PROJECT REVIEW REPORT

Project ID	*810*
Project Name	*CEYHAN 61.7 MW Hydropower Project*
Program(s)	*VCS*
Verification Period	*01 June 2012 - 31 May 2018*
Project Proponent	*Enova Enerji Üretim A.Ş*
Methodology	*ACM0002, Version 12.1.0: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"*
Sectoral Scope(s)	*01: Energy Industries (Renewable/Non-renewable)*
Validation/Verification Body (VVB)	*Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti.*

Assessment Criteria	*VCS Standard, v4.1*
Date of First Issue	*16 March 2021*
Date of Final Issue	*13 April 2022*

Summary:

An accuracy review of the CEYHAN 61.7 MW Hydropower Project verification approval request has been conducted by Verra in accordance with Section 4.3 of the *Registration and Issuance Process*.

The accuracy review has raised 13 assessment findings and 10 minor findings, detailed below. The VVB, in coordination with the project proponent, is hereby required to provide a response to the assessment findings presented in Section 1. The 13 assessment findings must be addressed to the satisfaction of Verra. The VVB need not address the minor findings during this review. Please note, however, that where Verra finds consistent minor findings by the VVB in future reviews, minor findings shall be escalated to assessment findings.

This project review report will be made publicly available. Confidential information may be provided as separate attachments.

1. ASSESSMENT FINDINGS

Finding 1
A review of the provided monitoring report document has returned a discrepancy in the Oskan HPP turbine capacity values. Section 1.1 of the Monitoring Report indicates an installed capacity of 7.963 MWe each. Under Table 3, capacity is indicated as 8,198 kW. The project proponent is requested to provide an updated Monitoring Report, ensuring turbine capacity measurements are consistent throughout. The VVB is requested to explain its decisions in validating the discrepancy between these values.
VVB Response: The capacity of 7,963 kWe is the electrical capacity of the turbine that has been verified through both generation license and the commissioning approval documents. 8,198 kWm is the mechanical capacity. Table 3 has been revised by PP accordingly. Please also see the Section 1.4 of the revised verification report. There is no discrepancy between the values.
Verra Response: The VVB has clarified that 7,963 kWe is the electricial capacity and 8,198 kWm is the nameplate mechanical capacity. The Verification report has been revised accordingly. However, Table 3 in Section 1.1 of the Monitoring Report has not been correctly revised as it is showing 7,198 kWe and not 7,963 kWe. The PP is required to effect the necessary revision. The VVB shall ensure that corrections are done before submitting of the same to Verra The finding remains open.
PP Response: Table 3 has been revised accordingly.
VVB Response: The value in Table-3 has been revised by PP.
Verra Response: The table has been revised to indicate 7,963 kWe The finding is closed and no further action is required

Finding 2
A review of the provided monitoring report document has returned a discrepancy in the Berkman HPP turbine capacity values. Section 1.1 of the Monitoring Report indicates an installed capacity of 12.605 MWe each. Table 3 indicates the Berkman HPP turbine capacity as 12,958 kW. The project proponent is requested to provide an updated Monitoring Report, ensuring turbine capacity

measurements are consistent throughout.

The VVB is requested to explain its decisions in validating the discrepancy between these values.

VVB Response:

The capacity of 12,605 MWe is the electrical capacity of the turbine that has been verified through both generation license and the commissioning approval documents. 12,958 kWm is the mechanical capacity. Table 3 has been revised by PP accordingly. Please also see the Section 1.4 of the revised verification report. There is no discrepancy between the values.

Verra Response:

The VVB has clarified that 12,605 MWe is the electrical capacity of the turbine while 12,958 kWm is the mechanical capacity. The Verification Report has been updated.

The PP is however required to revise Table 3 from 12.605 kWe to 12,605 kWe or to change the units in Table 3 to MWe. The VVB shall check that the appropriate correction has been carried out

The finding remains open.

PP Response:

Table 3 has been revised accordingly.

VVB Response:

The value in Table-3 has been revised by PP.

Verra Response:

The table has been revised to 12,605 kWe

The finding is closed and no further action is required

Finding 3

In line with Section 3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

Under Section 1.1, of the Monitoring Report, the project proponent is requested to provide an updated summary description to include all information on turbine and generator technical specifications, as detailed under Section A.4.3 of the registered PD.

