




**Validation report form for
CDM project activities
(Version 04.0)**

BASIC INFORMATION

Title of the project activity	Wind Power Project by Mangalam Fashions Limited & Group in Andhra Pradesh
Scale of the project activity	<input type="checkbox"/> Large-scale <input checked="" type="checkbox"/> Small-scale
Version number of the validation report	01
Completion date of the validation report	09/12/2020
Version number of the PDD to which this report applies	02
Date when PDD was uploaded for global stakeholder consultation	07/09/2017 ¹
Project participants	Mangalam Fashions Limited
Host Party	India
Applied methodologies and standardized baselines	Methodology: AMS-I.D "Grid connected renewable electricity generation" (Version 18.0 ²) Standardized Baseline: Not Applicable
Mandatory sectoral scopes	Sectoral Scope 1: Energy Industries (renewable - /non-renewable sources)
Conditional sectoral scopes, if applicable	NA
Estimated amount of annual average GHG emission reductions or GHG removals by sinks	14,980 tCO ₂ e / annum
Name and UNFCCC reference number of the DOE	LGAI Technological Center, S.A. (Applus+ Certification) UNFCCC Ref. No.: E-0032
Name, position and signature of the approver of the validation report	Mr. Juan Sendín Caballero <i>Applus+ Certification Business Unit Managing Director</i> Signature: 

¹ <https://cdm.unfccc.int/Projects/Validation/DB/DOZ7GR1278KIW8B81KQJ7TTT01DYN0/view.html>

² <https://cdm.unfccc.int/methodologies/DB/W3TINZ7KKWCK7L8WTFQOQFQQH4SBK>

SECTION A. Executive summary

The main purpose of this project activity is to generate clean form of electricity through renewable wind energy source. Mangalam Fashions Limited, RSM Estates Limited, Daulat Financial Services Pvt. Limited and HC Commercial Limited are the investors of the proposed project activity. Each investor having 2 MW of Wind Capacity totalling an overall capacity of 8 MW of Wind power in the state of Andhra Pradesh. The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 14,980 tCO₂e per year, thereon displacing 15,520 MWh/year amount of electricity from the generation-mix of power plants connected to the INDIAN Electricity grid, which is mainly dominated by thermal/ fossil fuel based power plant.

The details of the project activity and the state of installation are mentioned in the table:-

Project Name	Investors'	Village	Tehsil	District	State
Mangalam Fashions Limited		Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh
RSM Estates Limited		Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh
Daulat Financial Services Pvt. Limited		Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh
HC Commercial Limited		Muthvakuntla	Kanaganapalli	Ananthapuramu	Andhra Pradesh

The project activity is the installation of an environmentally safe and sound technology since there are no GHG emissions associated with the electricity generation. The design lifetime of the wind project is 25 years (As per the Manufacturer specifications). The same is acceptable to the assessment team.

Validation Scope: The scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS.I.D version 18. The validation was based on the requirements in the CDM Validation and Verification Standard for the project activities (VVS version 02)

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

Once Applus+ Certification receives the PDD, it has been made publicly available on the UNFCCC website, which initiates a 30 days global stakeholder consultation (GSC) process. The details of the GSC are included in this report.

Validation Process: The project assessment is based on the "CDM Project Cycle Procedure for project activities version 02.0 and is conducted using standard auditing techniques to assess the correctness of the information provided by the project participants. Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the CDM project activity are appointed.

Once the project is made available for the global stakeholder consultation process, the members of the assessment team carried out:

- I A desk review of the project design documentation;
- II Follow-up interviews with project stakeholders;
- III The resolution of outstanding issues and the issuance of the final validation report and opinion.

The prepared validation report and other supporting documents then undergo an internal quality control at the HQ (Accredited office) before being submitted to the CDM-EB.

Appointment of the assessment team

According to the sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center S.A. (Applus+ Certification) has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center S.A. (Applus+ Certification).

The composition of audit team shall be approved by the LGAI Technological Center S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A) / Auditor in Training (AiT).
- Technical Expert (TE).
- Technical Reviewer (TR).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

The detail regarding the assessment team is provided below in Appendix 2/B.1 and B.2 of this report

Document review

The Project Design Document submitted by the Client was reviewed against the approved methodology and other relevant criteria to verify the correctness, credibility, and interpretation of the presented information. Furthermore, a cross-check between information provided and information from other sources has been done. A complete list of all documents and evidence material reviewed is included in Appendix 3 of this report.

Follow-up interviews

A site visit is conducted by Applus+ Certification performed interviews, telephone conferences, and physical site inspection with project stakeholders to confirm selected information and to resolve issues identified in the document review. The detail is provided in section C.2 and C.3 of this report

Resolution of Clarification and Corrective Action Request

The objective of this phase of the validation was to resolve the requests for corrective actions and clarification and any other outstanding issues which need to be clarified for Applus+ Certification positive conclusion on the project design document. The Corrective Action Requests and Clarification Requests raised by Applus+ Certification were resolved during communications between the Client and Applus+ Certification to guarantee the transparency of the validation process, the concerns raised and responses given are summarized in Appendix 4 below.

The final PDD version 02 submitted by PP serves as the basis for the final assessment presented. Additional changes to the project during the validation process are not considered to be significant with respect to the main CDM objectives. The two CDM main objectives are the reduction of anthropogenic GHG emissions and the contribution of sustainable development to the host country

Internal quality control

As final step of a validation of the final documentation including the validation report and the checklist have to undergo an internal quality control by the technical review committee, i.e. each report has to be finally approved either by the head of the technical review committee or the deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one to avoid any conflict of interest.

After confirmation of the PP the validation opinion and relevant documents are submitted to the EB through the UNFCCC web-platform

Conclusion

Applus+ Certification has performed a validation of the “Wind Power Project by Mangalam Fashions Limited & Group in Andhra Pradesh”. The validation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria, e.g. AMS.I.D version 18, given to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation and the subsequent follow-up interviews have provided Applus+ Certification with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project will hence be recommended by Applus+ Certification for registration with the UNFCCC.

Applus+ Certification has received a confirmation from the host Party that the project activity assists it in achieving sustainable development.

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. An analysis of the investment demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of annual emission reductions of 14,980 tCO₂e per year, thereon displacing 15,520 MWh/year amount.

The validation has been performed following the requirements of the latest version of the “CDM Validation and Verification standard for project activities version 02.0 and on the basis of the contractual agreement. The single purpose of this report is its use during the registration process as part of the CDM/UNFCCC project cycle.

SECTION B. Validation team, technical reviewer and approver**B.1. Validation team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	L/TE	OR	DAS	SUKANTA	TRUE QUALITY CERTIFICATION PRIVATE LIMITED	YES	YES	YES	YES

B.2. Technical reviewer and approver of the validation report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	EI	Shen	Simon	Applus+ Certification
2.	Approver	IR	Caballero	Juan Sendin	Applus+ Certification

SECTION C. Means of validation

C.1. Desk/document review

The details of the document observed during the validation process are listed below in Appendix 3 of this report.

C.2. On-site inspection

Duration of on-site inspection: 29/09/2017 to 30/09/2017				
No.	Activity performed on-site	Site location	Date	Team member
1.	Assessment team checked the implementation of the project, Baseline emission, and emission reduction calculation, technical description of the project and Onsite Monitoring practice.	The project is located at Ananthapuramu district of the state Andhra Pradesh, India	29/09/2017 to 30/09/2017	Mr. Sukanta Das

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Singh	Sunil	PP representative	29/09/2017	As explained in C.2 above	Mr. Sukanta Das
2	Bhanu	Giriraj	Local Stakeholder	30/09/2017	Local Stakeholder consultation	Mr. Sukanta Das
3	Kottiala	Veena	Local Stakeholder	30/09/2017	As explained in C.2 above	Mr. Sukanta Das
4	Kundi	Pawan	Local Stakeholder	30/09/2017	Local Stakeholder consultation	Mr. Sukanta Das

C.4. Sampling approach

The assessment team didn't apply any sampling approach for the project activity. The site visit was conducted for the complete wind project implemented in the locations/site as mentioned in the PDD

C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Demonstration of prior consideration of the CDM	00	00	00
Identification of project type	00	00	00
Description of project activity	00	03	00
Application and selection of methodologies and standardized baselines	00	00	00
- Application of methodologies and standardized baselines	00	00	00
- Deviation from methodology and/or methodological tool	00	00	00
- Clarification on applicability of methodology, tool and/or standardized baseline	00	00	00
- Project boundary, sources and GHGs	00	00	00
- Baseline scenario	00	01	00
- Demonstration of additionality	00	01	00
- Estimation of emission reductions or net anthropogenic removals	00	00	00
- Monitoring plan	00	00	00
Start date, crediting period type and duration	00	00	00
Environmental impacts	00	00	00
Local stakeholder consultation	00	01	00

CDM-VAL-FORM

Sustainable development co-benefits	00	00	00
Approval	00	01	00
Authorization	00	00	00
Modalities of communication	00	01	00
Global stakeholder consultation	00	00	00
Others (please specify) - 1. ODA declaration	01	00	00
Total	01	08	00

SECTION D. Validation findings

D.1. Demonstration of prior consideration of the CDM

Means of validation	Assessment team checked UNFCCC web site and also the acknowledgement email as received by project participant from UNFCCC regarding receivable of prior consideration notification and publication of the same.
Findings	No findings have been raised for the criteria.
Conclusion	<p>Assessment team checked the UNFCCC web site for prior consideration notification and found that the project title “Renewable Energy Power Project by EKIESL-01-2017-02” is uploaded dated 25/01/2017. Assessment team checked the Initial prior notification form under this title and found that Mangalam Fashions Limited (=2MW), RSM Estates Limited (=2MW), Daulat Financial Services Pvt. Limited (=2MW) and HC Commercial Limited (=2MW) are part of this notification. The present project title for the project activity is Wind Power Project by Mangalam Fashions Limited & Group in Andhra Pradesh which is same as per the Host country approval and PDD uploaded for Global stakeholder consultation. To confirm the uniqueness of the project activity under different title, assessment team confirm that similar capacity, similar location i.e. Town/City, Region, Country as mentioned under the project title “Renewable Energy Power Project by EKIESL-01-2017-02” is same as mentioned in the PDD (both GSC and version 02 based on which positive validation opinion is provided) under the project title Wind Power Project by Mangalam Fashions Limited & Group in Andhra Pradesh. Therefore, prior consideration of the project activity send to UN under different project title is acceptable for the present project activity.</p> <p>Assessment team also checked the email notification sent to DNA by project participant regarding prior consideration for the present CDM project activity.</p> <p>As per Section 4.1 of the “CDM Project Cycle Procedure for project activities version 02.0, if the start date of the project is after 02/08/2008, <i>“the project participants shall notify the designated national authority (DNA) of the host Party of the project activity, if the DNA exists, and the secretariat in writing of the commencement of the project activity and their intention to seek the CDM status for the project activity, or, through a DOE, publish the PDD for global stakeholder consultation within 180 days of the start date of the project activity”</i></p> <p>The Start date of the project activity is 16/12/2016 (wind purchase order) as per the glossary of CDM terms and in accordance to start date definition for CDM project activity), and the prior notification is dated 25/01/2017 which is within 180 days of project start date. Hence, assessment team confirm that the prior consideration clause as per Section 4.1 of the “CDM Project Cycle Procedure for project activities version 02.0 has been fulfilled.</p>

D.2. Identification of project type

Means of validation	Assessment team checked the UNFCCC web site/Glossary of CDM terms regarding project type definition for CDM project activity.
Findings	No findings have been raised for the criteria.
Conclusion	<p>The project activity is power generated from the Wind power project and the output will be utilized for Sale to grid. Since the project is renewable energy generation and hence falls under following:</p> <p>Sectoral Scope : 01 - Energy industries (renewable / non-renewable sources) Project Type: Type-I - Renewable Energy Projects Project Category: AMS.I.D version 18.</p> <p>The project activity aims to harness wind energy through installation of wind turbines with a total installed capacity of 8 MW. Assessment team observed that the capacity of the project is below 15 MW Type I small scale project activity and thus assessment team confirms that the project is small scale project activity and will remain same for the entire duration of the crediting period. The technology (wind) being employed is well proven, safe & sound. No technology transfer to host party</p>

is envisaged due to project activity.

