VALIDATION OF

MORDOGAN WIND POWER PROJECT, TURKEY

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Summary:

Bureau Veritas Certification has conducted the validation of Mordogan Wind Power Project, Turkey owned by Egenda Ege Enerji Üretim A.Ş., which is located in Catalkaya Neighborhood of Mordogan Municipality in Izmir - Turkey, on the basis of relevant UNFCCC criteria for the CDM, VCS v.3 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.

Project is the implementation of a greenfield wind power plant with 5 Enercon E82 turbines of 3 MW capacity and related infrastructure under the EMRA generation license EU/1622-8/1181. Project aims to supply emission free generated electricity to the interconnected national grid dominated by fossil fuel based generating units. Project will have a installed capacity of 15 MWe, expects to generate 45,588 MWh annually with a corresponding emission reduction of 26,593 tCO2eq per year.

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 document and additional background documents; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and 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 Requests, Corrective Actions Requests, and Forward Actions Requests (CLs, CARs and FARs), presented in Appendix B. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology AMS-I.D. Version 17.0 and meets all relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests the registration of the project as a VCS project activity.

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1 INTRODUCTION

1.1 Objective

Egenda Ege Enerji Üretim A.Ş. has commissioned Bureau Veritas Certification to validate its VCS project Mordogan Wind Power Project, Turkey (hereafter called “the Project”) at Catalkaya Neighborhood of Mordogan Municipality in Izmir - Turkey.

This report summarizes the findings of the validation of the Project, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The objective of a validation is to provide a through and independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan, and the project’s compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable, and meets the applicable CDM requirements and the identified criteria. Validation is a requirement for all VCU projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs), VCUs in this project’s case.

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 the requirements of paragraph 37 of the CDM M&Ps, the applicability conditions of the selected methodology and guidance issued by the Board.

The validation is not meant to provide any consulting towards the project participants. 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 as the principles of ISO 14064-2:2006 - Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements were adopted and conservativeness were preserved throughout the validation by use of conservative assumptions, values and procedures to ensure that GHG emission reductions by sources or GHG removals by sinks are not over-estimated.

1.4 Summary Description of the Project

Project is the procurement and installation of 5 Enercon E82 wind energy converters of 3 MW capacity each at Mordogan, Karaburun, Izmir, Turkey under the EMRA license EU/1622-8/1181.

It is expected that the project will generate 45,588 MWh annually (ref-14) to be supplied to the national interconnected grid. This will in turn result in an expected emission reduction of 26,593 tCO2eq. Produced electricity will be supplied to the grid through the Karaburun TS. Project aims to diversify the fossil fuel heavy generation mix of Turkish national grid with emission free renewable energy sources such as wind while increasing the use of country's wind energy potential.

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 04.0 of the Clean Development Mechanism Validation and Verification Standard, issued by CDM Executive Board after its 74th meeting on 29/07/2013 (Ref-06). 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 CDM 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.

2.2 Document Review

The Project Description (VCS-PD) submitted by FutureCamp İklim ve Enerji Ltd and additional background documents related to the project design and baseline were reviewed.

Furthermore, cross checks were made between information provided in the VCS-PD and information from sources other than those used, (if available) the VVB's sectoral or local expertise and, (if necessary) independent background investigations.

To address Bureau Veritas Certification corrective action and clarification requests, FutureCamp İklim ve Enerji Ltd revised the VCS-PD and resubmitted it on 02/01/2014 (ref-05).

The validation conclusions presented in this report relate to the project as described in the VCS-PD version 05.

2.3 Interviews

On 29/04/2013, Bureau Veritas Certification performed a site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Egenda Ege Enerji Üretim A.Ş.and FutureCamp İklim ve Enerji Ltd were interviewed (see Appendix A). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Egenda Ege Enerji Üretim A.Ş. (the Project Owner)	➢ Project background information and VCU consideration. ➢ Project technology, operation and maintenance. ➢ Project approval and implementation status. ➢ Project management and monitoring plan. ➢ Stakeholder consultation process. ➢ Common practice in the area. ➢ Government policies related to the project activity.
Local Stakeholder	➢ Project background in details ➢ Stakeholder comments ➢ Social and environmental impact of the project
FutureCamp İklim ve Enerji Ltd (the Consultant)	➢ Applicability of selected methodology. ➢ Baseline determination. ➢ Emission reductions calculation. ➢ Emission reduction monitoring plan.

2.4 Site Inspections

Project site was inspected on **29/04/2013**. As the construction activities were yet to start the layout of the site, coordinates, neighbouring areas were assessed and stakeholders were interviewed at Mordogan.

2.5 Resolution of Findings

The objective of this phase of the validation is to resolve issues that require further elaboration, research or expansion prior to Bureau Veritas Certification's positive conclusion on the project design.

A Corrective Action Request (CAR) is raised, if one of the following situations occurs:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable, verifiable and additional emission reductions;

(b) The applicable CDM and/or VCS requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

A Clarification Request (CL) is raised, if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A Forward Action Request (FAR) may also be raised during validation, to identify issues related to project implementation that require review during the first verification of the project activity.

To guarantee the transparency of the validation process, the issues raised, the responses provided by the project participants, the means of validation of such responses and references to any resulting changes in the VCS-PD or supporting annexes are documented in the Validation Protocol in Appendix B.

The validation report underwent an Internal Technical Review (ITR) before requesting registration of the project activity.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader 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/VCS 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 and CLs during the validation exercise, review of sample documents.

The reviewer may raise Clarification Requests to the validation team and will discuss these matters with the Team Leader.

After the agreement of the responses to the Clarification Requests from the validation team as well as the PP(s), the finalized validation report is accepted.

2.6 Forward Action Requests

As the site was visited at an early phase of the validation, adequateness and specifications of the monitoring meters to be installed could not be validated on-site. Therefore **FAR01** was raised by BVC validation team to ensure that the "Adequateness of the meter specifications as well as initial calibration and serial number information shall be verified during initial verification"

FAR02: The available project license indicates an installed power cap of 13.8 MW (12 x 1000 kW and 2 x 900 kW) however this setup was revised to 5 x 3000 kW later as validated through the equipment contract (ref-13). It was indicated that the revision process is under way. Hence the verification VVB will verify the revised and current EMRA Generation License.

FAR03: License and implementation are not finalized hence the WTG coordinates are not final. Verifying DOE will confirm the coordinates during initial verification.

3 VALIDATION FINDINGS

3.1 Project Details

Proposed project is the implementation of a wind power plant consisting of five wind energy turbines, 3 MW each at a site that is not used for any generation. The total capacity of the plant was validated through the project the equipment contract (ref-13) as **15 MWe**. Project will be supplying electricity to the interconnected Turkish national grid that was produced through renewable wind energy. Project activity is greenfield and does not involve capacity addition, replacement or a retrofit. Project will be implemented by Egenda Ege Enerji Üretim A.S. and Futurecamp İklim ve Enerji Ltd are the VCU consultants for the project proponent. Expected project start date is February 2015 as it is in early stages of implementation. A crediting period of ten years that can be renewed at most twice will start on 01/02/2015 and end at 31/01/2025.

According to the third party wind and energy yield assessment by Barlovento (ref-14), the expected long term net production of the plant has been determined as **45,588 MWh/year** with 3039 full power hours, corresponding to a Plant Load Factor (PLF) of **35%**, which is acceptable compared to similar plants in Turkey as well as European statistics (ref-19) is sourced from {indicated the data source and reference}, and is complying with the Para. 03 (b) of "Guidelines for the Reporting and Validation of Plant Load Factors" version 01. This expected generation would yield an emission reduction of **26,593 tCO2** annually, classified as a 'small scale' project activity under scope 1 in CDM terms (as the project is ≤15 MWe renewable energy project) and as a 'project' in VCS project scale (as the expected annual reductions are smaller than 300,000 tCO2eq).

Project is to be implemented at a hill side, in a 5 km long strip just north of the Mordogan Municipality in Aegean region, western Turkey. The muni. and the plant are both located in the Mordogan Municipality jurisdiction at Izmir Province, in the Republic of Turkey. Project site was visited prior to the commencement of construction activities and it was observed that the site is greenfield. Area is covered with the maquis shrublands typical to the region and no tree cover. The complete project site is owned by the Treasury of the Republic and is lent to the project long term (ref-27), as the permit process is on-going, the preliminary permit was validated. Generated electricity will be transferred to Karaburun TS (ref-18)

Project is not a de-bundled component of a large scale project activity as Yaylakoy Elektrik has no other projects (TÜREB data) and the parent company Egenda Elektrik, although having projects in the Izmir region, none (Alacati WPP, Germiyan WPP, Urla WPP and Mordogan WPP) are within 1 km of the project activity (TÜREB data).

The investors ownership, right of use were validated through the EMRA generation license and the connection agreement to the national grid for the generation and supply of wind generated energy. The project activity is neither included in an emissions trading program nor does it take place in a jurisdiction or sector in which binding limits are established on GHG emissions. The PP has stated that the project does not participate/has not participated under any other GHG program; project has not created any form of other credit or Mordogan WPP has not applied for crediting under any other GHG program nor has it been rejected from any other GHG program. Project is not classified as a grouped project and no leakage is applicable in accordance with the

applied methodology. The validation did not reveal any information indicating that the Project can be seen as a diversion of official development assistance (ODA) funding towards the host country.

The processes undertaken by the validation team to validate the accuracy and completeness of the project description include conducting a physical site inspection, sampling, reviewing available designs and feasibility studies, conducting comparison analysis with equivalent projects. Bureau Veritas Certification hereby confirms that the project description in the final VCS-PD is accurate and complete in all respects.

3.2 Application of Methodology

3.2.1 Title and Reference

The Project uses the he UNFCCC approved consolidated baseline and monitoring methodology AMS-I.D. “Grid connected renewable electricity generation” v.17.0.; the UNFCCC methodology tool “Tool to calculate the emission factor for an electricity system”, v.03.0.0; and “Guidelines on the Demonstration of Additionality of Small-Scale Project Activities”, v.9.0

3.2.2 Applicability

The applicability of the selected methodology is justified and assessed as follows:

(1) Applicability condition 1: project is the installation a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant). This was confirmed on-site through observations and contracts for purchase, installation of new equipment. (Ref-13).

(2) Applicability condition 2: project is grid connected and supplies the generated electricity to the national grid, as validated through the EMRA license and TEIAS connection agreement (ref-12 and 18) Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling)

(3) Applicability condition 3: Project is a wind power plant project not involving reservoirs nor co-generation or other generation units.

Project does not involve any hydro elements, replacements, retrofitting, co-generation units. Project consists solely of greenfield wind energy converters.

Bureau Veritas Certification hereby confirms that the selected baseline and monitoring methodology, tool and other methodology component is previously approved by the CDM Executive Board, and is applicable to the Project, which, complies with all the applicability conditions therein.

3.2.3 Project Boundary

The validation team has validated the project boundary by:

(a) Assessing the relevant documents including grid connection agreement, single line diagram and the EMRA generation license.

(b) Observing the physical site and equipment used in the process.

The spatial extent of the project boundary is clearly defined in line with AMS-I.D. Version 17.0 as the project power plant and all power plants connected physically to the electricity system that the CDM (VCS) project power plant is connected to.

The greenhouse gases and emission sources included in the project boundary are CO2 emissions in the baseline arising from the fossil fuel fired power plants in the national grid that are displaced due to project activity. There are no project emissions.

Bureau Veritas Certification hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity. The validation team did not identify any emission sources that will be affected by the implementation of the proposed project activity and which are expected to contribute more than 1% of the overall expected average annual emissions reductions, and are not addressed by the selected approved methodology.

3.2.4 Baseline Scenario

The procedure contained in the methodology to identify the most reasonable baseline scenario has been correctly applied.

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 AMS-I.D., 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 3.1 of VCS-PD.

Following the procedural guidance of the applicable version of the tool referred in the identified baseline scenario from AMS-I.D., ‘Tool to calculate the emission factor for an electricity system’, Project Participant has calculated the Combined Margin.

Project electricity system has been identified as the Turkish National Grid, justified by TEIAS data. Following the criterion set forth by the Tool has leaded the Project Participant to adopt the default national grid definition. Hence the calculation of Operating Margin (OM) and Build Margin (BM) has been based on the Turkish electricity Network as one single interconnected system. Again, in accordance with the availability of EMRA and TEIAS data on the subject, only grid power plants have been included.