VVB Response:

MR draft version 4.0 went into effect on 19 September 2019. This version was valid when the documents were prepared and shared with VVB. Besides that, the effective date of the new version is 20 July 2022. Therefore, there is no need to use or revise the new template of the MR

https://verra.org/wp-content/uploads/2022/01/VCS-Summary-of-Effective-Dates-2022-Q1.pdf.

The details of the generators have been included in the Section 1.1 of the MR by PP. Please also see the Table-1 in the Section 1.4 of the verification report. Having said those, the inclusion of generators haven't been requested to be included in some other recently approved and issued projects. This creates some inconsistency among project reviews.

Verra Response:

MR and VR have been updated to provide details of generators. This finding is closed, and no further action is required.

Finding 4

The Project Description Document indicates construction beginning January 2008. The Monitoring Report (MP: 01 June 2012 - 31 May 2018) indicates construction beginning 28/03/2008.

The project proponent is requested to clarify the discrepancy between these documents in an updated Monitoring Report.

The VVB is requested to explain its decisions in validating the discrepancy between these values.

VVB Response:

In the registered PD, it's stated that construction works started in January 2008, however construction has started officially on 28/03/2008 which is the date of the construction agreement. The construction agreement has been provided by PP and verified by VVB.

Verra Response:

Construction start date has been clarified and verified as 28/03/2008. This finding is closed, and no further action is required.

Finding 5

A review of provided documents has found an approved transfer letter in the Registry (Transfer Letter_Ceyhan HPP), where the project proponent has requested transfer of ownership from Suen Ltd STI to Sekans Enerji Limited Sirketi. The Monitoring Report (MP: 01 June 2012 - 31 May 2018) references Sekans Danışmanlık as the 'Other Entity' involved in project activities.

The project proponent is requested to clarify if Sekans Danışmanlık and Sekans Enerji Limited Sirketi are the same entity through an updated Monitoring Report.

The VVB is requested to explain its decisions in validating the discrepancy between these entities.

VVB Response:

Sekans Danışmanlık and Sekans Enerji Limited Sirketi are the same entity. Sekans Danışmanlık is the abridgment version, however all have been revised as by PP. Please see the revised MR. Please also see the Section of the revised verification report and there is no discrepancy in the report.

Verra Response:

MR and VR have been updated to clarify entity name and for consistency. This finding is closed, and no further action is required.

Finding 6

The registered PD indicates the location of the project as: 37°13'28.06" North, 36°15'8.77" East for

Oşkan HEPP and 37°10'7.20" North, 36°14'1. 47" East for Berkman HEPP. Under Section 1.7 of the Monitoring Report only one coordinate is listed , 37°10'39.49"N 36°16'15.85"E.

The project proponent is requested to clarify this discrepancy in project location values as well as provide a value for both turbine locations in an updated Monitoring Report.

The VVB is requested to explain its decisions in validating the discrepancy between these values.

VVB Response:

The coodinates have been revised by PP in accordance with the registered PD and please see the Section 1.7 of the revised MR. The coordinates of one point had been used in the previous verion of MR through the Google Earth screenshot.

Verra Response:

Coordinates of section 1.7 of the MR has been updated to match the registered PD. This finding is closed and no further action is required.

Finding 7

In line with Section 3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

Under Section 3.1 of the Monitoring Report, the project proponent is requested to include the operation of the project activity(s) during this monitoring period, including any information on events that may impact the GHG emission reductions or removals and monitoring.

VVB Response:

There hasn't been any observed/reported negative event that may impact the GHG emission reductions or removals during the monitoring period. Section 3.1 of the MR has been revised by PP accordingly.

Verra Response:

Section 3.1 of MR has been updated to confirm the project implementation status. No negative impacts observed or reported. This finding is closed, and no further action is required.

Finding 8

A review of the provided project documents has found inconsistent values between the registered Project Description and Section 4.2 Data and Parameters Monitored of the Monitoring Report.

The project proponent is requested to update Section 4.2 of the Monitoring Report to be consistent with the values monitored in the registered PD and approved MR (MP: 03 -06-2010 to 31-05-2012)

The VVB is requested to explain its decisions in validating the discrepancy between these values.

VVB Response:

- In registered PD, AP_J was expressed as in total value. In the approved MR for the first monitoring period (MP: 03 -06-2010 to 31-05-2012), this parameter was written as separately, therefore it's been included as same for this monitoring period.
- Number of temporary and permanent employees has been changed for this monitoring period,

therefore values have been changed. Please also see the Section 4.1 of the revised verification report.

