

EGLENCE I-II HYDROELECTRIC POWER PLANT VALIDATION REPORT



BUREAU VERITAS CERTIFICATION HOLDING SAS
67/71 Boulevard du Château, 92200 Neuilly sur Seine, France
Tél. : +33 (0)1 55 24 70 00
Fax : +33 (0)1 55 24 70
climatechange.ops@uk.bureauveritas.com
www.bureauveritas.com

Project Title	Eglence I-II Hydroelectric Power Plant
Version	03
Report ID	CER.1927.10.C45.REV1

Report Title	Eglence I-II Hydroelectric Power Plant Validation Report
Client	Egenda Ege Enerji Uretim A.S
Pages	173
Date of Issue	07/10/2013
Prepared By	Bureau Veritas Certification
Contact	Centrum Is Merkezi Aydınevler Sanayi Cad. No:3 34854 Kucukyali Maltepe Istanbul/TURKEY Tel: +90 216 518 40 50 www.bureauveritas.com
Approved By	Matthieu Martini – Global Climate Change Operations – Accreditation Coordinator
Work Carried Out By	<i>Furkan Sadıkoğlu – Team Leader</i> <i>Murat Gencer – Financial Specialist</i> <i>Yildiz Arıkan – Baseline Specialist</i> <i>Burcu Mutman – Internal Technical Reviewer</i>

Summary:

Bureau Veritas Certification has made the validation of the "Eglence I-II Hydroelectric Power Plant" of Egenda Ege Enerji Uretim A.S located on the Eglence River, in the Mediterranean Region within the Karaisali district of Adana province on the basis of UNFCCC criteria for the CDM methodology (ACM0002 v.13.0.0), Voluntary Carbon Standard (VCS) v.3.1, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

Eglence I-II Hydroelectric Power Plant is owned by Egenda Ege Enerji Uretim A.S. The project type is run-off-river. The project purpose is supplying electricity generation to the Turkish National Grid by generating electricity from renewable sources. The project total capacity is 68.65 MWe which is confirmed through the Electricity generation license of dd. 27/12/2007. Eglence I capacity is confirmed through the generation license as 42.65 MWe and Eglence I capacity is confirmed as 26.00 MWe through the generation license. The project is consisting by two weirs and two power houses. Each power house is comprised of three turbines. Project expects to generate and supply 205,299 MWh of electricity per year to the grid and expects to reduce 114,065 tCO₂-e per year by replacing non-renewable generation sources in the national grid.

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and internal technical review followed by the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix B. Taking into account this output, GAIA Carbon Finance, on behalf of the project proponent, revised its project design document, final document being version 5, dated 13/09/2013, resolve the issues that have risen during the interviews and subsequent interactions.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology ACM0002 version 13.0.0 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" and meets the relevant UNFCCC requirements for the CDM Methodology, Voluntary Carbon Standard (VCS) v.3.1 requirements and the relevant host country criteria.

Table of Contents

1	Introduction.....	4
1.1	Objective.....	4
1.2	Scope and Criteria	4
1.3	Level of assurance	4
1.4	Summary Description of the Project	4
2	Validation Process.....	5
2.1	Method and Criteria	5
2.2	Document Review	6
2.3	Interviews	6
2.4	Site Inspections	7
2.5	Resolution of Any Material Discrepancy	7
3	Validation Findings	7
3.1	Project Design	7
3.2	Application of Methodology.....	11
3.2.1	Title and Reference.....	11
3.2.2	Applicability.....	11
3.2.3	Project Boundary	12
3.2.4	Baseline Scenario	13
3.2.5	Additionality.....	14
3.2.6	Quantification of GHG Emission Reductions and Removals.....	22
3.2.7	Methodology Deviations.....	25
3.2.8	Monitoring Plan	25
3.3	Environmental Impact	27
3.4	Comments by stakeholders	28
4	Validation conclusion	30

1 INTRODUCTION

1.1 Objective

The validation serves as project design verification and is a requirement of all projects. The validation is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC CDM Methodology, Verified Carbon Standard (VCS) v.3.1 requirements and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable, and meet the stated requirements and identified criteria. Validation is a requirement for all VCS-VCU projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of verified carbon units (VCUs).

UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules, Verified Carbon Standard (VCS) v.3.1 and associated interpretations.

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

1.3 Level of assurance

The Level of assurance of the validation report is defined as high.

1.4 Summary Description of the Project

The project is run-off-river type hydroelectric power plant. Eglence I-II project is consists by two part as Eglence I and Eglence II. The project total capacity is 68.65 MWe and comprising two weirs and two power houses. Each power house is comprised of three turbines. Eglence I capacity is confirmed as 42.65 MWe through the EMRA Generation license dd. 27/12/2007 and Eglence II capacity is confirmed as 26.00 MWe through the EMRE generation license dd. 27/12/2007 and DSI Approved feasibility report dd. May 2011. The project activity is located on the Eglence River, in the Mediterranean Region within the Karaisali district of Adana Province. The project is between 33°41' 28" and 37°38' 12" north latitudes and 3 5°21' 09" and 35°20' 11" east longitudes. The coordinates are checked and confirmed by the validation team during the site visit.

The project comes under Type I – Renewable Energy Project as per Appendix B of the procedures for the CDM project activities. The project activity consist by Conveyance Tunnel of 3.4 m diameter and 5670 m length and a penstock of about 1150 m length for Eglence I, 3.4 diameter and 1900 m length and a penstock of about 700 m length. The project won't produce any greenhouse gas (GHG) during operation. The electricity generated by the project can

displace part of the power from the fossil fuel-fired plants of Turkey and the expected annual GHG emission reductions are 114,065 tCO₂e. The project lifetime is defined as 35 years as suggested by DSI.

On the other hand Plant load factor is confirmed as %34 through the EB 48 Annex 11 by the validation team. The crediting period of the project activity is 10 years 0 months which may be renewable once. The crediting period will be 20 years and 0 months in total.

The raised corrective action requests and clarification requests for the description of the project activity can be seen as below;

CL-1 has been raised by the validation team. The project capacity is expressed in MWe unit in whole VCS PD and the clarification request is closed.

CL-2 has been raised for the reference of the annual electricity generation. Annual electricity generation is referenced from the generation license and the clarification request is closed.

CL-6 has been raised by the validation team. Any risks that may substantially affect the project's GHG emission reductions are presented under section 1.1 of the VCS PD and the clarification request is closed.

CL-8 has been raised for the description of how environmentally safe and sound technology and know-how is transferred. Description is added to section 1.1 of the VCS PD and clarification request is closed.

2 VALIDATION PROCESS

2.1 Method and Criteria

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the project, according to the version 01.2 of the Clean Development Mechanism Validation and Verification Manual, issued by the Executive Board at its 55th meeting on 30/07/2010. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes details and clarifies the requirements a VCS-VCU project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The completed validation protocol is enclosed in Appendix B to this report.

The validation report underwent an Internal Technical Review (ITR) before requesting publishing of the report for the project activity. The ITR is an independent process performed to examine thoroughly that the process of verification has been carried out in conformance with the

requirements of the verification scheme as well as internal Bureau Veritas Certification procedures.

The Lead Verifier provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

When performing an Internal Technical Review, the reviewer ensures that:

The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.

The review encompasses all aspects related to the project which includes project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the verification exercise, review of sample documents.

The reviewer compiles clarification questions for the Lead Verifier and Validation Team and discusses these matters with Lead Verifier.

After the agreement of the responses on the 'Clarification Request' from the Lead Verifier as well as the PP(s) the finalized validation report is accepted for further processing.

2.2 Document Review

The Project Description (VCS-PD) submitted by GAIA Carbon Finance and additional background documents related to the project design and baseline, i.e. technical documentation, assessments, reports, national laws and regulations, VCS Project Description Template v.3.1, Approved CDM methodology, VCS v.3.1 requirements, Kyoto Protocol, Clarifications (CL), Corrective Action Requests (CAR), and Forward Action Requests (FAR) on validation requirements to be checked by a Validation/Verification Body (VVB) were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, GAIA Carbon Finance revised the VCS-PD and resubmitted it on 04/2013. For the project activity latest VCS Project Description Template v.3.1 is used.

The validation findings presented in this report relate to the project as described in the VCS-PD

2.3 Interviews

On 22/06/2011 and 23/06/2011 Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Egenda Ege Enerji Uretim A.S. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics:

Interviewed organization	Interview topics
Egenda Ege Enerji Uretim A.S. (Project Owner)	➤ Design of the project activity ➤ The planning and the construction phase of the project ➤ Working conditions ➤ Training of the employees ➤ Monitoring practices
LOCAL Stakeholder	➤ Sustainable development in the region ➤ Project's Impact on local economy
GAIA Carbon Finance (Consultant)	➤ Additionality of the project activity ➤ Investment analysis ➤ Baseline determination ➤ Emission reduction calculations ➤ Document review ➤ CARs and CLs

2.4 Site Inspections

A site visit was performed on 22/06/2011 and 23/06/2011, where representatives of Egenda Ege Enerji Uretim A.S, GAIA Carbon Finance and local residents were interviewed about the project. Implementation of the project was observed on-site.

2.5 Resolution of Any Material Discrepancy

During the validation, there were no material discrepancies that were identified.

3 VALIDATION FINDINGS

3.1 Project Design

The project is large scale run-off-river hydroelectric power plant project and located on the Eglence River, in the Mediterranean Region within the Karaisali district of Adana province. Total installed capacity of the project is 68.65 MWe. The project total capacity is 68.65 MWe and comprising two weirs and two power houses. Each power house is comprised of three turbines. Eglence I capacity is confirmed as 42.65 MWe through the EMRA Generation license dd. 27/12/2007 and DSI Approved feasibility report dd. May 2011, and Eglence II capacity is confirmed as 26.00 MWe through the EMRE generation license dd. 27/12/2007 and DSI Approved feasibility report dd. May 2011. The estimated and calculated emission reduction is 114,065 tonnes of CO₂e. Emission factor and reduction methods are checked and confirmed by the validation team completely. Project scope is categorized as Type I – Renewable Energy, Energy Industries in accordance with UNFCCC 4/CMP.1, Annex II, Appendix B. The main purpose of the project activity is to generate electricity and supply it into the public grid. Due to its significant contribution to climate change mitigation and sustainable development in the region, this project is expected to fulfil the requirements of VCS rigorously.

Project is being developed by Egenda Ege Enerji Uretim A.S. Other entities involved in the project are GAIA Carbon Finance handling the carbon consultancy on behalf of the project proponent. Project start date is confirmed as 10/04/2013 through the Eglence-II commissioning date. The project lifetime is defined as 35 years as suggested by DSI.

The project is located in Turkey, in the Mediterranean Region, Adana province, in the boundaries of Aladag and Karasiali district. The project is between 33°41' 28" and 37°38' 12" north latitudes and 35°21' 09" and 35°20' 11" east longitudes. The coordinates are checked and confirmed by a GPS device by the validation team during the site visit.

The project activity consists of Conveyance Tunnel of 3.4 m diameter and 5670 m length and a penstock of about 1150 m length for Eglence I, 3.4 diameter and 1900 m length and a penstock of about 700 m length. The power houses are comprised of three turbines. All technical details of the project activity are carefully examined and confirmed by the validation team through the first feasibility report dd. April 2005 and the DSI Approved feasibility study dd. May 2011. The details are also confirmed through the EMRA Generation License dd. 27/12/2007.

Mandatory laws applicable to the project are Electricity Market Law (Nr.4628 / 03.03.2001), Renewable Energy Law (Nr.5346 / 18.05.2005) and Environmental Law (Nr. 2827 / 11.08.1983).

CL-1 has been raised by the validation team. The project capacity is expressed in MWe unit in whole VCS PD and the clarification request is closed.

Sources of the validation have been confirmed through the feasibility studies. The first feasibility report has been prepared on April 2005. The start date of the project activity is confirmed through the construction agreement dd. 14th December 2010. The financial analysis is revised through the 2010 DSI Unit prices. The changes and unit prices are provided to the validation team. Also a new feasibility analysis is prepared on May 2011.

The confirmed project timeline by the validation team can be seen as follows;

Events and Actions	Date
First Feasibility Report	April 2005
Water Usage Agreement for Eglence I-II	November 27 th 2007
Licenses granted by EMRA	27 th December 2007
Contact with PDD Consultants	March 2009
Local Stakeholder Consultation Meeting	24-25 th November 2009
EIA Reports for Eglence I-II	May 31 st 2010
Revision of Feasibility Calculations	June 2010
Internal e-mail exchanges regarding the feasibility calculation and carbon financing	30 th June 2010
EIA Positive Report for Eglence I	July 28 th 2010
EIA Positive Report for Eglence II	July 30 th 2010

Construction Agreement –Start date of the project activity (first real action)	14 th December 2010
Preparation of General Financial Feasibility Analyses	February 11 th 2011
Agreement with the DOE	March 2011
Electromechanical equipment agreements	May 9 th 2011
Loan Agreement with the Bank	July 7 th 2011
Expected commissioning of the power plant	31 st December 2012
Start of VER validation	January 2013
Project start date – Eğlence II Commissioning Date	10 th April 2013

Investment decision date and the project activity start date is confirmed as 14th December 2010 through the construction agreement. The agreement is signed between *Eğenda Ege Enerji Uretim A.S* and *A-TT Insaat Gıda Tekstil Turizm Mad. Müh. End. Urun. Paz. San. Ve Dis. Tic. Ltd. Sti.* On 14th December 2010.

The financial analysis is revised through the 2010 DSI Unit prices. The changes and unit prices are provided to the validation team. The financial analyses are confirmed through these calculations. The calculations and the prices are checked from the DSI web page and also assessed from the first feasibility study dd. April 2005.

Project start date is confirmed as 10th April 2013 through the Eğlence II Commissioning date by the validation team.

Finally all milestones of the project are checked attentively by the validation team through the contracts and agreements. All given events reference documents are stored in DOE data base and completely confirmed by the validation team.

On the other hand it is confirmed that the project is not a grouped project, has not involved any other emission trading programs and other binding limits, has not participated under other GHG programs and has not created another form of environmental credit of renewable energy certificate by the validation team.

CAR-5 has been raised for the project timeline. Project' events and actions are presented by objective evidences and the corrective action request is closed.

CL-22 has been raised by the validation team. Investment decision date is provided through the construction agreement and the clarification request is closed.

The given parameters' references are detailed in the VCS PD. All references are checked and confirmed by the validation team.

The VVB hereby confirms that the project description in VCS-PD (Version 5) is accurate and complete in all aspects of the project description.

3.2 Application of Methodology

3.2.1 Title and Reference

Applied methodology is ACM0002 v.13.0.0 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” and utilized tools are “Tool for the demonstration and assessment of additionality” v.06.1.0 for additionality and “Tool to calculate the emission factor for an electricity system” v.02.1.0 for calculation of the emission factor for the national grid. Validation team has approved of the versions used.

3.2.2 Applicability

The steps taken to assess the relevant information contained in the VCS-PD against each applicability condition are described below.

- Eglence I-II HEPP Project is a grid connected renewable power generation project which adds electricity capacity from hydro power sources and which supplies electricity to a system that is supplied by at least one fossil fuel generating unit. This condition is confirmed through the EMRA Generation license and the approved DSI feasibility report.
- The project activity results in a very small reservoir to balance the water flow to the power house (before the diversion weir). In addition, the power density of the power plant, as per definitions given in the VCS-PD Project emission section is much greater than 4 W/m². This condition is confirmed through the technical drawings and EMRA Generation License.
- The geographical and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the grid is available as “Description of how the baseline scenario is identified baseline scenario” of the VCS-PD. This condition is confirmed through the approved DSI feasibility report, EIA Report and EMRA Generation license.
- The project does not involve switching from fossil fuels to renewable energy at the site of the project activity. This condition is confirmed through the EMRA Generation License.
- The project involves construction of new units in a brand new plant, in other words the project does neither involve the addition of renewable energy generation units at an existing renewable power generation facility nor does it foresee to retrofit or modify an expired facility of renewable energy generation. This condition is confirmed through the EMRA Generation License and site visit.

The VVB hereby confirms that the selected baseline and monitoring methodology (ACM0002, “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, version 13.0), tools “Tool for the demonstration and assessment of additionality” (version 06.1) and “Tool to calculate the emission factor for an electricity system” (version 02.1.0) is previously approved by the CDM Executive Board, and is applicable to the project activity, which, complies with all the applicability conditions therein.

3.2.3 Project Boundary

The VVB validated the project boundary by:

- Review of the single line diagram, EMRA Generation License dd.27/12/2007, DSI Approved feasibility report dd. June 2011.
- On-site observations and interviews regarding the project site and equipment through a site visit.

The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the national electricity grid. Project emissions are neglected since the power density of the project is higher than 10W/m².

Source		Gas	Included?	Justification/Explanation
Baseline	Generation mix of electricity grid in Turkey	CO ₂	YES	CO ₂ emission from fossil fuel fired power plant that is displaced due to project activity was taken into account.
		CH ₄	NO	Minor emission source as suggested by ACM0002 Version 13.0.0
		N ₂ O	NO	Minor emission source as suggested by ACM0002 Version 13.0.0
Project Activity	Reservoir	CO ₂	NO	As net electricity approach is adopted, emissions that occur during construction and during the operation are negligible and non-existent respectively.
		CH ₄	YES	CH ₄ emissions have been considered in the project boundary. However, since the power density is higher than 10W/m ² , it has been taken as "0" as per the applied methodology.
		N ₂ O	NO	Minor emission source as suggested by ACM0002, Version 13.0.0

Based on the above assessment, the VVB hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

3.2.4 Baseline Scenario

The steps taken to assess the requirement given in paragraph 81 and 82 of the VVM are described below: Since the project is the installation of a new grid connected renewable power plant, the baseline scenario has been identified, in line with the applied methodology ACM0002, v.13.0.0, as "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'" under Section 2.4 and Section 3.1 of VCS-PD v.5

According to "Tool to calculate the emission factor for an electricity system, Version 03" the given formula is applied in OM calculations.

$$EF_{grid,OMsimple,y} = \frac{\sum_i FC_{i,y} \times NCV_{i,y} \times EF_{CO_2,i,y}}{EG_y}$$

Through the given values and the formula OM Emission Factor for 2007-2009 is calculated as;

- OM 2007 = 0.6631 MWh/tCO2
- OM 2008 = 0.6638 MWh/tCO2
- OM 2009 = 0.6569 MWh/tCO2

According the methodology ex-ante calculation is used and the weighted average of the figures between 2007 and 2009 is calculated.

The OM emission factor is computed as: **0.6613 tCO2 / MWh.**

The BM emission factor is calculated between 2007 and 2010. Turkey's capacity projection reports are determined by the validation team. Reports are published in years 2010, 2009, 2008 and 2007.

According to the Baseline methodology build margin emission factor is calculated as follows:

$$EF_{grid,BM,y} = \frac{\sum_{i,m} EG_{m,y} \times EF_{EL,m,y}}{\sum_m EG_{m,y}}$$

The BM Emission factor is computed as: **0.4499 tCO2 / MWh.**

The project participant has applied weight average of the OM and BM as specified in the tool to arrive at the emission factor for the combined margin.

Combined margin emission factor is computed as follows regarding to the methodological tool "Tool to calculate the emission factor for an electricity system, Version 03".

$$EF_{grid, CM, y} = EF_{grid, OM, y} \times w_{OM} + EF_{grid, BM, y} \times w_{BM}$$

w_{OM} and w_{BM} for other than wind and solar power generation projects are 0.5 and 0.5.

Accordingly, the calculated emission factor has calculated as **0.5556 tCO2/MWh** that was confirmed by the validation team with reviewing all the baseline calculation sheet equations and confirming the used parameters for the calculations.

CAR16 has been raised for the emission reduction calculations by validation team. All revisions are checked and approved by the baseline specialist and the corrective action request is closed.

After approval of the Baseline specialist all clarifications and corrective action requests related to Baseline calculations are closed by the validation team.

Based on the above assessment, the VVB hereby confirms that:

- (a) All the assumptions and data used by the project participants are listed in the VCS-PD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the VCS-PD;
- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the VCS-PD;
- (e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed VCS-VCU project activity.

3.2.5 Additionality

The step taken and sources of information used, to cross-check the information contained in the VCS PD ver-4 on this matter is described below.

Prior consideration of VCU credits for project is not mandatory under VCS v.3.1 requirements. VCU credits are discussed by the project owner. It is provided through the internal e-mail exchanges regarding the feasibility calculation and carbon financing dd. 30th June 2010. Investment decision date is confirmed through the construction agreement dd. 14th December 2010. The project start date is confirmed through Eglence II commissioning date as 10th April 2013.

"Tool for demonstration and assessment of additionality" (v.6.1.0) has been utilized to demonstrate additionality. Following the requirements of the aforementioned tool, first valid alternatives to the project activity were determined and their compliance with relevant mandatory laws and regulations were evaluated. Following this, Investment Analysis and Common Practice Analysis were used to demonstrate the additionality of the project.

Under sub-step 1a, the following four alternatives are identified as the alternative scenario that is likely to happen in the absence of the project activity:

Alternative (1): The proposed project activity undertaken without being registered as a VCS project activity

Alternative (2): Construction of a thermal power plant with equivalent installed capacity or annual electricity generation

Alternative (3): Construction of a new power plant generating the same annual power generation from other renewable sources such as wind power, solar power and biomass.

Alternative (4): The continuation of the current situation. The equivalent electricity will be provided by the existing power units connected to the national grid.

Alternative (3) is not considered as a realistic scenario because the project area is not a proper location for a wind farm. Alternative (1) is not credible alternative. Under the investment analysis it is provided the project activity is economically of financially less attractive without the revenue from the sale of the VCS-VERs. Alternative (2) is a credible alternative. The mother company Egenda Ege Enerji Uretim A.S has had experience in the management of a thermal power plant. Alternative (4) is also a credible alternative. This alternative is in compliance with legal and regulatory requirements.

Under Step-2 Investment Analysis is performed to demonstrate Additionality of the project. The investment decision date is provided by construction agreement dd. 14th December 2010. The investment analyses have been confirmed through the feasibility studies. The first feasibility report has been prepared on April 2005. The start date of the project activity is confirmed through the construction agreement dd. 14th December 2010. The financial analysis is revised through the 2010 DSI Unit prices. The changes and unit prices are provided to the validation team. Also a new feasibility analysis is prepared on May 2011.

Under sub-step 2a Option III – Benchmark Analysis is selected through the “Tool for the demonstration and assessment of additionality Version (06.1.0)”. Option I is Simple Cost analysis and Option II is Investment Comparison analysis in the tool. Option I cannot be applied since project has income from sale of generated electricity without VER revenue. Option II is not applicable, as the baseline scenario of the proposed project is the national grid supplying the same amount of electricity rather than a similar investment project alternative and the project owner has no investment options to compare with.

Under sub-step 2b Benchmark Analysis Method is applied. Equity IRR is selected as the financial indicator. Benchmark rate is calculated in line with the Capital Asset Pricing Model (CAPM).

