied and the suitability thereof to the type of financial indicator presented;
- b) conducting an assessment of parameters and assumptions used in calculating the financial indicator and determining the accuracy and suitability of parameters;
- c) cross-checking the parameters against third-party or publicly available sources;
- d) reviewing annual financial reports related to the project participant;
- e) assessing the correctness of computations carried out and documented; and
- f) subjecting the critical assumptions of the project activity to reasonable variations to determine under what conditions variations in the result would occur, and the likelihood of these conditions.

a) Suitability of investment analysis, financial indicator and benchmark: Project developer had demonstrated that the financial returns of the proposed CDM project activity would be insufficient to justify the required investment (Paragraph 109(c) of VVM). For demonstrating the financial unattractiveness of the project activity, project developer had chosen investment barrier and to demonstrate the investment barrier had selected benchmark analysis. Since in this instant case, as subsequent section would reveal, baseline is outside the direct control of the project developer (grid connected power) and hence, the choice of the project developer is restricted to “invest or not to invest”, the benchmark approach is most suited as per the latest version of Guidance 16 of Annex 58 of EB 51.

*In the above background, as subsequent paragraphs would reveal, Validation Team concludes that the additionality justification given by the project developer is in accordance with the requirements derived from the approved CDM methodology and the methodological tools referred therein as well as the guidance given by EB vide paragraphs 108-110 of VVM.*

The project developer has chosen project IRR to demonstrate the additionality of the project. As stated above, considering the fact that the project is financed by a mix of debt and equity and that guidance 12 of Annex 58, EB 51 permit the use of project IRR as one of the financial indicators to demonstrate additionality, project IRR has been considered as appropriate financial indicator for the project type and decision making context.

As per guidance 12 of Annex 58, EB 51, “Local commercial lending rates or weighted average costs of capital (WACC) are *appropriate* benchmarks for a project IRR”<sup>2</sup>. The project developer has chosen the Prime Lending Rate (PLR), which is the commercial lending rate, as the benchmark. Since the PP has chosen project IRR as financial indicator, selection of PLR as benchmark conforms to Guidance 12 of Annex 58, EB 51. At the time of decision making the PLR (evidenced by publications by the Reserve Bank of India) ranged between 13.00% and 14.00%<sup>3</sup>. PLR represents the commercial lending rate of banks. Therefore, the PLR as benchmark conforms to guidance 12 of Annex 58, EB 51. Moreover, since the PLR is publicly available and can be validated by DOE, it also conforms to guidance 13 of Annex 58, EB 51. PP has chosen the average value of the highest and lowest value during the month of November 2008, viz., 13.50% as benchmark.

*Therefore, the Validation Team concludes that the benchmark selected by the project developer is suitable for the financial indicator selected. Considering the fact that the financial indicator elevates with CDM benefits and reaches near to the benchmark value, it is reasonable to assume that no investment would have taken place at a return lower than the benchmark. Therefore, the selected benchmark is appropriate and conforms to paragraph 112 of VVM.*

b) Parameters and assumptions used: The three important parameters, which determine the project IRR of the project, are project cost, financing pattern, and profitability estimates.

The project cost includes land, WTGs, tower, transformer, electrical, erection and commissioning cost. All these costs are based on purchase orders, copies of which have been submitted to validation team. There is no difference in the project cost between the quotation (based on which the decision was taken) and the Purchase Order. As per the quotation and purchase orders, the cost of the project works out to Rs. 90.02 mn. Since the cost as given in the purchase order is the cost actually paid by the company and it is same as that of the quotation, validation team felt it appropriate to consider the cost based on purchase order/quotation and also meets the guidance 6 of Annex 58, EB 51. Hence, the cost considered in the computation of financial indicator is appropriate and backed by the supporting document.

---

<sup>2</sup> Annex 58 of EB 51, Guidance on the Assessment of Investment analysis

<sup>3</sup> <http://rbidocs.rbi.org.in/rdocs/Wss/PDFs/88944.pdf> The PLR is sourced from the RBI Bulletin (12/12/2008) issued by the Reserve Bank of India, which was available to the PP at the time of decision making (i.e., 14/12/2008). This rate pertains to November 2008.

Based on the purchase order, the cost works out to Rs.60.01 mn. per MW for 1.5 MW Wind mills. This is in contrast to Rs.40 mn./MW recommended by MERC order dated 24/11/2003. As the decision making period is December 2008, approximately five years later to the date of MERC order. The cost has gone up substantially and the difference in the cost is on account of inflation. Since the cost of windmills have been going up, thanks to inflation, comparison of projects already registered is not appropriate, as the orders for them were placed much earlier. Hence, the validation team compared the project cost with other projects received by the DOE for validation (for which validation is in progress) recently and found that the cost has been in this range only. Taking into consideration all these factors and based on the local and sectoral expertise, the Validation Team concludes that the project cost is reliable and appropriate for the project activity.

Financing pattern envisages a debt component of Rs.49 mn. – about 54 % of the project cost. Axis bank had sanctioned a loan of Rs 49 mn based on the loan application made by the Project developer. The loan sanction letter states the interest rate of 13.25 % since the actual interest payable by the project activity is taken into consideration; this is in conformity with guidance 11 of Annex 58, EB 51

The project financing pattern yields a gearing of 54:46, which is based on *actual loan sanctioned* to the project activity by the banks. In India, wind power projects get loan between 70 and 80% of the project cost and in exceptional cases a much higher debt equity ratio is also permitted by banks. MERC itself recommends a debt equity ratio of 70:30 for wind energy projects. As the debt equity ratio is below the range and is evidenced by the loan sanction letter, the validation team is convinced that the financing pattern assumed is appropriate and correct.

The profitability estimates of the project, which forms the basis for IRR calculation is based on installed capacity, PLF, power tariff, O&M cost, interest<sup>4</sup>, depreciation, taxation. The installed capacity is based on the capacity of wind mills, which is evidenced by the purchase orders. As per Annex 11, EB 48, the plant load factor (PLF) should be defined ex-ante according to one of the following three options:

- (a) The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval;
- (b) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company).

Project developer has submitted a copy of the application submitted to the bank, which confirms that the PLF was considered at 22% ( 2.89 GWh/year) while applying for project financing. In addition PP has also submitted third party PLF assessment report and accordingly WTG specific PLF estimated is 19.56 %. Moreover, MERC which is a state owned regulatory authority, after exhaustive study of wind pattern

---

<sup>4</sup> Loan amount and terms are based on actual loan sanction letter as that is the only document which is verifiable



and velocity, has recommended PLF of 20% for windmills located in Maharashtra <sup>5</sup>. Hence the PLF conforms to the requirements of Annex 11, EB 48. As PP has selected PLF of 22 % for financial analysis, validation team is convinced that the PLF assumed is appropriate considering the location and type of the wind mill. Further validation team also cross checked the actual PLF achieved by the WTG based on the actual generation data submitted by the PP and verified from joint meter readings and revealed that actual PLF achieved for the period April 2009 to March 2010 is 8.89 % and for the period April 2010 to February 2011 is 19.48 % which is lower than the PLF assumed by the PP. In addition, validation team also has cross checked the PLF considered by the projects situated in the state of Maharashtra and already applied for CDM from UNFCCC web site and reveal that PLF considered is below 22 %.

Transmission loss due to evacuation of the electrical energy generated from WTG to substation is considered correctly at 5 % based on the MERC order.

In the web hosted PDD, project developer had assumed power tariff at Rs.3.50/kWh and escalation of Rs 0.15 / kWh till 13<sup>th</sup> year , in line with the tariff prevailing then (in conformity with guidance 6 of Annex 58, EB 51). Power tariff is based on the tariff recommended by MERC in its order dt. 24/11/2003 and subsequent order dated 06/05/2008, which is also evidenced by the PPA signed subsequently by the project with the state utility, to whom the entire power would be exported. Tariff considered by the PP after 13<sup>th</sup> year is Rs 3.50 /kWh. This is in conformity with the MERC order dated 10/12/2008 wherein six approaches are suggested to arrive at the tariff after expiry of the PPA. Highest tariff calculated based on all six approaches is Rs 2.56 /kWh. As PP has selected tariff of Rs 3.50 /kWh validation team is convinced that it is on conservative side and appropriate.

O&M cost, the other major cost, is confirmed by the O&M agreement entered into by the project developer with the machinery suppliers. Validation team compared the O&M cost with that of other projects and found that Suzlon have been charging the same O&M cost to all the buyers. Insurance works out to 0.06% of the project cost and is based on the enquiry by the project developer with insurance companies, (conformity to guidance 6 of Annex 58, EB 51) which the validation team accepted based on its sectoral and local expertise; the project developer had also evidenced it by subsequent insurance premium receipts. Neither O&M cost nor insurance premium are critical parameters. The project would remain additional even if the O&M cost or insurance cost is totally removed.

The project developer has adopted straight line depreciation for computing book profit as per the companies law. Though the accelerated depreciation benefit is available to the project proponent as per the Income Tax Act, PP has not claimed the same. As the performance of the company for last three years does not allow to absorb all the depreciation, PP has considered 25 % of depreciation for four years to calculate income tax. Validation team has cross checked the same from the balance

<sup>5</sup> MERC tariff order recommends PLF 20% vide its Comprehensive Tariff Order on wind Energy. See <http://mercindia.org.in>

sheet of the company and also confirm the same from the loan application details submitted to the bank.

The block of assets has been computed for depreciation purpose as per the accepted accounting principles. Tax liability has been calculated as per the income tax rules and the rulings given. In computing the income tax liability, the project developer has taken into account the depreciation and the Tax holiday (u/s 80IA of the Income Tax Act, 1961), which the infrastructure projects (under which the project activity falls in as much as it generated electricity) are entitled to for 10 consecutive years out of the first 15 years. The tax rate assumed corresponds to the tax rate prevailing at the time of taking decision (conformity to guidance 6 of Annex 58, EB 51)

Since the input parameters have been sourced either from the quotations, purchase orders, loan sanction letters, acts and regulations, they were valid at the time of decision making (or modified to ensure conservativeness in the computation of financial indicator), are reliable, credible and appropriate for the project activity. Thus, the Validation conforms to the guidance given vide paragraph 87, 93 and 112 of VVM.

c) Cross checking parameters: The cost of windmills, power tariff, O&M cost, interest costs, depreciation and tax rate have been cross checked with quotations, purchase orders, Tariff order, loan application and sanction letter furnished by the project developer, Income Tax Act, PPA entered into by the project developer with the Utility. The documents supporting the financial calculations, in the opinion of Validation Team, are therefore authentic and appropriate. CARs and CLs were raised on non-conformities and they were set right. With the corrections having been incorporated, the input costs considered appear to be in order. All the input parameters considered in computation, the basis, correctness and appropriateness thereof are given in Table A-3 along with Validation Team's comments. Validation, therefore, conforms to guidance given vide paragraphs 87 and 95 of VVM.

d) Financial reports of project participant: Validation team requisitioned the balance sheet of the project developer. Validation team observed that the developer could not absorb whole accelerated depreciation and accordingly, the project developer has taken into consideration the depreciation rate for income tax purpose and tax shield enjoyed on account of depreciation as *notional cash inflow* at the present tax rate while computing IRR.

e) Assessment of correctness of computation: The assessment involved checking the data input taken from quotation/documents, adoption of correct accounting principle and arithmetical accuracy. Validation Team checked the quotation/documents and ensured that right input has been taken in the project cost and projections. In several places, the calculations were not conforming to accepted accounting principles and the laws and regulations in force necessitating CARs and CLs. Based on the CARs and CLs, corrections were incorporated. The accounting principles adopted with respect computation of interest, block of assets and tax computation were found to be in order in the corrected version presented. The arithmetical accuracy was also found to be correct.



The project IRR has been computed for a period of 20 years, which is the life time of the project and is in conformity with the Annex 58 of EB 51 and Annex 15 of EB 50<sup>6</sup>. As required by Annex 58 of EB 51 the expected realisation on the sale of assets at the end of the operating life has been taken as *salvage value* in the terminal year. In computing the IRR, the project developer has taken into account profit after tax, depreciation and interest on term loan, tax shield and salvage value (in the terminal year). The principle adopted conforms to the accepted accounting and taxation principles.

Based on the above, the project IRR works out to 10.94% in contrast to the benchmark of 13.50%. In the above background, the Validation Team is convinced that the project is additional and not a business-as-usual scenario.

**Sensitivity analysis:** The Guidance on Assessment of Investment Analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation ( $\pm 10\%$ ). Guidance 17 of Annex 45 of EB 41 states that as a general point of departure, variations in the sensitivity analysis should at least cover a range of  $+10\%$  and  $-10\%$ , unless this is not deemed appropriate in the context of the specific project circumstances. The project developer has identified PLF, project cost, O&M cost and power tariff as critical assumptions. Since project has already been implemented any variation in project cost is hypothetical. Nevertheless, the project cost has also been subjected to  $10\%$  variation. The sensitivity analysis reveals that even under more favorable conditions, the IRR would not cross the benchmark return as given in the following table:

Sensitive factors	-10%	Baseline	+10%
Plant Load Factor (PLF)	9.06%	10.94%	12.68%
Project cost	12.82%	10.94%	9.32%
O&M cost	11.19%	10.94%	10.69%
Power tariff after 13 years	10.73%	10.94%	11.14%

Validation Team carried out its own an independent assessment, which reveals that the project would become *non additional* only if

- PLF goes up by 14.9%
- Project cost goes down by 13.2%
- O&M cost goes down by more than 100%
- Tariff after 13 year goes up by more than 100%

PP has submitted that such a reduction in project cost or increase in PLF or tariff is highly unrealistic and unlikely to happen for the following reasons:

**PLF:** Generation taken into consideration is more than the MERC recommended PLF. MERC has recommended the PLF after conducting an exhaustive study over a long period on the wind pattern, velocity and WTG located in the state of Maharashtra.

<sup>6</sup> The life of the plant is based on the manufacturer's information on technical life time of the project

Further validation team also cross checked the actual PLF achieved by the WTG based on the actual generation data submitted by the PP and verified from joint meter readings and revealed that actual PLF achieved for the period April 2009 to March 2010 is 8.89 % and for the period April 2010 to December 2010 is 19.57 %.

Project cost: As stated above, the cost taken into computation is based on purchase orders<sup>7</sup>. Since purchase orders have already been placed and the payment has already been made, the cost, therefore, represents firm cost and as such the question of any reduction in the cost is hypothetical.

Tariff: As stated above, in the web hosted PDD, project developer had considered the tariff of Rs.3.50/kWh based on the MERC orders. PP has also entered into PPA with state electricity authority for sale of electricity for 13 years. Thereafter tariff considered is also as per MERC tariff order. Power tariff for the initial 13 years is fixed for the project as per the power purchase agreement. Hence there are no chances of any increment in the tariff for first 13 years. Moreover, the sensitivity analysis carried out for tariff rates after 13 years reveals that even after increase of 100 % in power tariff after 13 years IRR remains below the benchmark value.

O&M cost: It is observed that O&M cost is not a critical factor at all in as much as more than 100% reduction in O&M cost would render the project non-additional. Reduction in O&M cost more than 100%, is impossible.

Having regard to the assessment of conformity of additionality demonstration and benchmark selection to the latest version of the guidance issued by EB on the assessment of investment analysis, plausibility and appropriateness of parameters used and correctness of financial calculations, Validation Team concludes that the project scenario is not economically feasible without benefits from CER sales

## **Barrier analysis**

As per Attachment A to Appendix B (and Annex 34 of EB 35), the project developer is required to provide an explanation to show that the project activity would not have occurred anyway due to at least one barrier out of five barriers<sup>8</sup>. Since project developer had chosen investment barrier, additionality demonstration is in conformity with Attachment A to Appendix B read with Annex 34 of EB 35. Project developer did not considered barrier analysis. Hence, this is not applicable.

<sup>7</sup> Quotations have been submitted to TÜV during validation

<sup>8</sup> While Attachment A to Appendix B lists only four barriers, viz., investment barrier, technological barrier, barrier due to prevailing practices and other barriers, Annex 34 of EB 35, had split investment barrier into two resulting in five barriers, viz., investment barrier, access to finance barrier, technological barrier, barrier due to prevailing practices and other barriers.