Verra Response:

Parameter AP_J unit has been corrected.and therefore accepted. Update of values for Temporary and permanent employee values have been provided in both MR and VR. This finding is closed, and no further action is required.

Finding 9

In line with Section 3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

Under Section 4.2 of the Monitoring Report- Monitoring Equipment, 8 meters are listed. Each unit has a main meter and a check meter, there are total 6 meters for Oskan HPP and 6 meters for Berkman HPP. It is not clear why it is stated it is 8 meters (4 main, 4 check).

The project proponent is requested update the information provided to include all monitoring equipment, as required by the VCS Monitoring Report Template Section 4.2.

VVB Response:

As stated in the parameter, EGFacility,y, there are three meter set (three main meters and there back up meters) for Oşkan HEPP and one meter set (one main meter and one cback up meter).Therefore, in total, there are 8 electricity meters. Please see the Section 4.2 of the revised MR and Section 4.1 of the revised verification report.

However, also, changed meters were also indicated in the parameter box in the Section 4.2 of the MR. Please consider the sentence: "***The changed power meters are as below (these are the ones used during the monitoring period)".***

Verra Response:

Review has verified a total of 8 check meters. Section 4.2 of revised MR has been updated for clarity. This finding is closed, and no further action is required.

Finding 10

A review of the provided documents has returned numerous discrepancies across values in the provided monitoring report.

The VVB is requested to update Section 1.4 of the verification report to include revised and consistent turbine capacity values as well as revised and consistent generator specifications, as defined in the registered Project Description, and shall adhere to the revised Monitoring Report.

VVB Response:

Turbine and generator capacity details have already been included in detailed manner in the Section 1.4 of the verification report and please see the Section 1.4 of the revised report.

Verra Response:

Section 1.4 of VR has been updated for clarity and to provide the requested information, consistent with the revised Monitoring Report. This finding is closed, and no further action is required.

Finding 11

A review of the provided documents has returned numerous discrepancies between the monitoring report and registered Project Description.

Under Section 4.1 of the verification report, the VVB is requested to provide an updated list of all monitored parameters

The VVB is requested to provide an updated verification report which shall adhere to all values and parameters detailed in the registered PD and the revised monitoring report provided by the project proponent.

VVB Response:

The monitored parameters have been verified by VVB. Please see the Section 4.1 of the revised verification report.

Verra Response:

VVB has provided updated verification report, containing the requested monitored parameters. This finding is closed, and no further action is required.

Finding 12

In line with Section 4.1.14 of the *VCS Program Standard v4.1*, the project proponent shall use the VCS Verification Report Template or an approved combined verification report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

The VVB is requested to update Section 1.4 of the verification report to include generation values and generator information as required under Section 1.4 of the *VCS Verification Report Template.*

VVB Response:

It is not possible to include all equipment information in the documents but all necessary documents have been checked by VVB. The generators related information has also been included and please see the Table-1 in the Section 1.4 of the revised verification report Having said those, the inclusion of generators haven't been requested to be included in some other recently approved and issued projects. This creates some inconsistency among project reviews.

Verra Response:

Generator technical details are vital information for the project activity and must be provided. The VVB has confirmed review of all necessary documents. Requested generator information has been provided under Section 1.4 of the revised Verification Report. This finding is closed, and no further action is required.

Finding 13

The VVB is requested to provide an updated verification report, including a detailed assessment of the calibration compliance over the entire monitoring period (MP) under Section 4.1 and 4.5 of the verification report.

The VVB will update information regarding meters based on a revised monitoring report.

VVB Response:

The calibrated electricity meters were installed as per the regulations. Although, re-calibration is required after ten years, nevertheless, in case of irregular difference between main and cross-check spare meters, TEIAS (grid company) responsible are informed for the intervention. That means, TEIAS is responsible for the calibration and maintenance of the meters. Although the calibration of the meters is valid for 10 years in line with the relevant legal regulation, the tests for the meters were performed on 25/02/2010 (initial meter test), 23/12/2013, 04/05/2014, 22/12/2015, 08/10/2016, 28/10/2017, 30/10/2018 and 19/10/2019, respectively and those test reports were provided to VVB.