The CAPM suggests below formula to calculate the discount rate (in other words benchmark rate).

$$E(R_i) = R_f + \beta_i(E(R_m) - R_f)$$

where:

- $E(R_i)$ is the expected return on the capital asset

- R_f is the risk-free rate of interest such as interest arising from government bonds
- β_i (the [beta coefficient](#)) is the [sensitivity](#) of the asset returns to market returns, or

$$\beta_i = \frac{\text{Cov}(R_i, R_m)}{\text{Var}(R_m)}$$
also
- $E(R_m)$ is the expected return of the market
- $E(R_m) - R_f$ is sometimes known as the market premium or risk premium (the difference between the expected market rate of return and the risk-free rate of return).

Risk free rate is confirmed as **%7.29** through the Turkish Eurobonds.

(<http://www.ziraat.com.tr/tr/bankamiz/faiz-ve-ucretler.aspx/eurobond.aspx>)

The Beta Coefficient is calculated as **0.939** by Bloomberg which is one of the prominent data suppliers in financial markets.

Market risk premium is confirmed as **%12.88** through the independent study of Aswath Damodaran – Stern School of Business.

(<http://www.stern.nyu.edu/~adamodar/pc/archives/ctryprem08.xls>)

After the calculations Benchmark rate is accepted as **%19.37** by the validation team and financial specialist.

Under sub-step 2c financial parameters used for investment analysis is determined. The project total cost is confirmed as 89,680,640 \$ through the 2010 DSI unit prices. Sources of the validation have been confirmed through the feasibility studies. The first feasibility report has been prepared on April 2005. The financial analysis is revised through the 2010 DSI Unit prices. The changes and unit prices are provided to the validation team. Construction expenses sources are confirmed through the first feasibility study dd. 2005 and the construction costs are confirmed through the 2010 DSI unit prices. Construction costs are confirmed as 62,186,000 \$. Machinery and Equipment Expenses are checked through the agreements and proposals by the validation team as 22,385,000 \$. Other costs such as Etude, Project Design and Control and Installation is confirmed as 5,109,640 \$ through the proposals and project developers experience in hydro projects.

Investment inputs and related sources are indicated in below;

Main Financial Parameters used for the investment analysis

Parameters	Unit	Data Value	Reference
Installed Capacity	MWe	68.65	Revised FSR Calculations June 2010
Grid Connected Output	GWh	205,299	Revised FSR Calculations June 2010
Plant Load Factor	%	34%	Calculated through EB 48 Annex 11
Capital Investment	US \$	89,680,640	Revised FSR Calculations June 2010
Income Tax Rate	%	20	Corporate Tax Law, Art.32

Expected Tariff	\$/MWh	0.067 (0.055 Euro/kWh)	Energy Efficiency Law, Art 17
Expected VER Price	\$/tCO ₂ e	3-5	Estimation
Depreciation	\$	2,719,317	Revised FSR Calculations June 2010
O&M	\$/year	803,816	Revised FSR Calculations June 2010
Project Lifetime	Year	35	
Exchange Rate	USD / TL	1.3720	
Loan: Equity Ratio		80:20	Revised FSR Calculations June 2010
Benchmark Rate	%	19.37	

The plant load factor is calculated through the EB 48 Annex 11 "Guidelines for the reporting and Validation of plant load factors, Version 01". PLF calculated as follows;
 $205,299 \text{ MWh} / 68.65 \text{ MW} / 8760 \text{ hours /yr} = \mathbf{34 \%}$.

Equity IRR has been calculated as 16.9 % based on the parameters given in the feasibility report and the main financial parameters used for the investment analysis table. Equity IRR is lower than the benchmark of %19.37. By adding the carbon revenues Equity IRR increases to 17.8%. In the sensitivity analysis -10%, +10% ranges is applied to investment and electricity revenues and the calculated IRR figures are again below than the benchmark rate.

The project lifetime is assumed as 35 years through the suggestion of DSI for hydro projects. IRR analysis is applied for the 2 year construction and 35 year project lifetime period. IRR analysis is checked and accepted by the financial specialist.

CAR14 has been raised by the validation team for the IRR analysis. Under CAR14 IRR analysis are checked and confirmed by the Investment analysis specialist.

CAR15 has been raised for the IRR inputs and inputs' references. IRR inputs and references are provided in the PDD and excel sheet. Inputs and references are checked and confirmed by the validation team and corrective action request is closed.

Under sub-step 2d, sensitivity analysis is applied to the following items:

- Investment Cost
- Electricity Production
- Electricity Price

For a decrease of %5 , %10 and for an increase %5, %10 the results of the sensitivity analysis with and without carbon revenue are presented as below;

	IRR Sensitivity with Investment Costs				
Change in %	-10%	-5%	0%	5%	10%
Without VER	17.96%	17.41%	16.89%	16.41%	15.96%
IRR @3 Eur/ton VER	18.56%	17.97%	17.42%	16.91%	16.44%
IRR @4 Eur/ton VER	18.77%	18.16%	17.60%	17.08%	16.60%

IRR @5 Eur/ton VER	18.97%	18.36%	17.79%	17.26%	16.77%
--------------------	--------	--------	--------	--------	--------

	IRR Sensitivity with Electricity Production				
Change in %	-10%	-5%	0%	5%	10%
Without VER	13.91%	15.36%	16.89%	18.49%	20.16%
IRR @3 Eur/ton VER	14.31%	15.83%	17.42%	19.09%	20.84%
IRR @4 Eur/ton VER	14.45%	15.99%	17.60%	19.30%	21.08%
IRR @5 Eur/ton VER	14.59%	16.15%	17.79%	19.51%	21.31%

	IRR Sensitivity with Electricity Price				
Change in %	-10%	-5%	0%	5%	10%
Without VER	13.91%	16.89%	16.89%	18.49%	20.16%
IRR @3 Eur/ton VER	14.36%	17.42%	17.42%	19.06%	20.78%
IRR @4 Eur/ton VER	14.51%	17.60%	17.60%	19.26%	20.99%
IRR @5 Eur/ton VER	14.67%	17.79%	17.79%	19.46%	21.20%

The sensitivity analysis provides that the project activity is not financially attractive. It is confirmed that the electricity prices are fixed in Turkey and unit price is not considered to be an exogenous variable. Also the project activity not expects %10 increasing in electricity production for the next years. Without VER revenues only %10 increasing in Electricity production raise the IRR as %20.16 which is bigger than equity IRR. Also, when the electricity tariff prices of last years (2009, 2010, 2011 and 2012)¹ are compared with each others, a %10 increase in the energy prices is not expected in the following years

On the other hand sensitivity with investment cost shows that the biggest value is %18.97 which is lower than the Equity IRR %19.37. Analysis shows that the project is not financially attractive without carbon revenues.

Under Step-3 Barrier Analysis is not used.

Under Step-4 Common practice analysis is applied.

Common practice analysis is applied through the "Tool for the demonstration and assessment of additionality, Version 06.1.0" and "Guidelines on Common practice, Version 01.0". On the other hand common practice analysis is applied to the operational projects in Turkish Electricity system as of end of 2011 (www.teias.gov.tr/projeksiyon/KAPASITEPROJEKSYONU2012.pdf) is used to be on conservative side. Common practice is applied in four steps through the methodology as below;

Step 1: Calculate applicable output range as +/- 50% of the design output or capacity of the proposed project activity.

¹ <http://www.epdk.gov.tr/index.php/elektrik-piyasasi/tarifeler?id=95>

Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the proposed project activity and have started commercial operation before the start date of the project.

Step 3: Within plant identified in Step 2, identify those that apply different technologies different that the technology is applied in the proposed project activity (Ndiff)

Step 4: Calculate factor representing the share of plants using technology similar to the technology used in the project activity in all plants that deliver the same output or capacity as the proposed project activity.

Step 1 is calculated through the project capacity. Project capacity is confirmed through the generation license as 68.65 MWe. Therefore, the lower limit of the applicable output range is 34.33 MWe and upper limit is 102.98 MWe.

Under **Step 2** of the common practice analysis all power plants are listed for the applicable output range (between 34.33 MWe and 102.98 MWe). The list is taken from the TEIAS Capacity projection report of 2012 lists the power plant projects connected to Turkey's national electricity grid as of end of 2011. The list is controlled by the validation team through the given references. 71 projects are listed for the applicable output range. However VER project number is 10 in the list. "Nall" is calculated as 70.

Under **Step 3** different technologies are identified in the list. "Energy source/fuel" is selected as the main criterion while identify the different technologies. The power plants which have different fuel types such as hydro, lignite, natural gas, fuel oil, coal etc. are accepted as different technologies. 11 hydro power projects are listed in the capacity projection report of 2012 in the range.

"Nall" was calculated as 70 under Step 2. "Ndiff" is confirmed as 59 by excluding the similar project from the "Nall".

Under Step 4 the calculation is made through the Step 1, Step 2 and Step 3 analysis. The factor F defined in the guideline is calculated with the formula below;

$$F = 1 - Ndiff / Nall$$

$$F = 1 - 59 / 70 = 0.16^2$$

Through the guideline if F is greater than 0.2 and Nall – Ndiff is greater than 3 the proposed project activity should be defined as "Common practice".

² Please see the common practice excel sheet.

F is confirmed as **0.16** for the project activity by the validation team. $N_{all} - N_{diff}$ is 11 which is higher than 3. However F is not greater than 0.2 so the proposed project activity is not “Common Practice”.

CAR17 has been raised by the validation team by the validation team. Common practice analysis is correctly applied through the additionality tool and the corrective action request is closed.

3.2.6 Quantification of GHG Emission Reductions and Removals

3.2.6.1 Baseline Emissions

The baseline emissions for the project were calculated in line with the applied methodology and the relevant tools ACM0002 v.13.0.0 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”; “Tool for the demonstration and assessment of additionality” v.06.1; “Tool to calculate the emission for an electricity system” v.02.1.0

$$BE_y = E_{GBL,y} \cdot EF_{grid,CM,CO_2}$$

Where:

BE_y	Baseline emissions in year y (tCO ₂)
$E_{GBL,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the VCS project activity in year y (MWh/yr)
EF_{grid,CM,CO_2}	Combined margin CO ₂ 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”

Since project is a green-field implementation: $EGP_{J,y} = EG_{facility,y}$

Where:

$E_{GBL,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the VCS project activity in year y (MWh/yr)
$EG_{facility,y}$	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr).

3.2.6.2 Project Emissions

The project emission from hydro power plant is defined by the formula;

$$PE_y = PE_{HP,y}$$

Where:

PE_y Project emissions in year y (tCO₂e/yr)

PE_{FF,y} Project emissions from fossil fuel consumption in year y (tCO₂/yr)

Fossil fuel and geothermal considerations are not applicable and project emissions arising from the reservoir formed by the project are neglected since:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Power density calculation for Eğlence-I HEPP:

CapPJ = 42,650,000W

CapBL = 0 (Justification: The project is a new hydro power plant)

APJ = 87,216.410 m² (It is confirmed through technical drawings)

ABL = 0 (Justification: The project is a new hydro power plant))

Therefore;

$$PD = (42,650,000 - 0) / (87,216.410 - 0) = 489.0 \text{ W/m}^2$$

Power density calculation for Eğlence-II HEPP:

CapPJ = 26,000,000W

CapBL = 0 (Justification: The project is a new hydro power plant)

APJ = 10,491.275 m² (It is confirmed through technical drawings)

ABL = 0 (Justification: The project is a new hydro power plant))

Therefore;

$$PD = (26,000,000 - 0) / (10,491.275 - 0) = 2,478.2 \text{ W/m}^2$$

The power density is 489 W/m² and 2,478.2 W/m² for Eğlence-I HEPP and Eğlence-II HEPP which is greater than 10W/m² so the project emissions are taken as zero. **PE_y = 0**

3.2.6.3 Leakage Emissions

According to the ACM0002 Version 13.0.0, leakage emissions are neglected.

3.2.6.4 Summary of GHG emission reductions or removals

Accordingly the baseline emissions BE_y are calculated as following:

$$BE_y = (EG_y - EG_{\text{baseline}}) \times EF_{\text{grid, CM, y}}$$

Where:

BE_y	Baseline emissions (tCO ₂ e)
EG_y	Annual electricity supplied by the project to the grid (MWh)
EG_{baseline}	Baseline electricity supplied to the grid in the case of modified or retrofit facilities (MWh). For new power plants this value is taken as zero.
$EF_{\text{grid, CM, y}}$	Baseline emission factor (tCO ₂ e/MWh)
Y	Refers to a given year

$$EG_y = 205,299 \text{ MWh/year}$$

$$EG_{\text{baseline}} = 0 \text{ (The figure is zero for the project as the project is new)}$$

Therefore, the expected baseline emission for the full year production of the project is:

$$BE_y = (0.5556 - 0) \times 205,299 = \mathbf{114,065 \text{ tCO}_2\text{e}}$$

According to the ACM0002 version 13.0.0, the generic equation for the calculation of emission reduction is:

$$ER_y = BE_y - PE_y$$

Where:

ER_y	Emission reductions for the year y (tCO ₂)
BE_y	Baseline emissions for the year y (tCO ₂)
PE_y	Project emission for the year y (tCO ₂)

$$ER_y = 114,065 - 0$$

$$= \mathbf{114,065 \text{ tCO}_2}.$$

Starting date of the project activity is confirmed as 10/04/2013 through the Eğlence II commissioning date. The emission reduction estimation for the 2013 is calculated as **70,415** tCO₂. Also the emission reduction estimation for 2023 is calculated as **30,938** tCO₂. Commissioning dates of Eğlence-I and Eğlence-II are different. Eğlence-II is commissioned at 10.04.2013 and after the 2 months Eğlence-I is started to generation (13.06.2013). Therefore, sum of 2013 and 2023 emission reductions are different from the average annual ERs

Years	Estimated baseline emissions or removals	Estimated project emissions or removals	Estimated leakage emissions (tCO ₂ e)	Estimated net GHG emission reductions or removals
April 10th 2013	70,415	0	0	70,415

2014	114,065	0	0	114,065
2015	114,065	0	0	114,065
2016	114,065	0	0	114,065
2017	114,065	0	0	114,065
2018	114,065	0	0	114,065
2019	114,065	0	0	114,065
2020	114,065	0	0	114,065
2021	114,065	0	0	114,065
2022	114,065	0	0	114,065
April 10 th 2023	30,938	0	0	30,938
Total	1,127,938	0	0	1,127,938

CL4 has been raised by the validation team. Crediting period start date is confirmed as 04/06/2013 by the validation team through the provisional acceptance and the clarification request is closed.

Based on the above assessment, the VVB hereby confirms that:

- (a) All assumptions and data used by the project participants are listed in the VCS-PD, including their references and sources;
- (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PD;
- (c) All values used in the PD are considered reasonable in the context of the proposed CDM project activity;
- (d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;
- (e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PD.

The formulas and factors used in the calculation of GHG emissions are found to be transparent and correct by the validation team. Statistics related to the national grid were taken from publicly available TEIAS, EMRA sources. All data, parameters and their sources, available at validation for the ex-ante calculation of the Combine Margin Emission Factor have been validated by the baseline expert of the validation team to be conservative and appropriate.

3.2.7 Methodology Deviations

According to the ACM0002 Version 13.0.0, leakage emissions are neglected.

3.2.8 Monitoring Plan

The monitoring plan includes the monitoring of several parameters, the main parameter in the monitoring plan is the quantity of the net electricity that is delivered to the grid, and this parameter will be the basis for the emission reduction calculations. According to the methodology ACM0002 Version 13.0.0, the parameters used to calculate the power density of HEPPs also need to be monitored. The DOE hereby confirms that the monitoring plan complies with the requirements of the methodology.

Data and parameters available at validation

The Combined Margin emission factor is calculated ex-ante; the parameters used in the calculation of the emission factor are available at validation. The parameters used to calculate the power density of HEPPs also are available at validation. The below table shows the data and parameters that are available at validation:

Parameter	Data Unit	Description	Source
FC _{i,y}	Ton (m ³ for Natural Gas)	Amount of fossil fuel type / consumed in the project electricity system in year y	Turkish Electricity Transmission Company (TEIAS) http://www.teias.gov.tr/istatistik2008/43.xls
NCV	TJ/Ton	Net calorific value of fossil fuel type	Turkish Electricity Transmission Company (TEIAS) http://www.teias.gov.tr/istatistik2008/45.xls
EFCO _{2,i,y}	tCO ₂ /GJ	Default CO ₂ emission factor of fossil fuel type i	Guidelines for National Greenhouse Gas Inventory) are used. Link: http://www.ipccnggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf
Electricity Imports	GWh	Electricity imported to the Grid from other countries	Turkish Electricity Transmission Company (TEIAS) http://www.teias.gov.tr/istatistik2008/23.xls
Capacity additions	MW	Set of power capacity additions in the electricity system that comprise 20% of the system generation (in GWh) and that have been built most recently.	TEIAS Capacity Projection Reports for years 2008, 2007, 2006, 2005 and 2004 are applied for the capacity additions

Data and parameters monitored

Parameter	Data Unit	Description	Source
EG _{facility,y}	MWh	Quantity of net electricity delivered to the grid. (205,299 MWh/year)	The main source will be PMUM records. Cross check measurements results with

			records for sold electricity.
A_{PJ}	m ²	Area of the reservoir measured in the surface of the water for Eğlence-I HEPP, after the implementation of the project activity, when the reservoir is full (87,216.410 m ²)	Topographical surveys, GPS readings.
A_{PJ}	m ²	Area of the reservoir measured in the surface of the water for Eğlence-II HEPP, after the implementation of the project activity, when the reservoir is full (10491.275 m ²)	Topographical surveys, GPS readings.
Cap_{PJ}	MW	Installed capacity of the Eğlence-I hydro power plant after the implementation of the project activity (42.65 MW)	Project site (Supplier information on the equipment)
Cap_{PJ}	MW	Installed capacity of the Eğlence-II hydro power plant after the implementation of the project activity (26.00 MW)	Project site (Supplier information on the equipment)

Monitoring plan given in VCS-PD, are in line with the monitoring requirements of the applied approved CDM methodology, v.13.0.0. Main parameter monitored in line with the methodology is the net electricity supplied to the grid, which will be the basis of the amount of emission reduction achieved by the project. Roles and responsibilities regarding monitoring has been given under section 4.3 of the VCS-PD v. 04.

Regarding monitoring of the quantity of net electricity delivered to the grid ($EG_{facility,y}$), the main source for the data has been determined as the TEIAS Readings and monthly invoices, PMUM (Market Financial Settlement Center) records will be used as the basis for cross-checking the TEIAS Readings and monthly invoices. Readings will be taken from a set of meters, one being the primary and the other for control purposes. Meters' specifications are in line with the requirements of relevant rules and regulations, i.e. Turkish Standards and International Electro technical commission standards.

The plant manager is the responsible for providing the measurement records which show the monthly electricity generation of the company. During the verification period the electricity invoices will be presented to the validation team by project owners with calculation details.

By national law, the calibration and maintenance responsibilities regarding these meters belong solely to TEIAS. The meters are sealed by them and are never accessible by other parties. Calibration period for the devices was determined as 10 years by regulations however the parties can demand the calibration in case regarding of two meters are inconsistent, when TEIAS will provide required services without waiting for the 10 year period. These responsibilities have been documented through the project Eğlence – I TEIAS Connection Agreement dated 09/05/2013 and Eğlence – II TEIAS Connection Agreement dated 19/03/2013. For Eğlence I, the meters are tested by Kesir Mühendislik on 20/04/2013. The meters brand is presented as ITRON SL761B071. The serial number of the main meter is given as 65000771 and the serial number of the back-up meter is given as 65000770. For Eğlence II, the meters were tested by TEIAS

Measurement System Group Engineering on 03/03/2013 and the tests will be made yearly. The meters brand is presented as ITRON SL761B071. The serial numbers are given as 65000772 and as 65000773 for the main meter and back-up meter. The accuracy class for power meters have been defined in the Communiqué for Power Meters as 0.2S class.

CAR-1 has been raised by the validation team for the purpose of monitoring. Purpose of the monitoring process has been included in section 4.3 of the VCS PD and corrective action request is closed.

CAR-2 has been raised for the monitoring methods for EG facility. The mention is stated in section 4.2 of the VCS PD for the parameter EGfacility, "TEIAS readings and monthly invoices will be cross checked with the PMUM records" and the corrective action request is closed.

CL15 has been raised for the QA/QC procedures. Explanations of the QA/QC procedures in Section 4.2 have been provided in the VCS PD and the clarification request is closed.

The VVB hereby confirms that the project participants are able to implement the monitoring plan.

3.3 Environmental Impact

The project had received an "EIA is Positive" by Ministry of Environment and Forestry on 28/07/2010 with decision number of 1945 based on a EIA report prepared by third party, Arüv Çevre Müh.Müş.Hiz. San. Ve Tic. Ltd. Şti. in 2010. This EIA has evaluated the effects of the project that the project does not have any major negative environmental effects. Major points are considered in the EIA report such as Project properties (Capacity, Technology, Personnel, Waste formation and effects to the environment and measures), Project Location (land properties and quality, usage, evaluation of site in terms of cultural, population, flora, fauna, etc.).

3.4 Comments by stakeholders

No formal stakeholder meeting was held since this is in the scope of the EIA process and the project was deemed exempt. However stakeholder meeting has been applied by the project owners. The first meeting is organised for the Eglence – I on November 24th 2009 in Etekli Village Coffeehouse, Karaisali Adana and the second meeting was organised for the Eglence II part of the project on November 25th, 2009 in Boztahta village Coffeehouse, Karasiali, Adana. During the site visit no negative comments are discussed by the stakeholders.

4 VALIDATION CONCLUSION

Bureau Veritas Certification has performed a validation of the Eglence I – II Hydroelectric Power Plant Project. The validation was performed on the basis of UNFCCC criteria, applied CDM Methodology ACM0002 v.13.0.0, VCS criteria and Turkey's criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and internal technical review followed by the issuance of the final validation report and opinion.

Project participant/s used the latest tool for demonstration of the additionality. In line with this tool, the VCS-PD provides analysis of investment barriers to determine that the project activity itself is not the baseline scenario.

As a hydro power production plant, the project is likely to result in reductions of GHG emissions partially. An analysis of the investment barriers 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. Project's technical aspects, annual expected generation amounts and ex-ante calculated grid combined emission factor has been confirmed by the validation team and the ex-ante calculations of the expected emission reductions (114,065 tonnes CO₂e) have been validated, therefore given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions (114,065 tonnes CO₂e) that has been validated in the VCS-PD v.5

The review of the project design documentation (version 5) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfilment of stated criteria.

In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the CDM Methodology ACM0002 v.13.0.0, VCS v.03.1 and the relevant host country criteria. Bureau Veritas Certification thus requests registration of 'Eglence I-II Hydroelectric Power Plant Project' as a VCS-VCU project activity.