In line with the requirements of the applied tool, the Simple Operating Margin Emission Factor ($\mathbf{EF_{OM,\,y}}$) has been calculated ex-ante, using TEIAS, and IPCC values for 2009-2011 period, as **0.6542 tCO2/MWh**

The weighted Build Margin Emission Factor has been calculated using Option 1 of the tool with TEIAS, EUAS statistics for the years 2009 – 2011, and default values from applicable sources such as IPCC and the tool itself. The Build Margin Emission Factor ($\mathbf{EF_{grid,BM,y}}$) has been determined as **0.3707 tCO2/MWh** and has been found appropriate by the validation team.

In accordance with the methodology of the 'Tool to calculate the emission factor for an electricity system' v.03, Project Participant has determined the Combined Margin Emission Factor as **0.5833 tCO2/MWh** and this has been confirmed by the validation team with reviewing all baseline calculation sheet equations and confirming the parameters used for the calculations and their relevant sources.

Bureau Veritas Certification hereby confirms that:

All the assumptions and data used by the project participants are listed in the VCS-PD, including their references and sources;

All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the VCS-PD;

Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;

Relevant national and/or sectoral policies and circumstances are considered and listed in the VCS-PD;

The approved baseline methodology has been correctly applied to identify the most plausible baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed project activity.

3.2.5 Additionality

As required by the selected methodology, the additionality of the Project has been demonstrated by applying and "Guidelines on the Demonstration of Additionality of Small-Scale Project Activities", v.9.0 and "Tool for the demonstration and assessment of additionality"- Version 07.

The timeline of the Project has been validated as in Table 2 below:

Table 2 Timeline of the Project

Date	Events	Reference
29/05/2008	EMRA Generation License EU/1622-8/1181 issued	Ref-12

11/2008	Barlovento start of reference wind measurements	Ref-14
18/05/2009	"Out of EIA scope" status approved by Izmir Provincial Directorate of Environment and Forestry	Ref-15
10/2010	Barlovento end of reference wind measurements	Ref-14
08/12/2010	TEIAS System utilization and grid connection agreement	Ref-18
28/02/2011	Barlovento Wind Source Assessment Report	Ref-14
09/08/2011	Mordogan board decision involving development of carbon assets. This is also the prior consideration of VCUs	Ref-17
28/12/2011	Egenda – Futurecamp agreement for VCU development	Ref-28
02/2013	Mordogan WPP Project Informatory Report	Ref-21
12/02/2013	Mordogan WPP Financial Feasibility Report	Ref-16
15/05/2013	Egenda – ENERCON WEC supply and installation agreement *[investment decision date]*	Ref-13
15/08/2013	Egenda – Turkiye Is Bank Loan agreement	Ref-22
01/02/2015	Expected commissioning of the turbines	Assumption

From the table above, the validation team is able to verify that the project activity investment decision date determined as 15/05/2013 is appropriate and is the earliest of the dates at which either the implementation or construction or real action of the Project began. This is in accordance with the latest CDM glossary.

The validation team has assessed Egenda's Board of Directors' decision, dd. 09/08/2011, and confirms that the project participants had an awareness of the VCUs prior to the project activity start date, and the benefits of the VER were a decisive factor in the decision to proceed with the project. The validation team has also checked the implementation of agreements for carbon development and validation services and is able to verify that all documents are reliable and authentic. There is less than two years of a gap between the documented evidence. Therefore

the project participants demonstrated that real and continuing actions were taken to secure VER status for the project in parallel with its implementation.
Bureau Veritas Certification hereby confirms that the proposed project activity complies with the requirements related to the prior consideration of the VCU.

Analysis method
Project will be receiving revenues from electricity sales to the grid hence it is not eligible for simple cost analysis. Lack of detailed public knowledge inhibits the use of investment comparison analysis. Therefore, a benchmark analysis is applied and considered to be appropriate.

Benchmark
"Tool for the demonstration and assessment of additionality" Version 07 which approves using the publicly available and widely accepted World Bank benchmark of 15%, determined for small hydro power plants in Turkey (ref-24). According to the Tool, benchmark can be derived from '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'. As a banker view, according to Worldbank loan appraisal document , threshold equity IRR for wind power investments (i.e. required returns of equity for wind power plant investors) in Turkey is 15%. Hence, the benchmark has been assessed to be appropriate by the validation team and the financial expert.

The validation team considers that the type of benchmark applied is suitable for the type of financial indicator presented; the risk premiums applied in determining the benchmark reflect the risks associated with the project type; it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark.

Data source
The input values are taken from financial feasibility study report, which was compiled by the company for loan application purposes (Ref-16). The validation team confirms that the values used in the VCS-PD and associated annexes are fully consistent with the FSR. As the date of investment decision is the turbine agreement, the realized value was taken, which is 8% higher than the value foreseen in the FSR (WTG system + erection). This provided a further crosscheck for the validation team as the WTG cost constitutes 72% of the total investment cost, typical in wind projects.
The FSR was finalized in 12/02/2013. Based on the conclusion of the FSR, the PP decided to proceed with the Project on 15/05/2013 with the consideration of VER revenues (Ref-13). Given that the project owners are realizing the project on the factory grounds and with their own sources and the on-going wind measurements, the time period between the FSR and the implementation was found to be acceptable considering the inflation and that the realized figures are comparable and more conservative than the FSR.

Input value
The validation team has reviewed the IRR calculation sheet and cross-checked the major input values using local knowledge as well as sectoral and financial expertise and confirms that:

Parameters	Validated Value	Means of validation
Installed capacity	15.0 MWe	Egenda – Enercon WTG Supply & Inst. agreement
Grid connected output	45,588 MWh	Third party Barlovento W &EYA long term net annual expected production
Electricity sales price	73 $/MWh	Renewable Energy Law
Expected VER price		
Investment Costs – 26,053,600 USD		
Wind turbine generators	15,351,000 $	Egenda – Enercon Agreement *[supply, delivery, erection]*
Civil Works	2,045,000 $	Mordogan financial feasibility analysis
E&M equipment	1,175,880 $	
High Voltage Line	1,113,212 $	
Engineering & Consulting	337,834 $	
General Production Expenses (annual) – 1,134,866 USD		
Financing		
Loan	19,370,000 $	Mordogan financial feasibility analysis + Ref29 *[actual loan agreement validated at 4% higher]*
Tax rate	20 %	National Tax Law
Depreciation durations	10 years	WTGs, in line with national regulations
	40 years	Construction, in line with national regulations
Operational lifetime	25 years	Option (c), default value of Tool

Indicator Calculation

Based on the input values from the FSR that are valid and applicable at the time of investment decision, the equity of the Project without VER revenues is 8.79%, lower than the benchmark, which shows that the Project is not financially attractive in the absence of VCU benefits.

The validation team has reviewed the IRR calculation spreadsheet (Ref-02) and confirms that the calculation and presentation are consistent with the "Guidelines on the assessment of investment analysis" version 05. The data sources as well as the analysis approach are reliable and in accordance with local accounting regulations or international best practice.

Sensitivity Analysis

Variables including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues were taken as uncertainty factors for sensitive analysis to

determine under what conditions variations in the result would occur, and the likelihood of these condition:

Investment costs (@ 73 USD/MWh)
Variable was fluctuated for 10% intervals. Even when the cost is reduced by 10%, the equity IRR reaches a max. of 13.26% without VCU, failing to climb over the benchmark value of 15.00%. Considering that 59% of the project investment cost consists of the turbine purchase agreement, which was validated through the realized contract, it is not reasonable to expect the investment cost to decrease at all, hence the fluctuation interval was seen sufficient.

Operating costs (@ 73 USD/MWh)
Variable was fluctuated for 10% intervals. Even when the cost is reduced by 10%, the equity IRR reaches a max. of 10.88% without VCU, failing to climb over the benchmark value of 15.00%. Assumptions have been compared with similar projects in the country and were found to be appropriate by BVC.

Energy yield (@ 73 USD/MWh)
Variable was fluctuated for 10% intervals. Even when the yield is increased by 10%, the equity IRR reaches a max. of 11.95% without VCU, failing to climb over the benchmark value of 15.00%. According to European Commission Strategic Energy Technologies Information System (SETIS), a total of 20% variation for wind energy is acceptable in annual productions (ref-20) and therefore the ±10 variation in the electricity production sufficiently demonstrates that the IRR is not exceeded.

Electricity price
Variable was fluctuated for 10% intervals. Even when the price is increased by 10%, the equity IRR reaches 11.95% without VCU failing to climb over the benchmark value of 15.00%. According to EMRA statistics (ref-25), the average wholesale price of electricity in Turkey, between 2007 and 2011 has been realized as 74.3 $/MWh hence the fluctuation applied in the sensitivity is deemed sufficient for validation purposes.

The validation team considers that the range of variations is reasonable in the project context. The analysis provided a cross-check on the suitability of the assumptions used in the development of the investment analysis. The conclusion that the project activity is unlikely to be financially/economically attractive is robust to reasonable variations in the critical assumptions.

Bureau Veritas Certification hereby confirms that the underlying assumptions regarding investment analysis are appropriate and the financial calculations are correct.

3.2.6 Quantification of GHG Emission Reductions and Removals

The steps taken and the equations and parameters applied in the VCS-PD to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected methodology including applicable tool(s).

Project installed capacity has been validated as 15 MW through the Egenda – Enercon contract (ref-13). According to the third party wind and energy yield for the project (ref-14), the long term

average Annual Energy Production of the facility has been determined as 45,588 MWh/y, with a corresponding capacity factor of 35% and 3,309 full load hours per year. Technical lifetime of the project was determined as 25 years in line with the guidance of "Tool to determine the remaining lifetime of equipment", v.01 for onshore wind turbines. This has also been assumed as the project lifetime.

EMRA, TEIAS data support that the capacity factor is applicable, which is close to the national average and higher than the EU average, as publicly available EWEA and IEA reports indicate (ref-19).

According to the requirements of the applied methodology, AMS-I.D. v.17

Project Emissions of the project has been evaluated as:

$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$

Where:

PE_y = Project emissions in year y (tCO2e/yr)

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

$PE_{GP,y}$ = Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year y (tCO2e/yr)

$PE_{HP,y}$ = Project emissions from water reservoirs of hydro power plants in year y (tCO2e/yr)

Project being based on wind energy, none of the PE parameters are applicable according to AMS-I.D. v.17 and the project emissions are 0.

PE_y = 0 tCO2e/yr

Leakage Emission for the project has **not** been considered, in line with the applied methodology AMS-I.D. v.17

Baseline Emissions of the project has been evaluated as:

$BE_y = EG_{BL,y} \times EF_{CO2,grid,y}$

Where:

BE_y : Baseline emissions (tCO2e)

$EG_{BL,y}$: 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.

$EF_{CO2,grid,y}$: Baseline emission factor (tCO2e/MWh)

y : Refers to a given year

Project involves the installation of a greenfield plant and therefore $EG_{BL,y}$ is assumed zero, and baseline emission for a year of operation is:

BE_y = 0.5833 x (45,588) = 26,593 tCO2e and since no project emissions are considered,

BE_y = 26,593 tCO2e

Emission reductions are calculated as follows:

$ER_y = BE_y - PE_y - LE_y$

Where:

ER_y : Emission reductions in year y (t CO2/y)

BE_y : Baseline Emissions in year y (t CO2/y)

PE_y : Project emissions in year y (t CO2/y)

LE_y : Leakage emissions in year y (t CO2/y)

$ER_y = BE_y - 0 - 0$

$ER_y = BE_y$ = 26,593 tCO2e

Table 3 : Summary of Emission Reductions

Years	Estimated baseline emissions or removals (tCO2e)	Estimated project emissions or removals (tCO2e)	Estimated leakage emissions (tCO2e)	Estimated net GHG emission reductions or removals (tCO2e)
2015*	24,377	0	0	24,377
2016	26,593	0	0	26,593
2017	26,593	0	0	26,593

2018	26,593	0	0	26,593
2019	26,593	0	0	26,593
2020	26,593	0	0	26,593
2021	26,593	0	0	26,593
2022	26,593	0	0	26,593
2023	26,593	0	0	26,593
2024	26,593	0	0	26,593
2025**	2,216	0	0	2,216
Total	265,930	0	0	265,930

*Starts from 1st of february 2015
** Ends at 31st of january 2025

Bureau Veritas Certification hereby confirms that:

All assumptions and data used by the project participants are listed in the VCS-PD, including their references and sources;

All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the VCS-PD;

All values used in the VCS-PD are considered reasonable in the context of the proposed project activity;

The baseline methodology and corresponding tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;

All estimates of the baseline emissions can be replicated using the data and parameter values provided in the VCS-PD.

3.2.7 Methodology Deviations

No deviations from the methodology reported or identified.