The serial numbers of the currently available main meters (all are EMH model and accuracy class is 0.5s) are 8923872, 8923874 and 8923876 for Oskan HEPP and 8923878 for Berkman HEPP and those of back up meters (all are EMH model and accuracy class is 0.5s) are 8923873, 8923875 and 8923877 for Oskan HEPP and 8923879 for Berkman HEPP, respectively and these have been verified through the electricity meter photos and meter test protocols. Please see the Sections 4.1 and 4.5 of the revised verification report.

Verra Response:

Section 4.1 and 4.5 of the updated VR have provided the requested calibration compliance information. This finding is closed, and no further action is required.

2. MINOR FINDINGS

Finding 1

In line with Section 3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template. The project proponent is requested to correct value APJ.

VVB Response:

In registered PD, AP_J was expressed as in total value. In the approved MR for the first monitoring period (MP: 03 -06-2010 to 31-05-2012), this parameter was written as separately, therefore it's been included as same for this monitoring period.

Verra: OK

Finding 2

In line with Section 3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template. Under Section 1.1 of the Monitoring Report, the project proponent is requested to use the specified formatting for listing dates, DD-Month-YYYY to DD-Month-YYYY.

VVB Response:

Please see the revised MR.

Verra: OK

Finding 3

The project proponent has included extraneous information. There are no applied project description deviations for this project. Please adhere to the guidelines provided in the VCS Monitoring Report Template.

VVB Response:

Please see the revised MR.

Verra: OK

Finding 4

The project proponent is requested to clarify the data parameter 'Number of temporary and permanent employees', distinguishing between temporary employees and permanent employees.

VVB Response:

Number of temporary and permanent employees has been changed for this monitoring period, therefore values have been changed. Please see the Section 4.2 of the revised MR. Please also see the Section 4.1 of the revised verification report.

Finding 5

The project proponent is requested to omit the parameter "Environmental Indicators (during operation)" under Section 4.2.

VVB Response:

Please see the Section 4.2 of the revised MR.

Verra: OK

Finding 6

In line with Section 3.4.3 of the VCS Program Standard v4.1, the project proponent shall use the VCS Monitoring Report Template or an approved combined monitoring report template available on the Verra website, as appropriate, and adhere to all instructional text within the template.

The project proponent is requested to provide page numbers for the Monitoring Report.

VVB Response:

Please see the revised MR.

Verra: OK

Finding 7

DOE is referenced throughout the monitoring report. The project proponent is requested to update the Monitoring Report to provide the correct acronym for the VVB.

VVB Response:

Please see the revised MR.

Verra: OK

Finding 8

As this project is being verified against the VCS standard there is no need to include reference to the CDM Project Cycle Procedure. The VVB is requested to update the verification report to include only the required information throughout.

VVB Response:

CDM related documents are basis for all validation and verification services since it is the starting point for all emission reduction projects. The project is also using CDM methodology (ACM0002 version 11) and some rules are also based on CDM rules and requirements in VCS. However, the report has been revised. Please see the revised verification report.

Verra: The CDM Project Cycle Procedure is not required under VCS and shall not be refereed. Therefore, revision is OK

Finding 9

The project proponent has included extraneous information. There are no applied project description deviations for this project. Please adhere to the guidelines provided in the VCS Verification Report Template.

VVB Response:

The change in other entiy information in the Section 3.2.2 of the MR has been included as a result of project review process in another submitted project. This creates some inconsistency among project reviews.

Verra: OK

Finding 10

Under the VCS Verification Report Template, the VVB is requested to use appendices for supporting information. The VVB is requested to correct the section title to adhere to VCS Verification Report Template requirements.

VVB Response:

Please see the revised verification report.

Verra: OK

3. ASSESSMENT CONCLUSION

On 16 March 2022, Verra conducted a review of the verification approval request for project ID 810, CEYHAN 61.7 MW Hydropower Project, the results of which can be found above. The project review report was sent to the project proponent with thirteen assessment findings and ten minor findings.

On 12 April 2022, Verra reviewed the responses to the finding(s). The PP and VVB's response to all finding(s) was not sufficient, and two assessment findings remain open. The PP and VVB are requested to address these findings as well as provide Verra with a tracked changes and clean version of both the Monitoring Report and Verification Reports via email.

On 13 April 2022, Verra reviewed the responses to the finding(s). The PP and VVB's response to all finding(s) was sufficient, and two assessment findings closed.