D.3. Description of project activity

Means of validation	Assessment team checked the Initial PDD as received for GSC period, EPC contract with the Manufacturer, Commissioning Certificate (3 rd party document), Power purchase agreement to confirm the description of the project activity.																																													
Findings	CAR 01, CAR 02 and CAR 03 were raised during the validation process. Please refer Appendix 4 of this report for the detailed closure of the CAR.																																													
Conclusion	<p>The main purpose of this project activity is to generate clean form of electricity through renewable wind energy source. Mangalam Fashions Limited, RSM Estates Limited, Daulat Financial Services Pvt. Limited and HC Commercial Limited are the investors of the proposed project activity. Each investor having 2 MW of Wind Capacity totalling an overall capacity of 8 MW of Wind power in the state of Andhra Pradesh. The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 14,980 tCO₂e per year, thereon displacing 15,520 MWh/year amount of electricity from the generation-mix of power plants connected to the INDIAN Electricity grid, which is mainly dominated by thermal/ fossil fuel based power plant.</p> <p>The details of the project activity and the state of installation are mentioned in the table:-</p> <table><tr><th>Project Investors' Name</th><th>Village</th><th>Tehsil</th><th>District</th><th>State</th></tr><tr><td>Mangalam Fashions Limited</td><td>Tallimadugula</td><td>Kanaganapalli</td><td>Ananthapuramu</td><td>Andhra Pradesh</td></tr><tr><td>RSM Estates Limited</td><td>Tallimadugula</td><td>Kanaganapalli</td><td>Ananthapuramu</td><td>Andhra Pradesh</td></tr><tr><td>Daulat Financial Services Pvt. Limited</td><td>Tallimadugula</td><td>Kanaganapalli</td><td>Ananthapuramu</td><td>Andhra Pradesh</td></tr><tr><td>HC Commercial Limited</td><td>Muthvakuntla</td><td>Kanaganapalli</td><td>Ananthapuramu</td><td>Andhra Pradesh</td></tr></table> <p>The project activity is the installation of an environmentally safe and sound technology since there are no GHG emissions associated with the electricity generation. The design lifetime of the wind project is 25 years (As per the Manufacturer specifications). The same is acceptable to the assessment team.</p> <p>The project activity is the installation of a new grid-connected renewable power plant/unit and this is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of CPAs.</p> <p>The technical details were checked by the assessment team from the technical manual as available with the PP from the manufacturers (2nd party) and also during the onsite physical verification. The details are as below:</p> <p><u>The technical features of the WTG is summarized below:</u></p> <table><tr><th colspan="2">INOX WIND - MODEL WT 2000 DF</th></tr><tr><th colspan="2">OPERATING DATA</th></tr><tr><td>Rated power</td><td>2000 kW</td></tr><tr><td>Cut-in wind speed</td><td>3 m/s</td></tr><tr><td>Rated wind speed</td><td>≤11.5m/s</td></tr><tr><td>Cut-out wind speed</td><td>20 m/s</td></tr><tr><td>Survival Wind Speed</td><td>52.5 m/sec</td></tr><tr><td>Hub height</td><td>80 Meters</td></tr><tr><td>Type Class</td><td>TC IIIB</td></tr><tr><td>Rotor Speed</td><td>15.9 RPM</td></tr></table>	Project Investors' Name	Village	Tehsil	District	State	Mangalam Fashions Limited	Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh	RSM Estates Limited	Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh	Daulat Financial Services Pvt. Limited	Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh	HC Commercial Limited	Muthvakuntla	Kanaganapalli	Ananthapuramu	Andhra Pradesh	INOX WIND - MODEL WT 2000 DF		OPERATING DATA		Rated power	2000 kW	Cut-in wind speed	3 m/s	Rated wind speed	≤11.5m/s	Cut-out wind speed	20 m/s	Survival Wind Speed	52.5 m/sec	Hub height	80 Meters	Type Class	TC IIIB	Rotor Speed	15.9 RPM
Project Investors' Name	Village	Tehsil	District	State																																										
Mangalam Fashions Limited	Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh																																										
RSM Estates Limited	Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh																																										
Daulat Financial Services Pvt. Limited	Tallimadugula	Kanaganapalli	Ananthapuramu	Andhra Pradesh																																										
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Type Class	TC IIIB																																													
Rotor Speed	15.9 RPM																																													

Operational mode	Variable speed
Design Standards	Germanischer Lloyd
ROTOR	
Pitch system	Pitch Control- Electrical; Variable Speed Inverters; Power back up with Ultra Capacitor
Diameter	93.3 Meters
Swept area	6785 Sq Meters
Blade material type	Epoxy Glass Fibre
GENERATOR	
Type Class	Double fed Induction Generator
Rated power	2000 kW
Rated voltage	690 V AC, 3 Phase
Frequency	50 Hz
Cooling system	Water Cooled
Insulation	Class H
BRAKING SYSTEM	
Aerodynamic brake	Full span independent blade Pitching
Mechanical brake	Disc Brakes
DRIVE TRAIN	
Drive Train	Patented integral drive train with rotor shaft and drive train as single unit
Rated Drive Torque	1280 kNm
Maximum Static Torque	2235 kNm
Type of Gearing	Two Planetary and One Parallel shaft gear
Transmission Ratio	1 \approx 114.7
Gear Lubrication	Forced Lubrication
Connection gear / generator	Flexible Coupling
YAW SYSTEM	
Type	Driven by 4 gear Motors
Bearings	Slide Bearings
TOWER	
Type	Conical Tubular Steel Tower
Tower Height	78 Meters
Corrosion protection	Protective Paint

Assessment team checked the commissioning details of the project activity by 3rd party commissioning certificate. The detail of commissioning is below:

Project Investors' Name	Capacity	WTG Location No.	Date of Commissioning
Mangalam Fashions Limited	2 MW	T-04	31-Mar-17
RSM Estates Limited	2 MW	T-05	31-Mar-17
Daulat Financial Services Pvt. Limited	2 MW	T-02	31-Mar-17
HC Commercial Limited	2 MW	T-03	31-Mar-17

Assessment team also checked that the Geographical coordinates using GPS meter and Google earth Software during onsite visit and found that Latitude and Longitude as mentioned in the PDD are correct. The details are as below:

Project Investors' Name	Capacity	WTG Location No.	Latitude (N)	Longitude (E)
Mangalam Fashions Limited	2 MW	T-04	14°22'35.6" N	77°31'36.2"E
RSM Estates Limited	2 MW	T-05	14°22'41.3" N	77°31'50.0"E
Daulat Financial Services Pvt. Limited	2 MW	T-02	14°22'38.4" N	77°31'52.2"E
HC Commercial Limited	2 MW	T-03	14°18'18.8" N	77°30'15.3"E

The project activity description, capacity limitation and de-bundling criteria (=Assessment team confirm that PP have not registered any small scale CDM activity or applied to register another small scale CDM project activity within 1 km of the project boundary, in the same project category and technology/measure in previous 2 years. This means that, the project activity does not fall under the de-bundled category and qualifies for small scale CDM Project) are checked and found correct by the assessment team. The PDD mentions all the criteria of CDM requirements and PDD template requirements for small scale project activity properly and thus assessment team confirms that the description as mentioned in the PDD version 02 is correct and appropriate.

D.4. Application and selection of methodologies and standardized baselines

D.4.1. Application of methodologies and standardized baselines

Means of validation	<p>The assessment team has validated the documentation referred to in the PDD version 02 and verified the documentation content for verifying the justification of the applicability of the methodology and confirmed that the documentation referred to in the PDD is correctly quoted and interpreted. The assessment team has also cross-checked the information provided in the PDD with the documentation other than from the PDD based on the local and sectoral knowledge of the assessment team. Following documentation has been reviewed by the assessment team:</p> <ol style="list-style-type: none"> 1. Site visit 2. Interview with the concerned person mentioned in this report 3. Technical detail analysis of the power plant from the documents submitted by the manufacturer. <p>The assessment of the project's compliance with the applicability criteria of AMS.I.D version 18 are documented in detail in section B.2 of the PDD.</p>
Findings	No findings have been raised for the criteria.
Conclusion	<p>Assessment team checked that during the GSC period AMS.I.D version 18 was used in the Initial PDD version 01 as it is the latest version of the Methodology available. Hence assessment team confirm that PP used the latest version of the Methodology to confirm the applicability of the project activity. All the sections fulfil the requirement of AMS.I.D version 18 and thus the same is acceptable to the assessment team. The detail of the applicability condition is as below:</p> <p>All the tools/methodology are mentioned as per the latest version available in UN web page and found correct. The detail applicability condition is described below:</p> <p>Applicability 1: The project activity is installation of a new grid connected Wind power plant (Option 1 (A)) at a site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plant) and hence this criterion is applicable.</p> <p>Applicability 2: Assessment team confirm that project supplies electricity to national grid and therefore option 1 of the Appendix table 1 under AMS.I.D is applicable for the project activity.</p> <p>Applicability 3: The project is installation of new wind energy-based electricity generation plants (not a hydro power plant). Hence this criterion is not applicable.</p>

	<p>Applicability 4: The project activity is a 8 MW wind electricity generation. Unit does not co-fire fossil fuels. Hence the criterion is not applicable to the project activity.</p> <p>Applicability 5: The Project activity is a renewable wind energy project and is not a combined heat and power system. Hence the criteria is not applicable to the project activity</p> <p>Applicability 6: The project activity is Greenfield and there is no existing power generation facility at the site. Hence the criteria is not applicable to the project activity</p> <p>Applicability 7: The project activity is installation of a new grid connected wind power project and does not involve retrofit or replacement and hence the criteria is not applicable to the project activity</p> <p>Applicability 8: The Project activity is a renewable wind energy power project and is not a landfill gas, waste gas, wastewater treatment and agro-industries projects or recovered methane emissions project. Hence the criteria is not applicable to the project activity</p> <p>Applicability 9: The Project activity is a renewable wind energy power project and is not a biomass project. Hence the criterion is not applicable to the project activity.</p> <p>LGA Technological Center S.A. (Applus+ Certification) confirms that the application of the baseline methodology is transparent and conservative and confirms that the chosen baseline and monitoring methodology i.e. AMS.I.D version 18 is applicable to the project activity.</p>
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D.4.2. Deviation from methodology and/or methodological tool

Means of validation	Assessment team checked the initial PDD version 01 and revised PDD version 02.
Findings	No findings have been raised for the criteria.
Conclusion	No deviation from methodology and/or methodological tool is envisaged for the project activity.

D.4.3. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	AMS.I.D version 18 and PDD version 02 is checked by the assessment team
Findings	No findings have been raised for the criteria.
Conclusion	No clarification on applicability of the methodology, tool and/or Standardized baseline is envisaged for the project activity.

