

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	1221
Project Name	Eglence I-II Hydroelectric Power Plant
Review Type	Crediting Period Renewal
Program(s)	VCS
Verification Period	NA
Project Proponent	Egenda Ege Enerji Uretim A.S.
Methodology	ACM0002: Grid-connected electricity generation from renewable sources, v21.0
VVB	RINA Services S.p.A.
Assessment Criteria	VCS Standard, v4.7
Date of First Issue	26/11/2024, 07/01/2025
Review Conclusion	Approved
Date of Final Issue	22/01/2025

FINDINGS

#	Finding Description	VVB Response	Status
1.	Need further clarity in section 1 of PD		
	<p><u>Issue</u></p> <ol style="list-style-type: none"> The PP has altered the VCS template, resulting in changes to section numbering throughout the PD. In Section 1.10 of the PD, the PP has selected a ten-year fixed crediting period. <p><u>Action Required</u></p> <ol style="list-style-type: none"> The VVB must ensure that the PD template is fully completed without any alterations. VVB shall ensure that correct information is provided in Section 1.10 of the PD. <p><u>Program Rule(s):</u> VCS Project Description Template v4.3</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> The VCS template is checked and accordingly the headings are revised throughout the report (including Table of Contents). CP is revised as “Ten years, twice renewable”. The CP starts from 10/04/2013 and ends on 09/04/2033. <p><u>Verra Response</u></p> <ol style="list-style-type: none"> The VCS PD template has been revised and corrected; it is found to be okay. Hence, no further action is required. This finding is closed. Section 1.10 of PD has been revised. Hence, no further action is required. This finding is closed. 	Closed
2.	Need more clarity of Grid Emission factor		
	<p><u>Issue</u></p> <ol style="list-style-type: none"> In Section 4.1 of the PD, the $EF_{grid,CM,y}$ (Combined Margin CO2 emission factor for grid-connected power generation in year y) is stated to be calculated using the CDM Tool 07, “Tool to calculate the emission factor for an electricity system.” However, the PP has not included the necessary steps outlined in Section 6 (Paragraph 14) of TOOL07 (v07.0). <p><u>Action Required</u></p> <ol style="list-style-type: none"> The VVB must ensure that the PP includes all relevant information in a stepwise manner, as outlined in Section 6 (Paragraph 14) of TOOL07 (v07.0), “Tool to calculate the emission factor for an electricity system.” 	<p>Round 1</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> Under Section 4.1., it is stated as “Since National Emission Factor calculated by Republic of Türkiye Ministry of Energy and Natural Resources was used, Step-1, Step-2, Step-3, Step-4, and Step-5 was already conducted by the Ministry.” Step 6 is for the EF calculation is explained. <p><u>Verra Response</u></p> <p>Section 4.1 of the PD has been revised, and Steps 1 through 5 have been completed, with Step 6 addressed for the EF calculation. Since the procedure complies with TOOL07 (v07.0), No further action is required. This finding is now closed.</p>	Closed

	<p><u>Program Rule(s)</u></p> <ul style="list-style-type: none"> section 6: TOOL07 (v 07.0) “Tool to calculate the emission factor for an electricity system. 		
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3. Need further clarity on the electricity meter calibration details.			
	<p><u>Issue</u></p> <p>In Section 5.3 of the PD, the PP states that the calibration validity is 10 years, referencing this information through Footnote 38. The document cited is dated August 7, 2008. However, in Section 3.3.8 of the VR, the VVB has cross-checked this information using Document No. 17 (Appendix 2), which is dated July 24, 1994. This discrepancy is unclear.</p> <p><u>Action Required</u></p> <p>1. The VVB must ensure that the referenced document is consistent between PD and VR. Also please provide English version of the document for review.</p> <p><u>Program Rule(s)</u></p> <p>Section 2.2, VCS standard v4.7.</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>The VR and the PD is revised accordingly. The reference for the calibration period is 10 years with the following reference: https://www.resmigazete.gov.tr/eskiler/2023/11/20231123-2.htm which dates back to 23/11/2023. The referred footnote is Footnote #42 in the PD is revised also FVR appendix is revised.</p> <p><u>Verra Response</u></p> <p>Footnote #42 in the PD has been revised, and the FVR appendix has also been updated. No further action is required. This finding is now closed.</p>	<p>Closed</p>

4. Discrepancy in reservoir area			
	<p><u>Issue</u></p> <p>There is a discrepancy in the reservoir area between the registered PD (CP1) and the CP2 PD.</p> <p><u>Action Required</u></p> <p>The VVB shall identify the causes and provide the assessment in the VR.</p> <p><u>Program Rule(s)</u></p> <p>Section 2.2, VCS Standard v4.7</p>	<p>Round 1</p> <p><u>VVB Response</u></p> <p>As explained under Section 1.1, due to change only in electromechanic equipment, the capacity of the Eglence I HEPP and Eglence II HEPP are revised to 43.50 and 27.2 MW, respectively. In this regard, the CAP_{PJ} parameter values for two plants are changed. The area of the reservoirs was measured from Google Earth and relevant images from Google Earth showing reservoir areas are verified. Accordingly, PD value is calculated. By the way during licensing process it is usual to make minor revisions according to mechanical changes of</p>	<p>Closed</p>