3.2.8 Monitoring Plan

The Project uses the approved consolidated monitoring methodology AMS-I.D. Version 17.

Applicability of this methodology is justified in VCS-PD in section 2.2. Referring to the discussions on the applicability of the methodology in section 3.2.2 above, the validation team considers that the selected monitoring methodology is applicable to the Project.

Data and Parameters Monitored

$EG_{facility,y}$

Quantity of net electricity generation supplied by the project plant/unit to the grid in year y:

Parameter is calculated through the continuously monitored amount of electricity supplied to the grid and consumed from the grid. Both are monitored continuously and recorded monthly by two energy meters which are compliant relevant national and international laws and regulations (ref-26). Meters are under TEIAS responsibility and control as they are sealed at commissioning phase and are maintained and calibrated again by TEIAS and/or its affiliates. A periodical annual check is to be performed to confirm that both meters are functioning as they should. In case a measurement discrepancy is detected by either TEIAS or the PP, necessary calibrations are to be performed.

Monitored values are to be recorded monthly on 'OSF' forms issued by TEIAS, after the values are measured by TEIAS qualified equipment/personnel, and submitted to the project owners. All production figures which are subject to sales to the grid are agreed with PMUM (Market Financial Reconciliation Centre). These figures can be accessed from PMUM's web site by the seller. Therefore, net electricity production figures announced by PMUM will be used in emission calculation figures . These figures will also be cross checked with the production and internal electricity usage figures provided from the OSF forms and company internal records.

Implementation of the Monitoring Plan

Monitoring points in the system were validated through the system connection agreement made between the PP and TEIAS (ref-18). Single line diagram for the project clearly shows that the meters are located appropriately to monitor the parameter. Company meters and TEIAS meters at the transformation station back these up in case of an emergency, as is the practice of TEIAS.

Two energy meters will provide the data for the monitored parameter. Meter serials and type and calibration information could not be validated as the project is at an early phase of implementation hence **FAR01** is raised for the verification VVB, which shall confirm the specifications and S/Ns of the monitoring meters on-site.

Plant operator and manager are responsible for the implementation and oversight of the monitoring plan as well as data management. The period of storage of monitoring data will not be less than 2 years after the end of crediting period or till the last issuance of VER's for the project activity, whichever occurs later.

The validation team considers that the means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, are sufficient to ensure that the emission reductions achieved by/resulting from the proposed project activity can be reported ex post and verified.

Bureau Veritas Certification hereby confirms that the monitoring plan complies with the requirements of the methodology including applicable tool(s), the monitoring arrangements

described in the monitoring plan are feasible within the project design and the project participants are able to implement the described monitoring plan.

3.3 Non-Permanence Risk Analysis

N/A

3.4 Environmental Impact

The project participants conducted an analysis of the environmental impacts of the proposed project activity, including transboundary impacts as a part of the national EIA procedures. However the project is EIA exempt as it is not included in activities determined in the Annex-1 nor Annex-2 of the EIA Regulations. This was made official and was validated through the decision of the Izmır Provincial Environment and Forestry Directorate (ref-15).

Bureau Veritas Certification hereby confirms that the project participants have undertaken an analysis of environmental impacts.

3.5 Comments by Stakeholders

No stakeholder meeting is applicable in line with the EIA regulations of Turkey.

4 VALIDATION CONCLUSION

Bureau Veritas Certification has performed a validation of the Mordogan Wind Power Project, Turkey which is located in Mordogan, Izmir, Turkey. The validation was performed on the basis of relevant UNFCCC criteria for the CDM, and host country criteria, as well as VCS requirements v3 and criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) desk review of the project design document and additional background documents; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion.

The project correctly applies the approved consolidated baseline and monitoring methodology AMS-I.D. Version 17 and uses the latest tool, guidelines for demonstration of the additionality.

By displacing fossil fuel powered generation sources in the national interconnected grid, the project is likely to result in reductions of GHG emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project 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.

Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated annual emission reductions of **26,593 tCO_2e** during the ten years of its first renewable crediting period through an expected annual generation of **45,588 MWh**.

The review of the project design documentation and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM, VCS v.3 and the relevant host country criteria. Bureau Veritas Certification thus requests registration of the project as a VCS project activity.

Mrs. Burcu MUTMAN BORAN	Mr. Mustafa UNAL
Internal Technical Reviewer	Team Leader
03/01/2014	03/01/2014

APPENDIX A: REFERENCES

Category 1 Documents:

Documents provided by project participants that relate directly to the GHG components of the project.

1	*VCS_PD_MordoganWPP_2013-04-16.doc* *IRR_ Mordogan WPP_2013-04-16.xlsx* *CM_ Mordogan WPP_v1_2013-04-16.xlsx*
2	*VCS_PD_ Mordogan WPP_v2_2013-08-28.doc* *IRR_ Mordogan WPP_v2_2013-08-28.xls* *CM_ Mordogan WPP_v2_2013-08-28.xlsx*
3	*VCS_PD_Mordogan WPP_v3_2013-11-14.doc*
4	*VCS_PD_Mordoğan WPP_v4-2013-12-16.doc*
5	*VCS_PD_Mordoğan WPP-v5-2014-01-02.doc*

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents used for cross-check.

6	*Clean Development Mechanism Validation and Verification Standard, ver.04*
7	*UNFCCC Approved consolidated baseline and monitoring methodology AMS-I.D. Version 17 – "Grid connected renewable electricity generation"*
8	*UNFCCC's Methodological Tool : "Tool for the demonstration and assessment of additionality", Version 07*
9	*UNFCCC's Methodological Tool : "Tool to calculate the emission factor for an electricity system, Version 03.0.0*
10	*UNFCCC's Guidelines for the reporting and validation of plant load factors, version01*
11	*UNFCCC's "Guidelines on the Demonstration of Additionality of Small-Scale Project Activities", v.9.0*
12	*EMRA Generation License – EU/1622-8/1181 – dd. 29/05/2008*
13	*Egenda – ENERCON WEC Supply and installation agreement, dd.15/05/2013*
14	*Barlovento Wind Source Assessment Report, dd. 06/2011*
15	*EIA opinion – Izmir Provincial Environment and Forestry Directorate – dd.15/04/2009; document # B.18.4.İÇO.4.35.00.03/228.09*
16	*Egenda Financial Feasiblity Report – dd. 12/02/2013*
17	*Egenda Board of Directors Decision - dd. 11/05/2011*
18	*TEIAS System Usage and Grid Connection Agreement – 08/12/2010*
19	*http://www.ewea.org/library/* *http://www.iea.org/publications/*
20	*http://setis.ec.europa.eu/newsroom-items-folder/1-wind-power-generation*
21	*Mordogan Project Informatory Report, dd. 02/2013*
22	*Mordogan – Is Bank Loan Agreement, dd. 15/08/2013*
23	*ASTEC Yaylakoy Ornithological Assessment Report, dd. 04/2013*
24	*Worldbank - Project Appraisal Document on a IBRD Loan and a Proposed Loan from Clean Technology Fund to TSKB and TKB with the Guarantee of Turkey, May 2009 (http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/05/11/000333037_20090511030724/Rendered/PDF/468080PAD0P112101Official0Use0Only1.pdf*
25	*http://www.epdk.gov.tr/index.php/elektrik-piyasasi/tarifeler?id=95*
26	*"Measurement Equipment Inspection Regulation" of the Ministry of Commerce and Industry, Article 9." - http://www.mevzuat.adalet.gov.tr/html/21179.html* *Article 2 of the Communiqué of Meters in Electricity Sector - http://www.epdk.gov.tr/documents/elektrik/mevzuat/teblig/elektrik/sayaclar_hakkinda/Elk_Tblg_Sayaclar.doc*
27	*Karaburun Forestry Sub-district Directorate preliminary permit, dd. 20/08/2013*

28	*Egenda – Futurecamp Agreement for GS certification of 4 projects, agreement # 2011-RES-18, dd. 28/12/2011*
29	*Alacati WPP, Germiyan WPP, Urla WPP FSR's for loan consideration*

Persons interviewed:

Persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

	Egenda Ege Eenerji	
1	Vuslat Ayca D.KAYA	Engineer
2	Ali AYSAL	Technician
	Futurecamp Turkiye	
3	Engin MERT	Project Supervisor
	Local Stakeholder	
4	Omer TERZI	Mordogan Muhktar - +90 542 644 7376

Curricula vitae of the VVB's validation team members

Mr. Mustafa UNAL	Bureau Veritas Certification, Turkey	Team Leader, Climate Change Lead Verifier, Mustafa Unal is a Metallurgical and Materials Engineer and an auditor for environment, safety and quality management systems. He has experience in automotive and civil aviation industries. He has participated online seminars in the Gold Standard Academy in 2011, 2012.
Mrs. Burcu MUTMAN BORAN	Bureau Veritas Certification, Turkey	Technical Reviewer, Climate Change Lead Verifier. 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.
Mrs. Yildiz ARIKAN - Assoc. Professor Dr	Sabancı University, Faculty of Management, Turkey	Baseline Specialist. 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.
Mr. Murat GENCER – Master of Economics	RiskTürk Software Development and Consultancy – Head of Financial Analysis Team, Turkey	Investment Analysis Specialist 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.

APPENDIX B: VALIDATION PROTOCOL

Table 1 Validation Requirements Based On the Voluntary Carbon Standard Version 03

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
1. VCS Program Specific Issues					
a. Are the VCS PD, monitoring reports, and other documents required under the VCS Program in English?	VCS Ver03	2.2	Mordogan VCS-PD and emission factor worksheet are in English.	**OK**	**OK**
2. Project Requirements					
a. General Requirements					
a. Have the project proponents 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 Ver03	3.1	Project applies CDM methodology AMS I.D.	**OK**	**OK**
b. Grouped Projects					
a. Is this a grouped project?	VCS Ver03	3.4	Project is not grıouped	**OK**	**OK**
c. Content of the VCS PD					
a. Is the PD used as a basis for validation prepared in accordance with the latest template and guidance from the VCS?	VCS Ver03	3.19	PD template v.3.1 has been used, OK	**OK**	**OK**
b. Are the followings provided at the cover page in a tabular format?	PD temp Ver03	Cover Page			
i. Name of the project?	PD	Cover	Project is titles: "Mordoğan Wind	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	temp Ver03	Page	Power Project, Turkey"		
ii. Version number of the VCS PD?	PD temp Ver03	Cover Page	Version is 1.	**OK**	**OK**
iii. The date of the document issued in DD-Month-YYYY format?	PD temp Ver03	Cover Page	date of document is "16/04/2013"	**OK**	**OK**
iv. Individual or entity that prepared the document?	PD temp Ver03	Cover Page	Prepared by: "FutureCamp Turkey"	**OK**	**OK**
v. Physical address, telephone, email, website?	PD temp Ver03	Cover Page	Addressed at "Address: Çetin Emeç Bulvarı 19/18 Çankaya/Ankara e-mail: info@futurecamp.com.tr phone:0090 312 481 21 42 fax: 0090 312 480 88 10"	**OK**	**OK**
c. Is a brief description of the project provided?	PD temp Ver03	1.1	Project is a wind power plant with 15 MWe capacity and an annual production forecast of 44590 MWh/y to be supplied to the national grid. License EU/1622-8/1181 dd.	**CL01** **CL02** **CL03**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			29/05/2008 indicates 13.8 MW, please clarify. As the FSR is not officially approved please refer to a valid source for the annual generation expectation. Please provide information about the project (how many turbines, which brand, where is the site, connected to where, etc.)		
d. Are the sectoral scope(s) applicable to the project, the AFOLU project category and activity type (if applicable), and whether the project is a grouped project indicated?	PD temp Ver03	1.2	Project is sectoral scope 1 and is not grouped.	**OK**	**OK**
e. Are the contact information and roles/responsibilities for the project proponent(s) provided?	PD temp Ver03	1.3		**OK**	**OK**

Organization:	**Egenda Ege Enerji Üretim A.Ş.**
Street/P.O.Box:	1380 Sokak No:2/1
Building:	Alyans Apt. Alsancak
City:	İzmir
State/Region:	N/A
Postcode/ZIP:	35220
Country:	Turkey
Personal Contact:	Ayça Dumankaya
Direct FAX:	0090 232 465 32 86

