



VALIDATION REPORT ALENTEK ENERJI A.S.

VALIDATION OF THE BALIKESIR SUSURLUK 45 MW WIND FARM PROJECT-TURKEY

REPORT NO. **TURKEY-VAL-
CER.1173.10.C45/2010**

REVISION No. 00


BUREAU VERITAS CERTIFICATION

Great Guildford House, 30 Great Guildford Street
SE1 0ES - London – United Kingdom



VALIDATION REPORT

Date of first issue: 09/06/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Alentek Enerji A.S.	Client ref.: Ebubekir Fırtın
<p>Summary: Bureau Veritas Certification has made the validation of the Balıkesir Susurluk 45 MW Wind Farm Project-Turkey project of Alentek Enerji A.S. located in Susurluk-Balıkesir-Turkey on the basis of Gold Standard version 2.1 criteria and UNFCCC criteria for the CDM Methodology, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol as well as the country criteria.</p> <p>The validation scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and 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.</p> <p>The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.</p> <p>In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology ACM0002 "Consolidated baseline methodology for grid connected electricity generation from renewable sources" version 12 and meets the relevant Gold Standard version 2.1 requirements for the CDM and the relevant country criteria.</p> <p>Annual estimation of emission reductions: 74,016 tonnes of tCO₂.eq Expected Total emission reductions: 518,118 tonnes of tCO₂.eq</p>	

Report No.: TURKEY/VAL/CER.1173.10.C45/2010	Subject Group: GS-VER
Project title: Balıkesir Susurluk 45 MW Wind Farm Project-Turkey	
Work carried out by: Fikriye Seda Yücel-Verifier Bade Cebeci-Lead Verifier Yıldız Arıkan-Baseline Specialist Murat Gencer-Financial Specialist	
Internal Technical Review carried out by: Burcu Mutman 	
Date of this revision: 08/07/2011	Rev. No.: 01
Number of pages: 159	

Indexing terms

Work approved by:

Flavio Gomes

 No distribution without permission from the Client or responsible organizational unit

 Limited distribution

 Unrestricted distribution



Table of Contents		Page
1	INTRODUCTION	4
1.1	Objective	4
1.2	Scope	4
1.3	Validation team	4
2	METHODOLOGY	5
2.1	Review of Documents	5
2.2	Follow-up Interviews	6
2.3	Resolution of Clarification and Corrective Action Requests	6
2.4	Internal Technical Review	7
3	VALIDATION CONCLUSIONS	8
3.1	Project design document (57)	8
3.2	Changes in the Project Activity	8
3.3	Project description (64)	8
3.4	Baseline and monitoring methodology	10
3.4.1	General requirement (76-77)	10
3.4.2	Project boundary (80)	11
3.4.3	Baseline identification (87-88)	9
3.4.4	Algorithms and/or formulae used to determine emission reductions (92-93)	121
3.5	Additionality of a project activity (97)	14
3.5.1	Prior consideration of the clean development mechanism (104)	154
3.5.1.1	Historical information on project timeline	15
3.5.2	Identification of alternatives (107)	15
3.5.3	Investment analysis (114)	15
3.5.4	Barrier analysis (118)	19
3.5.5	Common practice analysis (121)	219
3.6	Monitoring plan (124)	20
3.7	Sustainable development (127)	21
3.8	Local stakeholder consultation (130)	21
3.9	Environmental impacts (133)	21
4	COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS.....	22
5	VALIDATION OPINION	22
6	REFERENCES	23



7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS25

APPENDIX A: COMPANY GS PROJECT VALIDATION PROTOCOL.....26



1 INTRODUCTION

Alentek Enerji A.S. has commissioned Bureau Veritas Certification to validate its GS-VER project Balıkesir Susurluk 45 MW Wind Farm Project-Turkey (hereafter called “the project”) at Susurluk-Balıkesir-Turkey.

This report summarizes the findings of the validation of the project, performed on the basis of Gold Standard version 2.1 (GS-VER) criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The validation serves as project design verification and is a requirement of all projects. The validation is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable, and meet the stated requirements and identified criteria. Validation is a requirement for all GS-VER 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 (VERs).

GS-VER criteria refer to v2.1 of Gold Standard Requirements, as well as the host country criteria.

1.2 Scope

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, GS-VER rules and associated interpretations.