D.4.4. Project boundary, sources and GHGs

Means of validation	The project boundary as depicted in the PDD version 02 is checked during the validation site visit and also during the interview with the plant official.				
Findings	No findings have been raised for the criteria.				
Conclusion	The spatial extent of project boundary diagram (including the metering system) referred by the methodology is now mentioned in the PDD as per the requirement of applied methodology and thus the same is acceptable to the assessment team.				
	The project boundary includes the wind project, sub-stations, grid and all power plants connected to grid. The proposed project activity will evacuate power to the INDIAN Electricity grid. Therefore the entire INDIAN grid and all connected power plants have been considered in the project boundary for the proposed CDM project activity.				
	The below table mentions the emission source:				

		connected electricity generation.	CH ₄	No	Minor emission source
			N ₂ O	No	Minor emission source
			Other	No	No other emissions are emitted from the project
	Project	Greenfield Wind Power Project Activity.	CO ₂	No	No CO ₂ emissions are emitted from the project
			CH ₄	No	Project activity does not emit CH ₄
			N ₂ O	No	Project activity does not emit N ₂ O
			Other	No	Project activity does not emit other forms of GHG emissions

D.4.5. Baseline scenario

Means of validation	The baseline scenario as depicted in the initial PDD version 01 and final PDD version 02 is checked during the validation site visit and also during the interview with the plant official.
Findings	CAR 04 was raised during the validation process and closed successfully. Please refer Appendix 4 for the detail closure of the CAR.
Conclusion	<p>Assessment team confirms that being a grid connected wind energy generation project, PP developed the project based on the Methodology AMS.I.D version 18</p> <p><i>As per methodology if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following:</i></p> <p>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>The project activity involves setting up of wind power projects to harness the power of wind to produce electricity and supply to the national grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid, which is fed mainly by fossil fuel fired plants. Hence, the baseline for the project activity is the equivalent amount of power from the Indian national grid.</p> <p>As per CDM Validation and Verification Standard for project activities version 02, "where the baseline scenario is not prescribed in the approved methodology, the DOE shall assess the list of identified credible alternatives to the project activity in the PDD selected to determine the most realistic baseline scenario." Thus, PDD should mention the credible alternatives to the project activity in order to determine the most realistic baseline scenario. As the selected small-scale methodology clearly mention the baseline scenario and the same has been opted in this project, therefore, no further analysis on baseline is required.</p> <p>Validation Team, therefore, concludes that the PDD conforms to the guidance given by EB via CDM Validation and Verification Standard for project activities version 02 and thus acceptable to the assessment team.</p>

D.4.6. Demonstration of additionality

Means of validation	The cost of Wind turbines, electricity tariff, O&M cost, depreciation, salvage value and tax rate have been checked with Offer letter, purchase order, tariff order, Income Tax Act 1961, Power purchase agreement, third party PLF report and financial analysis sheet. During the validation site visit validation team interviewed the personal and confirms that the input parameters considered is appropriate and correct.
Findings	CAR 05 was raised during the validation process and closed successfully. Please refer Appendix 4 for the detail closure of the CAR.

Conclusion	<p>During conceptualization of the project activity, board of directors of the project Investors i.e. Mangalam Fashions Limited, RSM Estates Limited, Daulat Financial Services Pvt. Limited and HC Commercial Limited dated 06/12/2016 considered the CDM revenue to improve the project financials. During the board meeting for board of Directors decided that they would consider CDM revenue for their project activity. In continuation to the board decision, PP issued the respective purchase order for the supply of Wind power plant.</p> <p>In line with CDM Validation and Verification Standard for project activities version 02.0., the Methodological Tool for the demonstration of Additionality of Small-scale Project Activities (Version 13.1, EB 105, Annex 04³), to establish the project additionality, it has to be shown that the project activity would not have occurred anyway due to at least one of the following barriers:</p> <ul style="list-style-type: none"> • Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions; • Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions; • Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions; • Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher. <p>The project investor has selected Investment barrier to demonstrate in a conservative and transparent manner that the proposed CDM project activity is financially unattractive. In line with the guidelines stipulated under Annex 34 of EB 35⁴ ("Non-binding best practice examples to demonstrate additionality for SSC project activities"), a benchmark analysis is used in the project case under investment barrier.</p> <p><u>Selection of Financial Indicator for 4 x 2.00 MW WTG:</u></p> <p>According to the TOOL 27 Methodological Tool for Investment Analysis⁵ - Version 10.0 (EB 105, Annex 06) and as per "Methodological Tool for the demonstration of additionality of small- scale project activities⁶ - Version 13.1 (EB 105, Annex 04)", <i>the financial indicator can be based either on (1) project IRR or (2) equity IRR. There is no general preference between the approaches (1) or (2). The benchmark chosen for analysis shall be fully consistent with the choice of approach.</i> Therefore in accordance with the guidance, the relevant financial indicator for project activity has been chosen as post tax equity IRR.</p> <p><i>Determine appropriate analysis method</i></p> <p>As per Sub-step 2a, Paragraph (1), as the project activity is selling the generated electricity or using it for captive purposes & getting financial benefits other than</p>
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³ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-21-v13.1.pdf>

⁴ https://cdm.unfccc.int/Reference/Guidclarif/ssc/methSSC_guid15_v01.pdf

⁵ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v10.0.pdf>

⁶ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-21-v13.1.pdf>

CDM benefits hence, Option- I (Apply simple cost analysis) is not applicable under this situation. Also as per EB-92, Annex 5, clause no.19 "If the alternative to the project activity is the supply of electricity from a grid this is not to be considered an investment and a benchmark approach is considered appropriate". Hence Option-II (Apply investment comparison analysis) is also not applicable under this situation. So the project investor has chosen Option- III or benchmark analysis as an appropriate analysis method to demonstrate the investment barrier.

Choice of Benchmark:

As per Investment Analysis tool, Required/expected returns on equity are appropriate benchmarks for an equity IRR. The Equity IRR is considered as the financial indicator and the benchmarks used is cost of equity. Hence the benchmarks used are applicable to the project activity and the type of IRR calculation presented.

At the time of decision made of project activity, Version 07 of methodological tool "Investment Analysis" (version 7 & 8) were the latest available tools to the PP at the time of decision making. However, the request for registration for Version 7 could be submitted till 31/10/2017 and for version 8 the registration request could be submitted till 28/11/2018 and for version 9.0, the request for registration can be submitted till 24/07/2020. Hence, PP has used Methodological Tool for Investment Analysis version 10 (EB 105, Annex 6). Upon comparison of the detail of version 07.0, 08.0 and version 09.0 of the methodological tools it was observed that, there is no major difference in the versions except for the change of default value for benchmark calculation. The default value as mentioned in version 07 was 11.06% for the group 1 projects in India, in the version 08 it was 10.73% for group 1 project in India and Value as mentioned in version 09 is 9.79% and Value as mentioned in version 10 is 10.24% for group 1 project in India which is clearly more conservative than version 07 & 08 & 09 values. Hence, version 10 is used which is appropriate and more conservative for benchmark calculation and PP has considered the same tool for default value of return on equity for the project activity. The default value of Return on Equity for Group-1 projects in India is 10.24% as per EB 105, Annex 6.

Benchmark Calculation

As per the guidelines of Methodological Tool- Investment Analysis para 15, "The applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for equity IRR. Benchmarks supplied by relevant national authorities are also appropriate". Since in this project activity, equity IRR has been considered as financial indicator, hence as per guidance 16, Required/expected returns on equity are considered as appropriate benchmarks and benchmark supplied by relevant national authorities has been used.

Since the choice of benchmark is based upon parameters that are standard in the market, hence as per Guidance 19 of EB 105 Annex 6, "the cost of equity should be determined either by: (a) selecting the values provided in the Appendix; or by (b) calculating the cost of equity using CAPM". Hence as per option (a), the default value for India is being considered as per the value provided in Appendix of EB 105 Annex 6⁷. The benchmark thus selected complies as per the relevant guidelines on Investment Analysis.

Further as per guidance 16 of EB 105 Annex 6, "In situations where an investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, project participants shall convert the real term values of benchmarks to nominal values by adding the inflation rate. The inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the

⁷ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v10.0.pdf>

crediting period". Following the above guidance, the default value is being converted to nominal values by adding inflation rate for 10 years⁸, as per the inflation forecast rate provided by Reserve Bank of India.

Default Value Benchmark:

The cost of equity is determined by selecting the values provided in the Appendix, i.e. Default values for cost of equity (expected return on equity) are presented below:

The default value considered as per latest Methodological Tool Investment Analysis version 10⁹ is conservative as compared with version 7 and 8 available to PP at the time of decision made.

" The default value as mentioned in version 07 was 11.06% for the group 1 projects in India, in the version 08 it was 10.73% for group 1 project in India and Value as mentioned in version 09 is 9.79% and Value as mentioned in version 10 is 10.24% for group 1 project in India which is clearly more conservative than version 07 & 08 & 09 values"

Benchmark Calculation for 4 x 2.00 MW WTG

As per the guidelines of Methodological Tool- Investment Analysis, para 16, "The applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for equity IRR. Benchmarks supplied by relevant national authorities are also appropriate". Since in this project activity, equity IRR has been considered as financial indicator, hence as per guidance 16, Required/expected returns on equity are considered as appropriate benchmarks and benchmark supplied by relevant national authorities has been used.

Since the choice of benchmark is based upon parameters that are standard in the market, hence as per Guidance 21 of EB 105 Annex 7, "the cost of equity should be determined either by: (a) selecting the values provided in the Appendix; or by (b) calculating the cost of equity using CAPM". Hence as per option (a), the default value for India is being considered as per the value provided in Appendix of EB 105 Annex 7¹⁰. The benchmark thus selected complies as per the relevant guidelines on Investment Analysis.

Further as per guidance 16 of EB 105 Annex 6, "In situations where an investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, project participants shall convert the real term values of benchmarks to nominal values by adding the inflation rate. The inflation rate shall be obtained from the inflation forecast of the central bank of the host country for the duration of the crediting period". Following the above guidance, the default value is being converted to nominal values by adding inflation rate for 10 years¹¹, as per the inflation forecast rate provided by Reserve Bank of India.

Benchmark Calculation

The benchmark has been considered in accordance with Guidance 16 of EB 105 Annex 6, "The values in the table in Appendix A may also be used, as a simple default option".

As suggested in Appendix A in EB 105 Annex 6, default value benchmark is presented below:

⁸ Since RBI provides inflation forecast only for 5 years and 10 years, hence inflation forecast for 10 years is being considered keeping in view length of crediting period to be 7 years.

⁹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v10.0.pdf>

¹⁰ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v10.0.pdf>

¹¹ Since RBI provides inflation forecast only for 5 years and 10 years, hence inflation forecast for 10 years is being considered keeping in view length of crediting period to be 7 years.

Appendix A in EB 105 Annex 6 specifies default value of expected return on equity in real terms for Energy Industries (Group 1) in India = **10.24%**
Methodology deployed for arriving at a suitable value of Benchmark using Default Value has been described below:

- As the proposed project activity generates power utilizing wind energy, Group 1 as per para 5 of Appendix of EB 105, Annex 6 has been identified as a suitable category.
- The investment analysis has been carried out in Nominal terms. The investment decision date of the project activity is on 06 December, 2016. Accordingly, Default value as given in Para 6, Appendix of Annex 6, EB 105¹² has been adjusted by adding suitable forecasted inflation rate taken from RBI (Central Bank, India).
- Project investor has calculated Benchmark based on WPI mean inflation rate. As per Para 18 of EB 105, Annex 6, the inflation forecast should be for the duration of the crediting period. The project investor has calculated benchmark using 10 years forecast and the same is considered as Benchmark for the project activity.