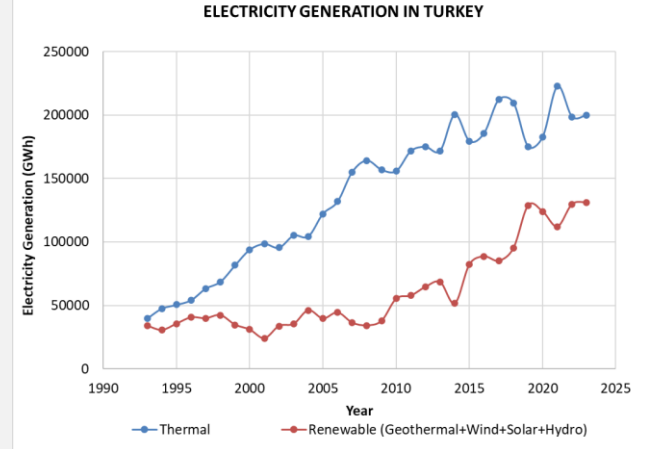
		equipment.	
		<p><u>Verra Response</u></p> <p>The VVB clarified that the discrepancy in the reservoir area was due to electromechanical equipment changes, with updated PD values calculated based on verified Google Earth images. No further action is required. This finding is now closed.</p>	

5. Justification for Baseline Selection and Compliance with Tool 11			
	<p><u>Issue</u></p> <ol style="list-style-type: none"> As per the Publicly available data indicates that hydropower contributes significantly to electricity generation in Turkey and is a key focus of the Turkish government to meet increasing electricity demand. Additionally, ongoing construction of hydropower plants (HPPs) is expected to further enhance its share in the energy mix. Given that renewable power plants (RPPs) have a greater combined installed capacity than thermal power plants (TPPs), it is unclear why RPPs should not be considered the baseline scenario. PP has not demonstrated the steps for identifying the baseline scenario as required under Tool 11. <p><u>Action Required</u></p>	<p>Round 2</p> <p><u>VVB Response</u></p> <ol style="list-style-type: none"> As shown in Figure 11 and 12 in the PD (according to TEIAS statistics for the year 2023), during last three years, in terms of installed capacity the renewable sources (geothermal + wind + solar + hydro) has surpassed that of thermal power plants. However, in terms of electricity generation, this is not the case. <p>As shown in Figure 14, the electricity generation by renewable sources has been less compared to that of thermal power plants. For the year 2023, the share of renewable sources in total electricity generation is 39.65% and therefore the share of thermal power plants is 60.35%, which means that the thermal power plants still dominate the electricity grid of Turkey.</p> <p>Figure 14:</p>	<p>Closed</p>

1. The VVB shall request the PP to justify why RPPs should not be considered the baseline scenario, considering their greater combined installed capacity compared to TPPs.
2. The PP must demonstrate the steps for identifying the baseline scenario in accordance with Tool 11.
3. The VVB shall ensure that the baseline selection is substantiated with appropriate data and analysis, considering Turkey's increasing reliance on hydropower.

Program Rule(s)

CDM tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period, v 03.0.1



Also as shown in Figure 11 in the PD, the share of HEPP's in total installed capacity of Turkey is about 30.41% (sum of shares of dam and lake and stream), whereas share of HEPP's **in total electricity generation** is only 19.3%.

These statistics and the related explanations are added under Section 3.4 and accordingly, RPPs are not considered to be the baseline scenario.

2. In accordance with the Tool 11, the baseline scenario is identified. The steps identified in Tool 11 are followed. Although there is no change in national/sectoral policies affecting project implementation (Step 1.1.) and investment and technology (Step 1.3.), the current situations such as margin calculations (Step 1.2) and parameters not monitored (Step 1.4) have been changed. In this regard, Step 2 has been applied and the baseline is updated accordingly. FVR step 2.1 and step 2.2 has been added.
3. The latest available statistics are taken from TEIAS webpage to show the change in installed capacity and the electricity

		<p>generation for the renewable and thermal sources of energy in Turkey. It should be mentioned that related references are provided under Section 3.4, and these references are valid and appropriate.</p> <p>As shown in both Figure 13 (installed capacity) and Figure 15 (electricity generation), thermal power plants still dominate the electricity grid and in terms of electricity generation, share of HEPPs is still lower than that of thermal plants. The share of coal and natural gas for the year 2023 in the electricity generation adds up to 57.1% which is higher value compared to that of HEPP's i.e., 19.3%.</p>	
		<p><u>Verra Response</u></p> <p>The VVB addressed the finding by:</p> <ul style="list-style-type: none"> • <u>Baseline Selection</u>: VVB confirmed that, despite renewable energy's higher installed capacity, thermal power plants still dominate electricity generation in Turkey (60.35% vs. 39.65%). Therefore, RPPs were not considered the baseline scenario. • <u>Compliance with Tool 11</u>: The VVB verified that the steps in Tool 11 were followed, including margin calculations and updates to the baseline as required. • <u>Data Validation</u>: The VVB confirmed data from TEIAS was used to support the baseline selection. <p>For the same Section 3.4 of the PD is updated and included the relevant explanations and references supporting the baseline justification.</p> <p>Hence no further action is required. This finding is closed.</p>	