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

1.3 Validation team

The validation team consists of the following personnel:

FUNCTION	NAME	CODE HOLDER*	TASK PERFORMED
Lead Verifier	Bade Cebeci	X Yes <input type="checkbox"/> No	XDR <input type="checkbox"/> SV XRI
Verifier	Fikriye Seda Yücel	X Yes <input type="checkbox"/> No	X DR XSV XRI
Technical Specialist	Yildiz Arıkan	X Yes <input type="checkbox"/> No	XDR <input type="checkbox"/> SV <input type="checkbox"/> RI
Financial	Murat Gencer	<input type="checkbox"/> Yes XNo	XDR <input type="checkbox"/> SV <input type="checkbox"/> RI



Specialist			
Internal Technical Reviewer (ITR)	Burcu Mutman	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Specialist supporting ITR	N.A.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI

*DR = Document Review; SV = Site Visit; RI = Report issuance

2 METHODOLOGY

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

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

- It organizes, details and clarifies the requirements a GS-VER 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 A to this report.

2.1 Review of Documents

The Project Design Document (PDD) submitted by Alentek Enerji A.S. and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for Completing the Project Design Document (GS-PDD), Approved methodology, Kyoto Protocol, Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Alentek Enerji A.S. revised the PDD and resubmitted it on 09/05/2011.

The validation findings presented in this report relate to the project as described in the PDD version 04.



2.2 Follow-up Interviews

On 18/08/2010 Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Alentek Enerji A.S. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Alentek Enerji A.S.	<ul style="list-style-type: none"> ➤ Design of the project activity ➤ The planning and the construction phase of the project ➤ Sustainable development in the region ➤ Training of the employees ➤ Noise pollution caused by the wind turbines ➤ Planting of trees ➤ Monitoring of bird deaths ➤ Working conditions
LOCAL Stakeholder	<ul style="list-style-type: none"> ➤ Sustainable development in the region ➤ Local stakeholder consultation meeting ➤ Bird migration routes ➤ Noise pollution caused by the wind turbines ➤ Project's impact on local economy
Ecofys	<ul style="list-style-type: none"> ➤ Local stakeholder consultation meeting ➤ Consideration of comments from the stakeholders ➤ Sustainable development in the region ➤ Additionality of the project activity ➤ Investment analysis ➤ Baseline determination ➤ Emission reduction calculations ➤ Planting of trees ➤ Training of the employees

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the project design.

Corrective Action Requests (CAR) is issued, where:

- (a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (b) The GS-VER requirements have not been met;



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

The validation team may also use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable GS-VER requirements have been met.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

2.4 Internal Technical Review

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

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

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

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

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

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



3 VALIDATION CONCLUSIONS

In the following sections, the conclusions of the validation are stated.

The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 25 Corrective Action Requests (CARs), 51 Clarification Requests (CLs) and 1 Forwarded Action Request (FARs).

The CARs and CLs were closed based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section correspond to the VVM paragraph

3.1 Project design document (57)

The validation team hereby confirms that the PDD complies with the latest forms of the guidance documents for completion of PDD.

3.2 Changes in the Project Activity

The major differences between the PDD version v1 and PDD v7 (version subject to ITR) are that:

- No IRR analysis was carried out in v1. Only barrier analysis was done, and after CL 22, some barriers have been removed and IRR analysis is carried out to demonstrate additionality.

- According to first issue of the production license, 112,227 MWh/year of electricity generated by 60 pieces of 750 kW wind turbines would be delivered. However, license was altered to change turbine sizes two times; at first time the turbines sizes changed to 22 pieces 2 MW and 1 piece 1 MW and at the second time, turbine sizes changed to 18 pieces of 2,5 MW wind turbines. Although the installed capacity remains the same (45 MW) the annual electricity generation rises up to 121,939 MWh/year because of the high energy yield of 2.5 MW turbines comparing to 750 kW ones. This confusion was clarified with CAR21.

- Sustainable Development Matrix was revised in accordance with the GS requirements (CL30 to CL40)

- Emission reduction calculations and IRR calculations have been revised



upon experts comments.

3.3 Project description (64)

The project was planned and acquired license to develop 45 MW onshore wind farm located in the Balıkesir province, Susurluk District in Turkey.

According to first issue of the production license, 112,227 MWh/year of electricity generated by 60 pieces of 750 kW wind turbines will be delivered to the Turkish national grid. However, they have applied EMRA (EPDK) for a license alteration to change turbine sizes two times; at first time the turbine sizes changed to 22 pieces 2 MW and 1 piece 1 MW and at the second time, turbine sizes changed to 18 pieces of 2,5 MW wind turbines.

Energy report by Geonet Umweltconsulting GmbH also gives the total annual energy yield as 121,939 MWh/year for %75 transgression probability for 18 pieces 80 m for N100-2500 and N90-2500 turbines.

Although the installed capacity remains the same (45 MW), according to this energy report, the annual electricity generation rises up to 121,939 MWh/year because of the high energy yield of 2,5 MW turbines comparing to 750 kW ones.

As a summary, the project involves the installation of 18 turbines (18 * 2,5 MW) with 121,939 MWh electricity generation yearly and the development of a 29,326 m. transmission line between the proposed project area and the national grid.