The benchmark has been computed in the following manner:

$$\text{Nominal Benchmark}^{13} = \{(1 + \text{Real Benchmark}) * (1 + \text{Inflation rate})\} - 1$$

Where,

Real Benchmark = Default Value, i.e., 10.24% (as per Appendix of Annex 6, EB 105)

Inflation rate = Projected Inflation Rate for India

Benchmark Calculations	Value	Sources Link	Document Date
Default Value for India as per UNFCCC guidelines	10.24 %	As per page 14, Annex 6, EB 105	Nov 28, 2019
Inflation forecast (WPI Mean) as per RBI for 10yrs	3.98%	https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=17390	4-Oct-16
Benchmark (with 10yrs Forecast)	14.63 %	Calculated	

Hence Benchmark considered for the project activity is 14.63%

b) Parameters and assumptions used:

The project activity is a renewable source of electricity generation and uses the generated electricity for Sale to grid. The key parameters which determine the Equity IRR of the project activity are project cost, PLF and profitability estimates.

Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant which can be clearly validated by the DOE, thus it complies with guidance VVS for project activities version 02 used for calculating post-tax Equity IRR applicable at the time of investment decision, which is in line with are set out below: In the revised PDD Version 02, the project cost is based on the Offer letter.

Project cost as per the Offer Letter for Mangalam Fashions Ltd.

¹³ As per Fisher Equation, https://en.wikipedia.org/wiki/Fisher_equation

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	Offer letter Date
Tallimadugula Site	Mangalam Fashions Ltd	2 MW	126	28-11-2016

Actual Project cost as per Purchase Order for Mangalam Fashions Ltd.

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	PO date
Tallimadugula Site	Mangalam Fashions Ltd	2 MW	99.6	16-12-2016

Project cost as per the Offer Letter for RSM Estates Ltd

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	Offer letter Date
Tallimadugula Site	RSM Estates Ltd	2 MW	126	28-11-2016

Actual Project cost as per Purchase Order for RSM Estates Ltd.

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	PO date
Tallimadugula Site	RSM Estates Ltd	2 MW	99.6	16-12-2016

Project cost as per the Offer Letter for Daulat Financial Ltd

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	Offer letter Date
Tallimadugula Site	Daulat Financial Ltd	2 MW	126	01-12-2016

Actual Project cost as per Purchase Order for Daulat Financial Ltd

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	PO date
Tallimadugula Site	Daulat Financial Ltd	2 MW	99.6	16-12-2016

Project cost as per the Offer Letter for HC Commercial Ltd

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	Offer letter Date
Muthvakuntla Site	HC Commercial Ltd	2 MW	128.5	01-12-2016

Actual Project cost as per Purchase Order for HC Commercial Ltd

Site Name	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	PO date
Muthvakuntla Site	HC Commercial Ltd	2 MW	99.6	16-12-2016

Offer letter has been submitted to validation team. The Offer letters were available during decision making and financial profitability of the project was decided based on this Offer letter. Validation team checked the Offer letter of the project activity and found that consideration of the project cost in revised PDD Version 02 is correct and it is in line with Investment guideline as well as in compliance to CDM Validation and Verification Standard for project activities version 02. Hence, the project cost consideration is justified. Assessment team checked the actual project cost and still the project do not breach the benchmark. The sensitivity analysis below confirms the same. Since the actual cost is considered there is no way the cost can go up and thus the same is assessed to be correct.

In India, infrastructure projects are generally entitled to a debt equity ratio of 70:30. However, depending on the relationship of the client with the bank, its credit rating and collaterals offered, banks consider higher debt equity ratio also. However, no Loan is availed for the project and thus post tax equity IRR calculation is justified as no debt is involved.

The profitability of the project, which forms the basis for IRR calculation is based on installed capacity, PLF, electricity tariff, O&M cost, depreciation and taxation.

c) Assessment of Plant Load Factor (PLF):

PP considered the Plant load factor from a third party engineering company for expected electricity generation estimation. They are contracted by the PPs for this project. PP has submitted the copy of the PLF estimation report to the assessment team being available at the time of investment decision date.

PLF as per 3rd party PLF report

Site Name	Name of the Investor/Owner/SPVs	PLF (%)= 3rd party engineering company	Date
Tallimadugula Site	RSM Estates Ltd	22.15%	27-11-2016
Tallimadugula Site	Mangalam Fashions Ltd	22.15%	27-11-2016
Tallimadugula Site	Daulat Financial Ltd	22.15%	27-11-2016
Muthvakuntla Site	HC Commercial Ltd	22.15%	27-11-2016

PLF estimation in third party DPR dated 27/11/2016 is in line with Para 3 (b) Annex 11, EB 48 and acceptable to the assessment team. The value is crosschecked from the SERC (=State electricity regulatory commission) order and the value of the PLF is same. Thus the Value as considered in the IRR and ER sheet is found to be appropriate.

D) Assessment of Electricity Tariff:

Site Name	Name of the Investor/Owner/SPVs	Tariff (as per SERC) ¹⁴	Tariff as per the PPA
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¹⁴ <http://aperc.gov.in/admin/upload/151357798913059820235a375e05b7933.pdf>

Tallimadugula Site	RSM Estates Ltd	4.83	4.83
Tallimadugula Site	Mangalam Fashions Ltd	4.83	4.83
Tallimadugula Site	Daulat Financial Ltd	4.83	4.83
Muthvakuntla Site	HC Commercial Ltd	4.83	4.83

Validation team assessed the tariff as mentioned above in the table and found that same value was available during decision making and in conformity with guidance tool for Investment analysis. Furthermore, assessment team has also checked the actual tariff as per the PPA for further substantiation as these values are available during the validation stage. IRR is still below benchmark with the consideration of PPA Agreement signed which is valid for total operational lifetime of the project.

e) Assessment of O & M cost:

Site Name	Name of the Investor/Owner/SPVs	O&M as per Offer letter O&M (In Million) (Without tax)	Date	The actual O&M agreements O&M (In Million) (Without tax)	Date
Tallima dugula Site	RSM Estates Ltd	2.3	28/11/2016	2.2	16/12/2016
Tallima dugula Site	Mangalam Fashions Ltd	2.3	28/11/2016	2.2	16/12/2016
Tallima dugula Site	Daulat Financial Ltd	2.3	01/12/2016	2.2	16/12/2016
Muthvakuntla Site	HC Commercial Ltd	2.3	01/12/2016	2.2	16/12/2016

The Offer letter has been used in the financial calculation as same was available during decision making and hence applicable. According to Investment guideline, the cost should be based on the input parameters available at the time of decision making and the PP has submitted offer letter supporting this consideration. Therefore, considering the above assessment, validation team concluded that the O&M cost considered from respective Offer letter in the computation of financial indicator is in conformity with guidance.

F) Assessment of Tax computation:

The project developer has adopted book depreciation rates as per Schedule XIV of the Companies Act, 1956 for computing book profit and Income Tax Act 1961 stipulated for income tax calculation, which are in conformity with the accepted accounting principles adopted by the company and income tax laws in the host country. The block of assets has been computed for depreciation purpose as per the accepted accounting principles. Tax liability has been calculated as per the income tax rules and the rulings given. In computing the income tax liability, the project developers have considered Tax holiday (u/s 80IA of the Income Tax Act, 1961). Accelerated depreciation on plant and machinery is also sourced from IT act. The tax rates assumed corresponds to the tax rate prevailing at the time of taking decision (conformity to Investment guidelines). Hence, these assumptions are appropriate during decision making context.

g)Cross checking parameters:

For Mangalam Fashions Limited, RSM Estates Limited, Daulat Financial Services Pvt. Limited, HC Commercial Limited.

Name of the parameter	DOE assessment
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Project Cost	The details of the proposed project activity are given below.			
	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	Project cost in Million per MW
	Mangalam Fashions Ltd	2 MW	126	63
	RSM Estates Limited	2 MW	126	63
	Daulat Financial Services Pvt. Limited	2 MW	126	63
	HC Commercial Limited	2 MW	128.5	64.25

The project cost has been considered from offer letter which was available at the time decision made for the project activity.

The DOE has also checked the actual cost of the each project site from the PO and found that, the reduction in project cost is within the range of sensitivity analysis. Since the comparison is done with actual project cost and hence, increase of the same in future is not possible. Thus, the project activity is additional with actual project cost.

Name of the Investor/Owner /SPVs	Project Capacity (MW)	Project Cost (In Million)- Actual from PO	Project Cost (In Million) per MW- Actual from PO
Mangalam Fashions Ltd	2 MW	99.6	49.8
RSM Estates Limited	2 MW	99.6	49.8
Daulat Financial Services Pvt. Limited	2 MW	99.6	49.8
HC Commercial Limited	2 MW	99.6	49.8

The assessment team also checked the respective state tariff orders and found that project cost considered for project is found to be appropriate.

Based on sectoral scope expert and local knowledge, the project cost considered as per offer letter for the proposed project activity is found to be appropriate for Wind projects. Also since the actual cost is available to DOE and IRR is still within benchmark and thus the same is acceptable.

The IRR as per the assumption from the Offer letter is as follows:

		<table><tr><th>Name of the Investor/Owner/SPVs</th><th>Project Capacity (MW)</th><th>Project Cost (In Million)</th><th>IRR</th><th>Benchmark</th></tr><tr><td>Mangalam Fashions Ltd</td><td>2 MW</td><td>126</td><td>7.86%</td><td>14.63%</td></tr><tr><td>RSM Estates Limited</td><td>2 MW</td><td>126</td><td>7.86%</td><td>14.63%</td></tr><tr><td>Daulat Financial Services Pvt. Limited</td><td>2 MW</td><td>126</td><td>7.86%</td><td>14.63%</td></tr><tr><td>HC Commercial Limited</td><td>2 MW</td><td>128.5</td><td>7.60%</td><td>14.63%</td></tr></table>	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	IRR	Benchmark	Mangalam Fashions Ltd	2 MW	126	7.86%	14.63%	RSM Estates Limited	2 MW	126	7.86%	14.63%	Daulat Financial Services Pvt. Limited	2 MW	126	7.86%	14.63%	HC Commercial Limited	2 MW	128.5	7.60%	14.63%
		Name of the Investor/Owner/SPVs	Project Capacity (MW)	Project Cost (In Million)	IRR	Benchmark																					
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		Daulat Financial Services Pvt. Limited	2 MW	126	7.86%	14.63%																					
		HC Commercial Limited	2 MW	128.5	7.60%	14.63%																					
		The IRR as per the actual project cost is defined as below:																									
		<table><tr><th>Name of the Investor/Owner</th><th>Project Capacity (MW)</th><th>Actual project cost as per the PO</th><th>IRR</th><th>Benchmark</th></tr><tr><td>Mangalam Fashions Ltd</td><td>2 MW</td><td>99.6</td><td>11.26%</td><td>14.63%</td></tr><tr><td>RSM Estates Limited</td><td>2 MW</td><td>99.6</td><td>11.26%</td><td>14.63%</td></tr><tr><td>Daulat Financial Services Pvt. Limited</td><td>2 MW</td><td>99.6</td><td>11.26%</td><td>14.63%</td></tr><tr><td>HC Commercial Limited</td><td>2 MW</td><td>99.6</td><td>11.26%</td><td>14.63%</td></tr></table>	Name of the Investor/Owner	Project Capacity (MW)	Actual project cost as per the PO	IRR	Benchmark	Mangalam Fashions Ltd	2 MW	99.6	11.26%	14.63%	RSM Estates Limited	2 MW	99.6	11.26%	14.63%	Daulat Financial Services Pvt. Limited	2 MW	99.6	11.26%	14.63%	HC Commercial Limited	2 MW	99.6	11.26%	14.63%
		Name of the Investor/Owner	Project Capacity (MW)	Actual project cost as per the PO	IRR	Benchmark																					
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Daulat Financial Services Pvt. Limited	2 MW	99.6	11.26%	14.63%																							
HC Commercial Limited	2 MW	99.6	11.26%	14.63%																							
As described above actual project cost with benchmark, the project is still additional. Since the comparison is done with actual project cost, the increase of the same in future is not possible. Thus assessment team is of the opinion that project is still additional with the consideration of actual project cost for the project activity.																											
O&M cost and Escalation in the operational expense =5(%) As per offer letter(Standard practice in India)	The details of the proposed project activity are given below.																										
	<table><tr><th>Name of the Investor</th><th>Project Capacity (MW)</th><th>O&M (In Million)</th></tr><tr><td>Mangalam Fashions Ltd</td><td>2 MW</td><td>2.30</td></tr><tr><td>RSM Estates Limited</td><td>2 MW</td><td>2.30</td></tr><tr><td>Daulat Financial Services Pvt. Limited</td><td>2 MW</td><td>2.30</td></tr><tr><td>HC Commercial Limited</td><td>2 MW</td><td>2.30</td></tr></table>			Name of the Investor	Project Capacity (MW)	O&M (In Million)	Mangalam Fashions Ltd	2 MW	2.30	RSM Estates Limited	2 MW	2.30	Daulat Financial Services Pvt. Limited	2 MW	2.30	HC Commercial Limited	2 MW	2.30									
	Name of the Investor	Project Capacity (MW)	O&M (In Million)																								
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	RSM Estates Limited	2 MW	2.30																								
	Daulat Financial Services Pvt. Limited	2 MW	2.30																								
HC Commercial Limited	2 MW	2.30																									
The O&M cost has been considered from offer letter and was available at the time decision made for the project activity.																											
The DOE has also checked the actual O&M contract for each project																											

site and found the changes in O&M cost is within threshold limit. Thus the project activity is additional with actual O&M cost.