5 REFERENCES

- Eglence I – II_PDD_VCS Version 1 Dated 18/04/2011
- Eglence I – II_PDD_VCS Version 2 Dated October 2011
- Eglence I – II_PDD_VCS Version 3 Dated January 2012
- Eglence I – II_PDD_VCS Version 4 Dated April 2013
- Eglence I – II_PDD_VCS Version 5 Dated September 2013
- Eglence I-II_IRR_Calculation_08.22.2011 Version 01
- SD_Edit_Eglence I-II_IRR_Calculation_v2_16.09.2011

- SD_Edit_Eglence I-II_IRR_Calculation_v3_06.01.2012
- SD_Edit_Eglence I-II_IRR_Calculation_v4_12.04.2013
- Eglence_I-II_Baseline_24.02.2011 Version 01
- Eglence_I-II_Baseline_v3_20.12.2011
- Eglence I-II_Baseline_v4_20.12.2011
- Eglence I-II_Baseline_v5_12-09-2013
- Common Practice-2011-2 Excel Sheet
- Eglence-I HES Keşif Özeti (DSİ-2010 B.F)
- Eglence-II HES Keşif Özeti (DSİ-2010 B.F)
- Contract_Gaia_Enda Dated 10/03/2009
- EGGLENCI I EIA Positive Certificate dd. 28/07/2010
- EGGLENCI II EIA Positive Certificate dd. 30/07/2010
- EGGLENCI I Electricity Generation License dd. 27/12/2007
- EGGLENCI II Electricity Generation License dd. 27/12/2007
- Feasibility Report dd. April 2005
- Eglence I EIA Report dd. May 2010
- Eglence II EIA Report dd. May 2010
- Loan Agreement with the Bank dd. 7th July 2011
- Eglence I-II_IRR_inputs_12-07-13.xlsx
- Eglence_I-II_Common Practice-10-07-13
- DSI Approval for the feasibility report dd. 2011
- Eglence I Project Approval Letter – 04.06.2013
- Eglence II Project Approval Letter – 04.06.2013
- Eglence I TEIAS Connection Agreement – 09.05.2013

- Eglence II TEIAS Connection Agreement – 19.03.2013
- Eglence I First Index Protocol - 03.03.2013
- Eglence II First Index Protocol – 03.03.2013
- Eglence I Commissioning Certificate June 2013
- Eglence II Commissioning Certificate April 2013

PERSONS INTERVIEWED

- Mr. Gurkan Bayraktar – **Gaia carbon Finance**
- Mr. Mustafa İnanlı - **Egenda Ege Enerji Uretim A.S**

6 VALIDATION TEAM

Internal Technical Reviewer: Burcu Mutman – Environmental Engineer

Bureau Veritas Certification SAS – Internal Technical Reviewer

Burcu Mutman is an auditor for environment, safety and quality management systems. Has participated various online trainings, seminars and personal trainings on Gold Standard also participated in the Gold Standard Academy in 2009 and 2010.

Team Leader : Furkan Sadikoglu – Electrical and Electronics Engineer

Bureau Veritas Certification SAS – Lead Verifier

Furkan Sadıkoğlu is an Electrical & Electronics engineer. He has an experience in renewable energy and LED lightning sectors and he has over 2 years' experience in energy sectors. He has participated online seminars in the Gold Standard Academy in 2012 and 2013 and is a lead verifier for GHG emission reduction projects.

Team Member: Mehmet Kumru – Environmental Engineer

Bureau Veritas Certification SAS – Lead Verifier

Mehmet Kumru received his Bachelor's Degree in Environmental Engineering from Uludag University. He was worked as a team member of research and development in renewable energy projects. He is working with Bureau Veritas Turkey as an auditor and carbon verifier. He is also lead verifier in ISO 14064 and PAS 2050.

Team Member: Ms. Seda Yücel – Chemical Engineer, M.Sc Energy

Bureau Veritas Certification SAS– Lead Verifier

Seda Yucel has over 2 years of experience in management systems and 4 years of experience in energy management in industry. She is a verifier for GHG Emission Reduction Projects. She has participated in various trainings on Gold Standard.

Baseline Specialist: Mrs. Yildiz Arikan - Assoc. Professor Dr

Sabancı University, Faculty of Management

Yildiz Arikan is an Electrical engineer and is working at Sabancı University. She has supported thesis related with energy . Also she has been conducting research studies on energy including “CO2 Emission Research” Studies. Academically, Yildiz Arikan is working also on GHG project since 2005.

Investment Analysis Specialists: Mr. Murat Gencer – Master of Economics

RiskTürk Software Development and Consultancy – Head of Financial Analysis Team

Murat Gencer, consultant and a trainer, has over 11 years of experience in FMCG, software development and banking sectors. He is specialized in project finance, financial modelling, risk management and MS Excel applications.

Validation Protocol

Table 1 Validation requirements based on the Voluntary Carbon Standard 2007.1

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
1. VCS Program specific issues					
a. Have the project(s) created another form of environmental credit (for example renewable energy certificates)?	VCS	3.1	It is stated in Section 1.12.4 of the VCS PD v1 that there is no other form of environmental credit generated.	OK	OK
b. If yes, have the project participants provided a letter from the program operator that the credit has not been used and has been cancelled from the relevant program?	VCS	3.1	As it is stated in the VCS PD v1 that there is no other form of environmental credit, question is N/A.	OK	OK
c. Are the VCS PD, monitoring reports, and other documents required under the VCS Program in English?	VCS	3.2	Documents are in English.	OK	OK
2. Project level requirements					
a. General requirements					
a. Has the project proponent applied an approved VCS Program methodology or a methodology from an approved GHG Program based on the list of current VCS Program approved GHG Programs and methodologies as set out on www.v-c-s.org ?	VCS	5.2	ACM0002 "Consolidated methodology for grid-connected electricity generation from renewable sources", Version 12.1.0 is applicable and used for this project. CDM methodology	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			elements are approved under the VCS Program.		
b. Is the Project Start Date before 1 January 2002? (If yes, a CAR shall be raised as the Project Start Date for non-AFOLU projects for the VCS 2007.1 shall not be before 1 January 2002)	VCS	5.2.1	Start date is after 2002.	OK	OK
c. Will this validation be completed within two years of the Project Start Date? If not, was this validation contracted before 19 November 2008? (If yes validation shall be completed by 19 November 2009 and proof of contracting prior to 19 November 2008 shall be provided)	VCS	5.2.1	Project start date (commissioning) is in 2013 and validation will have been completed then.	OK	OK
d. Is the earliest Project Crediting Period Start Date under the VCS 2007.1 28 March 2006 for non-AFOLU projects and 1 January 2002 for AFOLU projects ?	VCS	5.2.1	Project Crediting Period Start Date is given as 2013. This is a non-AFOLU project and Crediting Period Start Date is not earlier than 28/03/2006.	OK	OK
e. Does the project reduce GHG emissions from activities that are included in an emissions trading program; or take place in a jurisdiction or sector in which binding limits are established on GHG emissions?	VCS	5.2.1	GHG emission reductions or removals generated by the project will not be used for compliance with an emissions program or to meet binding limits on GHG emissions.	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
f. If yes, have the project proponents provided evidence that the reductions or removals generated by the project have or will not be used in the emissions trading program or for the purpose of demonstrating compliance with the binding limits that are in place in that jurisdiction or sector? [Such evidence could include: a letter from the program operator or designated national authority that emissions allowances (or other GHG credits used in the program) equivalent to the reductions or removals generated by the project have been cancelled from the program; or national cap as applicable or; purchase and cancellation of GHG allowances equivalent to the GHG emissions reductions or removals generated by the project related to the program or national cap]	VCS	5.2.1	N/A	OK	OK
g. Have project proponents claimed GHG credits from one project under more than one GHG Program? (If yes, a CAR shall be raised, as Project proponents shall not claim GHG credits from one project under more than one GHG Program)	VCS	5.2.1	PP did not claim for other credits	OK	OK
h. Was this project rejected by other GHG Programs?	VCS	5.2.2	The project was not rejected by any other GHG programs.	OK	OK
i. If yes, have project proponents:	VCS	5.2.2	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
i. clearly stated in its VCS PD all GHG Programs for which the project has applied for credits and why the project was rejected? (Such information shall not be deemed commercially sensitive information)	VCS	5.2.2	N/A	OK	OK
ii. provided the VCS Program validator and verifier, VCS Program project database and VCS Program Registry with the actual rejection document(s) including any additional explanations?	VCS	5.2.2	N/A	OK	OK
j. Is this a renewal of the Project Crediting Period?	VCS	5.2.3	No, this is validation	OK	OK
k. If yes have a VCS Program approved validator determined that the original project baseline scenario(s) and additionality is still valid or has been updated taking account of new data and changed VCS Program requirements where applicable?	VCS	5.2.3	N/A	OK	OK
b. Standards and factors					
d. Do standards and factors used to derive GHG emission data as well as any supporting data for additionality and baseline scenario(s) meet the following requirements:	VCS	5.5		OK	OK
i. be publicly available from a reputable and recognised source (e.g. IPCC, published Government data etc)?	VCS	5.5	GHG emissions data are obtained from TEIAS and IPPC, trustworthy sources.	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
ii. be reviewed as part of its publication by a recognised competent organization?			GHG emissions data are obtained from TEIAS and IPPC, trustworthy sources.	OK	OK
c. Project grouping					
a. Is this a grouped project?	VCS	5.6	As validated during site visit and indicated in PD section 1.2, this is not a grouped project.	OK	OK
b. If yes , was this grouped project described in one VCS PD?	VCS	5.6	N/A	OK	OK
c. Does this PD include a description of the central GHG information system and controls associated with the project and its monitoring?	VCS	5.6	N/A	OK	OK
d. What is the sampling carried out by the VCS verifier?	VCS	5.6	N/A	OK	OK
e. Have the sampling of a grouped project taken account of any sub groups and associated activities within each sub group?	VCS	5.6	N/A	OK	OK
f. Do this project, which intends to apply for the VCS Program VCUs as part of a grouped project also comply with the VCS Program requirements for grouped projects, detailed in the most recent version of the Program Guidelines 2007.1 on www.v-c-s.org ?	VCS	5.6	N/A	OK	OK
d. Content of the VCS PD					
a. Is the PDD used as a basis for validation prepared in accordance with the latest template and	VCS	5.7	PDD template is VCS 3 template and it is correct	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
guidance from the VCS?			ant time of validation.		
1.			Please remove the word “template” from PD.	CL-16	OK
b. Is there a project title?	PD tem p	1.1.	Title is “Eglence I-II Hydroelectric Power Plant.	OK	OK
c. Type/Category of the project	PD tem p	1.2	According to Annex A of the Kyoto Protocol, the Project fits in: Sectoral Scope Number: 1 Sectoral Scope: Energy Industries –Renewable Energy	OK	OK
i. Is it defined wether the project category is part of a GHG program that has been approved by the VCS Board?	PD tem p	1.2	Please refer above.	OK	OK
ii. Is it specified if the project is a Grouped project?	PD tem p	1.2	As validated during site visit and indicated in PD section 1.2, this is not a grouped project.	OK	OK
d. Is the amount of emission reductions over the crediting period estimated, including project size? (Micro project: Less than 5,000 tonnes CO2	PD tem	1.3	The average annual emission reduction of the proposed Project is estimated to be 114,698	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
equivalent emissions reductions per year; Mega Project: More than 1,000,000 tonnes CO ₂ equivalent emissions reductions per year)	p		tonnes of CO ₂ e (tCO ₂ e). The project falls into the individual validation and verification of a GHG programme option and the project size is "project" since the expected annual emission reduction is less than 1,000,000 tonnes and more than 5,000 tonnes.		
2.			Please also express installed capacity in Mwe as per the license	CL-1	OK
3.			Please clarify where number 211,348 kWh/year is referenced	CL-2	OK
			Data on page 3 are not in line with the licenses. Please clarify	CL-3	OK
e. Is a brief description of the project provided?	PD tem p	1.4	As observed during site visit, project is in line with the description.	OK	OK
f. Is the project location, including geographic and physical information allowing the unique identification and delineation of the specific	PD tem	1.5	Coordinates of the project are provided in section 1.9of the PD. Location has been validated during	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
extent of the project, and including GPS project boundaries, provided?	p		site visit.		
g. Duration of the project activity/crediting period	PD tem p	1.6		OK	OK
i. Is the project start date, i.e., the date on which the project began reducing or removing GHG emissions*, provided?	PD tem p	1.6	Project start date is January 2011 (Construction start date) and VCS crediting period start date: 1 st January 2013. Please provide a reference so that Construction start date can be validated.	CL-4	OK
ii. Is the crediting period start date, i.e., the date the first monitoring period commenced, provided? (VCS project crediting period: A maximum of ten years which may be renewed at most two times)	PD tem p	1.6	VCS crediting period start date: 1 st January 2013.	OK	OK
h. Are the conditions prior to project initiation provided?	PD tem p	1.7	Please explain how the project site was used prior to the project.	CL-5	OK
i. Is a description of how the project will achieve GHG emission reductions and/or removal	PD tem	1.8	The project activity reduces greenhouse gases (GHGs) emissions that would have otherwise	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
enhancements provided?	p		occurred in the absence of the project activity because electricity generation from fossil fuel sources is avoided		
j. Are project technologies, products, services and the expected level of activity described?	PD tem p	1.9	Technology is described in section 1.8.	OK	OK
k. Does the VCS PD include identification of relevant local laws and regulations related to the project and demonstration of compliance with them?	PD tem p	1.10	Relevant laws are identified in the PD. Compliance is demonstrated with permits and licenses.	OK	OK
l. Are risks that may substantially affect the project's GHG emission reductions or removal enhancements identified?	PD tem p	1.11	Please identify any risks that may substantially affect the project's GHG emission reductions	CL-6	OK
m. Is confirmation that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction demonstrated?	PD tem p	1.12	It is stated in section 1.10 of the PD that the project is not implemented to generate GHG emissions for the purpose of its subsequent reduction.	OK	OK
n. Has the project created another form of environmental credit (for example renewable energy certificates)?	PD tem p	1.13	There is no other form of environmental credit generated by the project because there is no such system within the country. The projects originate from Turkey do not comply for renewable energy	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			certificates of EU because there is no energy trade between EU and Turkey because of different grid structures.		
o. If yes, has the proponent provided a letter from the program operator that the credit has not been used and has been cancelled from the relevant program?	PD tem p	1.13	N/A	OK	OK
p. Was the project rejected under other GHG programs (if applicable)	PD tem p	1.14	The project was not rejected by any other GHG programs.	OK	OK
q. If yes, does the project:	PD tem p	1.14	N/A	OK	OK
i. clearly state in its VCS PD all GHG programs for which the project has applied for credits and why the project was rejected? (Such information shall not be deemed commercially sensitive information)	PD tem p	1.14	N/A	OK	OK
ii. provide the VCS verifier and Registry with the actual rejection document(s) including explanation?	PD tem p	1.14	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
r. Are project proponents roles and responsibilities, including contact information of the project proponent, other project participants provided?	PD tem p	1.15	Roles are clearly stated.	OK	OK
s. Is any information relevant for the eligibility of the project and quantification of emission reductions or removal enhancements, including legislative, technical, economic, sectoral, social, environmental, geographic, site-specific and temporal information provided?	PD tem p	1.16	All data necessary to demonstrate additionality are provided.	OK	OK
t. Is there any commercially sensitive relevant information that has been excluded from the public version of the VCS PD that will be displayed on the VCS Project Database?	PD tem p	1.17	There is no commercially sensitive information.	OK	OK
u. If yes, was it listed?	PD tem p	1.17	N/A	OK	OK
v. Are title and reference of the VCS methodology applied to the project activity and explanation of methodology choices provided?	PD tem p	2.1	ACM0002 version 12.1.0 and related tools are used (Tool for the demonstration and assessment of additionality, Version 05.2, Tool to calculate the emission factor for an electricity system, Version 02).	OK	OK
4.			Please check for latest versions of tools.	CL-17	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
w. Does the project use one of the VCS program approved project methodologies and provide information relevant to methodology deviations or methodology revisions?	PD tem p	2.1	Yes	OK	OK
x. Are the choice of the methodology and its applicability to the project activity justified?	PD tem p	2.2	Applicability conditions are discussed in the PD. Methodology is applicable.	OK	OK
y. Are GHG sources, sinks and reservoirs identified for the baseline scenario and for the project?	PD tem p	2.3	CO2 emissions are included for baseline scenario.	OK	OK
z. Is it described how the baseline scenario is identified and the identified baseline scenario?	PD tem p	2.4	Since the project is an installation of a new grid-connected renewable power plant, the baseline scenario is formulated in ACM0002 / Version 12 1.0: "Electricity delivered to the grid by the project 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 below."	OK	OK
aa. Has the project proponent selected the most reasonable baseline scenario for the project?	PD tem	2.4	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	p				
bb. Does it reflect what most likely would have occurred in the absence of the project?	PD tem p	2.4	Baseline is appropriate.	OK	OK
cc. Is it described how the emissions of GHG by source in baseline scenario are reduced below those that would have occurred in the absence of the project activity (assessment and demonstration of additionality)?	PD tem p	2.5	Additionality is explained in the PD.	OK	OK
dd. Has the project proponent demonstrated, in the VCS PD, in addition to describing how the project meets the VCS methodology, that the project is additional based on one of the tests, the project test, the performance test, and technology test?	PD tem p	2.5	"Tool for the Demonstration and Assessment of Additionality (Version 5.2)" is used to demonstrate additionality.	OK	OK
ee. Are title and reference of the VCS methodology (which includes the monitoring requirements) applied to the project activity and explanation of methodology choices provided?	PD tem p	3.1	The approved baseline and monitoring methodology ACM0002-Version 12 1.0: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" ("ACM0002") is applied.	OK	OK
ff. Is monitoring, including estimation, relevant, measurement or calculation approaches described	PD tem	3.2		OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
including:	p				
i. Purpose of monitoring?	PD tem p	3.2	Please indicate purpose of monitoring	CAR-1	OK
ii. Types of data and information to be reported, including units of measurement?	PD tem p	3.2	Units of measurement are provided.	OK	OK
iii. Origin of the data?	PD tem p	3.2	Source of data is project activity site.	OK	OK
iv. Monitoring, including estimation, relevant, measurement or calculation approaches?	PD tem p	3.2	Please explain monitoring methods for EG facility.	CAR-2	OK
v. Monitoring times and periods, considering the needs of intended users?	PD tem p	3.2	Monitoring periods are indicated.	OK	OK
vi. Monitoring roles and responsibilities ?	PD tem	3.2	The plant management of EGENDA is responsible with all monitoring and reporting issues in general.	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	p				
vii. Managing data quality?	PD tem p	3.2	Please explain in details how data quality is achieved for EG facility. What are accuracy classes of meters, how will PP notice if one of the meters go out of calibration and how will past data be retrieved. Is a scada system recording the generation data. Please clearly identify the procedure to monitor the data and to cross check the data.	CAR-3	OK
gg. Are data and parameters monitored/selecting relevant GHG sources, sinks and reservoirs for monitoring or estimating GHG emissions and removals described in the tabular form including:	PD tem p	3.3		OK	OK
i. Data unit?	PD tem p	3.3	Data units are MWh, MW and m2.	OK	OK
ii. Description?	PD tem p	3.3	Descriptions are consistent.	OK	OK
iii. Source of data to be used?	PD tem	3.3	Source of data is project activity site.	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	p				
iv. Value of data applied for the purpose of calculating expected emissions reductions?	PD tem p	3.3			
v. Description of measurement methods and procedures to be applied?	PD tem p	3.3	Please provide measurement methods for EG facility.	CL-19	OK
vi. QA/QC procedures to be applied?	PD tem p	3.3	Procedures are appropriate.	OK	OK
vii. Any comment?	PD tem p	3.3	N/A	OK	OK
hh. Is the monitoring plan described?	PD tem p	3.4	Monitoring plan is described	OK	OK
ii. Are methodological choices explained?	PD tem	4.1	The approved baseline and monitoring methodology ACM0002-Version 12 1.0: "Consolidated baseline methodology for grid-	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	p		connected electricity generation from renewable sources" ("ACM0002") is applied		
jj. Are GHG emissions and/or removals for the baseline scenario quantified?	PD tem p	4.2	Calculations are in the PDD.	OK	OK
kk. Are GHG emissions and/or removals for the project quantified?	PD tem p	4.3	Calculations are in the PDD.	OK	OK
ll. Are GHG emission reductions and removal enhancements for the GHG project quantified?	PD tem p	4.4	Calculations are in the PDD.	OK	OK
mm. Was a summary of environmental impact assessment, when such an assessment is required by applicable legislation or regulation, provided? ISO14064-2, 5.2.k	ISO 1406 4-2	5.2.k	EIA study is done and it has been approved by the national authority that there is no environmental impact of the project.	OK	OK
nn. Were relevant outcomes from stakeholder consultations and mechanisms for on-going communication provided?	PD tem p	6	Please explain how comments were collected during the meetings and provide any hard copies if available.	CAR-4	OK
oo. Waere chronological plan for the date of initiating project activities, date of terminating	PD tem	7	In the timeline provided, please provide references	CAR-5	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
the project, frequency of monitoring and reporting and the project period, including relevant project activities in each step of the GHG project cycle provided?	p		for the following dates: Contact with PDD Consultants Revision of Feasibility Calculations Investment Decision Construction Start-point of no return Please also include dates and evidences for loan agreement and equipment contract. Please define investment decision date accordingly (as first real action of the project)		
pp. Was evidence of proof of title provided through one of the following:	PD tem	8.1		OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	p				
i. a right of use arising or granted under statute, regulation or decree by a competent authority?	PD tem p	8.1	Proof of title is provided with generation license.	OK	OK
ii. a right of use arising under law?	PD tem p	8.1	N/A	OK	OK
iii. a right of use arising by virtue of a property or contractual right in the plant, equipment or process that generates GHG emission reductions and/or removals (where the right includes the right of use of such reductions or removals and the project proponent has not been divested of such right of use)?	PD tem p	8.1	N/A	OK	OK
iv. a right of use arising by virtue of a property or contractual right in the land, vegetation or conservational or management process that generates GHG emission reductions and/or removals (where such right includes the right of use of such reductions or removals and the project proponent has not been divested of such right of use)?	PD tem p	8.1	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
v. an enforceable and irrevocable agreement with the holder of the property or contractual right in the plant, equipment or process that generates GHG emission reductions and/or removals which vests the right of use in the project proponent?			N/A	OK	OK
vi. an enforceable and irrevocable agreement with the holder of the property or contractual right in the land, vegetation or conservational or management process that generates GHG emission reductions or removals which vests the right of use in the project proponent?			N/A	OK	OK
qq. Does the project reduce GHG emissions from activities that participate in an emissions trading program, or take place in a jurisdiction or sector in which binding limits are established on GHG emissions?	PD tem p	8.2	Project does not participate in an emissions trading program.	OK	OK
rr. If yes, have project proponents provided evidence that the reductions or removals generated by the project have or will not be used in the Program or jurisdiction for the purpose of demonstrating compliance, such as:	PD tem p	8.2	N/A	OK	OK
i. a letter from the Program operator or designated national authority that emissions allowances (or other GHG credits used in the Program) equivalent to the reductions/removals generated by the	PD tem p	8.2	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
project have been cancelled from the Program; or national cap as applicable?					
ii. purchase and cancellation of GHG allowances equivalent to the reductions/removals generated by the project related to the Program or national cap?	PD tem p	8.2	N/A	OK	OK
e. Additionality					
a. Has the project proponent demonstrated that the project is additional using one of the following tests: Test 1 – The project test; Test 2 – Performance test; Test 3 – Technology test?	VCS	5.8	“Tool for the Demonstration and Assessment of Additionality (Version 5.2)” is used to demonstrate additionality.	OK	OK
b. If the project proponent used Test 1:	VCS	5.8	N/A	OK	OK
i. Step 1 – Regulatory Surplus – Is the project mandated by any systematically enforced law, statute or other regulatory framework? Laws, statutes, regulatory frameworks or policies implemented since 11 November 2001 that give comparative advantage to less emissions-intensive technologies or activities relative to more emissions-intensive technologies or activities need not be taken into account. Laws, statutes, regulatory frameworks or policies implemented since 11 December 1997 that give comparative advantage to	VCS	5.8	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
more emissions-intensive technologies or activities relative to less emissions-intensive technologies or activities shall not be taken into account. (If yes a CAR shall be issued and the project shall be deemed non additional).					
ii. Step 2 – Implementation Barriers – Does the project face one (or more) distinct barrier(s) compared with barriers faced by alternative projects?	VCS	5.8	N/A	OK	OK
i. Investment Barrier – Does the project face capital or investment return constraints that can be overcome by the additional revenues associated with the generation of VCUs?	VCS	5.8	N/A	OK	OK
ii. Technological Barriers – Does the project face technology-related barriers to its implementation?	VCS	5.8	N/A	OK	OK
iii. Institutional barriers – Does the project face financial, organizational, cultural or social barriers that the VCU revenue stream can help overcome?	VCS	5.8	N/A	OK	OK
iii. Step 3 – Common Practice	VCS	5.8	N/A	OK	OK
i. Is project type common practice in sector/region, compared with	VCS	5.8	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
projects that have received no carbon finance?					
ii. if it is common practice, have the project proponents identified barriers faced compared with existing projects?	VCS	5.8	N/A	OK	OK
iii. Is the demonstration that the project is not common practice based on guidance in the GHG Protocol for Project Accounting, Chapter 7?	VCS	5.8	N/A	OK	OK
1. Was data on all baseline candidates within the geographic area collected?	GHG PRO TOC OL	7.4.2 AND 7.6	N/A	OK	OK
2. Was a relative percentage for each different technology or practice calculated? (Common practice refers to the predominant technologies or practices in a given market, as determined by the degree to which those	GHG PRO TOC OL	7.4.2 AND 7.6	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
technologies or practices have penetrated the market (defined by a specified geographic area). This percentage could be based on the number of plants or sites using each technology or practice, or could be weighted by the proportion of the total output for the market that is attributed to each technology or practice.)					
c. If the project proponent used Test 2:	VCS	5.8	N/A	OK	OK
i. Step 1 – Regulatory Surplus – Is the project mandated by any systematically enforced law, statute or other regulatory framework? Laws, statutes, regulatory frameworks or policies implemented since 11 November 2001 that give comparative advantage to less emissions-intensive technologies or activities relative to more emissions-intensive technologies or activities need not be taken into account. Laws, statutes, regulatory frameworks or policies implemented since 11 December 1997 that give comparative advantage to	VCS	5.8	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
more emissions-intensive technologies or activities relative to less emissions-intensive technologies or activities shall not be taken into account. (If yes a CAR shall be issued and the project shall be deemed non additional).					
ii. Step 2: Performance Standard	VCS	5.8	N/A	OK	OK
i. Are the emissions generated per unit output by the project below the level that has been approved by the VCS Program for the product, service, sector or industry, as the level defined to ensure that the project is not business-as-usual?	VCS	5.8	N/A	OK	OK
ii. Are performance standard based additionality tests approved through the double approval process and by the VCS Board? (The list of approved performance standards is on www.v-c-s.org)	VCS	5.8	N/A	OK	OK
d. If the project proponent used Test 3:	VCS	5.8			
i. Step 1 – Regulatory Surplus – Is the project mandated by any systematically enforced law, statute or other regulatory	VCS	5.8	N/A	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
framework? Laws, statutes, regulatory frameworks or policies implemented since 11 November 2001 that give comparative advantage to less emissions-intensive technologies or activities relative to more emissions-intensive technologies or activities need not be taken into account. Laws, statutes, regulatory frameworks or policies implemented since 11 December 1997 that give comparative advantage to more emissions-intensive technologies or activities relative to less emissions-intensive technologies or activities shall not be taken into account. (If yes a CAR shall be issued and the project shall be deemed non additional).					
ii. Step 2: Technology Additionality – Are the project and its location contained in the list of project types and applicable areas approved as being additional by the VCS Program? (The approved list is available on www.v-c-s.org)	VCS	5.8	N/A	OK	OK
f. Identifying GHG sources, sinks and reservoirs relevant to the project					
a. Refer to Clause 6, under Methodologies.	VCS	5.9	Refer to Clause 6, under Methodologies.	-	-
g. Determining the baseline scenario					

