



GOLD STANDARD VALIDATION REPORT

**WIND POWER PROJECT IN MADHYA PRADESH
BY OBWPPL**

**ORANGE BERCHA WIND POWER PRIVATE
LIMITED**


Report No: 8114363339 – 17/034

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R-No.: 8114363339 – 17/034

GOLD STANDARD VALIDATION REPORT	
Title of the project activity	Wind Power Project in Madhya Pradesh by OBWPPL
Version number of the validation report	1.0 TN P-No. : 8114363339 – 17/034
Completion date of the validation report	03/04/2018
Version number of PDD to which this report applies	5.0
Version number of GS passport to which this report applies	4.0
UNFCCC Reference Number (if applicable)	N/A
Project participant(s)	Orange Bercha Wind Power Private Limited
Host Party	India
Estimated annual average GHG emission reductions or net removals in the crediting period	107,058 tCO₂e
Sectoral scope(s) and selected methodology(ies)	Scope: 1 / Technical Area: 1.2 CDM Methodology: ACM0002.: <i>Grid-connected electricity generation from renewable sources</i> , version 17.0
Name of DOE	TÜV NORD CERT GmbH
Confidential content:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name, position and signature of the approver of the validation report	 Winter, Stefan Final Approver

Abbreviations

BAU	Business as usual
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
CP	Certification Program
DNA	Designated National Authority
DNH	Do No Harm
DOE	Designated Operational Entity
DVaIR	Draft Validation Report
EB	CDM Executive Board
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
FAR	Forward Action Request
FVaIR	Final Validation Report
GHG	Greenhouse gas (es)
GS	Gold Standard
GSP	Gold Standard Passport
GST	Gold Standard Toolkit
GS-VVM	Gold Standard Validation & Verification Manual
IPCC	Intergovernmental Panel on Climate Change
LSC	Local Stakeholder Consultation
LSCR	Local Stakeholder Consultation Report
PA	Project Activity
PDD	Project Design Document
PFA	Pre-Feasibility Assessment
PS	CDM Project Standard
SFR	Stakeholder Feedback Round
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change
VVS	CDM Validation and Verification Standard



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1 OBJECTIVE / SCOPE

The purpose of a validation is to have an independent third party assess the project design and compliance with the GS requirements as described in the Gold Standard documentation (GSv2.2), and supporting documents availed by Project Participants.

The project design documents and supporting documents were reviewed against the criteria as set out in the Gold Standard Requirements, the Gold Standard Toolkit and respective Annexes. The findings and conclusions on the project's compliance with the Gold Standard are recorded in this document.

In particular the project's

- Eligibility for GS registration
- Baseline and Monitoring Methodology
- Technology transfer
- Do No Harm Assessment
- Contribution to Sustainable Development
- Compliance with GS additionality requirements
- Application of conservative assumptions
- Monitoring of sustainable development parameters
- Environmental & Social Impacts & potential Mitigation Measures
- Stakeholder consultation requirements & responses

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) and/or Voluntary Emission Reductions (VERs).

The validation is based on the information made available to TÜV NORD JI/CDM CP and on the contract conditions.

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

Project title	Wind Power Project in Madhya Pradesh by OBWPPL		
Project size	<input checked="" type="checkbox"/> Large Scale	<input type="checkbox"/> Small Scale	<input type="checkbox"/> Micro 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	CDM Methodology: ACM0002,; <i>Grid-connected electricity generation from renewable sources</i> , version 17.0		
Technical Area(s)	1.2 Renewable Energies		
Crediting period	<input checked="" type="checkbox"/>	Renewable Crediting Period (7 y)	
	<input type="checkbox"/>	Fixed Crediting Period (10 y)	
	<input type="checkbox"/>	as per Project lifetime (xx y)	
Start of crediting period	Start date of crediting period is 05/05/2016 (i.e. commissioning date of the project activity WTGs)) or date of registration of the project activity with Gold Standard; as decided by the GSF		

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 (yes/no)
Non-Annex 1 Country	India	Orange Bercha Wind Power Private Limited
Annex 1 Country	N/A	N/A

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
State	Madhya Pradesh
District	Ratlam
Villages	Jhar, Sandala, Dhanesra, Kamed
Latitude:	Refer table below
Longitude:	Refer table below

S. No.	WTG Location No.	Latitude (North)	Longitude (East)
1	B 16	52.2298	25.7294
2	B 4	52.3946	25.7375
3	B 1	52.1672	25.7515
4	B 72	52.3437	25.7426
5	B 90	52.5259	25.7525
6	B 92	52.7864	25.7393
7	B 89	52.5573	25.7325
8	B 86	52.5976	25.7415
9	B 73	52.8737	25.7434
10	B 79	52.8032	25.7356
11	B 38	52.5999	25.7551
12	B 87	52.4506	25.7245
13	B 80	52.608	25.737
14	B 82	52.7876	25.7563
15	B 91	52.608	25.737
16	B 33	52.6708	25.7399
17	B 71	52.8647	25.7629
18	T1	52.7818	25.7614
19	T2	52.7876	25.7563
20	B 77	52.8648	25.7588
21	B 83	52.8737	25.7434
22	B 78	52.8747	25.7401
23	B 85	52.8032	25.7356
24	B 75	52.7864	25.7393
25	B 84	52.735	25.7416

2.4 Technical Project Description

The project reduces GHG emissions due to the installation of a 50 MW (25 numbers X 2.0 MW) grid connected Wind Power Plant at Ratlam district in the State of Madhya Pradesh in India. The project activity will reduce anthropogenic emissions of greenhouse gases (GHG's) by displacing electricity delivered to the Indian Grid that would have otherwise been generated by the operation of mainly fossil fuel based power plants. The project activity WTGs were commissioned on 05/05/2016 and all the WTGs are currently operational conditions.

The average net power generation of the project for the next 7 years is estimated at 109,500 MWh per year, resulting in estimated annual emission reductions of **107,058 tCO₂e**.

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

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

Parameter	Unit	Description
WTG Model : G-97 Make: Gamesa		
Number of Blades	-	3
Number of units	-	25
Rated power	kW	2000
Average annual wind speed	(m/s)	7.5
Hub Height	M	104
Tower Design	-	Tubular, Four sections
Rotor Diameter	M	97
Rotor Swept Area	m ²	7390
Rotor Speed range (variable)	rpm	9:19
Generator rated power	MW	2.0
Generator Voltage	Vac	690
Generator Frequency	Hz	50 / 60
Generator Type	-	Doubly-fed with coil rotors and slip rings
Gearbox Type	-	1 Planetary stage & 2 Parallel stage
Gearbox Ratio	Hz	1:106.8 (50 Hz), 1:127.2 (60 Hz)

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
- Detailed desk review of the GS PDD the Gold Standard Passport, and supporting documents
- Desk review of the PDD and supporting documents
- Validation planning
- Uploading of the GS Validation Work Plan
- 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

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, consisting of one team leader and one additional team member, as well as the Technical Review personnel were appointed.

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 ¹⁾	Qualification Status ²⁾	Scheme competence ³⁾	Technical competence ⁴⁾	Host country Competence	On-site visit
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Indrapal Parmar	TUV India Pvt. Ltd.	TL	LA	<input checked="" type="checkbox"/>	1.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	David Lubanga	-	TR ^{B)}	LA	<input checked="" type="checkbox"/>	1.2	<input type="checkbox"/>	-
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Stefan Winter	TN CERT GmbH	TR/FA ^{B)}	SA	<input checked="" type="checkbox"/>	1.2	<input type="checkbox"/>	-

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

²⁾ GHG Auditor Status: A: Assessor; LA: Lead Assessor; SA: Senior Assessor; T: Trainee; TE: Technical Expert

³⁾ GHG auditor status (at least Assessor)

⁴⁾ As per S01-MU03 or S01-VA070-A2 (such as 1.1, 1.2, ...)

⁵⁾ In case of verification projects

A) Team Member: GHG auditor (at least Assessor status), Technical Expert (incl. Host Country Expert or Verification Expert), not ETE

B) No team member

All team members contributed to the review of documents, the assessment of the project activity and to the preparation of this report under the leadership of the team leader.

All team members as indicated in the table above attended in the complete site-visit.

Technical Experts contributed to the assessment of special aspects of the project activity, e.g. technical or host country aspects.

Statements of competence for the above mentioned team members are enclosed in annex 7 of this report.

3.4 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 / GS requirements each 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-GS/ GS-VER 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.

Validation Protocol Table A-1: Requirement checklist				
Checklist Item	Validation Team Comment	Reference	Draft Conclusion	Final Conclusion
<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 subdivided 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 GS/VVS 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.

3.5 Review of Documents

The PDD, the Gold Standard Passport (GSP), LSC document 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.



3.6 Site Visit and Follow-up Interviews

The validation team has carried out a site visit 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 GS. The proposed project site included in the project activity has been visited by a validation team member.

Table 3-3: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
Project proponent representatives Project consultant	<ul style="list-style-type: none"> - Chronological description of the project activity with documents of key steps of the implementation. - Current status of plant design - Technical details of the project realization, project feasibility, designing, operational life time, monitoring of the project - Host Government Approval (if applicable) - Approval procedures and status - Monitoring and measurement equipment and system. - Financial aspects - Crediting period - Project activity starting date - CER allocation / ownership - Baseline study assumptions - Additionality - Sustainable development issues/indicators - Monitoring - Analysis of complete local stakeholder consultation including Stakeholder Feedback Round - Roles & responsibilities of the project participants w.r.t. project management, monitoring and reporting - National Legislation - Editorial issues of the PDD/Passport

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

3.7 Project comparison

The validation team has compared the proposed GS 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

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

3.8 Resolution of Clarification and Corrective Action Requests

3.8.1 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 validated by TN or that emission reductions would not be able to be verified.

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.

3.8.2 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.

3.8.3 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.

3.9 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 1.2 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.

3.10 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/GS passport, visits, interviews and supporting documents are summarised:

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

Validation topic ¹⁾	No. of CAR	No. of CL	No. of FAR
Description of project activity (A): <ul style="list-style-type: none"> - Project GS Eligibility Screen - PDD & Passport Editorial aspects - Technical project description - Project Participants - Technologies and / or measures - Public Funding - Scale of the project 	7	2	0
Application of selected approved baseline and monitoring methodology (B) <ul style="list-style-type: none"> - Application of the Methodology - Project Boundary - Baseline identification - Calculation of GHG emission reductions <ul style="list-style-type: none"> Project emissions Baseline emissions Leakage - Additionality screen - Monitoring Methodology - Monitoring Plan - Project management planning 	12	1	0
Duration and Crediting Period (C)	2	0	0
Contribution to Sustainable Development (D)	1	0	0
Environmental & Social Impact Assessment (ESIA) (E)	0	0	0
Stakeholder Consultation Process (F) <ul style="list-style-type: none"> - Local Stakeholder Consultation - Do No Harm Assessment - Stakeholder Feedback Round 	4	0	0



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Validation topic ¹⁾	No. of CAR	No. of CL	No. of FAR
Sustainable Development (SD) - Matrix - Indicators	2	0	0
SUM	28	3	0

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

Table 2. CAR from this validation

L. Finding	CAR A1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. Section A.1 of the PDD doesn't include the commissioning status (if in phase wise manner or not) of the project activity.</p> <p>2. Section A.1 of the PDD doesn't include the version number of the tool to calculate emission factor. The information shall be consistent across the document.</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>1. Section A.1 has been revised to include information on commissioning of the project.</p> <p>2. The version number of the tool to calculate emission factor has been included in section A.1 of the revised PDD</p>		
DOE Assessment #1 <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>Commissioning status of the WTGs in the project activity has been updated in section A.1 of the PDD.</p> <p>Section A.1 of the revised PDD now includes the latest version number of the tool to calculate emission factor. Same is verified by validation team to be correct.</p> <p>CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR A2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Section A.2.4 of the PDD doesn't include the latitudes and longitudes details of the WTGs. Also what is "Zone" detail cited in section.</p>		



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Finding	CAR A2
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The section A.2.4 now has the name of the village in which individual WTGs are located. The geological coordinates are already provided in UTM system.</p>
<p>DOE Assessment #1 <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>	<p>Section A.2.4 of the revised PDD now includes the name of the villages where project activity WTGs along with the commissioning date of WTGs. CAR is closed.</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed</p>

Finding	CAR A3		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>1. Section A.3 of the PDD cites the WTG technical specification and lifetime of the project activity. Submit the supporting evidence for the same.</p> <p>2. Section A.3 of the PDD (page 5/34) include the baseline scenario description however, same is not in-line with the para 24 of the latest applied methodology. Also reference of para number of methodology is also missing in this section and also in other sections of the PDD.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>1. A copy of the technical specification of the turbine has been provided reflecting expected lifetime of the WTG.</p> <p>2. The description under section A.3 has been revised to include the terminology under para 24 of the latest version of applicable methodology.</p>		
<p>DOE Assessment #1 <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>	<p>1. Technical specification of the WTG model and its expected operational lifetime i.e. 25 years is verified as per technical specification of the supplied by Gamesa for Model: G97-2.0. Validation team has checked the specifications supplied by the technology supplier to be correct and accurate. CAR is closed.</p> <p>2. Section A.3 of the revised PDD is now updated as per para 24 of the applied methodology and same is verified by validation team to be correct and accurate. As per the applied methodology ACM0002 ver. 17.0 the baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of the grid connected power plants and by the addition of new generation sources, as reflected by the combined margin. CAR is closed.</p>		



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Finding	CAR A3
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR A4		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section A.5 of the PDD. Submit the declaration related to information i.e. ODA included in this section of the PDD.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	DA declaration copy has been provided to the DoE		
DOE Assessment #1 <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>	ODA declaration not submitted. CAR is Open		
Corrective Action #2 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	ODA declaration has been provided to the DoE.		
DOE Assessment #2 <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.5 of the PDD. Declaration related to information i.e. ODA included in this section of the PDD is now submitted. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR B1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.1 of the PDD. Title of the methodology ACM0002, Version 17.0 is not in-line with information given in CDM webpage.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Title of the methodology is now revised and is now in line with information given in CDM webpage.		



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Finding	CAR B1
DOE Assessment #1 <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 B.1 of the revised PDD now updated with title of the applied methodology. Therefore, it is concluded by validation team that the project apply an approved and applicable CDM methodology and a valid version. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR B2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.2 of the PDD. Scope as cited in the methodology ACM0002, Version 17.0 for the project activity is missing.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Scope of the methodology has been cited in the section B.2 of the revised PDD.		
DOE Assessment #1 <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 B.2 of the revised PDD is now correctly updated w.r.t scope as per methodology ACM0002, Version 17.0 for greenfield project activity. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR B3		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.3 of the PDD. Project boundary given in the diagram is not line with the para 22 of applied methodology ACM0002.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Other power plants connected to the electricity system have also been included in the project boundary diagram.		



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Finding	CAR B3
DOE Assessment #1 <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>	Project boundary is not yet corrected. CAR is open
Corrective Action #2 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The project boundary has been revised to include all the power plants.
DOE Assessment #2 <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>	Project boundary under section B.3 of the revised PDD has been revised to be in line with the actual on-site visit by the validation team as well as the CEA database.. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR B4		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.4 of the PDD. Reference of the latest version number of tool to calculate emission factor is missing. Also, OM and BM emission factor values are not up to 4 decimal places. Submit emission factor and emission reduction calculation sheet.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The reference to the latest version number of tool to calculate emission factor is also updated along with values upto 4 decimal place. A copy of the detailed calculation is provided to the DoE.		
DOE Assessment #1 <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 reference of the latest CEA database and the version number of the tool to calculate emission factor is now corrected. Revised emission factor and emission reduction calculation sheet also is updated as per latest CEA database and tool to calculate emission factor. Same is checked by validation team to be correct and accurate.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR B5		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR



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Finding	CAR B5
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>Section B.5 of the PDD for demonstration of additionality is missing para and section 5.3 of the latest applied methodology ACM0002. Also references of the relevant para reference latest applied methodology ACM0002; information of Investment analysis ver. 7.0 (EB 92 annex 5) is missing.</p>
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The section B.5 of the revised PDD has been updated with relevant paras of the applied methodology and reference to the suitable paras of investment analysis has also been referred now.</p>
<p>DOE Assessment #1 <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>	<p>Section B.5 of the revised PDD is now updated as per latest applied methodology ACM0002 section 5.3 for the project activity.</p> <p>However, during the course of validation process investment analysis tool and Tool to calculation emission factor were revised by UNFCCC. In this regard project documents are yet to be updated.</p>
<p>Corrective Action #2 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>Revised PDD ver.3.1 and corresponding IRR and emission factor calculation sheet is now updated as per methodological tool: Investment analysis, version 8.0, EB 97 Annex8 and Tool to calculate the emission factor for an electricity system” – version 6.0, EB 97, Annex 7 respectively.</p>
<p>DOE Assessment #2 <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>	<p>Revised PDD ver.3.and IRR is now updated as per latest Investment analysis, version 8.0 and Tool to calculate the emission factor for an electricity system” – version 6.0. Revised PDD and IRR sheet is checked by validation team to confirm that the PDD and IRR sheet is correctly updated w.r.t default value used for benchmark calculation as per latest investment analysis tool. Further, to this latest version of emission factor is also updated in the revised PDD and emission factor sheet. Validation team has checked that the emission factor value is same for the project activity. Therefore, CAR is closed.</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed</p>

Finding	CAR B6		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR



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Finding	CAR B6
<p>Description of finding Describe the finding in unambiguous style; address the context (e.g. section)</p>	<ol style="list-style-type: none"> 1. Section B.5 of the PDD. Information as per para 29-31 of the Step 2: Investment analysis of tool for the demonstration and assessment of additionality (Version 07.0.0) is missing. 2. Step 2 (a) of Sec. B.5 does not explain the conformity investment analysis chosen (Benchmark analysis in this case) to para 32 of EB 70, Annex 8. Nor does it explain the appropriateness of the equity IRR selected as financial indicator to the project type and decision making context. 3. Section B.5 of the PDD. Selection of benchmark is not as per latest available tool cited vide EB 97, Annex 8. Submit the benchmark calculation as per latest tool. 4. Clarification is request for selection of conservative value of inflation for the benchmark calculation.
<p>Corrective Action #1 This section shall be filled by the PP. It shall address the corrective action taken in details.</p>	<ol style="list-style-type: none"> 1. Now the description has been updated to make it in conformity with para 29-31 of the Step 2: Investment analysis of tool for the demonstration and assessment of additionality (Version 07.0.0) 2. The description has been revised in the PDD to address chosen investment analysis type and the type of IRR analysed. 3. The latest tool vide EB97, Annex 8 has been included in the arrival of benchmark. 4. The inflation is used is based on most reliable data from the RBI which is considered to be the central bank for India. Hence, the choice of inflation source is apt and appropriate.
<p>DOE Assessment #1 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.</p>	<ol style="list-style-type: none"> 1. Section B.5 of the revised PDD is now correctly updated as per para 29-31 of the Step 2: Investment analysis of tool for the demonstration and assessment of additionality (Version 07.0.0). Update done by PP is checked by validation team and found to be correct and accurate. CAR is closed 2. Step 2 (a) of Sec. B.5 of the revised PDD now explains the conformity investment analysis chosen (Benchmark analysis in this case) to para 32 of EB 70, Annex 8. Also, justification for selection of the equity IRR selected as financial indicator for the project activity is also correct and accurate. CAR is closed. 3. Section B.5 of the revised PDD and the benchmark spreadsheet calculation sheet submitted by PP are not mutually correct and accurate. CAR is open. 4. Selection of the minimum value of inflation for benchmark calculation is still not correct in revised PDD and spreadsheet submitted by PP. Reference link in PDD and spreadsheet are altogether different. CAR is open.



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Finding	CAR B6
<p>Corrective Action #2 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>3. The typo error in in the PDD reflecting the 10 year inflation to be 4.00% has been corrected to make 4.70% as per the applicable inflation.</p> <p>4. The reference link included in the PDD was that of date 07/06/2016 which was post decision making date, the same was correct to the one applicable at the time of decision making. Further, the benchmark is correct in both spread sheet and PDD.</p>
<p>DOE Assessment #2 <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>	<p>3. Benchmark value is now corrected in the revised PDD sheet to be correct and in line with the IRR sheet. Validation team has checked the benchmark calculation to be correct. CAR is closed.</p> <p>4. The reference link included in the revised PDD and benchmark calculation is now corrected and updated as per the investment decision making date. Link is checked by validation team to be correct and valid. CAR is closed.</p> <p>5. During the course of validation a new finding is raised w.r.t IRR sheet Tab 'depreciation': The calculation is not consistent with the information on input values. Clarify whether this is 10/15 year basis or 12/13-years basis. CAR is open.</p> <p>6. In Section B.5 of the PDD inflation forecast for five year and ten year period is not consistent with the IRR sheet.</p>
<p>Corrective Action #3 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>5. Revised IRR sheet w.r.t ver.5.0 is now corrected w.r.t 'depreciation' calculation for the period of 25 years on 10/15-years basis. Calculation under depreciation sheet has been updated as per the DoE comment and now are calculated for "10/15 basis The resultant IRR value is now revised and updated in the revised PDD and IRR ver.5.0.</p> <p>6. The typo error is only applicable in the section B.5 of the PDD and the Benchmark remains unchanged. The "interchanging of values" had happened only in PDD and the values were corrected linked in the benchmark sheet.</p>
<p>DOE Assessment #3 <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>	<p>5. Revised PDD and IRR ver.5.0 is now corrected and updated w.r.t to depreciation rate for the period of 25 year on 10/15 year basis as per prescribed rate as per Companies Act. Revised PDD and IRR sheet is checked by validation team to be correctly updated in this respect. CAR is closed.</p> <p>6. In section B.5 of the revised PDD the typo error is now corrected w.r.t to inflation rate forecast for five and ten year period. Values are now in line with the IRR sheet. Validation team has checked the RBI link to confirm that the value is still correct and accurate in IRR sheet and there is no resultant change in benchmark value. Therefore, CAR is closed.</p>



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Finding	CAR B6
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR B7		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. Section B.5 of the PDD is shall justify and cite assumptions in a transparent manner for all techno-economic parameters and assumptions for calculation of financial indicator as per Sub-step 2c of additionality tool; para 11 of EB 92 annex 5.</p> <p>2. The reference given for each input parameter (both in the PDD and worksheet) does not contain the date and page number of the reference source/link document.</p> <p>3. Sensitivity analysis doesn't contain the explanation for input parameters with their values; that at what percent variation in the parameter the IRR the financial indicator will become zero/positive and the probability of its occurrence. Also, submit the evidence of actual values for each of the input parameters used in the assumption sheet.</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>1. The para 11 of EB 92 annex 5 has been referred while updating the description under PDD with respect to the assumptions considered.</p> <p>2. The exact page of source information has been updated in the revised PDD.</p> <p>3. The sensitivity analysis now just apart from the standard 10% variation also has information on variation at which the IRR reaches benchmark. IT includes not only percentage variation but also the value of parameters at such variation and then describes the possibility of such a scenario.</p>		



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Finding	CAR B7
<p>DOE Assessment #1 <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>	<ol style="list-style-type: none"> 1. Neither section B.5 of the revised PDD nor revised spreadsheet calculation include the input value assumptions reference/data in a transparent manner as per Sub-step 2c of additionality tool; para 11 of EB 92 annex 5. Kindly submit the actual values of input values for plausibility check of the input value comparison. CAR is open. 2. Still the reference given for each input parameter (both in the PDD and worksheet) does not contain the date and page number of the reference source/link document. CAR is open. 3. Under section B.5 of the PDD sensitivity analysis shows different value of equity IRR. Also, again reference of investment guideline is old one. Regarding input values justification, actual values of parameters have to be included in this section e.g. for tariff the input reference is tariff order for 4.5 INR/kwh. What about actual tariff rates as per PPA. Include same for other input values. CAR is open.
<p>Corrective Action #2 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<ol style="list-style-type: none"> 1. The sources of all parameters are included in the spread sheet as well as in the revised PDD in detail. The date of report is included to clarify that reference are valid as per the para 11 of the EB 92 annex 5. The actual values of input values are provided to DoE wherever possible and for the parameters subjected to sensitivity, the justification of actual scenarios are provided. 2. The date of the applicable sources are now included in the revised PDD and spread sheet. 3. The IRR values reflecting under the sensitivity table has been corrected and is consistently same everywhere. The error of reference to investment analysis reference has been corrected. Now actual values have been included for the parameters subjected to sensitivity.