Name of the Investor/Owner/SPVs	Project Capacity (MW)	Actual O&M (In Million) (Without tax)- Actual
Mangalam Fashions Ltd	2 MW	2.20
RSM Estates Limited	2 MW	2.20
Daulat Financial Services Pvt. Limited	2 MW	2.20
HC Commercial Limited	2 MW	2.20

The assessment team also checked the respective state tariff orders and found that O&M cost and its escalation considered for project is found to be appropriate.

IRR value as per the assumptions from the Offer letter is as below:

Name of the Investor/Owner/SPVs	Project Capacity (MW)	O&M (In Million)	IRR	Benchmark
Mangalam Fashions Ltd	2 MW	2.30	7.86%	14.63%
RSM Estates Limited	2 MW	2.30	7.86%	14.63%
Daulat Financial Services Pvt. Limited	2 MW	2.30	7.86%	14.63%
HC Commercial Limited.	2 MW	2.30	7.60%	14.63%

IRR value based on the actual O&M agreements signed is as below:

Name of the Investor/Owner/SPVs	Project Capacity (MW)	O&M (In Million) (Without tax)- Actual	IRR	Benchmark
Mangalam Fashions Ltd	2 MW	2.20	8.01%	14.63%
RSM Estates Limited	2 MW	2.20	8.01%	14.63%
Daulat Financial Services Pvt. Limited	2 MW	2.20	8.01%	14.63%
HC Commercial Limited	2 MW	2.20	7.75%	14.63%

Even after consideration of Actual O&M cost, the project activity is additional.

Benchmark for the project as described above along with actual O&M value, the project is still additional.

Based on sectoral scope expert and local knowledge, the project O&M cost and its escalation considered as per Offer Letter for the proposed project activity is found to be appropriate for wind projects. Also since the O&M cost is available to DOE and IRR is still within

		benchmark and thus the same is acceptable.																																																
	Tariff	<p>The Tariff rate has been considered from state tariff order and the same was available at the time decision made for the project activity</p> <p>The DOE has also checked the annual reports of PP and found there are no changes in tariff rate and is within threshold limit. Thus the project activity is additional with actual Tariff rate.</p> <table border="1"> <thead> <tr> <th>Name of the Investor/Owner/SPVs</th> <th>Project Capacity (MW)</th> <th>Tariff Rate as per PPA</th> <th>Tariff Rate as per state tariff order</th> </tr> </thead> <tbody> <tr> <td>Mangalam Fashions Ltd</td> <td>2 MW</td> <td>4.83</td> <td>4.83</td> </tr> <tr> <td>RSM Estates Limited</td> <td>2 MW</td> <td>4.83</td> <td>4.83</td> </tr> <tr> <td>Daulat Financial Services Pvt. Limited</td> <td>2 MW</td> <td>4.83</td> <td>4.83</td> </tr> <tr> <td>HC Commercial Limited</td> <td>2 MW</td> <td>4.83</td> <td>4.83</td> </tr> </tbody> </table> <p>IRR value as per the power purchase agreement signed between Individual project owners and State electricity Board is as below:</p> <table border="1"> <thead> <tr> <th>Name of the Investor/Owner/SPVs</th> <th>Project Capacity (MW)</th> <th>Tariff Rate (as per PPA)</th> <th>IRR</th> <th>Benchmark</th> </tr> </thead> <tbody> <tr> <td>Mangalam Fashions Ltd</td> <td>2 MW</td> <td>4.83</td> <td>7.86%</td> <td>14.63%</td> </tr> <tr> <td>RSM Estates Limited</td> <td>2 MW</td> <td>4.83</td> <td>7.86%</td> <td>14.63%</td> </tr> <tr> <td>Daulat Financial Services Pvt. Limited</td> <td>2 MW</td> <td>4.83</td> <td>7.86%</td> <td>14.63%</td> </tr> <tr> <td>HC Commercial Limited</td> <td>2 MW</td> <td>4.83</td> <td>7.60%</td> <td>14.63%</td> </tr> </tbody> </table>				Name of the Investor/Owner/SPVs	Project Capacity (MW)	Tariff Rate as per PPA	Tariff Rate as per state tariff order	Mangalam Fashions Ltd	2 MW	4.83	4.83	RSM Estates Limited	2 MW	4.83	4.83	Daulat Financial Services Pvt. Limited	2 MW	4.83	4.83	HC Commercial Limited	2 MW	4.83	4.83	Name of the Investor/Owner/SPVs	Project Capacity (MW)	Tariff Rate (as per PPA)	IRR	Benchmark	Mangalam Fashions Ltd	2 MW	4.83	7.86%	14.63%	RSM Estates Limited	2 MW	4.83	7.86%	14.63%	Daulat Financial Services Pvt. Limited	2 MW	4.83	7.86%	14.63%	HC Commercial Limited	2 MW	4.83	7.60%	14.63%
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	<p>The PLF has been taken from the PLF report, and the same has been checked and found that PLF considered for the project activity in within the range of sensitivity analysis and found to be appropriate.</p> <p>Also since the WTG's are operational, the actual PLF has been taken into consideration for last FY and the PLF based upon previous year generation comes out to be 22.5% which is approximately same as per the estimated PLF and thus deemed acceptable to the validation team.</p> <p>IRR for PLF value as per the DPR = 3rd party report, Annex 11 EB 48</p> <table><tr><th>Name of the Investor/Owner /SPVs</th><th>Project Capacity (MW)</th><th>PLF (%) - As per the Third Party DPR</th><th>IRR</th><th>Benchmark</th></tr><tr><td>Mangalam Fashions Ltd</td><td>2 MW</td><td>22.15%</td><td>7.86%</td><td>14.63%</td></tr><tr><td>RSM Estates Limited</td><td>2 MW</td><td>22.15%</td><td>7.86%</td><td>14.63%</td></tr><tr><td>Daulat Financial Services Pvt. Limited</td><td>2 MW</td><td>22.15%</td><td>7.86%</td><td>14.63%</td></tr><tr><td>HC Commercial Limited</td><td>2 MW</td><td>22.15%</td><td>7.60%</td><td>14.63%</td></tr></table> <p>Assessment team confirms that since with the value as mentioned in the Third party DPR has been considered in the IRR calculations being available to the project developer at the time of investment making date and still the IRR is still below the benchmark, hence the project is additional.</p> <p>The validation team has also crosschecked the actual generation data and observed that actual PLF is also about 22.5% and IRR of the project is still below benchmark even with consideration of actual PLF and hence the comparison deemed acceptable to the Validation team.</p>	Name of the Investor/Owner /SPVs	Project Capacity (MW)	PLF (%) - As per the Third Party DPR	IRR	Benchmark	Mangalam Fashions Ltd	2 MW	22.15%	7.86%	14.63%	RSM Estates Limited	2 MW	22.15%	7.86%	14.63%	Daulat Financial Services Pvt. Limited	2 MW	22.15%	7.86%	14.63%	HC Commercial Limited	2 MW	22.15%	7.60%	14.63%
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Tax Rates	<table><tr><td>Income tax rate (%)</td><td>33.06%</td></tr><tr><td>MAT (Minimum Alternate tax) (%)</td><td>20.39%</td></tr><tr><td>Service Tax (%)</td><td>15.45%</td></tr></table> <p>The above table shows the tax rate for all the 4 investors considered for individual project Owner and the same is found suitable.</p> <p>Assessment team noted that the project developer has adopted book depreciation rates as per Schedule XIV of the Companies Act, 1956 for computing book profit and Income Tax Act 1961 stipulated for income tax calculation, which are in conformity with the accepted accounting principles adopted by the company and income tax laws in the host country i.e. INDIA. Tax liability has been calculated as per the income tax rules and the rulings given. In computing the income tax liability, the project developers have considered Tax holiday (u/s 80IA of the Income Tax Act, 1961). Accelerated depreciation on plant and machinery is also sourced from IT act. The tax rates assumed corresponds to the tax rate prevailing at the time of taking decision. Hence, these assumptions are appropriate during decision making context and thus acceptable to the assessment team.</p>	Income tax rate (%)	33.06%	MAT (Minimum Alternate tax) (%)	20.39%	Service Tax (%)	15.45%																			
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No further assessment is required as the Values are directly procured from Income Tax Act, 1961 which is standard guideline for Tax value in India.

Sensitivity analysis:

The Guidance on Investment analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation. The project developer has identified Plant Load Factor (PLF), Project cost, Electricity tariff and O&M cost as critical assumptions. These critical parameters constitute more than 20% of either total project costs or total project revenues. The sensitivity analysis reveals that even under more favourable conditions, the IRR without CDM revenue would not cross the benchmark return as given in the following table:

Sensitivity Analysis:

Equity IRR	Mangalam Fashions Limited			
Variation %	-10%	Normal	10%	Breaching Value
PLF	6.12%	7.86%	9.49%	44.64%
O&M	8.19%	7.86%	7.53%	-265.95%
Project Cost	9.31%	7.86%	6.64%	-35.07%
Tariff Rate	6.12%	7.86%	9.49%	44.642%

Equity IRR	HC Commercial Limited			
Variation %	-10%	Normal	10%	Breaching Value
PLF	5.89%	7.60%	9.22%	47.18%
O&M	7.93%	7.60%	7.27%	-281.23%
Project Cost	9.03%	7.60%	6.40%	-36.34%
Tariff Rate	5.89%	7.60%	9.22%	47.18%

Equity IRR	Daulat Financial Limited			
Variation %	-10%	Normal	10%	Breaching Value
PLF	6.12%	7.86%	9.49%	44.64%
O&M	8.19%	7.86%	7.53%	-265.95%
Project Cost	9.31%	7.86%	6.64%	-35.07%
Tariff Rate	6.12%	7.86%	9.49%	44.64%

Equity IRR	RSM Estates Ltd			
Variation %	-10%	Normal	10%	Breaching Value
PLF	6.12%	7.86%	9.49%	44.64%
O&M	8.19%	7.86%	7.27%	-265.95%
Project Cost	9.31%	7.86%	6.40%	-35.07%
Tariff Rate	6.12%	7.86%	9.22%	44.64%

The results of sensitivity analysis show that even with a variation of +10% & -10% in project cost, O&M cost, PLF and Tariff Rate Equity IRR is significantly lower than the benchmark. And it is evident from the results given above; the project remains additional even under the most favourable conditions.