The annual emission reductions are calculated as 74,016.97 tCO₂-eq/year. The baseline scenario has been defined as "the generation of the same amount of electricity by the national grid which is dominated by thermal power plants". The main emission source of baseline is CO₂. Compared to that baseline scenario, the project will have positive influences on sustainable development in the region and in Turkey.

The project description has been validated through documents like energy production license, the purchase agreements and the turbine manufacturer catalogue. The coordinates of the turbines have been verified during site visit by the GPS.

The projects contributions to sustainable development are that:

- greenhouse gas emissions are reduced by replacing fossil fuel power generation
- development of the wind energy sector in Turkey



- contribution to local and regional economy by local purchases (bills provided to DOE)
- reduction of pollutants resulting from the electricity generation from fossil fuels in Turkey
- Reduction of Turkish dependency on the electricity imports
- local employment: there are already 7 people from Susurluk region hired for the construction stage
- roads enlarged, X ray room is renewed at Kepsut state hospital, fixed drink water pipeline for nearby village

The only changes between v1 and v7 are that IRR analysis is included to demonstrate additionality and that turbine sizes were changed (section 3.2). These changes do not affect the additionality of the project.

The DOE hereby confirms that the project description in PDD (v07) is accurate and complete in all respects.

3.4 Baseline and monitoring methodology

3.4.1 General requirement (76-77)

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

This methodology is applicable to grid-connected renewable power generation project activities that install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant). During site visit it was validated that project is the installation of a grid-connected greenfield WPP.

Project is not a capacity addition, retrofit or replacement. Project does not involve switching from fossil fuels to renewable energy sources and is not a biomass plant.

The DOE hereby confirms that the selected baseline and monitoring methodology (ACM0002 “Consolidated baseline methodology for grid connected electricity generation from renewable sources” version 12) is previously approved by the CDM Executive Board, and is applicable to the project activity, which, complies with all the applicability conditions therein.

The DOE hereby confirms that, as a result of the implementation of the proposed GS-VER project activity, there are no greenhouse gas emissions occurring within the proposed GS-VER project activity boundary, which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.



3.4.2 Project boundary (80)

The DOE validated the project boundary by:

- a) The generation license, turbine purchase agreement, contracts for the purchase of equipments
- b) During the site visit, the locations of the turbines have been observed and the coordinates have been checked with the GPS

CO2 emissions are included for baseline scenario and no emissions are foreseen for project scenario that is in line with the methodology.

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

3.4.3 Baseline identification (87-88)

The steps taken to assess the requirement given in paragraph 81 and 82 of the VVM are described below:

The project activity is the installation of a new grid-connected renewable power plant. There is only one applicable baseline scenario identified for the new grid-connected renewable power plant in the ACM002 methodology 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.”

The PDD includes the description of the baseline in line with the ACM 002 version 12.1.0 and refers to the “Tool to calculate the emission factor for an electricity system.” (v2.0).for calculating emission factor (EFy) as combined margin (CM).

Emission factor has been identified as 0.607 tCO₂/MWh and has been confirmed by the validation team with reviewing all the baseline calculation sheet equations and confirming the used parameters for the calculations.

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

- (a) All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;



- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
- (e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed GS-VER project activity.

3.4.4 Algorithms and/or formulae used to determine emission reductions (92-93)

The steps taken to assess the requirement outlined in paragraph 89 the VVM are described below:

The baseline calculation has been demonstrated through the baseline calculation excel sheet. The calculations and the parameters used have been checked by the validation team. The parameters are in line with the references.

Anthropogenic emission reduction is a function of the expected net amount of electricity produced, for the given project, which amounts to 121,939 MWh per annum. The annual emission reduction is 74,016 tCO₂e. Over the period of seven years, the total amount of emission reduction will reach 518,118 tCO₂e. For all calculations, the combined emission factor is 0.607 tCO₂/MWh.

The project was planned and acquired license to develop 45 MW onshore wind farm. The project involves the installation of 18 turbines (18 * 2.5 MW) with 121,939 MWh electricity generation yearly and the development of a 29,326 m. transmission line between the proposed project area and the national grid.

The technical lifetime of the project has been accepted as 20 years as per the EB50 ANNEX 15 since the life time for the turbines has been supplied as 20 years by the manufacturer (in the Nordex N90 and N100 2.5 MW turbine catalogue). The crediting period is also selected as 20 years which is the same as the technical life time of the project.

The Project emissions have been calculated with the formula mentioned in ACM0002/Version 12. The assumptions made for the Project Emissions and made were found acceptable and suitable for the project activity by the validation team.

No leakage emissions are considered. The main emissions are emissions arising due to activities such as power plant construction and upstream



emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected.