## Common practice analysis

Since it is a small scale project activity, PP is not required to demonstrate common practice barrier and hence, the project developer has not demonstrated additionality through common practice barrier. As per Attachment A to Appendix B (and Annex 34 of EB 35), the project developer is required to provide an explanation to show that the project activity would not have occurred anyway due to at least one barrier out of five barriers<sup>9</sup>. Since project developer had chosen investment barrier, additionality demonstration is in conformity with Attachment A to Appendix B read with Annex 34 of EB 35.

## Summary

In the above background, Validation Team concludes that the project is not a business-as-usual scenario and is additional. The CDM benefits would enable the project to become financially attractive in as much as the project IRR with CDM benefits (13.27%) would reach near the benchmark (13.5%) and hence CDM benefits would enable the project developer to overcome the barrier.

### 5.2.6 Monitoring Methodology

Applied baseline and monitoring methodology is AMS I-D Version 16 which is approved by UNFCCC and appropriate for the project activity. Web hosted PDD applied version 14 of the AMS I D. As the validity of the methodology expired PP has used latest version of the methodology AMS I D Version 16. As project activity is a wind mill project, change in the version of the methodology does not have any impact.

### 5.2.7 Monitoring Plan

The project applies monitoring methodology

*AMS-I.D.: "Grid-connected renewable electricity generation" version 16.*

As per the methodology, monitoring shall consist of metering the net electricity supplied by the project activity to the grid. Measurement results shall be cross checked with records for sold electricity. Continuous monitoring, Hourly measurement and monthly recording are required.

As verified during the site visit, monitored parameter  $EG_{BL,y}$  i.e. net power supplied to the grid is measured by main meter and check meters installed at the substation

<sup>9</sup> While Attachment A to Appendix B lists only four barriers, viz., investment barrier, technological barrier, barrier due to prevailing practices and other barriers, Annex 34 of EB 35, had split investment barrier into two resulting in five barriers, viz., investment barrier, access to finance barrier, technological barrier, barrier due to prevailing practices and other barriers.

jointly by representatives of MSEDCL and PP that facilitates continuous monitoring, hourly measurement and monthly recording.

Secondary measurement of electricity generated from the wind mill is also done with the help of controller meter installed at WTG. This meter is connected to Central Monitoring station (CMS) and real time data can be assessed from this CMS. Wind mill controller meters are not calibrated.

Accuracy, calibration, periodical testing and maintenance procedures of monitoring equipment installed at substation are clearly mentioned in the section B.7.2 of PDD<sup>/PDD2/</sup>. Validation team has reviewed Power purchase agreement<sup>/PPA/</sup> in order to ensure the metering arrangement, power evacuation procedure and calibration approach for the measurement of electricity and is convinced that the monitoring plan described is adequate and will lead to correct measurement of the net electricity exported to the grid. Also the MSEDCL is a State governmental body and Joint Meter reading issued by MSEDCL is used for commercial purpose and considered as authentic and correct.

### **5.2.8 Project Management Planning**

The organisational structure of monitoring team responsible for monitoring plan is provided in section B.7.2 of the PDD<sup>/PDD2/</sup>. Further Operation and maintenance of the wind mills are allocated to manufacturer of the WTG (O&M service provider) and is responsible for preventive maintenance, handling emergency situations and improvement measures. The data will be kept for the whole crediting period and additional 2 years as given in the PDD<sup>/PDD2/</sup>

This was verified during the on site assessment conducted by the validation team. Validation team has also reviewed O&M contract, and Power purchase agreement<sup>/PPA/</sup> and ensured that roles and responsibilities for operation and maintenance and data recording are properly implemented. All monitored data are archived partly in physical and partly in electronic form.

### **5.2.9 Crediting Period**

As described in section C.2.2.1 of the PDD<sup>/PDD2/</sup>, crediting period chosen is 10 years fixed period starting from 01/09/2011 or from the date of registration whichever is later. Start date of the crediting period chosen is appropriate.

### **5.2.10 Environmental Impacts**

Ministry of Environment and Forest i.e. Government of India vide their notification S.O 1533, 14<sup>th</sup> November 2006, <http://envfor.nic.in/legis/eia/so1533.pdf> does not require any Environment Impact Assessment (EIA) of wind turbine projects. It results in no emission of GHGs and other gases i.e. SO<sub>2</sub> and NO<sub>x</sub> common in conventional power generation sources.

### **5.2.11 Comments by Local Stakeholders**

Local stakeholders were invited by giving notice in local news paper “DESHDOOT-Nashik Avrut” on 7<sup>th</sup> May 2009 and personal invitation. Meeting was conducted at the project site on 18<sup>th</sup> May 2009. No negative or adverse comments were received. Details of the stakeholder consultation meet was described in section E of the PDD. Validation team has reviewed the advertisement published in local news paper, Minutes of meeting of stakeholder consultation meeting and also confirmed during the site visit by conducting interview.

## 6 VALIDATION OPINION

M/s. Allgrow ventures has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the project: “1.5 MW Wind Power Project in Maharashtra by M/s. Allgrow ventures ” with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board

In the course of the pre-validation 32 Corrective Action Requests (CARs) and 07 Clarification Requests (CLs) were raised and successfully closed.

The review of the project design documentation and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The project is in line with all relevant host country criteria (India) and all relevant UNFCCC requirements for CDM. Project activity approval have been obtained from DNA of India vide the Letter of Approval (HCA) dated 2009-09-15
- The project additionality is sufficiently justified in the PDD.
- The monitoring plan is transparent and adequate.
- The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of 24,860 tCO<sub>2</sub>e are most likely to be achieved within the crediting period.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.

Vadodara, 2011-08-12



Mr. Pankaj Patel  
TÜV NORD JI/CDM CP  
Validation Team Leader

Essen, 2011-08-12



Stefan Winter  
TÜV NORD JI/CDM CP  
Final Approval

## 7 REFERENCES

**Table 7-1:** Documents provided by the project participant

Reference	Document
<b>/CC/</b>	Commissioning certificate from MSEDCL vide letter SE/NSKR/T-2/WTG-S/2275 dated 02/04/2009. ( Commissioning date is 31/03/2009)
<b>/HCA/</b>	Host Country Approval Letter from INDIA DNA vide letter no 4/12/2009-CCC dated 15/09/2009
<b>/INS/</b>	National Insurance Co Ltd premium receipt dated 31/03/2009
<b>/INT-DNA/</b>	Intimation letter to DNA dated 06/03/2009 regarding CDM consideration
<b>/INT-UNFCCC/</b>	Intimation to UNFCCC dated 06/03/2009 regarding CDM consideration.
<b>/LA/</b>	Loan application letter to Axis bank vide letter dated 14/12/2008 with IRR calculation sheet (In support of PLF submitted to bank – EB 48, Aneex-12)
<b>/LSL/</b>	Loan sanction letter from Axis Bank dated 24/01/2009
<b>/LSHC/</b>	Local stakeholder consultation Public notice in local news paper dated 07/05/2009 Local stakeholder meeting dated 18/05/2009 Minutes of meeting and attendance sheet dated 18/05/2009
<b>/MOC/</b>	Modalities of Communication
<b>/O&amp;M/</b>	Operation and maintenance contract with Suzlon Energy Limited dated 19/02/2009
<b>/PLF-AR/</b>	Third party PLF assessment report from M/s Vayu Yantra report no VYT/RE/GC/2010-11/14/AS
<b>/PDD1/</b>	Draft Project Design Document named “ <b>1.5 MW Wind Power Project in Maharashtra by M/s. Allgrow ventures</b> ” hosted from <10/09/09> to <09/10/09> version 01 dated 30/05/2009
<b>/I-PDD/</b>	Intermediate Project Design Document Version 02 dated 20/12/2010 and version 03 dated 05/03/2011
<b>/PDD2/</b>	Final Project Design Document – Version 04 dated 29/06/2011,



Reference	Document
<b>/PO/</b>	Purchase orders for supply of one no of S-82 Suzlon 1500 kW. Suzlon Energy Limited vide letter no 2008-09 dated 19/02/2009.
<b>/PPA/</b>	Power purchase Agreement between Allgrow Ventures and The Maharashtra State electricity Distribution Company Limited dated 23/06/2009
<b>/QUO/</b>	Quotation from Suzlon Energy Limited dated 12/12/2008
<b>/SC/</b>	Statutory clearances Infrastructure clearance vide letter no PGN-I/IC/Allgrow ventures/1.5 MW/08-09/1562 dated 26/03/2009 Clearance for commissioning from Maharastra Energy Development Agency letter ref no PGN-I/CC/Allgrow ventures/1.5 MW/08-09/1607 dated 30/03/2009
<b>/SE/</b>	Share of electricity certificate
<b>/SP/</b>	Signed Service proposal no BRD-001-0609 R01 dated 2009-06-29 between PP and DOE
<b>/TS/</b>	Technical specification of S-82 Suzlon wind mill generator as per PO
<b>/Worksheet/</b>	IRR calculation sheet
<b>/XLS1/</b>	ER calculation spreadsheet

**Table 7-2:** Background investigation and assessment documents

Reference	Document
<b>/AMS I D/</b>	AMS I-D: Grid connected renewable electricity generation
<b>/CPM/</b>	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
<b>/GCP/</b>	UNFCCC: Guidelines for completing CDM-PDD and CDM-NM
<b>/IPCC-GP/</b>	IPCC Good Practice Guidance & Uncertainty Management in National Greenhouse Gas Inventories, 2000
<b>/IPPC-RM/</b>	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual
<b>/KP/</b>	Kyoto Protocol (1997)

Reference	Document
<b>/MERC/</b>	Maharashtra State electricity Regulatory Commission order. <a href="http://www.mercindia.org.in/pdf/Detail_Wind_Energy_Order.pdf">www.mercindia.org.in/pdf/Detail_Wind_Energy_Order.pdf</a>
<b>/MA/</b>	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
<b>/TA/</b>	<ul style="list-style-type: none"> <li>• Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories (Attachment A to Appendix B)</li> <li>• Non-binding best practice examples to demonstrate additionality for SSC project activities (Annex 34, EB 35)</li> <li>• Guidelines on the assessment of investment analysis (Annex 58, EB 51).</li> </ul>
<b>/VVM/</b>	Validation and Verification Manual (Version 01.2, Annex 1, EB 55)

**Table 7-3: Websites used**

Reference	Link	Organization
/CEA/	<a href="http://www.cea.nic.in">www.cea.nic.in</a>	Central Electricity Authority of India. CO2 database for grid.
/dna/	<a href="http://cdm.ccchina.gov.cn/english/index.asp">http://cdm.ccchina.gov.cn/english/index.asp</a>	National Development and Reform Commission (DNA of China)
/dna-i/	<a href="http://www.cdmindia.nic.in">www.cdmindia.nic.in</a>	The Designated National Authority of India
/ipcc/	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	IPCC publications
/IT/	<a href="http://law.incometaxindia.gov.in/TaxmannDit/DisplayPage/dpage1.aspx?md=2&amp;typ=se&amp;yr=&amp;ch=">http://law.incometaxindia.gov.in/TaxmannDit/DisplayPage/dpage1.aspx?md=2&amp;typ=se&amp;yr=&amp;ch=</a>	Income Tax Act, 1961
/mnes/	<a href="http://www.mnes.nic.in">www.mnes.nic.in</a>	Ministry of New and Renewable Energy
/moef/	<a href="http://envfor.nic.in/">http://envfor.nic.in/</a>	Ministry of Environment and Forests.
/unfccc/	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	UNFCCC

**Table 7-4: List of interviewed persons**

Reference	Mol <sup>1</sup>		Name	Organisation / Function
/IM01/	T	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	G.D.Mehta	Allgrow ventures
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Dipankar Das	Suzlon Energy Limited
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Yashodip Charjan	Suzlon Energy Limited
/IM01/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Sanjay N Thorat	Suzlon Energy Limited
/IM02/	V	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Akanksha Gupta	Gensol consultants
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Rama Krishna Pawar	Stakeholder ( Village Sohambi)
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Sandeep Patil	Stakeholder ( Village Nashik)

Reference	Mol <sup>1</sup>		Name	Organisation / Function
/IM03/	V	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Bimraj Jundhari	Stakeholder ( Village Sinner)

<sup>1)</sup> Means of Interview: (Telephone, E-Mail, Visit)

# ANNEX

- A1:** Validation Protocol
- A2:** Assessment of Baseline Identification
- A3:** Assessment of Financial Parameters
- A4:** Assessment of Barrier analysis
- A5:** Outcome of the GSCP
- A6:** Appointment certificates of the team members

## ANNEX 1: VALIDATION PROTOCOL

**Table A-1: Requirements Checklist**

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<b>A. General Description of Project Activity</b>				
<b>A.1. Approval</b> <i>The written approval of the parties involved is a mandatory requirement</i>				
A.1.1. Has the project provided written approvals of all parties involved? (EB 55 Annex 1, § 44) <i>Indicate whether a letter of approval has been received, with a clear reference to the supporting documentation.</i> <i>Indicate whether this letter was provided to the DOE by the project participants or directly by the DNA</i>	<p>Description: Host country approval is provided by the Project Participants for the project activity.</p> <p>Justification of evidences: Host country approval dated 15/09/2009 issued by DNA of India</p> <p>Conclusion: Letter of approval/<sup>HCA/</sup> dated 15/09/2009 from the DNA i.e. Ministry of Environment and forest (MoEF) has been submitted to the DOE by the project participant. The project is a unilateral project and no other parties except India have been involved in the project.</p> <p>However CAR A1 was raised and closed successfully</p>	/PDD1/ /PDD2/ /HCA/	CAR A1	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>A.1.2. Are the approvals issued from organisations listed as DNAs on the UNFCCC CDM website?</p> <p>(EB 55 Annex 1, §§ 44, 47, 48, 49 (b), 49 (c), 53)</p> <p><i>Indicate the means of validation employed to assess the authenticity, i.e. in case of doubt whether LoA has been verified with the DNA. Further describe which entity submitted the LoA for validation.</i></p>	<p><i>Description:</i> Host country approval issued by DNA of India.</p> <p><i>Justification of evidences:</i> <a href="http://cdm.unfccc.int/DNA/index.html">http://cdm.unfccc.int/DNA/index.html</a></p> <p><i>Conclusion:</i> It is verified from the details available on UNFCCC web site that the organisation i.e. Ministry of Environment and forest (MoEF) which has issued the approval is a listed DNA.</p> <p>However CAR A1 was raised and closed successfully</p>	<p>/PDD1/ /PDD2/ /HCA/ /UNFCCC/</p>	CAR A1	OK
<p>A.1.3. Do the written approvals confirm that the corresponding party is a Party to the Kyoto Protocol?</p> <p>(EB 55 Annex 1, § 45(a))</p>	<p><i>Description:</i> Host country approval issued by DNA of India</p> <p><i>Justification of evidences:</i> Host country approval dated 15/09/2009 issued by DNA of India</p> <p><i>Conclusion:</i> Yes, It has been mentioned in the letter of approval<sup>HCA/</sup> that the host party India is a party to Kyoto protocol.</p> <p>However CAR A1 was raised and closed successfully</p>	<p>/HCA/ /UNFCCC/</p>	CAR A1	OK
<p>A.1.4. Do the written approvals confirm that the participation is voluntary?</p> <p>(EB 55 Annex 1, § 45(b))</p>	<p><i>Description:</i> Host country approval issued by DNA of India</p> <p><i>Justification of evidences:</i> Host country approval dated 15/09/2009 issued by DNA of India</p> <p><i>Conclusion:</i> Yes, It has been verified from the written letter of approval<sup>HCA/</sup> that the participation is voluntary.</p> <p>However CAR A1 was raised and closed successfully</p>	<p>/PDD/ /HCA/</p>	CAR A1	OK
<p>A.1.5. Does the written approval from the host</p>	<p><i>Description:</i> Host country approval issued by DNA of India</p>	<p>/PDD1/</p>	CAR	OK





Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
country confirm that the project contributes to the sustainable development in the country? (EB 55 Annex 1, § 45(c))	Justification of evidences: Host country approval dated 15/09/2009 issued by DNA of India  <i>Conclusion:</i> Yes, It has been verified from the written letter of approval <sup>/HCA/</sup> that the project contributes to the sustainable development in the country.  However CAR A1 was raised and closed successfully	/PDD2/  /HCA/	A1	
A.1.6. Do the written approvals refer to the precise project title in the PDD submitted for registration or an additional specification of the project activity, e.g. PDD version number? (EB 55 Annex 1, §§ 45(d), 50)	<i>Description:</i> Host country approval issued by DNA of India Justification of evidences: Host country approval dated 15/09/2009 issued by DNA of India  <i>Conclusion:</i> Yes, It has been verified from the written letter of approval <sup>/HCA/</sup> that the project title is exactly same as per the details provided in section A. 3 of the PDD <sup>/PDD2/</sup> .  However CAR A1 was raised and closed successfully	/PDD1/ /PDD2/ /HCA/	CAR A1	OK
A.1.7. Are the written approvals unconditional with regard to A.1.3 to A.1.6? (EB 55 Annex 1, § 46)	<i>Description:</i> Host country approval issued by DNA of India Justification of evidences: Host country approval dated 15/09/2009 issued by DNA of India  <i>Conclusion:</i> Yes, It has been verified from the written letter of approval <sup>/HCA/</sup> that the issued approval is unconditional.  However CAR A1 was raised and closed successfully	/PDD1/ /PDD2/ /HCA/	CAR A1	OK
A.1.8. Is the information regarding the project participants listed in section A3 and in Annex 1 of the PDD internally consistent to each other?	<i>Description:</i> Details of project participants provided in the PDD are consistent Justification of evidences: Written approval obtained from	/PDD1/ /PDD2/	CAR A1	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, § 51)	DNA of India and PDD submitted by PP.  Conclusion: Validation team has reviewed PDD and confirmed that the details of the project participants are consistent in Annex-1 and section A.3 of the PDD. Same is also similar as per the host country approval.  However CAR A1 was raised and closed successfully	/HCA/		
A.1.9. Are all project participants listed in the PDD approved at least by one Party involved?  (EB 55 Annex 1, § 51) <i>Indicate whether the participation of the project participant(s) has been approved by a Party to the Kyoto Protocol.</i>  <i>Describe the means of validation employed to draw this conclusion.</i>	<i>Description:</i> Providing written approval for the PP specified in the PDD.  <i>Justification of evidences:</i> Written approval obtained from DNA of India and PDD submitted by PP.  <i>Conclusion:</i> Validation team has reviewed PDD and UNFCCC website and confirmed that there is only one project participant i.e. M/s Allgrow Ventures and is approved by the DNA of India which is party to Kyoto protocol.  However CAR A1 was raised and closed successfully	/PDD1/ /PDD2/ /HCA/	CAR A1	OK
A.1.10. Are any other project participants approved but not listed in the PDD?  (EB 55 Annex 1, § 52)	<i>Description:</i> Details of project participants provided in the PDD  <i>Justification of evidences:</i> Written approval obtained from DNA of India and PDD submitted by PP  <i>Conclusion:</i> As verified from the host country approval that there is only one project participant for the project activity.  However CAR A1 was raised and closed successfully	/PDD1/ /PDD2/ /HCA/	CAR A1	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>A.1.11. Does the DoE have a direct contractual relationship with the PP? (EB 55 Annex 1, § 51; EB 50 Annex 48, §§ 7–9)</p> <p><i>Check whether the PPs listed in the published PDD are still listed in the PDD going to be submitted to request for registration.</i></p>	<p>Description: Contractual agreement with TÜV-NORD and M/S Allgrow Ventures (project participants)</p> <p>Justification of evidences: Signed Service proposal no BRD-001-0609 R01 dated 29/06/2009 between PP and DOE</p> <p>Conclusion: As confirmed from the service proposal dated 29/06/2009 that the DOE has direct contractual agreement with PP.</p>	/HCA/ /SP/	OK	OK
<p><b>A.2. Contribution to Sustainable Development</b></p> <p><i>The project's contribution to sustainable development is assessed.</i></p>				
<p>A.2.1. Has the host country confirmed that the project assists it in achieving sustainable development? (EB 55 Annex 1, §§ 125–127)</p> <p><i>Contains a statement confirming whether the letter of approval by the DNA of the host party confirmed the contribution of the project to the sustainable development of the Host Party.</i></p>	<p>Description: Host country approval issued by DNA of India</p> <p>Justification of evidences: Host country approval dated 15/09/2009 issued by DNA of India</p> <p>Conclusion: Yes, as per the Letter of host Government approval<sup>/HCA/</sup> dated 15/09/2009, the project contributes to Sustainable Development in India</p> <p>However CAR A1 was raised and closed successfully</p>	/PDD1/ /PDD2/ /HCA/	CAR A1	OK
<p>A.2.2. Will the project create other environmental or social benefits than GHG emission reductions? (EB 55 Annex 1, §§ 125–127)</p>	<p>Description: Contribution by renewable source of energy generation other than GHG emission reduction</p> <p>Justification of evidences: The validation team had conducted interview during the on-site visit.</p>	/PDD1/ /PDD2/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>Describe the other positive aspects not related to GHG emission reduction on the environment.</i>	<i>Conclusion:</i> The project will lessen the power shortage in the region, generate locale employments and will bring benefits to the local community around the project site.			
<b>A.3. PDD editorial aspects</b>  <i>The PDD used as a basis for validation shall be prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website.</i>				
A.3.1. Has the latest version of the PDD form been applied?  (EB 55 Annex 1, § 55)	<i>Description:</i> In cover page of PDD written the utilized version is version 03 dated 22/12/2006.  <i>Justification of evidences:</i> During visited UNFCCC official website found that the latest version is version 03 as per EB 28 Annex 34.  <i>Conclusion:</i> It evidenced that latest version of PDD is utilized and applied accordingly.	/PDD1/ /PDD2/ /UNFCCC/ C/	OK	OK
A.3.2. Has the PDD been duly filled in accordance with the latest guidance(s)?  (EB 55 Annex 1, §§ 56–57)	<i>Description:</i> Yes, the PDD has been duly filled in accordance with the latest guidance for completing CDM –SSC-PDD version 05  <i>Justification of evidences:</i> During visited UNFCCC official website found that the latest version is version 05 as per EB 34 Annex 09  <i>Conclusion:</i> By means of reviewing UNFCCC website it is convinced that the PDD is filled as per latest guidance for	/PDD1/ /PDD2/ /UNFCCC/ C/	CAR A2	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	completing CDM-SSC-PDD. However CAR A2 was raised and closed successfully.			
<b>A.4. Technology to be employed</b>  <i>Validation of project technology focuses on the project engineering, choice of technology and competence/ maintenance needs. The DOE should ensure that environmentally safe and sound technology and know-how is used.</i>				
<p>A.4.1. Does the PDD contain a clear, accurate and complete project description?</p> <p>(EB 55 Annex 1, §§ 58–59)</p> <p><i>The PDD shall contain a clear description of the project activity which provides the reader with a clear understanding of the precise nature of the project activity and the technical aspects of its implementation.</i></p> <p><i>Pl. consider esp. chapters A.2, A.4.2 and A.4.3 (in case of LSC PDD) for assessment.</i></p> <p><i>Describe the process undertaken to validate the accuracy and completeness of the project description.</i></p>	<p><i>Description:</i> The project description is given in various parts of the PDD (esp. In sections A.2 and A.4.2 and A.4.3).</p> <p><i>Justification of evidences:</i> The validation team has verified the relevant sections of the PDD and compared the observation during site visit against the applied methodology.</p> <p><i>Conclusion:</i> By means of site visit and document review it is confirmed that the description of the project activity along with its technical aspects has been filled adequately in the PDD.</p> <p>However CAR A3 , A4 and B4 were raised and closed successfully</p>	<p>/PDD1/ /PDD2/ /IM01/</p>	<p><del>CAR</del> A3  <del>CAR</del> A4  <del>CAR</del> B4</p>	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>Contain the DOE's opinion on the accuracy and completeness of the project description.</i>				
A.4.2. Is this description in accordance with the real situation or (in case of greenfield projects) is it most likely that the project will be implemented acc to the project description?	<p><i>Description:</i> Description of the project activity is based on the real situation.</p> <p><i>Justification of evidences:</i> Document review of PDD and interview with project participants.</p> <p><i>Conclusion:</i> The project has already been commissioned and it has been verified during site visit that the project is implemented according to the project description in the PDD.</p>	<p>/PDD1/ /PDD2/ /IM01/</p>	OK	OK
<p>A.4.3. In case the project involves alteration of the existing installation or process, is a clear description available regarding the differences between the project and the pre-project situation?</p> <p>(EB 55 Annex 1, §§ 63–64) <i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> Project does not involve alteration of the existing installation</p> <p><i>Justification of evidences:</i> Document review of PDD and interview with project participants.</p> <p><i>Conclusion:</i> As verified, project activity is a installation of a new wind mill and is a Greenfield project and does not involve any alteration of the existing installations.</p>	<p>/PDD1/ /PDD2/ /IM01/</p>	OK	OK
<p>A.4.4. Does the project design engineering reflect current good practices?</p> <p><i>Consider the equipment specifications, literature (e.g. EU BREF papers) and professional experiences. Describe the process undertaken to assess the engineering.</i></p>	<p><i>Description:</i> The project description is given in various parts of the PDD (esp. In sections A.2 and A.4.2 and A.4.3).</p> <p><i>Justification of evidences:</i> By means of document check, interview and site visit the engineering of the wind mill was checked.</p> <p><i>Conclusion:</i> By means of knowledge of the validation team and document check it can be assessed that the project</p>	<p>/PDD1/ /PDD2/ /IM01/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	design reflects current good practice.			
<p>A.4.5. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?</p> <p><i>Describe the process undertaken to assess the state of the art technology.</i></p>	<p><i>Description:</i> The project description is given in various parts of the PDD (esp. In sections A.2 and A.4.2 and A.4.3).</p> <p><i>Justification of evidences:</i> During the site visit the technology and engineering of the project activity was verified. Wind mill technology is supplied by Suzlon Energy Limited and is proven technology.</p> <p><i>Conclusion:</i> By means of knowledge of the validation team and document review it can be confirmed that the project has used state of the art technology.</p>	<p>/PDD1/ /PDD2/ /TS/ /IM01/</p>	OK	OK
<p>A.4.6. Does the project make provisions for meeting training and maintenance needs?</p> <p><i>Describe the process undertaken to assess the maintenance and training needs.</i></p>	<p><i>Description:</i> Operation and maintenance of the wind mill was awarded to the wind mill manufacturer</p> <p><i>Justification of evidences:</i> Operation and maintenance contract between PP and WTG manufacturer.</p> <p><i>Conclusion:</i> Validation team has reviewed the O&amp;M contract<sup>/O&amp;M/</sup> signed by the PP with WTG manufacturer. Training and maintenance need for the project activity is taken care by the manufacturer of wind mills by providing skilled man power at the site.</p>	<p>/PDD1/ /PDD2/ /O&amp;M/</p>	OK	OK





Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<b>A.5. Small scale project activity</b> <i>It is assessed whether the project qualifies as small-scale CDM project activity</i>				
A.5.1. Does the project qualify as a small scale CDM project activity as defined in decision 4 / CMP.1 annex II?  (EB 55 Annex 1, §§ 135–136 (a))	<i>Description:</i> Project activity is a installation of 1.5 MW wind mill small scale project  <i>Justification of evidences:</i> The justification of chosen project type and category of the project activity is provided under the section B.2. of PDD in an adequate manner.  <i>Conclusion:</i> By document review it is confirmed that the project falls under small scale project as per the criteria defined by UNFCCC.	/PDD1/ /PDD2/ (A.4.2 B.2) /IM01/ /UNFCCC/ C/	OK	OK
A.5.2. Does the project apply one of the approved small scale categories and any methodology and tool referred therein?  (EB 55 Annex 1, § 136 (b)) <i>Check, if applicable the expiry dates of the applied methodology. Further, take into consideration the general guidance to the methodologies<sup>10</sup>, which provide guidance on equipment capacity, equipment performance, sampling and other monitoring related issues.</i>	<i>Description:</i> Project activity correctly applies approved methodology AMS I D and tools referred therein  <i>Justification of evidences:</i> During visited UNFCCC official website found that the PP applied version 16 of approved methodology AMS I D.  <i>Conclusion:</i> By document review it is confirmed that the PP has correctly applied approved methodology AMS ID and tools referred therein. All the applicability conditions are met with.	/PDD/ /UNFCCC/ C/	CAR B4	OK

<sup>10</sup> <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	However CAR B1 was raised and closed successfully			
<p>A.5.3. Is the small scale project activity not a debundled component of a larger project activity?</p> <p>(EB 55 Annex 1, § 136 (c))</p> <p><i>Describe the steps taken to validate this issue. PI refer to the Compendium of guidance on debundling (EB 36, Annex 27 54, Annex 13).</i></p>	<p><i>Description:</i> The small scale project activity is not a debundled component of a larger project activity</p> <p><i>Justification of evidences:</i> Description and justification as provided in the PDD.</p> <p><i>Conclusion:</i> By document review it is confirmed that that there is no other WTG owned by the project participant apart from the project under consideration in the same wind farm.</p>	<p>/PDD1/ /PDD2/</p>	OK	OK
<p>A.5.4. Is an assessment of the environmental impacts of the proposed SSC CDM project activity required by the host Party?</p> <p>(EB 55 Annex 1, § 136 (d))</p>	<p><i>Description:</i> Assessment of environmental impacts are not required as per local environmental regulations prevailing in the host country.</p> <p><i>Justification of evidences:</i> Environmental laws and acts prevailing in India. schedule I of Environmental Impact Notification 2004 S.O. (60) E, dated 27/01/1994, Environment Impact Assessment Notification Ministry of Environment and Forests dated, 14<sup>th</sup> September, 2006.</p> <p><i>Conclusion:</i> Based on the local and sectoral knowledge of the DOE and by conducting document review of the environmental laws it is confirmed that Environmental Impact Assessment is not required for the project activity being installation of wind mill of 1.5 MW capacity.</p>	<p>/PDD1/ /PDD2/ /MOEF/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<b>B. Project Baseline, Additionality and Monitoring Plan</b>				
<b>B.1. Application of the Methodology</b>				
<p>B.1.1. Does the project apply an approved and applicable CDM methodology and a valid version thereof?</p> <p>(EB 55 Annex 1, § 65) <i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> Project activity applies approved methodology AMS I D V 16</p> <p><i>Justification of evidences:</i> During visited UNFCCC official website found that the latest version is version 16 of approved methodology AMS I D.</p> <p><i>Conclusion:</i> By document review it is confirmed that the PP has correctly applied approved methodology AMS ID and is valid and identical with the version available on UNFCCC website..</p>	<p>/PDD1/ /PDD2/ /UNFCCC/ C/</p>	OK	OK
<p>B.1.2. Is the applied CDM methodology identical with the version available on the UNFCCC website?</p> <p>(EB 55 Annex 1, §§ 65, 70) <i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> Project activity applies approved methodology AMS I D V 16</p> <p><i>Justification of evidences:</i> During visited UNFCCC official website found that the latest version is version 16 of approved methodology AMS I D.</p> <p><i>Conclusion:</i> By document review it is confirmed that the PP has correctly applied approved methodology AMS ID and is</p>	<p>/PDD1/ /PDD2/  /UNFCCC/ C/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	valid and identical with the version available on UNFCCC website..			
<p>B.1.3. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled?</p> <p>(EB 55 Annex 1, §§ 66(a)–(b), 68, 71, 76)</p> <p><i>Describe for <u>each</u> applicability criterion listed in the selected approved methodology the steps taken to assess the information contained in the PDD.</i></p>	<p>As described in section B.2 of the PDD, the applicability criteria of the approved methodology AMS I D V 16 are as below,</p> <p><b>Applicability criteria 1 :</b></p> <p>The project activity comprises of installation of wind mills using wind as a renewable source of energy for generation of power and supplies electricity to the NEWNE grid of India and hence meets the applicability criteria. As verified from the CO<sub>2</sub> database published by Central Electricity Authority<sup>/CEA/</sup> that NEWNE grid is connected to fossil fuel based power plant which will be replaced by the addition of the power from project activity.</p> <p><b>Applicability criteria 2:</b></p> <p>Project activity is a green field project of total installed capacity of 1.5 MW (Less than 15 MW) and is not an addition / retrofit / replacement of any units to existing generation facility. Same is validated by document review and conducting interview during site visit<sup>/IM01/</sup>. Project activity meets the applicability criteria.</p>	<p>/PDD1/ /PDD2/  /UNFCCC/ C/</p>	OK	OK