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			Direct tel: 0090 232 463 98 11 Personal e-mail: ayca.dumankaya@endaenerji.com.tr		
f. Are the contact information and roles/responsibilities for any other entities involved in the development of the project provided?	PD temp Ver03	1.4	Carbon consultant was given : Organization: **FutureCamp İkl** Street/P.O.Box: Çetin Emeç Bulv Building: Beste Apartman City: Ankara State/Region: N/A Postcode/ZIP: 06460 Country: Turkey Personal Contact: Engin MERT Direct FAX: 0090 312 480 88 Direct tel: 0090 312 481 21 Personal e-mail: engin.mert@futu	**OK**	**OK**
g. Is the project start date (the date on which the project began reducing or removing GHG emissions) indicated in day, month and year format?	PD temp Ver03	1.5	An expected project start date is provided as 01/*05/2014	**OK**	**OK**
h. Is the starting and ending date of the project crediting period indicated in day, month and	PD	1.6	Expected start of the crediting period has been given as	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
year format?	temp Ver03		01/05/2014 to end on 30/04/2024		
i. Is the total crediting period indicated? (VCS project crediting period: A maximum of ten years which may be renewed at most two times)	PD temp Ver03	1.6	Two times renewable crediting period of 10 years.	**OK**	**OK**
j. Is the scale of the project indicated? (Projects: Less than or equal to 1,000,000 tCO_2e per year; and Mega projects: Greater than 1,000,000 tCO_2e per year)	PD temp Ver03	1.7	Project scale is of ”project”	**OK**	**OK**
k. Are the estimated annual GHG emission reductions or removals during the project crediting period indicated in a tabular format?	PD temp Ver03	1.7	Table 3 indicates emission reduction expectations annually to a total of 260,100 ERs	**OK**	**OK**
l. Is the description of the project activity(s) including the technologies or measures employed provided?	PD temp Ver03	1.8	Project is to employ 5 Enercon E-82 turbines, specs given in table 4. No information regarding the energy transfer lines and grid connection was given, please do.	**CL04**	**OK**
m. Is a description of how the project will achieve GHG emission reductions and/or removal enhancements provided?	PD temp Ver03	1.8	”The project activity will achieve emission reductions by avoiding CO2 emissions from the business-as-usual scenario electricity generation produced by mainly fossil fuel-fired power plants within the Turkish national grid”	**OK**	**OK**
n. Is the lifetime of the project activity(s) provided?	PD temp Ver03	1.8	Please provide the lifetime of the project activity in line with the guidance of ”Tool to determine the	**CAR01**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			remaining lifetime of equipment" EB50 Annex 15 v.1		
			Description is not in line with the properties indicated in the license, please clarify	**CL06**	**OK**
o. Is the project location and geographic boundaries (if applicable) provided?	PD temp Ver03	1.9	Project is located at mordogan izmir turkey. Please provide GPS coordinates for the project site	**CL05**	**OK**
p. Are the conditions prior to project initiation provided?	PD temp Ver03	1.10	Project site is a treasury site that is previously unused for any purposes. Located right above the new double road construction.	**OK**	**OK**
q. Is it demonstrated that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction?	PD temp Ver03	1.10	Project is implemented for renewable energy generation.	**OK**	**OK**
r. Does the VCS PD include identification of relevant local, regional and national laws, statutes and regulatory frameworks related to the project and demonstration of compliance with them?	PD temp Ver03	1.11	Project has a license, a grid connection agreement and pre-permits from the treasury on the use of land.	**OK**	**OK**
a. Was evidence of proof of title provided?	PD temp Ver03	1.12.1	Annex 2 of PD contains the license of the project, which evidents the right of use.	**OK**	**OK**
b. Does the project reduce GHG emissions from activities that are included in an emissions trading program; or take place in a	PD temp	1.12.2	N/A	**OK**	**OK**

	CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	jurisdiction or sector in which binding limits are established on GHG emissions?	Ver03				
c.	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?	PD temp Ver03	1.12.2	N/A	**OK**	**OK**
d.	Have the project(s) indicate whether the project has been registered, or is seeking registration under any other GHG programs?	PD temp Ver03	1.12.3	Project does not participate under any other GHG program	**OK**	**OK**
e.	If yes, have the project participants provided the registration number and details?	PD temp Ver03	1.12.3	N/A	**OK**	**OK**
f.	Have the project(s) created other forms of environmental credit (for example renewable energy certificates)?	PD temp Ver03	1.12.4	Project does not create any other forms of crdits	**OK**	**OK**
g.	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?	PD temp Ver03	1.12.4	N/A	**OK**	**OK**
h.	Was the proposed project rejected by other GHG Programs?	PD temp Ver03	1.12.5	Section refers to bucakkisla HPP, please revise	**CL07**	**OK**
i.	If yes, have the project participants provided the relevant information?	PD temp Ver03	1.12.5	N/A	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
j. Is the additional information relevant to the project as following provided?	PD temp Ver03	1.13			**OK**
i. Eligibility Criteria: Are the eligibility criteria for inclusion of new instances of each project activity identified for grouped projects?	PD temp Ver03	1.13	N/A as not grouped	**OK**	**OK**
ii. Leakage Management: Is a description of the leakage management plan and implementation of leakage and risk mitigation measures provided? (if applicable)	PD temp Ver03	1.13	N/A as meth. requires	**OK**	**OK**
iii. Commercially Sensitive Information: Is it indicated whether any commercially sensitive information has been excluded from the public version of the project description and briefly describtion of the items to which such information pertains provided?	PD temp Ver03	1.13	N/A	**OK**	**OK**
iv. Further Information: Is any additional relevant legislative, technical, economic, sectoral, social, environmental, geographic, site-specific and/or temporal information that may have a bearing on the eligibility of the project, the net GHG emission reductions or removals, or the quantification of the project's net GHG emission reductions or removals provided?	PD temp Ver03	1.13	N/A	**OK**	**OK**
s. Are the title, reference and version number of the methodology(ies) applied to the project provided?	PD temp	2.1	The UNFCCC methodology AMS-I.D. "Grid connected renewable electricity generation" v.17.0.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	Ver03		-The UNFCCC methodology "Tool to calculate the emission factor for an electricity system", v.03.0.0. -"Guidelines on the Demonstration of Additionality of Small-Scale Project Activities", v.9.0		
t. Have the project participants demonstrated and justified that the project activity(s) meets the applicability conditions of the methodology(s) applied to the project?	PD temp Ver03	2.2	Applicability conditions of the methodology were justified. Applicability of the applied tool Tool to calculate the emission factor for an electricity system has not been considered, please do so.	**CL08**	**OK**
u. Is the project boundary defined in a tabular format?	PD temp Ver03	2.3	Table 6 depicts the baseline and project boundaries and gasses included	**OK**	**OK**
v. Are GHG sources, sinks and reservoirs identified for the project and baseline scenarios? (including leakage if applicable)	PD temp Ver03	2.3	Table 6	**OK**	**OK**
w. Is it described how the baseline scenario is identified?	PD temp Ver03	2.4	Baseline is determined by the methodology	**OK**	**OK**
x. Is the justification of the baseline scenario is provided?	PD temp Ver03	2.4	Section justifies the scenario by showing the demand and the possible supply in case the project	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			is not realized.		
y. Has the additionality of the project activity been demonstrated and assessed in accordance with the applied methodology?	PD temp Ver03	2.5	Worldbank threshold equity IRR of 15% was used. Please show the IRR calculation, with all parameters referenced and clearly shown in the PD. Additionality related parameters cannot be confidential, please revise.	CL09 CL10	**OK**
z. Have the project proponents provided and justified methodology deviations?	PD temp Ver03	2.6	No deviations reported	**OK**	**OK**
aa. Have the project proponents a description of the procedure for quantification of the baseline emissions and/or removals including all relevant equations?	PD temp Ver03	3.1	Regarding emission factor calculations: • Excel sheet, OM tab, cell A47 refers to years 2007-2009, which should be corrected. • PDD p.25 and Excel (tab 'Latest PPS – BM&CM', cell Q272) refer to 0.5 weighting factor for BM and OM emission factors. The text needs to be corrected; the calculations are based correctly on 0.75/0.25.	**CL11**	**OK**
bb. Have the project proponents a description of	PD	3.2	Project emissions are 0	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
the procedure for quantification of the project emissions and/or removals including all relevant equations?	temp Ver03				
cc. Have the project proponents a description of the procedure for quantification of the leakage emissions and/or removals including all relevant equations?	PD temp Ver03	3.3	N/A as meth. reguires.	**OK**	**OK**
dd. Have the project proponents a description of the procedure for quantification of the net GHG emission reductions and removals including all relevant equations?	PD temp Ver03	3.4	Emission reductions are equal to the baseline emissions as PE and LE are 0	**OK**	**OK**
ee. Are the ex ante calculation (estimate) of baseline emissions/removals, project emissions/removals, leakage emissions and net emission reductions and removals provided in a tabular format?	PD temp Ver03	3.4	Table 21 depicts the BE, PE and LE as well as the net emission reductions expected.	**OK**	**OK**
ff. Are data and parameters available at the validation described in the tabular form including:	PD temp Ver03	4.1			
i. Data unit/parameter?	PD temp Ver03	4.1	Gross electricity generation, EFelec i,j,y; Net electricity generation; EFi, Sample Group for BM emission factor, ηi,y, HVi,y, FCi,y, NCVi,y,	**OK**	**OK**
ii. Description?	PD temp Ver03	4.1	All descriptions were given in line with the sources.	**OK**	**OK**
iii. Source of data?	PD temp	4.1	All data sources have been indicated are valid.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
	Ver03				
iv. Value applied?	PD temp Ver03	4.1	Applied values or tables of data have been indicated.	**OK**	**OK**
v. Justification of choice of data or description of measurement methods and procedures applied?	PD temp Ver03	4.1	TEIAS or IPCC values used.	**OK**	**OK**
vi. Any comment?	PD temp Ver03	4.1	N/A	**OK**	**OK**
gg. Are data and parameters monitored subsequent to validation described in the tabular form including:	PD temp Ver03	4.2			
i. Data unit/parameter?	PD temp Ver03	4.2	EGfacility,y	**OK**	**OK**
ii. Data unit?	PD temp Ver03	4.2	MWh/yr	**OK**	**OK**
iii. Description?	PD temp Ver03	4.2	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y	**OK**	**OK**
iv. Source of data?	PD temp Ver03	4.2	PMUM records have been identified as a source	**OK**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
v. Description of measurement methods and procedures to be applied?	PD temp Ver03	4.2	Two meters will continuously monitor the generation and consumption from the grid.	**OK**	**OK**
vi. Frequency of monitoring/recording?	PD temp Ver03	4.2	Continuous measurement and monthly recording	**OK**	**OK**
vii. Value applied?	PD temp Ver03	4.2	N/A	**OK**	**OK**
viii. Monitoring equipment?	PD temp Ver03	4.2	Meters are to be up to regulation, not available yet.	**OK**	**OK**
ix. QA/QC procedures to be applied?	PD temp Ver03	4.2	Please clarify how TEIAS will perform the readings and if a record of this will be produced	**CL12**	**OK**
x. Calculation method?	PD temp Ver03	4.2	Calculation method is not N/A as indicated in the description of measurement methods (v.)	**CL13**	**OK**
xi. Any comment?	PD temp Ver03	4.2	N/A	**OK**	**OK**
hh. Is the monitoring plan described?	PD temp Ver03	4.3	Please provide information on calibration procedures for the energy meters Kindly depict the monitoring points Please clarify how the readings by	**CL14** **CL15** **CL16**	**OK**

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
			TEIAS and technicians of Mordogan WPP will be made		
ii. Are the organizational structure, responsibilities and competencies of the monitoring plan identified?	PD temp Ver03	4.3	Figure 5 depicts the organizational chart	**OK**	**OK**
jj. Are the methods for generating, recording, storing, aggregating, collating and reporting data on monitored parameters described?	PD temp Ver03	4.3	All data monitored under the monitoring plan will be kept in electronic form and hard copy for 2 years after the end of the crediting period. Egenda's Project Manager Mrs. Ayça Karaduman is the authority and responsibility of overall project management.	**OK**	**OK**
kk. Are the procedures for handling internal auditing and non-conformities described?	PD temp Ver03	4.3	in case of a non-conformity, the plant manager will report it instantly to TEIAS as the meters are sealed and under TEIAS responsibility.	**OK**	**OK**
ll. Are the line diagrams used to display the GHG collection and management system? (optional)	PD temp Ver03	4.3	N/A	**OK**	**OK**
mm. Was a summary of environmental impact assessment carried out with respect to the project provided? (if applicable)	PD temp Ver03	5	Project is EIA exempt as documented by the certificate in Annex 2.	**OK**	**OK**
nn. Were relevant outcomes from stakeholder consultations and mechanisms for on-going	PD	6	No stakeholder meeting was held		

CHECKLIST QUESTION	Ref.	item	COMMENTS	Draft Concl	Final Concl
communication provided?	temp		as the project is EIA exempt. Please provide a mechanism for on-going communications.		