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
a. Has the project proponent selected the most conservative baseline scenario for the project, based on the requirements in the applicable VCS methodology?	VCS	5.10	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
b. Does the baseline scenario set out the geographic scope as applicable to the project?	VCS	5.10	The project electricity system is defined as “the spatial extent of the power plants that are physically connected through transmission and distribution lines to the project activity, meaning the Turkish grid.	OK	OK
c. Has the project proponent selected or established criteria and procedures for identifying and assessing potential baseline scenarios considering the following:	ISO 1406 4-2	5.4	Baseline is directly stated in the PD	OK	OK
i. The project description, including identified GHG sources, sinks and reservoirs;	ISO 1406 4.2	5.4	Baseline is directly stated in the PD	OK	OK
ii. Existing and alternative project types, activities and technologies providing equivalent type and level of activity of products or services to the project;	ISO 1406 4-2	5.4	Baseline is directly stated in the PD	OK	OK
iii. Data availability, reliability and limitations;	ISO 1406	5.4	Baseline is directly stated in the PD	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	4-2				
iv. Other relevant information concerning present or future conditions, such as legislative, technical, economic, sociocultural, environmental, geographic, site-specific and temporal assumptions or projections.	ISO 1406 4-2	5.4	Baseline is directly stated in the PD	OK	OK
d. Has the project proponent demonstrated equivalence in type and level of activity of products or services provided between the project and the baseline scenario and has explained, as appropriate, any significant differences between the project and the baseline scenario ?	ISO 1406 4.2	5.4	Project and baseline scenarios are clearly explained.	OK	OK
e. Has the project proponent selected or established, explained and applied criteria and procedures for identifying and justifying the baseline scenario?	ISO 1406 4.2	5.4	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
f. In developing the baseline scenario, has the project proponent selected the assumptions, values and procedures that help ensure that GHG emissions reductions or removal enhancements are not over-estimated?	ISO 1406 4.2	5.4	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
g. Has the project proponent selected or established, justified and applied criteria and	ISO	5.4	Baseline is directly stated in the PD, PP has no	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
procedures for demonstrating that the project results in GHG emissions reductions or removal enhancements that are additional to what relevant in the baseline scenario?	1406 4.2		selection to make.		
h. Has the project participant demonstrated that the project has met all relevant regulations, legislation and project approvals (e.g. environmental permits)?	VCS	5.10	Licence, EIA not required document and other governmental documents demonstrate compliance with regulations.	OK	OK
h. Monitoring the GHG project					
a. Has the project proponent shall established and maintained criteria and procedures for obtaining, recording, compiling and relevant data and information important for quantifying and reporting GHG emissions and/or removals relevant for the project and baseline scenario (i.e. GHG information system)?	VCS	5.11	Criteria are defined in the MP.	OK	OK
b. Do the monitoring procedures include?	VCS	5.11		OK	OK
i. purpose of monitoring?	VCS	5.11	Please indicate purpose of monitoring	CAR-1	OK
ii. types of data and information to be reported, including units of measurement?	VCS	5.11	Units of measurement are provided.	OK	OK
iii. origin of the data?	VCS	5.11	Source of data is project activity site.	OK	OK
iv. monitoring methodologies, including estimation, relevant, measurement or calculation approaches?	VCS	5.11	Please explain monitoring methods for EG facility.	CAR-6	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
v. monitoring times and periods, considering the needs of intended users?	VCS	5.11	Monitoring periods are indicated.	OK	OK
vi. monitoring roles and responsibilities?	VCS	5.11	The plant management of EGENDA is responsible with all monitoring and reporting issues in general.	OK	OK
vii. GHG information management systems, including the location and retention of stored data?	VCS	5.11	Please explain in details how data quality is achieved for EG facility. What are accuracy classes of meters, how will PP notice if one of the meters go out of calibration and how will past data be retrieved. Is a scada system recording the generation data. Please clearly identify the procedure to monitor the data and to cross check the data.	CAR-3	OK
c. Where measurement and monitoring equipment is used, does the project proponent ensure the equipment is calibrated according to current good practice?	VCS	5.11	Please provide more details on calibration. Will calibration be done in line with a regulation? Please provide reference.	CAR-7	OK
d. Does the project proponent apply GHG monitoring criteria and procedures on a regular basis during project implementation?	VCS	5.11	Eg facility will be monitored continuously.	OK	OK
i. Monitoring reports for the GHG project					
a. Do monitoring reports include all the monitoring data, calculations, estimations, conversion factors and others standard factors as defined in	VCS	5.12	As the validation process is not completed yet, there is no monitoring plan prepared. Question is N/A.	OK	OK

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
the monitoring clause of the applied VCS Program methodology and set out in the VCS PD? (A list of VCS approved methodologies is available on www.v-c-s.org)					
j. Records relating to the project					
a. Has the project proponent kept all documents and records in a secure and retrievable manner for at least two years after the end of the project crediting period.?	VCS	5.13	As the validation process is not completed yet, the crediting period has not started. Question is N/A.	OK	OK
k. Information to validator and verifier					
a. Has the project proponent made available to the validator the VCS PD, proof of title and any requested supporting information and data needed to evidence statements and data in the VCS PD and proof of title?	VCS	5.14	All requested information has been presented to DOE.	OK	OK
b. Has the project proponent made the VCS PD and validation report available to the verifiers as well as a monitoring report applicable to the period of monitoring and any requested supporting information and data needed to evidence statements and data in the monitoring report?	VCS	5.14	This question is N/A as the project is at validation stage yet.	OK	OK