<b>Checklist Item</b> (incl. guidance for the validation team)	<b>Validation Team Comments</b> (justification and substantiation of information, data and evidences)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
	<p><b>Applicability criteria 3:</b> As verified from the document review and site visit, project activity is not a hydro power plant and hence this applicability criteria is not applicable.</p> <p><b>Applicability criteria 4:</b> As verified from the document review and site visit, project activity is not a biomass power plant and hence this applicability criteria is not applicable.</p> <p><b>Applicability criteria 5:</b> In the project activity, total installed capacity of the wind mill is 1.5 MW and is of renewable component only. Validation team has reviewed technical specification<sup>/TS/</sup>, purchase orders<sup>/PO/</sup>, conducted interview during site visit, Project design Document<sup>/PDD/</sup> and convinced that the installed capacity of the renewable component is only 1.5 MW which is less than the eligibility limit of 15 MW for small scale project activity. Hence fulfilling this applicability criterion.</p> <p><b>Applicability criteria 6:</b> As verified from the document review and site visit, project activity is not a Combined heat and power (Co-generation) systems and hence this applicability criteria is not applicable.</p> <p><b>Applicability criteria 7:</b> Project activity is a green field project of total installed</p>			



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p>capacity of 1.5 MW (Less than 15 MW) and is not an addition of any units to existing generation facility fulfilling this applicability criteria. Same is validated by document review and conducting interview during site visit.</p> <p><b>Applicability criteria 8:</b></p> <p>Project activity is a green field project of total installed capacity of 1.5 MW (Less than 15 MW) and is not a retrofit activity fulfilling this applicability criteria. Same is validated by document review and conducting interview during site visit.</p>			
<p>B.1.4. In case one or more applicability criteria have not been met, has the validation team requested clarification to, revision of or deviation from the methodology in accordance with the latest guidelines?</p> <p>(EB 55 Annex 1, §§ 72–75)</p>	<p><i>Description:</i> Please refer section B.1.3, All the applicability criteria are met.</p> <p><i>Justification of evidences:</i> Not applicable</p> <p><i>Conclusion:</i> Not applicable</p>	<p>/PDD1/ /PDD2/</p>	OK	OK
<p>B.1.5. Is the project in accordance with every other stipulation or requirement mentioned in all sections of the methodology and in guidances for approved methodologies provided by the CDM EB?</p>	<p><i>Description:</i> In the approved methodology, no specific stipulation or requirements are indicated.</p> <p><i>Justification of evidences:</i> The stipulation/ requirements of the methodology were checked.</p>	<p>/PDD1/ /PDD2/ /AMS I D/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, § 69, 71) <i>Describe the steps taken to check whether the proposed project activity meets all the other possible stipulations and/or limitations mentioned in all sections of the approved methodology selected.</i>	<i>Conclusion:</i> It can be confirmed that the project is in accordance to every other stipulation or requirement of the methodology.			
<b>B.2. Project Boundaries</b> <i>Project Boundaries are the limits and borders defining the GHG emission reduction project</i>				
B.2.1. Are the project's spatial boundaries (geographical) clearly defined? (EB 55 Annex 1, §§ 67(a), 78–80) <i>Provide information on how the validation of the geographical boundary has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.</i>	<i>Description:</i> The project boundary includes the physical and geographical site of the WTGs. This has been clearly shown in the section B.3 of the PDD  <i>Justification of evidences:</i> Validation team has performed site visit and CO <sub>2</sub> database of Central Electricity Authority <sup>/CEA/</sup> Project design Document <sup>/PDD/</sup>  <i>Conclusion:</i> It can be confirmed that the physical delineation of the proposed CDM project activity are clearly identified and is in conformity with the para 9 of the approved methodology. However CAR B2 was raised and closed successfully.	/PDD1/ /PDD2/ (B.3.) /IM01/	CAR B2	OK
B.2.2. Are all sources and GHGs included in the project boundary as required in the applied	<i>Description:</i> As required by approved methodology CO <sub>2</sub> which is emitted from the electricity generation in fossil fuel	/PDD1/	OK	OK





Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>methodology?</p> <p>(EB 55 Annex 1, §§ 67(a), 78–80)</p> <p><i>Provide information on how the validation of the GHGs and sources has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.</i></p>	<p>fired power plants is the only GHG included in the project boundary to calculate the baseline emission.</p> <p><i>Justification of evidences:</i> Same is verified by validation team by reviewing approved methodology available on UNFCCC web site<sup>/UNFCCC</sup> and details provided in the PDD</p> <p><i>Conclusion:</i> Based on above it can be confirmed that all sources and GHG are included as per approved methodology.</p>	/PDD2/		
<p>B.2.3. In case the methodology allows to choose whether a source and/or gas is to be included, is the choice sufficiently explained and justified?</p> <p>(EB 55 Annex 1, §§ 67(a), 78–80)</p> <p><i>Confirm if the justification provided by the PPs is reasonable, based on assessment of supporting documented evidence provided by the PPs or by onsite observations.</i></p>	<p><i>Description:</i> The methodology does not allow to choose a source and/or gas is to be included, hence this question is not applicable for this project activity.</p> <p><i>Justification of evidences:</i> Not applicable</p> <p><i>Conclusion:</i> Not applicable</p>	<p>/PDD1/ /PDD2/ /AMS I D/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<b>B.3. Baseline Identification</b> <i>The choice of the baseline scenario will be validated with focus on whether the baseline is a likely scenario, and whether the methodology to define the baseline scenario has been followed in a complete and transparent manner.</i>				
<b>B.3.1. What possible baseline scenarios have been considered?</b> (EB 55 Annex 1, §§ 67(b), 83) <i>Fill in all alternatives in table A-2.</i>	<i>Description:</i> Please refer table A-2 <i>Justification of evidences:</i> Approved methodology AMS I D v16.  <i>Conclusion:</i> As per the approved methodology AMS I D v 16, PP has correctly identified the baseline as the product of electrical energy baseline produced by renewable generating unit multiplied by an emission factor.  However CAR B3 was raised and closed successfully.	/PDD1/ /PDD2/  /AMS I D/	  CAR B3	  OK
<b>B.3.2. Is the list of alternatives complete?</b> (EB 55 Annex 1, §§ 67(b), 83) <i>Describe how it was validated that all alternatives are plausible and no plausible alternative is excluded from the consideration</i>	<input checked="" type="checkbox"/> All plausible alternative scenarios listed in the approved methodology have been considered. In the course of document review and site visit, it has been validated that no other alternatives which supply comparable outputs and / or services are to be taken into consideration. Thus no plausible scenario has been omitted. <input type="checkbox"/> The following alternative scenarios/options have been omitted. Corresponding CAR(s)/CL(s) has /have been	/PDD/ /AMS I D/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	issued			
<p>B.3.3. What has been identified as the baseline scenario?</p> <p>(EB 55 Annex 1, §§ 81–82, 86) <i>Describe the chosen BL scenario, taking into consideration the technology that would be employed and / or the activities that would take place in the absence of the proposed CDM project activity.</i></p>	Refer section B.3.1	<p>/PDD1/ /PDD2/  /AMS I D/</p>	OK	OK
<p>B.3.4. Has the baseline scenario been determined according to the methodology?</p> <p>(EB 55 Annex 1, §§ 82, 87(e)) <i>Describe how it is validated that the identification of the most plausible baseline scenario is carried out in accordance with the applied methodology and applied methodological tools. Please refer to table A-2.</i></p>	<p>For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2.</p> <p><input checked="" type="checkbox"/> The determination has been carried out as per the procedure contained in the applied methodology.</p> <p><input type="checkbox"/> The following CARs / CLs have been identified with respect to the selection of the baseline scenario: .</p>	/AMS I D/	OK	OK
<p>B.3.5. Has any plausible alternative scenario been excluded?</p> <p>(EB 55 Annex 1, § 83) <i>Describe how it is validated that no plausible alternative scenario has been excluded.</i></p>	<p>For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2.</p> <p><input checked="" type="checkbox"/> No plausible baseline scenario has been excluded.</p> <p><input type="checkbox"/> The following plausible baseline scenarios have been excluded though no adequate justification has been provided for elimination. The following CARs / CLs have been issued:</p>	<p>/PDD1/ /PDD2/</p>	OK	OK
B.3.6. Is the identified baseline scenario reasonable	<input checked="" type="checkbox"/> The baseline scenario is reasonable and has been	/PDD1/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>and has the baseline scenario been determined using conservative assumptions where possible, including relevant references and sources?</p> <p>(EB 55 Annex 1, §§ 84–86(a)–(c)) <i>Describe whether the choice of the identified baseline scenario is reasonable by validating the <u>key assumptions, calculations and rationales</u> used in the PDD. Describe whether these are listed, relevant and <u>conservatively interpreted</u> in the PDD.</i></p>	<p>determined using conservative assumptions where possible. Please refer to comments in table A-2 and sections B.3.2 to B.3.5 above.</p> <p><input type="checkbox"/> The following CARs / CLs have been issued because assumptions used in the baseline determination have been assessed to be not conservative</p>	/PDD2/		
<p>B.3.7. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?</p> <p>(EB 55 Annex 1, §§ 85, 87(d)) <i>Describe whether the PP has shown that all relevant policies and circumstances have been identified and correctly considered in the PDD in accordance with the guidance by the Board. Pl. consider the guidance EB 22 annex 3 (regarding E+ and E- policies).</i></p>	<p><i>Description:</i> Consideration of national and sectoral policies ,macro-economic trends and political aspirations for baseline scenario</p> <p><i>Justification of evidences:</i> Validation team has reviewed Central electricity Authority<sup>/CEA/</sup>, Ministry of Power<sup>/MOP/</sup></p> <p><i>Conclusion:</i> Validation team has reviewed Central electricity Authority<sup>/CEA/</sup>, Ministry of Power<sup>/MOP/</sup> and confirm that baseline scenario has taken into account prevailing national law of India.</p>	/PDD1/ /PDD2/	OK	OK
<p>B.3.8. Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?</p> <p>(EB 55 Annex 1, § 87(a)–(c)) <i>Describe whether the documents and sources referred to in the PDD are correctly quoted and clearly referenced.</i></p>	<p><i>Description:</i> Compatibility of baseline scenario with available data and referenced sources in the PDD.</p> <p><i>Justification of evidences:</i> Document review of PDD</p>	/PDD1/ /PDD2/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<i>Conclusion:</i> Validation team is convinced that the sources and data are properly referenced in the PDD for the determination of the baseline scenario			
B.3.9. Does the PDD contain a <i>verifiable</i> description of the identified baseline scenario, including 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. (EB 55 Annex 1, § 86)	<i>Description:</i> Under the section B.4 of the PDD there is a verifiable description of the identified baseline scenario including the description of the technology that would be employed and/or that would take place in absence of the proposed CDM project activity.  <i>Justification of evidences:</i> Validation team has reviewed Technical specifications <sup>/TS/</sup> , PDD, and conducted site visit  <i>Conclusion:</i> As per the approved methodology AMS I D v 16, PP has correctly identified the baseline as the product of electrical energy baseline produced by renewable generating unit multiplied by an emission factor. Technical description is also sufficiently included in the PDD.	/PDD1/ /PDD2/	OK	OK
<b>B.4. Additionality Determination</b>  <i>The assessment of additionality will be validated with focus on whether the project itself is not a likely baseline scenario.</i>				
<b>B.4.1. Methodology</b>				
B.4.1.1. Does the PDD describe how the project is additional and does the additionality	<i>Description:</i> Yes, the PDD describes additionality of the project and additionality	/PDD1/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>justification follow the requirements of the applied methodology and/or methodological tools?</p> <p>(EB 55 Annex 1, §§ 67(d), 94–95) <i>Describe how it is validated that additionality justification is carried out in accordance with the applied methodology and/or applied methodological tools. Further focus your assessment on the reliability and credibility of data, rationales and assumptions, justifications and documentations provided by the PP.</i></p>	<p>justifications have followed the requirements of the Appendix B of the simplified modalities and procedures for small-scale CDM project activities (Attachment A to Appendix B).</p> <p><i>Justification of evidences:</i></p> <ul style="list-style-type: none"> <li>Attachment A to Appendix B</li> <li>Annex 34, EB 35</li> <li>Annex 51, EB 58</li> <li>Revised PDD<sup>/PDD2/</sup>.</li> </ul> <p><i>Conclusion:</i></p> <p>The PDD demonstrates the additionality of project using benchmark analysis. The additionality justification conforms to Attachment A to Appendix B, read with Annex 34, EB 35 and Annex 51, EB 58</p>	/PDD2/ /unfccc/		
<b>B.4.2. Consideration of CDM before project start</b>				
<p>B.4.2.1. Is the project starting date reported in accordance with the CDM glossary of terms?</p> <p>(EB 55 Annex 1, § 104(a)) <i>Assess why the chosen starting date can be considered as the earliest date at which either the implementation or construction or real action of a project has begun or will begin.</i></p> <p><i>Check that no other activities related to the project that happened before the identified start date can be considered as start date. In this context please also take into consideration infrastructural expenses if they are relevant (in terms of costs and importance for the project</i></p>	<p><i>Description:</i></p> <p>The contract between M/s Suzlon Energy Limited and M/s Allgrow Ventures for the supply of WTG is considered as the start date of the project activity.</p> <p><i>Justification of evidences:</i></p> <p>Supply Agreement dated 19/02/2009 between M/s Suzlon Energy Limited and M/s Allgrow Ventures</p> <p><i>Conclusion:</i></p> <p>The project start date is in conformity with Glossary of CDM terms. However CAR C1 was raised and closed successfully.</p>	/PDD1/ /PDD2/ /PO/	CAR C1	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
implementation) in the specific context of the project activity.				
<p>B.4.2.2. In case the project start date is on or after 2<sup>nd</sup> August 2008 has the PP informed the DNA and UNFCCC about the intension to seek CDM status?</p> <p>(EB 55 Annex 1, §§ 99–101) Describe whether such a notification has been provided by the project participants within six months of the project activity start date; if NOT it shall be determined that the CDM was not seriously considered.</p>	<p><i>Description:</i> Project start date identified is 19/02/2009 which is after 02/08/2008 and accordingly PP has intimated DNA of India and UNFCCC regarding intimation to seek CDM status.</p> <p><i>Justification of evidences:</i> Intimation letter to DNA of India <sup>/INT-DNA/</sup> <a href="http://cdm.unfccc.int/Projects/PriorCDM/notifications/index.html">http://cdm.unfccc.int/Projects/PriorCDM/notifications/index.html</a></p> <p><i>Conclusion:</i> Validation team has cross checked the intimation letter submitted by the PP to DNA of India and UNFCCC and confirmed that the PP has intimated DNA and UNFCCC regarding intention to seek CDM status.</p>	<p>/PDD1/ /PDD2/ /INT-DNA/ /INT-UNFCCC/</p>	OK	OK
<p>B.4.2.3. In case the project start date is before commencing of validation and 2<sup>nd</sup> August 2008, was the incentive from the CDM seriously considered and are details given in the PDD?</p> <p>(EB 55 Annex 1, §§ 100, 102) Describe whether the evidence to support such consideration is adequately and transparently described in the PDD.</p>	<p><i>Description:</i> Not applicable as project start date is after 02/08/2008.</p> <p><i>Justification of evidences:</i></p> <p><i>Conclusion:</i></p>	<p>/PDD1/ /PDD2/ /PO/</p>	OK	OK
<p>B.4.2.4. How and when was the decision to proceed with the project taken?</p>	<p><i>Description:</i> Decision to proceed with the project was taken based on the loan application letter prior to the start date</p> <p><i>Justification of evidences:</i></p>	<p>/PDD1/ /PDD2/</p>	CAR B14	OK





Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>Describe the steps taken to validate the starting date.</i>	<p>Loan Application letter<sup>/LA/</sup></p> <p><i>Conclusion:</i></p> <p>Validation team has reviewed the loan application letter submitted to the Axis bank and confirmed that decision to proceed with the project was taken prior to the start date.</p> <p>However CAR B14 was raised and closed successfully.</p>	<p>/PO/</p> <p>/LA/</p>		
<p>B.4.2.5. Is the project start date consistent with the available evidences? (EB 55 Annex 1, § 102)</p> <p><i>Describe the evidence assessed regarding the prior consideration of the CDM (if necessary). Describe whether the evidence to support such consideration is adequately and transparently described in the PDD.</i></p>	<p><i>Description:</i> Project start date i.e. 19/02/2009 is consistent with the purchase orders placed on M/s Suzlon Energy Limited by the PP.</p> <p><i>Justification of evidences:</i></p> <p>Purchase orders<sup>/PO/</sup>, Revised PDD<sup>/PDD2/</sup> Loan application letter<sup>/LA/</sup></p> <p><i>Conclusion:</i> Validation team has reviewed the documents submitted by the PP and convinced that the PP is well aware of the CDM benefits. While applying for the loan, PP has considered CDM benefits. Also Start date of the project is appropriately defined as a date of purchase orders on which date PP has made financial commitment towards project activity.</p>	<p>/PDD1/</p> <p>/PDD2/</p> <p>/PO/</p>	GAR C1	OK
<p>B.4.2.6. Was the decision to proceed with the project taken by a person which has the authority to do so? (EB 55 Annex 1, § 102(a))</p> <p><i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> Decision to proceed with the project was taken by the Mrs G D Mehta. Proprietor of the company.</p> <p><i>Justification of evidences:</i> Loan Application letter<sup>/LA/</sup></p> <p><i>Conclusion:</i> Validation team has cross checked the loan application letter and confirmed that the decision to proceed with the project was taken by the sole proprietor of the company.</p>	<p>/PDD1/</p> <p>/PDD2/</p> <p>/LA/</p>	OK	OK
<p>B.4.2.7. How was the CDM involved in the decision making process?</p>	<p><i>Description:</i> While applying for the loan with Axis bank, PP has considered CDM for evaluating financial viability of the project.</p>	/PDD1/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, § 102) <i>Describe why CDM was a decisive factor in the decision making process.</i>	<i>Justification of evidences:</i> Loan Application letter <sup>/LA/</sup> <i>Conclusion:</i> Validation team has cross checked the loan application letter and confirmed that the CDM was involved in the decision making process.	/PDD2/ /LA/		
B.4.2.8. Do the evidences provided doubtlessly prove that continuous and real actions were taken in order to secure the CDM status?  (EB 55 Annex 1, § 102; EB 49 Annex 22 § 7)	<i>Description:</i> Evidences provided by the PP reveals that continuous and real actions were taken to secure CDM status. <i>Justification of evidences:</i> Please refer Table 7.1 of this report <i>Conclusion:</i> By document review, validation team convinced that the real and continual actions were taken by the PP. purchase order/PO/ was placed on 19/02/2009, Local stakeholder meeting/LSHC/ was held on 18/05/2009, PDD was submitted for global stakeholder consultation on UNFCCC website on 10/09/20009	/PDD1/ /PDD2/ /PO/ /LSHC/	OK	OK
B.4.2.9. Is the gap of documented evidences to secure the CDM status less than 3 years and are the evidences relevant for substantiating the action taken, credible, reliable and complete?  (EB 49 Annex 22 § 8)	<i>Description:</i> Evidences provided by the PP reveals that gap between two consecutive actions taken to secure CDM status is less than 3 years. <i>Justification of evidences:</i> Please refer Table 7.1 of this report <i>Conclusion:</i> By document review, validation team convinced that the real and continual actions were taken by the PP and gap between two consecutive actions is less than 3 years. Following actions were taken by the PP for project activity. purchase order/PO/ was placed on 19/02/2009, Local stakeholder meeting/LSHC/ was held on 18/05/2009, PDD was submitted for global stakeholder consultation on UNFCCC website on 10/09/20009	/PDD1/ /PDD2/ /PO/ /LSHC/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>B.4.2.10. Did implementation of the project ceased after its commencement and did implementation recommence after consideration of the CDM?</p> <p>(EB 51 Annex 58, § 7)</p> <p><i>Describe the reasons for ceasing the project and explain why the incentive from CDM was necessary to recommence the implementation.</i></p>	<p><i>Description:</i></p> <p>No, the implementation of the project did not cease after its commencement</p> <p><i>Justification of evidences:</i></p> <ul style="list-style-type: none"> <li>Revised PDD</li> <li>Supply Agreement dated 19/02/2009 between M/s Suzlon Energy Limited. and M/s Allgrow Ventures</li> <li>Certificate of commissioning<sup>CC/</sup></li> </ul> <p><i>Conclusion:</i></p> <p>Chronology of events and documentary evidence submitted relating to purchase order and commencement of the project prove that the project implementation did not cease after its commencement.</p>	<p>/PDD1/ /PDD2/ /PO/ /CC/</p>	OK	OK
<p>B.4.2.11. Can the CDM involvement in the decision assessed as serious?</p> <p><i>Describe whether or not the project would have been undertaken without the incentive of the CDM.</i></p> <p>(EB 55 Annex 1, § 104(b)–(c))</p>	<p><i>Description:</i></p> <p>Yes, the CDM involvement in the decision making was serious The CDM incentive was considered imperative by the proprietor of the company to make the project economically viable and financially sustainable.</p> <p><i>Justification of evidences:</i></p> <ul style="list-style-type: none"> <li>Loan application letter<sup>/LA/</sup></li> <li>Revised Worksheet<sup>/worksheet/</sup></li> </ul> <p><i>Conclusion:</i></p> <p>Validation team checked the loan application letter and observed that the proprietor after discussion had concluded that the wind mill project will be economically viable and financially sustainable only</p>	<p>/PDD1/ /PDD2/ /LA/ /worksheets/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	after taking into due consideration the CDM benefits. Validation team is convinced that it could be reasonably concluded that no investment would have taken place without CDM benefits			
<b>B.4.3. Identification of alternatives Step 1</b> (in case of SSC projects pl. skip steps 1 and 2 if appropriate)				
B.4.3.1. Does the list of alternatives contain the status-quo situation, the project not undertaken as a CDM project as well as all other viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?  (EB 55 Annex 1, §§ 105–107) <i>Describe the steps taken to validate this issue on the basis of your local and sectoral knowledge.</i>	Not Applicable as this is a small scale project activity.	/AMS-I.D/	OK	OK
B.4.3.2. Have all realistic alternatives been identified to the project?  (EB 55 Annex 1, §§ 105–107) <i>Describe whether the list of alternatives is credible and complete. Describe how it is validated that the alternatives are realistic.</i>	Not Applicable as this is a small scale project activity.	/AMS-I.D/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
B.4.3.3. Do all identified alternatives comply with enforced legislations?  (EB 55 Annex 1, §§ 106(c)) <i>Describe the steps taken to validate this issue. Refer to the legislations.</i>	Not Applicable as this is a small scale project activity.	/AMS-I.D/	OK	OK
<b>B.4.4. Investment analysis Step 2</b>  <i>In case the investment analysis as per step 2 is chosen to justify the additionality Annex 2 "Assessment of Financial Parameters" has to be used to provide additional details of the calculation parameters..</i>				
B.4.4.1. Does the PDD provide evidence that the project would not be the most economically or financially attractive alternative or economically / financially feasible without the revenues from the sale of CERs?  (EB 55 Annex 1, § 108)	<i>Description:</i> Yes, the PDD provides evidence to the effect that the project activity is not financially attractive without CER  <i>Justification of evidences:</i> Excel worksheet providing the detailed computation of project IRR, Annex 58, EB 51 and Annex 3, EB 51  <i>Conclusion:</i> Evidence to the effect that the project activity is not financially attractive has been provided.	/PDD1/ /PDD2/ /Work sheet/	OK	OK
B.4.4.2. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)?  (EB 55 Annex 1, § 108; EB 39 Annex 10) <i>Describe why the selected analysis method is appropriate under consideration of potential revenues and costs,</i>	<i>Description:</i> Benchmark analysis has been chosen to demonstrate additionality of the project  <i>Justification of evidences:</i> Excel worksheet, providing detailed computation of project IRR, Annex 58, EB 51 and Annex 3, EB 51  <i>Conclusion:</i> Since the project activity would be earning revenue from the sale of power to the grid and that the baseline is outside the direct control of project developer, benchmark analysis is	/PDD1/ /PDD2/ /Work sheet/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>potential project alternatives and potential available benchmark values.</i>	appropriate.			
<p>B.4.4.3. Is a clear, viewable and unprotected Excel spreadsheet available for the investment calculation?</p> <p>(EB 55 Annex 1, § 110; EB 51, Annex 58, §8) <i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> Yes, a clear and viewable and unprotected excel spread sheet containing investment analysis calculations has been submitted</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> A clear, viewable and unprotected excel spread sheet on investment calculations has been submitted, using the latest guidance given in the latest Guidance on the Assessment of Investment Analysis.</p>	<p>/PDD1/ /PDD2/ /Work sheet/</p>	OK	OK
<p>B.4.4.4. Does the period chosen for the investment analysis reflect the technical lifetime of the project activity or in case a shorter period is chosen, is the fair value of the project activity's assets at the end of the investment analysis period (as a cash inflow) included?</p> <p>(EB 55 Annex 1, § 109; EB 51 Annex 58 § 3 – 4) <i>Describe how the technical lifetime / period chosen for calculating financial parameter(s) is reviewed and which documents were utilised in the course of review. Describe furthermore the approach used to check the inclusion of a potential fair value.</i></p>	<p><i>Description:</i> Yes, the period chosen for investment analysis reflects the technical lifetime of the project activity</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Manufacturer's technical specification of windmill, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> Investment analysis has been carried out for 20 years which is the technical lifetime of the project activity. However CAR B16 was raised and closed successfully.</p>	<p>/PDD1/ /PDD2/ /Work sheet/</p>	CAR B46	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>B.4.4.5. Is the (remaining) technical lifetime of existing or project equipment defined in accordance with the guidance of the <i>Tool to determine the remaining lifetime of equipment?</i></p> <p>(EB 50 Annex 15)</p>	<p><i>Description:</i> Not applicable as it is a green-field project</p> <p><i>Justification of evidences:</i> Not applicable</p> <p><i>Conclusion:</i> Not applicable</p>	<p>/PDD1/  /PDD2/ /Work sheet/</p>	OK	OK
<p>B.4.4.6. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice?</p> <p>(EB 55 Annex 1, § 109; EB 51 Annex 58, § 4)</p> <p><i>State the accounting regulations applied for calculating the fair value and describe why these are applicable under the project specific circumstances. Describe potential mismatches between regulations and the approach applied for calculating the fair value.</i></p>	<p><i>Description:</i> Salvage value has been provided in the terminal year</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> Salvage value has been provided at 5% of the cost of other assets plus the land cost. Considering the fact that the assets are fully depreciated, salvage value represents the potential profit on the sale of assets. In this context, please see findings CAR B.18 and CAR B26</p>	<p>/PDD1/  /PDD2/ /Work sheet/</p>	<p>CAR B26  CAR B48</p>	OK
<p>B.4.4.7. Is the book value as well as the expectation of the potential profit or loss included in the fair value calculation?</p> <p>(EB 55 Annex 1, § 109; EB 51 Annex 58, § 4)</p>	<p><i>Description:</i> Book value as well as the expected potential profit has been included in the fair value calculation</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> Considering the fact that the project assets have been fully written off, the salvage value represents mainly the potential profit expected to be realised. Therefore, the fair value calculation conforms to guidance (4) of Annex 58, EB 51.</p> <p>In this context, please see findings CAR B.18 and CAR B26</p>	<p>/PDD1/  /PDD2/ /Work sheet/</p>	<p>CAR B26  CAR B48</p>	OK





Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
B.4.4.8. Are depreciation and other non-cash related items added back to net profits for the purpose to calculate the financial indicator?  (EB 55 Annex 1, § 109; EB 51 Annex 58, § 5)	<i>Description:</i> Depreciation and non tax items have been added back to net profits for the purpose of calculation of financial indicator  <i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51  <i>Conclusion:</i> Depreciation and other non cash flow items have been added back to net profits for financial indicator calculation.  However CAR B23 was raised and closed successfully	/PDD1/ /PDD2/ /Work sheet/	CAR B23	OK
B.4.4.9. Is taxation excluded in the investment analysis or is the benchmark intended for post tax comparisons?  (EB 55 Annex 1, § 109; EB 51 Annex 58, § 5)	<i>Description:</i> Benchmark is intended for post tax comparison  <i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51  <i>Conclusion:</i> Taxation has been netted out in the investment analysis as the benchmark is intended for post tax comparison, In this context, please see findings CAR B.26	/PDD1/ /PDD2/ /Work sheet/	CAR-B 26	OK
B.4.4.10. Were the input values used in the investment analysis valid and applicable at the time of the investment decision?  (EB 55 Annex 1, § 109,112; EB 51 Annex 58, § 6) <i>In case the basis for input values is a Feasibility Study Report (FSR) describe how it has been ensured that the period in time between the finalisation of the FSR and the investment decision is sufficiently short so that it is unlikely that input values would have materially changed. Further confirm the consistency of values in</i>	<i>Description:</i> Input values used in the investment analysis are based on quotations, purchase orders and other document and the values were either valid at the time of investment decision or conservative  <i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, <ul style="list-style-type: none"> <li>• Quotations / Purchase Orders</li> <li>• Axis bank Loan sanction letter dated 24/01/2009</li> <li>• Income Tax Act</li> <li>• MERC tariff orders</li> <li>• Annex 58, EB 51 and</li> </ul>	/PDD1/ /PDD2/ /Work sheet/	CAR B.12., B.13., B.17 B.19., B.20., B.21., B.22.,B .24., B.25.a	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
FSR and PDD.	<ul style="list-style-type: none"> <li>Annex 3, EB 51</li> </ul> <p><i>Conclusion:</i> The input values are based on purchase orders and other documents specified above. For detail assessment on input parameter please refer Table A-3 of this report. In this context see findings to CAR B.12., B.13., B17, B.19., B.20., B.21., B.22.,B.24., B.25.and B.26., CL B.2, B.3. and B.4.</p>		nd B.26., CL B.2, B.3. and B.4.	
B.4.4.11. Is the plant load factor (PLF) chosen in a conservative manner, taking into account that the PLF may be different in the framework of demonstrating additionality and calculating the ex-ante ER? (EB 48, Annex 11)	<p><i>Description:</i> PLF is based on the loan application submitted to bank based on which the loan has been sanctioned.</p> <p><i>Justification of evidences:</i> Following documents have been verified</p> <ul style="list-style-type: none"> <li>Loan application to Bank</li> <li>MERC order</li> <li>Third party PLF assessment report</li> <li>Actual Generation data</li> <li>Registered CDM projects in Maharashtra state</li> </ul> <p><i>Conclusion:</i> PLF assumed in the additionality demonstration conforms to the stipulations made in Annex 11, EB 48. In this context, please see findings to CAR B.13</p>	/PDD1/  /PDD2/  /Work sheet/	CAR B13	OK
B.4.4.12. In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR? (EB 55 Annex 1, § 109; EB 51 Annex 58, § 9)	<p><i>Description:</i> Loan repayments and interests have been excluded from the calculation of project IRR</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> Project IRR calculation conforms to the guidance given vide Annex 58, EB 51.</p>	/PDD1/  /PDD2/  /Work sheet/	OK	OK
B.4.4.13. In cases where a post-tax benchmark is applied please ensure that actual interest	<p><i>Description:</i> Project IRR calculation conforms to the guidance given vide Annex 58, EB 51.</p>	/PDD1/	CAR B25	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>payable is taken into account in the calculation of income tax.</p> <p>(EB 51 Annex 58, § 11)</p> <p><i>As per the guidance it is recommended to select a pre tax benchmark in order to Describe the steps taken in assessing this requirement.</i></p>	<p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> Tax calculations take into account actual interest payable and therefore conform to Annex 58, EB 51. In this context, please see findings to CAR B.25</p>	/PDD2/ /Work sheet/		
<p>B.4.4.14. In case of equity IRR: Is the part of the investment costs, which is financed by equity considered as net cash outflow and is the part financed by debt excluded in net cash outflow?</p> <p>(EB 55 Annex 1, § 109; EB 51 Annex 58, § 10)</p>	<p><i>Description:</i> Not applicable as additionality is demonstrated through project IRR</p> <p><i>Justification of evidences:</i> Not applicable</p> <p><i>Conclusion:</i> Not applicable</p>	/PDD1/ /PDD2/ /Work sheet/	OK	OK
<p>B.4.4.15. Is the type of benchmark chosen appropriate for the type of IRR calculated (e.g. local commercial lending rates or weighted average costs of capital for project IRR; required/expected returns on equity for equity IRR)?</p> <p>(EB 55 Annex 1, § 111; EB 51 Annex 58, §§12 – 15)</p> <p><i>In case risk premiums are applied precisely describe its suitability to reflect the risks associated with the project activity, considering the project type and market situation.</i></p>	<p><i>Description:</i> Yes, the benchmark value is suitable for the project IRR chosen to demonstrate additionality</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> The PLR has been chosen as the benchmark which is in conformity with the guidance given vide paragraph 12 and 13 of Annex 58, EB 51. In this context, please see findings to CAR B14</p>	/PDD1/ /PDD2/ /Work sheet/	CAR B14	OK
<p>B.4.4.16. Is the benchmark value suitable for the project activity and is it reasonable to</p>	<p><i>Description:</i> Yes, the benchmark value is suitable for the project activity and investment would not have been made at a rate lower than the benchmark</p>	/PDD1/ /PDD2/	CL-B4	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>assume that no investment would be made at a rate of a lower return than the benchmark?</p> <p>(EB 55 Annex 1, § 109; EB 51 Annex 58, §§13 – 15)</p> <p><i>Describe whether it is reasonable to assume that a lower rate of return would consequently result in the baseline scenario.</i></p>	<p><i>Justification of evidences:</i> Bank loan application letter</p> <p><i>Conclusion:</i> Bank Loan application letter reveal that the investment would not have been made at a return lower than the benchmark. In this context see findings to CL B1</p>	/Work sheet/		
<p>B.4.4.17. Is it ensured that the project cannot be developed by other developers than the PP?</p> <p>(EB 55 Annex 1 § 109; EB 51 Annex 58, §§ 13 – 14)</p> <p><i>Describe why the benchmark does not include the subjective profitability expectations or risk profile of the project developer. If applicable assess the past financial behavior of the entity during at least the last 3 years in relation to similar projects.</i></p>	<p><i>Description:</i> Not applicable</p> <p><i>Justification of evidences:</i></p> <p><i>Conclusion</i></p>	<p>/PDD1/</p> <p>/PDD2/</p> <p>/Work sheet/</p>	OK	OK
<p>B.4.4.18. Was the benchmark consistently used in the past for similar projects with similar risks?</p> <p>(EB 55 Annex 1, § 112(c))</p>	<p><i>Description:</i> Not applicable as internal benchmark has not been used</p> <p><i>Justification of evidences:</i> Not applicable</p> <p><i>Conclusion:</i> Since internal benchmark has not been used, the question does not arise</p>	<p>/PDD1/</p> <p>/PDD2/</p> <p>/Work sheet/</p>	OK	OK
<p>B.4.4.19. Does the PDD and related spreadsheets contain a sensitivity analysis and does the same contain variation of parameters which may vary throughout the project lifetime,</p>	<p><i>Description:</i> The PDD and related spreadsheet contain sensitivity analysis and they contain variation in parameters which may vary throughout the project life time</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3,</p>	<p>/PDD1/</p> <p>/PDD2/</p> <p>/Work sheet/</p>	CAR-B 27	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, §§ 109–110(e); EB 51 Annex 58, § 17–18) <i>Describe relevance of parameters used in the sensitivity analysis as well as their likeliness to vary during the project's lifetime. Parameters which are fixed on the basis of contracts, PPAs etc. may not be subject to variation and not adequate.</i>	EB 51 <i>Conclusion:</i> Generation, project cost, tariff and O&M cost have been subjected to 10% variation on either side. The sensitivity analysis is in conformity with guidance 17 and 18 of Annex 58, EB 51. In this context, please see findings to CAR B.27.,			
B.4.4.20. Were only variables that constitute more than 20% of either total project costs or total project revenues subjected to reasonable variation?  (EB 55 Annex 1, § 109; EB 51 Annex 58, § 17)	<i>Description:</i> Only variables that constitute more than 20% of total project revenue were subjected to reasonable variation  <i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51  <i>Conclusion:</i> Only project cost, tariff and generation were subjected to sensitivity analysis. In this context, please see findings to CAR B.27	/PDD1/ /PDD2/ /Work sheet/	CAR B 27	OK
B.4.4.21. Have parameters, constituting less than 20% of total project costs or revenues, been identified with potential material impact on the financial parameter?  (EB 55 Annex 1, § 109; EB 51 Annex 58, § 17) <i>Describe whether those parameters are considered in the sensitivity analysis?</i>	<i>Description:</i> Variable that constitute less than 20% of total project revenue were not subjected to variation  <i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51  <i>Conclusion:</i> O&M cost is the only variable which accounts for less than 20% of the project cost/revenue. Since it is not critical in as much as a 100% reduction in the O&M cost is necessary for the project to become non-additional, subjecting O&M cost to any reasonable variation (70% variation cannot be construed as reasonable) was not considered necessary. However sensitivity analysis is carried out for O&M cost.	/PDD1/ /PDD2/ /Work sheet/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>B.4.4.22. Is the range of variation reasonable in the specific context of the project activity, taking into consideration historic trends in the business sector?</p> <p>(EB 55 Annex 1, § 109; EB 51 Annex 58, § 18)</p> <p><i>Describe whether the range of variation is appropriate with focus on historic developments, e.g. price of oil / labour etc., energy potential in the region in question.</i></p>	<p><i>Description:</i> Range of variation considered is reasonable for the project activity considering the historic trends</p> <p><i>Justification of evidences:</i> Excel worksheet providing detailed calculations of investment analysis, Annex 58, EB 51 and Annex 3, EB 51</p> <p><i>Conclusion:</i> Considering the fact that the PLF assumed is more than the MERC recommended PLF, and used while applying the loan (based on which the loan has been sanctioned), tariff is based on the MERC orders/PPA, O&amp;M cost is based on the O&amp;M contract and that the project cost represents incurred cost, the variation considered is appropriate for this business sector</p>	<p>/PDD1/ /PDD2/ /Work sheet/</p>	OK	OK
<b>B.4.5. Barrier analysis Step 3 or SSC additionality assessment</b>				
<p>B.4.5.1. Are there any barriers given which have a clear and direct impact on the financial returns of the project?</p> <p>(EB 55 Annex 1, §§ 115, 134, 137)</p> <p><i>In case of LSC projects those issues cannot be considered as barriers and shall be assessed in the investment analysis. In case of SSC projects the same fundamentals as for LSC projects shall apply, i.e. the assessment of the investment barrier according to EB 51 Annex 58.</i></p>	<p><i>Description:</i> Not Applicable</p> <p><i>Justification of evidence:</i></p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p><i>Conclusion:</i> Not applicable</p>	<p>/PDD1/ /PDD2/</p>	OK	OK
B.4.5.2. Are the barriers described risk related (e.g	<i>Description:</i>	/PDD1/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>technology failure, other performance related risks)?</p> <p>(EB 55 Annex 1, §§ 116, 134, 137)</p> <p><i>Are there other barriers or barriers due to prevailing practice existent which would have led to higher emissions?</i></p>	<p>Not Applicable</p> <p><i>Justification of evidence:</i></p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p><i>Conclusion:</i></p> <p>Not applicable</p>	/PDD2/		
<p>B.4.5.3. Has the unavailability of means of finance for the project been described and adequately substantiated? Do evidences doubtlessly prove that the financing of the project was assured only due to the benefit of the CDM?</p> <p>(EB 55 Annex 1, §§ 116, 137, EB 50 Annex 13, § 9)</p>	<p><i>Description:</i></p> <p>Not Applicable</p> <p><i>Justification of evidence:</i></p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p><i>Conclusion:</i></p> <p>Not applicable</p>	<p>/PDD1/</p> <p>/PDD2/</p>	OK	OK
<p>B.4.5.4. How is it justified and evidenced that the barriers given in the PDD are real?</p> <p>(EB 55 Annex 1, § 116(a))</p>	<p><i>Description:</i></p> <p>Not Applicable</p> <p><i>Justification of evidence:</i></p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p><i>Conclusion:</i></p> <p>Not applicable</p>	<p>/PDD1/</p> <p>/PDD2/</p>	OK	OK
<p>B.4.5.5. How is it justified that one or a set of real barriers prevent(s) the implementation of the project activity and do not prevent the implementation of at least one of the</p>	<p><i>Description:</i></p> <p>Not Applicable</p> <p><i>Justification of evidence:</i></p>	<p>/PDD1/</p> <p>/PDD2/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
alternatives? (EB 55 Annex 1, § 116(b))	<ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p>Conclusion: Not applicable</p>			
B.4.5.6. Does the review of relevant background information on the nature of the company(ies) and entitiy(ies) involved in the financing and implementation of the project sufficiently justify that the barriers related to the lack of access to capital, technologies and skilled labour are real? (EB 50 Annex 13, § 4)	<p>Description: Not Applicable</p> <p>Justification of evidence:</p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p>Conclusion: Not applicable</p>	/PDD1/ /PDD2/	OK	OK
B.4.5.7. Has it been demonstrated in an objective way how the CDM alleviates each of the identified barriers to a level that the project is not prevented anymore from occurring by any of the barriers? (EB 50 Annex 13, § 5)	<p>Description: Not Applicable</p> <p>Justification of evidence:</p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <p>Conclusion: Not applicable</p>	/PDD1/ /PDD2/	OK	OK
B.4.5.8. Would provision of additional financial means lead to the mitigation of the barrier(s) demonstrated? (EB 50 Annex 13, § 7) <i>Describe why provision of additional financial means would not</i>	<p>Description: Not Applicable</p> <p>Justification of evidence:</p> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul>	/PDD1/ /PDD2/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>lead to mitigation of the barrier(s) demonstrated and hence analysing the project's additionality within the framework of an investment analysis is inappropriate. .</i>	<i>Conclusion:</i> Not applicable			
<b>B.4.6. Common practice analysis Step 4</b> (in case of SSC projects skip this step)				
<b>B.4.6.1.</b> Is the defined region for the common practice analysis appropriate for the technology/industry type?  (EB 55 Annex 1, § 120(a)) <i>Describe why the project activity is not common practice in a transparent and unambiguous manner. If a region other than the entire host country is chosen, describe why this region is more appropriate.</i>	<i>Description:</i> Not Applicable  <i>Justification of evidence:</i> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <i>Conclusion:</i> Not applicable	/PDD1/  /PDD2/	OK	OK
<b>B.4.6.2.</b> To what extent similar projects have been undertaken in the relevant region?  (EB 55 Annex 1, § 120(b))	<i>Description:</i> Not Applicable  <i>Justification of evidence:</i> <ul style="list-style-type: none"> <li>Revised PDD</li> </ul> <i>Conclusion:</i> Not applicable	/PDD1/  /PDD2/	OK	OK
<b>B.4.6.3.</b> In case similar projects are identified, are	<i>Description:</i>	/PDD1/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
there any key differences between the proposed project and existing or ongoing projects and what kind of differences are observed?  (EB 55 Annex 1, § 120(c))	Not Applicable <i>Justification of evidence:</i> ▪ Revised PDD <i>Conclusion:</i> Not applicable	/PDD2/		
<b>B.5. Ex-Ante Calculation of GHG Emission Reductions</b>  <i>It is assessed whether the ex-ante calculations of project emissions, baseline emissions, leakage emissions are stated according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified. Furthermore calculation of emission reductions shall be assessed.</i>				
B.5.1. Are the equations applied correctly according to the applied approved methodology?  (EB 55 Annex 1, §§ 67(c), 89–90, 92) <i>Describe clearly the steps taken to assess whether the methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. Further take into consideration that all estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD.</i>	<input checked="" type="checkbox"/> The equations applied for calculation are correctly applied according to the approved methodology. <input type="checkbox"/> The following mistakes have been identified in this context:  The applied equations for calculations of the baseline emission are in line with the requirements of the approved methodology AMS –I D V 16. Project emission and leakages are considered zero as appropriate for project activity as it is using renewable source of energy. Also values and data used by PP in the PDD are relevant and properly referenced.  <i>The validation was conducted by document review</i>	/PDD1/  /PDD2/	CAR B6	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<i>However CAR B6 was raised and closed successfully.</i>			
<p>B.5.2. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological choices (i.e. baseline identification)?</p> <p>(EB 55 Annex 1, §§ 90–91)</p> <p><i>Assess the correct selection and application of methodological choices. Describe whether proper justification has been provided (based on the choice of the baseline scenario, context of the project activity and other evidence provided) and whether the correct equations have been used reflecting the relevant methodological choices.</i></p>	<p>Methodology does not allow for different methodological choices.</p>	<p>/PDD1/ /PDD2/</p>	OK	OK
<p>B.5.3. Have conservative assumptions been used when calculating the project emissions?</p> <p>(EB 55 Annex 1, §§ 90–91)</p> <p><i>Describe clearly the steps taken to assess whether all the assumptions and data used by the PP are listed in the PDD including references and sources and are conservatively interpreted in the PDD.</i></p>	<p><i>Description:</i></p> <p>There is no project emission from the project activity</p> <p><i>Justification of evidence: Approved methodology AMS I D Version 16</i></p> <p><i>Conclusion:</i></p> <p>As per the approved methodology AMS I D Version 16, as the project uses renewable energy project emission is correctly taken as zero and same is validated by document review.</p>	<p>/PDD1/ /PDD2/</p>	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>B.5.4. Does the implementation of the project activity lead to GHG emissions within the project boundary which are expected to contribute more than 1% of the overall expected average annual emission reductions, which are not addressed by the methodology?</p> <p>(EB 55 Annex 1, § 77)</p>	<p><i>Description:</i></p> <p>Project activity does not expect to contribute more than 1 % of overall expected average annual emission which are not addressed by the methodology.</p> <p><i>Justification of evidence: Approved methodology AMS I D Version 16</i></p> <p><i>Conclusion:</i></p> <p>Project activity is installation of wind mills and does not lead to GHG emission within the project boundary more than 1 % of expected average annual emission reduction. Same is verified by document review</p>	<p>/PDD1/ /PDD2/</p>	OK	OK
<p>B.5.4.1. Has a plant load factor (PLF) been defined ex-ante and considered for determination of baseline emissions?</p> <p>(EB 48 Annex 11, §§ 1, 3–4)</p> <p><i>Describe why the PLF is conservative in the framework of calculating emissions reductions and whether the PLF is the same in the framework of demonstrating additionality by applying the investment analysis. Note, in order to be conservative in both cases the PLF may be different.</i></p>	<p><i>Description:</i> Plant load factor is defined ex-ante for determination of baseline emissions</p> <p><i>Justification of evidences:</i> PLF considered is based on the loan application letter<sup>/LA/</sup>. As per EB-48, Annex-11, PP has also carried out third party PLF assessment report for the project activity<sup>/PLF-AR/</sup>. MERC order</p> <p><i>Conclusion:</i> Plant load factor is defined ex-ante based on the PLF value submitted to the bank<sup>/LA/</sup>. Validation team is convinced that the PLF is correctly and conservatively assessed by the PP. Ex-ante Baseline emissions are calculated based on the same PLF.</p> <p>Detail assessment is given in section 5 of this report.</p> <p>However CAR B 13 was raised and closed successfully.</p>	<p>/PDD1/ /PDD2/ /LA/ /PLF-AR/</p>	CAR B13	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>B.5.5. Are all data sources and assumptions appropriate and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions?</p> <p>(EB 55 Annex 1, § 91) <i>Describe clearly the steps taken to assess whether the values used for the fixed parameters are considered reasonable, correct and applicable in the context of the project activity. Check esp. chapter 6.2 of the PDD.</i></p>	<p><i>Description:</i> Combined Margin emission factor is chosen for calculating baseline emission is fixed ex-ante for entire crediting period and is calculated based on <math>EF_{OM}</math> and <math>EF_{BM}</math>. Values are taken from CO2 database published by Central Electricity Authority<sup>/CEA/</sup></p> <p><i>Justification of evidences:</i> Same is validated by document review of tool to calculate emission factor for an electricity system version 2.0<sup>/UNFCCC/</sup>, CO<sub>2</sub> database of Central electricity Authority<sup>/CEA/</sup></p> <p><i>Conclusion:</i> As verified, emission factor considered for the project activity for the calculation of emission reduction is conservative.</p> <p>However CAR B5 and CAR B7 were raised and closed successfully.</p>	<p>/PDD1/ /PDD2/  /UNFCC/ CEA/</p>	<p>CAR B5  CAR B7</p>	<p>OK</p>
<p>B.5.6. Are all ex-ante calculation values for monitoring parameters (as defined as per chapter B.7.1) reasonable?</p> <p>(EB 55 Annex 1, § 91) <i>Describe clearly the steps taken to assess whether the values used for the monitoring parameters are considered reasonable, applicable and conservative in the context of the project activity</i></p>	<p><input checked="" type="checkbox"/> All "Values of data to be applied for the purpose of calculating expected emissions reductions" are considered to be reasonable, applicable and conservative.</p> <p><input type="checkbox"/> The following mistakes have been identified in this context:</p>	<p>/PDD1/ /PDD2/</p>	<p>OK</p>	<p>OK</p>
<p>B.5.7. Are the emission reductions real, measurable and give long-term benefits related to the mitigation of climate change.</p> <p><i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> Yes, the project is a green field wind based renewable energy generation project.</p> <p><i>Justification of evidences:</i> The emission reduction occurred from the project will be calculated by measuring net exported electricity</p>	<p>/PDD1/ /PDD2/</p>	<p>CAR B8</p>	<p>OK</p>