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Finding	CAR B7
<p>DOE Assessment #2 <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>	<p>1. Section B.5 of the revised PDD and revised spreadsheet calculation now include the input value date and reference link available at the time of investment decision making time. Input values are now justified with the actual values observed for the project activity. Validation team has checked the same and found to be correct and accurate. CAR is closed.</p> <p>2. Revised PDD and IRR sheet now include the reference for each input parameter. Values are checked by validation team to be correct and in line with the reference document. CAR is closed.</p> <p>3. Under section B.5 of the revised PDD under sensitivity analysis shows different correct value of the equity IRR. Now, the reference of investment guideline updated to latest one. Sensitivity analysis section now includes the actual values of parameters for input value justification. Validation team has checked the sensitivity analysis to be correct and justifiable. CAR is closed.</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Additional action should be taken (finding remains open)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

Finding:	CL B1		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>1. Clarify whether the depreciation rate assumed is in conformity with IT Act.</p> <p>2. Total IT depreciation provided does not seem to equal the project cost. Clarify whether this is appropriate.</p> <p>3. Clarify how MAT was applied in the tax calculation; how it considered "Deduction Under 80IA"; and how the "Net Tax" was accounted in the cash flow, especially in the first three years for which the taxable profit is negative.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>1. The depreciation rate is in conformity to the IT act and reference has been provided in the sources.</p> <p>2. The total depreciation may not match the total project cost as the project also considers salvage value for the project.</p> <p>3. The IRR has been revised to correct the application of MAT and 80IA.</p>		
<p>DOE Assessment #1 <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>	<p>1. IRR Spreadsheet doesn't include the source/link reference of the depreciation rate considered by PP. CAR is open.</p> <p>2. OK, salvage value considered is checked to consider the total project cost. CAR is closed.</p> <p>3. Again, the source/link reference of the MAT rate considered by PP is missing. Kindly revisit the input values source references. CAR is open.</p>		



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Finding:	CL B1
Corrective Action #2 <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"> - The source of depreciation rate has been taken from the tariff order and slight correction as per the same source has been made. - The source of MAT has been included in the revised spread sheet and PDD.
DOE Assessment #2 <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"> 1. Reference link of the depreciation rate is verified to be correct and is in conformity with IT Act. CAR is closed. 2. Reference link for the MAT rate applied in the tax calculation is correct and in line with the deduction under section 80IA. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR B8		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.5 of the PDD the reference/source of the projects cited for Common Practice Analysis (CPA) is missing for CDM and Non-CDM projects for calculating the number Nall and Ndiff as per latest CPA tool. Refer section 5 of methodological tool Common practice Version 03.1. Submit CPA sheet.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The sources of projects considered to reach Nall and Ndiff as per latest CPA tool have been provided in a detailed spread sheet and the same also reflects the source of information for projects listing in CDM.		
DOE Assessment #1 <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 B.5 of the revised PDD is now updated as per Common practice guideline, ver. 03.1 (EB 69, Annex 8). Ndiff and Nall values and reference cited by project proponent is checked by validation team and found to be correct and accurate. And the total number of the project identified (both CDM & non- CDM) with the installed capacities in the range outlined are valid and correct. Therefore, it is concluded by validation team that the project is not a common practice. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR B9		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR



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Finding	CAR B9
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.5 of the PDD doesn't include the major timeline milestone related to project activity.
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	This section has been revised to include detailed chronology of the project.
DOE Assessment #1 <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 B.5 of the revised PDD is now updated to include milestone for the project activity as well as GS related timelines. The timeline table is verified by validation team along with the reference documents (as cited in Section 7) to confirm that the timeline is correct and accurate for the GS project activity. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR B10		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. Section B.6 of the PDD. Reference of methodology para reference is missing used for emission factor calculations. Submit the Emission factor and emission reduction calculation sheet for the project activity.</p> <p>2. Section B.6 of the PDD. Justification is required for not considering the off grid power plant i.e. option II as per Step-2 of the emission factor tool. Refer Figure-1 flow chart.</p> <p>3. Section B.6 of the PDD. Operation Margin and Build Margin formula used for emission factor calculation are not as per latest available equation no. 3 and 15 of emission factor tool. Submit the ER sheet as per latest emission factor tool. Update section B.6.2 accordingly.</p> <p>3. Section B.6.3 of the PDD. Project and emission reduction formula is not as per para 36 and 58 of applied methodology ACM0002. Further, calculation of $EG_{P,J,y}$ for Greenfield power plants as per 46 of applied methodology ACM0002 is missing.</p> <p>3. Section B.6.3 of the PDD. Reference of evidence of PLF value used in $EG_{P,J,y}$ calculation is missing.</p>		



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Finding	CAR B10
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<ol style="list-style-type: none"> 1. The reference to methodology is included in the revised PDD and emission reduction spread sheet with complete details has been shared. 2. The description under step two of the tool has been elaborated to explain both the options and choice used for the project activity. 3. The equations under the latest tool to calculate the emission factor of an electricity has been checked to match the equations for calculation of emission factors. 4. The formulae wherever applicable have been updated to reflect the exact terminology as mentioned in the applicable methodology. 5. The reference to the PLF source is third party report or DPR which was also submitted to bank. The same is mentioned just under the emission reduction calculations.
<p>DOE Assessment #1 <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>	<ol style="list-style-type: none"> 1. OK. Section B.6 of the revised PDD now include the correct reference of methodology para for emission factor calculations. Revised emission factor and emission reduction calculation sheet for the project activity is checked and found correct and accurate. CAR is closed. 2. OK. Section B.6 of the revised PDD is now updated to include the justification for not considering the off grid power plant as per option II as per Step-2 of the emission factor tool. CAR is closed. 3. OK. Section B.6 of the revised PDD now updated as per equation no. 3 and 15 of emission factor tool. Revised ER sheet is checked by validation team to be as per latest emission factor tool. CAR is closed. 4. OK. Section B.6.3 of the revised PDD now correctly includes the project and emission reduction formula as per para 36 and 58 of applied methodology ACM0002. Calculation of $EG_{P,J,y}$ for Greenfield power plants as per 46 of applied methodology ACM0002 is correctly updated. CAR is closed. 3. OK. Section B.6.3 of the revised PDD now include the reference of evidence of PLF value used in $EG_{P,J,y}$ calculation. CAR is closed.
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed </p>

Finding	CAR B11
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Finding	CAR B11		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.7.1 of PDD <ul style="list-style-type: none"> • The notations, monitoring/ recording frequency, and the data units used for, “Quantity of net electricity supplied to the grid in year y” are not in line to the applied methodology ACM0002. • The source of data, description of measurement methods and procedure for the monitoring parameter $EG_{facility,y}$ are not inline to the actual monitoring verified by the validation team during the site visit. PP is required to correct the same as per the actual monitoring procedure at the site i.e. prorate calculation at transformer yard and substation meter, if applicable. • The calibration frequency and accuracy class of meters and type of the meters are not defined. • Value of data (period) for the monitoring parameter is not specified. 		
Corrective Action #1 <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"> 1. The section B.7.1 has been updated to include the details as per the applicable methodology ACM0002 2. The source of data, description of measurement methods and procedure for the monitoring parameter $EG_{facility,y}$ are now revised to match the monitoring practice at site. The site has only the project connected to the GSS currently and in future as and when the new projects are added to the same feeder, there will be apportioning applied. 3. The calibration frequency and accuracy class are mentioned in the section b.7.1 of the revised PDD. 4. The value of data is mentioned in the table and is as per the estimate from the DPR. The same has been used for estimation of emission reduction calculations. 		
DOE Assessment #1 <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 B.7.1 of revised PDD is checked by validation team to include monitoring/ recording frequency, and the data units for monitoring parameter as per actual practice followed on-site. Source of data for the monitoring parameter $EG_{facility,y}$ is correct and now inline to the actual monitoring verified by the validation team during the site visit. Accuracy, calibration, periodical testing and maintenance procedures of monitoring equipment are clearly mentioned in the section B.7 of PDD. Validation team has reviewed the same and is convinced that the same is adequate and will lead to correct measurement of the net electricity exported to the grid. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		



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Finding	CAR B12		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Section B.7.3 of PDD <ul style="list-style-type: none"> PP is required to incorporate the details of monitoring approach with the organizational structure consisting of responsibilities and competencies, Internal QA/QC, document control, Troubleshooting procedures, maintenance procedures, data archive, data protection, trainings, roles and positions for the proposed CDM project activity as per the PDD guidelines. PP is required to incorporate the single line diagram of metering arrangement and/or apportionment approach (if applicable for project activity in future) used for calculating net electricity exported to the grid. 		
Corrective Action #1 <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"> The description under section B.7.3 has been updated to include the details of monitoring approach. Please note that apportion not applicable currently for the project activity and hence no single line diagram has been updated. The method to calculated net electricity is described in the earlier sections and the same shall be followed in case apportioning is introduced in future. 		
DOE Assessment #1 <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"> Section B.7.3 of the PDD is updated but not in track change mode. Kindly note every revision has to be in track change mode. CAR is open. Single line diagram of metering arrangement and/or apportionment approach is missing. CAR is open. 		
Corrective Action #2 <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"> The section B.7.3 has been updated in track change mode. Representation of metering has been included in the revised PDD's section B.7.3. No apportion method is included as the billing is based on direct reading from the GSS and no other WTGs are connected to the same meter neither any transmission losses needs to be calculated. 		
DOE Assessment #1 <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"> The section B.7.3 of the revised has been updated in track change mode. CAR is closed. Section B.7 of the revised PDD now include the single line diagram of metering arrangement and details of apportionment approach (not under the control of PP) used for calculating net electricity exported to the grid. Same is verified by validation team during site visit and interview with the site personnel to confirm that the information is correct and accurate. CAR is closed. 		



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Finding	CAR B12
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR C1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Expected operational lifetime of the project activity considered in section C of the PDD doesn't refer any supporting evidence.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The technical description of the project WTGs reflect the complete details and also clarifies the expected lifetime of the same.		
DOE Assessment #1 <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>	Document for the lifetime is submitted. However, footnote is missing in section C.1.2 of the PDD. CAR is open.		
Corrective Action #2 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The reference has been included in form of a foot note under the section C.2 of the revised PDD.		
DOE Assessment #2 <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 operational lifetime of the project WTGs has been determined (by the manufacturer) as 25 years which corresponds to the standard design life time of turbines and has been verified from the technical specification ^{TS/} provided by the WTG supplier. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR C2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	In section C.2.2 of the webhosted PDD, the start date of crediting period is considered unrealistic considering the times needed for validation and registration.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the</i>	The start date of the crediting period has been revised as per the possible time required for validation and registration.		



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Finding	CAR C2
<i>new version No.</i>	
DOE Assessment #1 <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 project start date of crediting is clearly defined in section C of the PDD CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CAR D1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	In section D.1 of the webhosted PDD, the reference of the amendment notification of the MoEF is missing.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details. In case the PDD is changed as part of the CA, the PP is requested to indicate the revised sections as well as the new version No.</i>	The description under section D.1 has been updated to include details of notification dated 2009.		
DOE Assessment #1 <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 D.1 of the revised PDD now include the information that an EIA is not required for Wind power projects in the host country as per Ministry of Environment & Forests (MoEF), Govt. of India guidelines. However, the PP has undertaken an environmental and social impact assessment that has concluded only positive impacts. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

Finding	CAR F1		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<ul style="list-style-type: none"> Section E.1 of the PDD/Passport project proponent has not included the date of advertisement given in local newspaper for local stakeholder feedback meeting conducted for the said project activity. Submit the summary report of the comment received from local stakeholders as per requirement cited vide EB 87 Annex 12. 		



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Finding	CAR F1
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The details of stakeholders' feedback round have been provided in the revised passport provided to DoE. The PDD has been revised accordingly.</p> <p>The details of comments as well are provided under the revised passport.</p>
<p>DOE Assessment #1 <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>	<p>Section E.1/E.2 of the revised Passport now includes the date of invitation given vide invitation letters and/ or public notice for the said project activity. Date is checked by validation team to be correct and accurate. CAR is closed.</p> <p>Revised GS passport document include the summary of the comment received from local stakeholders. CAR is closed.</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Additional action should be taken (finding remains open)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

Finding	CAR F2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>The written Host Country Approval (HCA) letter received for the project activity is not yet submitted by the project proponent to DOE.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The project activity is now going ahead with GS registration and hence HCA is not required. However, the project proponent has already approached the MoEF for allocating HCA as the project may choose to approach CDM board in future.</p>		
<p>DOE Assessment #1 <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>	<p>Since, client is not going for CDM track, the finding lost its relevance.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Additional action should be taken (finding remains open)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>		

Finding	CAR F3		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>Modalities of communication (MOC) for the project activity is not yet submitted by project proponent to validation team</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>A copy of MoC is required only for CDM and as per the currently requirement it may not be relevant.</p>		



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Finding	CAR F3
DOE Assessment #1 <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>	Since, client is not going for CDM track, The finding lost its relevance.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Finding	CL A1		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Following documents/documentary evidence should be submitted: a) Operating life of the project activity b) PPA for project activity c) Loan application and sanction letter (debt:equity) d) O&M agreement for project activity and old project if any e) Commencement of generation certificate f) Generation since COD of the project activity g) Copy of Stakeholder Public Notice h) Insurance Premium paid for project activity and old project if any Kindly ignore the documents already submitted.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The list of documents are provided to DoE.		
DOE Assessment #1 <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 the supporting documents are now submitted by PP; same are checked by validation team to be correct w.r.t to information given in PDD, IRR and ER sheet. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

GS Finding	CL A2		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Clarification is requested if GS project was previously announced.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Description under section C.3 of the revised passport has been updated to elaborate the project previous announcement.		



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GS Finding	CL A2
DOE Assessment #1 <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 C.3 of the GS passport contains information that the project was not announced before as going ahead without carbon finance. Furthermore, additionality of the project has been demonstrated in line with CDM guidelines. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

GS Finding	CAR A5		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Passport version 01, Section B: Project description doesn't include commissioning status and technical details of project activity equipment details.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The commissioning dates have been included in the revised passport's section B. The technical details of the project equipment are already provided under the section A.3 of PDD of the same project.		
DOE Assessment #1 <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>	OK. Revised passport include the commissioning as well as technical details of the project activity. Same is checked by validation team and found to be correct and accurate. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

GS Finding	CAR A6		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Passport version 01, Section D.1: GPS-coordinates of WTG along with villages and WTG IDs are missing . (refer GS PDD)		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The passport has been revised to include GPS-coordinates of WTGs in degree/minute/The complete table has been updated as there was typo error in the WTG ID number. The project project's geo-coordinates provided are valid. Now the details of villages in which WTGs are located as well included in the same table. second.		



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GS Finding	CAR A6
DOE Assessment #1 <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>	Geographical co-ordinates of the project WTGs is now included in the revised passport document with name of villages. Same is cross verified by validation team during site visit. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

GS Finding	CAR A7		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Submit Official Development Assistance Declaration; Declaration of Other Certification Schemes for double counting and/or Annex M and Annex S as cited vide GS requirements.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The ODA has been provided to the DoE along with Annex-M & Annex-S of GS.		
DOE Assessment #1 <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>	Annex D, Annex M & Annex S are now submitted to validation team as per the requirement sought in GS toolkit. Annex 1 of the passport has also been completed accordingly. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed		

GS Finding	CAR F3		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR



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GS Finding	CAR F3
<p>Description of finding Describe the finding in unambiguous style; address the context (e.g. section)</p>	<ol style="list-style-type: none"> 1. Passport version 01, Section E.1: The list of stakeholders who attended the meeting is not included. PP has to submit SFR document to ensure that Sustainable Development, NO Harm assessment, Sustainability monitoring parameters and GS aspects were discussed with stakeholders. 2. Passport version 01, Section E.2: <ol style="list-style-type: none"> 1) The date of the invitation and date for upload of documents to begin SFR process was not indicated 2) The invitation letters and source where the documents were uploaded were not indicated. 3) The list of invited stakeholders was not indicated. 4) The outcome of the SFR shall be included. 3. Passport version 01, Section E.2: Grievance mechanism is missing, also review and monitoring of same is elaborated w.r.t responsibility/authority.
<p>Corrective Action #1 This section shall be filled by the PP. It shall address the corrective action taken in details.</p>	<ol style="list-style-type: none"> 1. The original attendance list has been included as annex2 to the Passport. It has the details of majority of the participants of SFR. During the SFR meeting all the aspects of GS were discussed and elaborated. 2. Section E.2 <ol style="list-style-type: none"> 1) The date of invitation and document uploaded dates to initiate the SFR process has been included in this section 2) The details of invitation sent in the form of table have been included in the section E.2. Further, sample invitation is also provided as annex 3 to the passport. 3) The list of invited stakeholders apart from the generation notices and newspaper advertisements in provided in the form of a table in section E.2 of the revised passport. 4) The complete details of meeting, comments and addressing the comments has been elaborated in the section E.2 of the revised Passport.



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GS Finding	CAR F3
<p>DOE Assessment #1 <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>	<ol style="list-style-type: none"> 1. Section E.1 of the revised passport document now include the list of stakeholders who attended the meeting. CAR is closed. 2. Section E.2 of the revised passport document is now revised and updated to include: <ol style="list-style-type: none"> 1) The date of the invitation and date for upload of documents to begin SFR process 2) The invitation letters and source where the documents were uploaded 3) The list of invited stakeholders 4) The outcome of the SFR <p>It is concluded the SFR is conducted in accordance to GS v2.2 toolkit guidelines and fulfilled the relevant criteria of the Gold Standard Stakeholder Consultation.</p> 3. Section E.2 of the revised passport document now includes the grievance mechanism and its on-site monitoring along with its responsibility/authority. The project owner has informed us on the grievance mechanism and grievance register kept at the office.
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

GS Finding	CAR SD1		
<p>Classification</p>	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<ol style="list-style-type: none"> 1. Passport version 01, Section F.1, Description of relevance to project: The description of relevance doesn't include the reference/source link for all safeguarding principle relevant for the project activity like Land, EIA etc. 2. Passport version 01, Section F.2, SD Matrix: Describe how the selected SD indicator by project proponent is related to local MDG goals, provide reference link for the said information (if any). Refer Annex-I Guidance on SD indicators. 3. Passport version 01, Section F.2: All sustainable development indicators scored as zero, neutral and positive must be justified with the help of reference document in SD Matrix. Include justification paragraph for all the sustainable development indicators as faced/applicable for the project activity. 		



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GS Finding	CAR SD1
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<ol style="list-style-type: none"> 1. The section F.2 has been revised extensively to include reference wherever possible and description elaborated wherever necessary. 2. The section F.2 has been elaborated to include the MDG goals wherever applicable. All the information in the project has been referred from the ESIA study report and the same is provided to DoE. 3. The justification on impact of the project on each parameter has been provided in the table of section F.2. Based on the same impact the conclusion of project's score on that particular indicator is decided.
<p>DOE Assessment #1 <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>	<ol style="list-style-type: none"> 1. Section F.1 of the revised passport now include the reference/source link for all safeguarding principle relevant for the project activity Section F.1 of Passport was reviewed and compared with Annex H. During the onsite assessment, the local stakeholders and workers were interviewed. CAR is closed. 2. Section F.2 of the revised passport now linkage of local/national MDG goals with the SD indicators as per annex-I Guidance on SD indicators. In the SD matrix, each of the indicators includes a scoring of either positive "+" or neutral "0". There are no negative scoring for any indicators. Section F.2 of the revised passport is reviewed to confirm the information is inline with assessment and interview during onsite. Therefore, scoring for the SD indicators is considered appropriately. CAR is closed. 3. Section F.2 of the revised passport now include the appropriate justification for all the sustainable development indicators which are scored as zero, neutral and positive. Justification along with the reference source is checked by validation team and found to be correct and appropriate. CAR is closed.
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

GS Finding	CAR SD2		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	Passport version 01, Section G: Please clarify how the information provided for the parameters number 2, 4 (Chosen parameter, Current situation of the parameter, Estimation of the parameter, future target) are arrived at, for project activity case.		
<p>Corrective Action #1 <i>This section shall be filled by</i></p>	The description under the table of indicators 2 and 4 has been revised to elaborate the Chosen parameter, Current situation of the		



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GS Finding	CAR SD2
<i>the PP. It shall address the corrective action taken in details.</i>	parameter, Estimation of the parameter, future target.
<p>DOE Assessment #1 <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>	Section G of the revised passport document now include the information w.r.t to monitoring parameters for its overall monitoring aspect. Validation team verified the monitoring plan complies with the requirements of the Gold Standard version 2.2. The DOE has validated the monitoring plan in section G of the Passport and confirms that the monitoring plan contains all necessary parameters that are clearly described and that the means of monitoring described in the plan complies with the requirements of Gold Standard version 2.2. CAR is closed.
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p> <input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed </p>

5 VALIDATION ASSESSMENT SUMMARY

5.1 General Description of the Project Activity

5.1.1 Participation: Country Eligibility

- The host country has ratified the Kyoto protocol and has no cap on GHG emissions.
- The proposed large-scale PA is not part of any other certification scheme and is being simultaneously validated as a GS project.
- No public funding and therefore no ODA used in the project activity
- The GHG considered is CO₂, which is eligible under GS
- The proposed PA falls under the Renewable Energy Supply Category

5.1.2 Project Participants

The project participant for the project activity is Orange Bercha Wind Power Private Limited which is a private entity.