Table 2 Validation requirements based on the Clean Development Mechanism Validation and Verification Manual (Version 01.2) and methodology ACM0002 (Version 12.1) – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
3. Approval			COUNTRY A (insert the country name)	COUNTRY B (insert the country name)		
a. Have all Parties involved approved the project activity?	VVM	44	N/A		OK	OK
b. Has the DNA of each Party indicated as being involved in the proposed CDM project activity in section A.3 of the PDD provided a letter of approval? (If yes, provide the reference of the letter of approval, any supporting documentation, and specify if the letter was received from the project relevant or directly from the DNA)	VVM	45	N/A		OK	OK
c. Does the letter of approval from DNA of each Party involved:	VVM	45	N/A		OK	OK
i. confirm that the Party is a Party of the Kyoto Protocol?	VVM	45.a	N/A		OK	OK
ii. confirm that participation is voluntary?	VVM	45.b	N/A		OK	OK
iii. confirm that, in the case of the host Party, the proposed CDM project activity contributes to	VVM	45.c	N/A		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
the sustainable development of the country?						
iv. Refers to the precise proposed CDM project activity title in the PDD being submitted for registration?	VVM	45.d	N/A		OK	OK
d. Is(are) the letter(s) of approval unconditional with respect to (i) to (iv) above?	VVM	46	N/A		OK	OK
e. Has(ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA) and is valid for the CDM project activity under validation?	VVM	47	N/A		OK	OK
f. Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	N/A		OK	OK
g. If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	N/A		OK	OK
4. Participation			PP1 (insert PP1 name)	PP2 (insert PP2 name)		
a. Have all project participants been listed in a consistent manner in the project documentation?	VVM	51	N/A		OK	OK
b. Has the participation of the project participants in the project activity been approved by a Party to the Kyoto Protocol?	VVM	51	N/A		OK	OK
c. Are the project participants listed in tabular form in section A.3 of the PDD?	VVM	52	N/A		OK	OK
d. Is the information in section A.3 consistent with the contact details provided in annex 1 of the PDD?	VVM	52	N/A		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
e. Has the participation of each of the project participants been approved by at least one Party involved, either in a letter of approval or in a separate letter specifically to approve participation? (Provide reference of the approval document for each of the project participants)	VVM	52	N/A		OK	OK
f. Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	N/A		OK	OK
g. Has the approval of participation issued from the relevant DNA?	VVM	53	N/A		OK	OK
h. Is there doubt with respect to (g) above?	VVM	53	N/A		OK	OK
i. If yes, was verified with the DNA that the approval of participation is valid for the proposed CDM project participant?	VVM	53	N/A		OK	OK
5. Project design document						
a. Is the PDD used as a basis for validation prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website?	VVM	55	VCS template is correct.		OK	OK
b. Is the PDD in accordance with the applicable CDM requirements for completing the PDD?	VVM	56	VCS template is correct.		OK	OK
c. In CDM-PDD section A.1 are the following provided?	EB 41	Ann 12			OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Title of project	EB 41	Ann 12	Title is “Eglence I-II Hydroelectric Power Plant (Eglence I-II HEPP)”	OK	OK
ii. Current version number and date of document	EB 41	Ann 12	Please provide version and date of the PDD	CL-7	OK
d. In CDM-PDD section A.2 are following provided (max. one page)?	EB 41	Ann 12		OK	OK
i. A brief description of the project activity covering purpose which includes the scenario existing prior to the start of project, present scenario and baseline scenario	EB 41	Ann 12	As observed during site visit, project is in line with the description.	OK	OK
ii. Explanation on how the GHG emission reductions are effected	EB 41	Ann 12	The project activity reduces greenhouse gases (GHGs) emissions that would have otherwise occurred in the absence of the project activity because electricity generation from fossil fuel sources is avoided.	OK	OK
iii. The PP's vies on the contribution of project activity to sustainable development	EB 41	Ann 12	Please explain contributions to sustainable development	CAR-8	OK
5.			Employee list is provided.	OK	OK
			Bills for local purchases is provided.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iv. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	There are no major changes except for corrections in IRR and baseline calculations.	OK	OK
e. In CDM-PDD section A.3 are following provided in the tabular format?	EB 41	Ann 12		OK	OK
i. List of project participants and parties	EB 41	Ann 12	Contributors are listed in section 1.3.	OK	OK
ii. Identification of Host Party			Turkey is the host country.	OK	OK
iii. Indication eleva the Party wishes to be considered as project participant	EB 41	Ann 12	N/A for Turkey.	OK	OK
f. In CDM-PDD section A.4.1 are following provided?	EB 41	Ann 12		OK	OK
i. Technical description, location, host party(ies) and address as required	EB 41	Ann 12	Addresses are provided in section 1.3.	OK	OK
ii. Detailed physical location with unique identification of the project activity (eg. Longitude/latitude) – not to exceed one page	EB 41	Ann 12	Coordinates are provided in section 1.9. Project site is validated during site visit.	OK	OK
iii. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	There are no major changes except for corrections in IRR and baseline calculations.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
g. In CDM-PDD section A.4.2 is the list of relevant project activities provided?	EB 41	Ann 12	According to Annex A of the Kyoto Protocol, the Project fits in: Sectoral Scope Number: 1 Sectoral Scope: Energy Industries –Renewable Energy	OK	OK
h. In CDM-PDD section A.4.3 are following provided?	EB 41	Ann 12		OK	OK
i. A description of how environmentally safe and sound technology, and know-how, is transferred to the Host Party(ies)	EB 41	Ann 12	Please describe how environmentally safe and sound technology, and know-how, is transferred	CL-8	OK
ii. Explanation of purpose of project activity with scenario existing prior to the start of project, scope or present activities and the baseline scenario	EB 41	Ann 12	The main purpose of the project is to generate approximately 211,348 kWh/year of electricity to supply the national grid using a renewable resource and tapping the significant hydropower potential in the region.	OK	OK
iii. List and arrangement of the main manufacturing/production technologies, systems and equipments involved	EB 41	Ann 12	Technology and equipment are provided in section 1.8.	OK	OK
iv. The emissions sources and GHGs involved	EB 41	Ann 12	Section 2.3. indicates emission sources. CO2 is included for baseline.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	There are no major changes except for corrections in IRR and baseline calculations.	OK	OK
i. In CDM-PDD section A.4.4 is the estimation of emission reductions provided as requested in a tabular format?	EB 41	Ann 12	Please check table 1. EG data is not correct in summary section. Revise calculation if required.	CAR-9	OK
j. In CDM-PDD section A.4.5 is Information regarding Public funding provided?	EB 41	Ann 12	There is no public funding available for the project.	OK	OK
k. In CDM-PDD section B.1 are following provided?	EB 41	Ann 12		OK	OK
i. The approved methodology and version number	EB 41	Ann 12	The approved baseline and monitoring methodology ACM0002-Version 12 1.0: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" ("ACM0002") is applied.	OK	OK
ii. Any methodologies or tools which the above approved methodology draws upon and their version number	EB 41	Ann 12	"Tool for the demonstration and assessment of additionality, Version 05.2" and "Tool to calculate the emission factor for an electricity system, Version 02" are used.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
I. In CDM-PDD section B.2 are following provided?	EB 41	Ann 12		OK	OK
i. Justification of the choice of methodology that the project activity meets each of the applicability conditions	EB 41	Ann 12	Applicability conditions are discussed in the PD.	OK	OK
ii. Documentations with references that had been used. This can be provided in Annex 3 instead	EB 41	Ann 12	Annexes are checked by experts.	OK	OK
m. In CDM-PDD section B.3 are following provided?	EB 41	Ann 12		OK	OK
i. Description of all sources and gases included in the project boundary in the table	EB 41	Ann 12	CO2 emissions are included for baseline scenario.	OK	OK
ii. A flow diagram of the project boundary physically delineating the project activity	EB 41	Ann 12	Flow diagram is presented separately. Please provide them in the PD.	CL-9	OK
iii. The flow diagram with all equipments, systems and flows of mass and energy etc	EB 41	Ann 12	Flow diagram is presented separately. Please provide them in the PD.	CL-9	OK
n. In CDM-PDD section B.4 are following provided?	EB 41	Ann 12		OK	OK
i. Explanation how the most plausible baseline scenario is identified in accordance with the	EB 41	Ann	Since the project is an installation of a new grid-connected renewable power plant, the baseline	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
selected baseline methodology		12	scenario is formulated in ACM0002 / Version 12 1.0: "Electricity delivered to the grid by the project 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 below."		
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources, etc.)	EB 41	Ann 12	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
iv. A transparent and detailed description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity	EB 41	Ann 12	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	There are no major changes except for corrections in IRR and baseline calculations.	OK	OK
o. In CDM-PDD section B.5 are following provided?	EB 41	Ann 12		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Explanation of how and why this project activity is additional and therefore not the baseline scenario in accordance with the selected baseline methodology	EB 41	Ann 12	Additionality is explained in section 2.5.	OK	OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Assumptions are provided in the PD.	OK	OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources etc)	EB 41	Ann 12	Data is transparent.	OK	OK
iv. Evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity, if the starting date of the project activity is before the date of validation	EB 41	Ann 12	In case the PPs make the claim for investment barriers, they should demonstrate in the PDD that the financing of the project was assured only due to the benefit of the VER revenues. Please clarify.	CAR-10	OK
p. In CDM-PDD section B.6.1 are following provided?	EB 41	Ann 12		OK	OK
i. Explanation as to how the procedures, in the approved methodology to calculate project emissions, baseline emissions, leakage emissions and emission reductions are applied to the proposed project activity	EB 41	Ann 12	Equations are provided. Calculations will be checked after EG facility data is clarified.	OK	OK
6.			Please provide a reference document for reservoir area.	CAR-11	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. Equations used in calculating emission reductions	EB 41	Ann 12	Equations are provided and are correct.	OK	OK
iii. Explanation and justification for all relevant methodological choices, including different scenarios or cases, options and default values	EB 41	Ann 12	Explanation and justifications will be checked by experts.	OK	OK
q. In CDM-PDD section B.6.2 are following provided?	EB 41	Ann 12		OK	OK
i. A compilation of information on the data and parameters that are not monitored throughout the crediting period but that are determined only once and thus remains fixed throughout the crediting period AND that are available when validation is undertaken	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
ii. The actual value period	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
iii. Explanation and justification for the choice of the source of data	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
iv. Clear and transparent references or additional documentation in Annex 3	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
v. Where values have been measured, a description of the measurement methods and	EB 41	Ann	Monitoring is evaluated in table 1 and related	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
procedures (e.g. which standards have been used), indicated the responsible person/entity having undertaken the measurement, the date of measurement(s) and the measurement results		12	section of table 2.		
r. In CDM-PDD section B.6.3 are following provided?	EB 41	Ann 12		OK	OK
i. A transparent ex ante calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the approved methodology	EB 41	Ann 12	Equations are provided. Calculations will be checked after EG facility data is clarified.	OK	OK
ii. Documentation how each equation is applied, in a manner that enables the reader to reproduce the calculation	EB 41	Ann 12	Equations are clear and correct.	OK	OK
iii. Additional background information and or data in Annex 3, including relevant electronic files (i.e. spreadsheets)	EB 41	Ann 12	Annex 3 is checked by experts.	OK	OK
s. In CDM-PDD section B.6.4 are the results of the ex ante estimation of emission reductions for all years of the crediting period, provided in a tabular format?	EB 41	Ann 12	Calculations will be checked after EG facility data is clarified.	OK	OK
t. In CDM-PDD section B.7.1 are following provided?	EB 41	Ann	Monitoring is evaluated in table 1 and related	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
		12	section of table 2.		
i. Specific information on how the data and parameters that need to be monitored would actually be collected during monitoring for the project activity	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
ii. For each parameter the following below information, using the table provided:	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
a. The source(s) of data that will be actually used for the proposed project activity (e.g. which exact national statistics). Where several sources may be used, explain and justify which data sources should be preferred.	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
b. Where data or parameters are supposed to be measured, specify the measurement methods and procedures, including a specification which accepted industry standards or national or international standards will be applied, which measurement equipment is used, how the measurement is undertaken, which calibration procedures are applied, what is the accuracy of the measurement method, who is the responsible person/entity that should undertake the measurements and what is the	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
measurement interval; (i) A description of the QA/QC procedures (if any) that should be applied; (ii) Where relevant: any further comment. Provide any relevant further background documentation in Annex 4.					
u. In CDM-PDD section B.7.2 are following provided?	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
i. A detailed description of the monitoring plan	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
ii. The operational and management structure that the project operator will implement in order to monitor emission reductions and any leakage effects generated by the project activity	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
iii. The responsibilities for and institutional arrangements for data collection and archiving	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
iv. Indication that the monitoring plan reflect good monitoring practice appropriate to the type of project activity	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK
v. Relevant further background information in Annex 4	EB 41	Ann 12	Monitoring is evaluated in table 1 and related section of table 2.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
v. In CDM-PDD section B.8 are following provided?	EB 41	Ann 12		OK	OK
i. Date of completion of the application of the methodology to the project activity study in DD/MM/YYYY	EB 41	Ann 12	Baseline study is dated to 24.2.2011	OK	OK
ii. Contact information of the person(s)/entity(ies) responsible for the application of the baseline and monitoring methodology to the project activity	EB 41	Ann 12	Contact people are given in section 1.3.	OK	OK
iii. Indication if the person/entity is also a project participant listed in Annex 1	EB 41	Ann 12	N/A	OK	OK
w. In CDM-PDD section C.1.1 are following provided?	EB 41	Ann 12			
i. The starting date of a CDM project activity, which is the earliest of the date(s) on which the implementation or construction or real action of a project activity begins/has begun (EB33, Para 76/CDM Glossary of terms/EB41, Para 67)	EB 41	Ann 12	Investment decision date will be determined when the timeline is revised.	OK	OK
ii. A description of how this start date has been determined, and a description of the evidence available to support this start date	EB 41	Ann 12	Investment decision date is the first real action for the project.	OK	OK
iii. If this starting date is earlier than the date of publication of the CDM-PDD for global stakeholder consultation by a DOE, description	EB 41	Ann	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
in Section B.5 contain a of how the benefits of the CDM were seriously considered prior to the starting date (EB41, Para 68).		12			
x. In CDM-PDD section C.1.2 is the expected operational lifetime of the project activity in years and months provided?	EB 41	Ann 12	The license of the project is for 49 years starting from 2007. Actual operation will be shorter as this period includes the construction years, too. IRR is calculated for 51 years. These are not in line. Please clarify.	CAR-12	OK
7.			The project lifetime is defined as 49 years as suggested in the revised feasibility study.	OK	OK
y. In CDM-PDD section C.2 is it stated whether the project activity will use a renewable or a fixed crediting period and is C.2.1 or C.2.2 completed accordingly?	EB 41	Ann 12	VCS project crediting period: 10 years, renewable once.	OK	OK
z. In CDM-PDD section C.2.1 is it indicated that each crediting period shall be at most 7 years and may be renewed at most two times, provided that, for each renewal, a designated operational entity determines and informs the Executive Board that the original project baseline is still valid or has been updated taking account of new data where applicable?	EB 41	Ann 12	VCS project crediting period: 10 years, renewable once.	OK	OK
aa. In CDM-PDD section C.2.1.1 are dates in the following format: (DD/MM/YYYY) provided?	EB 41	Ann 12	VCS project crediting period: 10 years, renewable once.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
bb. In CDM-PDD section C.2.1.2 is the length of the first crediting period in years and months provided?	EB 41	Ann 12	VCS project crediting period: 10 years, renewable once.	OK	OK
cc. In CDM-PDD section C.2.2 is the fixed crediting period at most ten (10) years provided?	EB 41	Ann 12	N/A	OK	OK
dd. In CDM-PDD section C.2.2.1 are the dates provided in the following format: (DD/MM/YYYY)?	EB 41	Ann 12	N/A	OK	OK
ee. In CDM-PDD section C.2.2.2 is the length of the crediting period in years and months Provided?	EB 41	Ann 12	N/A	OK	OK
ff. In CDM-PDD section D.2 are the conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the Host Party, if environmental impacts are considered significant by the project participants or the Host, provided?	EB 41	Ann 12	EIA study is done and it has been approved by the national authority that there is no environmental impact of the project.	OK	OK
gg. In CDM-PDD section E.1 are the following provided?	EB 41	Ann 12		OK	OK
i. The process by which comments by local stakeholders have been invited and compiled. An invitation for comments by local stakeholders shall be made in an open and transparent manner, in a way that facilities	EB 41	Ann 12	Invitations are presented in the PD.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted.					
ii. The project activity is described in a manner, which allows the local stakeholders to understand the project activity, taking into account confidentiality provisions of the CDM modalities and procedures.	EB 41	Ann 12	Please provide the meeting minutes of the stakeholder meeting or provide the presentation that was used in the meeting.	CL-10	OK
iii. The local stakeholder process has been completed before submitting the proposed project activity to the DOE for validation.	EB 41	Ann 12	Yes.	OK	OK
hh. In CDM-PDD section E.2 are following provided?	EB 41	Ann 12		OK	OK
i. Identification of local stakeholders that have made comments	EB 41	Ann 12	Please identify stakeholders and their comments	CL-11	OK
ii. A summary of this comments.	EB 41	Ann 12	Please identify stakeholders and their comments	CL-11	OK
ii. In CDM-PDD section E.3 is the explanation of how due account have been taken of comments received from local stakeholders provided?	EB 41	Ann 12	There is no due account taken.	OK	OK
jj. In CDM-PDD Annex 1 are the following provided?	EB 41	Ann 12		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Contact information of project participants	EB 41	Ann 12	Contact information of project participants is provided in the PD.	OK	OK
ii. For each relevant listed in section A.3 the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail	EB 41	Ann 12	Contact information of project participants is provided in the PD.	OK	OK
kk. In CDM-PDD Annex 2 is information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties provided?	EB 41	Ann 12	In section 1.1.3, it is stated that "There is no public funding available for the project."	OK	OK
ll. In CDM-PDD Annex 3 is the background information used in the application of the baseline methodology provided?	EB 41	Ann 12	Additional baseline info is provided in the Annex.	OK	OK
mm. In CDM-PDD Annex 4 is the background information used in the application of the monitoring methodology provided?	EB 41	Ann 12	N/A	OK	OK
6. Project description					
a. Does the PDD contain a clear description of the project activity that provides the reader with a clear understanding of the precise nature of the project activity and the technical aspects of its implementation?	VVM	58	Project description is very clear and validated during site visit.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
b. Is the description of the proposed CDM project activity as contained in the PDD:	VVM	59		OK	OK
i. sufficiently covering all relevant elements?	VVM	59	Project description cover all elements.	OK	OK
ii. relevant?	VVM	59	Project description is accurate.	OK	OK
iii. providing the reader with a clear understanding of the nature of the proposed CDM project activity?	VVM	59	Project description is clear.	OK	OK
iv. Are there any changes/modifications compared to the webhosted PDD?	VVM	59	There are no major changes except for corrections in IRR and baseline calculations.	OK	OK
c. Is the proposed CDM project activity in existing facilities or or utilizing existing equipments?	VVM	60	Project is greenfield.	OK	OK
d. Is the CDM project activity one of the following types:	VVM	60		OK	OK
i. Large scale?	VVM	60	According to domestic regulations, with an installed capacity of 67.8 MW, the Eglence I-II HEPP is qualified as a large-scale project	OK	OK
ii. Non-bundled small scale projects with emission reductions exceeding 15,000 tonnes per year?	VVM	60	N/A	OK	OK
iii. Bundled small scale projects, each with emission reductions not exceeding 15,000 tonnes?	VVM	60	N/A	OK	OK
e. If yes to I and (d) above, was a physical site inspection conducted to confirm that the description in the PDD reflects the proposed CDM project activity, unless other means are	VVM	60	Site visit is realized on 22 June 2011.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
specified in the methodology?					
f. If yes to (d.iii) above, was the number of physical site visits base on sampling?	VVM	60	No, there is only one site.	OK	OK
g. If yes is the sampling size appropriately justified through statistical analysis?	VVM	60	No, there is only one site.	OK	OK
h. For other individual proposed small scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, was a physical site inspection conducted?	VVM	61	N/A	OK	OK
i. For all other proposed CDM project activities not referred to in paragraphs 59 – 61, was a physical site inspection conducted?	VVM	62	Site visit is realized on 22 June 2011.	OK	OK
j. If no, was it appropriately justified?	VVM	62	N/A	OK	OK
k. Does the proposed CDM project activity involve the alteration of an existing installation or process?	VVM	63	Project is greenfield.	OK	OK
l. If yes, does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	VVM	63	Project description clearly states the differences resulting from the project activity compared to the pre-project.	OK	OK
7. Baseline and monitoring methodology					
a. General requirement					
l. Do the the baseline and monitoring methodologies selected by the project participants comply with the methodologies previously approved by the CDM Executive	VVM	65	Baseline is selected accordingly with the methodology.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Board?					
m. Is the selected methodology applicable to the project activity?	VVM	66	Methodology is applicable	OK	OK
n. Had the PP correctly applied the selected methodology?	VVM	66	Methodology is correctly applied	OK	OK
o. Had the selected methodology been correctly applied with respect to project boundary?	VVM	67	Methodology is correctly applied with respect to project boundary	OK	OK
p. Had the selected methodology been correctly applied with respect to baseline identification?	VVM	67	Methodology is correctly applied with respect to baseline identification	OK	OK
q. Had the selected methodology been correctly applied with respect to Algorithms and/or formulae used to determine emission reductions?	VVM	67	Methodology is correctly applied with respect to Algorithms and/or formulae used to determine emission reductions	OK	OK
r. Had the selected methodology been correctly applied with respect to additionality?	VVM	67	Methodology has been correctly applied with respect to additionality	OK	OK
i. Has the additionality of the project activity been demonstrated and assessed using the latest version of the “Tool for the demonstration and assessment of additionality” agreed by the Board, which is available on the UNFCCC website?	ACM	0002 v.11	Additionality is demosntreted as per the tool.	OK	OK
s. Had the selected methodology been correctly applied with respect to monitoring methodology?	VVM	67	Methodology is correctly applied	OK	OK
b. Applicability of the selected methodology to the project activity					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
a. Is the selected baseline and monitoring methodology, previously approved by the CDM Executive Board, applicable to the project activity? Is the used version valid?	VVM	68	ACM0002 v12 is applicable and valid.	OK	OK
i. This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plants); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).	ACM	0002 v.11	The project involves construction of new units in a brand new plant, in other words the project does neither involve the addition of renewable energy generation units at an existing renewable power generation facility nor does it foresee to retrofit or modify an expired facility of renewable energy generation.	OK	OK
b. Has the DOE applied specific guidance provided by the CDM Executive Board in respect to the applicable approved methodology?	VVM	69	Applicability conditions are validated during site visit in line with ACM0002.	OK	OK
c. Is the methodology correctly quoted?	VVM	70	Methodology is correctly quoted	OK	OK
d. Are the applicability conditions of the methodology met?	VVM	71		OK	OK
i. The project activity is the installation, capacity addition, retrofit or replacement of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave	ACM	0002 v.11	The project involves construction of new units in a brand new plant, in other words the project does neither involve the addition of renewable energy generation units at an existing renewable power generation facility nor does it foresee to retrofit	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
power plant/unit or tidal power plant/unit			or modify an expired facility of renewable energy generation.		
ii. In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects which use Option 2: on page 10 to calculate the parameter EGPI,y): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	ACM	0002 v.11	N/A	OK	OK
iii. In case of hydro power plants, one of the following conditions must apply: - The project activity is implemented in an existing reservoir, with no change in the volume of reservoir; or - The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given	ACM	0002 v.11	In addition, the power density of the power plant, as per definitions given in the Project Emissions section of ACM0002 / Version 12 1.0, is much greater than 4 W/m ² as calculated in section 1.3 “Estimated amount of emission reductions over the crediting period including project size” of this	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
in the Project Emissions section, is greater than 4 W/m ² ; or - The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m ² .			PDD,		
iv. The methodology is not applicable to the following conditions. Please confirm - Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity - Biomass fired power plants; - Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m ² .	ACM	0002 v.11	The project does not involve switching from fossil fuels to renewable energy at the site of the project activity,	OK	OK
v. In the case of retrofits, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.	ACM	0002 v.11	N/A	OK	OK
e. Is the project activity expected to result in emissions other than those allowed by the	VVM	71	There are no project emissions.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodology?					
f. Is the choice of the methodology justified?	VVM	71	Methodology choice is justified.	OK	OK
g. Have the project participants shown that the project activity meets each of the applicability conditions or the approved methodology?	VVM	71	All applicability conditions are discussed.	OK	OK
h. Have the project participants shown that the project activity meets each of the applicability conditions of any tool or other methodology component referred to the methodology?	VVM	71	All applicability conditions are discussed and met.	OK	OK
i. Are each of the applicability conditions of the “Tool to calculate the emission factor for an electricity system” met?	EB 50	Ann 40	All applicability conditions are discussed and met.	OK	OK
ii. Are each of the applicability conditions of the “Tool for the demonstration and assessment of additionality” met?	EB 39	Ann 10	All applicability conditions are discussed and met.	OK	OK
iii. Are each of the applicability conditions of the “Combined tool to identify the baseline scenario and demonstrate additionality” met?	EB 28	Ann 14	All applicability conditions are discussed and met.	OK	OK
iv. Are each of the applicability conditions of the “Tool to calculate project or leakage CO2 emissions from fossil fuel combustion” met?	EB 41	Ann 11	All applicability conditions are discussed and met.	OK	OK
i. Is the DOE, based on local and sectoral knowledge, aware that comparable information is available from sources other than that used in	VVM	71	Expert opinions and DOE experience is used to cross check.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the PDD?					
j. If yes, was the PDD cross checked against the other sources to confirm that the project activity meets the applicability conditions of the methodology? (provide the reference to these choices)	VVM	71	Expert opinions and DOE experience is used to cross check.	OK	OK
k. Can a determination regarding the applicability of the selected methodology to the proposed CDM project activity be made?	VVM	72	Methodology is applicable.	OK	OK
l. If no, clarification of relevant policy was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	72	N/A	OK	OK
m. If answer to (5.b.d) above is "no", revision or deviation from the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	73	N/A	OK	OK
n. If yes to (5.b.l) and (5.b.m) above, a request for registration was submitted before the CDM Executive Board has approved the proposed deviation or revision?	VVM	74	N/A	OK	OK
c. Project boundary					
c. Does the PDD correctly describe the project boundary, including the physical delineation of the proposed CDM project activity included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity?	VVM	78	The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the national electricity grid.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Does the extent of the project boundary, as described in the PDD, includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to?	ACM	0002 v11	The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the national electricity grid.	OK	OK
ii. Are the greenhouse gases and emission sources that are included in or excluded from the project boundary shown in a table format as per applicable methodology?	ACM	0002 v 11	Yes.	OK	OK
d. Is the delineation in the PDD of the project boundary correct and include identification of all locations, processes and equipment including secondary equipment and associated processes such as logistics etc.?	VVM	79	Yes.	OK	OK
e. Does the delineation in the PDD of the project boundary meet the requirements of the selected baseline?	VVM	79	Yes.	OK	OK
f. Have changes been made to the project boundary in comparison to the webhosted PDD. If yes please comment on the reason for the changes.	VVM	79	There are no major changes except for corrections in IRR and baseline calculations.	OK	OK
g. Have all sources and GHGs required by the methodology been included within the project boundary?	VVM	79	Yes. Co2 is included for baseline.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
h. Does the methodology allow project participant to choose whether a source or gas is to be included within the project boundary	VVM	79	No	OK	OK
i. If yes, have the project participants justified that choice?	VVM	79	N/A	OK	OK
j. If yes, is the justification provided reasonable? (provide reference to the supporting documented evidence provided by the project participants)	VVM	79	N/A	OK	OK
d. Baseline identification					
a. Does the PDD identify the baseline for the proposed CDM project activity, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed CDM project activity?	VVM	81	Since the project is an installation of a new grid-connected renewable power plant, the baseline scenario is formulated in ACM0002 / Version 12 1.0: "Electricity delivered to the grid by the project 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 below."	OK	OK
b. Has any procedure contained in the methodology to identify the most reasonable baseline scenario, been correctly applied?	VVM	82	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
i. If the project activity is the install a new grid-connected renewable power plant/unit (greenfield plant), is the baseline scenario identified appropriately in accordance with the ACM0002 ver.11?	ACM	0002 v11	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. If the project activity is a capacity addition to existing grid-connected renewable power plant/unit, is the baseline scenario identified appropriately in accordance with the ACM0002 ver. 11? And is the point of time at which the generation facility would likely be replaced or retrofitted (DATE Baseline Retrofit) reasonably defined?	ACM	0002 v11	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
iii. If the project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit, is the baseline scenario identified following the step-wise procedure in accordance with the ACM0002 ver.11?	ACM	0002 v11	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
iv. Are the realistic and credible alternative baseline scenarios for power generation appropriately identified following the Step 1 of the “Combined tool to identify the baseline scenario and demonstrate additionality”? (Step 1)	ACM	0002 v11	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
v. Are the realistic and credible alternative baseline scenarios i.e. P1, P2 and P3 appropriately applied Barrier analysis following the Step 2 of the “Combined tool to identify the baseline scenario and demonstrate additionality”? (Step 2)	ACM	0002 v11	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
vi. If more than one alternative is remaining after Step 2, is Investment analysis appropriately	ACM	0002	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
applied (apply an Investment Comparison as per step 3 of the “Combined tool to identify the baseline scenario and demonstrate additionality” or a Benchmark Analysis as per step 2b of the “Tool for the demonstration and assessment of additionality”)? (Step 3)		v11			
c. Does the selected methodology require use of tools (such as the “Tool for the demonstration and assessment of additionality” and the “Combined tool to identify the baseline scenario and demonstrate additionality”) to establish the baseline scenario?	VVM	82	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
d. If yes, was the methodology consulted on the application of these tools? (In such cases, the guidance in the methodology shall supersede the tool.)	VVM	82	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
e. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	VVM	83	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
f. If yes, are all scenarios that are considered by the project participants and are supplementary to those required by the methodology reasonable in the context of the proposed CDM project activity?	VVM	83	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
g. Has any reasonable alternative scenario been excluded?	VVM	83	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
h. Is the baseline scenario identified reasonably supported by:	VVM	84	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
i. Assumptions?	VVM	84	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
ii. Calculations?	VVM	84	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
iii. Rationales?	VVM	84	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
i. Are the documents and sources referred to in the PDD correctly quoted and interpreted?	VVM	84	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
j. Was the information provided in the PDD cross checked with other verifiable and credible sources, such as local expert opinion, if available? (identify the sources)	VVM	84	Baseline information is checked with expert opinions and DOE experience.	OK	OK
k. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed CDM project activity?	VVM	85	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
l. Have relevant policies and circumstances been identified and correctly considered in the PDD, in accordance with the guidance by the CDM Executive Board?	VVM	85	Baseline is directly stated in the PD, PP has no selection to make.	OK	OK
m. Does the PDD provide a verifiable description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity?	VVM	86	Yes	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
e. Algorithms and/or formulae used to determine emission reductions					
a. Do the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring?	VVM	89	Steps are correct.	OK	OK
b. Have the equations and parameters in the PDD been correctly applied with respect those in the select approved methodology?	VVM	90	Equations are in line with the methodology	OK	OK
i. Are the Project emissions appropriately calculated?.	ACM	0002 v.11	Project emissions are appropriately calculated	OK	OK
ii. Are the Baseline emissions appropriately calculated specifically for (a) greenfield plants or (b) retrofit and replacements or (c) capacity additions?	ACM	0002 v.11	Baseline emission calculations have been checked by experts.	OK	OK
iii. Are the Leakage appropriately calculated?	ACM	0002 v.11	Leakage is considered as zero.	OK	OK
iv. Are the Emission reductions appropriately calculated?	ACM	0002 v.11	OM Calculations: The 'net electricity production' values for the years 2007 and 2008 in the bottomline of Table 9, PDD p.24, do not match with the corresponding values in the Excel sheet. Unfortunately, the Excel sheet for this numbers is pasted as "values" so that it cannot be tracked where the	CAR-16	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			error is. This needs to be corrected and made compatible with the PDD.		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
8.			BM Calculations: In the BM calculations it is necessary that the set of most recent power capacity additions in the electricity system that comprise 20% of the system generation be included. This condition, however, is not met: 38364.7 MWh of net power generation has been included whereas the 20% limit requires 38962.6 MWh. Accordingly, plants commissioned in 2006 need to be added so as to comply with the 20% hurdle (note that if 20% falls on part capacity of a unit, that unit should be fully included in the calculation) and computations need to be updated accordingly.		
			Please check: PDD Table 9 defines $c=a/b$. Is it $c=b/a$? PDD Table 10 defines unite as MWh/tCO₂. Is it tCO₂/MWh ? There are various grammer and spelling errors in the document (e.g. Table 11 'Ultra-upercritical' instead of 'supercritical', the paragraph below saying 'Since there is no lpg fired power plant exists....'), a careful check needs to be made		
c. Have project participants prepared as part of the CDM-PDD an estimate of likely emission reductions for the proposed crediting period? This estimate should, in principle, employ the same methodology as selected for the calculation of emission reductions. Where the grid emission	ACM	0002 v.11	Estimations are made and checked by experts. Comments are provided in different CAR-CL's in this PD.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
factor (EFCM,grid,y) is determined ex post during monitoring, project participants may use models or other tools to estimate the emission reductions prior to validation.					
d. Does the methodology provide for selection between different options for equations or parameters?	VVM	90	Selected options are correct.	OK	OK
e. If yes, has adequate justification been provided (based on the choice of the baseline scenario, context of the proposed CDM project activity and other evidence provided)?	VVM	90	Justifications are correct.	OK	OK
f. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	90	Correct equations and parameters are used	OK	OK
g. Will data and parameters be monitored throughout the crediting period of the proposed CDM project activity?	VVM	91	Parameters related to baseline are fixed over the crediting period	OK	OK
h. If no, and these data and parameters will remain fixed throughout the crediting period, are all data sources and assumptions:	VVM	91	N/A	OK	OK
i. Appropriate and correct?	VVM	91	N/A	OK	OK
ii. Applicable to the proposed CDM project activity?	VVM	91	N/A	OK	OK
iii. Resulting in a conservative estimate of the emission reductions?	VVM	91	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Will data and parameters be monitored on implementation and hence become available only after validation of the project activity?	VVM	91	EG facility data will be monitored and emission reductions are estimated.	OK	OK
j. If yes, are the estimates provided in the PDD for these data and parameters reasonable?	VVM	91	Estimations are made and checked by experts. Comments are provided in different CAR-CL's in this PD.	OK	OK
8. Additionality of a project activity					
b. Does the PDD describe how a proposed CDM project activity is additional?	VVM	94	Additionality is described in PD.	OK	OK
c. Does the CDM-PDD state the latest version of the additionality tool being used?	ACM	0002 v.11	Tool for the demonstration and assessment of additionality, Version 05.2" is used and it is the latest version.	OK	OK
d. Were the following steps of the tool to assess additionality used:	EB 39	Ann 10		OK	OK
i. Identification of alternatives to the project activity?	EB 39	Ann 10	Alternatives have been identified	OK	OK
ii. Investment analysis to determine that the proposed project activity is either: 1) not the most economically or financially attractive, or 2) not economically or financially feasible?	EB 39	Ann 10	IRR is calculated	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iii. Barriers analysis?	EB 39	Ann 10	Barrier analysis is carried out	OK	OK
iv. Common practice analysis?	EB 39	Ann 10	Common practice analysis is done.	OK	OK
e. In step 1 (i) have all the sub-steps as below been followed?	EB 39	Ann 10		OK	OK
i. Sub-step 1a: Define alternatives to the project activity	EB 39	Ann 10	Alternatives have been defined	OK	OK
ii. Sub-step 1b: Consistency with mandatory laws and regulations	EB 39	Ann 10	Discussed.	OK	OK
f. Have the following alternatives been included while defining alternatives as per sub-step 1a?	EB 39	Ann 10		OK	OK
i. (a) The proposed project activity undertaken without being registered as a CDM project activity;	EB 39	Ann	Considered.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
		10			
ii. If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	EB 39	Ann 10	Considered and found realistic	OK	OK
g. Has the project participant included the technologies or practices that provide outputs or services with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region?	EB 39	Ann 10	Please refer above.	OK	OK
h. Has the outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project activity done correctly? Please briefly mention the outcome.	EB 39	Ann 10	Please state outcome of sub step of Step 1 a clearly	CL-12	OK
i. Is the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution.?	EB 39	Ann 10	The alternatives discusse are in line with applicable legal and regulatory requirements.	OK	OK
j. If an alternative does not comply with all mandatory applicable legislation and regulations, has it been shown that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are	EB 39	Ann 10	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
systematically not enforced and that noncompliance with those requirements is widespread in the country?					
k. Has the outcome of Step 1b: Identified realistic and credible alternative scenario(s) to the project activity that are in compliance with mandatory legislation and regulations taking into account the enforcement in the region or country and EB decisions on national and/or sectoral policies and regulations done correctly? Please state the outcome.	EB 39	Ann 10	The alternatives discussed are in line with applicable legal and regulatory requirements.	OK	OK
l. Has PP selected Step 2 (Investment analysis) or Step 3 (Barrier analysis) or both Steps 2 and 3?	EB 39	Ann 10	Both analyses are done.	OK	OK
m. In step 2, have all the sub-steps as below been followed?	EB 39	Ann 10		OK	OK
i. Sub-step 2a: Determine appropriate analysis method;	EB 39	Ann 10	As a result Option III: Benchmark Analysis is selected as the analysis method and the Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. Sub-step 2b: Option I. Apply simple cost analysis;	EB 39	Ann 10	Since the proposed project generates financial and economic benefits via the sales of electricity other than carbon revenues, Option I cannot be used.	OK	OK
iii. Sub-step 2b: Option II. Apply investment comparison analysis;	EB 39	Ann 10	Option II is only applicable to projects where alternatives should be similar investment projects in terms of generation capacity	OK	OK
iv. Sub-step 2b: Option III. Apply benchmark analysis;	EB 39	Ann 10	As a result Option III: Benchmark Analysis is selected as the analysis method and the Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project.	OK	OK
v. Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III);	EB 39	Ann 10	As a result Option III: Benchmark Analysis is selected as the analysis method and the Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project.	OK	OK
vi. Sub-step 2d: Sensitivity analysis (only applicable to Options II and III).	EB 39	Ann 10	Done.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
n. In sub-step 2a has relevant method of analysis done as per the guidance as below?	EB 39	Ann 10		OK	OK
i. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income (Option I).	EB 39	Ann 10	Since the proposed project generates financial and economic benefits via the sales of electricity other than carbon revenues, Option I cannot be used.	OK	OK
ii. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III). Specify option used with justification.	EB 39	Ann 10	Option II is only applicable to projects where alternatives should be similar investment projects in terms of generation capacity As a result Option III: Benchmark Analysis is selected as the analysis method and the Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project.	OK	OK
o. Has the below guideline followed for sub-step 2b Option I. Apply simple cost analysis? Document the costs associated with the CDM project activity and the alternatives identified in Step 1	EB 39	Ann 10	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
and demonstrate that there is at least one alternative which is less costly than the project activity.					
p. Has the below guideline followed for sub-step 2b Option II. Apply investment comparison analysis? Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service most suitable for the project type and decision-making context. Please specify	EB 39	Ann 10	N/A	OK	OK
q. Has the below guideline followed for Sub-step 2b: Option III. Apply benchmark analysis?	EB 39	Ann 10		OK	OK
i. Identify the financial/economic indicator, such as IRR, most suitable for the project type and decision context.	EB 39	Ann 10	Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project.	OK	OK
ii. When applying Option II or Option III, the financial/economic analysis shall be based on parameters that are standard in the market, considering the specific characteristics of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer. Only in the particular case where the project activity can be implemented by the project participant, the specific financial/economic situation of the	EB 39	Ann 10	All parameters and inputs used in the financial analysis are in line with market conditions. They are not subjective and they don't depend on project or project owners' specific features.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
company undertaking the project activity can be considered.					
iii. Discount rates and benchmarks shall be derived from: (a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data; (b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds' required return on comparable projects; (c) A company internal benchmark (weighted average capital cost of the company), only in the particular case referred to above in 2. The project developers shall demonstrate that this benchmark has been consistently used in the past, i.e. that project activities under similar conditions developed by the same company used the same benchmark; (d) Government/official approved benchmark where such benchmarks are used for investment decisions; (e) Any other indicators, if the project participants can demonstrate that the above Options are not applicable and their	EB 39	Ann 10	Benchmark rate is obtained by CAPM rules. Government bond rates increased by a risk premium including the beta of the project. The application is done properly in the project.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
indicator is appropriately justified. Please specify benchmark and justify.					
r. Has the below guideline followed for Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III)?	EB 39	Ann 10		OK	OK
i. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA, etc, where applicable), and, as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.	EB 39	Ann 10	All necessary costs are taken into consideration in the analysis.	OK	OK
ii. Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CDM-PDD, or in separate annexes to the CDM-PDD.	EB 39	Ann 10	All calculations are transparent and easy to follow up.	OK	OK
iii. Justify and/or cite assumptions.	EB 39	Ann 10	All assumptions are cited and justified.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iv. In calculating the financial/economic indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions.	EB 39	Ann 10	The project risks are taken into consideration in the sensitivity analysis.	OK	OK
v. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.	EB 39	Ann 10	There is no unexpected figures the analysis inputs considering the project size and etc.	OK	OK
vi. Present in the CDM-PDD a clear comparison of the financial indicator for the proposed CDM activity. Please specify details for above.	EB 39	Ann 10	The calculated IRR is compared by a benchmark set by the CAPM in which country risk premium is added to the risk free rate.	OK	OK
s. Has the below guideline followed for Sub-step 2d: Sensitivity analysis (only applicable to Options II and III)? Include a sensitivity analysis that shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions.	EB 39	Ann 10	Sensitivity analysis shows that the financial/economic attractiveness is robust to reasonable variations in the critical assumptions. However, no scenario in the sensitivity analysis makes the project attractable.	OK	OK
t. Has the outcome of Step 2 clearly mentioned with justification?	EB 39	Ann 10	The outcome of Step2 is that the project is not attractive without the carbon revenue.	OK	OK
u. In step 3: Barrier analysis have all the sub-steps as below been followed?	EB 39	Ann		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
		10			
i. Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project activity;	EB 39	Ann 10	In case the PPs make the claim for investment barriers, they should demonstrate in the PDD that the financing of the project was assured only due to the benefit of the VER revenues. Please clarify.	CAR-10	OK
ii. Sub-step 3 b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity).	EB 39	Ann 10	To be answered later		
v. Has the below guideline followed for Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project?	EB 39	Ann 10	To be answered later		
i. (a) Investment barriers: For alternatives undertaken and operated by private entities: Similar activities have only been implemented with grants or other non-commercial finance terms. No private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed CDM project activity is to be implemented, as demonstrated by the credit rating of the country or other country investments reports of reputed origin.	EB 39	Ann 10	To be answered later		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. (b) Technological barriers: Skilled and/or properly trained labour to operate and maintain the technology is not available in the relevant country/region, which leads to an unacceptably high risk of equipment disrepair and malfunctioning or other underperformance; Lack of infrastructure for implementation and logistics for maintenance of the technology, Risk of technological failure: the process/technology failure risk in the local circumstances is significantly greater than for other technologies that provide services or outputs comparable to those of the proposed CDM project activity, as demonstrated by relevant scientific literature or technology manufacturer information, The particular technology used in the proposed project activity is not available in the relevant region.	EB 39	Ann 10	Not used. OKOK		
iii. (c) Barriers due to prevailing practice: The project activity is the “first of its kind”.	EB 39	Ann 10	Not used.	OK	OK
iv. (d) Other barriers, preferably specified in the underlying methodology as examples.	EB 39	Ann 10	Not used.	OK	OK
w. Has the outcome from Step 3a clearly mentioned in PDD?	EB 39	Ann	To be answered later		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
		10			
x. Has the below guideline followed for Sub-step 3 b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)?	EB 39	Ann 10	To be answered later		
i. If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity. In other words, demonstrate that the identified barriers do not prevent the implementation of at least one of the alternatives. Any alternative that would be prevented by the barriers identified in Sub-step 3a is not a viable alternative, and shall be eliminated from consideration.	EB 39	Ann 10	To be answered later		
ii. Provide transparent and documented evidence, and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers and whether alternatives are prevented by these barriers.	EB 39	Ann 10	To be answered later		
iii. The type of evidence to be provided should include at least one of the following: (a) Relevant legislation, regulatory information or industry norms; (b) Relevant (sectoral) studies or surveys (e.g. market surveys, technology	EB 39	Ann 10	To be answered later		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
studies, etc) undertaken by universities, research institutions, industry associations, companies, bilateral/multilateral institutions, etc; (c) Relevant statistical data from national or international statistics; (d) Documentation of relevant market data (e.g. market prices, tariffs,II); (e) Written documentation of independent expert judgments from industry, educational institutions (e.g. universities, technical schools, training centres), industry associations and others. Please specify.					
y. Has the outcome from Step 3 clearly mentioned in PDD?	EB 39	Ann 10	To be answered later		
z. In steelevant practise analysis have all the sub-steps as below followed?	EB 39	Ann 10		OK	OK
i. Sub-step 4a: Analyze other activities similar to the proposed project activity;	EB 39	Ann 10	Similar activities have been discussed.	OK	OK
ii. Sub-step 4b: Discuss any similar Options that are occurring.	EB 39	Ann 10	Similar options have been discussed.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
aa. Has the below guideline followed for Sub-step 4a: Analyze other activities similar to the proposed project activity? Provide an analysis of any other activities that are operational and that are similar to the proposed project activity. Other CDM project activities are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.	EB 39	Ann 10	Please discuss why the selection of Adana region is appropriate. Please provide the full list of power plants first and then narrow down the list by means of capacity, region, etc.	CAR-13	OK
bb. Has the below guideline followed for Sub-step 4b: Discuss any similar Options that are occurring? If similar activities are identified, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially/economically attractive (e.g., subsidies or other financial flows) and which the proposed project activity cannot use or did not face the barriers to which the	EB 39	Ann 10	Similar options have been discussed.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
proposed project activity is subject. In case similar projects are not accessible, the PDD should include justification about non-accessibility of data/information.					
cc. Has the outcome from Step 4 clearly mentioned in PDD?	EB 39	Ann 10	Electricity generation from HEPP business is not a common practice, especially without VER revenues.	OK	OK
dd. Has it been prolevaelelevane project is additional?	EB 39	Ann 10	To be answered later		
a. Prior consideration of the clean development mechanism					
a. Is the project activity start date prior to the date of publication of the PDD for stakeholder comments?	VVM	98	E mails regarding the decision to use VER revenues dated (25 june 2010) is provided to DOE. When the timeline is revised and investment decision date is determined, prior consideration will be considered.	OK	OK
b. If yes, were the CDM benefits considered necessary in the decision to undertake the project as a proposed CDM project activity?	VVM	98	To be answered later	OK	OK
c. Is the start date of the project activity, reported in the PDD, in accordance with the "Glossary of	VVM	99	To be answered later	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
CDM terms”, which states that “The starting date of a CDM project activity is the earliest date at which either the implementation or construction or real action of a project activity begins.”?					
d. Does the project activity require construction, retrofit or other modifications?	VVM	99	Project is greenfield.	OK	OK
e. If yes, is it ensured that the date of commissioning cannot be considered as the project activity start date?	VVM	99	Date of commissioning is not start date.	OK	OK
f. Is it a new project activity (a project activity with a start date on or after 02 August 2008) or an existing project activity (a project activity with a start date before 02 August 2008)?	VVM	100	Project is new.	OK	OK
g. For a new project, for which PDD has not been published for global stakeholder consultation or a new methodology proposed to the CDM Executive Board before the project activity start date, had PPs informed the host Party DNA and the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status? (Provide reference to such confirmation from host Party DNA and UNFCCC secretariat).	VVM	101	N/A	OK	OK
h. For an existing project activity, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, are the following evidences provided:	VVM	102	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. evidence that must indicate that awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project, including, inter alia:	VVM	102	N/A	OK	OK
a. minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participant, to undertake the project as a proposed CDM project activity?	VVM	102	N/A	OK	OK
iii. reliable evidence from project participants that must indicate that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation, including, inter alia:	VVM	102	N/A	OK	OK
a. contract with consultants for CDM/PDD/methodology services?	VVM	102	N/A	OK	OK
b. Emission Reduction Purchase Agreements or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds)?	VVM	102	N/A	OK	OK
c. evidence of agreements or negotiations with a DOE for validation services?	VVM	102	N/A	OK	OK
d. submission of a new methodology to the CDM Executive Board?	VVM	102	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
e. publication in newspaper?	VVM	102	N/A	OK	OK
f. interviews with DNA?	VVM	102	N/A	OK	OK
g. earlier correspondence on the project with the DNA or the UNFCCC secretariat?	VVM	102	N/A	OK	OK
h. Has the chronology of events including time lines been appropriately captured and explained/detailed in the PDD?	VVM	102	N/A	OK	OK
b. Identification of alternatives					
b. Does the approved methodology that is selected by the proposed CDM project activity prescribe the baseline scenario and hence no further analysis is required?	VVM	105	Baseline is stated in the methodology.	OK	OK
c. If no, does the PDD identify credible alternatives to the project activity in order to determine the most realistic baseline scenario?	VVM	105	N/a	OK	OK
d. Does the list of alternatives given in the PDD ensure that:	VVM	106		OK	OK
i. the list of alternatives includes as one of the options that the project activity is undertaken without being registered as a proposed CDM project activity?	VVM	106	Considered.	OK	OK
ii. the list contains all plausible alternatives that the DOE, on the basis of its local and sectoral knowledge, considers to be viable means of supplying the outputs or services	VVM	106	Construction of a thermal- power plant with equivalent installed capacity or annual electricity generation	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
that are to be supplied by the proposed CDM project activity?			and Construction of a new power plant generating the same annual power generation from other renewable sources such as wind power, solar power and biomass.		
iii. the alternatives comply with all applicable and enforced legislation?	VVM	106	Alternatives comply with all applicable and enforced legislation.	OK	OK
c. Investment analysis					
i. Has investment analysis been used to demonstrate the additionality of the proposed CDM project activity?	VVM	108	IRR analysis is used.	OK	OK
j. If yes, does the PDD provide evidence that the proposed CDM project activity would not be:	VVM	108		OK	OK
i. the most economically or financially attractive alternative?	VVM	108	N/A	OK	OK
ii. economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs)?	VVM	108	IRR is below the benchmark, project is not economically attractive.	OK	OK
k. Was this shown by one of the following approaches?	VVM	109		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. The proposed CDM project activity would produce no financial or economic benefits other than CDM-related income. Document the costs associated with the proposed CDM project activity and the alternatives identified and demonstrate that there is at least one alternative which is less costly than the proposed CDM project activity.	VVM	109	As project will obtain electricity sales revenues, N/A	OK	OK
ii. The proposed CDM project activity is less economically or financially attractive than at least one other credible and realistic alternative.	VVM	109	Option II is only applicable to projects where alternatives should be similar investment projects in terms of generation capacity.	OK	OK
iii. The financial returns of the proposed CDM project activity would be insufficient to justify the required investment.	VVM	109	Between Option II and Option III, benchmark financial analysis (Option III) is selected as the analysis method.	OK	OK
l. Is the period of assessment limited to the proposed crediting period of the CDM project activity?	EB 51	Ann 58	The analysis period is 35+2 (construction) which is higher than the VER crediting period.	OK	OK
m. Does the project IRR and equity IRR calculations reflect the period of expected operation of the underlying project activity (technical li-et-me), or - if a shorter perio- i- chosen - include the fair value of the project activity assets at the end of	EB 51	Ann 58	IRR calculation reflects the technical lifetime of the project activity and since the analysis period is 35 years, fair value is calculated properly.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the assessment period?					
n. Does the IRR calculation include the cost of major maintenance and/or rehabilitation if these are expected to be incurred during the period of assessment?	EB 51	Ann 58	There is no additional maintenance expense needed regarding rehabilitation.	OK	OK
o. Do the project participants justify the appropriateness of the period of assessment in the context of the underlying project activity, without reference to the proposed CDM crediting period?	EB 51	Ann 58	45 years of analysis period is acceptable.	OK	OK
p. Does the cash flow in the final year include a fair value of the project activity assets at the end of the assessment period?	EB 51	Ann 58	There is a fair value calculation done at the end of assessment period.	OK	OK
q. Has the fair value been calculated in accordance with local accounting regulations where available, or international best practice?	EB 51	Ann 58	Fair value calculation is in line with the local accounting principles.	OK	OK
r. Does the fair value calculations include both the book value of the asset and the reasonable expectation of the potential profit or loss on the realization of the assets?	EB 51	Ann 58	Potential profit or loss is not taken into consideration. Accounting based calculations are done.	OK	OK
s. Was depreciation, and other non-cash items related to the project activity, which have been deducted in estimating gross profits on which tax is calculated, added back to net profits for the purpose of calculating the financial indicator (e.g.	EB 51	Ann 58	Depreciation is added back to the net profits to obtain the cash flow.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
IRR, NPV)?					
t. Has taxation been included as an expense in the IRR/NPV calculation in cases where the benchmark or other comparator is intended for post-tax comparisons?	EB 51	Ann 58	Tax is a cash outflow item in the analysis.	OK	OK
u. Are the input values used in all investment analysis valid and applicable at the time of the investment decision taken by the project participant?	EB 51	Ann 58	No extraordinary figure is noticed in terms of being up-to-date at the time of investment.	OK	OK
v. Is the timing of the investment decision consistent and appropriate with the input values?	EB 51	Ann 58	The investment decision date is given in PDD clearly.	OK	OK
w. Are all the listed input values been consistently applied in all calculations?	EB 51	Ann 58	The input values have been consistently applied in the calculations	OK	OK
x. Does the investment analysis reflect the economic decision making context at point of the elevelevantsrecomence the project in the case of project activities for which implementation ceases after the commencement and where implementation is recommenced due to consideration of the CDM?	EB 51	Ann 58	As validated through the site; the implementation has not ceased after the commencement	OK	OK
y. Have project participants supplied the spreadsheet versions of all investment analysis?	EB 51	Ann 58	All necessary spreadsheets are supplied.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
z. Are all formulas used in this analysis readable and all relevant cells be viewable and unprotected?	EB 51	Ann 58	All formulas used in this analysis are readable and all relevant cells are viewable and they are unprotected.	OK	OK
aa. In cases where the project participant does not wish to make such a spreadsheet available to the public has the PP provided an exact read-only or PDF copy for general publication?	EB 51	Ann 58	N/A	OK	OK
bb. In case the PP wishes to black-out certain elements of the publicly available version, is it justifiable?	EB 51	Ann 58	N/A	OK	OK
cc. Was the cost of financing expenditures (i.e. loan repayments and interest) included in the calculation of project IRR?	EB 51	Ann 58	N/A	OK	OK
dd. In the calculation of equity IRR, has only the portion of investment costs which is financed by equity been considered as the net cash outflow?	EB 51	Ann 58	N/A Project IRR is not calculated.	OK	OK
ee. Has the portion of the investment costs which is financed by debt been considered a cash outelelevantsslcualtion of equity IRR? (this is not allowed)	EB 51	Ann 58	The debt portion of the investment financing is not taken into equity IRR calculations.	OK	OK
ff. Was a pre-tax benchmark be applied?	EB 51	Ann	The analysis is done based on the after tax values and the benchmark is applied accordingly.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
		58			
gg. In cases where a post-tax benchmark is applied, is actual interest payable taken into account in the calculation of income tax?	EB 51	Ann 58	Interest expenses are taken into consideration.	OK	OK
hh. In such situations, was interest calculated according to the prevailing commercial interest rates in the region, preferably by assessing the cost of other debt recently acquired by the project developer and by applying a debt-equity ratio used by the project developer for investments taken in the previous three years?	EB 51	Ann 58	The interest is calculated by the commercial interest rates agreed with the bank.	OK	OK
ii. In cases where a benchmark approach is used is the applied benchmark appropriate to the type of IRR calculated?	EB 51	Ann 58	The benchmark is appropriate to the calculated IRR.	OK	OK
jj. Has local commercial lending rates or weighted average costs of capital (WACC) selected as appropriate benchmarks for a project IRR?	EB 51	Ann 58	N/A Equity IRR is calculated.	OK	OK
kk. Has required/expected returns on equity selected as appropriate benchmark for an equity IRR?	EB 51	Ann 58	Appropriate benchmark is used to compare with the equity IRR.	OK	OK
ll. In case benchmarks supplied by relevant national authorities selected is it applicable to the project activity and the type of IRR calculation	EB 51	Ann	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
presented?		58			
mm. In the cases of projects which could be developed by an entity other than the project participant is the benchmark applied based on publicly available data sources which can be clearly validated?	EB 51	Ann 58	N/A	OK	OK
nn. Have internal company benchmarks/expected returns (including those used as the expected return on equity in the calculation of a weighted average cost-of-capital - WACC) been applied in cases where there is only one possible project developer?	EB 51	Ann 58	N/A	OK	OK
oo. In such cases, have these values been used for similar projects with similar risks, developed by the same company or, if the company is brand new, would have been used for similar projects in the same sector in the country/region?	EB 51	Ann 58	N/A	OK	OK
pp. Has a minimum clear evidence of the resolution by the company's Board and/or shareholders been provided to the effect as above?	EB 51	Ann 58	N/A	OK	OK
qq. Has a thorough assessment of the financial statementelevanthe projec- d-veloper - including the pr-po-ed WACC - to assess the past financial behavior of the entity during at least the last 3 years in relation to similar projects been conduted?	EB 51	Ann 58	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
rr. Does the risk premiums applied in the determination of required returns on equity reflect the risk profile of the project activity being assessed, established according to national/international accounting principles? (It is not considered reasonable to apply the rate general stock market returns as a risk premium for project activities that face a different risk profile than an investment in such indices.)	EB 51	Ann 58	Country risk is taken into calculations to obtain benchmark. Beta figures are taken from Bloomberg properly.	OK	OK
ss. Has an investment comparison analysis and not a benchmark analysis used when the proposed baseline scenario leaves the project participant no other choice than to make an investment to supply the same (or substitute) products or services?	EB 51	Ann 58	The baseline does not leave project participant no other choice than to make an investment to supply the same (or substitute) products or services; hence the checklist question is not applicable.	OK	OK
tt. Have variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues been subjected to reasonable variation (positive and negative) and the results of this variation been presented in the PDD and be reproducible in the associated spreadsheets?	EB 51	Ann 58	All variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues been subjected to reasonable variation (positive and negative) and the results of this variation been presented in the PDD and be reproducible in the associated spreadsheets.	OK	OK
uu. Have a corrective action been raised for a variable to be included in the sensitivity analysis which constitute less than 20% and have a	EB 51	Ann	There is no more parameter needed to be included in the sensitivity analysis which constitute less than 20% and have a material	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
material impact on the analysis ?		58	impact on the analysis.		
vv. Is the range of variations selected is reasonable in the project context?	EB 51	Ann 58	10% of variations are reasonable to see the project risks.	OK	OK
ww. Dos the variations in the sensitivity analysis at least cover a range of +10% and -10%, unless this is not deemed appropriate in the context of the specific project circumstances?	EB 51	Ann 58	The sensitivity analysis and obtained results are appropriate. There is nothing to do more.	OK	OK
xx. In cases where a scenario will result in the project activity passing the benchmark or becoming the most financially attractive alternative, is an assessment done of the probability of the occurrence of this scenario in comparison to the likelihood of the assumptions in the presented investment analysis, taking into consideration correlations between the variables as well as the specific socio-economic and policy context of the project activity?	EB 51	Ann 58	All scenarios in the sensitivity analysis can happen by one by or together. There is no major exception expected due to the correlation impact or the probability occurrence.	OK	OK
yy. Was the plant load factor defined ex-ante in the CDM-PDD according to one of the following options:	EB 48	Ann 11	Please define plant load factor in the PDD.	CL-20	OK
i. The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project	EB 48	Ann 11			