	Variable	Probability to breach the benchmark
	PLF ¹⁵	PLF has been considered from Third party report dated 27/11/2016 and was available at the time of investment making decision ¹⁶ . This also fulfils the requirement of Guidelines for Reporting and Validation of Plant Load Factors" EB 48 Annex 11 option 3(b)17. Hence, variation in PLF of more than 10% is unlikely to happen.
	O&M Cost ¹⁸	With the country experiencing 7.13% inflation on an average ¹⁹ , the question of O&M coming down is ruled out. The Project owner has also provided for sensitivity on O&M cost for the variation in the range of +/- 10%. However, the IRR does not reach the benchmark.
	Project Cost	The Purchase Order cost for all WTGs is within 10% of the Offer letter cost which was considered during decision making. However, we have conducted sensitivity analysis for project cost being 10% less and 10% more than that considered during decision making. Even at this level, the IRR does not breach the Benchmark. Hence, there is no any probability of the Benchmark being breached.
	Tariff Rate	Tariff Rate has been determined as per the State Electricity Board Tariff Order dated 31st March 2016 which will be fixed for the entire lifetime of the project activity. Hence, there is no probability of any variation for the same.
<p>The above discussions show that the project activity is not financially attractive; hence the project activity is additional and the assessment team considers the approach and calculations acceptable as per the requirements in the methodological tool.</p> <p>Assessment team noted that the project fulfils the norms put down by Central Pollution Control Board. As per Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India), final document on revised classification of Industrial Sectors under Red, Orange, Green and White Categories (29/02/2016). The newly introduced White category of industries pertains to those industrial sectors which are practically non-polluting such as Biscuit trays etc. from rolled PVC sheet (using automatic vacuum forming machines), Cotton and woollen hosiers making (Dry process only without any dyeing/washing operation), Electric lamp (bulb) and CFL manufacturing by assembling only, Scientific and mathematical instrument manufacturing, Solar power generation through photovoltaic cell, wind power and mini hydel power (less than 25 MW).</p> <p>There shall be no necessity of obtaining the "Consent to Establish/Operate" for White category of industries. Intimation to concerned SPCB / PCC is sufficient. Being a renewable power project it falls under the category of White and thus these</p>		

¹⁶In the project activity, PLF is being sourced from the third party report available at the time of investment making decision. Further this also fulfils the requirement to comply as per the guidelines of EB 48 annex 11, option 3 (b) the project investor obtained the PLF provided by an independent third party.

¹⁷ https://cdm.unfccc.int/EB/048/eb48_repan11.pdf

¹⁸ PP has considered the O&M cost from offer letter which was available to PP at the time of investment decision. To justify the robustness of IRR calculations, the sensitivity analysis has been made and it is observed that even with exclusion of O&M cost (i.e zero O&M cost), there is no any adverse impact on additionality.

Also as per ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION, "Retail Supply Tariff Order for FY 2016-17" <http://aperc.gov.in/admin/upload/151357798913059820235a375e05b7933.pdf> the variations of input parameters has been crosschecked.

¹⁹ <http://www.tradingeconomics.com/india/inflation-cpi>

	<p>projects do not need clearance for Consent to operate and only needs to inform the relative State pollution control board. The same is done for the project and thus it can be confirmed that it follows the local laws of the host country.</p> <p>Due to above categorization of white category and being the renewable in nature, the project activity does not emit any emissions. Thus there is no any other surplus regulatory requirement for the project activity. This is found to be accepted by assessment team.</p>
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D.4.7. Estimation of emission reductions or net anthropogenic removals

Means of validation	The emission reduction sheet, CEA database and PDD version 02 is checked by the assessment team																		
Findings	No findings have been raised for the criteria.																		
Conclusion	<p>The baseline emissions as discussed in section B.6.1 will include emissions that would have occurred in the absence of the project activity. The emission reduction calculation has been done as per the methodology AMS.I.D version 18.</p> <p>Baseline Emission: As per the approved consolidated Methodology AMS.I.D version 18:</p> <p>Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid- connected power plants. The baseline emissions are to be calculated as follows:</p> <p>BE_y = EG_{PJ,y} x EF_{grid,CM,y} Where: BE_y = Baseline emissions in year y (t CO₂/yr) 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 (MWh/yr) 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” (t CO₂/MWh)</p> <p>The grid emission factors are calculated as the weighted average of the operating margin (0.75) & build margin (0.25) values. The value of combined margin is sourced from Baseline CO₂ Emission Database, Version 12, published by Central Electricity Authority (CEA), Government of India. This is the version available to the PP at the time of PDD submitted to DOE for web-hosting purpose and hence thus version 12 is used for emission factor value. No further assessment is required for grid emission calculation as the ex-ante value is sourced directly from the Govt. of India database.</p> <p>EG_{PJ,y} for wind power plant is calculated based on capacity (Checked from the manufacturer specification), PLF= sourced from 3rd party thus fulfilling the requirement of Para 3 (b), Annex 11 EB 48 and 8760 (365*24) annual hours.</p> <p>Emission factor</p> <p>EF_{grid,CM,y}= 0.9653 t CO₂/MWh. This value is fixed ex-ante for the crediting period.</p> <table><tr><th>Project Sites' Name</th><th>PLF (%)</th><th>Grid</th><th>Generat ed Power (MWh) p.a</th><th>Baseline Emission Factor (tCO₂/MW h)</th><th>Baseline emissions (tCO₂/ year)</th></tr><tr><td>Mangalam Fashions Limited</td><td>22.15 %</td><td>INDIA N</td><td>3,880</td><td>0.9653</td><td>3,745</td></tr><tr><td>RSM Estates Limited</td><td>22.15</td><td>INDIA</td><td>3,880</td><td>0.9653</td><td>3,745</td></tr></table>	Project Sites' Name	PLF (%)	Grid	Generat ed Power (MWh) p.a	Baseline Emission Factor (tCO ₂ /MW h)	Baseline emissions (tCO ₂ / year)	Mangalam Fashions Limited	22.15 %	INDIA N	3,880	0.9653	3,745	RSM Estates Limited	22.15	INDIA	3,880	0.9653	3,745
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RSM Estates Limited	22.15	INDIA	3,880	0.9653	3,745														

		%	N			
Daulat Financial Services Pvt. Limited	22.15 %	INDIA N	3,880	0.9653	3,745	
HC Commercial Limited	22.15 %	INDIA N	3,880	0.9653	3,745	
Total			15,520		14,980	

As per EB 48, Annex- 11, Option 3(b), PLF for all the Projects has been considered as the values based upon the report provided by a Third Party Engineering Company contracted by the PP.

$EF_{grid,y}$ = Baseline emission factor (INDIAN Grid)
= 0.9653 tCO₂/MWh

$BE_y = 15,520 * 0.9653$
= 14,980 tCO_{2e}

Project Emission:
As the project activity is the installation of a new grid-connected Wind Power plant and does not involve any project emissions from fossil fuel, operation of dry, flash steam or binary geothermal power plants, and from water reservoirs of hydro power plants. Therefore PE_y = 0.

Leakage Emission:
As the project activity is the installation of a new grid-connected Wind Power plant and there is no equipment transfer, LE_y=0

Net Emission reduction:
Emission Reductions are calculated as follows:

$ER_y = BE_y - PE_y = 14,980 - 0 = 14,980 \text{ tCO}_2$

D.4.8. Monitoring plan

Means of validation	Assessment team checked the monitoring practice onsite and also checked the guideline of SERC for the respective state of Andhra Pradesh
Findings	No findings have been raised for the criteria.
Conclusion	<p>Assessment team checked the monitoring practice onsite and also checked the guideline of respective State electricity regulatory commission. The detail analysis is as below:</p> <p><u>Parameters determined ex-ante:</u></p> <p>Baseline emission factor of INDIAN Grid is establish ex-ante based on Tool to calculate the grid emission factor, using a combined approach consisting 75 % operating margin and 25 % build margin. The emission coefficient from official data published in Central Electricity Authority (CEA) CO₂ Baseline database version 12 available to the project participant at the time of submission of PDD for global stakeholder's consultation process. CEA is an official source of Ministry of Power, Government of India have worked out baseline as CO₂ baseline database. The assumption were verified by the validation team and found to be correct.</p> <p><u>Parameters determined ex-post:</u></p> <p>The parameters monitored ex-post involves net electricity supplied to the grid (calculated from electricity exported and imported) to the INDIAN grid by the project activity.</p> <p>As per the PDD Version 02, for wind power plant Joint Energy Meter Reading Report signed by state board as well as O&M partner will be the source of data during verification. The DOE will use the same source for verification of emission reductions.</p>

	<p>The Net electricity supplied to the grid by the project activity will be calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from Joint Energy Meter Reading Report as per below equation:</p> $EG_{PJ,y} = EG_{Export} - EG_{Import}$ <p>The export and import energy will be measured continuously using Main & Check meters at the switchyard. Export & Import readings of Main meter shall be taken on monthly basis at appointed day and hour (time) by authorized officer of Discom in the presence of PP or representative of PP. The meter reading will be taken jointly and signed by the representatives of the Discom and Project Investor. Based on the readings, invoices for net electricity exported will be raised by Project Investor to Discom. Quantity of net electricity supplied to the grid for Wind power project will be cross checked from the invoices raised by the Project Participant to the respective State electricity board.</p> <p>In the event of failure of main meter, the check meter will be used in monitoring the electricity data. The agency is experienced in the monitoring system and is managing O&M of numerous other wind projects. The validation team therefore is of the opinion that the project participant through the O&M agency is capable of implementing the monitoring plan in the context of the project activity.</p> <p>Calibration of all the meters for Wind power project is done by state electricity board officials as per the industry standards. However, the calibration will be done once in a 5 year²⁰ for wind power plant. The energy meter recording the export and import from the grid at substation is under the control and supervision of state electricity board officials. Similarly O&M contractor is responsible for monitoring of the generation data at CMS.</p> <p>It is reported that the data will be kept for 2 years following the end of the crediting period or till the last issuance of CERs for the project activity whichever occurs later.</p> <p>The responsibilities and authorities of project management, data handling and recording, measurement methods and QA/QC procedure have been systematically established and formalized and the same was verified during the site visit.</p>
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D.5. Start date, crediting period type and duration

Means of validation	Assessment team checked the Initial PDD for crediting period type and duration and EPC (=Engineering, Procurement, Construction) contract for the validation of Start date of the project activity
Findings	No findings have been raised for the criteria.
Conclusion	<p>The start date of project activity is considered to be 16/12/2016 which is the purchase order for the supply of WTGs to Inox Wind by Mangalam Fashion Limited. As per the definition of Start date of the project activity <i>"For a CDM project activity (non-A/R) or CPA (non-A/R), the date on which the project participants commit to making expenditures for the construction or modification of the main equipment or facility (e.g. a wind turbine), or for the provision or modification of a service (e.g. distribution of energy-efficient light bulbs, change of transport management system), for the CDM project activity or CPA. Where a contract is signed for such expenditures (e.g. for procurement of a wind turbine), it is the date on which the contract is signed"</i></p> <p>Assessment team checked the EPC contract for the wind power project dated 16/12/2016 and thus approve the start date of the project activity as because the start date of the project meet the criteria <i>"commit to making expenditures for the construction or modification of the main equipment or facility"</i>.</p> <p>Project participant has chosen renewable crediting period of the project activity and thus the duration is 7 years which can be renewed twice. The same is thus</p>

²⁰http://powermin.nic.in/whats_new/pdf/Metering_Regulations.pdf, page 12

acceptable to the assessment team.