Table 2 Validation requirements based on VVS version 03.0 (EB 70 Annex 3), PS version 02.1 (EB 70 Annex 2), PCP version 03.1 (EB 70 Annex 4), and Guidelines for completing the SSC PDD form version 01.0 (EB66 Annex 9)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Part I Cover Page					
(a) Is the title of the project activity provided?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
(b) Is the version number of the PDD indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
(c) Is the completion date of the PDD provided in DD/MM/YYYY format?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
(d) Are project participants indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
(e) Is the host party(ies) indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			in Table 1		
(f) Is the sectoral scope and selected methodology(ies) indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
(g) Is the estimated amount of annual average GHG emission reductions indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
Part II PDD					
A. Description of project activity					
A.1 Purpose and general description of project activity					
A.1.1 Is a brief description of the project activity provided, including a summary of the scope of activities/ measures that are to be implemented within the project activity?	PDD PS	31(b)	Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.1.2 Are the scenario existing prior to the start of project and baseline scenario indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.1.3 Does it explain how the project activity will reduce GHG emissions or increase GHG removals?	PS	31(c)	Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.1.4 Is the estimated of annual average and total GHG emission reductions for the chosen crediting period provided?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			in Table 1		
A.1.5 Is a brief description of how the project activity contributes to sustainable development provided?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.1.6 In order to determine whether the description of the proposed project activity in the PDD is accurate, complete, and provides an understanding of the proposed CDM project activity, does the DOE conducted a physical site visit to assess the Project? If not, please justify.	VVS	65	*Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1*	OK	**OK**
A.1.7 For all other proposed CDM project activities not referred to in VVS paragraphs 65-66, does the DOE undertaken the validation of project description by reviewing available designs and feasibility studies and should conduct comparison analysis with equivalent projects, as appropriate.	VVS	67	Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.1.8 If the proposed CDM project activity involves the alteration of an existing installation or process, does the project description state the differences resulting from the project activity compared to the pre-project situation?	VVS	68	Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.2 Location of project activity					
A.2.1 Is the host party(ies) indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.2.2 Is region/state/province etc. indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.2.3 Is City/Town/Community etc. indicated?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.2.4 Are the details of physical location of the project activity, including information allowing the unique identification of this project activity and a map, provided?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3 Technologies and measures					
A.3.1 Are there a list and the arrangement of the main manufacturing/ production technologies, systems and equipment involved?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3.1.1 Is the information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies included in the description?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3.1.2 Are the monitoring equipments and their location in the systems included in the description?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3.2 Are energy and mass flows and balances of the systems and equipment included in the	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
project activity provided?			in Table 1		
A.3.3 Are the types and levels of services provided by the systems and equipment that are being modified and/or installed under the project activity and their relation, if any, to other manufacturing/ production equipment and systems outside the project boundary provided?	PDD		*Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1*	OK	**OK**
A.3.4 Does the description clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3.5 Is a list of facilities, systems and equipment in operation under the existing scenario prior to the implementation of the project activity provided?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3.6 Is a list of facilities, systems and equipment in the baseline scenario provided?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.3.7 Is a description of how technologies and measures and know-how to be used are transferred to the Host Party(ies) included?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.4 Parties and project participants					
A.4.1 Are following information provided in a tabular format?					
A.4.1.1 List of project participants and parties	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			in Table 1		
A.4.1.2 Identification of Host Party	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.4.1.3 Indication whether the Party wishes to be considered as project participant	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.5 Public funding of project activity					
A.5.1 Is it indicated whether the project activity receives public funding from Annex I Parties?	PDD		Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.5.2 In case where public funding from Annex I Parties is involved, are followings provided? (a) Information on Parties providing public funding (b) Attached in Appendix 2: the affirmation obtained from such Parties that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties	PS	34	Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	**OK**
A.6 Debundling for project activity					
A.6.1 Do the project participants demonstrate that the project activity is not a debundled component of a large-scale project activity?	PDD PS	87	Project is developed under VCS scheme, using VCS templates. Issue was discussed	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			in Table 1		
A.6.2 Do the project participants follow the applicable provisions in the "Guidelines on assessment of debundling for SSC project activities"?	PS	88	Project is developed under VCS scheme, using VCS templates. Issue was discussed in Table 1	OK	OK
B. Application of selected approved baseline and monitoring methodology					
B.1 Reference of methodology					
B.1.1 Is the selected methodology (ies) indicated with exact reference (number, title and version)?	PDD		*The UNFCCC methodology AMS-I.D. "Grid connected renewable electricity generation" v.17.0.* *-The UNFCCC methodology "Tool to calculate the emission factor for an electricity system", v.03.0.0.* *-"Guidelines on the Demonstration of Additionality of Small-Scale Project Activities", v.9.0*	OK	OK
B.1.2 Are the baseline and monitoring methodologies selected by the project participants the valid versions of those approved by the Board?	VVS	70	*17 is the most current version.*	OK	OK
B.1.3 Are there any tools and other methodologies to which the selected methodology indicated?	PDD		*The UNFCCC methodology "Tool to calculate the emission factor for an electricity system", v.03.0.0.* *CDM Program standard par. 96 indicates that "For demonstration of additionality of a proposed small-scale*	CAR02	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CDM project activity, project participants shall apply or use one of the following: *(a) "Attachment A of Appendix B". In such cases, project participants should also* *follow the "Non-binding practice examples to demonstrate additionality for SSC* *project activities";* *(b) Any applicable additionality tool; or…"* *Please either conform with a or b*		
B.1.4 Has specific guidance and/or clarifications provided by the Board with respect to the approved methodology and any applicable tools been applied?	VVS	71	Guidelines on the Demonstration of Additionality of Small-Scale Project Activities", v.9.0	OK	**OK**
B.1.5 Is there any deviation or clarification requested for the approved methodology?	VVS	78-81	No deviations indicated	OK	**OK**
B.2 Project activity eligibility					
B.2.1 Is the selected baseline and monitoring methodology applicable to the project activity and that the selected version valid at the time of submission of the proposed project activity for registration?	VVS	73-75	Project is a 13.8 MW greenfield wind project utilizing new equipment.	OK	**OK**
B.2.2 Is the choice of the selected methodology(ies) justified by showing that the project activity meets each applicability conditions of the selected methodology(ies)?	PDD VVS	76	*Table 5 has the applicability conditions and proejct's justifications.*	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.2.3 Is it demonstrated that the project activity qualifies as Type I, II, and/or III during every year of the crediting period in accordance with applicable provisions for project activity eligibility in the Project standard?	PDD		*Project capcity is 13.8 to be revised to 15 in the license. This is the maximum allowed by equipment and the grid operator and will be continuously monitored by both parties.*	OK	**OK**
B.2.4 Is it determined that the project activity conforms to one or more of the approved small-scale methodologies applied in conjunction with the general guidelines to SSC CDM methodologies?	VVS	152	*Project is Type 1 SSC greenfield wind project conforming with AMS ID*	OK	**OK**
B.2.5 Do the project participants explain the documentation that has been used as a basis for justification and provide the references, or include the documentation in Appendix 3 of the PDD?	PDD		*Project license is included as an Annex2*	OK	**OK**
B.3 Project boundary					
B.3.1 Is the project boundary of the project activity defined based on the guidance of the selected methodology(ies)?	PDD		*The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system10 that the CDM project power plant is connected to*	OK	**OK**
B.3.2 Is a flow diagram of the project boundary presented, physically delineating the project activity?	PDD		*Figure 2 depicts the project boundary*	OK	**OK**
B.3.3 Does the flow diagram include the equipment, systems and flows of mass and energy described? In particular, is the emission sources and GHGs included in the project boundary and the data parameters to	PDD VVS	 82	*Table 6 depicts the baseline and project boundaries and gasses included*	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
be monitored indicated in the diagram?					
B.4 Establishment and description of baseline scenario					
B.4.1 Is an explanation how the baseline scenario is established in accordance with the selected baseline methodology provided?	PDD VVS	89	baseline scenario is identified as "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 in the "Tool to calculate the emission factor for an electricity system" defined in AMS I.D. v 17	OK	**OK**
B.4.2 When establishing the baseline scenario, and where "future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party", do the project participants follow the "Guidelines on the consideration of suppressed demand in CDM methodologies"?	PS	42	Baseline scenario is dictated by the methodology	OK	**OK**
B.4.3 Does the PDD explain and justify the key assumptions and rationale, provide and explain all data used to establish the baseline scenario (variables, parameters, data sources etc.) preferably in a tabular form, and provide all relevant documentation and/or references?	PDD		Baseline scenario is dictated by the methodology	OK	**OK**
B.4.4 To determine the performance of equipment used in the proposed small-scale CDM project activity, do project participants use:	PS	91			

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.4.4.1 The appropriate value specified in the selected methodology;	PS	91(a)	N/A	OK	**OK**
B.4.4.2 The national standard for the performance of the equipment type (project participants shall identify the standard used) if the value specified in 0 is not available;	PS	91(b)	National statistics and IPCC data was used.	OK	**OK**
B.4.4.3 An international standard for the performance of the equipment type, such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) standards (project participants shall identify the standard used) if the value specified in 0 is not available;	PS	91(c)	National statistics and IPCC data was used.	OK	**OK**
B.4.4.4 The manufacturer's specifications, provided that they are tested and certified by national or international certifiers, if the value specified in 0 is not available;	PS	91(d)	N/A	OK	**OK**
B.4.4.5 Performance data from test results conducted by an independent entity for equipment installed under the project activity if the value specified in 0 is not available.	PS	91(e)	N/A	OK	**OK**
B.4.5 Are the documents and sources referred to in the PDD correctly quoted and interpreted and are they crosschecked with other verifiable and credible sources, such as local expert opinion, if available?	VVS	91	CM calculations and sources in the PD as well as the CM calculation workbook have been checked by the validation team experts	OK	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.4.6 Does the PDD provide a 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?	VVS	92	Baseline scenario is identified bvy the methodology	OK	**OK**
B.4.7 Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed project activity?	VVS	93	Baseline scenario is identified bvy the methodology	OK	**OK**
B.4.8 Has relevant national and/or sectoral policies and circumstances (type E+ or E-), such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector been taken into account?	VVS	93	*Baseline scenario is identified bvy the methodology*	OK	**OK**
B.4.9 Does the PDD provide a transparent description of the baseline scenario?	PDD		*The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system10 that the CDM project power plant is connected to*	OK	**OK**
B.5 Demonstration of additionality					
B.5.1 Is the project activity demonstrated additional in accordance with one of options below?	PDD				
B.5.1.1 Attachment A of Appendix B: In such cases, project participants should also follow the "Non-binding practice examples to demonstrate additionality for SSC project activities".	PS VVS	96(a) 159	*Please see CAR02*	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.5.1.2 Any applicable additionality tool;	PS	96(b)	*Please see CAR02*	**OK**	**OK**
B.5.1.3 Guidelines for demonstrating additionality of microscale project activities"? if the proposed project activity meets one of the following criteria: a) Type I: Project activities up to 5 MW that employ renewable energy as their primary technology; b) Type II: Energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or c) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emissions reductions at a scale of no more than 20 $ktCO_2e$ per year.	PS VVS	96(c) 160	*N/A as project is not micro*	 OK	OK
B.5.2 If investment analysis is used:					
B.5.2.1 Are all relevant assumptions and parameters used in the analysis listed?	PDD		Please see CL09 and CL10 A summary has been given in VCS PD, rest is available at the calculations spreadsheet	**OK**	**OK**
B.5.2.2 Is the latest version of the "Guidelines on the assessment of investment analysis" applied?	VVS	118	Will be answered after CL09, CL10 A summary has been given in VCS PD, rest is available at the calculations spreadsheet	**OK**	**OK**
B.5.2.3 Is project activity one of the following	VVS	119			