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
activity for implementation approval?					
ii. The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company)?	EB 48	Ann 11			
zz. Was a thorough assessment of all parameters and assumptions used in calculating the relevant financial indicator, and determine the accuracy and suitability of these parameters using the available evidence and expertise in relevant accounting practices conducted?	VVM	111	All parameters and assumptions used in calculating the relevant financial indicator are verified. The accuracy and suitability of these parameters are checked.	OK	OK
aaa. Were the parameters cross-checked against third-party or publicly available sources, such as invoices or price indices?	VVM	111	All financial figures are cross checked (Exchange rate, tax rate, risk premium etc)	OK	OK
bbb. The relevance and correctness of computations carried out and documented by the project participants assessed?	VVM	111	The correctness of computations is checked.	OK	OK
ccc. Was the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions assessed?	VVM	111	There is no need to do further improvement in the sensitivity analysis.	OK	OK
ddd. Is the type of benchmark applied is suitable for the type of financial indicator presented?	VVM	112	The benchmark calculation is suitable for the IRR calculation	OK	OK
eee. Do any risk premiums applied determining the benchmark reflect the risks	VVM	112	Country risk is taken into calculations to obtain benchmark.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
associated with the project type or activity?					
fff. To determine this, was it assessed whether it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark by:	VVM	112		OK	OK
i. assessing previous investment decisions by the project participants involved?	VVM	112	i. Previous investment decisions by the project participants are not taken into consideration to evaluate the performance of current project.	OK	OK
ii. determining whether the same benchmark has been applied?	VVM	112	ii.N/A	OK	OK
iii. determining if there are verifiable circumstances that have led to a change in the benchmark?	VVM	112	iii.The benchmark used to compare the IRR calculated is assumed to be not change.	OK	OK
ggg. Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed CDM project activities?	VVM	113	Please provide an excel sheet of IRR inputs including (input name, input value, reference document name and page number, reference document page). All reference documents should be dated before the investment decision date to be determined. Table should include important costs, financial parameters (exchange rate etc), production data)	CAR-15	OK
hhh. If yes:	VVM	113		OK	OK
i. has the FSR been the basis of the decision to proceed with the investment in the project, i.e. that the period of time	VVM	113	There is no big gap between the input values of the project on investment decision date and the realized values.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
between the finalization of the FSR and the investment decision is sufficiently short for the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed?					
ii. Are the values used in the PDD and associated annexes fully consistent with the FSR?	VVM	113	The values presented in PDD are in line with the FSR.	OK	OK
iii. If not, was the appropriateness of the values validated?	VVM	113	N/A	OK	OK
iv. On the basis of its specific local and sectoral expertise, is confirmation provided, by cross-checking or other appropriate manner, that the input values from the FSR are valid and applicable at the time of the investment decision?	VVM	113	The input values are validated by DOE.	OK	OK
d. Barrier analysis					
e. Has barrier analysis been used to demonstrated the additionality of the proposed CDM project activity?	VVM	115	In case the PPs make the claim for investment barriers, they should demonstrate in the PDD that the financing of the project was assured only due to the benefit of the VER revenues. Please clarify.	CAR-10	OK
f. If yes, does the PDD demonstrate that the proposed CDM project activity faces barriers that:	VVM	115	To be answered later.		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
viii. prevent the implementation of this type of proposed CMD project activity?	VVM	115	To be answered later.		OK
ix. do not prevent the implementation of at least one of the alternatives?	VVM	115	To be answered later.		OK
g. Are there any issues that have a clear direct impact on the financial returns of the project activity, other than: risk related barriers, for example risk of technical failure, that could have negative effects on the financial performance; or barriers related to the unavailability of sources of finance for the project activity? {If yes, these issues cannot be considered barriers and shall be assessed by investment analysis. [Refer to (6.c) above]}	VVM	116	To be answered later.		OK
h. Were the barriers determined as real by:	VVM	117	To be answered later.		OK
i. assessing the available evidence and/or undertaking interviews with relevant individuals (including members of industry associations, government officials or local experts if necessary) to determine whether the barriers listed in the PDD exist?	VVM	117	To be answered later.		OK
ii. ensuring that existence of barriers is substantiated by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics?	VVM	117	To be answered later.		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iii. Is existence of a barrier substantiated only by the opinions of the project participants? (If yes, this barrier cannot be considered as adequately substantiated)	VVM	117	To be answered later.		OK
i. Were the barriers determined as preventing the implementation of the project activity but not the implementation of at least one of the possible alternatives by applying local and sectoral expertise to judge whether a barrier or set of barriers would prevent the implementation of the proposed CDM project activity and would not equally prevent implementation of at least one of the possible alternatives, in particular the identified baseline scenario?	VVM	117	To be answered later.		OK
e. Common practice analysis					
b. Is this a proposed large-scale, or first-of-its kind small-scale project activity?	VVM	119	Project is large scale	OK	OK
c. If yes, was common practice analysis carried out as a credibility check of the other available evidence used by the project participants to demonstrate additionality?	VVM	119	Common practice analysis is carried out	OK	OK
d. Was it assessed relevant geographical scope (e.g. defined region) of the common practice analysis is appropriate for the assessment of common practice related to the project activity's technology or industry type? (For certain	VVM	120	Please discuss why the selection of Adana region is appropriate. Please provide the full list of power plants first and then narrow down the list by means of capacity, region, etc.	CAR-13	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
techelevant relevatn region for assessment will be local and for others it may be transnational/global.					
e. Was a region other than the entire host country chosen?	VVM	120	The Seyhan River Basin entails the provinces of Adana, Kahramanmaras and Osmaniye provinces. This basin is chosen for analysis.	OK	OK
f. If yes, was the explanation why this region is more appropriate assessed?	VVM	120	A river basin is defined as the land area that is drained by a river and its tributaries. According to the River Basin Map of Turkey, there are twenty five river basins ³ and the Adana province is situated in the Seyhan River Basin. The Seyhan River Basin entails the provinces of Adana, Kahramanmaras and Osmaniye provinces	OK	OK
g. Using official sources and local and industry expertise, was it determined to what extent similar and operational projects (e.g., using similar technology or practice), other than CDM project activities, have been undertaken in the defined region?	VVM	120	Similar projects have been discussed in the PD.	OK	OK
h. Are similar and operational projects, other than CDM project activities, already "widely observed and commonly carried out" in the defined	VVM	120	Some of the information provided in section sub	CL-18	OK

