

PROJECT REVIEW REPORT

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

Review Type	Verification
Project ID	1189
Project Name	Shandong Taipingshan Wind Farm Project
Program(s)	VCS
Verification Period	27 April 2020 to 31 December 2021
Project Proponent	Anqiu Taipingshan Wind Power Co., Ltd.
Methodology	ACM0002: Grid-connected electricity generation from renewable sources, Version 20.0
VVB	LGAI Technological Center, S.A. (Applus+ Certification)
Assessment Criteria	VCS Version 4
Date of First Issue	17 October 2022
Review Conclusion	Approved
Date of Final Issue	21 November 2022

FINDINGS

#	Description	Response	Status																												
1	<p>Shared meters must be explained, and electricity allocation justified</p> <p><u>Issue</u></p> <p>1. Meter (M) naming and serial numbers are reported inconsistently between Project 1187 and 1189's MR.</p> <ul style="list-style-type: none"> Project 1187's MR indicates that M3 is used by Project 1187 and M4 & M5 are used by Project 1189; while Project 1189's MR indicates that 1187 uses M5 and M3 & M4 are used by Project 1189. <p>2. The MR does not justify why all 5 meters were used, and does not explain how the measured electricity generation was allocated between projects and how the PP ensured that double counting did not occur.</p> <p><u>Action item</u></p> <p>The VVB must ensure that Section 4.3 of the MR and applicable sections in the verification report are updated to:</p> <ol style="list-style-type: none"> Revise the provided monitoring equipment table so that the meters are named consistently between shared projects (1189 & 1187). Describe how and why the measured electricity generation was allocated between projects and double counting was avoided. <p>The VVB must also ensure that an updated ERR calculations spreadsheet is provided which includes an additional tab showing the meters and actual electricity allocations between projects.</p> <p><u>Program rule(s) or methodology section</u></p> <p>VCS Program Guide, v4.1, Section 3; VCS Standard, v4.3 Section 3.4.3 and 4.1.14</p>	<p>Round 1:</p> <p>VVB Response:</p> <p>1. First of all, it should be clear that the meter naming (Mx) is not the serial number, it is just the sequential number for indicate the difference of 5 meters' location. Please note that the meters used in both projects are independently numbered with M1-M5. It is quite reasonable in each project which has connection with the other project, the project itself was named with "project A" and other project was named with "project B". Meanwhile, it is also reasonable that the meter used in this project activity (Project 1189) was named with prior number. This is why the meter used in this project (Project 1189) was named with M3 and M4, and the meters used in the other project (Project 1187) was named with M5. The serial number is coincident depending on location of the meter and its functionalities. That means, the meter (M3, with s/n 9090151400332) in project 1187 is the same one (M5, with s/n 9090151400332) in project 1189. Please see below the correspondence between M1-M5 indicated with serial number in each project.</p> <table border="1"> <thead> <tr> <th colspan="2">Project 1187</th> <th colspan="2">Project 1189</th> </tr> <tr> <th>Meters</th> <th>Serial No.</th> <th>Meters</th> <th>Serial No.</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1305712953</td> <td>M1</td> <td>1305712953</td> </tr> <tr> <td>M2</td> <td>9070125900004</td> <td>M2</td> <td>9070125900004</td> </tr> <tr> <td>M3</td> <td>9090151400332</td> <td>M3</td> <td>9090151400334</td> </tr> <tr> <td>M4</td> <td>9090151400334</td> <td>M4</td> <td>9090151400336</td> </tr> <tr> <td>M5</td> <td>9090151400336</td> <td>M5</td> <td>9090151400332</td> </tr> </tbody> </table> <p>Please note that whatever the sequential number of the meters were name, the accuracy of electricity monitoring</p>	Project 1187		Project 1189		Meters	Serial No.	Meters	Serial No.	M1	1305712953	M1	1305712953	M2	9070125900004	M2	9070125900004	M3	9090151400332	M3	9090151400334	M4	9090151400334	M4	9090151400336	M5	9090151400336	M5	9090151400332	Closed
Project 1187		Project 1189																													
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is not affected. The name of the meters did neither affect the accuracy of ERs calculation in previous monitoring period, nor affect the accuracy in this monitoring period.

2. The quantity of electricity supplied to the grid by Project 1189 in year y. (i.e. $EG_{A,y}$) is sourced from the readings of the meters (Serial No.09090151400334 and 09090151400336) installed on the 35kV transmission lines at the site of project 1189. And the quantity of electricity supplied to the grid by Project 1187 in year y (i.e. $EG_{B,y}$) is sourced from the readings of the meter (Serial No. 09090151400332) installed at the site of project 1187. However, the readings of M3/M4/M5 were not the data at the side of grid company, so it was not conservative to use $EG_{A,y}$ directly. Thereby in the monitoring plan of PDD, project A and project B shared the electricity monitored by meter M1 installed at the side of grid company.

The formula of sharing is described as below:

$$EG_{\text{facility},y} = EG_{A,y} / (EG_{A,y} + EG_{B,y}) * EG_{\text{export},y} - EG_{\text{import},y}$$

Where:

$EG_{\text{facility},y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y.

$EG_{\text{export},y}$ = Total electricity supplied to the grid by the proposed Project (Project A) and Project B during year y.

$EG_{\text{import},y}$ = Electricity imported from the grid by the Project (Project A) and Project B during year y.

$EG_{A,y}$ = Quantity of electricity supplied to the grid by the Project (Project A) in year y.

$EG_{B,y}$ = Quantity of electricity supplied to the grid by Project B in year y.

Please note that the monitoring plan has been validated and approved by VERRA. So no double counting occurred in calculation of ERs.

Please noted that in this project MR, “A” refers to the project 1189. However in the MR of project 1187, project 1189 is referred to with “B”.

In the updated verification report. Above clarification has been clearly included. It has been verified in the revised MR that the serial number of each meter has been marked for make the monitoring process clearer. The usage of each meter in the monitoring plan has been explained in the updated verification report. The allocation of the net electricity supplied to the grid is also explained.

The calculation of the ERs is correct so it is not necessary to revised the ERs spreadsheet.

Verra Review: This finding is closed.