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p>to the grid by energy meters. Emission reduction generated from the project activity are real measurable and will provide long term benefit related to the mitigation of climate change.</p> <p><i>Conclusion:</i> Validation team has reviewed O&amp;M contract<sup>/O&amp;M/</sup>, Purchase orders<sup>/PO/</sup>, CO2 database of Central electricity authority<sup>/CEA/</sup> to validate the same.</p> <p>However CAR B8 was raised and closed successfully</p>			
<b>B.6. Monitoring of Emission Reductions</b> <i>It is assessed whether the monitoring plan is appropriate for the project activity and in line with the applied methodology.</i>				
<p>B.6.1. Are all monitoring parameters required by the applied methodology contained in the monitoring plan?</p> <p>(EB 55 Annex 1, §§ 67(e), 121, 123(a), 124)  <i>Assess whether all applicable parameters listed in the methodology are included in the monitoring plan.</i></p> <p><i>Pl. check further whether the selection of parameters not to be monitored (section B.6.2) is appropriate and in line with the applied methodology.</i></p> <p><i>In case of different approaches can be chosen acc. to the methodology assess whether the selection of parameters is</i></p>	<p><i>Description:</i> As per approved methodology, all monitoring parameters are included in the monitoring plan.</p> <p><i>Justification of evidences:</i> Validation team has reviewed, PDD, Methodology for same.</p> <p><i>Conclusion:</i> As verified, the net electricity supplied to the grid is the only parameter which needs to be monitored as per the applied methodology. This has been clearly mentioned in the monitoring plan of the PDD<sup>/PDD02/</sup>.</p>	<p>/PDD1/ /PDD2/ /UNFCCC /</p>	OK	OK





Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>justified and correct.</i>	Validation has reviewed approved methodology AMS I D V 16 available on UNFCCC web site <sup>/UNFCCC</sup> and details provided in PDD, to validate the same.			
<p>B.6.2. Are the means of monitoring of all parameters contained in the monitoring plan feasible and in accordance with the requirements of the applied methodology?</p> <p>(EB 55 Annex 1, § 123(a)–(b), 124)</p> <p><i>Assess whether the provided information for all parameters w.r.t.</i></p> <ul style="list-style-type: none"> <li>a) <i>Label (name of the data / parameter)</i></li> <li>b) <i>data unit</i></li> <li>c) <i>description</i></li> <li>d) <i>source of data</i></li> <li>e) <i>measurement equipment / method / procedure</i></li> <li>f) <i>monitoring frequency</i></li> <li>g) <i>QA/QC procedures</i></li> </ul> <p><i>are appropriately described and in compliance with the requirements of the methodology..</i></p>	<p><i>Description:</i> Feasibility of means of monitoring for monitoring parameter as required by approved methodology.</p> <p><i>Justification of evidences:</i> Validation team has reviewed PDD, and approved methodology to assess the same. Same is also cross verified by conducting site visit.</p> <p><i>Conclusion:</i> As verified, details provided in section B.7.1 of the PDD is appropriate and complete. All the details as required as per CP guidelines is provided.</p> <p>However CAR B9, CAR B10 and CAR B11 were raised and closed successfully</p>	<p>/PDD1/ /PDD2/</p>	<p>CAR B9 CAR B10 CAR B11</p>	<p>OK</p>
B.6.3. Have all means of implementing the monitoring plan, e.g. equations necessary for	<i>Description:</i> PDD contains all the required equations for ex-post emission reduction calculations.	/PDD1/	CAR B6	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>ex-post emission reduction calculation, been described clearly and in line with the methodology?</p> <p>(EB 55 Annex 1, §§ 123(b), 124)</p> <p><i>Check whether all necessary equations have been provided in the PDD. Pl. consider that ex-post and ex-ante calculations might be different.</i></p> <p><i>Please consider that additional equations might be necessary to calculate auxiliary parameters.</i></p>	<p><i>Justification of evidences:</i> Validation team has reviewed PDD, Methodology for assessment.</p> <p><i>Conclusion:</i> As described under section B.6.1, all the required equations for calculating ex-post emission reductions are included as per the approved methodology.</p> <p>However CAR B6 was raised and closed successfully</p>	<p>/PDD2/ /UNFCCC /</p>		
<p>B.6.4. Is it likely that the monitoring arrangements described in the PDD can properly be implemented in the context of the project activity?</p> <p>(EB 55 Annex 1, § 124(c))</p> <p><i>Assess whether the described monitoring arrangements are sufficient and realistic to enable a thorough monitoring. Pl. consider also special monitoring conditions, e.g. downtimes of monitoring equipment etc.</i></p>	<p><i>Description:</i> Implementation of monitoring arrangement as per PDD</p> <p><i>Justification of evidences:</i> PDD, PPA AMS ID</p> <p><i>Conclusion:</i> Validation team has cross checked the installation of the energy meters at wind mills during the site visit and also verified the document and concluded that the Monitoring arrangement as described in the PDD and is implemented at the project location.</p> <p>However CAR B10 and CAR B11 were raised and closed successfully</p>	<p>/PDD1/ /PDD2/ /PPA/ /AMS I D/</p>	<p>CAR B10 CAR B11</p>	OK
<p>B.6.5. Are the QA/QC procedures appropriate sufficient to ensure the emission reductions achieved from the project activity can be reported ex-post and verified?</p> <p>(EB 55 Annex 1, § 124(b))</p> <p><i>Please consider the description given in section B.7.2.</i></p>	<p><i>Description:</i> QA/QC procedures as described in the PDD is sufficient to ensure ex-post emission reduction</p> <p><i>Justification of evidences:</i> Validation team has reviewed PDD, Power purchase agreement<sup>/PPA/</sup> and AMS I D</p> <p><i>Conclusion:</i> Energy meters are confirming the metering specifications approved by MEDCL and calibration frequency is</p>	<p>/PDD1/ /PDD2/</p>	<p>CAR B9</p>	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>Describe which QA/QC provisions are considered. Address Quality Management System provisions, calibration and maintenance of equipment. Address further any review procedures.</i>	once in a year and it is confirmed that emission reduction achieved from the project activity can be reported ex-post and easily be verified.  However CAR B 9 was raised and closed successfully.			
<b>B.6.6. Are procedures identified for data management?</b>  (EB 55 Annex 1, § 124(b)) <i>Check whether appropriate provisions are considered for data management including responsibilities, what records to keep, storage area of records and how to process performance documentation</i>  <i>Check further the data archiving provisions for the project activity and ensure that provisions are made to archive data for the whole crediting period + 2 years.</i>	<i>Description:</i> Organisation chart and responsibility are defined in the PDD section B.7  <i>Justification of evidences:</i> Validation team has reviewed, Purchase orders, O&M contract,  <i>Conclusion:</i> Validation team has reviewed, Purchase orders, O&M contract, and confirmed that Roles and responsibilities are properly defined in PDD. Also data archiving provisions are made in the PDD.	/PDD1/  /PDD2/	OK	OK
<b>C. Duration of the Project/ Crediting Period</b>  <i>It is assessed whether the temporary boundaries of the project are clearly defined.</i>				



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>C.1. Is the project's starting date clearly defined and evidenced?</p> <p>(EB 55 Annex 1, § 99)</p> <p><i>Check whether the starting date is correct. Apply the definition of the project starting date as per the "Glossary of CDM terms".</i></p>	<p><i>Description:</i> According to the CDM glossary of terms, the starting date of a project activity is the earliest date of either the implementation or construction or real action of a project activity begins.</p> <p><i>Justification of evidences:</i> Purchase order, PDD</p> <p><i>Conclusion:</i> The project starting date is correctly identified as the signing date of equipment purchasing contract</p> <p>However CAR C1 was raised and closed successfully.</p>	<p>/PDD1/ /PDD2/ /PO/</p>	<p>CAR C1</p>	<p>OK</p>
<p>C.2. Is the project's operational lifetime clearly defined and evidenced?</p> <p><i>Check whether the project lifetime is correctly defined. Consider the guidance on the assessment of investment analysis (annex to the additionality tool).</i></p> <p><i>Check in case of phased implementation this has been reflected throughout the whole PDD incl. the financial assessment, if applicable.</i></p>	<p><i>Description:</i> Operational lifetime of 20 years is identified for the project activity.</p> <p><i>Justification of evidences:</i> Validation team has reviewed Technical specifications of WTG from purchase orders, O&amp;M contract to ensure the same</p> <p><i>Conclusion:</i> As verified, operational life time is correctly applied as 20 years for wind mills.</p>	<p>/PDD1/ /PDD2/ /PO/</p>	<p>OK</p>	<p>OK</p>
<p>C.3. Is the start of the crediting period clearly defined and reasonable?</p> <p><i>Check whether the envisaged starting date of the crediting period is realistic, taking into consideration the times needed</i></p>	<p><i>Description:</i> Crediting period chosen is the fixed crediting period of 10 years. Start of the crediting period stated is 01/09/2011.</p> <p><i>Justification of evidences:</i> Validation team has reviewed PDD to ensure the same</p> <p><i>Conclusion:</i> Crediting period chosen is the fixed crediting period of</p>	<p>/PDD1/ /PDD2/</p>	<p>OK</p>	<p>OK</p>



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>for validation and registration.</i>	10 years. Start of the crediting period stated is 01/09/2011 under section C.2.2.1 of the PDD <sup>/PDD2/</sup> is correct and realistic considering the approximate time taken for validation and registration.			
<b>D. Environmental Impacts</b>  <i>Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the DOE.</i>				
D.1.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)?  (EB 55 Annex 1, §§ 131–133) <i>Check the host party regulations, regarding EIA.</i>	<i>Description:</i> Environmental Impact Assessment (EIA) is not required for a wind mill projects.  <i>Justification of evidences:</i> Environment Impact Assessment Notification Ministry of Environment and Forests dated, 14 <sup>th</sup> September, 2006, schedule I of Environmental Impact Notification 2004 S.O. (60) E, dated 27/01/1994,  <i>Conclusion:</i> As verified from the public domain <a href="http://envfor.nic.in/legis/eia/eia-2006.htm">http://envfor.nic.in/legis/eia/eia-2006.htm</a> , EIA notification 2006, Environmental Impact Assessment (EIA) is not required for the project activity as per the prevailing laws of host country India. (Ministry of Env and forests).	/PDD1/ /PDD2/ /MOEF/	OK	OK
D.1.2. In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been carried out and if applicable duly approved?  (EB 55 Annex 1, §§ 131–133)	<i>Description:</i> Environmental Impact Assessment (EIA) is not required for a wind mill projects. Please refer section D.1.1.  <i>Justification of evidences:</i> not applicable  <i>Conclusion:</i> Not applicable	/PDD1/ /PDD2/ /MOEF/	OK	OK



Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>Check the EIA and its approval, if applicable.</i>				
<p>D.1.3. Has an analysis of the environmental impacts of the project activity been sufficiently described and in line with the host party environmental legislation?</p> <p>(EB 55 Annex 1, §§ 130–132)  <i>Check the PDD (section D). Check whether the project will create any adverse environmental effects.</i>  <i>Check the relevant national environmental legislation.</i></p>	<p><i>Description:</i> Environmental Impact Assessment (EIA) is not required for a wind mill projects. Please refer section D.1.1.  <i>Justification of evidences:</i> not applicable  <i>Conclusion:</i> Not applicable</p>	<p>/PDD1/ /PDD2/ /MOEF/</p>	OK	OK
<p>D.1.4. Are transboundary environmental impacts considered in the analysis?</p> <p>(EB 55 Annex 1, §§ 131–133)  <i>Check the documents and local official sources / expertise regarding transboundary environmental impacts.</i></p>	<p><i>Description:</i> Environmental Impact Assessment (EIA) is not required for a wind mill projects. Please refer section D.1.1.  <i>Justification of evidences:</i> not applicable  <i>Conclusion:</i> Not applicable</p>	<p>/PDD1/ /PDD2/ /MOEF/</p>	OK	OK
<p><b>E. Stakeholder Comments</b></p> <p><i>The DOE should ensure that stakeholder comments have been invited with appropriate media and that due account has been taken of any comments received.</i></p>				



<b>Checklist Item</b> (incl. guidance for the validation team)	<b>Validation Team Comments</b> (justification and substantiation of information, data and evidences)	<b>Ref.</b>	<b>Draft Concl.</b>	<b>Final Concl.</b>
<p>E.1. Have relevant local stakeholders been invited to consultation prior to the publication of the PDD?</p> <p>(EB 55 Annex 1, § 128)</p> <p><i>Check by means of document review and interviews with local stakeholders if and when a local stakeholder consultation process has been carried out.</i></p>	<p>Description: Local stakeholders were invited by giving advertisement in local news paper dated 2009-05-07</p> <p>Justification of evidences: Validation team had reviewed the copy of the advertisement and conducted the interview with the local stakeholder to ascertain the same.</p> <p>Conclusion: As verified local stakeholder consultation meet was held on 2009-05-18 and various stakeholder from nearby village have attended the same.</p>	<p>/PDD1/ /PDD2/</p>	<p>OK</p>	<p>OK</p>
<p>E.2. Can the local stakeholder consultation process be assessed as adequate?</p> <p>(EB 55 Annex 1, § 129(a)–(c))</p> <p><i>Describe what assessment steps have been undertaken to assess the adequacy of the stakeholder consultation process. Give a final opinion on the adequacy.</i></p> <p><i>Please consider the following requirements in this context:</i></p> <p><i>(a) Comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity, have been invited;</i></p> <p><i>(b) The summary of the comments received as provided in the PDD is complete;</i></p> <p><i>(c) The project participants have taken due account of any comments received and have described this process in the PDD.</i></p>	<p>Description: As stated in the PDD local stakeholder concerns are invited during stakeholder meeting on 2009-05-18.</p> <p>Justification of evidences: Same is confirmed by conducting interview with local stakeholder during site visit. Minutes of meeting, News paper advertisement<sup>/LSHC/</sup></p> <p>Conclusion: Stakeholder consultation process was properly undertaken to invite the concerns of the local stakeholders.</p> <p>Validation team has verified the local newspaper advertisement on 2009-05-07 and conducted interview during site visit and also reviewed minutes of meeting. Based on this validation team is convinced that stakeholder consultation process was adequately completed</p>	<p>/LSHC/ /PDD1/ /PDD2/</p>	<p>OK</p>	<p>OK</p>



## ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION

**Table A-2:** Assessment of Baseline Identification (EB 51 Annex 3, §§ 82 – 85)

<input type="checkbox"/>	Baseline is not identified
<input checked="" type="checkbox"/>	Assessment of baseline see below

Baseline Alternatives identified	In line with the Methodology?	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	DOE Assessment	
					Appropriateness of elimination	Assessment of validation team (results and means of assessment)
Baseline emissions are the product of electrical energy baseline $EG_{BL, y}$ expressed in kWh of electricity produced by the renewable generating unit multiplied by an emission factor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	As per Para 10-11 of the approved methodology AMS I D v 16, it is appropriate. Further, it is not a modification or retrofit of an existing electricity generation facility. Validation was conducted by document review.

### ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

**Table A-3:** Assessment of Financial Parameters (EB 51 Annex 3, §§110, 111, 113/ in case financial parameters stem from FSR §112,)

<input type="checkbox"/>	No financial parameters are used for additionality justification						
<input checked="" type="checkbox"/>	Assessment of all financial parameters see below						
Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
Plant Capacity	1.5	MW	Purchase Orders dt. 19/02/2009, Page no 1.	/PO/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The value is based on the purchase order placed by the company. The value is correct and appropriate for the project. The provided data source has been checked and the applied value was verified.
Project life	20	Years	Manufacturer's technical specification	/TS/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	It is based on the machinery supplier technical specification. Incidentally, this is also in conformity with the operating life given by MERC. Hence, the value considered by PP is correct and appropriate for the project
Project Cost	90.02	Rs. In million	Purchase Orders dt. 19/02/2009 page 2,6,10,15,19,27,34	/PO/ /LA/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The value is based on the loan application letter submitted to bank/purchase order placed

			Loan application letter dated 14/12/2008, page no 3				by the company. Validation team had checked the data and found value to be correct and appropriate for the project.  . Taking into consideration all these factors and based on the local and sectoral expertise, the Validation Team concludes that the project cost is reliable and appropriate for the project activity
Loan	49.00	Rs. in million	Loan application letter dated 14/12/2008, page no 3  Loan Sanction letter dt. 24/01/2009 from Axis bank page no 1	/LA/  /LSL/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Loan amount is based on the loan application letter, (which formed the basis for investment decision). Validation team has also reviewed loan sanction letter, and Loan amount sanctioned is the same as the loan sought for in the loan application,. Hence, the value is correct and appropriate for the project activity.
Interest on Term Loan	13.25	Percent	Loan application letter dated 14/12/2008, page no 3  Loan Sanction letter dt. 24/01/2009 from Axis bank.page no 2	/LA/ /LSL/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Interest rate is based on the loan application letter and same is cross checked from sanction letter issued by Axis bank , which has been verified by the validation team. The value is correct and appropriate and conservative.
Repayment	72	Months	Loan application letter dated 14/12/2008 page no 3  Loan Sanction letter dt.	/LA/ /LSL/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Repayment period (71 monthly installments of 6.8 Lakhs and 72 <sup>nd</sup> installment of 7.2 lakh commencing from March 2010) is based on the loan application letter and same is cross checked from sanction letter, which has been verified by the validation team. Grace period is

			24/01/2009 from Axis bank.page no 2				correct and appropriate.
Plant Load Factor	22	Percent	Loan application dated 14/12/2008 page no 3 PLF assessment report no VYT/RE/GC/2010-11/14/AS	/LA/ /PLF-AR/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The project is financed by Axis bank. Project developer has submitted PLF of 22% (i.e. generation of 2.889 GWh/year) in the loan application<sup>/LA/</sup>, based on which the bank has approved the loan. Hence, it conforms to Annex 11 of EB 48. Moreover, MERC recommended PLF for WTG situated in the state of Maharashtra is only 20%. Further to substantiate the PLF, PP has also carried out third party PLF assessment report<sup>/PLF-AR/</sup> which provides PLF of 19.56 %.</p> <p>In addition ,validation team also has cross checked the PLF considered by the projects situated in the state of Maharshttra and already applied for CDM from UNFCCC web site and reveal that PLF ranges from 18.22 to 22.8 %</p> <p>Therefore, validation team is convinced that the value applied is correct, conservative and appropriate for the project.</p>
Tariff per kWh	3.50	in Rs.	MERC tariff order dated 24/11/2003 page 8 to 15 and PPA	/MERC/ /PPA/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tariff is based on the clause no 1.5.3.1 of MERC tariff order dated 24/11/2003, which is further evidenced by the PPA entered into subsequently. The value applied is therefore correct and appropriate.
Escalation in tariff till 13 <sup>th</sup> year	0.15	Paisa/year	MERC tariff order dated 24/11/2003 page 8 to 15 and PPA	/MERC/ /PPA/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Escalation in tariff considered is 0.15 paisa /year till 13 <sup>th</sup> year as per clause no 1.5.3.1 of MERC tariff order dated 24/11/2003, which is

							further evidenced by the PPA entered into subsequently. The value applied is therefore correct and appropriate.
Tariff after 13 <sup>th</sup> year	3.50	in Rs.	MSEDCL guidelines		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Value considered by the PP is conservative. MERC order dated 10/12/2008 defines six options for calculation of tariff after expiry of the PPA. PP has calculated all the six option and highest tariff achieved is Rs 2.56 / kWh. However as PP has considered Rs 3.5 Rs/kWh, validation team is convinced that it is appropriate and conservative.  Also sensitivity analysis reveals that even after increase of 100 % power tariff after 13 years, IRR remains below the benchmark value
O&M cost per WTG per annum	1.46	Rs. In million	O&M agreement page 2	/O&M/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	O&M cost is based on the quotation and O&M agreement. As per the O&M agreement, O&M cost is payable at Rs.1.46 p.a. inclusive of all taxes. As the costs are based on O&M contract, the input parameters are considered correct and appropriate.
Free O&M period	2	Year	O&M agreement page 2	/O&M/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Quotation and O&M contract provide for two year free warranty. This is has been verified and found correct. Hence , this input parameter is correct and appropriate
O&M escalation	5	Percent	O&M agreement page 2	/O&M/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Quotation and O&M contract provide for escalation from the third year of payment, which is fourth year of operation. This is has been verified and found correct. Hence , this

							input parameter is correct and appropriate
Salvage Value	5	Percent	International practices <sup>11</sup> best	-	☒	☒	Most assets commonly seen in structured finance transactions will have a <i>scrap value assumption of 5-10% of original cost</i> . Since for Income Tax computation, the asset has been fully depreciated in the first 4 years itself, 5% salvage value represents potential profit and therefore it conforms to guidance 4 of Annex 58, EB 51. Therefore, the validation team considers the salvage value appropriate
Depreciation (IT)	25	Percent	Income Tax Rule	/IT/	☒	☒	Though Appendix I of Income Tax Rules allows 80 % depreciation, PP has considered depreciation only of 25 % every year for first four years. This is due to company being loss making at the time of decision making. The same have been cross checked with the financial details of the PP. Validation team considers the depreciation rate as appropriate for the project activity
Income Tax (Regular) 2008-09	33.99	Percent	Indian Income Tax Act	/IT/	☒	☒	The rate is based on the Income tax rate applicable to the financial year 2008-09, i.e., the year in which investment decision was taken. The tax rate is correct and appropriate.
Tax Holiday	10	Years	Indian Income Tax Act	/IT/	☒	☒	As per Sec. 80IA of the Income Tax Act, infrastructure projects (under which the project activity falls) are entitled to tax holiday of any 10 consecutive years in the first 15 years of

<sup>11</sup> [http://www.marshall-stevens.com/pdf/pub\\_ValueCurves.pdf](http://www.marshall-stevens.com/pdf/pub_ValueCurves.pdf)



							operation. The validation team checked the provision and found it to be correct.
Prime lending rate (benchmark)	13.5	Percent	Reserve bank of India Prime Lending rate prevailing during investment decision. (Nov 2008)	/RBI/	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PLR is sourced from Weekly Statistical Supplement of RBI of 12/12/2008. Validation team verified this data and found the data to be correct and appropriate. The PLR pertains to November 7-28, 2008. Average value of highest and lowest is taken as a benchmark. Hence, the value is appropriate and correct.



## ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

**Table A-4:** Assessment of Barrier Analysis (EB 51 Annex 3, § 117)

<input type="checkbox"/>	No barrier parameters are used for additionality justification			
<input checked="" type="checkbox"/>	Assessment of barriers see below			
Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of validation team	
			Appropriateness of information source	Explanation of final result
Investment Barrier	Project IRR of the project activity is compared with the benchmark value of Prime lending rate (PLR) of Reserve Bank of India (RBI)	Please refer Annex-3	<input checked="" type="checkbox"/>	Validation team is convinced that the project is facing Investment barrier. Validation team has assessed documentary evidences submitted by PP in support of financial parameters as evaluated in Annex-3 above.

## ANNEX 5: OUTCOME OF THE GSCP

**Table A-5:** Outcome of the Global Stakeholder Consultation Process  
(§§ 40-42, VVM Version 1.2)

<input type="checkbox"/>	No comments were received during the global stakeholder consultation period					
<input checked="" type="checkbox"/>	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the validation team are presented below:					
Comment No.:	Comment by:	Inserted on:	Subject	Comment <sup>*)</sup>	Action taken by the validation team to take due account on the comment <sup>*)</sup>	Conclusion (incl. CARs CLs or FARs)
1	sauvik banerjee	07/10/2009	Metering Arrangement	As the project demands continuous monitoring, it is not clear from the PDD that in case of malfunctioning of energy meters, how the project proponent is ensuring proper data archiving and collection procedures as the PDD doesn't say anything about spare meters. please clarify.	Net electricity exported to the grid is continuously monitored by the PP. However same is now included in the PDD in response to CAR B11.	CAR B11
2	sauvik banerjee	07/10/2009	Measurement approach of Electricity	The monitoring section of the methodology asks for hourly measurement and monthly recording. However, in the section B.7.of the PDD, the monitoring frequency is different. Please clarify.	Net electricity exported to the grid is continuously monitored, hourly measured and monthly recorded by the PP. However same is now included in the PDD in response to CAR B11.	CAR B11

<sup>\*)</sup> In case clarifications have been requested by the validation team corresponding rows shall be added

## ANNEX 6: STATEMENTS OF COMPETENCE OF TEAM MEMBERS

TUV NORD Certification											
<b>Statement of Competence</b> Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program											
<b>Mr. Pankaj Patel</b>											
<table border="1"><thead><tr><th>SCHEME</th><th>STATUS</th><th>VALID UNTIL</th></tr></thead><tbody><tr><td>CDM</td><td>Lead Assessor</td><td>2013-06-21</td></tr><tr><td>VCS</td><td>Lead Assessor</td><td>2013-06-21</td></tr></tbody></table>	SCHEME	STATUS	VALID UNTIL	CDM	Lead Assessor	2013-06-21	VCS	Lead Assessor	2013-06-21		
SCHEME	STATUS	VALID UNTIL									
CDM	Lead Assessor	2013-06-21									
VCS	Lead Assessor	2013-06-21									
Authorization status for technical areas within sectoral scopes:											
<table border="1"><thead><tr><th>CODE</th><th>TECHNICAL AREA</th></tr></thead><tbody><tr><td>2.2</td><td>Heat Distribution</td></tr><tr><td>3.1</td><td>Energy Demand</td></tr></tbody></table>	CODE	TECHNICAL AREA	2.2	Heat Distribution	3.1	Energy Demand					
CODE	TECHNICAL AREA										
2.2	Heat Distribution										
3.1	Energy Demand										
031 – Rev. 0, Date: 2011-03-23											
031_S01-F003_2011-03-23_rev0											

TUV NORD Certification																
<b>Statement of Competence</b> Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program																
<b>Mr. Hemang Shah</b>																
<table border="1"><thead><tr><th>SCHEME</th><th>STATUS</th><th>VALID UNTIL</th></tr></thead><tbody><tr><td>CDM</td><td>Lead Assessor</td><td>2014-06-22</td></tr><tr><td>VCS</td><td>Lead Assessor</td><td>2014-06-22</td></tr></tbody></table>	SCHEME	STATUS	VALID UNTIL	CDM	Lead Assessor	2014-06-22	VCS	Lead Assessor	2014-06-22							
SCHEME	STATUS	VALID UNTIL														
CDM	Lead Assessor	2014-06-22														
VCS	Lead Assessor	2014-06-22														
Authorization status for technical areas within sectoral scopes:																
<table border="1"><thead><tr><th>CODE</th><th>TECHNICAL AREA</th></tr></thead><tbody><tr><td>1.1</td><td>Thermal Energy Generation</td></tr><tr><td>1.2</td><td>Renewable Energies</td></tr><tr><td>2.1</td><td>Electricity Distribution</td></tr><tr><td>2.2</td><td>Heat Distribution</td></tr><tr><td>3.1</td><td>Energy Demand</td></tr><tr><td>13.1</td><td>Waste handling and disposal</td></tr></tbody></table>	CODE	TECHNICAL AREA	1.1	Thermal Energy Generation	1.2	Renewable Energies	2.1	Electricity Distribution	2.2	Heat Distribution	3.1	Energy Demand	13.1	Waste handling and disposal		
CODE	TECHNICAL AREA															
1.1	Thermal Energy Generation															
1.2	Renewable Energies															
2.1	Electricity Distribution															
2.2	Heat Distribution															
3.1	Energy Demand															
13.1	Waste handling and disposal															
087 – Rev. 1, Date: 2011-06-23																
087_S01-F003_2011-06-23_rev1																

TUV NORD Certification											
<b>Statement of Competence</b> Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program											
<b>Mr. Saroj Kumar Sahoo</b>											
<table border="1"><thead><tr><th>SCHEME</th><th>STATUS</th><th>VALID UNTIL</th></tr></thead><tbody><tr><td>CDM</td><td>Assessor</td><td>2013-03-14</td></tr><tr><td>VCS</td><td>Assessor</td><td>2013-03-14</td></tr></tbody></table>	SCHEME	STATUS	VALID UNTIL	CDM	Assessor	2013-03-14	VCS	Assessor	2013-03-14		
SCHEME	STATUS	VALID UNTIL									
CDM	Assessor	2013-03-14									
VCS	Assessor	2013-03-14									
088 – Rev. 0, Date: 2011-03-17											
088_S01-F003_2011-03-17_rev0											



P-No.: 8105998794 – 09/333

**CERTIFICATE OF APPOINTMENT**

**Mr. Sanjay Kandari**

born on 1979-05-13

satisfies the requirements as specified in the TÜV NORD  
JIVCDM CP directives and is hereby appointed as

**TÜV NORD CDM Assessor**

The present appointment will terminate on 2014-06-09  
Certification registration No. 11 06 03 – 192

Essen, 2011-05-10

Head of TÜV NORD JI/CDM Certification Program  
at TÜV NORD CERT GmbH

**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD JI/CDM Certification Program

**Mr. Stefan Winter**

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor	2014-06-30
Validation/Verification	Senior Assessor	2014-06-30
VCS	Senior Assessor	2014-06-30

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewable Energies
13.1	Waste handling and disposal
13.2	Animal waste management
15.2	Animal waste management

163 – Rev. 1, Date: 2011-07-01

801-P003-wr/1 / 2010-04-19

**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD JI/CDM Certification Program

**Mr. Ingo Klein**

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification) Technical Reviewer	2013-10-17
VCS	Lead Assessor Technical Reviewer	2013-10-17

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
1.2	Renewable Energies	1.2.1 Hydro 1.2.2 Wind 1.2.3 Geothermal 1.2.4 Solar 1.2.5 Tidal

122 - Rev. 1, Date: 2011-08-08

801-P003-wk/1 / 2011-08-08



**Statement of Competence**

Appointment and authorization according to the procedures  
of the TÜV NORD JI/CDM Certification Program

**Mr. Samir Beqqal**

SCHEME	STATUS	VALID UNTIL
CDM	Assessor	2013-08-21
VCS	Assessor	2013-08-21

110 – Rev. 0, Date: 2011-03-17