³ <http://www.cografyaforum.com/forum/index.php/topic,543.0>

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
region?			step 4 a should be given in sub step 4b.		
9.			Please correct format of table 20.		
i. If yes, was it assessed whether there are essential distinctions between the proposed CDM project activity and the other similar activities?	VVM	120	It is not possible to compare all these projects with the subject project in respect to carbon revenues. There is no detailed information accessible for the similar projects if they benefit from carbon revenues or not, since there is no registration authority in the host country to apply for this information.	OK	OK
9. Monitoring plan					
a. Does the PDD include a monitoring plan?	VVM	122	Yes	OK	OK
b. Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVM	122	Yes	OK	OK
c. Were the list of parameters required by the the selected methodology identified?	VVM	123	Yes	OK	OK
d. Does the monitoring plan contains all necessary parameters?	VVM	123	Yes	OK	OK
e. Are the parameters clearly described?	VVM	123	Please explain monitoring methods for EG facility.	CAR-2	OK
f. Does the means of monitoring described in the plan comply with the requirements of the	VVM	123	Yes	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodology?					
g. Are all data and parameters monitored as per monitoring methodology?	ACM	0002 v.11	Yes	OK	OK
h. Are all data collected as part of monitoring archived electronically and kept at least for 2 years after the end of the last crediting period?	ACM	0002 v.11	Please state if % 100 of the data is to be kept at least for 2 years after the end of the last crediting period	CL-13	OK
i. Are 100% of the data monitored, if not indicated otherwise?	ACM	0002 v.11	%100 of the data will be kept even after 2 years after the end of the crediting period.	OK	OK
j. Are measurements conducted with calibrated measurement equipment according to relevant industry standards?	ACM	0002 v.11	Please explain in details how data quality is achieved for EG facility. What are accuracy classes of meters, how will PP notice if one of the meters go out of calibration and how will past data be retrieved. Is a scada system recording the generation data. Please clearly identify the procedure to monitor the data and to cross check the data.	CAR-3	OK
10.			Please provide more details on calibration. Will calibration be done in line with a regulation? Please provide reference.	CAR-7	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
k. Are the monitoring provisions in the tools referred to in the methodology correctly applied?	ACM	0002 v.11	Monitoring provisions are correctly applied.	OK	OK
l. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVM	123	Monitoring is feasible.	OK	OK
m. Are the following means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified:	VVM	123		OK	OK
i. data management procedures?	VVM	123	Please explain in more details the data management procedures.	CL-14	OK
ii. quality assurance procedures?	VVM	123	Please explain in more details the QA/QC procedures.	CL-15	OK
iii. quality control procedures?	VVM	123			
10. Sustainable development					
a. Does the CDM project activity assists Parties not included in Annex I to the Convention in achieving sustainable development?	VVM	125	Turkey is not a host party. This question is not applicable.	OK	OK
b. Does the letter of approval by the DNA of the host Party confirm the contribution of the proposed CDM project activity to the sustainable	VVM	126	Turkey is not a host party, it does not have a DNA. This question is not applicable.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
development of the host Party?					
11. Local stakeholder consultation					
a. Were local stakeholders (public, including individuals, groups or communities affected, of likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity) invited by the PPs to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC website?	VVM	128	LSC meeting is done as it is mandatory in EIA regulation.	OK	OK
b. Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVM	129	Please provide the meeting minutes of the stakeholder meeting or provide the presentation that was used in the meeting.	CL-10	OK
11.			Please explain how comments were collected during the meetings and provide hard copies if available.	CAR-4	OK
c. Is the summary of the comments received as provided in the PDD complete?	VVM	129	Please identify stakeholders and their comments	CL-11	OK
d. Have the project participants taken due account of any comments received and described this process in the PDD?	VVM	129	There is no due account taken.	OK	OK
12. Environmental impacts					
a. Have the project participants submitted documentation on the analysis of the	VVM	131	EIA positive document is provided to DOE.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
environmental impacts of the project activity?					
b. Have the project participants undertaken an analysis of environmental impacts?	VVM	132	EIA positive document is provided to DOE.	OK	OK
c. Does the host Party require an environmental impact assessment?	VVM	132	EIA positive document is provided to DOE.	OK	OK
d. If yes, have the project participants undertaken an environmental impact assessment?	VVM	132	EIA positive document is provided to DOE.	OK	OK

Table 3 Legal Requirements

CHECKLIST QUESTION	Ref.	MoV *	COMMENTS	Draft Concl	Final Concl
1. Legal requirements					
1.1. Is the project activity environmentally licensed by the competent authority?	2	DR	EIA positive document is provided to DOE.	OK	OK
1.2. Are the conditions of the environmental license being met?	2	DR	EIA positive document is provided to DOE.	OK	OK
1.3 Are the conditions of the Designated National Authority being met?	2	DR	EIA positive document is provided to DOE.	OK	OK

Table 4 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action	Ref. to	Summary of project owner response	Validation team conclusion
---	---------	-----------------------------------	----------------------------

requests by validation team	checklist question in table 1 and 2		
<u>CAR-1</u> Please indicate purpose of monitoring	Table 1 2.d.ff	Purpose of the monitoring process has been included in section 4.3. of the Revised VCS PDD.	<u>Review 1:</u> The purpose of the monitoring plan is to ensure that the monitoring and calculation of emission reductions of the proposed Project within the crediting period is complete, consistent, clear and accurate. <u>The corrective action request is closed.</u>
<u>CAR-2</u> Please explain monitoring methods for EG facility.	Table 1 2.d.ff	Monitoring methods for EG facility have been clarified in the Revised VCS PDD. <u>Respond to Review 1:</u> Monitoring methods for EG facility has been revised in the VCS PDD.	<u>Review 1:</u> Please explain which documents are exactly to be used for monitoring and cross check of EG facility. <u>The corrective action request is still</u>

			<u>open.</u> <u>Review 2:</u> The mention is stated in section 4.2 for the parameter EGfacility,y <i>“TEIAS readings and monthly invoices will be cross checked with the PMUM records”</i> <u>The corrective action request is closed.</u>
<u>CAR-3</u> Please explain in details how data quality is achieved for EG facility. What are accuracy classes of meters, how will PP notice if one of the meters go out of calibration and how will past data be retrieved. Is a scada system recording the generation data. Please clearly identify the procedure to monitor the data and to cross check the data.	Table 1 2.d.ff	Necessary applications have been made.in section 4.3 of the Revised VCS PDD.	<u>Review 1:</u> Info about accuracy is stated in Table 25 of the PD. If there is a measuring difference between these two meters and one of the parties (TEIAS or the company) requests for calibration of the meters, in this case, the meters will be calibrated without waiting for the periodic calibration date. <u>The corrective action request is</u>

			<u>closed.</u>
<u>CAR-4</u> Please explain how comments were collected during the meetings and provide any hard copies if available.	Table 1 2.d.nn	The EIA Reports of Eglence I-II have been provided with regard to the local stakeholders meetings <u>Respond to Review 1:</u> Since the project is developed under VCS, the project developer was not held responsible for the organisation of a local stakeholder consultation meeting. The stakeholder meeting was organised by the Ministry of Environment and Forestry and the whole process was conducted independently from the project developer. The minutes of the meeting and the list of the stakeholders have been provided. Review 2: The EIA certificate of Eglence-II has been reinserted to the revised VCS PD. With respect to the project activity, a record book has been provided in order	<u>Review 1:</u> Please state where in the 2 EIA reports the answer to question is. <u>The corrective action request is still open.</u> <u>Review 2:</u> Meeting list of participants is provided. 42 participants have been attended under the process of EIA. EIA certificates are provided in Annex 2 "EIA Positive Reports of the Project" Please re-insert the EIA certificate of Eglence-II. Please also provide mechanisms for on-going communication. <u>The corrective action request is still</u>

		to monitor the on-going mechanism. The record book entails four basic information; stakeholders' personal info, stakeholder request, project developer's response to the request and how the request is closed. The record book will be provided at the first verification period.	<u>open.</u> <u>Review 3:</u> The EIA certificate of Eglenze-II is provided. On-going mechanism is defined in PD. The record book will be provided at the first verification. <u>The corrective action request is closed.</u>
<u>CAR-5</u> In the timeline provided, please provide references for the following dates: Contact with PDD Consultants Revision of Feasibility Calculations Investment Decision Construction Start-point of no return Please also include dates and evidences for loan	Table 1 2.d.oo	The first pages and the last page of the contract between the project developer and the PDD consultant has been provided. As for the investment decision, the date of the real action of the project), related e-mail exchanges have been presented. Construction agreement, verifying the start of the construction, has been provided	<u>Review 1:</u> VER consultancy contract is dated 10/03/2009. Revision of Feasibility Calculations have been done on June 2010. Loan agreement is signed on 07/07/2011.

agreement and equipment contract. Please define investment decision date accordingly (as first real action of the project)			
		<u>Respond to Review 1:</u> The whole of the construction contract dated 14/12/2010 has been provided. The date of the start of construction has been changed to 14th December 2010, in line with the construction agreement. PDD is revised accordingly. <u>Respond to Review 2:</u> The project developer stated that the cost of the construction was calculated taking unit prices into consideration. The unit prices for construction have been provided.	Please provide whole of the document “construction contract” (dated 14/12/2010) as from the document provided, it can not be understood for what the contract is signed. The construction cost should also be referenced and validated by DOE. Besides, in section 1.5 construction start date is expressed as January 2011. This is not in line with the provided contract. Please clarify. <u>Review 2:</u> Construction agreement (dated 14/12/2010) is provided. Construction start date 14/12/2010

		is stated in the section 1.5 and Table 18 Project Timeline of the VCS PD. The construction cost should also be referenced and validated by DOE. <u>The corrective action request is still open.</u> <u>Response To Review 3:</u> The readable DSI unit prices has been provided on attachments folder and the quantities can be seen in the studies. There are some small differences in quantities in the previous FSR. This is because of some changes in the design of the project activity. Unit prices are multiplied with the quantities and the construction costs are calculated. (Please see <i>Eğlence-I HES Keşif Özeti (DSİ-2010 B.F).xls</i> & <i>Eğlence-II HES Keşif Özeti (DSİ-2010 B.F).xls</i>). Also, an explanation has been provided to clarify how unit prices were determined for the Eğlence I and Eğlence-II HEPP construction costs on <i>Eğlence-I HES Keşif</i>	<u>Review 3:</u> The unit prices are not clear. Please clearly define construction cost. Also unit prices are unreadable. Site construction cost is given as 2,124,000 \$.Please provide construction cost clearly and give references for construction calculation. <u>The corrective action request is still open.</u> <u>Review 4:</u> The unit prices are provided correctly. An excel sheet is provided for the IRR inputs.
--	--	---	---

		Özeti (DSİ-2010 B.F).xls.	<u>The corrective action request is closed.</u>
		The equipment contract has been provided.	Please provide equipment contract. <u>Review 2:</u> The equipment contracts are provided for Eglence I and Eglence II HEPP signed with Flovel Energy. <u>The corrective action request is closed.</u>
		According to the time line, first real action of the project activity is the date of the construction agreement dated 14/12/2010.	Please determine investment decision date according to the timeline (first real action for the project) <u>Review 2:</u> The first real action date is defined as 14/12/2010 in Project timeline of the VCS PD.

			<u>The corrective action request is closed.</u>
<u>CAR-6</u> Please explain monitoring methods for EG facility.	Table 1 2.h.b.	Monitoring methods have been presented in the revised VCS PDD.	<u>Review 1:</u> Issue is discussed in CAR-2. <u>The corrective action request is closed.</u>
<u>CAR-7</u> Please provide more details on calibration. Will calibration be done in line with a regulation? Please provide reference.	Table 1 2.h.c.	Details on calibration have been included to emphasize that calibration is to be done in line with a regulation. Necessary reference is provided in the Revised VCS PDD.	<u>Review 1:</u> Details on calibration are provided. <u>The corrective action request is closed.</u>
<u>CAR-8</u> Please explain contributions to sustainable development	Table 2 5.d.iii	Contributions of the project to sustainable development has been explained under the section "Further Information" in 1.13.	<u>Review 1:</u> Contributions of the project to

			sustainable development have been explained. <u>The corrective action request is closed.</u>
--	--	--	---

<u>CAR-10</u> In case the PPs make the claim for investment barriers, they should demonstrate in the PDD that the financing of the project was assured only due to the benefit of the VER revenues. Please clarify.	Table 2 5.0	Email exchanges are to be provided. <u>Respond to Review 1:</u> Barrier Analysis has been excluded from the PDD.	<u>Review 1:</u> According to “EB50 Annex 13” Barriers that can be mitigated by additional financial means can be quantified and represented as costs and should not be identified as a barrier for implementation of project while conducting the barrier analysis, but rather should be considered in the framework of investment analysis. As this is already done in the PD, please demonstrate that there are other proofs that project has investment barrier. Proofs should be in line with EB50 annex 13.
--	------------------------	--	--

			<u>The corrective action request is still open.</u> <u>Review 2:</u> Step 3 Barrier analysis is excluded from the VCS PD. <u>The corrective action request is closed.</u>
--	--	--	--

<u>CAR-11</u> Please provide a reference document for reservoir area.	Table 2 5.p	A reference document displaying the reservoir area has been provided. <u>Respond to Review 1:</u> In the feasibility Report, on page 7-2, it is stated that a negligible size of a regulation pond would come into existence. With respect to the information given above, it is understood that the project developer has not measured the area of the regulation pond before. The project developer is informed about the necessity of regular measurement of the area of the regulation pond for monitoring and they responded affirmatively. As a result, information regarding the regulation pond has been provided and PDD has been revised accordingly.	<u>Review 1:</u> Please provide a reference showing area of the reservoir in m2 <u>The corrective action request is still open.</u> <u>Review 2:</u> The reference for reservoir area is provided. Eglence-I reservoir area is 87216.410m2 and Eglence-II reservoir area is 10491.275m2. APJ (Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full) parameter is added in monitoring plan.
--	------------------------	---	--

			<u>The corrective action request is closed.</u>
<u>CAR-12</u> The license of the project is for 49 years starting from 2007. Actual operation will be shorter as this period includes the construction years, too. IRR is calculated for 51 years. These are not in line. Please clarify.	Table 2 4.1.17.1	The technical lifetime of the project has been revised 35 years and the financial projection has also been corrected in line with the technical lifetime. Please see the revised IRR Calculation Excel Sheet. On the other hand, benchmark IRR has also been revised according to the technical lifetime. Respond to Review 1: The project lifetime is defined as 35 years as suggested by DSI (the estimated operational lifetime of the electromechanical equipments) The financial analysis is performed over the 37 year period (2 years for investment period and 35 years for the estimated operational lifetime of the electromechanical equipments as suggested by DSI). This therefore includes the investments made by the project owner during the construction phase and	<u>Review 1:</u> IRR is calculated for 35 years. In the PD, it is stated that 51 years are mentioned. <u>The corrective action request is still open.</u> <u>Review 2:</u> The mention is corrected, the project lifetime is defined as 35 years in the PDD. <u>The corrective action request is closed.</u>

		the operational costs along the lifetime of the project. The indication that IRR was calculated for 51 years has been excluded from the PDD. PDD is revised accordingly.	
<u>CAR-13</u> Please discuss why the selection of Adana region is appropriate. Please provide the full list of power plants first and then narrow down the list by means of capacity, region, etc.	Table 2 8.aa	According to the map of the River basins of Turkey, the project is situated in the Seyhan river basin. The mentioned map has been provided.	<u>Review 1:</u> A river basin is defined as the land area that is drained by a river and its tributaries. According to the River Basin Map of Turkey, there are twenty five river basins ⁴ and the Adana province is situated in the Seyhan River Basin. The Seyhan River Basin entails the provinces of Adana, Kahramanmaras and Osmaniye provinces. Amnalysis is carried out here. <u>The corrective action request is closed.</u>
<u>CAR-14</u>		Not understood	Yield curve function may not be a good model in terms of fitting performance.