D.6. Environmental impacts

Means of validation	The guideline provided by MOEF is checked by the assessment team http://envfor.nic.in/legis/eia/so1533.pdf
Findings	No findings have been raised for the criteria.
Conclusion	The project activity is expected to have positive impacts and no significant adverse environmental impacts are foreseen. Since, the project activity is an electricity generation from renewable source (i.e. wind energy) therefore no negative impact are envisaged. There is no mandatory legal requirement for carrying out an environmental impact assessment in the host country. The Ministry of Environment and Forests (MoEF), Government of India (GOI) notification ²¹ dated 14/09/2006 regarding the requirement of Environment Impact Assessment (EIA) studies states that any project developer in India needs to file an application to the Ministry of Environment and Forests (including a public hearing and an EIA) in case the proposed industry or project is listed in a predefined list. The list includes thirty nine project activities that require EIA studies. The wind power projects are not included in this list and thus an EIA study is not required. Ministry of Environment & forests vide their OM J-11013/41/2006 - IA II (I) dated 13 th May 2011 ²² has re-affirmed this and exempted wind power plants from EIA and EC requirement.

D.7. Local stakeholder consultation

Means of validation	The local stakeholder consultation MOM, attendance sheet is checked by the assessment team. During the validation site visit assessment team also interviewed some of the stakeholder present during the meeting with PP.
Findings	Assessment team raised concern regarding the stakeholder consultation meeting and supporting document. The detail of the same is mentioned as CAR 06 in this report and the same is closed successfully. Please refer Appendix 4 of this report
Conclusion	<p>As per the CDM requirements, it is necessary to invite the relevant stakeholders, before the validation process starts. Moreover, the start date of the project is 16/12/2016 and the Local Stakeholder Meetings were organized for local stakeholder consultation on 14/12/2016 at the project site. Assessment team confirm that stakeholder consultation meeting took place on at the project site before the start date of the respective project which fulfills the requirement of Para 107 of CDM project standard for the project activities version 02. The DOE checked the relevance of the dates during the validation site visit.</p> <p>Assessment team confirm that Local stakeholders were informed about the meeting on 07/12/2016 by means of Public Notice as well as through personal interactions with the locals. The Notices were checked during the validation process and found correct.</p> <p>The following are identified as the stakeholders for the project activity:</p> <ul style="list-style-type: none"> • Local community • Local village administration • Technology suppliers • Local vendors <p>The stakeholders identified by the project participant were local villagers who are the major population of the particular area, local communities and gram panchayet (Village head), wind turbine supplier, project proponent representatives, O&M Team and other people involved in the project. Validation team verified the list of participants who attended the stakeholder meeting and feedback questionnaire and confirms the stakeholders identified are relevant. The validation team also verified the minutes of meeting to note that no negative comments were received and the same was cross checked with the information obtained during follow up interviews with the stakeholder's.</p>

²¹ <http://envfor.nic.in/legis/eia/so1533.pdf>

²² <http://moef.nic.in/downloads/public-information/OM-SolarPV.pdf>

	<p>Moreover, as per Para 133 of CDM Validation and Verification Standard for project activities version 02, DOE enquired with the MOEF (Host country DNA) via email regarding any stakeholder comments received for this particular project activity. DOE waited for 14 days and no comments received from MOEF (= DNA). Based on the guideline and directive of Para 133, DOE concluded that Stakeholder consultation is in line with the requirement of this Para 133 and hence conclude that Local stakeholder consultation was conducted properly.</p> <p>Thus Validation team is of the opinion that the stakeholder meeting was adequate and appropriate.</p>
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D.8. Sustainable development co-benefits

Means of validation	The criteria is a voluntary initiative. As the project Host country approval clearly mentions that project activity contributes to Sustainable development in India (= Host country) no further study is thus required.
Findings	No findings have been raised for the criteria.
Conclusion	The criteria is a voluntary initiative. As the project Host country approval clearly mentions that project activity contributes to Sustainable development in India (= Host country) no further study is thus required.

D.9. Approval

Means of validation	The Approval is provided by the Indian DNA (Ministry of Environment and Forest, Govt of India). Assessment team checked the HCA supplied by the project participant and also cross checked the same from the web site (http://www.cdmindia.gov.in/). The HCA confirms the approval of Indian DNA which is the party to Kyoto protocol and confirms that project is vide by the guideline of CDM
Findings	CAR 07 was raised during the validation of the project and closed successfully. Please refer Appendix 4 of this report for the detailed closure of the CAR.
Conclusion	<p>Assessment team confirms that the project is approved from Indian DNA and thus the same is in line with CDM Validation and Verification Standard for the project activities (VVS version 02) The HCA confirms that</p> <ol style="list-style-type: none"> 1. The Party is a Party to the Kyoto Protocol 2. Participation is voluntary; 3. the proposed project activity contributes to the sustainable development of the country; 4. HCA refers to the precise proposed project activity title in the PDD being submitted for registration. 5. HCA is unconditional with respect to above items and thus acceptable to the assessment team.

D.10. Authorization

Means of validation	The Authorisation is provided by the Indian DNA (Ministry of Environment and Forest, Govt of India). Assessment team checked the HCA supplied by the project participant and also cross checked the same from the web site (http://moef.gov.in). The HCA confirms the authorisation of Indian DNA which is the party to Kyoto protocol and confirms that project is vide by the guideline of CDM
Findings	No findings have been raised for the criteria.
Conclusion	<p>Assessment team confirms that the project is authorised from Indian DNA and thus the same is in line with CDM Validation and Verification Standard for project activities version 02:</p> <p>The HCA confirms that</p> <ul style="list-style-type: none"> • the Party is a Party to the Kyoto Protocol • Participation is voluntary; • the proposed project activity contributes to the sustainable development of the country; • HCA refers to the precise proposed project activity title in the PDD being submitted for registration. <p>HCA is unconditional with respect to above items.</p> <ul style="list-style-type: none"> • The project activity is in line with sustainable development policies of the country and national regulation / policy on Environmental Protection,

	<p>Electricity and Non- Conventional Energy. Nevertheless in the Host Country Approval, it is stated that the project participant (PP) has to comply with the following conditions:</p> <ul style="list-style-type: none"> • PP shall not sell the CERs to any agency /company/ organization which purchases the CERs using ODA Funds • PP shall inform the national CDM Authority regarding all transaction details of CERs including the name and address of the party to which CERs were sold within 30 days of transfer of the CERs • PP shall furnish expeditiously any information, during the lifetime of the project as requested by the National CDM Authority. • PP shall obtain all statutory clearances and other approvals as required from the competent authorities for setting up of the project • All transaction shall be subject to supervision of the Executive Board of the CDM, under the authority and guidance of the COP/MOP • This approval is not transferable. The authority reserved the rights to revoke this Host Country Approval if the conditions stipulated in this approval are not complied with to the satisfaction of the National CDM Authority. <p>All the above conditions are met and same is checked by the assessment team from the host country approval number 13008/81/2017-CC -dated 15/04/2019 and found correct.</p>
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D.11. Modalities of communication

Means of validation	Assessment team checked the MOC supplied by the project participant and found that the latest form applicable in the UNFCCC web site is used and signing authority has the power to sign the same on behalf of PP
Findings	Assessment team raised concern regarding the MOC signing and supporting document. CAR 08 is thus raised during the validation process and closed successfully. Please refer Appendix 4 of this report for the detail closure of the CAR.
Conclusion	Assessment team checked the signed MOC document dated 08/11/2019. The project participant is Mangalam Fashions Limited to act as focal point along with EKI energy Services Limited for the project activity. Assessment team also checked the power of Attorney in the name of Mr. Deepak to act as focal point and Signatory on behalf of Mangalam Fashions Limited and Mr. Manish Dabkara to act as focal point and Signatory on behalf of EKI energy Services Limited. The same is as per the requirement of CDM Validation and Verification Standard for project activities version 02 and thus assessment team confirm that the MOC is correct and accurate.

D.12. Global stakeholder consultation

Means of validation	Assessment team checked the GSC home page for the project. https://cdm.unfccc.int/Projects/Validation/DB/DOZ7GR1278KIW8B81KQJ7TTTT01DYN0/view.html
Findings	No findings have been raised for the criteria.
Conclusion	No comments obtained at the GSC stage.

SECTION E. Internal quality control

As final step of a validation of the final documentation including the validation report and the checklist have to undergo an internal quality control by the technical review committee, i.e. each report has to be finally approved either by the head of the technical review committee or the deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one to avoid any conflict of interest.

After confirmation of the PP the validation opinion and relevant documents are submitted to the EB through the UNFCCC web-platform

SECTION F. Validation opinion

Applus+ Certification has performed a validation of the "Wind Power Project by Mangalam Fashions Limited & Group in Andhra Pradesh.". The validation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria, e.g. AMS.I.D version 18, given to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation and the subsequent follow-up interviews have provided Applus+ Certification with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project will hence be recommended by Applus+ Certification for registration with the UNFCCC.

Applus+ Certification has received a confirmation from the host Party that the project activity assists it in achieving sustainable development.

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. An analysis of the investment demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of annual emission reductions of 14,980 tCO₂e per year, thereon displacing 15,520 MWh/year

The validation has been performed following the requirements of the latest version of the "CDM Validation and Verification standard for project activities version 02.0 and on the basis of the contractual agreement. The single purpose of this report is its use during the registration process as part of the CDM/UNFCCC project cycle.

Appendix 1. Abbreviations

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CEA	Central Electricity Authority
CL	Clarification request
CM	Combined Margin
CMS	Central Monitoring system
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reductions
EB	Electricity Board
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming potential
GSC	Global Stakeholder consultation
PP	Project Participant
PPA	Power purchase agreement
PLF	Plant Load factor
RBI	Reserve Bank Of India
SERC	State Electricity regulatory commission

Appendix 2. Competence of team members and technical reviewers

1. Mr. Sukanta DAS, has done M. SC in (Electronics and Photonics) and M. Tech in (Energy technology) from Tezpur Central University/ Indian Institute of technology Bombay in India. He is a certified lead auditor for ISO 14001 EMS LA and ISO 9001 QMS LA from International registry for Certified Auditors (IRCA) and Certified Lean Management practitioner from Quality Council of India (QCI). He has more than Nine (9) years of working experience at TUV NoRD/ Re-consult/CRA/ Applus+ Certification under various categories of projects stating from Renewable to waste to supercritical projects. He was JI/ CDM Lead Assessor in TUV NoRD and was involved in more than 100 CDM validation and verifications activities in Gold Standard, VCS, CDM projects as a team leader/technical reviewer / validator / verifier covering the sectoral scope 1, 13 technical areas 1.2/1.1/13.1. Currently he is associated with True Quality Certifications Private Limited and is empanelled with Applus+ Certification to carry out GHG audit.
2. Mr. Simon Shen (Master Degree in Thermal Energy Engineering, Bachelor Degree in Environmental Engineering) is a Lead Auditor appointed by Applus+ LGAI for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environmental protection field. Before he joined Applus+ LGAI, he had been worked for TÜV SÜD as a GHG Validator/Assessment team and ISO 9001/14001 Lead Auditor for 3.5 years.