5.1.3 Pre-feasibility Assessment

The project seeks registration under the retroactive project cycle since the starting date of the project activity is after the start of validation. No pre-feasibility assessment is required as per GS applicable requirements¹. Furthermore, the project proponent applies for 'fast-track' process for retroactive projects in line with the eligibility criteria stated in Gold Standard guidelines and the project type is eligible for fast-tracking.

5.1.4 Contribution to Sustainable Development

Besides GHG emission reduction, the proposed project will contribute to sustainable development. All sustainable development indicators have been scored either as 0 or +. The scoring of SD indicators relative to the baseline scenario and the sustainability monitoring plan is deemed to be sufficient in accordance with T.4.1 requirements. Where negative impacts are expected, appropriate mitigation measures have been conducted or proposed during the operational phase of the project activity.

5.1.5 PDD & Passport Editorial Aspects

¹ Email confirmation from the GS

The PDD is in compliance with the latest PDD template version 10.1 and completed as per template and CDM guidelines. The PP has applied the latest GS passport GSv2.2.

5.1.6 Technology to be employed

The project is a Greenfield wind power project and therefore under the renewable energy supply category. The description of the project in the PDD complete and accurate and provides an understanding of the proposed PA and the GSP is deemed to be consistent with the PDD.

5.1.7 Small Scale Projects

This is a large-scale Wind power utility scale project applying the approved and applicable CDM methodology ACM0002, version 17.0

5.2 Project Baseline, Additionality and Monitoring Plan

5.2.1 Application of the Methodology & Methodological Tools

The project applies a valid version of the CDM Methodology ACM0002, version 17.0 approved by the CDM Executive Board. All applicability conditions of the methodology and applied GEF tool have been met and outlined in the PDD. The project does not expect to result in significant emissions, related both to project and leakage, other than those listed in the methodology.

5.2.2 Project Boundary

As per ACM0002, version 17.0, the spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the project power plant is connected to.

The project boundary as validated includes the proposed PA and its facilities, the integrated national grid and all power plants connected to it.

5.2.3 Baseline Identification

The baseline scenario is pre-defined and prescribed by the applied methodology as the "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 (CM) calculations described in the "Tool to calculate the emission factor for an electricity system version 6.0."

5.2.4 Calculation of GHG Emission Reductions

During the validation the calculations of GHG emissions reductions and the grid emission factor for Indian grid have been checked from the CEA database. In The ER calculation is as following:

$$\begin{aligned}
 ER_y &= BE_{,y} - PE_{,y} - LE_y \\
 &= 107,058 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} \\
 &= \mathbf{107,058 \text{ tCO}_2\text{e}} \\
 BE_{,y} &= EG_{PJ,y} * EF_{grid,CM,y} \\
 &= 109,500 \text{ MWh/yr} \times 0.9777 \text{ tCO}_2/\text{year} \\
 &= \mathbf{107,058 \text{ tCO}_2\text{e}}
 \end{aligned}$$

Where:

ER_y Emission reductions

PE_y : Project emissions

$BE_{,y}$: Baseline emission in year y; (tCO₂/year).

$EG_{PJ,y}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y y

$$EG_{PJ,y} = EG_{facility,y}$$

$EF_{grid,CM,y}$: Combined `margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system”

According to the methodology,

$$PE_y = \mathbf{0 \text{ tCO}_2\text{e}}$$

As per §60 of the applied baseline and monitoring methodology ACM0002, version 17.0, no leakage emissions are considered for this project activity.

$$LE_y = \mathbf{0 \text{ tCO}_2\text{e}}$$

The calculation of GHG emission reductions has been done as per the applied and applicable methodology & related tools. Also, all data sources and assumptions for the ex-ante fixed parameters are appropriate and the corresponding calculations correct and applicable to the project activity. The estimated emission reductions are therefore plausible and conservative.

5.3 The Additionality Screen

Consideration of CDM/carbon credit revenue in decision making (if project start is before validation)

The starting date reported as the earliest date at which either the implementation or construction or real action of a project activity begins. In the case of the project activity, the start date of the project activity 24/01/2016 is the date on which the first purchase order was signed by PP^{/PO/}.

PP has also demonstrated using milestones and actions that GS registration was seriously considered throughout the decision making process.

Previous announcement check

The GS Passport provides a statement that the proposed project activity was not previously announced without revenues from carbon credits. PP has demonstrated milestones to indicate that carbon finance was integral in the decision making process. Validation team has checked and ensured the same by verifying the Management/investment decision^{/MD/} taken by board of directors of the company for consideration of carbon credit revenues.

Alternatives

Not applicable as the baseline is pre-defined and prescribed by the applied methodology

Investment analysis

The PP has considered to the investment barrier mentioned in EB 35 Annex 34 to demonstrate additionality and carry out the investment analysis. This has been described in section B.5 of the PDD. The investment analysis has been validated against the requirements of the methodology tool “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8).

PDD demonstrates that the project would not be economically attractive or financially feasible, without the revenue from the sale of certified emission reductions (CERs). In order to assess the claim of the project developer that the project scenario is not economically viable without benefits from VER 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

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.

Benchmark selection

PDD demonstrates that the project will not be financially feasible, without the revenue from the sale of verified emission reductions (VERs). The claim of the project developer that the project scenario is not economically feasible without benefits from CER sales has been assessed by the Validation Team through the following steps:

The PP has selected benchmark analysis method to demonstrate the additionality as per the methodology tool “Tool for the demonstration and assessment of

additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8).

As the project activity brings in additional revenues from the supply of electricity to grid via power purchase agreement (PPA)^{PPA} for project activity; the alternative to the project activity is the supply of electricity from a grid, project developer has adopted benchmark analysis in conformity with methodology tool “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8).

Project developer has chosen and demonstrated investment barrier by selecting a benchmark and equity IRR as financial indicator. Since in this instance, 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 methodology tool “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8). And hence post-tax equity IRR is one of the financial indicators recommended by additionality tool for additionality demonstration. Therefore, the investment analysis and the financial indicator are considered appropriate for the project type and decision-making context. Hence, post-tax equity IRR is considered as correct and appropriate.

Benchmark calculations: The requirements issued in methodology tool “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8) states that in cases where a benchmark approach is used the applied benchmark shall be appropriate to the type of IRR calculated. Cost of Equity (CoE) & Weighted Average Costs of Capital (WACC) are appropriate benchmarks for Equity IRR and Project IRR respectively. As per para 18 of investment analysis tool internal company benchmark is not applicable as there are more than one project developer and thus as per para 18, the benchmark is based on parameters that are standard in the market. In the draft and final PDD submitted for registration, the project proponent has applied the benchmark applied for the project activity as the expected returns on equity which is calculated based on the methodology tools “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8) which works out to be 15.93%.

As per appendix of the investment analysis tool project proponent has calculated the benchmark for the project activity based on the default value for the expected return on equity, as provided in Appendix of EB 97, Annex 8. Since, the project activity falls under Host Country India, Group 1 (Energy Industries) hence the real value for expected return on equity is 10.73%. As the investment analysis is carried out in nominal terms, this value has to be converted to nominal values by adding the inflation rate of 4.70%, which is the median value of Consumer Price Index (CPI-Combined) as forecasted by Reserve Bank of India for 10 years period. Accordingly,

the resulted benchmark (as per EB 97, Annex 8) considering this approach arrived at a value of 15.93% which is correct, conservative and appropriate.

Therefore, the validation team confirms the benchmark value of 15.93% chosen by PP at the time of investment decision making to be appropriate and reasonable. Validation team cross-checked the financial additionality of the project activity by comparing the Equity IRR against default value based return on equity from “Appendix of Default values for the expected return on equity” of EB 97, Annex 8, the value calculated is 10.73%. The default value relevant for the project activity is 10.73% and the appropriate inflation rate is 4.70 % (RBI projected inflation rate expected over the next ten years i.e. duration of crediting period).

Hence as per methodology tool “Investment analysis” ver.8.0 (EB 97 annex 8) the return on equity (RoE) in nominal term value comes out to be as:

$$= (1 + \text{Default Return on Equity as per EB 97, annex 8, in real term}) * (1 + \text{Inflation rate}) - 1 \\ = (1 + 10.73\%) * (1 + 4.70\%) - 1^2 = 15.93\%$$

Therefore, the benchmark considered by the PP during investment decision making is correct and appropriate. As per EB 97 Annex 8 using RBI data for 10 year inflation rate in the host country has been correctly. Thus, the benchmark value of 15.93% as per EB 97 Annex 8 is calculated for the project activity is reasonable and acceptable.

Additionally, PDD explains in details the sources of data, methodology adopted and the conservativeness of the benchmark selected. Validation team checked the data and found that the data used are from reliable and credible sources, methodology adopted is correct and the calculations are in order. The benchmark chosen is suitable for the type of financial indicator selected, and is in conformity with the methodology tool “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8) and also VVS latest version requirement.

Financial indicator calculation is based on the detailed project report (DPR) and MPERC tariff order which were available at the time of decision making. Copies of all the documents as referred in section 7 (References) of this report have been submitted to DOE. Validation team checked the values with the documents furnished by PP and also those that were publicly available. The input parameters used, basis thereof and appropriateness of the input parameters used are given in Annex 3. CARs/CLs have been raised on non-conformities and errors and they have been duly corrected. After closure of all CARs/CLs, validation team arrived at the conclusion that the assumptions and computations in the IRR spreadsheet are in conformity with methodology tool “Tool for the demonstration and assessment of additionality” ver.7.0.0 (EB 70 annex 08) and “Investment analysis” ver.8.0 (EB 97 annex 8) read with requirements mentioned in latest version of the VVS.

² <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=16710>



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The financial indicator – post-tax equity IRR works out to 10.51%, which is lower than the benchmark value of 15.93%. Selected input parameters, viz., generation i.e. PLF, power cost, O&M cost, tariff have been subjected to variation of $\pm 10\%$ in conformity with methodology tool “Investment analysis” ver.8.0 (EB 97 annex 8) and the results are given below:

Parameters	-10%	Baseline	+10%
PLF	7.63%	10.51%	13.35%
O&M Cost	10.82%	10.51%	10.20%
Project Cost	13.84%	10.51%	7.94%
Tariff	7.73%	10.51%	13.26%

The analysis and the results reveal that the financial indicator does not equal the benchmark even when the critical parameters are subjected to reasonable variation. Further analysis reveals that for the financial indicator to equal the benchmark, when

Parameter	Breaching Value
Project Cost	Decreased by 15.02 %
Tariff	Increased by 19.38 %
PLF	Increased by 18.68 %
O&M Cost	Decrease by more than 100 %

For the project activity; an increase in PLF by 18.68% will tantamount to WTGs achieving PLF of ~29.67% on a sustained basis for 25 years. Therefore, the possibility of achieving PLF of ~29.67% on sustained basis for 25 years^{/DPR/} is ruled out as for the project the PLF as per study^{/DPR/} done is 25%. Hence the validation team confirmed that the achieving of cross over PLF is not possible.

The actual project cost of the project is approximately ~7.5% less than the cost reckoned in the financial indicator which is as per the detailed project report prepared by SBI Cap at the time of investment decision making. Post-tax equity IRR reaches benchmark only if the cost of project is reduced by ~15.02%. Furthermore, since the project activity is operational and the costs have already been incurred by the project participant, validation team has reviewed the purchase orders issued by the PP and confirmed that the actual project costs within the sensitivity range considered. Purchase orders submitted by project proponent are verified by validation team to confirm the same. Since the project has already been implemented any reduction in the capital cost is hypothetical. Hence, the occurrence of any of the above mentioned events is hypothetical.

O&M cost is not at all critical as even a 100% reduction in O&M cost does not render the project non-additional. A decrease in O&M cost to zero is not feasible considering the high inflation rate in the host country and without periodic maintenance, operation of WTG is not possible. Since the PP had already committed to the O&M service

provider with an annual escalation of 5% from 2nd year onwards there is no possibility for reduction in the O&M cost.

Project participant had considered INR 4.78/kWh as electricity tariff fixed for 25 years of project's lifetime. It is checked and confirmed from Madhya Pradesh Electricity Regulatory Commission (MPERC) tariff order dated 26/03/2013 in the DPR report. Since, it was available and applicable at the time of conceptualization of the project activity, methodology tool "Investment analysis" ver.8.0 (EB 97 annex 8) is followed and it is accepted. To further cross-check the appropriateness of the electricity tariff, Power Purchase Agreement^{/PPA/} has been checked out and entire power generated will be exported to grid for which necessary PPA has been entered into with distribution company. Moreover, the sensitivity analysis reveals that any increase in tariff by ~19.38% for the entire life of the project activity is unlikely to render the project non additional.

In summary the validation team concluded that the project activity complies with all relevant additionality requirements and deemed the investment barrier to be significant in order to prevent the project activity from being implemented without additional revenues from CERs.

However, during the course of validation process validation team has raised the finding (refer section 4 above) which were closed successfully.

Barrier analysis

Investment barrier through investment analysis is identified for this project activity to prove additionality. The same is detailed in the above sections. No other barrier analysis is considered for this project activity

Common practice analysis

Common practice analysis of the project activity has been performed as per Common practice guideline, ver. 03.1 (EB 69, Annex 8).

Step 1: The wind power capacity of the project activity being 50 MW (25 numbers X 2.0 MW), the applicable range for the common practice analysis is (\pm 50% of the capacity) is 25 MW (-50% of installed capacity) to 75 MW (+50%) of installed capacity.

Step 2: As per the para 1 of the Common practice guideline, the project proponent has chosen the entire host country as the geographical area for the purpose of common practice analysis and considered electricity generation using wind energy is an output. The total number of power plants, operating at the time of project start date, within the capacity range of 25 MW to 75 MW has been verified from the Wind Power Directory. Therefore, the total number of the project identified (both CDM & non- CDM) with the installed capacities in the range outlined above are 61 are valid and correct. Validation team has verified the same from published Indian Wind power

directory and publically available sources i.e. UNFCCC webpage^{/UNFCCC/} and IGES CDM Project Database

Step 3: N_{all} : As verified from the UNFCCC webpage out of these 61 projects 9 projects are registered CDM projects, requesting registration, or undergoing CDM validation activities. Therefore, N_{all} comes out to be **9**.

Step 4: N_{diff} has been calculated based on the different investment climate in the host country. Wind power projects which are different wind policies and tariffs (from state to state) have been considered. Validation team has checked the policies/tariff for states which are regulated by the respective State Electricity Regulatory Commission in India. The power project installed by Orange Bercha Wind Power Private Limited is located in Madhya Pradesh state of India. Therefore, projects installed in other states except Madhya Pradesh state have been considered in N_{diff} calculation.

Therefore, $N_{diff} = 9$.

Step 5: As aforementioned, N_{all} is 9 and N_{diff} is 9. Hence,

1. $F = 1 - N_{diff}/N_{all} = 1 - (9/9) = 0$
2. $N_{all} - N_{diff} = 9 - 9 = 0$

As per paragraph 18 of the EB 84 Annex 7 i.e. Guidelines on Common Practice (ver. 03.1 EB 84, Annex 7); the project activity would be a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and $N_{all} - N_{diff}$ is greater than 3. And as per step 5 above since the factor F was calculated as $F = 1 - N_{diff} / N_{all} = 0$, which is below 0.2. Hence it was validated that the Project is not common practice within the sector in the geographical area.

Therefore, it is concluded by validation team that the project is not a common practice in host country i.e. India..

ODA Additionality Screen

The project will not involve public funding. Therefore, no ODA is to be involved. PP has provided an ODA declaration to the GS and the validation team. The same is included in Annex 1 of the GS Passport

Technology transfer and / or knowledge innovation Summary

There will be technology transfer to the host country India through human capacity development and trainings. Wind power technologies have not been established in the host country as explained and referenced in the GS PDD.

5.4 Monitoring Methodology & Monitoring Plan

Carbon Monitoring Plan

The carbon monitoring plan is in compliance with the applied monitoring methodology and tools and all parameters ($EG_{\text{facility},y}$) necessary to estimate GHG reductions included.

Sustainable Indicator Monitoring Plan

The GS Sustainability Monitoring Plan has been assessed and found to be in compliance with the applied methodology and relevant GS annexes.

The GS Sustainability Monitoring Plan as demonstrated in Section G of the Passport is in compliance with the requirements of GS guidelines and toolkit version 2.2.

The validation team has validated the monitoring plan in section G of the Passport and confirms that the monitoring plan contains all necessary parameters that are clearly described and that the means of monitoring described in the plan complies with the requirements of Gold Standard version 2.2.

The result of outcome sustainability assessment is provided in section F of the Passport (Do no harm assessment in section F.1 and Sustainable development matrix in section F.2). An assessment of the same i.e. Do no harm assessment by the validation team is given below:

“Do No Harm Assessment”

In line with GS requirement, the following safeguarding principles are assessed by validation team as a part of “Do No Harm Assessment”

The GS project activity follows internationally recognized human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicity in Human Rights abuses: the electricity generated from the wind power project activity units are directly sold grid therefore, the families and the dignity, cultural properties and uniqueness of indigenous people has not been affected. Hence validation concludes that the risk assessment is low;

The project does not involve and is not complicit in involuntary resettlement: the risk associated by the project activity is low since the project doesn't involve any involuntary resettlement of the local community;

The project does not involve and is not complicity in the alteration, damage or removal of any critical cultural heritage: the project activity is implemented in already existing households and there is no alteration, damage or removal of cultural heritage. Hence the risk associated by the project activity is low for this parameter;

The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights: the company adheres to labour ILO labour practices and Indian government labour rules. Therefore the risk associated is low and hence no mitigation measures needed;

The project does not involve and is not complicit in any form of forced or compulsory labour: the company adheres to Factories Act of India, 1948 and labour ILO labour practices and Indian government labour rules. Therefore the risk associated is low and hence no mitigation measures needed;

The project does not employ and is not complicit in any form of child labour: the company adheres to labour ILO labour practices and Indian government labour rules. The project participant has an internal HSE policy and anti-child labour policy to ensure prohibition of unlawful employment of children below 18 years and the company adheres with this law. Hence the risk associated is low and therefore no mitigation measures needed;

The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis: the company adheres to labour ILO labour practices and Indian government labour rules. Therefore the risk associated is low and hence no mitigation measures needed;

The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments: the project activity doesn't involve any unsafe and unhealthy work environment and no hazardous materials are involved in the project activity. Therefore only low risk associated and hence no mitigation measures required;

The project takes a precautionary approach in regard to environmental challenges and is not complicity in practices contrary to the precautionary principle: The project does not lead to release of any hazardous substances that pose threat to the environment. Therefore only low risk associated and hence no mitigation measures required;

The project does not involve and is not complicity in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value or (d) recognized as protected by traditional local communities: this principle has the low risk as the project activity neither produces nor installs nor operation threatens the natural habits;

The project does not involve and is not complicit in corruption: The project does not involve and is not complicit in corruption. The project participant has an internal anti-corruption policy and all validation team found that all the employees are aware of this policy and has taken necessary steps to ensure that the project activity does not involve and is not complicit in any form of corruption. Therefore, no mitigation measures are needed;

Any relevant critical issue for the project: this principle is not relevant for the project as a conclusion, no mitigation measures were needed for the “do not harm”

assessment principles. The validation team considers the “do not harm” assessment results reasonable and adequate.

The DNH has been conducted sufficiently in consideration of the project technology and circumstances, following the guidelines of Annex H of GSv2.2.