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
cases in regards to investment analysis:					
B.5.2.3.1 The proposed project activity would produce no financial or economic benefits other than CDM-related income;	VVS	119(a)	*Project will produce income through sale of electricity*	OK	OK
B.5.2.3.2 The proposed project activity is less economically or financially attractive than at least one other credible and realistic alternative;	VVS	119(b)	Project is less attractive then continuation of the existing situation which is heavy in non-renewable alternatives	OK	OK
B.5.2.3.3 The financial returns of the proposed project activity would be insufficient to justify the required investment.	VVS	119(c)		**OK**	**OK**
B.5.2.4 Has the accuracy of financial calculations carried out for investment analysis been verified as follows:	VVS	120	Will be answered after CAR03 is closed	CAR03	
B.5.2.4.1 Determine the suitability of the financial indicator selected by the project participants and conduct a thorough assessment of all parameters and assumptions used in calculating such financial indicators, and determine the accuracy and suitability of these parameters using available evidence and applying its expertise in relevant accounting practices	VVS	120(a)	Equity IRR has been calculated	OK	OK
B.5.2.4.2 Cross-check the parameters against third-party or publicly available sources, such as invoices or price indices	VVS	120(b)	Majority of the investment is crosschecked with realized contract.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.5.2.4.3 Review, as appropriate, feasibility reports, public announcements and annual financial reports related to the proposed project activity and the project participants	VVS	120(c)	Company FSR for loan application was submitted and used for investment analysis	OK	OK
B.5.2.4.4 Assess the correctness of computations carried out and documented by the project participants; and	VVS	120(d)	Calculations in the PDD and excel spreasdsheet were validated by the financial expert in the validation team	OK	OK
B.5.2.4.5 Assess, where applicable, the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions.	VVS	120(e)	Power price, investment cost, operating cost, and energy yield was fluctuated by ±10%	OK	OK
B.5.2.5 If benchmark analysis is used:			Will be answered after CAR03 is closed		
B.5.2.5.1 Is the benchmark clearly indicated?	PDD		Worlbank benchmark of 15% for hydro in TR used.	OK	OK
B.5.2.5.2 Is the type of benchmark applied suitable for the type of financial indicator presented?	VVS	121(a)	Official public WB benchmark	OK	OK
B.5.2.5.3 Does the risk premiums applied in determining the benchmark reflect the risks associated with the project type or activity?	VVS	121(b)	N/A	OK	OK
B.5.2.5.4 Is it reasonable to assume that no investment would be made at a rate of return lower than the benchmark?	VVS	121(c)	It is reasonable	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.5.2.6 If cost comparison is used:			N/A		
B.5.2.6.1 Are the scenarios compared described?	PDD		N/A	OK	OK
B.5.2.7 If PPs rely on values from FSR:	VVS	122	N/A		
B.5.2.7.1 Has the FSR been the basis of the decision to proceed with the investment in the project?	VVS	122(a)	*N/A*	OK	OK
B.5.2.7.2 Are the values used in the PDD and associated annexes fully consistent with the FSR? If inconsistencies occur, was the appropriateness of the values validated?	VVS	122(b)	N/A	OK	OK
B.5.2.7.3 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?	VVS	122(c)	N/A	OK	OK
B.5.3 If barriers analysis is used:			N/A		
B.5.3.1 Is the "Guidelines for objective demonstration and assessment of barriers" followed?	PS	48	N/A	OK	OK
B.5.3.2 Is it ensured that only the most relevant barriers selected?	PDD		N/A	OK	OK
B.5.3.3 Is the credibility of the barriers justified with key facts and/or assumptions and	PDD		N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the rationale?					
B.5.3.4 Is it ensured that issues that have a direct impact on the financial returns of the project activity are not considered as barriers but assessed by investment analysis? This does not refer to either: (a) Risk related barriers (b) Barriers related to the unavailability of sources of finance for the project activity	VVS	125	N/A	OK	OK
B.5.3.5 Were the barriers determined as real?	VVS	126(a)	*N/A*	OK	OK
B.5.3.6 Were the barriers determined as preventing the implementation of the project activity but not the implementation of at least one of the possible alternatives?	VVS	126(b)	*N/A*	OK	OK
B.5.4 Prior consideration of the clean development mechanism			Project is developed under VCS scheme where prior consideration is not a prerequisite.		
B.5.4.1 If the project activity start date prior to the date of publication of the PDD for stakeholder comments, were the CDM benefits considered necessary in the decision to undertake the project as a proposed CDM project activity?	PDD VVS	105	N/A	OK	OK
B.5.4.2 Is the start date of the project activity, reported in the PDD, the earliest date at which either the implementation or construction or real action of a project	VVS	106	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
activity begins?					
B.5.4.3 If the project activity requires construction, retrofit or other modifications, is it ensured that the date of commissioning not considered as the project activity start date?	VVS	106	N/A	OK	OK
B.5.4.4 Is it a project activity with a start date on or after 02 August 2008, or before 02 August 2008?	VVS	106	N/A	OK	OK
B.5.4.5 For a project activity with a start date on or after 02 August 2008, are the following provisions to be satisfied:			*for which PDD has not been published for GSC or a new methodology proposed to the EB before the project activity start date*		
B.5.4.5.1 Has the PP 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 within 180days of the project activity start date?	PS VVS	27 107	N/A	OK	OK
B.5.4.5.2 Do the project participants inform the secretariat of the progress of the project activity every subsequent two years after the initial notification, until the PDD regarding the project activity has been published for global stakeholder consultation or, a new baseline and monitoring methodology is proposed or a revision of an approved baseline and monitoring methodology is requested for the project activity before the start date?	PCP	9	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.5.4.6 For a project activity with a start date before 02 August 2008, are the following elements to be satisfied:	VVS	108	*for which the start date is prior to the date of publication of the PDD for global stakeholder consultation*		
B.5.4.6.1 Are evidence of their 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 provided?	PS VVS	28(a) 108	N/A	OK	OK
B.5.4.6.2 Are evidence that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation provided?	PS VVS	28(b) 108-110	N/A	OK	OK
B.5.4.6.3 Is an implementation timeline of the proposed CDM project activity provided?	PS	28(c)	N/A	OK	OK
B.6 Emission reductions					
B.6.1 Explanation of methodological choices					
B.6.1.1 Does the PDD explain how the methods or methodological steps in the selected methodology, for calculating project emissions, baseline emissions, leakage emissions and emission reductions are applied?	PDD VVS	96	Section 3.1 of the VCS-PD follows the relevant Tool to calculate the emission factor for an electricity system' version 03.0.0 's steps. Option 1 is identified in step 2. Simple ex-ante option is preferred in step 3. Option B is selected in step 4	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Option 1 the ex-ante approach is preferred in step 5.		
B.6.1.2 In case the methogology(ies) provide different options to choose from, does the PDD indicate and justify which option is chosen for the project activity?	PDD VVS	97	Option 1 is identified in step 2. Simple ex-ante option is preferred in step 3. Option B is selected in step 4 *Option 1 the ex-ante approach is preferred in step 5.* *Weigthed average CM is preferred in step 6.*	OK	OK
B.6.1.3 In case the methodology(ies) allow different default values, does the PDD indicate and justify which of the default values have been chosen for the project activity?	PDD		*N/A*	OK	OK
B.6.2 Data and parameters fixed ex ante					
B.6.2.1 If data and parameters will not be monitored throughout the crediting period of the proposed project activity but have already been determined and will remain fixed throughout the crediting period, are all data sources and assumptions: a) Appropriate and correct? b) Applicable to the proposed CDM project activity? c) Resulting in a conservative estimate of the emission reductions?	PDD VVS	98	All calculations, sources and assumptions have been validated by the validation team and are found to be appropriate, applicable and compliant with conservativeness principle.	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.6.2.2 For each piece of data or parameter, are tables provided in accordance with the instructions?	PDD		Relevant parameters were tabulated in section 4.1 of the PD.	OK	OK
B.6.3 Ex ante calculations of emission reductions					
B.6.3.1 Is 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 provided?	PDD		Baseline emissions were calculated by using the correct formula in the applied methodology:by multiplying the ex-ante fixed grid emission factor with the annual generation expectation (please see CL02 regarding this value). Leakage is not considered in line with the methodology All is depicted in sction 3.1 of the PD. Annual expected reduction amount is 26,010 tCO2	OK	OK
B.6.3.2 Is the information how each equation is applied, in a manner that enables the reader to reproduce the calculation, provided?	PDD		Section 3.1 to 3.4 summarizes ina reproducible manner and further detailed in the spreadsheet	OK	OK
B.6.3.3 Is the information of additional background information and/or data provided in Appendix 4, including relevant electronic spreadsheets?	PDD		Data is available and validated in the appexndix and the spreadsheet	OK	OK
B.6.3.4 Is a sample calculation for each equation used provided, substituting the values used in the equations?	PDD		Yes, section 3.1 resulting in 26,010 tCO2/y	OK	OK
B.6.3.5 If the proposed small-scale CDM project activity involves more than one	PDD		*N/A as project applies single*	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
component, does the project participants provide ex ante calculations of baseline, project and leakage GHG emissions as well as GHG emission reductions for each year of the crediting period and for each component separately?	PS	90	*methodology*		
B.6.3.6 In cases where leakage is to be considered in the proposed small-scale CDM project activity, do project participants consider leakage only within the boundaries of non-Annex I Parties?	PS	92	*N/A as applied methodology neglects leakage*	OK	OK
B.6.3.7 In case of replacement of existing equipments, do project participants estimate the point in time where the existing equipments would be replaced in the absence of the proposed small-scale CDM project activity in accordance with the "Tool to determine the remaining lifetime of equipment"? For household devices/ appliances, project participants may disregard the remaining lifetime.	PS PS	93 94	*N/A as project is greenfield*	OK	OK
B.6.3.8 Do norms, specifications, standards and test procedures cited in the selected methodology refer to the latest version of the documentation available at the time of submission of the PDD to the DOE for validation?	PS	95	*All relevant documents are uptodate*	OK	OK
B.6.4 Summary of the ex ante estimates of emission reductions					
B.6.4.1 Are the results of the ex ante estimation of emission reductions for all years of the	PDD		Provided in table 21 in section 3.4 of the	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
crediting period, provided in a tabular format?			VCS-PD.		
B.6.4.2 If the project activity involves more than one component, does the PDD provide a separate table for each of the component or each of the selected methodology(ies), and whether the PDD provide a table showing the aggregate emission reductions of the project activity?	PDD		N/A as Project activity does not involve more than one component	OK	OK
B.7 Monitoring Plan					
B.7.1 Data and parameters to be monitored					
B.7.1.1 Is specific information on how the data and parameters that need to be monitored would actually be collected during monitoring included?	PDD		Section 4.2 and 4.3 specify the data collection proecdures. Two meters will continuously be monitoring the electricity exported and imported to and from the grid as well as scada systems	OK	OK
B.7.1.2 For each data or parameter, is the information completed, in a tabular format:					
B.7.1.2.1 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.	PDD		Net electricity generated by the facility in year y will be monitored by TEIAS tested/approved/sealed meters and SCADA systems. Adequateness of the meter specifications as well as initial calibration and serial number information shall be verified during initial	FAR01	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			verification as the meters are not yet available to the validation team.		
B.7.1.2.2 Is an estimate of the data/ parameter that will be monitored during the crediting period provided?	PDD		*Kindly report the estimated applied value for the parameter in section 4.2*	CL18	OK
B.7.1.2.3 Is the estimate provided in the PDD for this monitored data or parameter reasonable?	VVS	98	*Will be answered after CL18 and CL02* *Third party WEYA results have been used.*	OK	OK
B.7.1.2.4 Where data or parameters are to be measured, does it specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals?	PDD		Table in section 4.2 indicates both hourly measurement and continuous measurement please clarify. Meters are under TEIAS control, with 0,5s accuracy class and are to be compliant with national and international regulaations mandatory.	CL19	OK
B.7.1.2.5 Is a description of the QA/QC procedures including the calibration procedures, where applicable, provided?	PDD		Internal records are indicated as c/checking sources. Please see CL14	CL14	OK
B.7.1.2.6 Is the purpose of data indicated?	PDD		*(ii) Calculation of baseline emissions;*	OK	OK
B.7.1.3 Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVS	131	Monitoring plan I,s compliant with the applied methodology	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.7.1.4 Does the monitoring plan contain all necessary parameters?	VVS	132(a)	*All parameters relevant to the project are considered according to the methodology*	OK	OK
B.7.1.5 Do the means of monitoring described in the plan comply with the requirements of the methodology including applicable tool(s)?	VVS	132(a)	Will be answered after monitoring related findings are closed.		OK
B.7.1.6 Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVS	132(b)	Indicated monitoinrg arrangements are feasible.	OK	OK
B.7.1.7 Are the means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified?	VVS	132(b)	*Will be answered after monitoring related findings are closed.*	OK	OK
B.7.2 Sampling plan			N/A as no sampling is involved		
B.7.2.1 Are there any data and parameters monitored in section B.7.1 above to be determined by a sampling approach?	PDD		N/A	OK	OK
B.7.2.2 Is a description of the sampling plan provided in accordance with the recommended outline for a sampling plan in the “Standard for sampling and surveys for CDM project activities and programme of activities”?	PDD		N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.7.3 Other elements of monitoring plan					
B.7.3.1 Is the operational and management structure, that the project operator will implement in order to monitor emission reductions and any leakage generated by the project activity, described in the PDD?	PDD PS	56(a)	Figure 5 in PD provides the organizational chart	OK	OK
B.7.3.2 Are the responsibilities for and institutional arrangements for data collection and archiving clearly indicated?	PDD PS	56l	Project manager Ayca Karaduman is indicated as the responsible for data collection and archiving. To be keptin hard and soft copy for 2 years after the crediting period.	OK	OK
B.7.3.3 Does the monitoring plan include provisions to ensure that data monitored and required for verification and issuance be kept and archived electronically for two years after the end of the crediting period or the last issuance of CERs, whichever occurs later?	PS	56(b)	Project manager Ayca Karaduman is indicated as the responsible for data collection and archiving. To be keptin hard and soft copy for 2 years after the crediting period.	OK	OK
B.7.3.4 Does the monitoring plan include uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables?	PS	56(e)	Please provide information on uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables?	CL20	OK
B.7.3.5 Does the monitoring plan include specifications of the calibration frequency	PS	56(f)	No, Please see CL14	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
for the measuring equipments?					
C. Duration and crediting period					
C.1 Duration of project activity					
C.1.1 Start date of project activity					
C.1.1.1 Is the start date of the project activity stated, in the format of DD/MM/YYYY?	PDD		Expected start date is indicated as 1/05/2014 according to VCS definitions.	OK	OK
C.1.1.2 Does it describe how the start date has been determined and provide evidence to support this date?	PDD		Kindly indicate the relevance of this expected date as a start date	CL21	OK
C.1.2 Expected operational lifetime of project activity					
C.1.2.1 Is the expected operational lifetime of the project activity stated in years and months?	PDD		Please see CAR01	CAR01	OK
C.2 Crediting period of project activity					
C.2.1 Type of crediting period					
C.2.1.1 Is the type of crediting period chosen for the project activity stated?	PDD		Renewable crediting period has been chosen.	OK	OK
C.2.1.2 In case a renewable crediting period was chosen, does it indicate whether it is the first, second or third?	PDD		This is the intial crediting period to start from the expected date as indicated	OK	OK
C.2.2 Start date of crediting period					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C.2.2.1 Is the start date of crediting period stated in the format of DD/MM/YYYY?	PDD		01/05/2014	OK	OK
C.2.3 Length of crediting period					
C.2.3.1 Is the length of crediting period stated in years and months?	PDD		10 years 0 months to be renewable at most twice	OK	OK
D. Environmental impacts					
D.1 Analysis of the environmental impacts					
D.1.1 If required by the host Party, is an analysis of the environmental impacts of the proposed small-scale CDM project activity carried out and a summary of the analysis of the environmental impacts of the project activity and references to all related documentation provided?	PDD PS	99	Project introductory file has been assessedby the Ministry and the project has been exempted from a full EIA process due its limited impact. Exemption certificate has ben validated	OK	OK
E. Local stakeholder consultation					
E.1 Solicitation of comments from local stakeholders					
E.1.1 Did the project participants complete a local stakeholder consultation process and that due steps were taken to engage stakeholders and solicit comments for the proposed project activity?	VVS	138	**As project is exempt from a full EIA a live stakeholder meeting was not deemed required.**	**OK**	**OK**
E.1.2 Is the process by which comments from local stakeholders have been invited provided?	PDD		N/A, see above	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
E.2 Summary of comments received						
E.2.1 Are stakeholders that have made comments identified?	PDD		N/A, see above		OK	OK
E.2.2 Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVS	139 (a)	N/A, see above		OK	OK
E.2.3 Is the summary of comments provided complete?	PDD VVS	139 (b)	N/A, see above		OK	OK
E.3 Report on consideration of comments received						
E.3.1 Is information provided to demonstrate that all comments received have been considered?	PDD VVS	139 (c)	N/A, see above		OK	
F. Approval and authorization			Project is a VER project developed under VCS hence section is N/A			
F.1 General						
F.1.1 Is it indicated whether the letter(s) of approval from Party(ies) available at the time of submitting the PDD to the validating DOE?	PDD		N/A		OK	OK
F.2 Approval			COUNTRY A	COUNTRY B		
F.2.1 Has the DNA of each Party indicated as being involved in the proposed CDM project	VVS	38	*N/A*	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
activity in section A.3 of the PDD provided a written letter of approval?						
F.2.2 Does the letter of approval from DNA of each Party confirm that : (a) The Party is a Party of the Kyoto Protocol (b) The participation is voluntary (c) In the case of the host Party, the proposed CDM project activity contributes to the sustainable development of the country (d) Refers to the precise proposed CDM project activity title in the PDD being submitted for registration	VVS	39	N/A	N/A	OK	OK
F.2.3 Is(are) the letter(s) of approval unconditional with respect to (0) above?	VVS	40	N/A	N/A	OK	OK
F.2.4 Has(ve) the letter(s) of approval been issued by the respective Party's DNA? If there is doubt with respect to (0) above, was it verified with the DNA that the letter of approval is valid for the proposed CDM project activity under validation?	VVS	41,42	N/A	N/A	OK	OK
F.2.5 Does the letter of approval by the DNA of the host Party confirm the contribution of the proposed CDM project activity to the sustainable development of the host Party?	VVS	51	N/A		OK	OK
F.3 Authorization						
F.3.1 Has each project participant been authorized by at least one Party involved in a letter of	VVS	45	*N/A*		OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
approval?					
F.3.2 Is the information in tabular form in the PDD consistent with the contact information for project participants provided?	VVS	46	N/A	OK	OK
F.3.3 Are any entities other than those approved as project participants included in the PDD?	VVS	47	*N/A*	OK	OK
F.3.4 Has the approval of participation issued from the relevant DNA? And if in doubt, was it verified with the DNA that the approval of participation is valid for the proposed CDM project participants?	VVS	48	N/A	OK	OK
Part III Others					
A. Appendixes of PDD			PDD was prepared with VCS templates according to VCS requirements, hence section is N/A. Please see Table 1 for PDD considerations.		
A.1 Appendix 1: Contact information of project participants	PDD				
A.1.1 For each organization listed in section A.4 of PDD, is the table in PDD completed, with the following mandatory fields: Organization, City, postcode, Country, Telephone and Fax, e-mail and Name of contact person?	PDD		N/A	OK	OK
A.2 Appendix 2: Affirmation regarding public funding					
A.2.1 If applicable, is the affirmation obtained from Parties providing public funding to the project	PDD		*N/A*	OK	OK

