

PROJECT REVIEW REPORT

This project review report includes findings raised during Verra's review of the project specified below. The VVB must address the findings before the project request can be considered for approval by Verra. The project review report will be made publicly available on the Verra Registry. Confidential information may be provided in separate attachments.

Project ID	3556
Project Name	Grouped Rooftop Solar Project by Tata Power Renewable Energy Limited
Review Type	Registration & Verification Approval
Program(s)	VCS Program
Verification Period	01 Oct 2020 – 30 April 2022
Project Proponent	Tata Power Renewable Energy Limited
Methodology	AMS.I. F: Renewable Electricity Generation for captive use and Mini grid , Ver 5
VVB	LGAI Technological Center, S.A. (Applus+ Certification)
Assessment Criteria	VCS Standard, v4.2
Date of First Issue	23 Dec 2022
Review Conclusion	Approved
Date of Final Issue	20 February 2024

FINDINGS

#	Finding Description	VVB Response	Status
1	Verification report does not assess the project against the clustering rule for grouped projects		
	<u>Issue</u> Unclear if the VVB assessed project compliance with the capacity limit and clustering rules in section 3.5.14 of the VCS Standard, v4.3 <u>Action Required</u> 1. The VVB must assess if the project meets the capacity limit requirements specified in section 3.5.14 of the VCS Standard, v4.3 2. The VVB must describe their assessment and conclusion in the joint v/v report <u>Program Rule(s)</u> VCS Standard, v4.3, Section 3.5.14 <u>Background</u> The project must identify any instances that exceed 1% of the capacity limit. Any such instances within a kilometer of another instance should be clustered, and no single cluster of instances shall exceed the capacity limit	Round 1 <u>VVB Response</u> During review, Assessment team observed that there is not a single instance included in the project is within one kilometre of any other instances of the project activity. Same has been confirmed during interview with the project site-in-charge and cross checked with google maps. (Geo Coordinates mentioned in section 3.1 of Joint V/V report). Thus, there is no requirement of clustering the instances of the project. Same is accepted by VVB. <u>Verra Response</u> The response is sufficient. No further action is required. Round 2 <u>VVB Response</u> <u>Verra Response</u>	Closed
2	KML file does not identify the locations of instances included in the project at registration		
	<u>Issue</u> The KML file does not identify project activity instances <u>Action Required</u> 1. The VVB must ensure an updated KML file with geocoordinates of all known instances is uploaded to the Verra Registry	Round 1 <u>VVB Response</u> An updated KML file with geocoordinates of all 13 instances has been uploaded to the Verra Registry. <u>Verra Response</u> No further action is required.	Closed

	<u>Program Rule(s)</u> VCS Standard, v4.3, Section 3.10.1		
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3 Additionality test uses an outdated CDM tool			
	<u>Issue</u> The project applies an outdated version of the CDM Positive List of Technologies (3.0 instead of 4.0) <u>Action Required</u> 1. The VVB must ensure the project uses a valid approach for demonstrating additionality <u>Program Rule(s)</u> <i>Clarification to the VCS Program Guide, v4.1, 29 April 2022</i> <u>Background</u> The 29 April 2022 <i>Clarification to the VCS Program Guide, v4.1</i> , clarifies projects using v3.0 of the CDM Positive List of Technologies must have listed on the VCS pipeline by 10 March 2022; however, the project did not request listing until 20 July 2022	Round 1 <u>VVB Response</u> Reference of CDM Positive List of Technologies has been removed from the revised PD-MR & PP demonstrated the additionality according to Tool 21, "Demonstration of additionality of small-scale project activities" Version 13.1	Closed
		<u>Verra Response</u> No further action is required.	

4 Unclear how electricity is delivered to the captive consumer in instances with net metering			
	<u>Issue</u> It is unclear if the grid is used for wheeling in instances 2 and 8 <u>Action Required</u> 1. The VVB must clarify if the grid is used for wheeling in the grid connected instances <u>Program Rule(s)</u> <i>AMS I.F: Renewable electricity generation for captive use and mini grid Ver 5 .0, Section 2.2</i>	Round 1 <u>VVB Response</u> The Bundled project activity consist of several rooftop solar project which TPREL has developed, installed, financed, operates, and owns the rooftop solar power units and supplies power generated from the project to the consumers on whose premises the rooftop SPV panels are set up at Industries. All project are connected with the load via "behind the Meter" concept or "Net Metering" concept. there is no wheeling involved in this project activity for instances 2 & 8. Only surplus electricity will be exported to the grid	Closed

		by project instances 2 and 8. Same has been confirmed through JRM and invoices copies of respective project instance. Solar Panels installed at rooftop of industries where electricity is consuming. Hence requirement of wheeling is not appropriate.	
		<u>Verra Response</u> The information provided is sufficient. No further action is required.	