The sustainability monitoring plan included in the GS Passport as per the requirements in the GS Toolkit Annex I is tabulated as follows:

Table 5-4: Assessment of monitored SD Indicators

No	Indicator	Validation Opinion
1.	Air Quality	<p>The project is a wind power plant that does not emit GHG such as SO_x and NO_x during operation. Therefore, has no impact on air quality.</p> <p>However, during construction phase of the project activity dust and CO₂ emissions from trucks and other transport vehicles will be generated. Further, since the project is already commissioned and as verified during site visit there is not any situation which can entail the generation of dust therefore operation of wind power project will not lead to any significant environment impact.</p> <p>The project applies for retroactive registration, therefore during the onsite assessment, the project is already in operation and not able to assess the situation during construction.</p> <p>In this regard, a positive score is assigned for project since as the impact on air quality during operation has not any significant negative impact on surrounding environment. Nonetheless, as verified during site visit interview with PP and stakeholders adequate measures were taken to mitigate the envisaged impacts like spraying water on the road side to reduce dust level (which was very minimum)..</p>
2.	Quality of employment	<p>The implementation of the project will create employment during construction and operation phases. At the time of onsite visit and interview with the project proponent and site personnels, the project has employed approx. 14 persons to manage and operate the power plant on a shift basis. The employees are provided with proper accommodation and medical as required by local laws. The employees have received proper training to manage the power plant. With the implementation of this project, it has created quality of employment by introducing technical and non-technical jobs to the local population, as opposed to the baseline farming pre-occupation activities. Operation and maintenance Staff will be trained and compensated better with long term jobs. A positive score is deemed appropriate.</p>
3.	Livelihood of the poor	<p>Livelihood of the poor has got improved during the implementation of the project activity and same is evidenced to validation team during site visit and interview with the project proponent as well as with the local personnel including the ones who are working in the project activity. As a part of CSR activity also project proponent is doing the socio-economic activities (which included education, health and water related programmes) with local school, local village Panchyat for education, health and water related programmes. Therefore, a positive score is deemed appropriate</p>
4.	Access to affordable and clean energy services	<p>The project activity is a wind power plant using wind to generate renewable energy to reduce the dependency of fossil fuel as an affordable energy to local populations. The power plant is connected to the national grid of India and will assist to reduce power shortage in the country. During the onsite</p>

		stakeholder meeting, the stakeholders could confirm there is no much power failure with the implementation of the project. And in the near future also power availability will increase in the local region and state also. In this aspect, the score for this indicator is positive.
5.	Quantitative employment and income generation	According to the stakeholders interviewed during onsite assessment, the project hired local communities during construction phase and around 60 workers were involved during the construction phase of the project activity. During the operation phase, 14 persons were employed to operate the power plant. Since the project will create employment and income generation, a positive score for this indicator.
6	Soil condition	As verified during site visit it is confirmed that the proposed project will not cause any kind of land occupation and no deforestation/plantation removal was necessary since the wind farm construction was in erection-point basis and they will not produce any pollutants to the solid during both the construction and operation phase. Further, the wind power project activities during its construction and operation phase do not release any pollutants into or change the organic matter content of the soil. As there is no impact of this parameter it is considered to be neutral. Hence the solid condition will not be affected. The indicator is scored 0.
7	Other pollutants	It is confirmed by validation team that the proposed project complies with the noise level standard (Local and National standards). Via on-site investigation, it is confirmed that the main construction sites are not adjacent to the local communities, thus the impact of noise is limited. And the projects site is far away from the village and mitigation measures implemented during construction work. In addition, during the construction period, no special materials or processing procedure will be added. During the operation period, no any harmful pollutants can be produced. The indicator is scored 0.
8	Biodiversity	It is confirmed by validation team that project will not affect genetic diversity, alter or destruct natural habitat or deplete stocks of renewable resources. Further, as verified during site visit and interview with PP the project does not involve forest land, and there are no notified wildlife sanctuary and national park which can affect local Biodiversity. The indicator is scored 0.
9	Human and institutional capacity	The project does not have any impact on gender equality, social structures, and access to schooling or distribution of assets. Therefore, the indicator is scored 0.
10	Balance of payments and investment	According to the GS Passport, foreign currency will be obtained through VER sale. However, compared to the baseline, there is no indication that foreign currency is required for local investment activities. The project also adopted the domestic equipment such as wind generators and turbines, thus there is no impact on the demand on foreign currency caused by the project activity. The validation team also considers that the project activity would not cause any adverse impact to balance of payments and investment The indicator is scored 0.
11	Technology transfer and technological	The penetration of wind energy technology is prominent in India and there is no technology transfer involved for the project activity. The indicator is scored 0.



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	self-reliance	
12	Soil Erosion	It is confirmed by validation team that the proposed project will not cause any kind of land occupation and no deforestation/plantation removal was necessary since the wind farm construction was in erection-point basis and the will not produce any pollutants to the solid during both the construction and operation phase. Hence the solid condition will not be affected. The indicator is scored 0.

Project Management Planning

The project monitoring involves measuring the quantity of net electricity generation continuously using calibrated energy meters, and aggregating the data monthly. This is in line with the applied CDM methodology. The final value will be cross-checked with sales record (invoices) for the purposes of ER calculations.

The monitoring plan in section B.7.3 of the PDD contains details of roles and responsibilities, QA/QC procedures, monitoring and training of personnel and troubleshooting procedures.

5.5 Crediting Period

The project is under the retroactive Project Cycle with a project starting date of 24/01/2016 and Start date of crediting period is 05/05/2016 (i.e. commissioning date of the project activity WTGs) or date of registration of the project activity with Gold Standard; as decided by the GSF. Therefore, the project applies a regular crediting period with retroactive credits.

5.6 Environmental & Social Impact Assessment (ESIA)

An EIA is not required for Wind power projects in the host country. It was established that the proposed PA does not have significant adverse impacts on the environmental but has positive impacts on the social and economic existence of the local population. However, project proponent on voluntarily basis has carried out the Environmental & Social Impact Assessment (ESIA) to assess the environment and social aspect and their subsequent impact on local society and environment. Validation team has checked the ESIA report to ensure that the wind project activity has got overall positive impact on the environment.

5.7 Comments by Local Stakeholders

Introductory meetings and consultations were carried out by the PP as a part of Local Stakeholder Feedback Round (SFR) to engage the local administrative officials (department, municipality and villages, and national institutions) and other stakeholders on all aspects of the proposed project activity. Various aspects including technical aspects of the project, land acquisition, project management were

deliberated upon. Opinions, views and suggestions were solicited and appropriate responses offered by the project proponent.

As verified during the site visit and interview with the stakeholder (Government, Village Panchyat representative, Local School Head etc) All the project documents like Project Design Document, Passport document, Non-technical summary (NTS) were made available at village panchayats of identified villages for a period of over two months from 01/01/2016 to 28/02/2016 for public comments. Post the stakeholder consultation, the revised passport was kept available for over another two months' time. Further as verified during site visit and interview with the PP site EHS (Environment Health and Safety) personnel and local stakeholders a transparent communication channel with local stakeholders is maintained and will be maintained throughout the crediting period of a project vide Continuous Input & Grievance Mechanism register at site office with telephone access/internet/email access and nominated person.

The stakeholder feedback Round was conducted through physical meeting on 23/02/2016 at the project site at Village Sandla, District Ratlam of Madhya Pradesh state of India. Participants were accorded ample notice to prepare for the meetings by means of News Paper Advertisement & Invitation pasted in Gram Panchayat Office and Banners, personnel letters and emails during 11 to 19/02/2016..All relevant local stakeholders were invited to comment on the project (including the GSF and GS supporter NGOs). The summary of comments and how they were addressed has been included in the PDD and GS passport.

The stakeholder feedback round (SFR) was carried out simultaneously for the project activity as prescribed by the GS guidelines. All appropriate documents i.e. non-technical summary, GS PDD and GS Passport were made available to the SFR attendees.

Hard copies were also availed in the surrounding villages, as well as in the district Ratlam of the project area.

During the physical meeting for SFR all comments were addressed by project proponent. No negative comments were received by the end of the feedback round.

All sections of the Stakeholder Feedback have been duly completed in accordance with GS guidelines. Continuous input/Grievance Mechanism has been included in section E.3 of the GS Passport.

Thus, the Stakeholder Feedback process can be assessed as sufficient and in line with GSF guidelines^{/LSHCP/}.

5.8 Passport editorial Aspects

The GS passport has been completed using the latest GS template version 2.2. The document is consistent with the GS PDD.

6 VALIDATION OPINION

Orange Bercha Wind Power Private Limited has commissioned the TÜV NORD JI/CDM Certification Program (CP) to carry out the validation for Gold Standard GS project:

“Wind Power Project in Madhya Pradesh by OBWPPL”.

The Gold Standard documentation and supporting documents were reviewed against the criteria as set out in the Gold Standard Requirements, the Gold Standard Toolkit and respective Annexes. The findings and conclusions on the project's compliance with the Gold Standard are recorded in this document..

In the course of the validation for GS registration 28 Corrective Action Requests (CARs) and 03 Clarification Requests (CLs) were raised and successfully closed.

In detail the conclusions can be summarised as follows:

- The project meets all eligibility criteria as laid out by the GS foundation
- The project involves the adaption of a new technology
- The project does not result in negative social, environmental and/or economic impacts
- The project contributes to Sustainable Development.
- The project additionality is sufficiently justified in the PDD and GSP
- The project does not result in diversion of ODA
- Conservative assumptions were applied in the project description
- The monitoring plan of SD parameters is transparent and adequate
- The project meets the stakeholder consultation requirements
- The calculated emission reductions of **749,406 tCO₂e** are most likely to be achieved within the renewable crediting period of 7 years.

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, 03/04/2018



Indrapal Parmar
TÜV NORD JI/CDM CP
Validation Team Leader

7 REFERENCES

No.	Author	Reference	Title	References to the document	Provider
1	UNFCCC	/ACM/	ACM0002 “Grid-connected electricity generation from renewable sources” (Version 17.0, EB 89, Annex 1)	http://cdm.unfccc.int/methodologies/index.html	Other
2	DOE	/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)	-	Other
3	IPCC	/IPCC/	<ul style="list-style-type: none"> 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book 	www.ipcc-nggip.iges.or.jp	Other
4	UNFCCC	/KP/	Kyoto Protocol (1997)	http://unfccc.int/kyoto_protocol/items/2830.php	Other
5	UNFCCC	/MA/	Decision 3/CMP. 1 (Marrakesh – Accords)	http://cdm.unfccc.int/Reference/COP/MOP/index.html	Other
6	UNFCCC	/PDD/	Project Design Document for GS project: “ Wind Power Project in Madhya Pradesh by OBWPPL ” Version 1.0, dated 07/06/2016 Version 2.0, dated 07/11/2017 Version 3.0, dated 22/01/2018 Version 4.0, dated 19/03/2018 Version 5.0, dated 22/03/2018	https://cdm.unfccc.int/Projects/Validation/DB/NBADG/VAUMA0MUJE2Z51HIZB7YSL5CQ/view.html	PP
7	UNFCCC	/PDD-T/	CDM-PDD -FORM - Project Design Document form - Version 10.1	https://cdm.unfccc.int/Reference/PDs_Forms/index.html	Other
8	UNFCCC	/PS/	CDM Project Standard (Version 1.0)	http://cdm.unfccc.int/Reference/index.html	Other
9	UNFCCC	/VVS/	CDM Validation and Verification Standard (Version 01.0)	http://cdm.unfccc.int/Reference/index.html	Other
10	UNFCCC	/PCP/	CDM Project Cycle Procedure (Version 01.0)	http://cdm.unfccc.int/Reference/index.html	Other
11	UNFCCC	/TOOL/	Tool to calculate the emission factor for an electricity system Version 06.0 Tool for the demonstration and assessment of additionality	http://cdm.unfccc.int/Reference/tools/index.html	Other

No.	Author	Reference	Title	References to the document	Provider
			ver.7.0.0 (EB 70 annex 08) Investment analysis ver.8.0 (EB 97 annex 8).		
12	UNFCCC	/GT/	Glossary "CDM terms" (version 09.1)	http://cdm.unfccc.int/Reference/index.html	Other
14	MPPTCL	/CC/	Commissioning certificate dated 05th May 2016; SC/T&C/UJN/UB/233 for 50 MW	-	PP
15	PP	/ER/	Emission Reduction Calculation sheet w.r.t Version 1.0, dated 07/06/2016 Version 2.0, dated 07/11/2017 Version 3.0, dated 22/01/2018 Version 4.0, dated 19/03/2018 Version 5.0, dated 22/03/2018	-	PP
16	MPERC	/EGS/	Sample Credit note for Share of Electricity Generated at the Wind farm for month of May 2017 <ul style="list-style-type: none"> Sample Invoice raised by PP to "MPPMCL dated 03-08-2017 Sample JMR made for the month of May 2017 dated 01/06/2017 	-	PP
17	PP	/LSHCP/	Proof of local stake holders Feedback process <ul style="list-style-type: none"> Letter and public notice for local stakeholders' consultation meeting dated 11 to 19/02/2016. Minutes of Stakeholder consultation process dated 23rd Feb 2016. Feedback Assessment as received from the Stakeholders dated 23rd Feb 2016. Non-technical Summary of the project activity dated 01st Jan 2016 	-	PP
18	PP	/MD/	Management decision taken by the board of directors of the company for investment in the project activity dated 18/01/2016	-	PP
19	PP	/PO/	Purchase Order to WTG manufacturer (Gamesa) on 24/01/2016	-	PP

No.	Author	Reference	Title	References to the document	Provider
20	PP	/PLF/	PLF provided to banks while applying the project activity for project financing in-line with Annex 11 of EB 48. PLF sourced from DPR dated Dec 2015 submitted to banks.	-	PP
21	PP	/PPA/	PPA with Madhya Pradesh Power Management Company Limited (MPPMCL) for 50 MW capacity, 10/02/2017	-	PP
22	PP	/P-Life/	Technical specification of G97-2.0 MW WTG CERC Notification dated 06th Feb 2012	-	PP
23	MPNERD	/SC/	MPNERD approval as per reference letter 1. NRE/Wind-426/2013-16-915 for 50MW dated 23/07/2013 2. MP PCB Consent to Establish letter: 3. MPPCB/UJJ for consent to establish dated 23/02/2016	-	PP
24	Gamesa	/TS/	Technical specification of G97-2.0 MW WTG dated 18/06/2014	-	PP
25	PP	/IRR/	IRR & benchmark sheet w.r.t PDD version Version 1.0, dated 07/06/2016 Version 2.0, dated 07/11/2017 Version 3.0, dated 22/01/2018 Version 4.0, dated 19/03/2018 Version 5.0, dated 22/03/2018	-	PP
26	PP	/SLD/	Single line Diagram describing project boundary	-	PP
28	PP	/IP/	Insurance premium receipt for old project owned by Orange Renewable Group project (Orange Jaisalmer Wind Energy Pvt. Ltd.) Issued By The New India Assurance Co. Ltd. dated 01/04/2014 Insurance policy document of the project activity dated 05/05/2017	-	PP
29	PP	/LS/	Loan Sanction letter issued by „PTC India Financial Services Ltd“ to Project Proponent dated 31/01/2016	-	PP
30	/PP/	/O&M/	Operation and maintenance contract signed between PP and M/s Gamesa Renewable Private	-	PP

No.	Author	Reference	Title	References to the document	Provider
			Limited dated 24/01/2016.		
31	/PP/	/ESIA/	Detailed ESIA (Environmental & Social Impact Assessment) report for the project activity, dated Dec 2015	-	PP
32	PP	/GSP/	GS Passport Version 1.0, dated 06/06/2016 Version 2.0, dated 20/10/2017 Version 3.0, dated 22/01/2018 Version 4.0, dated 19/03/2018	-	PP
33	Gold Standard	/GST/	Gold Standard Toolkit version 2.2 (June 2012)		GS
34	Gold Standard	/GSR/	Gold Standard Requirements version 2.2 (June 2012)		GS
35	PP	/DPR/	Detailed project report for the project activity dated Dec 2015	-	PP
36	Ministry of Finance	ACT	Companies Act, 1956 Income Tax Act 1961 Income Tax Rules	-	Other
37	MPERC	MPERC	Madhya Pradesh Electricity Regulatory Commission (MPERC) Tariff Order, March 2013	-	Other
Websites					
1	India DNA	/dna/	http://envfor.nic.in/	MoE&F	Other
2	UNFCCC	/unfccc/	http://cdm.unfccc.int	UNFCCC	Other
3	IPCC	/ipcc/	www.ipcc-nggip.iges.or.jp	IPCC publications	Other
4	Google	/google/	https://earth.google.com/	Google Earth	Other
5	CEA	/CEA/	http://www.cea.nic.in/ http://www.cea.nic.in/reports/monthly/executivesummary/2015/exe_summary-10.pdf	Central Electricity Authority	Other
6	MNRE	/MNRE/	http://www.mnre.gov.in/mission-and-vision-2/achievements/	Ministry of new and renewable Energy	Other
7	IREDA	/GBI/	http://ireda.gov.in/writereaddata/Operational%20Guidelines.pdf	Indian renewable development agency	Other
8	Ministry of Finance	/IT/	http://law.incometaxindia.gov.in/DIT/Income-tax-acts.aspx	Income Tax Act, 1961 Income tax Amendment Rule 2012	Other
9	RBI	/RBI/	www.rbi.org	Reserve Bank of India	Other

Table 7-4: List of interviewed persons

No	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Gupta	Pavan	BD Manager /Orange Renewable	31/03/2017	CDM conceptualization, Baseline & Additionality	Indrapal Parmar
1.	Sahoo	Arpan	Site Incharge / Orange Renewable	31/03/2017	Project design Local; Stakeholder Consultation; Monitoring Plan	Indrapal Parmar
2.	Negi	Praveen	AM- CSR / Orange Renewable	31/03/2017	Project design Local; Stakeholder Consultation; Monitoring Plan	Indrapal Parmar
3.	Sharma	Manoj	SS/HT Engineer/ Gamesa	31/03/2017	Calibration Metering Arrangement and Monitoring Plan	Indrapal Parmar
4.	Kumar	Nitin	Site Engineer/ Gamesa	31/03/2017	Calibration Metering Arrangement and Monitoring Plan	Indrapal Parmar
5.	Singh	Puspendir	Site In-charge/ Gamesha	31/03/2017	Metering and Billing arrangement	Indrapal Parmar
6.	-	Balaram	Village: Jhar	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
7.	-	Dinesh	Village: Jhar	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
8.	Singh	Kuldeep	Village: Sandala	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
9.	Singh	Dharmendra	Village: Kamed	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
10.	-	Dilip	Village: Kamed	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
11.	Singh	Madan	Village: Dhanesra	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
12.	Singh	Manohar	Village: Sandala	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar
13.	Singh	Kaan	Village: Sandala	31/03/2017	Local Stakeholder Consultation Interview	Indrapal Parmar

¹⁾ 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:** Statement of competence of involved Personnel