The proposed project activity involves the generation of electricity by development of a wind farm. The generation of electricity does not result in greenhouse gas emissions and therefore $PE_y = 0 \text{ tCO}_2/\text{year}$

The baseline emissions BE_y has been calculated as following:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (t CO₂e/yr)

BE_y = Baseline emissions in year y (t CO₂e /yr)

PE_y = Project emissions in year y (t CO₂/yr)

LE_y = Leakage emissions in year y (t CO₂/yr)

For this project activity the project electricity system include the project site and all power plants attached to the Interconnected Turkish National Grid. Since there is no off grid plants in Turkey, option 1 is selected. Only grid power plants are included in the calculation.

As the share of “low cost/must run” resources are below 50% for the five most recent years (Table 13), therefore, in accordance with the Tool, (a) Simple OM method Option B was used in the calculations. For the calculation of the Simple OM, the Ex-Ante option has been selected. Data for calculating the three year average is obtained from the period 2006 – 2008 which are the most recent data available at the time of preparation of the PDD.

The emission factors of fuels that are used in the calculations are taken from the IPCC default values at the lower limit of uncertainty at a 95% confidence interval as provided in table 1.4 of Chapter 1 of Vol.2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories, as suggested by the methodology. The formulas and factors used in the calculation of GHG emissions are found to be transparent and correct by the validation team.

For the BM, the set of capacity additions in the electricity system that comprise 20% of the system generation was used. For the first crediting period, the build margin emission factor was calculated ex-ante based on the most recent information available on units already built for sample group m at the time of GS-PDD submission for validation. The efficiency factors of power plants were taken from Annex 1 of the “Tool to calculate



the emission factor for an electricity system". The efficiency factors used are on the conservative side. The Build Margin Emission Factor of the grid was calculated as a generation weighted average for the years 2004, 2005, 2006, 2007 and 2008.

The combined margin grid emission factor ($EF_{grid,CM,y}$) is expressed as the weighted average of the Operating Margin emission factor ($EF_{grid,OM,y}$) and the Build Margin emission factor ($EF_{grid,BM,y}$) where weights w_{OM} and w_{BM} are by default 0.75 and 0.25 according to the selected methodology.

OM has been defined as 0.656 tCO₂/MWh, the BM has been defined as 0.459 tCO₂/MWh and the Emission factor has been identified as 0.607 tCO₂/MWh, which has been confirmed by the validation team with reviewing all the baseline calculation sheet equations and confirming the used parameters for the calculations.

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

$$BE_y = 121,939 \text{ MWh} * 0.607 \text{ tCO}_2/\text{MWh} = 74,016 \text{ tCO}_2\text{e}$$

Annual estimation of emissions reductions has been calculated as follows in line with the ACM0002/Version 12:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (t CO₂e/yr)

BE_y = Baseline emissions in year y (t CO₂e /yr)

PE_y = Project emissions in year y (t CO₂/yr)

LE_y = Leakage emissions in year y (t CO₂/yr)

Therefore, the annual emission reduction is estimated as:

$$ER_y = 74,016 - 0 - 0 = 74,016 \text{ tCO}_2\text{e}$$

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

- (a) All assumptions and data used by the project participants are listed in the PDD, including their references and sources;
- (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PDD;
- (c) All values used in the PDD are considered reasonable in the context of the proposed GS-VER project activity;
- (d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;



(e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD.

3.5 Additionality of a project activity (97)

The steps taken and sources of information used, to cross-check the information contained in the PDD on this matter are described below:

“Tool for the demonstration and assessment of additionality” Version 05.2 has been used to demonstrate additionality. Under demonstration of additionality first of all alternative projects has been identified and consistency with mandatory laws and regulations have been demonstrated.

The Investment Analysis and Common Practice Analysis have been applied for the project activity. The input values were confirmed through the wind report of the project activity, licenses, purchase offers, loan proposals and other sectoral data's were confirmed by the financial specialist through the sectoral knowledge. All IRR input references are dated before the investment decision (18/08/2010 which is the date for “wind turbine purchase agreement”). Common Practice analysis data's were checked from TEIAS Statistics.

3.5.1 Prior consideration of the clean development mechanism (104)

The DOE validated the project activity start date (investment decision date) provided in the PDD by the wind turbine purchase agreement, which is dated to 18/08/2010.

The evidence for prior consideration of the GS-VER that were assessed is the board decision for considering the carbon revenue, dated 12.10.2009.

Based on the above assessment, the DOE hereby confirms that the proposed GS-VER has considered GS-VER project prior to start of the project.

Based on the above assessment, the DOE hereby confirms that the proposed GS project activity complies with the requirements of the latest version of the Guidance on prior consideration of VER revenues.

3.5.1.1 Historical information on project timeline

The timeline of the project activity is given as following at the PDD. The dates were validated through the given documents (referred documents) at the below table below.