5	Unclear energy balance in the instances with net metering				
	<u>Issue</u> It is unclear if instances 2 and 8 export greater than 50% of generated electricity to the grid <u>Action Required</u> 1. The VVB must ensure the PD-MR reports what percent of electricity generated from instances 2 and 8 is exported to the grid 2. The VVB must describe how the energy balance of instances 2 and 8 was assessed in Section 4.1 of the v/v report <u>Program Rule(s)</u> VCS Standard, v4.3, Section 2.1.1 <u>Background</u> Grid-connected electricity generation is excluded in non-LDC countries. Verra considers any project or instance that delivers >50% of electricity to the grid as grid-connected		Round 1 <u>VVB Response</u> According to the VERRA Clarification on solar rooftop captive consumption projects eligibility under VCS, those solar PV projects that generate electricity primarily to deliver to a captive consumer can account for 100% of the electricity generated by the solar PV system, even though the project is grid-connected, given that the main purpose is delivery to the captive consumer. In line with the VERRA clarification, the electricity produced by all the project activity instances involved in the proposed project is primarily intended to be used by the captive consumers and excess of the electricity to be supplied to the grid, 100% of the electricity generated by the solar PV units is to be accounted for emission reduction, even though the project is grid-connected, given that the main purpose is delivery to the captive consumer. Same has been verified through Power Purchase Agreement between Consumer and generator for each instances. Further confirmed that installed capacity is lower than the installed load of the consumer. There are 2 instances only which are connected to grid out of 13 instances included now in this grouped project activity & their sanctioned load details as follows:		
			Closed		

		<table><tr><td>1</td><td>Duraline India Private Limited</td><td>1501</td><td>750</td><td>980</td></tr><tr><td>2</td><td>TATA Lockheed Martin Aerostructures Limited</td><td>1400</td><td>780</td><td>999.6</td></tr></table>	1	Duraline India Private Limited	1501	750	980	2	TATA Lockheed Martin Aerostructures Limited	1400	780	999.6	
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2	TATA Lockheed Martin Aerostructures Limited	1400	780	999.6									
		From the above-mentioned table, it can be concluded that the project installed capacity is very less as compared to the sanctioned load for the project location. The generated electricity from the rooftop solar units is very less considering the PLF values in the range of 18-19% which is negligible when compared with the electricity demand of the above consumers. Therefore, it is demonstrated that the project activity instances under consideration do not supply more than 50% of the electricity generated to the grid. Hence, the project is not a grid-connected renewable energy project and does not fall in the excluded category as per paragraph 2.1.1 of VCS Standard 4.4.											
		<u>Verra Response</u> No further action required.											

6	Baseline emission factor does not reflect captive power plant in the baseline scenario		
	<u>Issue</u> The baseline scenario of most instances is either a fossil fuel fired captive power plant or a carbon intensive mini grid which is not accounted for in the baseline combined emission factor	Round 1	Closed
	<u>Action Required</u> 1. The VVB must ensure the baseline combined emission factor reflects the emissions intensity of the grid AND the captive power plant in the baseline scenario	<u>VVB Response</u> The baseline scenario would be the continued use of fossil fuel dominated grid-connected electricity i.e., in the absence of the project activity. Hence, the baseline combined emission factor is calculated as the result of a weighted average of two emission factors pertaining to the electricity system: the operating margin (OM) (having a weightage of 75%) and build margin (BM) (having a weightage of 25%)	
	<u>Program Rule(s)</u>	<u>Verra Response</u> No further action is required.	

<i>AMS I.F: Renewable electricity generation for captive use and mini grid Ver 5.0, Para 21</i> <u>Background</u> Paragraph 21 of the methodology: “For project activities that displace electricity consumed from the electric grid and from a fossil fuel fired on-site captive power plant, the baseline emission factor shall reflect the emissions intensity of the grid and the captive power plant in the baseline scenario, i.e. the weighted average emission factor for the displaced electricity is calculated using values based on the historical (prior three year ratio) of electricity from captive plants and the grid.⁸ For new facilities, the most conservative (lowest) of the emission factor for the two power sources should be used”		
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