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 evidence)	Ref.	Draft Concl.	Final Concl.
A. General Description of Project Activity				
A.1. Project GS Eligibility Screen				
A.1.1. Is the proposed project activity a small-scale, a large-scale or a micro-scale, as defined by the Gold Standard? <i>(GS T1.2.1, GSv2.2 Requirements III.e.1 and III.e.2, III.e.3, and III.e.4)</i>	<i>Description:</i> The proposed GS project activity is large-scale project of output capacity 50 MW (25 numbers X 2.0 MW) and utilizing the larges-scale CDM methodology ACM0002, version 17.0 <i>Justification of evidence:</i> The PDD/GSP has been checked and interviews conducted with the PP <i>Conclusion:</i> The proposed project is large-scale as per GS guidelines.	/PDD/ /GSP/ /GST/ /GSR/	OK	OK
A.1.2. Is the host country eligible for Gold Standard CDM and Gold Standard JI project activities? Has the host country a quantitative reduction target under the Kyoto Protocol? <i>(GS T1.2.2, and in case of a host country with a cap on GHG emissions, see directions)</i>	<i>Description:</i> India is a non-annex 1 country, and has ratified the Kyoto protocol. India has no quantitative cap on emissions <i>Justification of evidence:</i> The PP has demonstrated in section C.3 of the GS passport and PDD that the host country is eligible for Gold Standard project activities <i>Conclusion:</i>	/PDD/ /GSP/ /GS/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	India is eligible for GS project activities			
<p>A.1.3. Is the Project activity a Renewable Energy Supply category, End-use Energy Efficiency Improvement category, or Waste Handling and Disposal category?</p> <p>(GS T1.2.3)</p>	<p><i>Description:</i></p> <p>The proposed 'Grid-connected Wind power project in Ratlam district of Madhya Pradesh state of India is in the Renewable Energy Supply Category as defined by the GS</p> <p><i>Justification of evidence:</i></p> <p>The GS toolkit section 1.2.3 has been checked against the PDD and GS passport</p> <p><i>Conclusion:</i></p> <p>The proposed wind power project is under the Renewable Energy Supply Category</p>	<p>/PDD/ /GSP/ /gs/ /GST/</p>	OK	OK
<p>A.1.4. Are the greenhouse gases (GHGs) eligible under the Gold Standard? Only Carbon Dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O) are allowed</p> <p>(see GS Toolkit section 1.2.4)</p>	<p><i>Description:</i></p> <p>Only carbon dioxide is considered and in the emission reduction calculations, considering the carbon intensity of the Indian grid.</p> <p><i>Justification of evidence:</i></p> <p>The PDD and methodology as well as GS requirements have been consulted</p> <p><i>Conclusion:</i></p> <p>Carbon dioxide is eligible under the GS</p>	<p>/CEA/ /PDD/ /GSP</p>	OK	OK
<p>A.1.5. Does the proposed GS project activity receive Official Development Assistance (ODA)? PP to submit the list of donors/investors and financing plan for</p>	<p>No public funding from an Annex 1 party is involved and therefore no diversion of ODA</p>	<p>/PDD/ /GSP/</p>	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
validation assessment. (see GS T1.2.5)				
<p>A.1.6. Was the project previously announced as going ahead without revenues from carbon credits?</p> <ul style="list-style-type: none"> - Is the start date of the proposed project activity before the time of first submission (LSC of documents for PFA) to the Gold Standard (retroactive registration)? - If not previously announced, has a statement been provided in the GS Passport? - If applicable, has it undergone a positive PFA? - Is the project applying for retroactive crediting? GS labels only allowed for realized emission reductions up to a maximum of two years prior to GS registration. <p>(see GS Toolkit section 1.2.6, 2.5)</p>	<p><i>Description:</i> The start date of the project activity is before the submission of the LSC documents to the GS. Therefore, the project is applying under retroactive registration as defined by the GS toolkit. According to the GS passport section C.3, the project was not previously announced as going ahead without carbon finance.</p> <p><i>Justification of evidence:</i> The GS passport has been checked</p> <p><i>Conclusion:</i> This is a retroactive GS project activity. The project entity has demonstrated that carbon finance was considered from the onset in decision making for this regular project</p>	/PDD/ /GSP/ /LSHCP/ /GST/	OK	OK
<p>A.1.7. Is the project registered under other certification schemes or is the proposed project activity claiming emission reductions from different vintages.</p>	<p><i>Description:</i> In section C.3 of the GS Passport, the PP has stated that the project activity is not claiming Green or White Certificates, or equivalent and that the project is undergoing for GS validation and registration</p> <p><i>Justification of evidence:</i> The GS passport has been checked against the PDD. The UNFCCC</p>	/GSP/ /gs/ /vsc/ /unfccc/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<ul style="list-style-type: none"> - Check for possible double-registration - Check in case of possible double-counting of certificates. - Signed declaration from PP obtained? (GS T1.2.7)	website, the GS website and the VCS websites have been cross-checked Conclusion: The proposed project will be a GS project and undergoing simultaneous validation/registration.			
A.1.8. Is the proposed PA eligible as defined by Annex C of the Gold Standard? Check further eligibility criteria as spelled out in Annex C of the GS (GS Annex C, GS T3.5.1)	<i>Description:</i> The proposed project is a large scale wind power project and eligible under the GS <i>Justification of evidence:</i> The GS requirements as well as annex C have been checked. The PDD has also been checked <i>Conclusion:</i> The proposed project is eligible under the GS	/PDD/ /GSP/ /GS/ /unfccc/ /VCS/	OK	OK
A.2. PDD & Passport editorial aspects <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.2.1. Has the latest version of the PDD form been applied? (VVS, EB 93, Annex 5)	<i>Description:</i> The latest CDM PDD form version has been applied and fully completed as per CDM/GS requirements <i>Justification of evidence:</i>	/PDD/ /PDD-T/	CAR A1	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
(GS Toolkit chapter 2.1)	<p>The PDD has been checked against the latest template found in the UNFCCC website</p> <p><i>Conclusion:</i></p> <p>The latest PDD template has been applied. However, finding is raised to update the PDD template to 10.1.</p>			
<p>A.2.2. Has the PDD been duly filled in accordance with the latest guidance(s)?</p> <p>(VVS, EB 93, Annex 5)</p> <p>(GS Toolkit chapter 2.1)</p>	<p><i>Description:</i></p> <p>The latest PDD form version has been applied and fully completed as per CDM/GS guidelines</p> <p><i>Justification of evidence:</i></p> <p>The PDD has been checked against the latest template found in the UNFCCC website</p> <p><i>Conclusion:</i></p> <p>The latest PDD template has been applied. However, finding is raised to update the PDD template to 10.1</p>	/PDD/ /PDD-T/	CAR A+	OK
<p>A.2.3. Has the Passport been duly filled in accordance with the latest template and guidance(s) (Annex R)?</p> <p>(GS Toolkit chapter 2.1)</p>	<p><i>Description:</i></p> <p>The passport has been largely completed as per the latest GS Passport template version 2.2</p> <p><i>Justification of evidence:</i></p> <p>The completed GS passport has been checked against the template</p> <p><i>Conclusion:</i></p> <p>The latest GS passport template has largely been complied with. Nonetheless, CAR GSP3 and CAR GSP6 have been raised</p>	/GSP/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>A.3. Technology to be employed</p> <p><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>				
<p>A.3.1. Does the PDD contain a clear, accurate and complete project description?</p> <p>(VVS, EB 93, Annex 5)</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>Describe the process undertaken to validate the accuracy and completeness of the project description.</i></p> <p><i>Contain the DOE's opinion on the accuracy and completeness of the project description.</i></p>	<p><i>Description:</i></p> <p>The PDD contains a clear and accurate project description in the GS PDD, however, some of the technical information is missing.</p> <p><i>Justification of evidence:</i></p> <p>The PDD was checked</p> <p><i>Conclusion:</i></p> <p>The latest PDD contains a clear and accurate project description. However, finding is raised to update section A .1 of the PDD.</p>	<p>/PDD/</p>	<p>CAR A2</p> <p>CAR A3</p> <p>CAR A5/A6</p>	<p>OK</p>
<p>A.3.2. 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>	<p><i>Description:</i></p> <p>The description of the project in the PDD is as per the real situation. The proposed project is a greenfield project.</p> <p><i>Justification of evidence:</i></p> <p>The PDD review and onsite inspection were conducted</p> <p><i>Conclusion:</i></p>	<p>/PDD/</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 evidence)	Ref.	Draft Concl.	Final Concl.
	The description of the proposed greenfield project activity in the PDD is as per the real situation.			
A.3.3. 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? (VVS, EB 93, Annex 5) <i>Describe the steps taken to validate this issue.</i>	Not applicable	/PDD/	OK	OK
A.3.4. Does the project design engineering reflect current good practices? <i>Consider the equipment specifications, literature (e.g. EU BREF papers) and professional experiences. Describe the process undertaken to assess the engineering.</i>	<i>Description:</i> The proposed project activity is a wind project with equipment purchased from local and established technology supplier (Gamesa). <i>Justification of evidence:</i> The project utilizes state of the art WTGs and this reflects current good practices <i>Conclusion:</i> The project will employ the latest wind power technologies	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>A.3.5. 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></p> <p>The proposed project activity is a wind project with equipment purchased from local technology supplier.</p> <p><i>Justification of evidence:</i></p> <p>The project utilizes state of the art WTGs and this reflects current good practices</p> <p><i>Conclusion:</i></p> <p>The project will employ the latest wind power technologies</p>	/PDD/	OK	OK
<p>A.3.6. 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></p> <p>Yes, this is articulated under the quality management system of the organisation and the SD parameter 'Quality of employment' under QSEH policy.</p> <p><i>Justification of evidence:</i></p> <p>The PDD, QMS certificate and quality has been checked as well as the passport and interviews with PP</p> <p><i>Conclusion:</i></p> <p>The project makes provisions for meeting training and maintenance needs</p>	/PDD/ /GSP/ /QMS/	OK	OK
<p>A.4. Small scale project activity</p> <p><i>It is assessed whether the project qualifies as small-scale CDM project activity</i></p>				
<p>A.4.1. Does the project qualify as a small scale CDM</p>	<p><i>Description:</i></p>	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
project activity as defined in decision 4 / CMP.1 annex II? (VVS, EB 93, Annex 5)	The project is a 50 MW (25 numbers X 2.0 MW) capacity wind project. Hence not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>			
A.4.2. Does the project apply one of the approved small scale categories and any methodology and tool referred therein? (VVS, EB 93, Annex 5) (GS Toolkit 2.2, Annex AD) <i>Check, if applicable the expiry dates of the applied methodology. Further, take into consideration the general guidance to the methodologies³, which provide guidance on equipment capacity, equipment performance, sampling and other monitoring related issues.</i>	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK
A.4.3. Is the small scale project activity not a debundled component of a larger project activity? (VVS, EB 93, Annex 5) <i>Describe the steps taken to validate this issue. PI refer to the Compendium of guidance on debundling (54, Annex 13).</i>	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK
A.4.4. Is an assessment of the environmental impacts of the proposed SSC GS project	<i>Description:</i> Not applicable as this is a large-scale project activity	/PDD/	OK	OK

³ <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 evidence)	Ref.	Draft Concl.	Final Concl.
activity required by the host Party? (VVS, EB 93, Annex 5)	<i>Justification of evidence:</i> <i>Conclusion:</i>			
A.4.5. Who are the project participants?	<i>Description:</i> The project participant is Orange Bercha Wind Power Private Limited <i>Justification of evidence:</i> The GS PDD has been checked <i>Conclusion:</i> The PP has been validated	/PDD/ /GSP/ /unfccc/ /LoA/	OK	OK
B. Project Baseline, Additionality and Monitoring Plan				
B.1. Application of the Methodology				
B.1.6. Does the project apply an approved and applicable GS VER methodology and a valid version thereof? (VVS, EB 93, Annex 5) <i>Describe the steps taken to validate this issue.</i>	<i>Description:</i> The proposed project applies the approved and applicable CDM methodology ACM0002, version 17.0, which is still valid <i>Justification of evidence:</i> The methodology has been checked along with the GS PDD. <i>Conclusion:</i> ACM0002, version 17.0 is still valid	/PDD/ /ACM2/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>B.1.7. Is the applied methodology identical with the version available on the UNFCCC or GS website?</p> <p>(VVS, EB 93, Annex 5) <i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> The applied methodology is identical with the version in the UNFCCC page.</p> <p><i>Justification of evidence:</i> The methodology has been checked along with the PDD document,</p> <p><i>Conclusion:</i> ACM0002, version 17.0 is still valid</p>	<p>/PDD/ /unfccc/ /gs/</p>	<p>OK</p>	<p>OK</p>
<p>B.1.8. Are all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein fulfilled?</p> <p>(VVS, EB 93, Annex 5) <i>Describe for each applicability criterion listed in the selected approved methodology the steps taken to assess the information contained in the PDD.</i></p>	<p><i>Description:</i> All applicability conditions of the applied methodology and tools have been articulated in the PDD and met</p> <p><i>Justification of evidence:</i> The PDD section B.2 has been checked against the methodology applicability conditions</p> <p><i>Conclusion:</i> All methodology applicability conditions have been met</p>	<p>/PDD/ /GSP/</p>	<p>OK</p>	<p>OK</p>
<p>B.1.9. 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>(VVS, EB 93, Annex 5)</p>	<p><i>Description:</i> All applicability conditions have been met</p> <p><i>Justification of evidence:</i> See above</p> <p><i>Conclusion:</i> See above</p>	<p>/PDD/ /GSP/</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 evidence)	Ref.	Draft Concl.	Final Concl.
<p>B.1.10. 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 GS of CDM EB?</p> <p>(VVS, EB 93, Annex 5)</p> <p><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></p>	<p><i>Description:</i></p> <p>The project fully complies with all sections of the CDM methodology</p> <p><i>Justification of evidence:</i></p> <p>The PDD has been validated against all sections of the methodology</p> <p><i>Conclusion:</i></p> <p>The methodology has been complied with.</p>	<p>/PDD/ /GSP/</p>	<p>OK</p>	<p>OK</p>
<p>B.2. Project Boundaries</p> <p><i>Project Boundaries are the limits and borders defining the GHG emission reduction project</i></p>				
<p>B.2.6. Are the project's spatial boundaries (geographical) clearly defined?</p> <p>(VVS, EB 93, Annex 5)</p> <p><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></p>	<p><i>Description:</i></p> <p>The project's spatial boundaries have been clearly defined in the PDD in line with the applied methodology</p> <p><i>Justification of evidence:</i></p> <p>The GS PDD has been checked</p> <p><i>Conclusion:</i></p> <p>In line with the applied methodology, the spatial boundaries include the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to. However, findings are raised in this regard. However, CAR B3 is raised w.r.t project boundary.</p>	<p>/PDD/ /GSP/</p>	<p>CAR B3</p>	<p>OK</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>B.2.7. Are all sources and GHGs included in the project boundary as required in the applied methodology?</p> <p>(VVS, EB 93, Annex 5)</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>Description:</p> <p>All sources of GHG in the project boundary have been included in the PDD. Only CO₂ has been considered as main baseline source</p> <p><i>Justification of evidence:</i></p> <p>The PDD was checked</p> <p><i>Conclusion:</i></p> <p>All GHG sources are included</p>	<p>/GSR/ /PDD/ /gs/</p>	<p>OK</p>	<p>OK</p>
<p>B.2.8. 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>(VVS, EB 93, Annex 5)</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></p> <p>Not applicable</p> <p><i>Justification of evidence:</i></p> <p><i>Conclusion:</i></p>	<p>/PDD/ /GSP/ /ACM2/</p>	<p>OK</p>	<p>OK</p>
<p>B.3. Baseline Identification</p> <p><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></p>				

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>B.3.6. What possible baseline scenarios have been considered? (VVS, EB 93, Annex 5) <i>Fill in all alternatives in table A-2.</i></p>	<p><i>Description:</i> The baseline is pre-defined by the methodology</p> <p><i>Justification of evidence:</i> The methodology and PDD have been consulted</p> <p><i>Conclusion:</i> The baseline is correct</p>	<p>/PDD/ /ACM2/</p>	<p>OK</p>	<p>OK</p>
<p>B.3.7. Is the list of alternatives complete? (VVS, EB 93, Annex 5) <i>Describe how it was validated that all alternatives are plausible and no plausible alternative is excluded from the consideration</i></p>	<p><input 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.</p> <p><input type="checkbox"/> The following alternative scenarios/options have been omitted. Corresponding CAR(s)/CL(s) has /have been issued N/A</p>	<p>/PDD/ /ACM2/</p>	<p>OK</p>	<p>OK</p>
<p>B.3.8. What has been identified as the baseline scenario? (VVS, EB 93, Annex 5) <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>	<p><i>Description:</i> The baseline is defined by the methodology as “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 (CM) calculations described in the “Tool to calculate the emission factor for an electricity system.”</p> <p><i>Justification of evidence:</i> The methodology and PDD have been checked</p>	<p>/PDD/ /ACM2/ /CEA/</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 evidence)	Ref.	Draft Concl.	Final Concl.
	<p><i>Conclusion:</i> No further action is required</p>			
<p>B.3.9. Has the baseline scenario been determined according to the methodology? (VVS, EB 93, Annex 5) <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><input 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 issued</p>	<p>/PDD/ /ACM2/</p>	<p>OK</p>	<p>OK</p>
<p>B.3.10. Has any plausible alternative scenario been excluded? (VVS, EB 93, Annex 5) <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. <input checked="" type="checkbox"/> The determination has been carried out as per the procedure contained in the applied methodology. <input type="checkbox"/> The following CARs / CLs have been identified with respect to the selection of the baseline scenario:</p>	<p>/ACM2/ /PDD/</p>	<p>OK</p>	<p>OK</p>
<p>B.3.11. Is the identified baseline scenario reasonable and has the baseline scenario been determined using conservative assumptions where possible, including relevant references and sources? (VVS, EB 93, Annex 5)</p>	<p>For details of the assessment regarding the evaluation of the baseline scenario pl. refer to table A-2. <input checked="" type="checkbox"/> No plausible baseline scenario has been excluded. <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>/PDD/ /unfccc/ /ACM2/</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 evidence)	Ref.	Draft Concl.	Final Concl.
<p><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>B.3.12.Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations? (VVS, EB 93, Annex 5)</p> <p><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> See checklist item B.3.8 above</p> <p><i>Justification of evidence:</i></p> <p><i>Conclusion:</i></p>	/PDD/	OK	OK
<p>B.3.13.Is the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced? (VVS, EB 93, Annex 5)</p> <p><i>Describe whether the documents and sources referred to in the PDD are correctly quoted and clearly referenced.</i></p>	<p><i>Description:</i> See checklist item B.3.8 above</p> <p><i>Justification of evidence:</i></p> <p><i>Conclusion:</i></p>	/PDD/ /ACM2/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
B.3.14. 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. (VVS, EB 93, Annex 5)	<i>Description:</i> See checklist item B.3.8 above <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/ /GSP/	OK	OK
B.4. Additionality Screen <i>The assessment of additionality will be validated with focus on whether the project itself is not a likely baseline scenario.</i>				
B.4.6. Public Announcement Check				
B.4.6.1. Has the project, in its current design, previously been publicly announced to go ahead without carbon revenues, prior to any payment being need for the implementation of the project? Is a statement included in the GS passport?	<i>Description:</i> Section C.3 of the GS passport contains a declaration that the project was not announced before as going ahead without carbon finance. Milestones have also been included showing clear Carbon credit intentions. Furthermore, additionality of the project has been demonstrated in line with CDM guidelines <i>Justification of evidence:</i> The PDD and GS passport has been checked <i>Conclusion:</i> The project has demonstrated carbon finance consideration	/PDD/ /GSR/ /ODA/	CAR A7 GLA1	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	was taken into account from project conceptualization. However, finding CAR A7 and CL A1 is raised for ODA submission.			
B.4.6.2. If the project is a Micro Scale project, is a written statement included, that the project has not been announced for implementation without seeking carbon finance during the last 3 years?	<p><i>Description:</i> N/A as this is a large-scale project activity</p> <p><i>Justification of evidence:</i></p> <p><i>Conclusion:</i></p>	/PDD/ /GSP/	OK	OK
B.4.7. Methodology Additionality Requirements				
<p>B.4.7.1. Does the PDD describe how the project is additional and does the additionality justification follow the requirements of the applied methodology and/or methodological tools? (GS Toolkit 3.5.1)</p> <p>(VVS, EB 93, Annex 5)</p> <p><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><i>Description:</i> Project additionality has been validated following guidance of the applied methodology (simplified procedure to demonstrate additionality)</p> <p><i>Justification of evidence:</i> The PDD and applied methodology have been checked</p> <p><i>Conclusion:</i> Additionality is correctly demonstrated and sufficiently validated. However, CAR B5 is raised w.r.t to para reference as per latest meth.</p>	/PDD/ /GSR/	CAR B5	OK
B.4.8. Consideration of CDM before project start				
<p>B.4.8.1. Is the project starting date reported in accordance with the CDM glossary of terms?</p> <p>(VVS, EB 93, Annex 5)</p>	<p><i>Description:</i> The project starting date is 24/01/2016, when the signature of the purchase order between Orange Bercha Wind Power Private Limited, technology supplier.</p>	/PDD/ /GSR/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p><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 implementation) in the specific context of the project activity.</i></p>	<p><i>Justification of evidence:</i> Section C.1.1 of the PDD has been checked</p> <p><i>Conclusion:</i> The project starting date has been defined as per CDM Glossary of Terms</p>			
<p>B.4.8.2. In case the project start date is before commencing of validation, was the incentive from carbon revenues seriously considered and are details given in the PDD?</p> <p>(VVS, EB 93, Annex 5)</p> <p><i>Describe whether the evidence to support such consideration is adequately and transparently described in the PDD.</i></p>	<p><i>Description:</i> The project start date is 24/01/2016, when purchase order was signed. As the project start date is before commencing of validation, the incentive from carbon revenues seriously considered by project owner as evidenced by validation team.</p> <p><i>Justification of evidence:</i> The PDD was checked along with the Management decision taken by board of directors of the company.</p> <p><i>Conclusion:</i> The project start date is before commencing of validation. And PP has demonstrated in section C and section B.5 of the PDD. that carbon credit revenues was seriously considered in the decision-making process</p>	/PDD/ /GSR/ /MD/	OK	OK
<p>B.4.8.3. How and when was the decision to proceed with the project taken?</p> <p><i>Describe the steps taken to validate the starting date.</i></p>	<p><i>Description:</i> PP has demonstrated in section PDD that carbon credit revenues was seriously considered in the decision-making process</p>	/PDD/ /GSP/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	<i>Justification of evidence:</i> The passport has been checked <i>Conclusion:</i> The milestones indicated in PDD show serious consideration for carbon finance in the decisions and steps taken by the PP	/MD/		
<p>B.4.8.4. Is the project start date consistent with the available evidence?</p> <p>(VVS, EB 93, Annex 5) <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>	<i>Description:</i> The project starting date has been defined as per CDM Glossary of Terms. <i>Justification of evidence:</i> The PDD has been checked <i>Conclusion:</i> The project starting date is correctly defined	/PDD/ /PO/	OK	OK
<p>B.4.8.5. Was the decision to proceed with the project taken by a person which has the authority to do so?</p> <p>(VVS, EB 93, Annex 5) <i>Describe the steps taken to validate this issue.</i></p>	<i>Description:</i> Key decisions were taken by top management of the company as part of their investment decision <i>Justification of evidence:</i> The GS Passport and interviews were carried out. Signed documents have been checked <i>Conclusion:</i> Authorized personnel took the decisions on the project activity	/PDD/ /GSP/ /MD/	OK	OK
<p>B.4.8.6. How was the carbon finance involved in the decision making process?</p>	<i>Description:</i> The PP has followed procedures and taken specific decisions to	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
(VVS, EB 93, Annex 5) <i>Describe why CDM was a decisive factor in the decision making process.</i>	ensure that the project complies with GS requirements <i>Justification of evidence:</i> Interviews and key documents such as the PDD and GS passport have been checked <i>Conclusion:</i> It is clear from project milestones that carbon finance was a significant factor in decisions and actions			
B.4.8.7. Do the evidence provided doubtlessly prove that continuous and real actions were taken in order to secure the GS status? (VVS, EB 93, Annex 5)	All evidence provided doubtlessly prove that continuous and real actions were taken in order to secure the GS status. However, CAR B9 is raised w.r.t to major milestones related to GS project.	/PDD/ /GSP/ /Section 7/	CAR B9	OK
B.4.8.8. Is the gap of documented evidence to secure the CDM status less than 3 years and are the evidence relevant for substantiating the action taken, credible, reliable and complete? (EB 49 Annex 22 § 8) (VVS, EB 93, Annex 5)	<i>Description:</i> All evidence and milestones indicated are not more than three years. <i>Justification of evidence:</i> The PDD and section C.3 of the GS Passport, and reference documents have been checked <i>Conclusion:</i> The gap of documented evidence to secure the CDM status less than 3 years	/PDD/ /GSP/ /Reference table 7/	OK	OK
B.4.8.9. Did implementation of the project cease after its commencement and did implementation recommence after	<i>Description:</i> No, The project activity has got commissioned in 05/05/2016 <i>Justification of evidence:</i>	/PDD/ /GSR/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
consideration of the CDM? (EB 97, Annex 8) <i>Describe the reasons for ceasing the project and explain why the incentive from CDM was necessary to recommence the implementation.</i>	PDD was checked <i>Conclusion:</i> The project implementation has started and project activity is commissioned.			
B.4.8.10. Can the CDM involvement in the decision assessed as serious? <i>Describe whether or not the project would have been undertaken without the incentive of the CDM.</i> (VVS, EB 93, Annex 5)	<i>Description:</i> The project has used the applied baseline and monitoring methodology ACM0002, Version-17 / EB 89 to prove additionality. PP has taken the necessary steps to ensure that the project complies with GS validation and registration requirements, such as the LSC, and the SFR. <i>Justification of evidence:</i> The PDD and GS Passport have been checked <i>Conclusion:</i> The project has proved that it would not implemented without carbon finance	/PDD/ /LSHCP/	OK	OK
B.4.9. Identification of alternatives Step 1 (in case of SSC projects pl. skip steps 1 and 2 if appropriate)				
B.4.9.1. 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	<i>Description:</i> Not applicable as the project baseline is pre-defined by the applied and applicable methodology. PP is also applying investment analysis to demonstrate additionality.	/PDD/ /GSR/ /ACM2/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
outputs or services that are to be supplied by the proposed CDM project activity? (VVS, EB 93, Annex 5) <i>Describe the steps taken to validate this issue on the basis of your local and sectoral knowledge.</i>	<i>Justification of evidence:</i> <i>Conclusion:</i>			
B.4.9.2. Have all realistic alternatives been identified to the project? (VVS, EB 93, Annex 5) <i>Describe whether the list of alternatives is credible and complete. Describe how it is validated that the alternatives are realistic.</i>	<i>Description:</i> Not applicable as the project baseline is pre-defined by the applied and applicable methodology <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/ /GSR/ /ACM2/	OK	OK
B.4.9.3. Do all identified alternatives comply with enforced legislations? (VVS EB 93, Annex 5) <i>Describe the steps taken to validate this issue. Refer to the legislations.</i>	<i>Description:</i> Not applicable as the project baseline is pre-defined by the applied and applicable methodology <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/ /ACM2/ /GSR/	OK	OK
B.4.10. Investment analysis Step 2 <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 the calculation parameters..</i>				