Date of Event	Description of event
24 July 2008	EMRA issues production license for the project.
27 April 2009	Exemption from EIA received form Balıkesir



	Provincial Directorate of Environment and Forestry
12 October 2009	Decision of Alentek Board to make use of VER credits
16 November 2009	Alentek signs contract with Ecofys Turkey to develop VER credits
03 May 2010	The land permit was granted to Alentek by Susurluk Forestry Regional Directorate. Even there is no certainty if the project will actually be implemented, minor pre-project activities started.
18.August.2010	Alentek signs wind turbine purchase agreement with Nordex. This date is also project activity start date.
19 August 2010	Alentek reached financial closure with Aklease.

3.5.2 Identification of alternatives (107)

Alternatives have been defined as:

- 1- The proposed project activity undertaken without being registered as a VER project activity.

This alternative is realistic and is discussed in barrier analysis. It is demonstrated with loan provider banks' letter that "VER revenues was a factor to decide to provide the loan for the project".

- 2- Continuation of the current situation (no project activity or other alternatives undertaken)

This is the baseline scenario and implementation of the proposed project as a VER activity would be additional to this scenario. Case 2 is also realistic.

- 3- Other realistic and credible (thermal or hydraulic) alternative scenario(s) to the proposed GS VER project

Scenario 3 is not realistic in the proposed project area there are no hydro or other sources available for electricity generation.

All the alternatives to the project (implementing or not implementing the project) are in compliance with applicable laws and regulations. Means of validation is license, EIA not required report and other legal permits.

The DOE considers the listed alternatives to be credible and complete.

3.5.3 Investment analysis (114)

The assessment and demonstration of additionality of the project is done by using UNFCCC Methodological Tool "Tool for the Demonstration and



Assessment of Additionality”, Version 05.2. Step 2: investment analysis of this tool is applied.

Under sub-step 2a, Benchmark Analysis (Option III) is chosen and the other options are eliminated because, the proposed Project generates financial and economic benefits through the sales of electricity other than Voluntary Emissions Reduction (VERs) related income. Therefore the simple cost analysis (Option I) cannot be taken. Investment comparison analysis (Option II) is only applicable to projects where alternatives should be similar investment projects.

Under sub-step 2b, the Internal Rate of Return (IRR) is used for project evaluation. According to the “Guidance on the assessment of Investment Analysis” # 12 “required/expected returns on equity are appropriate benchmarks for an **equity IRR**; therefore this benchmark will be used.

The additionality tool states that benchmarks should be derived from (among others) government bond rates, increased by a suitable risk premium to reflect project characteristics.

In this case, cost of equity will be calculated using Capital Asset Pricing Model (CAPM), a standard tool in finance. The market reward-to-risk ratio is effectively the market risk premium and solving for $E(R_i)$, the Capital Asset Pricing Model (CAPM) is obtained as below formula;

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

where:

- $E(R_i)$ is the cost of equity
- R_f is the risk-free rate of interest such as interest arising from government bonds
- β_i (the *beta*) is the sensitivity of the expected excess asset returns

$$\beta_i = \frac{\text{Cov}(R_i, R_m)}{\text{Var}(R_m)}$$

- to the expected excess market returns, or also,
- $E(R_m)$ is the expected return of the market
- $E(R_m) - R_f$ is sometimes known as the *market premium* or *risk premium* (the difference between the expected market rate of return and the risk-free rate of return).

R_f is the risk-free rate of interest, Eurobond



Regarding the inputs for CAPM calculation:

Eurobond : From state bank (Ziraat Bankası) website, Eurobond was chosen for the date when the turbine purchase agreement signed (18.08.2010) which is the project activity start date. Since the investment of the project is primarily made in Euros, the currency of Eurobond was also chosen in Euro with the longest available due date Eurobond choice.

Eurobond Code	Due Date	Currency	Rate %
XS05034566	18.05.2020	EUR	4,79

The beta: There is no publicly available source to derive Beta, it can be concluded that Beta value is equal to “one”, which represents that expected excess returns will move with the entire market returns for Turkey.

$E(R_m) - R_f$ **the market premium or risk premium:** As in study of “Stern School of Business”, Average Risk Premium of Turkey is 9.29%, calculated on the basis of the credit rating Ba3 given to Turkey by Moody’s.

Using these inputs, the cost of equity can be found from below formula:

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

$$E(R_i) = 4,79\% + 1*(9,29\%) = 14,08\%$$

Hence, the appropriate benchmark rate for the proposed project activity is 14, 08%. All calculations have been checked and approved by financial experts.

Under sub-step 2c, the project proponents have calculated the project IRR for 20 years The IRR of the project activity is 7.16 % without the VER revenues. In parallel with technical lifetime, operational lifetime of the project was taken as 20 years on IRR calculation.