CHECKLIST QUESTION		Ref.	§	COMMENTS	Draft Concl	Final Concl
	Activity attached?					
A.3	**Appendix 3: Applicability of the selected methodology(ies)**					
A.3.1	Is the background information on the applicability of the selected methodology provided?	PDD		N/A	OK	OK
A.4	**Appendix 4: Further background information on ex ante calculation of emission reductions**					
A.4.1	Is the background information on the ex ante calculation of emission reductions provided?	PDD		*N/A*	OK	OK
A.5	**Appendix 5: Further background information on monitoring plan**					
A.5.1	Is the background information used in the development of the monitoring plan provided?	PDD		*N/A*	OK	OK
A.6	**Appendix 6: Summary of post registration changes**					
A.6.1	Is a summary of the post registration changes provided?	PDD		N/A	OK	OK
B.	**Global Stakeholder Consultation**			N/A as project is VCS		
B.1.1	Is there any comment on the PDD of the proposed project activity received during Global Stakeholder Consultation process?	VVS	34	*N/A*	OK	OK
B.1.2	If yes, have all comments been taken into account during the validation of the proposed project activity?	VVS	35	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
B.1.3 If comments indicate that the proposed project activity does not comply with the CDM requirements and are not substantiated, is there any further clarification from the entity providing the comment?	VVS	36	*N/A*	OK	OK
B.1.4 If yes, how comments received have been taken due account?	VVS	36	N/A	OK	OK
B.1.5 If no, are the comments as originally provided proceeded to assess?	VVS	36	N/A	OK	OK
C. Modalities of Communications (MoC)			N/A as project is VCS N/A as project is VCS		
C.1.1 Has the corporate identity of all project participants and focal points included in MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories been validated by:	VVS	53			
C.1.1.1 Directly checking evidence for corporate, personal identity and other relevant documentation; or	VVS	54(a)	N/A	OK	OK
C.1.1.2 Notarized documentation; or	VVS	54(b)	N/A	OK	OK
C.1.1.3 Written confirmation from the project participant or the coordinating/managing entity that all corporate and personal details, including specimen signatures, are valid and accurate.	VVS	54(c)	N/A	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
C.1.2 If (0) above was chosen, is it ensured that the MoC statement is received from a project participant with whom the DOE has a contractual relationship?	VVS	55	N/A	OK	OK
C.1.3 If (0) above was chosen, is it ensured that the official who submits the MoC statement to the DOE and the official who signed the written confirmation (if a different person) is/are duly authorized to do so on behalf of the respective project participant?	VVS	56	N/A	OK	OK
C.1.4 If it is unable to validate the requirements by applying 0 to 0 above, are any further validation activities performed?	VVS	57	N/A	OK	OK
C.1.5 Has the latest version of the form “Modalities of Communication statement” (F-CDM-MOC) been used?	VVS	60(a)	N/A	OK	OK
C.1.6 Is the information required as per F-CDM-MOC, including its annex 1, correctly completed?	VVS	60(b)	N/A	OK	OK
C.1.7 Do the project participant’s authorized signatories signing the F-CDM-MOC correspond to the project participant’s authorized signatories included in F-CDM-MOC, annex 1?	VVS	60(c)	N/A	OK	OK

Table 4 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR01 Please provide the lifetime of the project activity in line with the guidance of "Tool to determine the remaining lifetime of equipment" EB50 Annex 15 v.1		Response: Lifetime of the project is determined in line with the tool. Which is deifned as 25 years for onshore wind turbines. Response: It is indicated under sub-step 2c of the section 2.5.	Msu131101: It has not been indicated which option of the tool was utilized. CAR remains open Msu131209: Option C defaults is indicated.ok Closed.

CAR02 (4) CDM Program standard par. 96 indicates that "For demonstration lthough lityity of a proposed small-scale CDM project activity, project participants shall apply or use one of the followinga) "Attachment A of Appendix B". In such cases, project participants should also follow the "Non-binding practice examples to demonstra lthough lityity for SSC (4) project activities"b) Any applicab lthough lityity tool; or…" Please either conform with a or b		Response: Option a is confirmed and and section 2.5 of the VCS PD is revised accordingly.	Msu131101: Section 2.5 revised to indicate: "*Investment barrier (option a) in accordance with Attachment A to Appendix B (Version 09) Non-binding best practice examples to demonstra lthough lityity for SSC project activities as per Annex 34 (EB 35).*" CAR is closed.

Car01CAR03 1. Please expla lthoughugh Debt Interest Payment (Commer.) is considered in the TOTAL Cost (Million USD) why Loan Repayment (Commer.) is not considered in the cash flow. 2. Please check the cells “m18” and “q16”. Those must be zero because there must be outstanding left 3. Please clarify why Interest Rate in sheet “Investment&Financials” exists. It is found that this rate hasn’t been used anywhere. 4. Please calculate depreciation for the fixed asset investments. This would have impact both on the corporate tax and the final cash flow. 5. Please explain why the sum of total debt taken and equity (24.2m$) is greater than the total initial investment cost (21.4m$). 6. It is stated that the grace period is 2 years but the loan repayment starts as of 2013; just after 1 year after the loan taken. Please check the related formulas. 7. Investment cost scenario only effects the insurance cost so the change in IRR is not so high. There must be a connection with the investment cost and the total investment finance both equity and debt i.e. the total eguity and debt should be equal to initial imvestment cost. 8. The benchmark selected from world bank document is for the hydropower invetsments. Please find another benchmark for wind power investments or calculate CAPM to obtain the benchmark. 9. Please clarify if there are VATs on the asset items or not? 10. Please clarify if the investment can be completed in 1 year.		4. Respons1. Loan Repayment is considered in the cash flow. Loan Repayment is subtracted from the Outstanding loan until outstanding loan becomes zero. It is an annually payment for outstanding loan not a yearly cost.2. m18 and q 16 is corrected to zero. 4. 3.It is a miswriting, It is deleted4. Depreciation is added. Also taxes are taken into account. 5. It is corrected. Now equity and total loan amount is equal to project cost. 6.It is corrected, Now grace period is two years. 7.Sensitivity analysis is corrected. Now operating cost range is affected total operation cost and investment cost range is affected total investment cost. 8. It can be seen from the world bank document page 81 table 11.5, threshold IRR on equity is also defined for Wind projects, which is 15%. (http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/05/11/000333037_20090511030724/Rendered/PDF/468080PAD0P112101Official0Use0Only1.pdf) 9.VAT is considered in the IRR analysis. All costs other than equipment costs there is VAT. 10. It is stated in the FSR of the project page 12, investment will be completed in one year. Also during the site visit it is confirmed by project manager.	Msu131101: Will be reviewed later Msu131209: All issues closed as approved by financial expert, OK. Closed.