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
B.4.10.1. 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 VERs? (VVS, EB 93, Annex 5)	<p><i>Description:</i> PDD demonstrates additionality of the project using post-tax equity IRR.</p> <p><i>Justification of evidences:</i> PDD and IRR</p> <p><i>Conclusion:</i> PDD provides evidence that the project is not financially attractive or feasible without revenues from sale of VERs. However, CAR B7 is raised w.r.t investment analysis as per latest investment analysis tool, benchmark calculation incl. consideration of inflation rate value.</p>	/PDD/ /GSR/ /PDD/ /VVS/	CAR B6 CL-A1	OK
B.4.10.2. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)? (VVS, EB 93, Annex 5, EB 97 Annex 8) <i>Describe why the selected analysis method is appropriate under consideration of potential revenues and costs, potential project alternatives and potential available benchmark values.</i>	<p><i>Description:</i> Benchmark analysis has been chosen for the project activity.</p> <p><i>Justification of evidences:</i> PDD and IRR spreadsheet.</p> <p><i>Conclusion:</i> Subject to closure of CAR B6</p>	/PDD/ /GSR/ /PDD/ /VVS/	CAR B6	OK
B.4.10.3. Is a clear, viewable and unprotected Excel spreadsheet available for the investment	<p><i>Description:</i> Yes, a clear, viewable and unprotected Excel spreadsheet is</p>	/PDD/ /GSR/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
calculation? (EB 97 Annex 8) <i>Describe the steps taken to validate this issue.</i>	available. <i>Justification of evidence:</i> PDD and IRR spreadsheet <i>Conclusion:</i> Yes, a clear, viewable and unprotected Excel spreadsheet available for the investment calculation	/VVS/		
B.4.10.4. 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? (EB 97 Annex 8) <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>	<i>Description:</i> Yes, 25 year period has been chosen for investment analysis, which reflects the technical lifetime of the project activity. The WTG machine supplier has been listed on the website of 'Centre for Wind Energy Technology', Govt. of India, confirming availability of Type Certificate, which confirms the lifetime. <i>Validator's action:</i> PDD and spread sheet has been checked by validation team along with the technical specification of 2 MW WTG submitted by PP <i>Conclusion:</i> Thus, it is concluded by validation team that the period chosen for the investment analysis reflect the technical lifetime of the project activity. And salvage value i.e. fair value of the project activity's assets i.e. WTG has been included at the end of the investment analysis period (as a cash inflow).	/PDD/ /GSR/ /VVS/	OK	OK
B.4.10.5. 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</i>	<i>Description:</i> Not applicable <i>Justification of evidence:</i>	/PDD/ /GSR/ /VVS/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<i>equipment?</i> (EB 50 Annex 15)	<i>Conclusion:</i>			
B.4.10.6. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice? (EB 97 Annex 8) <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>	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/ /GSR/ /VVS/		OK
B.4.10.7. Is the book value as well as the expectation of the potential profit or loss included in the fair value calculation? (EB 97 Annex 8)	<i>Description:</i> Fair value has been taken at 10% of the value of assets, which is only potential profit, as the book value is nil. <i>Validator's action:</i> Excel calculation sheets are reviewed by the validation team. <i>Conclusion:</i> Fair value provided in the terminal year conforms to international best practices. The fair value represents only potential profit expected to be realized.	/PDD/	OK	OK
B.4.10.8. Are depreciation and other non-cash related items added back to net profits for the purpose to calculate the financial	<i>Description:</i> The depreciation has been observed to be considered in tax calculation and in cash outflow.	/PDD/ /GSR/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>indicator? (EB 97 Annex 8)</p>	<p><i>Validator's action:</i> PDD and sources or references of input values are verified by validation team</p> <p><i>Conclusion:</i> Thus, it is concluded by validation team that the depreciation and other non-cash related items only considered in the tax calculation</p>	/VVS/		
<p>B.4.10.9. Is taxation excluded in the investment analysis or is the benchmark intended for post tax comparisons? (EB 97 Annex 8)</p>	<p><input type="checkbox"/> N/A <input checked="" type="checkbox"/> Yes, the costs of financing expenditures have been included. <input type="checkbox"/> No, this requirement is not met.</p> <p>In this context the following additional findings have been identified: N/A</p>	/PDD/ /GSR/ /VVS/	OK	OK
<p>B.4.10.10. Were the input values used in the investment analysis valid and applicable at the time of the investment decision? (EB 97 Annex 8) <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 FSR and PDD.</i></p>	<p><i>Description:</i> All input values used in the investment analysis were valid at the time of investment decision</p> <p><i>Justification of evidences:</i> PDD and IRR spreadsheet</p> <p><i>Conclusion:</i> Subject to closure of CAR B7 raised for section B.5 of the PDD.</p>	/PDD/ /IRR/ /DPR/	CAR B7	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
B.4.10.11. 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></p> <p>The PLF considered for both financial analysis and emission reduction calculation is based on Detailed Project Report (DPR).</p> <p><i>Validator's action:</i></p> <p>PDD and spread sheet are checked by validation team against the DPR report for consideration of the PLF value for financial analysis.</p> <p><i>Conclusion:</i></p> <p>Thus, it is conclude by validation team PLF chosen for financial analysis is correct and in line with the guidelines for the reporting and validation of plant load factors</p>	/PDD/ /PLF/ /DPR/	OK	OK
B.4.10.12. In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR? (EB 97 Annex 8)	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Yes, the costs of financing expenditures have been included. <input type="checkbox"/> No, this requirement is not met. In this context the following additional findings have been identified: N/A	/PDD/ /IRR/	OK	OK
B.4.10.13. In cases where a post-tax benchmark is applied please ensure that actual interest payable is taken into account in the calculation of income tax. (EB 97 Annex 8)	<input type="checkbox"/> N/A <input type="checkbox"/> A pre-tax benchmark is applied <input checked="" type="checkbox"/> The benchmark is post-tax and the interest has been taken into account for the calculation	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<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><input type="checkbox"/> No, this requirement is not met. In this context the following additional findings have been identified: na</p>			
<p>B.4.10.14. 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? (EB 97 Annex 8)</p>	<p><input type="checkbox"/> N/A <input checked="" type="checkbox"/> Yes, in- and outflows have been considered correctly. <input type="checkbox"/> No, this requirement is not met. In this context the following additional findings have been identified: N/A</p>	/PDD/	OK	OK
<p>B.4.10.15. 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)? (EB 97 Annex 8) <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> In line with Investment Analysis tool, the default value of cost of equity provided in Appendix A of the latest guidelines. The default value of return on equity applicable for energy sector in India is 11.06% as per the guidelines. In accordance with the Guidelines, project participant has converted the real term value of return on equity to nominal values by adding inflation rate. However, during the course of the validation process the investment guideline is revised to investment analysis tool. And as per latest tool the default value for India is now revised by CDM EB. <i>Validator's action:</i> The information provided in the PDD and "Investment analysis" are reviewed by the validation team to confirm the same.</p>	/PDD/	CAR B6	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	<p><i>Conclusion:</i> Thus, it is concluded by validation team that steps taken to calculate the type of benchmark chosen is appropriate for the type of IRR selected by PP. However, during the course of validation process CAR B3 is raised by validation team.</p>			
<p>B.4.10.16. Is the benchmark value suitable for the project activity and is it reasonable to assume that no investment would be made at a rate of a lower return than the benchmark?</p> <p>(VVS, EB 93, Annex 5) <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>Description:</i> The benchmark has been selected as per the default value of return on equity recommended by CDM EB. The equity IRR calculated for the project is lower as compared to the benchmark selected.</p> <p>However, during the course of the validation process the investment guideline is revised to investment analysis tool. And as per latest tool the default value for India is now revised by CDM EB.</p> <p><i>Validator's action:</i> The same has been confirmed by review of PDD, financial calculation sheet and copy of board resolution^{/MD/}.</p> <p><i>Conclusion:</i> Thus, it is concluded by validation team that the benchmark value suitable for the project activity. However, during the course of validation process CAR B6 is raised by validation team which is closed successfully.</p>	<p>/PDD/ /IRR/ /TOOL/</p>	<p>CAR B6</p>	<p>OK</p>
<p>B.4.10.17. Is it ensured that the project cannot be developed by other developers than the PP?</p>	<p><i>Description:</i> Not applicable</p>	<p>/PDD/</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 evidence)	Ref.	Draft Concl.	Final Concl.
(EB 97 Annex 8) <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>	<i>Justification of evidence:</i> <i>Conclusion:</i>			
B.4.10.18. Was the benchmark consistently used in the past for similar projects with similar risks? (EB 97 Annex 8) <i>If applicable, assess the past financial behaviour of the entity during the last 3 years in relation to similar projects.</i>	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK
B.4.10.19. 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. <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>	<i>Description:</i> Yes, the PDD and related spreadsheets contain sensitivity analysis and they contain variation in parameters which may vary throughout the project lifetime. However, justification for the input values is missing under sensitivity analysis section for input values. <i>Validator's action:</i> PDD and sources or references of input values are verified by validation team <i>Conclusion:</i> However, CAR B7 is raised in this regard and closed.	/PDD/	CAR B7	OK
B.4.10.20. Were only variables that constitute more than 20% of either total project costs or	<i>Description:</i> Not only the variables that constitute more than 20% of project	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>total project revenues subjected to reasonable variation? (EB 97 Annex 8)</p>	<p>cost have not been subjected to sensitivity analysis, O&M cost being a critical parameter which constitutes less than 20% of the project costs is also considered for the sensitivity analysis.</p> <p><i>Validator's action:</i> The PDD and financial calculation sheet are reviewed by the validation team to confirm the same.</p> <p><i>Conclusion:</i> Even though the O&M cost does not constitute more than 20% of the project cost, this has been subjected to sensitivity analysis.</p>			
<p>B.4.10.21. Have parameters, constituting less than 20% of total project costs or revenues, been identified with potential material impact on the financial parameter? (EB 97 Annex 8) <i>Describe whether those parameters are considered in the sensitivity analysis?</i></p>	<p><i>Description:</i> The only revenue forms the part of the project is revenue from the sale of electricity. The net electricity generation or PLF and electricity tariff which determine the revenue, as well as O&M costs are separately subjected to sensitivity analysis.</p> <p><i>Validator's action:</i> The PDD and financial calculation sheet are reviewed by the validation team to confirm the same.</p> <p><i>Conclusion:</i> The revenue due to the sale of electricity has been considered for sensitivity analysis. Further, to this other expense related</p>	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	cost component i.e. project cost and O&M cost are also considered in the sensitivity analysis.			
B.4.10.22. Is the range of variation reasonable in the specific context of the project activity, taking into consideration historic trends in the business sector? (EB 97 Annex 8) <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>	<i>Description:</i> Range of variation is reasonable in the context of the project activity. <i>Validator’s action:</i> PDD and IRR calculation sheet are reviewed by the validation team to confirm the same. <i>Conclusion:</i> Range of variation is reasonable in the context of the project activity, taking into consideration historic trends in the business sector.	/PDD/	OK	OK
B.4.11. Barrier analysis Step 3 or SSC additionality assessment				
B.4.11.1. Are there any barriers given which have a clear and direct impact on the financial returns of the project? (VVS, EB 93, Annex 5) (Toolkit 2.3) <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 97 Annex 8. Only unavailability of sources of finance and/or risk related barriers, for example, the risk related to technical failure that could have negative impact on financial performance are</i>	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<i>acceptable as barriers.</i>				
<p>B.4.11.2. Are the barriers described risk related (e.g technology failure, other performance related risks)?</p> <p>(VVS, EB 93, Annex 5)</p> <p><i>In case of LSC projects those issues <u>cannot be considered</u> 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 97 Annex 8. Only unavailability of sources of finance and/or risk related barriers, for example, the risk related to technical failure that could have negative impact on financial performance are acceptable as barriers.</i></p> <p><i>Are there other barriers or barriers due to prevailing practice existent which would have led to higher emissions?</i></p>	<p><i>Description:</i></p> <p>Not applicable</p> <p><i>Justification of evidence:</i></p> <p><i>Conclusion:</i></p>	<p>/PDD/</p>	<p>OK</p>	<p>OK</p>
<p>B.4.11.3. Has the unavailability of means of finance for the project been described and adequately substantiated? Do evidence doubtlessly prove that the financing of the project was assured only due to the benefit of the CDM?</p> <p>(EB 50 Annex 13, § 9)</p>	<p><i>Description:</i></p> <p>Not applicable</p> <p><i>Justification of evidence:</i></p> <p><i>Conclusion:</i></p>	<p>/PDD/</p>	<p>OK</p>	<p>OK</p>
<p>B.4.11.4. How is it justified and evidenced that the barriers given in the PDD are real?</p> <p>(VVS, EB 93, Annex 5)</p>	<p><i>Description:</i></p> <p>Not applicable</p>	<p>/PDD/</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 evidence)	Ref.	Draft Concl.	Final Concl.
	<i>Justification of evidence:</i> <i>Conclusion:</i>			
B.4.11.5. 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 alternatives? (VVS, EB 93, Annex 5)	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK
B.4.11.6. Does the review of relevant background information on the nature of the company(ies) and entity(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? (VVS, EB 93, Annex 5)	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK
B.4.11.7. 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? (VVS, EB 93, Annex 5)	<i>Description:</i> Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/	OK	OK
B.4.11.8. Would provision of additional financial	<i>Description:</i>	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
means lead to the mitigation of the barrier(s) demonstrated? (VVS, EB 93, Annex 5) <i>Describe why provision of additional financial means would not 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>	Not applicable <i>Justification of evidence:</i> <i>Conclusion:</i>			
B.4.12.Common practice analysis Step 4 (in case of SSC projects skip this step)				
B.4.12.1. Is the defined region for the common practice analysis appropriate for the technology/industry type? (VVS, EB 93, Annex 5) <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> Project developer has taken the entire country as the geographical region. However, in PDD and common practice analysis sheet submitted by project proponent the value of Nall and Ndiff is not evident. Further, the common practice guideline version is not the latest one. <i>Validator's action:</i> Desk review of webhosted PDD <i>Conclusion:</i> Defined region for the common practice analysis appropriate for the technology/industry type. However, pending closure of CAR B8 w.r.t CPA analysis.	/PDD/	CAR B8	OK
B.4.12.2. To what extent similar projects have been undertaken in the relevant region?	<i>M. Description:</i> As the project is located in India, therefore, the applicable	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
(VVS, EB 93, Annex 5)	<p>geographical area is India and projects in the host country India have been chosen for analysis for similar projects (both CDM and non-CDM).</p> <p><i>Validator's action:</i></p> <p>PDD and Common Practice Analysis (CPA) sheet has been reviewed by validation team.</p> <p><i>Conclusion:</i> CAR B8 is raised in this regard and closed successfully.</p>			
<p>B.4.12.3. In case similar projects are identified, are there any key differences between the proposed project and existing or ongoing projects and what kind of differences are observed?</p> <p>(VVS, EB 93, Annex 5)</p>	<p><i>Description:</i></p> <p>Within similar projects identified in Step 3, PP has identified those that apply technologies that are different to the technology (refer para 12 d (iii) & (iv) of the Methodological tool Common practice tool) applied in the proposed project activity</p> <p><i>Justification of evidences:</i></p> <p>PDD and Common Practice Analysis (CPA) sheet has been reviewed by validation team.</p> <p><i>Conclusion:</i> CAR B8 is raised in this regard and closed successfully.</p>	/PDD/	CAR B8	OK
<p>B.3.1.1. In case of projects activities applying ACM0002:</p> <p>Has an output range as +/- 50% of the design output of the project activity been calculated in order to define the capacity range for "similar" projects?</p>	<p><i>Description:</i></p> <p>Yes, output range as +/- 50% of the design output of the project activity, i.e., from 25 MW to 75 MW has been calculated in order to define the capacity range for "similar" projects.</p> <p><i>Validator's action:</i></p>	/PDD/	CAR B8	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
(EB 84, Annex 7, § 5)	<p>PDD and Common Practice Analysis (CPA) sheet has been reviewed by validation team.</p> <p><i>Conclusion:</i></p> <p>Output range as +/- 50% of the design output of the project activity has been calculated in order to define the capacity range for “similar” projects.</p>			
<p>B.3.1.2. In case of projects activities applying ACM0002: Does N_{all} include only plants that have started commercial operation before the the start date of the project and are within the applicable output range? (EB 84, Annex 7) <i>Under N_{all}, registered CDM projects and projects undergoing validation are not to be included.</i></p>	<p>N. <i>Description:</i></p> <p>Yes, N_{all} include only plants that have started commercial operation before the start date of this project activity but not applied for CDM.</p> <p><i>Validator’s action:</i></p> <p>PDD and Common Practice Analysis (CPA) sheet has been reviewed by validation team.</p> <p><i>Conclusion:</i></p> <p>N_{all} include only plants that have started commercial operation before the start date of this project and is within the applicable output range.</p>	/PDD/	OK	OK
<p>B.3.1.3. In case of projects activities applying ACM0002: Does N_{diff} include only plants that apply different “technology” than the project activity? (EB 84, Annex 7) <i>The term “technology” refers to energy fuel, investment climate (access to technology, subsidies, legal regulations, etc...) or unit cost of output.</i> <i>Assess how the essential distinctions to identify the different</i></p>	<p><i>Description:</i></p> <p>The project activity is located in the state of Madhya Pradesh of India and the policy applicable for the wind projects is regulated by Madhya Pradesh Electricity Regulatory Commission. Therefore, it is confirmed that the policies and tariff are different (Investment climate w.r.t (iii) Promotional policies; (iv) Legal regulations) in different states and hence projects installed in other states have been considered in N_{diff}</p> <p><i>Validator’s action:</i></p> <p>PDD and Common Practice Analysis (CPA) sheet has been reviewed</p>	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<i>measures have been carried out.</i>	by validation team. <i>Conclusion:</i> Therefore, projects installed in other states have been considered in N _{diff}			
B.4.13.ODA Additionality Check				
B.4.13.1. Is a clear and transparent financing plan submitted which allows an assessment of whether the project financing includes ODA?	<i>Description:</i> The project does not involve public funding. <i>Justification of evidence:</i> The PDD and GS Passport have been checked. Interviews with the Project proponent have been contacted <i>Conclusion:</i> Project does not involve any public funding. However, declaration for the same is yet to be submitted as per GS toolkit	/PDD/ /GSP/	OK	OK
B.4.13.2. Is ODA used for the project activity and if yes is the funding on condition that the credits coming out of the project are transferred to the donor country? (Toolkit 3.5.1)	<i>Description:</i> Project does not involve any public funding hence not applicable <i>Justification of evidence:</i> <i>Conclusion:</i> No ODA is used	/PDD/ /GSP/ /ODA/	OK	OK
B.4.13.3. Is a duly filled ODA declaration submitted for validation? And is it signed by an authorized person?	<i>Description:</i> A completed and signed ODA declaration was furnished to both the GS and the DOE <i>Justification of evidence:</i>	/PDD/	CAR AZ	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	ODA declaration was checked <i>Conclusion:</i> The ODA was however not included in the draft GS passport and CAR A7 was raised			
B.4.14. Assessment of double counting				
B.4.14.1. Does the project area overlap with the project area of a similar project activity which claims for ER-certificates?	<i>Description:</i> This is a greenfield project activity where no such project or projects reducing emission reductions is located <i>Justification of evidence:</i> Via onsite visit and interviews <i>Conclusion:</i> The project does not overlap with any other project	/PDD/ /GSR/ /GSP/ /gs/ /vcs/ /unfccc/	OK	OK
B.4.14.2. Is it reliably confirmed, e.g. by providing an undertaking, that the VERs within this proposed project activity are not part of another voluntary emission reduction project activity. Has a declaration of non-involvement in other certification schemes been provided by the PP? (Confirmation of avoidance of double counting).	<i>Description:</i> PP has confirmed in the GS Passport that the project is not part of other schemes and will not claim Green or White Certificates, or equivalent. <i>Justification of evidence: pending</i> The GS Passport has been checked <i>Conclusion:</i> The project is undergoing GS validation	/GSP/ /PDD/ /GSR/ /vcs/ /gs/ /unfccc/	OK	OK
B.1. Ex-Ante Calculation of GHG Emission Reductions				