After applying the assumptions enumerated above and others described in the financial analysis spreadsheet, the Equity IRR is 5,4%. Comparison of the Equity IRR and the Benchmark rate: According to the Tool for the demonstration and assessment of additionality, Sub-step 2c, subitem 10. (b): “The financial benchmark, if Option III (benchmark analysis) is used. If the GS-VER project activity has a less favorable indicator (e.g. lower IRR) than the benchmark, then the GS-VER project activity cannot be considered as financially attractive”. Thus, without the VER revenues, the proposed VER project is not financially feasible, that is, the Project IRR of 5,4% is much lower than the benchmark rate value of 16,59%.With VERs revenue of 8 Euro/tonne, the project IRR 8,1% makes the project financially more attractive and the investment decision possible.

Equity IRR of 5,4% < Benchmark rate of 16,59%

Inputs for IRR analysis are validated as per the below table:

	Input Name	Units	Input Value	Reference Document
1	Size of the project	MW	45	EPDK / Susurluk RES Lisans Tadil2.pdf
2	Annual electricity production	MWh	121939	GeonetUmweltconsultingGmbHreport / enerji raporu.pdf
3	CAPEX		53.783.640	
	A.) Turbine Purchase	Euro	43.920.000	NORDEX Budget Proposal Nordex/TR Eksim Budget Proposal update May 2009.pdf
	B.) BOP	Euro	9.863.640	Susurluk RES Budget/Susurluk RES IRR.xls Approved "budgetsheet" can be found from the files of ALENTEK BÜTÇE 001.pdf, ALENTEK BÜTÇE 002.pdf and ALENTEK BÜTÇE 003.pdf
4	OPEX		1.559.680	
	A.) Service and spare parts	Euro/year	738.000	NORDEX Budget Proposal / İltNordex ilk teklif (outlook)
	B.) Land Rent	Euro/year	111.724	Çevre ve Orman Bakanlığı/ Land rent 001.jpg
	C.) Insurance	Euro/year	172.043	Akfinansal kiralama / Insuranceproposal.pdf
	D.) Administration	Euro/year	162.545	Güngör elektrik proposal/ SUSURLUK RES HİZMET SÖZLEŞMESİ.pdf
	E.) Unforeseen cost	Euro/year	74.270	Susurluk RES Budget/ Susurluk RES Bütçe.xls
	F.) TEIAS Cost	Euro/year	301.098	2011 regionaltariff/ TEIAS 001.jpg
6	Debt payback period	year	2+10	Ak leasing proposal/ Akleasing Teklif 001thru 005 jpgfiles
7	Bank profit rate		6,99%	Ak leasing proposal/ Akleasing Teklif 001thru 005 jpgfiles
8	Electricity	Euro per	55	Renewableenergylaw



VALIDATION REPORT

	income	MWh		
9	Project lifetime	year	20	EB 50 Annex 15 Nordex Technical Sheet

Under Sub-step 2d, sensitivity analysis is applied. There are four parameters that constitute more than 20% of either total project costs or total project revenues. The variables include:

- 1.) Total investment cost
- 2.) Operational cost
- 3.) Electricity price
- 4.) Electricity generation

Sensitivity analysis variables change by -10% and +10%;

	-10%	-5%	0%	5%	10%
Total Investment Cost	8,5%	6,7%	5,4%	4,3%	3,5%
Operational Cost	6,2%	5,8%	5,4%	5,0%	4,8%
Electricity Price	2,2%	3,9%	5,4%	7,1%	8,8%
Electricity Generation	2,2%	3,9%	5,4%	7,1%	8,8%

The sensitivity analysis shows that without VER revenue, IRR of the project is difficult to reach the benchmark, which supports the conclusion that the proposed project is unlikely to be financially attractive. Based on the above information, the project is considered as additional to the baseline scenario and eligible for VERs.

The DOE, based on the assessment result by the financial expert engaged, hereby confirms that the underlying assumptions are appropriate and the financial calculations are correct.

3.5.4 Barrier analysis (118)

The steps taken to assess the relevant information contained in the PDD against each barrier are described below.



Barrier Analysis with some barriers was applied at the PDD that was submitted first to the validation team. Since most of these barriers were not credible CL22 was raised by the validation team. The only remaining barrier is investment barrier and it is validated by an official letter from the creditor bank declaring that VER revenues were considered for the loan. Letter is included in the PDD.

An important reason why the project had difficulties on securing financing is that the project will be realized in Turkey which is internationally considered a relatively high risky country for investment and finance. This results in higher interest rates and required shorter payback terms compared to other countries.

The DOE hereby confirms that the barrier analysis performed is credible.

3.5.5 Common practice analysis (121)

Under the common practice analysis section, wind power projects in the same grid have been compared to the proposed project activity.