⁴ <http://www.cografyaforum.com/forum/index.php/topic,543.0>

1. Please show the significance of the parameters found in the yield curve analysis.			Significance figures show the success of the model. There is no need to do any more calculation. OK
2. Are there any other costs related to the loan such as commissions (management, import and guarantee letter) and commitment fees etc.?		To be on the conservative side only the basic parameters related to the project financing are included to the IRR calculations.	OK
3. Please update the benchmark rate in PDD, table 14		Corrected according to the IRR calculations.	OK
4. It is found that annual cost is calculated as 271.715\$ in IRR excel file. However, it is used as 803.816\$. Please validate the figure used in Model.		Annual operational costs for Egence InIII.... and respectively. These figures are obtained from the firms revised feasibility calculations and the equity of this project has been calculated according to these figures. Please see IRR excel, model sheet cells E34: BA 34	OK
5. Please reduce the Carbon crediting period to 7 years.		The crediting period has been defined as 10 years (renewable once)	OK
6. Please check the depreciation years used in the analysis. They must be in line with the Turkish on the statutory accounting principles. Please also note that there mustn't be a depreciation calculation for the assets which has 35 years depreciation period.		Depreciation years has been checked and corrected in line with the useful lifetimes defined by Turkish Revenue Administration. http://www.gib.gov.tr/fileadmin/user_upload/	OK

		Yararli Bilgiler/amortisman oranlari2011.html)	
7. The period of assessment is 50 years. However, there exist no renewal expenses in the 50 years of period. Please add some renewal expenses.		The period of assessment has been corrected as 37 years. (2 years for the construction and 35 years for the operational lifetime)	OK
8. Please state which analysis period should be taken into consideration by us. There is no big problem in the analysis of 49 years period. However, there are some complications to be corrected in other analysis. For example, fair value should be calculated at the end of the analysis period for the 20, 30 and 40 years period analysis.		The period of assessment has been revised as 35 years, according to the technical lifetime of the electromechanical equipments. The assessments for 20, 30 and 40 years have been excluded from the IRR Calculation Excel Sheet.	OK
9. When investment cost is changed in the sensitivity analysis, depreciation periods don't change automatically. Please do the necessary corrections so that cash flow and depreciation calculations are linked each other for the investment cost.		The formula in the IRR Calculation Excel Sheet regarding the depreciation calculation has been corrected. In the revised excel sheet, the depreciation costs change automatically when the investment amount changes. Respond to Review 1: The calculation formulas of the investment details in the IRR excel sheet have been corrected.	Investment details part in excel study has some formulas to adapt the sensitivity coefficients but the formulas for year 1 seems not correct. As an example, formulas in row 43 links to row 44 in sensitivity coefficient column. Please correct the formulas. Review 2: OK
10. Please give reference for the loan interest rate.		The loan interest rate is assumed as 5.0%.	OK

Please give information whether the loan rate is floated or fixed.		The reference for this rate has been provided both in the IRR calculation excel sheet and the PDD.	
11. Please update the PDD based on the new IRR outputs after necessary corrections.		All corrective action requests regarding the IRR calculation have been responded and the PDD has been updated accordingly.	OK <u>The corrective action request is closed.</u>
<u>CAR-15</u> Please provide an excel sheet of IRR inputs including (input name, input value, reference document name and page number, reference document page). All reference documents should be dated before the investment decision date to be determined. Table should include important costs, financial parameters (exchange rate etc), production data)		The excel sheet was provided in the previous version. The exchange rate and the total value of depreciation have been included in the excel sheet of IRR inputs. <u>Respond to Review 2:</u> The IRR inputs have been based on the revised feasibility calculations dated June 2010. The project developer stated that these figures were acquired using the unit prices that had been used during their previous Akçay HEPP project. Based on the project developer's experience on hydro projects, the project developer therefore did not need to collect relevant proposals for the determination of an investment plan. The incentive certificate granted to Akçay HEPP has also been	<u>Review 2:</u> Please provide reference of IRR inputs. <u>The corrective action request is still open.</u> <u>Review 3:</u> Please provide references in excel sheet clearly. <u>The corrective action request is still open.</u> <u>Review 4:</u> References are provided. <u>The corrective action request is closed.</u>

		provided to get an overview of how unit prices were determined for the Eğlence I HEPP investment costs. Only an electromechanical equipment proposal was acquired dated 21st December 2010. Although the date of point-of no return has been indicated as 14th December 2010 in the timeline of the PDD, it should be taken into consideration that the proposal was submitted after relevant conversations had been realised. The electromechanical equipment proposals have been provided. In addition, in order to realise an amendment in the generation license, a current feasibility report had to be prepared and submitted to DSI first. The new feasibility report dated May 2011 has been provided. In the economical analysis section, it is presented that the total amount of investment cost is 137,699,789 TL. In Section 8.1, it is also stated that the \$/TL is considered as 1.5. Consequently, the total investment cost has been evaluated as 91,799,859 \$. As realised, the investment cost in the	
--	--	--	--

		feasibility calculation prepared in June 2010 has been undervalued. (It was estimated as 89,857,040 \$). It may be concluded that the prior feasibility calculation was realised in a conservative manner; therefore, the IRR excel sheet has not been revised taking into consideration the new figures presented in the current feasibility report. Please see Tables 9.1 and 9.9 for the details of the investment cost analysis. <u>Response to Review 3:</u> The readable DSI unit prices has been provided on attachments folder and the quantities can be seen in the studies. There are some small differences in quantities in the previous FSR. This is because of some changes in the design of the project activity. Unit prices are multiplied with the quantities and the construction costs are calculated. (Please see Eğlence-I HES Keşif Özeti (DSİ-2010 B.F).xls& Eğlence-II HES Keşif Özeti (DSİ-2010 B.F).xls).	
--	--	--	--

		Also, an explanation has been provided to clarify of how unit prices were determined for the Eğlence I and Eğlence-II HEPP construction costs on Eğlence-I HES Keşif Özeti (DSİ-2010 B.F).xls. After the these calculations and in light of the some equipment proposals,a financial feasibility table has been prepared by the company itself for Eğlence-I and Eğlence II HEPP on February 2011.(Please see <i>20110207_EglenceI_Fizibilite_GenelKabuller.pdf&20110207_Eglence II_Fizibilite_Genel Kabuller.pdf</i> on attachments). Based on the project developer's experience on hydro projects, other investment costs (others,general expenses, commissioning,unexpected etc.) have been determined. An excel sheet which includes IRR inputs (input name, input value, reference document name) has been prepared for DOE.(Please see <i>Eğlence I-II_IRR_inputs.xlsx</i> document and <i>Proposals folder for references which are under the attachments folder.</i>)	
--	--	--	--

CAR-16			
OM Calculations: The 'net electricity production' values for the years 2007 and 2008 in the bottomline of Table 9, PDD p.24, do not match with the corresponding values in the Excel sheet. Unfortunately, the Excel sheet for this numbers is pasted as "values" so that it cannot be tracked where the error is. This needs to be corrected and made compatible with the PDD.		The 'net electricity production' values for the years 2007 and 2008 in the bottomline of Table 9, PDD p.24, have been corrected with the corresponding values in the Baseline Excel sheet. Please see the revised Excel sheet provided.	<u>Review 2:</u> This checklist question will be evaluated next round of validation. <u>The corrective action request is still open.</u> <u>Review 3:</u> Corrections have been done.
BM Calculations: In the BM calculations it is necessary that the set of most recent power capacity additions in the electricity system that comprise 20% of the system generation be included. This condition, however, is not met: 38364.7 MWh of net power generation has been included whereas the 20% limit requires 38962.6 MWh. Accordingly, plants commissioned in 2006 need to be added so as to comply with the 20% hurdle (note that if 20% falls on part capacity of a unit, that unit should be fully included in the calculation) and computations need to be updated accordingly.		With the revised baseline excel sheet provided, the mentioned condition has been met. Please see the revised baseline excel sheet.	<u>Review 3:</u> Corrections have been done.
Please check: PDD Table 9 defines $c=a/b$. Is it $c=b/a$? PDD Table 10 defines unite as MWh/tCO₂. Is it tCO₂/MWh		PDD Table 9 and 10 are corrected. PDD is checked thoroughly for grammar and spelling corrections.	<u>Review 3:</u> Corrections have been done.

? There are various grammer and spelling errors in the document (e.g. Table 11 'Ultra-upercritical' instead of 'supercritical', the paragraph below saying 'Since there is no lpg fired power plant exists....'), a careful check needs to be made			<u>The corrective action request is closed.</u>
<u>CAR-17</u> Please revise common practice analysis to be in line with EB63 annex 12		The common practice analysis has been revised in line with EB63 annex 12. Respond to Review 2: The common practice analysis has been re-revised as requested. The projects' completion rates have been provided in the revised VCS PDD. The tool states that projects which are located in the same country/region are evaluated as similar. With respect to the project activity, Seyhan Basin has been taken as the region to be considered.	<u>Review 2:</u> The request of updating common practice was revaluated by the DOE and it was decided that the common practice should not be updated since the VCS was submitted to the DOE before the issuance of this guideline. The VCS PD version 02 includes new common practice analysis. Please remove the new common practice applied as per the EB63-annex 12. Also please indicate projects and their situation clearly that are located in the identified region including Mediterranean Region. <u>The corrective action request is still open.</u>

			<u>Review 3:</u> Common practice analysis is revised accordingly “Tool for the demonstration and Assessment of Additionally (Version 5.2)” <u>The corrective action request is closed.</u>

<u>CL-1</u> Please also express installed capacity in MWe as per the license	Table 1 2.d.d.	The installed capacities of Eglence I and Eglence II are 41.8 and 26.0 MWe respectively and they are presented in the revised. Amendment of the generation licences will be realised in line with the revised feasibility calculation sheets <u>Respond to Review 1:</u> The name of the project activity is “Eglence I Regulator and HEPP” as stated in the construction agreement and the reports prepared by the Ministry of the Environment and the Forestry regarding the Stakeholder Consultation Meeting IRR was calculated separately because the Consultant was presented separate feasibility calculation excel sheets. On the other hand it is easily seen that an IRR below the benchmark would be obtained even if the two of the IRR calculations were merged as one. Amendment of the generation licences will be realised due to the change in the annual generation figures in line with the revised feasibility calculation sheets .	<u>Review 1:</u> Capacities are not in line with the licences. Please clarify is the licences are to be revised? Please explain why IRR is calculated for Eglence 1 and 2 separately. <u>The clarification request is still open.</u> <u>Review 2:</u> Please provide the legal application to EMRA which is indicated February 2012. <u>The clarification request is still open.</u> <u>Review 3:</u> Please provide DSI approval for feasibility which is used in IRR. It is
---	---------------------------	--	---

	Since the mentioned amendment could not be realised yet, a signed document from the project developer has been presented indicating that the application to EMRA will be realised. <u>Respond to Review 2:</u> The project developer stated that a new feasibility report had to be prepared for the legal application to EMRA. Consequently, the new feasibility report dated May 2011 was prepared and submitted to DSI. The project developer stated that after an approval letter from DSI is acquired, the process of legal application to EMRA will be realised. They concluded that this process will be completed within two months. As a result, the legal application to EMRA regarding the change in the installed capacities will be provided during monitoring. <u>Response to Review 3:</u>	dated June 2010. Please provide an official document by DSI which defines new feasibility study evaluating are continue or an appeal document to DSI for new feasibility report(May 2010). <u>The clarification request is still open.</u> <u>Review 4:</u> DSI Approval has been provided. <u>The clarification request is closed.</u>
--	--	--

		Revised Feasibility Calculations for construction cost were made by the company itself in June 2010(Please see <i>(Eğlence-I HES Keşif Özeti (DSİ-2010 B.F).xls & Eğlence-II HES Keşif Özeti (DSİ-2010 B.F) on attachments</i>).There is no DSI approval for these studies. However, the calculations are based on DSI unit prices. In light of the above calculations and some equipment proposals, two separately feasibility calculation sheets were prepared by the company itself in February 2011.(Please see <i>‘Eğlence-I Genel Kabuller.pdf.’ and ‘Eğlence-II_Genel kabuller.pdf.’ in attachments folder. Also, proposals has been provided in attachments folder</i>). Amendment of the generation licences has been realised due to the change in the annual generation figures. Revised generation licences has been provided on attachments folder.	
		There may be two licenses for Eğlence HEPP project but the projects are bundled. For example when the	Please explain why the licences are different for both projects. Please explain why these projects are

		construction agreement is analysed, it is seen that the projects are evaluated as a single project.	bundled. <u>Review 3:</u> OK.
<u>CL-2</u> Please clarify where number 211,348 kWh/year is referenced	Table 1 2.d.d.	<u>Respond to Review 1:</u> The total electricity generation figure, 211,348 kWh/year has been obtained from the revised feasibility calculation sheets. The net generation figures for Eglence I has been given as 131,081 kWh and 80,267 kWh for Eglence II. On the other hand, the necessary amendment could not be achieved yet. Please see the document indicating that the application to EMRA will be realized by the project developer. <u>Respond to Review 2:</u> The project developer stated that a new feasibility report had to be prepared for the legal application to EMRA. Consequently, the new feasibility report dated May 2011 was prepared and submitted to DSI. The project developer stated that after an approval letter from	<u>Review 1:</u> Please refer above. <u>The clarification request is still open</u> <u>Review 2:</u> The checklist question will be evaluated after CL01 is solved. <u>The clarification request is still open.</u> <u>Review 3:</u> The checklist question will be evaluated after CL01 is solved. <u>The clarification request is still</u>

		DSI is acquired, the process of legal application to EMRA will be realised. They concluded that this process will be completed within two months. As a result, the legal application to EMRA regarding the change in the installed capacities will be provided during monitoring. <u>Response to Review 3:</u> Please see response to CL01. Amendment of the generation licences has been realised due to the change in the annual generation figures. Revised generation licences has been provided on attachments folder. Total annual generation is 205,299 kwh/year and corrected on PDD.	<u>open.</u> <u>Review 4:</u> Corrections have been done. <u>The clarification request is closed.</u>
<u>CL-3</u> Data on page 3 are not in line with the licenses. Please clarify	Table 1 2.d.d.	Data presented in the PDD are not in line with the generation licenses due to the revisions regarding the changes in the locations of the heads and water	<u>Review 1:</u> Please provide licence amendment

		discharges. The project developer stated that an amendment of the licenses will be realized. In order to proceed, first, an agreement with TEIAS will be signed in September 2011, followed by an application to EPDK in October 2011. Finally, it is anticipated that the amendment of the generation licenses will be realized in March 2011. <u>Respond to Review 1:</u> The most up to date generation licenses are presented. The project developer stated that an agreement with TEIAS was realised and an application to EPDK (EMRA) for the amendment of the installed capacity and the electricity generation figures would be realised next. For the time being, a signed document by the project developer that an application to EPDK (EMRA) will be realised has been presented. <u>Respond to Review 2:</u> The project developer stated that a new feasibility report had to be prepared for	documents or if not yet available provide the application documents. <u>The clarification request is still open</u> <u>Review 2:</u> The checklist question will be evaluated after CL01 is solved. <u>The clarification request is still open.</u> <u>Review 3:</u> The checklist question will be evaluated after CL01 is solved. <u>The clarification request is still open.</u> <u>Review 4:</u> Corrections have been done.
--	--	--	--

		the legal application to EMRA. Consequently, the new feasibility report dated May 2011 was prepared and submitted to DSI. The project developer stated that after an approval letter from DSI is acquired, the process of legal application to EMRA will be realised. They concluded that this process will be completed within two months. As a result, the legal application to EMRA regarding the change in the installed capacities will be provided during monitoring. <u>Response to Review 3:</u> Please see response to CL01.	<u>The clarification request is closed.</u>
<u>CL-4</u> Project start date is January 2011 (Construction start date) and VCS crediting period start date: 1st January 2013.	Table 1 2.d.g.i.	To be provided. <u>Respond to Review 1</u> The date of the start of construction has been changed to 14th December 2010, in line with the construction agreement. PDD is revised accordingly.	<u>Review 1:</u> Reference is still not provided. <u>The clarification request is still open</u>

Please provide a reference so that Construction start date can be validated.			<u>Review 2:</u> Construction start date is revised as 14/12/2010. Reference document has been provided. <u>The clarification request is closed.</u>
<u>CL-5</u> Please explain how the project site was used prior to the project.	Table 1 2.d.h	Section 1.10 “Conditions Prior To The Project” of the PDD has been revised. Please see the Revised VCS PDD. <u>Respond to Review 1:</u> Section 1.10 “Conditions Prior To The Project” of the PDD has been revised. Please see the Revised VCS PDD.	<u>Review 1:</u> There is an unfinished sentence in related section. <u>The clarification request is still open.</u> <u>Review 2:</u> Section 1.10 is revised in VCS PD version 03. <u>The clarification request is closed.</u>
<u>CL-6</u> Please identify any risks that may substantially affect the project’s GHG emission reductions	Table 1 2.d.l	The contention that there not any serious risks that may substantially affect the project’s GHG emission reductions have	<u>Review 1:</u> It is stated in the PD that there are

		been discussed in 1.1 of the VCS PDD.	no risk associated with the project. <u>The clarification request is closed.</u>
<u>CL-7</u> Please provide version and date of the PDD	Table 2 5.c.ii.	The version and date of the PDD has been included and presented on the cover page of the VCS PDD.	<u>Review 1:</u> Data is provided. <u>The clarification request is closed.</u>

<u>CL-8</u> Please describe how environmentally safe and sound technology, and know-how, is transferred	Table 2 2.d.ff.iv	In section 1.1, the information that environment- friendly technologies will be used and necessary trainings for the transfer of know-how will be realized has been provided. Related references may be provided if requested in the future.	<u>Review 1:</u> Explanation is provided. <u>The clarification request is closed.</u>
<u>CL-9</u> Flow diagram is presented separately. Please provide them in the PD.	Table 2 5.m.ii	Flow diagrams are provided in the Revised VCS PDD in Section 2.3.	<u>Review 1:</u> Diagrams are provided. <u>The clarification request is closed.</u>
<u>CL-10</u> Please provide the meeting minutes of the stakeholder meeting or provide the presentation that was used in the meeting.	Table 2 5.gg.ii	The EIA Reports of Eglence I-II have been provided with regard to the local stakeholders meetings. <u>Respond to Review 1:</u> Since the project is developed under VCS, the project developer was not held responsible for the organisation of a local stakeholder consultation meeting. The stakeholder meeting was organised by the Ministry of Environment and Forestry and the whole process was conducted independently from the project developer. The minutes of the meeting	<u>Review 1:</u> Please state where in the 2 EIA reports the answer to question is. <u>The clarification request is still open</u> <u>Review 2:</u> The attending list is provided.

		and the list of the stakeholders have been provided.	<u>The clarification request is closed.</u>
<u>CL-11</u> Please identify stakeholders and their comments	Table 2 5.hh	The EIA Reports of Eglence I-II have been provided with regard to the local stakeholders meetings. <u>Respond to Review 1:</u> Since the project is developed under VCS, the project developer was not held responsible for the organisation of a local stakeholder consultation meeting. The stakeholder meeting was organised by the Ministry of Environment and Forestry and the whole process was conducted independently from the project developer. The minutes of the meeting and the list of the stakeholders have been provided.	<u>Review 1:</u> Please state where in the 2 EIA reports the answer to question is. <u>The clarification request is still open</u> <u>Review 2:</u> OK <u>The clarification request is closed.</u>
<u>CL-12</u> Please state outcome of sub step of Step 1 a clearly	Table 2 8.h.	The identification and assessment of the alternatives have been realized and outcome of Sub- step 1a has been clearly	<u>Review 1:</u> Outcome is provided.

		stated in the Revised PDD.	<u>The clarification request is closed.</u>
<u>CL-13</u> Please state if % 100 of the data is to be kept at least for 2 years after the end of the last crediting period	Table 2 9.h.	Data will be recorded for each crediting period and maintained at least 2 years after its end. Necessary revision has been made in the VCS PDD	<u>Review 1:</u> Statement is provided. <u>The clarification request is closed.</u>
<u>CL-14</u> Please explain in more details the data management procedures.	Table 2 9.m.	The data management procedures have explicitly been explained in the Revised VCS PDD	<u>Review 1:</u> Clarifications are provided. <u>The clarification request is closed.</u>
<u>CL-15</u> Please explain in more details the QA/QC procedures.	Table 2 9.m.	Explanations of the QA/QC procedures in Section 4.2 have been provided in the Revised VCS PDD:	<u>Review 1:</u> Clarifications are provided. <u>The clarification request is closed.</u>
<u>CL-16</u> Please remove the word “template” from PD.		The word “template” has been removed from the PD.	<u>Review 1:</u> The word “template” is removed.

			<u>The clarification request is closed.</u>
<u>CL-17</u> Please check for latest versions of tools.		“Tool to calculate the emission factor for an electricity system, Version 02.2.1” was applied to the PDD. Section 2.1 of the PD has been revised accordingly. The latest version of “Tool for the demonstration and assessment of additionality” v.06.0.0 cannot be applied since the date of the first submission date of the project is before the publication date of the latest version of the mentioned tool. For the common practice analysis, EB63 annex 12 has been adopted. Respond to Review 2: The PDD has been revised as requested.	<u>Review 1:</u> The tool is revised as “Tool to calculate the emission factor for an electricity system, Version 02.2.1.” The checklist question is evaluated after CAR17 is solved. <u>The clarification request is still open.</u> <u>Review 2:</u> Common practice analysis is revised accordingly “Tool for the demonstration and assessment of additionally (version 5.2)”. <u>The clarification request is closed.</u>
<u>CL-18</u>			
Some of the information provided in section sub step 4 a should be given in sub step 4b.		The common practice analysis has been revised in line with EB63 annex 12..in the revised VCS PD.	<u>Review 1:</u> This checklist question will be evaluated after the CAR17 is solved.

		Respond to Review 2: The PDD has been revised as requested.	<u>The clarification request is still open.</u> <u>Review 2:</u> Common practice analysis is revised accordingly “Tool for the demonstration and assessment of additionally (version 5.2)”. <u>The clarification request is closed.</u>
Please correct format of table 20.		Format of table 20 is corrected.	
<u>CL-19</u> Please provide measurement methods for EG facility.		Measurement methods for EG facility has been provided in the revised PDD. <u>Respond to Review 2:</u> The calculation method for EGfacility,y has been provided under section 4.2 of the revised VCS PD.	<u>Review 1:</u> Measurement methods is defined as “TEIAS readings and monthly invoices” Please provide calculation method for EGfacility,y <u>The clarification request is still open.</u> <u>Review 2:</u> Calculation method for EGfacility y is provided under section 4.2 of the revised VCS PD.

			<u>The clarification request is closed.</u>
<u>CL-20</u> Please define plant load factor in the PDD.		The load factors of the plant have separately been calculated in the feasibility calculation excel sheets presented before. Load factor of a plant is calculated as annual generation figure/ installed capacity/ 8,760. As a result, the load factors of the plant come out as 36% and 35% respectively.	<u>Review 1:</u> The definition is added in section 2.5 of the VCS PD. <u>The clarification request is closed.</u>
<u>CL-21</u> Please indicate version number of VCS PD. That refers to PD version not a VCS Version.		The version number of the VCS PD is 4. It has been indicated at the cover page of the revised VCS PD.	<u>Review 1:</u> Corrections have been done. <u>The clarification request is closed.</u>
<u>CL-22</u> Please revise the investment decision date according to http://cdm.unfccc.int/EB/041/eb41rep.pdf (paragraph 67)		The investment decision date has been accepted as 14/12/2010 which is the date of the construction agreement. The indication of “the investment decision date” in the timeline has been replaced. The timeline has been revised accordingly.	<u>Review 1:</u> Corrections have been done. <u>The clarification request is closed.</u>
<u>CL-23</u> Emission reduction calculations includes 9 years in Table-1 and in related tables. Please clarify.		In Table 1, the emission reduction calculations include 10 year from 2013 to 2022.	<u>Review 1:</u> Corrections have been done. <u>The clarification request is closed.</u>