CL01 License EU/1622-8/1181 dd. 29/05/2008 indicates 13.8 MW, please clarify.		Response: In the early stages of the project, installed capacity is determined as 13.8 MW. However after the license is granted new researches was done at the project site and project owner decided to change the capcity of the project to 15 MW. Also equipment agreement of the project is 15 MW. Revised licence will be granted before the plant starts operation and it qill be provided as soon as PO completed the procedure. A FAR could be open for this purpose. 15 MW installed power of the project can be seen from equipment agreement now and will be seen from revised license in the future.	Msu131101: Equipment capacity has been validated through the contract with provider as 5 x 3MW Enercon E-82s. FAR02 has been raised to validate the revised EMRA generation license for the project, confirming the increase of project capacity to 15 MW Closed.
CL02 As the FSR is not officially approved please refer to a valid source for the annual generation expectation.		Response: For the electricity generation predictions, Barlevento Wind-Resourcce-Assessment is considered. In the assessment report all alternatives of the project is discussed. Alternative 6 (page 46) which is the actual situation now, is determined as yearly electricity generation.	Msu131101: The equipment validated through TSA, Enercon E-82 is alternative 6 in WEYA. Revised value for plant is 45,588 MWh/y, which is the third party determined long term average production. CL is closed.

CL03 Please provide information about the project (how many turbines, which brand, where is the site, connected to where, etc.)		Information about the turbines were given under the section 1.8. Location of the site was given under the section 1.9.	Msu131101: 5 turbines of Enercon 3MW E82 type. Location given in section 1.9 CL is closed.
CL04 No information regarding the energy transfer lines and grid connection was given, please do.		Response: Information about the energy transfer line is given under the section 1.8. Also connection agreement is provided to the DOE. Also single line diagram of the plant is added to the PD.	Msu131101: Project is to be connected to 125 MVA TR-1 which in turn will be connected to 380 kV Karaburun zone TP. CL is closed.
CL05 Please provide GPS coordinates for the project site		Response: GPS coordinates of the project is given under the section 1.9. Response; Reference for the coordinates is given under the table as a footnote.	Msu131101: Kindly indicate a source for the given location information CL is open Msu131209: As the license is not finalized and the site under construction: Please see FAR02 for confirmation of the coordinates Closed.

CL06 Description is not in line with the properties indicated in the license, please clarify		Response: Please refer to CL01.	Msu131101: Please see FAR02 CL is closed.
CL07 Section refers to bucakkisla HPP, please revise		Response: It is corrected.	Msu131101: Corrected, OK, Closed.
CL08 Applicability of the applied tool Tool to calculate the emission factor for an electricity system has not been considered, please do so.		Response: Applicability of the tool is given under the section 2.2 Response: Applicability of the tool is revised.	Msu131101: Applicability has not been discussed in line with section 2.2 of the applied tool Cl remains open Msu131209: Applicability revised, OK: Closed.

CL09 Please show the IRR calculation, with all parameters referenced and clearly shown in the PD.		Response: All references for the IRR parameters are given in the IRR excel sheet. Equipment cost cannot be publicly published because of the confidentially agreement between Enercon and Egenda. So it is not possible to add the all IRR items in the PD. However total project cost is added to the PD. Response: Please kindly clarify the question. Annual generation assumption is checked and it is correct. Response: It is corrected to 45.588 GWh/year.	Msu131101: IRR parameters given, OK. However please check the annual generation assumption in the table. CL is open. Msu131209: Given footnote in the VCS-PD gives 45588, not 44588 MWh/year. CL is open Msu131229: Corrected, OK. Closed.
CL10 Additionality related parameters cannot be confidential, please revise.		Response: Please refer to CL09	Msu131101: Total investment amount and annual operatiog costs given in PDD, OK. CL is closed.

CL11 Regarding emission factor calculations: • Excel sheet, OM tab, cell A47 refers to years 2007-2009, which should be corrected. • PDD p.25 and Excel (tab 'Latest PPS – BM&CM', cell Q272) refer to 0.5 weighting factor for BM and OM emission factors. The text needs to be corrected; the calculations are based correctly on 0.75/0.25.		Response: -It is corrected. -It is corrected.	Msu131101: Will be reviewed later Msu131209: All corrections made, OK Closed.

CL12 Please clarify how TEIAS will perform the readings and if a record of this will be produced		Response: Section 4.2 is revised. Responsibilities of TEİAŞ and Project owner are described under the regulation. (http://www.epdk.gov.tr/documents/elektrik/mevzuat/yonetmelik/elektrik/dengeleme_uzlastirma/DUYson.doc). TEİAŞ will read the records with the system OSOS. It is defined under the article 81 (page 55) . OSOS means that TEİAŞ will read the meters from the center via internet communication. Response: It is corrected as “Measured hourly and readings monthly” Response: “Frequency of monitoring/recording” is corrected as “Continuous monitoring and at least monthly recording”	Msu131101: section 4.2 of VCS PD r.02 indicates under description of measurement methods that the measurements will be hourly, contradicting with frequency of monitoring. Cl remains open Msu131209: It is not indicated if the monitoring is to be continuous, as AMS ID monitoring parameter no 5 dictates. CL is open Msu131229: Corrected, OK Closed.
CL13 Calculation method is not N/A as indicated in the description of measurement methods (v.)		Response: Calculation method is added.	Msu131101: Method added to the rl3evant table under section 4.2 CL is closed.

CL14 Please provide information on calibration procedures for the energy meters		Response: It is provided under the section 4.2 Response: Crosschecking procedure is explained under the qa/qc procedures.	Msu131101: Given under qa/qc procedures However no crosschecking spurce was identified for the monitored parameter CL is open Msu131209: OSF forms and company records indicated as c/checking source Closed.
CL15 Kindly depict the monitoring points		Response: Monitoring points are described ubder the table in the section 4.2. Monthly PMUM data will be monitored and will be used during the verification period.	Msu131101: Points depicted through the connection agreement, in figure 1 of VCS pD r.02 CL is closed.
CL16 Please clarify how the readings by TEIAS and technicians of Mordogan WPP will be made		Response: TEİAŞ will read the records from the center via internet communication. Technicians of the plant will read the records from the meters physically and just keep them for internal checks.	Msu131101: Readings will be done remotely through OSOS. CL is closed.
CL17 Please provide a mechanism for on-going communications.		Response: Please kindly clarify the question.	Msu131101: CL removed

CL18 Kindly report the estimated applied value for the parameter in section 4.2		Response: It is added any comment line of the table.	Msu131101: Given as 45,588 MWh/y Closed.
CL19 Table in section 4.2 indicates both hourly measurement and continuous measurement please clarify.		Response: Table is revised accordingly Response: Please refer to CL14	Msu131101: table still indicates hourly measurements under description of measurement methods and contionuous under frequency. CL remains open Msu131209: Please refer to CL12
CL20 Please provide information on uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables?		Response: Table in the section 4.2 and the section 4.3 are revised. Accuracy level of the meters are added.	Msu131101: Given, OK. Closed.
CL21 Kindly indicate the relevance of this expected date as a start date		Response: Project start date is revised.	Msu131101: Date revised as February 2015, start of expected generation. Closed.

CL22 Monitoring parameter and its description is not consistent between section 4.2 section 4.3 and the methodology. All shall be consistent.		Response: Monitoring parameter and its description is consistent between section 4.2 section 4.3 and the methodology Response: Egy is corrected to $\mathbf{EG_{facility,y}}$	Msu131209: Parameter in section 4.3 EGy is not consistent with the parameter in 4.2 EG facility,y CL is open Msu131229: Corrected, OK. Closed.

CAR04 1. Kindly clarify if the Mordogan Financial report was used for any official submissions or not (loan etc?). If so please document this submission 2. Kindly justify the applicability of this financial analysis as it was prepared for 13.8 MW capacity in VCS-PD.		Response: 1. Mordoğan Financial reports was used for loan proposal requests. As it can be seen from the loan agreement between İşbankası and Enda, total project cost of the four project (Alaçatı WPP, Germiyan WPP, Urla WPP, Mordoğan WPP) is 97 Billion USD. (agreement date 15.08.2013). In the agreement it is indicated that project cost is decided by the financial reports of the project. So the financial reports of the project is evaluated by the bank and also İşbankası decided to sign loan agreement after evaluating this financial reports. In addition to that Equipment agreement is covered nearly 60% of the total cost of the project, so biggest part of the project cost is realized and evidence for this cost was provided to the DOE. Other small costs could be considered as negligible compared to equipment cost. For example biggest cost other than the equipment cost is civil works and it is nearly 8% of the total cost. So the biggest part of the cost is realized and it is documented. Also in the financial report cost of the turbines are estimated as 15,210,000 USD. Equipment agreement cost is 15,351,000 USD. So it can be considered that estimations in the financial report is reasonable because equipment cost estimation of the report is nearly realized with only %0.92 error. 2. In the financial report page 10 figure c shows that there are 5 enercon e82 turbines, which are the actual ones. Also in the financial report page 14 it is indicated that total installed power of the project will be 15 MW. So it can be considered that financial report of the project is prepared for 15 MW installed power. Also at the page 23 in the financial report construction works are calculated for Enercon E82 turbines. So only the name of the document is 13.8 MW Mordoğan, but whole cost is calculated for 15 MW installed power.	Msu131229: Justifications accepted, OK. Closed.

FAR01 Adequateness of the meter specifications as well as initial calibration and serial number information shall be verified during initial verification as the meters are not yet available to the validation team.			
FAR02 The revised EMRA generation license for the project shall be validated to confirm the project capacity. Grid connection agreement and the turbine coordinates are also to be checked per revision.			
FAR03 License and implementation are not finalized hence the WTG coordinates are not final. Verifiying DOE will confirm the coorsindates			
ITR FINDINGS			
CL23 Please provide the contract with furutrecamp to verify the date in table 14		Response: Contract is provided to the DOE.	Msu140103: Corrected. Closed.
CL24 In the VCS-PD, Section 6 is not appropriately filled and the mechanism for ongoing communications is missing.		Response: Section 6 of the VCS-PD is revised.	Msu140103: Corrected. Closed.
CAR05 De-bundling criteria have not been justified Please see “Guidelines On Assessment Of Debundling For Ssc Project Activities” v.3		Response: It is added under the section 1.7 of the VSC-PD.	Msu140103: Corrected. Closed.
CAR06 No reference stated for the investment and operational costs in the PD;		Response: References are added in the VCS-PD.	Msu140103: Corrected. Closed.

CL25 Mordogan is not the city. What is the village name? (a village is mentioned). Cesme is not relevant as a location.		Response: Section 1.9 of the VCS-PD is revised.	Msu140103: Corrected. Closed.
CL26 Biodiversity typed wrong		Response: It is corrected.	Msu140103: Corrected. Closed.
CAR07 Loan amount cannot be verified as the document is for more than one project and the amount related to this project is not clear		Response: In the loan agreement total amount of the 4 egenda projects is mentioned. All these figures are taken from the financial reports of the projects and they were provided to the banks in order to take the loan. As it can be seen from the financial reports total project cost of the four project is almost same as the mentioned in the loan agreement. Financial reports of the alaçatı, germiyan and urla are provided to the DOE.	Msu140103: FSRs of the 4 projects were analyzed and the requested loan amounts for the projects add up to (78,940,000), which is the 96% of the validated total loan amount for the same projects (82,600,000), hence it is accepted. Closed.

CAR08 Project emissions have not been assessed according to the methodology paragraph 21		Response: As per paragraph 20 of approved methodology AMS- I.D. (Version- 17, EB- 61), For most renewable energy project activities, PEy = 0. However, for the following categories of project activities, project emissions have to be considered following the procedure described in the most recent version of ACM0002. - Emissions related to the operation of geothermal power plants (e.g. non-condensable gases, electricity/fossil fuel consumption); - Emissions from water reservoirs of hydro power plants As the project activity is a wind power generation, the project emissions are considered zero. The paragraph 21 is not applicable to the project activity.	Msu140103: As this has been the CDM's approach on many currently registered AMS-ID v.17 projects this justification has been accepted. Closed.