The geographical boundary of common practice is selected as the whole country. The national grid in Turkey is not layered; the grid is interconnected. Hence the selection of the geographical scope of the common practice analysis as the whole grid is found appropriate by the validation team.

Among the list of WPP's projects developed with VER revenues, auto producers and Build-operate-transfer models have been excluded.

There is only one private company that does not use VERs however due to very low installed capacity this project poses much lower investment risks and hence is not comparable to the Project.

The DOE hereby confirms that the proposed GS-VER project activity is not common practice.

3.6 Monitoring plan (124)

The DOE hereby confirms that the monitoring plan complies with the requirements of the methodology.

All monitoring procedures and requirements of the Susurluk Wind Farm Project are in accordance with the methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (version 12).

Validation team considers the monitoring plan to be adequate as the methodological requirements and GS requirements are accomplished.



Net electricity supplied to the grid by the proposed Project Activity:

According to ACM0002, this is the only one variable that a WPP needs to monitor. The amount of electricity generated by the project and delivered to the national grid will be monitored continuously by two metering devices. The measuring frequency of both devices is continuous. During site visit meters were not yet purchased but technical specification papers and “first index reading protocol” have been submitted to DOE later.

Meters installed are:

Serial Nr: 00416275 (main) and 00416274 (back up)

Brand: Elster, A 1500

Production standard and class: 0,2 S Active, 2 Reactive

Current: 5A

Voltage: 3 x 57 /100 V.

Constant value: 40000

Number of phase and wire: 3 phase, 4 wires

As provided in the technical papers, accuracy classes of the meters are “0.2S for active and 2 for reactive” power.

Meters were installed by TEIAS (these meters are in compliance with TEIAS system and TEIAS installs these meters, signing also the first reading protocol as a proof of calibration. This document is means of validation for calibration).

Data obtained from monthly protocols will be used in calculations of emission reductions. Internal electricity consumption will be excluded from the generation value. Every last day of the month, officials from TEİAŞ (Turkish Electricity Transmission Company) will perform data readings. An invoice (receipt of sale) will be prepared by TEİAŞ and delivered to Alentek for each month. PMUM records which are the annexes of the invoices will be used for the crosscheck. As validated from the regulations, this procedure is applicable to all power plants in Turkey.

All collected data will be archived electronically and kept at least for 2 years after the end of the last crediting period.

According to Article 52 of the official regulation “Electricity Market Balancing And Settlement Regulation”, “The meters included in the metering system configuration of the settlement aggregation entities registered on the names of the market participants shall be read monthly, within the first 4 (four) days of the month, by TEIAS and/or distribution licenses with participation of the market participant’s representative and the meter reading values shall be submitted to MFSC.



The (a) energy withdrawn from the system in kWh, and (b) active energy supplied to the system in kWh for each settlement period of the related invoicing period shall be read from the registered meters.”

Maintenance and calibration of the metering devices will be made by TEIAS. This procedure is also in accordance with the existing regulations in Turkey.

The parameters that will be monitored regarding the Gold Standard Passport are:

SO₂ and Nox emissions avoided by the project activity (for “air quality” indicator): Electricity generation of the plant will be monitored and NO_x and SO₂ emission data from GHG inventory of Turkey will be used as references in calculation of the SO₂ and NO_x emission reductions. Monitoring will be done yearly by plant manager.

Hg emissions avoided by the project activity (for “other pollutants” indicator): The latest data of total coal consumption for generating electricity in Turkey and Hg emission data from UNEP study for Hg emission factor of coal power plant will be used as references in calculation of the Hg emission reductions. Monitoring will be done yearly by plant manager.

Trainings and safety procedures (for “Quality of employment” indicator): Training certificates, training participation lists, social security documents and safety equipments distributed will be kept as records. Monitoring will be done yearly by plant manager and safety inspector.

Amount of produced clean energy (for “Balance of payments and investment” indicator): The annual electricity generation of the plant through monitoring will be multiplied by the latest available data for the average projected cost of Natural gas fired plants in OECD countries according to EIA. Monitoring will be done yearly by project developer.

There is also one FAR that has been raised for observation of bird deaths. Although the project is not in bird migration routes, as the project is a large scale GS wind project, bird deaths should be questioned (with local stakeholders) in first verification.

The validation team hereby confirms that the monitoring plan described in the revised PDD complies with the requirements of the methodology and Gold Standard Validation and Turkish regulations.

3.7 Sustainable development (127)

The sustainable development assessment and do no harm assessment has been realized according to GS version 2.1. The sustainable development assessment has been documented in GS passport. The sustainable development matrix has been marked as +4. The positive



indicators have been indicated air quality, other pollutants, quality of employment and balance of payments and investment. These four parameters have been also included into the sustainable monitoring plan.