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<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>				
<p>B.1.1. Are the equations applied correctly according to the applied approved GS methodology? (VVS, EB 93, Annex 5) <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></p>	<p><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: <i>Description:</i> Equations to calculate BE, PE, LE and ER have been applied in line with the applied methodology. The emission reductions are calculated based on expected net generation annually, computed with the carbon intensity of the project electricity system (grid). <i>Justification of evidence:</i> The calculations have been checked against the methodology requirements and applied GEF tool <i>Conclusion:</i> The calculations have been checked and are correct, however, CAR B10 is raised in this regard.</p>	/PDD/ /ACM2/ /ER/ /CEA/ /TOOL/	CAR B10	OK
<p>B.1.2. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological</p>	<p><i>Description:</i> As per the approved methodology ACM0002, Ver. 17.0, as the project uses renewable energy, project emission is correctly taken as zero <i>Justification of evidence:</i></p>	/ACM2/ /PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>choices (i.e. baseline identification)?</p> <p>(VVS, EB 93, Annex 5)</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>The PDD and applied methodology have been checked</p> <p><i>Conclusion:</i></p> <p>Methodological choices have been correctly applied and justified</p>			
<p>B.1.3. Have conservative assumptions been used when calculating the baseline and project emissions?</p> <p>(VVS, EB 93, Annex 5) (GS Toolkit 2.2, 3.5.1)</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>Project activity is installation of wind power project and does not lead to GHG emission within the project boundary more than 1 % of expected average annual emission reduction</p> <p><i>Justification of evidence:</i></p> <p>The PDD and applied methodology have been checked</p> <p><i>Conclusion:</i></p> <p>Methodological choices have been correctly applied and justified</p>	<p>/ER/ /PDD/</p>	<p>OK</p>	<p>OK</p>
<p>B.1.4. 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>(VVS, EB 93, Annex 5)</p>	<p><i>Description:</i></p> <p>As per methodology and PDD, no project emissions are expected and/or realized.</p> <p><i>Justification of evidence:</i></p> <p>The PDD and methodology have been checked</p> <p><i>Conclusion:</i></p> <p>No project emissions are expected</p>	<p>/PDD/ /ER/</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 evidence)	Ref.	Draft Concl.	Final Concl.
<p>B.1.4.1. Has a plant load factor (PLF) been defined ex-ante and considered for determination of baseline emissions?</p> <p>(EB 48 Annex 11, VVS, EB 93, Annex 5)</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></p> <p>Yes, PLF data to be applied for the purpose of calculating expected emissions reductions” are considered to be reasonable, applicable and conservative</p> <p><i>Justification of evidence:</i></p> <p>PDD, PLF as per of DPR report and emission reduction sheet is checked</p> <p><i>Conclusion:</i></p> <p>The validation team confirm that the PLF used for determination of baseline emission is defined ex-ante as per third party PLF assessment report.</p>	<p>/ER/ /PDD/ /PLF/ /DPR/</p>	<p>OK</p>	<p>OK</p>
<p>B.1.5. 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>(VVS, EB 93, Annex 5)</p> <p><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></p> <p>Emission factor considered for the project activity for the calculation of emission reduction is calculated correctly. The data/parameter i.e. $EF_{grid, CM, y} = 0.9770 \text{ tCO}_2/\text{MWh}$ value used for emission factor calculation is consistent in section B.6.1 and B.6.2.</p> <p><i>Validator’s action:</i></p> <p>This is validated by the review of tool to calculate emission factor for an electricity system version ^{/UNFCCC/} and CO2 Baseline Database for the Indian Power Sector, version 11.0 of Central electricity Authority ^{/CEA/}</p> <p><i>Conclusion:</i></p> <p>Therefore, it is concluded by validation team that the CM emission factor is calculated is correct and as per the “Tool to calculate the</p>	<p>/PDD/ /ER/ /CEA/ /TOOL/ /UNFCCC/</p>	<p>CAR B4 CAR B10</p>	<p>OK</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	emission factor for an electricity system”, Version 6 and has been sourced from the Central Electricity Authority (CEA) CO2 Baseline database. However, CAR B4 is raised for emission factor calculation submission.			
<p>B.1.6. Are all ex-ante calculation values for monitoring parameters (as defined as per chapter B.7.1) reasonable?</p> <p>(VVS, EB 93, Annex 5) <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>	/ER/ /ACM2/	OK	OK
<p>B.1.7. 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> The project is a green field Wind based renewable energy generation project. The emission reduction occurred from the project will be calculated by measuring net exported electricity to the grid by project activity. The emission reduction is real, measurable and will give long term benefits related to the mitigation of climate change.</p> <p><i>Validator’s action:</i> Validation team has reviewed, Purchase orders^{/PO/}, CO2 Baseline Database for the Indian Power Sector, version 11.0 of Central electricity authority^{/CEA/} to validate the same.</p> <p><i>Conclusion:</i> The validation team concluded that the emission reductions are real, measurable and give long-term benefits related to the</p>	/PDD/ /ACM2/ /ER/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	mitigation of climate change			
B.2. Monitoring of Emission Reductions <i>It is assessed whether the monitoring plan is appropriate for the project activity and in line with the applied methodology.</i>				
<p>B.2.1. Are all carbon monitoring parameters required by the applied methodology contained in the monitoring plan?</p> <p>(VVS, EB 93, Annex 5)</p> <p><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 justified and correct.</i></p>	<p><i>Description:</i></p> <p>All carbon monitoring parameters ($EG_{\text{facility},y}$) are included in section B.7.1 of the project PDD and deemed correct</p> <p><i>Justification of evidence:</i></p> <p>The PDD was checked against applied methodology and tool</p> <p><i>Conclusion:</i></p> <p>The same was validated from the PDD and emission reduction sheet. However, CAR B11 is raised w.r.t to monitoring parameter i.e. net electricity supplied to the grid.</p>	<p>/PDD/ /Tool/</p>	<p>CAR B11 CAR B12</p>	<p>OK</p>
<p>B.2.2. 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>(VVS, EB 93, Annex 5)</p> <p><i>Assess whether the provided information for all parameters w.r.t.</i></p>	<p><i>Description:</i></p> <p>The means of monitoring $EG_{\text{facility},y}$ is feasible and in accordance with the applied methodology.</p> <p><i>Justification of evidence:</i></p> <p>The PDD and methodology have been compared</p> <p><i>Conclusion:</i></p> <p>No significant mistakes have been raised. However, CAR B12 is</p>	<p>/PDD/ /ACM2/</p>	<p>CAR B11 CAR B12</p>	<p>OK</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
a) <i>Label (name of the data / parameter)</i> b) <i>data unit</i> c) <i>description</i> d) <i>source of data</i> e) <i>measurement equipment / method / procedure</i> f) <i>monitoring frequency</i> g) <i>QA/QC procedures</i> <i>are appropriately described and in compliance with the requirements of the methodology..</i>	raised w.r.t to monitoring parameter i.e. net electricity supplied to the grid.			
B.2.3. Have all means of implementing the monitoring plan, e.g. equations necessary for ex-post emission reduction calculation, been described clearly and in line with the methodology? (VVS, EB 93, Annex 5) <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> <i>Please consider that additional equations might be necessary to calculate auxiliary parameters.</i>	<i>Description:</i> All means of implementing the monitoring plan, including all equations necessary for ex-post emission reduction calculation, have been described clearly and in line with the methodology. <i>Justification of evidence:</i> The PDD have been checked <i>Conclusion:</i> The monitoring plan and all equations comply with the methodology	/PDD/ /ACM2/	CAR B11 CAR B12	OK
B.2.4. Is it likely that the monitoring arrangements described in the PDD can properly be implemented in the context of the project	<i>Description:</i> The monitoring arrangement described in the PDD is likely to be properly implemented in the project activity	/PDD/ /ACM2/	CAR B11 CAR	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
activity? (VVS, EB 93, Annex 5) <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>	<i>Justification of evidence:</i> The PDD have been checked <i>Conclusion:</i> The monitoring plan can properly be implemented in this PA		B12	
B.2.5. Are the QA/QC procedures appropriate sufficient to ensure the emission reductions achieved from the project activit can be reported ex-post and verified? (VVS, EB 93, Annex 5) <i>Please consider the description given in section B.7.2. Describe which QA/QC provisions are considered. Address Quality Management System provisions, calibration and maintenance of equipment. Address further any review procedures.</i>	<i>Description:</i> All QA/QC procedures have been sufficiently articulated in section B.7.1 & B.7.3 of the PDD <i>Justification of evidence:</i> The PDD have been checked <i>Conclusion:</i> The monitoring plan and QA/QC procedures are deemed sufficient for the project data quality	/PDD/	CAR B11 CAR B12	OK
B.2.6. Are procedures identified for data management? (VVS, EB 93, Annex 5) <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</i>	<i>Description:</i> All procedures are identified for data management and duly outlined in the GS PDD <i>Justification of evidence:</i> The PDD and applied methodology have been consulted <i>Conclusion:</i> Data management procedures are sufficiently addressed	/PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<i>for the whole crediting period + 2 years.</i>				
B.2.7. Are all SD monitoring parameters required by the applied methodology contained in the monitoring plan?	<p><i>Description:</i> The CDM methodology applied does not require specific SD parameters. However, PP has to address the same as per GS requirement.</p> <p><i>Justification of evidence:</i> The methodology was checked</p> <p><i>Conclusion:</i> Finding CAR SD1 and SD2 is raised and closed successfully.</p>	/GSP/ /PDD/	CAR SD1 SD2	OK
<p>C. Duration of the Project <i>It is assessed whether the temporary boundaries of the project are clearly defined.</i></p>				
C.1. Is the project's starting date clearly defined and evidenced? (VVS, EB 93, Annex 5) <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><i>Description:</i> The project starting date is clearly defined in section C.1 of the PDD and evidenced in line with the <i>CDM Glossary of Terms</i>.</p> <p><i>Justification of evidence:</i> The PDD has been checked</p> <p><i>Conclusion:</i> The starting date is clearly defined</p>	/PDD/	CAR C1	OK
C.2. Is the project's operational lifetime clearly defined and evidenced? <i>Check whether the project lifetime is correctly defined.</i>	<p><i>Description:</i> The project lifetime is clearly defined in section C.of the PDD as 25 years and evidenced</p>	/PDD/ /P-Life/	CAR C1	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p><i>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>Justification of evidence:</i></p> <p>The PDD has been checked</p> <p><i>Conclusion:</i></p> <p>The operational lifetime is clearly defined as per industry practice. However, finding CAR C1 is raised w.r.t to lifetime to the project activity.</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 for validation and registration.</i></p>	<p><i>Description:</i></p> <p>The project start date of crediting is clearly defined in section C.2.2 of the PDD and evidenced</p> <p><i>Justification of evidence:</i></p> <p>The PDD has been checked</p> <p><i>Conclusion:</i></p> <p>The start date of crediting is clearly defined. However, finding CAR C2 is raised w.r.t to lifetime to the project activity.</p>	/PDD/	CAR C2	OK
<p>D. Contribution to Sustainable Development</p> <p><i>The project's contribution to sustainable development is assessed.</i></p>				
<p>D.1. Will the project create other environmental or social benefits than GHG emission reductions?</p> <p>(VVS, EB 93, Annex 5)</p> <p><i>Describe the other positive aspects not related to GHG emission reduction on the environment.</i></p>	<p><i>Description:</i></p> <p>The GS passport (F.2) and the PDD (A.1) have outlined the other benefits aside from GHG emission reductions</p> <p><i>Justification of evidence:</i></p> <p>The PDD/Passports were checked. Several interviews were</p>	/GSP/ /PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	conducted onsite with the PP, the local representatives and local stakeholders <i>Conclusion:</i> Section F.2 of the GS passport is to updated in this regard.			
E. Environmental & Social Impact Assessment (ESIA) <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>				
E.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA)? (VVS, EB 93, Annex 5) <i>Check the host party regulations regarding EIA. If no requirements for an EIA exist, discuss whether the project participants conducted an analysis of the environmental impacts of the project activity.</i>	<i>Description:</i> There are no specific EIA requirements for Wind projects in India. However, the PP has undertaken an environmental and social impact assessment that has concluded only positive impacts.. <i>Justification of evidence:</i> The GS PDD <i>Conclusion:</i> No host country requirements for an EIA. However, PP has conducted a comprehensive ESIA in line with IFC requirements	/ESIA/ /PDD/	OK	OK
E.2. In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been carried out and if applicable duly approved? (VVS, EB 93, Annex 5) <i>Check the EIA and its approval, if applicable.</i>	<i>Description:</i> There are no specific EIA requirements for Wind projects in India. However, the PP has undertaken an environmental and social impact assessment that has concluded only positive impacts. <i>Justification of evidence:</i>	/ESIA/ /PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
	The GS PDD <i>Conclusion:</i> No host country requirements for an EIA. However, PP has conducted a comprehensive ESIA in line with IFC requirements			
E.3. Has an analysis of the environmental and social impacts of the project activity been sufficiently described and in line with the host party environmental legislation? (VVS, EB 93, Annex 5) <i>Check the PDD (section D). Check whether the project will create any adverse environmental effects.</i> <i>Check the relevant local, regional, and national environmental legislation and compliance with requirements of environmental and social impact assessment. (GS Toolkit 3.5.1)</i>	<i>Description:</i> There are no specific EIA requirements for Wind projects in India. However, the PP has undertaken an environmental and social impact assessment that has concluded only positive impacts. <i>Justification of evidence:</i> The GS PDD <i>Conclusion:</i> No host country requirements for an EIA. However, PP has conducted a comprehensive ESIA	/PDD/ /ESIA/	OK	OK
E.4. Are transboundary environmental impacts considered in the analysis? (VVS, EB 93, Annex 5) <i>Check the documents and local official sources / expertise regarding trans-boundary environmental impacts.</i>	<i>Description:</i> No trans-boundary impacts are expected from wind power project <i>Justification of evidence:</i> The PDD <i>Conclusion:</i> No trans-boundary impacts are expected	/ESIA/ /PDD/	OK	OK
E.5. If no EIA has been carried out, could it be assessed whether	<i>Description:</i> An ESIA has been carried out	/GSP/ /PDD/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<ul style="list-style-type: none"> Environmental impacts of the project are included in the PDD? Any SD indicator is scored “-“? All potential negative impacts have been neutralized by mitigation measures Stakeholders identified any significant social or environmental impacts? 	<p><i>Justification of evidence:</i> The GS PDD</p> <p><i>Conclusion:</i> No negative impacts are expected</p>	/ESIA/		
<p>F. Stakeholder Consultation Process</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>				
<p>F.1. Does the project activity result in a transfer of knowledge or an innovation of technology in the host country of project implementation and are the benefits of the transfer substantiated?</p>	<p><i>Description:</i> Not applicable, as the project activity is not the transfer of technology</p> <p><i>Justification of evidence:</i> The GS passport has been reviewed</p> <p><i>Conclusion:</i> Project activity does not result in a transfer of knowledge or an innovation of technology in the host country of project implementation. However, CAR F1 is raised w.r.t to LSC process.</p>	/GSP/ /LSHCP/ /PDD/ /ESIA/	CAR F1	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>F.2. Does the project activity clearly demonstrate benefits in terms of SD, based on</p> <ul style="list-style-type: none"> Local / global environment sustainability Social sustainability and development Economic and technological development? 	<p><i>Description:</i> Section F of the GS Passport contains an assessment of SD indicators, and has made a DNH assessment to ensure environmental and social integrity</p> <p><i>Justification of evidence:</i> The PDD and GS passport have been checked</p> <p><i>Conclusion:</i> The proposed project activity has demonstrated how it contributes to sustainable development however; section F of the GS passport is to updated w.r.t to local MDG and related reference link.</p>	<p>/PDD/ /GSP/ /ESIA/ /LSC/</p>	<p>CAR F4</p>	<p>OK</p>
<p>F.3. Is the “Do No Harm” assessment performed in an adequate manner, considering all the questions in Annex H of the GSR? Are all safeguarding principles considered?</p> <p>(Toolkit 2.4.1-2.4.3, GS Annex H, GS Annex I, GS Requirements v2.2 section VII.b.1.)</p>	<p><i>Description:</i> The DNH assessment has been carried out sufficiently considering all requirements of GS Annex H</p> <p><i>Justification of evidence:</i> The GS Passport has been reviewed against Annex H of the GS and project situation</p> <p><i>Conclusion:</i> All DNH and safeguarding principles have been assessed in line with GS requirements and however, ddescription of relevance doesn't include the reference/source link for all safeguarding principle. However, CAR SD1 is raised w.r.t GS safeguarding principle and their linkage with MDG.</p>	<p>/GSP/ /MDG/</p>	<p>CAR SD1</p>	<p>OK</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
F.4. In the event of adverse impacts on the environment, the social / economic situation or technological development in the project region are appropriate mitigation measures implemented?	<i>Description:</i> No adverse impacts are expected. Please see checklist item D.1.1 above <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/ /GSP/ /ESIA/	OK	OK
F.5. Are the chosen mitigation measures able to offset the adverse effects or is the impact deemed negligible? If negative impact cannot be mitigated and a neutral score, then the project is not eligible (GS Toolkit 2.4.3, 3.5.1)	<i>Description:</i> No adverse impacts are expected. Please see checklist item D.1.1 above <i>Justification of evidence:</i> <i>Conclusion:</i>	/PDD/ /GSP/ /ESIA/	OK	OK
F.6. Are all statements in the SD Assessment Matrix transparent and based on existing sources and referenced and reproducible? (GS Annex I, GS Annex AC, GS Toolkit 3.5.1)	<i>Description:</i> The SD matrix is transparent and well-referenced <i>Justification of evidence:</i> The GS Passport has been checked <i>Conclusion:</i> The SD matrix is fully completed and referenced however, finding is raised in this respect. However, finding SD 1 is raised w.r.t link/reference of SD matrix/indicators.	/PDD/ /GSP/ /ESIA/	CAR SD1	OK
F.7. Is the most relevant indicator of each listed potential mitigation measure taken from the “Do No Harm” assessment? Is the mitigation measure copied to the SD-Matrix?	<i>Description:</i> No significant negative impacts are expected in the ESIA and DNH assessments. Therefore, no need for any mitigation measure as demonstrated in section F.2 of the GS passport	/GSP/ /ESIA/	CAR SD1	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
(GS Annex H)	<i>Justification of evidence:</i> The GS passport has been checked <i>Conclusion:</i> No need for any mitigation measures			
F.8. Is the scoring linked to the MDGs of the host country, transparent and verifiable?	<i>Description:</i> Scoring is linked to a relevant MDG goals for each SD indicator <i>Justification of evidence:</i> The GS passport was reviewed <i>Conclusion:</i> Section F.2 is duly completed as per GS requirements	/MDG/ /GSP/	OK	OK
F.9. In case of Wind, Biomass and Hydro project, is the SD checklist completed? (GS Annex G)	<i>Description:</i> Yes, for the project activity SD indicators are complete as per the checklist. <i>Justification of evidence:</i> The GS passport and during site visit.by validation team <i>Conclusion:</i> Yes, for wind projects SD checklist is complete.	/MDG/ /PDD/ /GSP/ /GS ANNEX G/	OK	OK
F.10. Are all SD indicators discussed during stakeholder consultation? Check that all non-neutral indicators are part of the	<i>Description:</i> As per the LSC document submitted to DOE and the GS, all relevant SD indicators discussed during stakeholder consultation	/GSP/ /GSR/ /LSHCP/	OK	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
monitoring plan (GS Annex I, Annex AB, Annex AC, Toolkit 2.4.3.)	<i>Justification of evidence:</i> The LSC document and passports have been reviewed <i>Conclusion:</i> All SD indicators were discussed			
F.11. Are all points considered in the SD monitoring plan relative to the baseline scenario?	<i>Description:</i> All points considered in the SD monitoring plan are relative to the baseline scenario <i>Justification of evidence:</i> Passport review <i>Conclusion:</i> The baseline situation is considered when analysing all SD parameters. However, finding CAR SD2 is raised wr.t to SD monitoring current situation and future target.	/PDD/ /GSP/	CAR SD2	OK
F.12. Scoring requirements: <ul style="list-style-type: none"> • Have all components a non-negative sub-total score? • Is the total score positive? • Has one indicator a score of “-”? • Are all indicators scoring “-” subjected to the EIA? • Are at least two of the sub---totals (categories) 	<i>Description:</i> Indicators have scored with 0 or +. Therefore there was no need for any mitigation measures. All sustainable development indicators scored as zero, neutral and positive must be justified with the help of reference document in SD Matrix. Include justification paragraph for all the sustainable development indicators as faced/applicable for the project activity <i>Justification of evidence:</i> Passport review <i>Conclusion:</i>	/PDD/ /GSP/	CAR SD2	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
positive? Is the third sub---total at least neutral (GS Annex I, GS Toolkit 3.5.1)	However, finding SD2 is raised in this regard.			
F.13. In case of potential negative impacts or risk of violating the GS Safeguarding Principles by the project, are the identified points (including mitigation/compensation) included in the monitoring plan? (GS Requirements v2.2, section VII.b.2.)	<p><i>Description:</i></p> <p>No major negative impacts are expected.. The DNH assessments indicated no risk for violating the same in the host country, hence, no need for mitigation or compensation measures</p> <p><i>Justification of evidence:</i></p> <p>The GS passport and annex H were checked</p> <p><i>Conclusion:</i></p> <p>No need for mitigation or compensation measures</p>	/PDD/ /GSP/	OK	OK
F.14. Does the SD monitoring plan describe the current status (or expected status under the baseline) of the parameters, the future status and the way, the parameters will be monitored of the project activity in an adequate, transparent and verifiable manner? (GS Toolkit 2.4.3 and Toolkit Annex I, Annex AB)	<p><i>Description:</i></p> <p>The SD monitoring plan describes the current status under the baseline of the parameters, the future status and the way, the parameters will be monitored of the project activity are defined. However, finding is w.r.t how the information provided for the parameters number 2, 4 (Chosen parameter, Current situation of the parameter, Estimation of the parameter, future target) are arrived for project activity case.</p> <p><i>Justification of evidence:</i></p> <p>The passport has been checked</p> <p><i>Conclusion:</i></p> <p>Finding CAR SD2 was raised and closed.</p>	/GSR/ /PDD/ /GSP/	CAR SD2	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p>F.15. If a full EIA has been carried out, is the documentation submitted to the validator and are all GS criteria fulfilled?</p>	<p><i>Description:</i></p> <p>No EIA is required as per the host country laws. However, a full and comprehensive ESIA has been carried out considering all GS required issues which include social, environmental and economic impacts. No negative impacts have been identified</p> <p><i>Justification of evidence:</i></p> <p>The ESIA report review as well as the GS passport review</p> <p><i>Conclusion:</i></p> <p>A full ESIA has been carried out. All host country criteria as well as GS criteria have been met. The same has been uploaded onto the GS registry</p>	<p>/ESIA/ /PDD/ /GSP/</p>	<p>OK</p>	<p>OK</p>
<p>F.16. Can the stakeholder consultation process be assessed as adequate?</p> <p>(VVS, § 138-140) (GS Toolkit 1.6, 1.7, 1.8, 2.6.1, 2.6.2, 2.7, 3.5.1)</p> <p>(GS Requirements v2.2 section VIII.b.2 – VIII.b.7, GS Annex W, Annex AB, Annex J,)</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>(a) Comments by local stakeholders that can reasonably be considered relevant for the proposed GS project activity, have been invited;</p> <p>(b) The summary of the comments received as provided in the</p>	<p><i>Description:</i></p> <p>The PP has conducted the local stakeholder feedback round as a part of the stakeholder Feedback Round as per GS rules/guidance. Efforts were made to identify and invite all relevant stakeholders to the LSC and to comment during the SFR. All comments were taken into account.</p> <p>However, PP has to submit SFR document to ensure that Sustainable Development, No Harm assessment, Sustainability monitoring parameters and GS aspects were discussed with stakeholders</p> <p><i>Justification of evidence:</i></p> <p>The LSC documents and PDD/GS passport were checked</p>	<p>/PDD/ /LSHCP/ /GSP/</p>	<p>CAR SD1</p>	<p>OK</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidence)	Ref.	Draft Concl.	Final Concl.
<p><i>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><i>d) Check that the initial LSC has been carried out for regular project cycle prior to the project start date, and all relevant stakeholders (including GS Foundation and GS supporter NGOs) were identified and invited with sufficient notice time. The DNA/National Focal Point also needs to be informed.</i></p> <p><i>e) Check that the LSC report has been uploaded by PP and approved by the GS</i></p> <p><i>f) Procedure stakeholder feedback round (SFR) as per GS Toolkit & requirements</i></p> <p><i>g) Continuous input/Grievance Mechanism</i></p> <p><i>h) Check that the full LSC report incorporating the physical public consultation meeting and the SFR is complete as per GS guidelines.</i></p>	<p>Conclusion:</p> <p>The stakeholder consultation process is deemed adequate, however, finding is raised.</p>			

ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION

Table A-2: Assessment of Baseline Identification (VVS, v. 09.0 §§ 97 – 104)

<input checked="" type="checkbox"/>	Baseline is pre-defined by the methodology
<input type="checkbox"/>	Assessment of baseline alternatives 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)

ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-3: Assessment of Financial Parameters (VVS, v. 2.0, §§ 120, 121 / in case financial parameters stem from PDD §122,)

<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 comments	
					Correctness of value applied	Comment
Plant Capacity	50 (2 MW * 25 no's of WTG)	MW	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 Certified true copy of the board resolution passed by Board of directors of Company i.e. Orange Bercha Wind Power Private Limited for investment in wind power project dated 18/01/2016 Purchase Order for WTG erection, supply and commissioning signed	/DPR/ /MD/ /PO/	<input checked="" type="checkbox"/>	The installed capacity of the project considered in the financial analysis is based on the Detailed Project Report dated Dec 2015 50 MW (25 numbers X 2.0 MW) prepared by Orange Bercha Wind Power Private Limited available at the time of investment decision making time. Based on which the investment decision dated 18/01/2016 is taken by the PP. Installed capacity of the project is also verified from the purchase order issued to Gamesa by the Project proponent (PP). Validation team would like to highlight here that at the time of investment decision making time board of directors of the company had decided to install 50 MW (25 numbers X 2.0 MW) project in Madhya Pradesh. Accordingly, project proponent has demonstrated the financial additionality for 50 MW (25 numbers X 2.0 MW) project. Validation team has checked the documents submitted

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			between PP and M/s Gamesa Renewable Private Limited (Gamesa) dated 24/01/2016.			by PP i.e. the investment decision; the permission from MP state nodal agency, Power Purchase Agreement, and commissioning certificates to confirm that the installed capacity of the project is 50 MW (25 numbers X 2.0 MW).
Project life	25	Years	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 Certificate from Gamesa Environmental Product Declaration for life of G97-2.0 MW WTG 2000 kW Wind Turbine Generator (WTG) included in the project activity	/DPR/ /PO/ /P-Life/ /MPERC/	<input checked="" type="checkbox"/>	The technical lifetime of the project activity is 25 years. The input value is based on the information given by the machinery supplier on the technical life time of the equipment Incidentally; this is also in conformity with the operating life given by MPERC. The certificate from Gamesa (Environmental Product Declaration for life of G97-2.0 MW WTG) submitted by PP for the WTG indicates the technical life time of the project as 25 years. Thus, the validation team has confirmed that the computation of the equity IRR calculations for period of 25 years is appropriate for the project activity. Hence, the value considered by PP is correct and appropriate for the project.
Project cost	3883.0	INR In million	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 Purchase Order for WTG	/DPR/ /PO/ /SC/	<input checked="" type="checkbox"/>	The project cost includes land, WTGs, tower, transformer, electrical, erection and commissioning cost. Project developer has submitted the Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 and the total project cost has been verified to be 3883.0 INR million as correct. As per Detailed project report (DPR), the per WTG cost for

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			erection, supply and commissioning signed between PP and M/s Gamesa Renewable Private Limited (Gamesa) dated 24/01/2016. CA certificate for the actual project cost for the project activity.			<p>model no. G97-2.0 works out to be 77.66 million INR per MW. Since the DPR document was available with the PP at the time of decision making based on which the investment decision is taken by the top management of the company so, consideration of this cost is in conformity with Investment analysis, version 8.0 (EB 97, annex 8).</p> <p>Nonetheless, the checked the actual cost incurred for the project (based on purchase orders issued) and project cost comes out to be ~7.5% less than as per DPR. Therefore, validation team considers the cost as correct and appropriate for the project activity for additionality demonstration. The validation team has confirmed from the investment analysis spreadsheet that IRR does not cross the benchmark even if the actual project cost is used. The equity IRR does not exceed the benchmark even with a -10% change in the project cost and hence, the additionality of the project activity is still substantiated.</p> <p>Therefore, the project cost considered in the additionality demonstration of the project is correct and appropriate.</p>
Plant Load Factor	25	%	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 MPERC Tariff Order for wind plants dated	/DPR/ /PLF/ /MPERC/	<input checked="" type="checkbox"/>	<p>PLF considered in the IRR calculation is 25% which is available to the PP at the time of decision making, PP estimated the generation i.e. 25 % based on the detailed project report (DPR) in conformity with Investment analysis, version 8.0 (EB 97, annex 8)..</p> <p>Validation team would like to highlight here that at</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			26/03/2013			<p>investment decision making time board of directors of the company had decided to install 50 MW (25 numbers X 2.0 MW) project. Accordingly, PP estimated the generation i.e. 25 % based on the detailed project report (DPR) for 50 MW (25 numbers X 2.0 MW) project activity.</p> <p>Moreover, verification team considered MPERC Tariff Order for wind plants dated 26/03/2013 to check the appropriateness of the PLF value as per detailed project report (DPR). According to the tariff order MPERC has recommended PLF value of 23% which is less than the value considered in the DPR.</p> <p>Nonetheless, PLF has been subjected to sensitivity analysis wherein the continued additionality of the project has been demonstrated even with a 10% increase in PLF (resulting in a net PLF of ~ 27.50%); project loses its additionality only when the WTGs achieve PLF of ~29.67% on a sustained basis right through the operating life which is not possible in project activity case as for the project the PLF as per study^{DPR/} done is 25%. Therefore, validation team accepted the PLF as correct and appropriate for the project activity.</p>
Debt-Equity Ratio	75:25	Ratio	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 MPERC Tariff Order for	/MPERC/ /MD/	<input checked="" type="checkbox"/>	The debt equity ratio in the IRR calculations is taken as 75:25, which is widely used for the wind power projects in the states of India. PP has used Debt-Equity Ratio as per detailed project report (DPR) available at the time of investment decision making time. Further, MPERC tariff order dated 26/03/2013 which also recommends debt

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			wind plants dated 26/03/2013. Certified true copy of the board resolution passed by Board of directors of Company i.e. Orange Bercha Wind Power Private Limited for investment in wind power project dated 18/01/2016			equity ratio of 70:30 which is normative for power generating companies in the host country i.e. India. The above referred tariff order also confirms that Tariff Policy (TP) notified by Ministry of Power, Government of India stipulates a debt-equity ratio of 70:30 for financing of power project. Further, based on local and sectoral expertise validation team found that in India, infrastructure projects are generally entitled to a debt equity ratio of 70:30, though depending on the case the ratio can be marginally higher or lower. MPERC has recommend debt equity ratio of 70:30 for wind energy projects. Since the debt equity ratio is in comparable and is in conformity with general norm and is evidenced by the sanction letter (which states debt: equity ratio as 75:25) as, the validation team is convinced that the financing pattern assumed is appropriate and correct and is also valid. Also, the validation team was able to check the actual values from the loan sanction letter, wherein the ratio is approximately the same i.e. 75:25. However, this has no impact on IRR; hence validation team considers the value used is reasonable and appropriate.
Loan period (in years)	12	years	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015 MPERC Tariff order	/MPERC/ /DPR/ /LS/	<input checked="" type="checkbox"/>	The loan period considered in the IRR calculation is verified from detailed project report (DPR) available at the time of investment decision making time as 12 years and found to be consistent with the evidence checked by validation team. The validation team also reviewed the tariff order, wherein the loan repayment period is taken

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			dated 26/03/2013. Loan Sanction letter issued by PTC India Financial Services Ltd to Project Proponent dated 31/01/2016			<p>same as 10 years and no moratorium periods.</p> <p>Validation team has also checked the actual loan sanction letter as per loan sanction letter. The actual repayment period of also 15 years with one year moratorium period. Validation team has independently checked if same is considered in the financial model project doesn't loses its additionality. Therefore, it is confirmed by validation team that repayment period considered in the project is correct and accurate.</p> <p>However, this has no impact on IRR; hence validation team considers the value used is reasonable and appropriate.</p>
Rate of Interest	12.50	%	<p>Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015</p> <p>MPERC Tariff Order for wind plants dated 26/03/2013.</p> <p>Loan Sanction letter issued by PTC India Financial Services Ltd to Project Proponent dated 31/01/2016</p>	/MPERC/ /LS/ /DPR/	<input checked="" type="checkbox"/>	<p>The interest rate on loan used in the IRR calculation is verified from detailed project report (DPR) available at the time of investment decision making time found to be correct and consistent. The validation team also reviewed the tariff order, wherein the interest rate is taken same as 12%. Hence validation team considers the value used is reasonable and appropriate.</p> <p>In line with VVS ver. 1.0, validation team has cross-checked the interest rate with the actual loan sanction letter. The actual interest rate considered in the project is 12.50% and repayment period of 15 years with one year moratorium period. If same is considered in the financial model project doesn't loses its additionality. Therefore, it is confirmed by validation team that interest rate considered in the project is correct and accurate.</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
Tariff per kWh	4.78	In INR	<p>Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015</p> <p>MPERC Tariff Order for wind plants dated 26/03/2013</p> <p>PPA with MPPMCL dated 10/02/2107 for the 50 MW project activity</p> <p>Certified true copy of the board resolution passed by Board of directors of Company i.e. Orange Bercha Wind Power Private Limited for investment in wind power project dated 18/01/2016</p>	/MPERC/ /MD/ /PPA/	☒	<p>The tariff of electricity used in the IRR calculation is taken as 4.78 INR per kWh based on the MPERC tariff order as well as from the detailed project report (DPR) which was valid during the time of investment decision hence it is in line with EB 97, annex 8. Validation team checked the DPR report where tariff order of MPERC is used for financial indicator calculation.</p> <p>Moreover, Power Purchase Agreement (PPA) has been verified by validation team which fixes at 4.78 INR/kWh the tariff for the whole life time of the project activity i.e. 25 years. Therefore, even 1% increase in tariff is unrealistic.</p> <p>Furthermore, the PP has also carried out the sensitivity analysis at $\pm 10\%$ of the tariff in the investment analysis. The post-tax equity IRR of the project activity at +10% is lower than the benchmark of the project activity. Thus, the tariff of INR 4.78 per kWh considered in the project activity is found to be appropriate.</p> <p>Thus, it is concluded by validation team that the tariff considered in financial indicator calculation is valid, appropriate and correct and conforms to EB 97, annex 8.</p>
O & M cost per WTG per annum	2.20	Rs. in million per WTG	Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015.	/DPR/ /O&M/	☒	O&M cost has been taken from Detailed Project Report (DPR) which was available at the time of decision making, a copy of which has been submitted to DOE. As per the DPR O&M cost is free for 2 years and 3 rd year onwards the O&M cost is INR 2.20 million/WTG/Year

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			Operation and maintenance contract signed between PP and M/s Gamesa Renewable Private Limited (Gamesa) dated 24/01/2016.			<p>with 5% escalation year-on-year basis. The value has been verified from the detailed project report (DPR) and found to be correct and accurate.</p> <p>Validation team cross checked the O&M cost with the O&M agreement signed by PP. As per actual O&M agreements, the O&M cost is free for 2 years and O&M cost is INR 2.20 million per WTG with 5% escalation Year on year basis. Validation team has checked the plausibility of the input parameter in sensitivity analysis which reveals that even after 100% decrease in the O&M cost project activity remains additional.</p> <p>Hence, it is conclude by validation team the O&M cost considered in financial indicator calculation is within the range. Therefore, the value considered is correct, appropriate and conservative.</p>
O&M escalation	5	%	<p>Detailed Project Report (Project Information Memorandum) for the project activity dated Dec 2015.</p> <p>Operation and maintenance contract signed between PP and M/s Gamesa Renewable Private Limited (Gamesa) dated 24/01/2016.</p>	/DPR/ /O&M/	<input checked="" type="checkbox"/>	<p>Detailed Project Report (DPR) which was available at the time of decision states that the O&M cost is subject to 5% escalation over previous year after 3 years. Validation team has checked the DPR to confirm the correctness of the input parameter.</p> <p>Validation team has also checked actual O&M Service & Availability agreement signed by PP which states O&M escalation rate same i.e. 5%.</p> <p>Validation team has checked the financial model project doesn't breaches the benchmark and remains additional. Hence, it is concluded by validation team that the input</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
						parameter is correct and appropriate.
Insurance	0.02	Million INR/WT G/ year	<p>Insurance premium receipt for old project owned by Orange Renewable Group project issued by The New India Assurance Co. Ltd. dated 01/04/2014.</p> <p>Insurance premium receipt for the project activity dated 05/05/2017.</p>	/IP/	☒	<p>The insurance premium is evidenced by insurance premium receipts of previous wind project of the project proponent and hence available to PP at the time of investment decision making. Moreover, the insurance premium is supported by actual premium paid by the project developer subsequently.</p> <p>Validation team observed that this insurance premium considered in the financial calculation constitutes around 0.004 % of project cost. And based on local sectoral expertise this amount ranges from 0.08% to 0.25% in most of the cases. Validation team observed that insurance is not a critical factor in that even if the entire insurance premium is excluded, the project will remain additional. Hence, the value is considered correct and appropriate</p>
Salvage Value	10.00	%	MPERC Tariff Order for wind plants dated 26/03/2013	/MPERC/	☒	<p>The project proponent has considered the salvage value as per the MPERC Tariff Order for wind plants dated 26/03/2013. Same evidence is available to the PP at the time of investment decision making time. MPERC tariff order is verified by validation team to confirm that the reference considered is correct. Furthermore, since the assets are fully depreciated, 10% of project cost as salvage value represents potential profit and therefore it conforms to Investment analysis, version 8.0 (EB 97, annex 8).</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
						In addition to this the international practices estimate the salvage value at 10%. Therefore, the validation team considers the salvage value as correct and appropriate.
Book Depreciation	7.0 (first 10 years) 1.33 (next 15 Years)	%	MPERC Tariff Order for wind plants dated 26/03/2013 Companies Act 1956, Section 14	/IT/ /ACT/	<input checked="" type="checkbox"/>	The book depreciation considered is based on the Companies act and MPERC Tariff Order for wind plants dated 26/03/2013. Validation team checked book depreciation provided in the companies act 1956 Section 14 and found it to be correct. Project participant has calculated the depreciation as per as per the Companies Act, 1956. So, the same has been found to be appropriate and hence accepted. Hence, it is concluded by validation team that the input parameter is valid, correct and appropriate.
IT Depreciation	7.69	%	IREDA guideline for wind power project dated 22/04/2015 Income Tax Rules and Income tax fourth Amendment rule, 2012	/IT/	<input checked="" type="checkbox"/>	The project participant has considered the IT depreciation as per Indian Renewable Energy Development Agency Limited (IREDA) guideline dated 22/04/2015 available at the time of investment decision making time. Validation team checked Income Tax rules and found it to be correct. Hence, the input parameter is valid, correct and appropriate.
Corporate Tax (Regular) 2015-16	34.61 ⁴	%	As per IT act (Income tax applicable for the year 2015-16)	/IT/	<input checked="" type="checkbox"/>	The tax rates have been considered based on the prevailing tax rate as per the income tax rule applicable at the time of investment decision i.e. for the financial year 2015-16. The total tax is calculated based on

⁴ <http://www.incometaxindia.gov.in/Tutorials/2%20Tax%20Rates.pdf>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
						corporate tax (30%), surcharge (12%) and educational cess (3%). Validation team has checked the calculation to confirm that tax calculation is correct. Hence the corporate tax rate considered is correct.
Benchmark	15.93	%	Detailed IRR calculation sheet Default Return on Equity as per EB 97, annex 8, in real term and RBI Bulletin	/IRR/ /GBI/ /unfccc/	☒	<p>In accordance with Investment analysis, version 8.0 (EB 97, annex 8), project developer has chosen expected return on equity as the benchmark which comes out to be 15.93%. Expected return on equity has been computed using the Appendix of EB 97, annex 8 i.e. Default values for the expected return on equity and detailed calculations are provided in the spreadsheet^{/IRR/} are verified by validation team.</p> <p>Default Return on Equity as per EB 97, annex 8, in real term comes out to be 10.73 %. This value is converted in nominal values by adding the median value of the inflation rate of 4.70%. Value is sourced from the Survey of Professional Forecasters on Macroeconomic Indicators issued by the Reserve Bank of India, which was available to the PP at the time of decision making. Validation team has checked the inflation forecast of central bank of India i.e. RBI and found that the median value of the CPI forecast for next 10 years as per RBI is 4.70%. RBI link is checked by validation team to check the appropriateness of the considered value. The benchmark value thus works put to be 15.93% i.e. $((1+10.73%)*(1+4.70%)-1)$.</p> <p>The value of 15.93% based on the inflation rates available at the time of investment decision. Hence the</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
						<p>value calculated using the EB 97, annex 8 is correct and accepted.</p> <p>Validation team checked the data and found that the data used are from reliable and credible sources, methodology adopted is correct and the calculations are in order. The benchmark chosen is suitable for the type of financial indicator selected, and is in conformity with the Additionality Tool, EB 97, annex 8 and also VVS.</p> <p>The validation team has confirmed that all data used to arrive at the benchmark were derived from the sources available to the project participant at the time of the investment decision and hence the validation team accepted the same. Thus, the benchmark is in line with CDM VVS for project activities, version 1.0.</p>
Service Tax Rate	14.5	%	Income Tax Rules and Income tax fourth Amendment rule, 2012	/ACT/ /IRR/	<input checked="" type="checkbox"/>	<p>The service tax rate have been considered based on the prevailing tax rate as per the income tax rule applicable at the time of investment decision i.e. for the financial year 2015-16. The service tax is calculated based on Service Tax Basic Rate (14%), Swachh Bharat Cess (0.5 %). Validation team has checked the calculation to confirm that tax calculation is correct. Hence the corporate tax rate considered is correct.</p>
Generation Based Incentive (GBI) per kWh	0.50	INR per kWh	Generation Based Incentive for Grid Connected Wind Power Projects guideline issued by Government dated	/GBI/ /DPR/	<input checked="" type="checkbox"/>	<p>Generation based incentive is based on Generation Based Incentive for Grid Connected Wind Power Projects guideline issued by Government dated 04/09/2013. Validation team verified the evidence and found the amount to be correct and available at the time of</p>

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE comments	
					Correctness of value applied	Comment
			04/09/2013			investment decision making time. Validation team also independently checked the Generation Based Incentive scheme for Grid Connected Wind Power Projects and observed that the incentive is available at Re.0.50/kWh subject to a maximum of INR 2.5 million per MW per year. The reckoning of GBI has been done as per the scheme in the worksheet and found to be correct and accurate.

ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

Table A-4: Assessment of Barrier Analysis (VVS, v. 2.0, §§ 124-127)

<input checked="" type="checkbox"/>	No barrier parameters are used for additionality justification
<input 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
			<input type="checkbox"/>	
			<input type="checkbox"/>	

ANNEX 5: OUTCOME OF THE GSCP

Table A-5: Outcome of the Global Stakeholder Consultation Process


(VVS Version 2.0, §§ 34- 37)

<input checked="" type="checkbox"/>	No comments were received during the global stakeholder consultation period
<input 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 ^{*)}	Action taken by the validation team to take due account on the comment ^{*)}	Conclusion (incl. CARs CLs or FARs)
-	-	-	-	-	-	-

^{*)} In case clarifications have been requested by the validation team corresponding rows shall be added

ANNEX 7: STATEMENTS OF COMPETENCE OF INVOLVED PERSONNEL



Statement of Competence
Appointment and authorization according to the procedures of the TUV NORD JVCQM Certification Program

Mr. Indrapal Parmar


SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2019-01-08
VCS / ISO 14064-2	Lead Assessor	2019-01-08

Authorization status for technical areas within sectoral scope:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
I.2	Renewable Energies	

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TR_2015-01-07_2015-01-07_2015-01-07



Statement of Competence
Appointment and authorization according to the procedures of the TUV NORD JVCQM Certification Program

Mr. Stefan Winter

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2020-07-27
VCS	Senior Assessor (Validation, Verification) Technical Reviewer	2020-07-27

Authorization status for technical areas within sectoral scope:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
2.1	Energy distribution
3.1	Energy demand
4.1	Cement and lime production
4.2	Paper
5.2	Caprochloride, nitric and adipic acid
6.1	Aluminium and magnesium production
9.2	Iron, steel and Ferro-alloy production
13.1	Solid waste and wastewater
13.2	Manure

163 - Rev. 5, Date: 2017-07-20



Statement of Competence
Appointment and authorization according to the procedures of the TUV NORD JVCQM Certification Program

Mr. David Lubanga

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2019-10-20
VCS / ISO 14064-2	Lead Assessor	2019-10-20

Authorization status for technical areas within sectoral scope:

CODE	TECHNICAL AREA
I.2	Renewables
3.1	Energy demand

251 - Rev. 4, Date: 2015-10-21