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	NA	Contract of the project participant with the DOE	Contract document signed between PP and DOE	Project participant
2	NA	PLF assessment study report for the project activity	Detailed 3 rd party report by Power and energy consultants annex 11 EB 48) dated 27/11/2016	Project participant
3	NA	Technical specifications of Wind turbine generators from manufacturers	Technical specifications of wind turbine as provided Manufacturer	Project participant
4	NA	Board decision for serious CDM consideration	Board meeting dated 06/12/2016 for investment into the project.	Project participant
5	NA	Intimation to UNFCCC	Prior consideration emails for the project. Also checked from UN web site https://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html	Project participant
6	NA	Webhosted PDD for GSC comment- version 01 PDD version 02 based on which opinion is provided	02/09/2017 05/11/2020	Project participant
7	NA	Financial Calculation sheet- version 01	05/11/2020	Project participant
8	NA	Emission reduction calculation sheet- version 01 Emission reduction calculation sheet- version 02	02/09/2017 05/11/2020	Project participant
9	NA	Offer letter for the project activity	Offer letter dated 28/11/2016	Project participant

				ant
10	NA	The operational lifetime of the project activity (wind) from the manufacturer(=Technical specifications)	Manufacturer technical specifications	Project participant
11	NA	The stakeholder consultation process documents: <ul style="list-style-type: none"> List of attendee Minutes of meeting Feedbacks from the stakeholders 	MOM and attendance sheet of the meeting	Project participant
12	NA	AMS.I.D version 18	UNFCCC CDM web site	UNFCCC
13	NA	SERC order RBI: Reserve Bank of India www.rbi.org.in Ministry of Environment and forest: www.envfor.nic.in UNFCCC www.cdm.unfccc.int CEA: Central electricity authority www.cea.nic.in Income tax act 1961 http://law.incometaxindia.gov.in/DIT/	Reference link is provided.	Independent Search
14	NA	Tools/ guidelines used in the project activity <ul style="list-style-type: none"> Clarification on national and/or sectoral policies Para 27 EB 55 Guidelines for the reporting and validation of Plant Load Factor Annex 11 EB 48 Guidelines on the demonstration and assessment of Prior Consideration of the CDM EB 62 Annex 13 Tool to determine the 	UNFCCC CDM web site	UNFCCC

		remaining lifetime of the project activity in line with Annex 15 EB 50 · Tool to calculate project or leakage CO2 emissions from fossil fuel combustion, Version 2, EB 41 · Tool to calculate the emission factor for an electricity system version 07 · Glossary of CDM terms version 09				
15	NA	Letter of ODA from the PP	ODA letter dated 17/09/2020			Project Participant
16	NA	Host country approval	HCA letter dated 15/04/2019			Project Participant
17	NA	Modalities of Communication	MOC dated 08/11/2019			Project Participant
18	NA	EPC contract for the project activity	EPC contract 16/12/2016			Project Participant
19	NA	Commissioning Certificates for the project activity	Project Investors' Name	Capacity	Date of Commissioning	Project Participant
			Mangalam Fashions Limited	2 MW	31-Mar-17	
			RSM Estates Limited	2 MW	31-Mar-17	
			Daulat Financial Services Pvt. Limited	2 MW	31-Mar-17	
			HC Commercial Limited	2 MW	31-Mar-17	

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1 CLs from this validation

CL ID	01	Section no.	CDM REQUIREMENT	Date: 10/11/2017
Description of CL				
The Project Participant is requested to provide documentation to confirm there is no public funding of the proposed CDM project activity.				
Project participant response				Date: 05/11/2020
<i>The ODA declaration is provided</i>				
Documentation provided by project participant				
<i>ODA declaration</i>				
DOE assessment				Date: 09/12/2020
The ODA letter dated 17/09/2020 is checked and found correct. CL is closed.				

Table 2 CARs from this validation

CAR ID	01	Section no.	D.3	Date: 10/11/2017
Description of CAR				
In accordance with the Attachment "Instructions for filling out the project design document form for small-scale CDM project activities" at the end of "Project design document form for small-scale CDM project activities", the APPLUS Project Team has the following observation:				
<ol style="list-style-type: none"> 1. The version of tool referred in section A.1 is not provided. 2. The sectoral scope(s) and type of the project activity has not been mentioned in section A.1 of PDD. 3. The terminology "Project Proponent" is not correct as per "Glossary CDM terms". Please check the same throughout the PDD. 4. The document related to technical lifetime is not provided to the DOE for Wind technology 				
Corrective action is sought for the above queries and requisite documents needs to be submitted.				
Project participant response				Date: 05/11/2020
<ol style="list-style-type: none"> 1. <i>The version of tools used has been mentioned in section A.1 of the PDD.</i> 2. <i>Sectoral scope and project type has been mentioned in section A.1 of the PDD.</i> 3. <i>The terminology has been corrected in the PDD as requested.</i> 4. <i>The document related to technical lifetime has been submitted to the Validation team.</i> 				
Documentation provided by project participant				
<i>PDD Version 02</i>				
<i>Lifetime certificate</i>				
DOE assessment				Date: 09/12/2020
Following are the observation of the DOE:				
<ol style="list-style-type: none"> 1. The version of the tool, referred in section A.1 is now updated in revised PDD version 02. CAR is closed 2. The sectoral scope(s) and type of project activity has now been mentioned in section A.1 of the revised CDM PDD. CAR is closed 3. The terminology "Project Proponent" has now been corrected as per CDM "Glossary CDM terms" in the revised CDM PDD and now made consistent. CAR is closed. 4. The document related to technical lifetime is checked and found correct. CAR is closed 				

CAR ID	02	Section no.	D.3	Date: 10/11/2017
Description of CAR				
During the desk review APPLUS team observed that the geographical map addressing the project activity site is missing in the PDD. Corrective action is sought in this regard.				
Project participant response				Date: 05/11/2020
<i>The geographical map has been included in the PDD Version 02 section A.2.</i>				
Documentation provided by project participant				
<i>PDD Version 02</i>				
DOE assessment				Date: 09/12/2020
The geographical maps, addressing to the individual project sites are now updated in the revised CDM PDD version 02. CAR is closed				

CAR ID	03	Section no.	D.3	Date: 10/11/2017
Description of CAR				
The Section A.3 of the PDD is not in accordance with the GUIDELINES FOR COMPLETING THE PROJECT DESIGN DOCUMENT FORM in following manner.				
<ol style="list-style-type: none"> 1. The description of the "Technologies and/or measures" in Section A.3 does not include a list of the facilities, systems and equipment that will be installed by the project activity. 				
The Project Participants are requested to revise the PDD to include the required information.				
Project participant response				Date: 05/11/2020
<i>The technical specification of the project activity has been mentioned in the PDD Version 02.</i>				
Documentation provided by project participant				
<i>PDD Version 02</i>				
DOE assessment				Date: 09/12/2020
The description of the "Technologies and/or measures" in Section A.3 is now updated and relevant supporting is provided to the assessment team which found to be correct. CAR is closed.				

CAR ID	04	Section no.	D.4.5	Date: 10/11/2017
Description of CAR				
In order to confirm that Data Source used for calculation of grid emission factor is the latest available data at the time of PDD webhosting, the assessment team request that the Project Participant mention the date of publication of CEA data for Grid Emission Factor in the table in Section B.4 of the PDD.				
Moreover, Emission reduction sheet is not submitted to the DOE and thus ER calculation is thus reserved. Corrective action is sought for the same.				
Project participant response				Date: 05/11/2020
<i>The date of publication of CEA Database has been mentioned in the PDD Version 02. Also the ER Calculations has been submitted to the VVB as desired.</i>				
Documentation provided by project participant				
<i>PDD Version 02 ER Sheet V02</i>				
DOE assessment				Date: 09/12/2020
The emission factor is now updated in section B.4 of the PDD. The estimation emission reduction sheet is now submitted. The same is checked and found correct. CAR is closed.				

CAR ID	05	Section no.	D.4.6	Date: 10/11/2017
Description of CAR				
During the desk review of the PDD and onsite visit document verifications, APPLUS team observed following inconsistency in the additionality determination :				
<ol style="list-style-type: none"> 1. Following documents are missing and thus the IRR calculation is reserved: <ol style="list-style-type: none"> a. PLF reports b. Board decision documents 				

- c. Project Cost defragmentation
 - d. Administrative expenses
 - e. Offer/purchase order
 - f. Insurance letter
 - g. All other assumptions documents
2. MAT is considered for IRR calculation. Please clarify whether the firm is eligible for tentative MAT benefit. Kindly please submit the latest audit report
 3. Prior consideration document is not submitted to the DOE
 4. IRR sheet is missing and thus IRR calculation is reserved.

Corrective action is sought in the PDD section B.5 and supporting documentation is requested for further analysis.

Project participant response	Date: 05/11/2020
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The PP has submitted the following documents

1. *PLF Report*
2. *Board Decision document*
3. *Project cost defragmentation*
4. *Offer letter and insurance copies*
2. *MAT has been removed from consideration in the IRR Sheet submitted*
3. *Prior consideration email copies has been submitted as desired*
4. *IRR Sheet submitted to the VVB as desired*

Documentation provided by project participant
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PLF Report
Offer letter and insurance copies
Company balance sheet
Prior consideration email copies
IRR Sheets

DOE assessment	Date: 09/12/2020
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The supporting documents required are now submitted to the assessment team. IRR calculation sheet is now checked and found correct. The input assumptions are at the time of Investment decision and the same is also checked with 3rd party available documents.
 CAR is closed.

CAR ID	06	Section no.	D.7	Date: 10/11/2017
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Description of CAR

During the desk review related to stakeholder consultation following observation is made by the APPLUS project team:

1. The stakeholder documentation is also not provided to the DOE

Corrective action is this sought for the same.

Project participant response	Date: 05/11/2020
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The stakeholder documents like public notice, attendance sheets and MOM has been submitted as desired

Documentation provided by project participant
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Stakeholder documents

DOE assessment	Date: 09/12/2020
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The MoM, attendance sheets and Site pictures for the local stakeholder is checked and assessment team found the detail to be correct. Assessment team confirm that the stakeholder consultation was conducted as per the requirement of UN. CAR is closed.

CAR ID	07	Section no.	D.9	Date: 10/11/2017
Description of CAR				
In accordance with CDM Project Standard, Version 01.0 (Project Standard), the APPLUS Project Team requires a letter of approval provided by the DNA - National CDM Authority (NCDMA) Ministry of Environment & Forests, for the Party involved in the proposed Project Activity. The APPLUS Project Team requests letter of approval when available, and before the request for registration can be submitted.				
Project participant response				Date: 05/11/2020
<i>HCS provided to the DOE</i>				
Documentation provided by project participant				
<i>HCS document</i>				
DOE assessment				Date: 09/12/2020
The HCA letter dated 15/04/2019 is checked and found correct. CAR is closed				

CAR ID	08	Section no.	D.11	Date: 10/11/2017
Description of CAR				
In accordance with the Project Standard Version 01.0, the APPLUS Project Team requests that the Project Participant submit the Modalities of Communication (MoC) statement. Corrective action is sought and requisite document need to be submitted				
Project participant response				Date: 05/11/2020
<i>The MOC Form duly signed by PP is submitted with PDD Version 02.</i>				
Documentation provided by project participant				
<i>MOC Form</i>				
DOE assessment				Date: 09/12/2020
The MOC letter dated 08/11/2019 is checked and found correct. CAR is closed.				

Table 3 FARs from this validation

FAR ID	xx	Section no.		Date: DD/MM/YYYY
Description of FAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
04.0	31 May 2019	Revision to: <ul style="list-style-type: none"> • Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN); • Make editorial improvements.
03.1	11 January 2018	Editorial revision to remove an erroneously included instruction paragraph in section D.2 (Identification of project type).
03.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
02.0	22 July 2016	EB 90, Annex 3 Revision to include provisions related to automatically additional project activities.
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Registration Keywords: project activities, validation report		