The environmental indicators and the Environmental Impact Assessment Project file have been reviewed by the validation team. Endemic species are not present as stated in the Environmental Impact Assessment Project file.

3.8 Local stakeholder consultation (130)

The steps taken to assess the adequacy of the local stakeholder consultation are described below.

The Stakeholder Consultation Meetings was held in Omerkoy Village on 13/04/2010. All the stakeholders including central and local governmental agencies, local NGOs and GS endorsed NGOs were invited by faxes and emails. The meeting date and place was announced in a local newspaper.

The stakeholder comments were on possibility for temporary and permanent jobs for the locals and disturbance levels related to noise.

During site visit village head and some villagers were interviewed. It was observed that they had no negative comments. No changes have been done regarding the stakeholder comments.

The DOE hereby confirms that the process of local stakeholder consultation is observed to be adequate.

3.9 Environmental impacts (133)

The project participants have undertaken an analysis of environmental impacts and obtained an EIA-exemption letter from Ministry of Environment and Forest.

The environmental precautions have been presented in Environmental Monitoring Plan. The precautions are mainly to reduce dust, to reduce water pollution during the construction.

Waste management plans were explained to DOE during site visit. Measures have been found acceptable by the validation team.

It has been concluded that the project will not result in significant environmental impacts



4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PDD using methodology ACM0002 was published on Alentek website for global stakeholders' comments as per GS requirements. The project has been hosted since 09/06/2010.

No comments were received.

5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the Balıkesir Susurluk 45 MW Wind Farm Project-Turkey Project in Turkey. The validation was performed on the basis of GS 2.1 criteria, UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

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

By generating electricity from wind, the project is likely to result in reductions of GHG emissions partially. An analysis of the investment barrier demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The review of the project design documentation (version 4) 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 correctly applies and meets the relevant GS 2.1 criteria, UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests registration of 'Balıkesir Susurluk 45 MW Wind Farm Project-Turkey' as GS-VER project activity.



6 REFERENCES

Category 1 Documents:

Documents provided by Type the name of the company that relate directly to the GHG components of the project.

- Project Design Document v1 dated 27.05.2010
- Project Design Document v2 dated 08.11.2010
- Project Design Document v3 dated 30.12.2010
- Project Design Document v4 dated 14.01.2011
- Project Design Document v5 dated 08.03.2011
- Project Design Document v6 dated 21.04.2011
- Project Design Document v7 dated 09.05.2011
- Gold Standard Passport v1 dated 02.05.2010
- Gold Standard Passport v2 dated 08.11.2010
- Gold Standard Passport v3 dated 30.12.2010
- Investment Analysis Excel Sheet v1 dated 21.04.2011
- EF calculation sheet v1 dated 03.08.2010
- EF calculation sheet v2 dated 06.12.2010
- EF calculation sheet v3 dated 06.12.2010
- Local Stakeholder Consultation Report
- GS LSC Review

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- Technical documents of turbines
- Technical drawings of project site
- Geo Net Energy report
- Production license
- Board decision on investigation of carbon revenues
- Subcontractor contracts
- Equipment contract
- Budget documents
- Project Introduction Report



Persons interviewed:

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

- /1/ Haluk Sayar-VER consultant
- /2/ Ebubekir Firtın-Alentek
- /3/ Managers of subcontractors
- /4/ Üzeyir Ünsal-Omerköy Village Head
- /5/ Şeref Kurt- Yeniköy Village Head
- /6/ Tayyar Mars- Demirkapı Village Head

1. 000 -



7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Internal Technical Reviewer: Mrs. Burcu Mutman- Environmental Engineer

Bureau Veritas Certification, Lead Verifier

Burcu Mutman is an auditor for environment, safety and quality management systems. She is also lead verifier for GHG projects.

Lead Verifier: Ms. Bade Cebeci - Environmental Engineer

Bureau Veritas Certification Lead Verifier

Bade Cebeci has over 10 years of experience in environmental sciences and auditing. She is a lead auditor for environment, safety and quality management systems. She is also lead verifier for GHG Emission Reduction Projects.

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

Bureau Veritas Certification – Auditor/Trainer

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

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

Sabancı University, Faculty of Management

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

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

RiskTürk Software Development and Consultancy – Head of Financial Analysis Team

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



VALIDATION REPORT

APPENDIX A: COMPANY GS PROJECT VALIDATION PROTOCOL

Table 1 Validation requirements based on the Validation and Verification Manual V 01.1 (EB51 Annex 3) and methodology ACM0002 version 12 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources”

CHECKLIST QUESTION	Ref.	§	comments		Draft Concl	Final Concl
			COUNTRY A (Country A)	COUNTRY B (Country B)		
1. Approval						
1.1. Has the DNA of each Party indicated as being involved in the proposed CDM project activity in section A.3 of the PDD provided a written letter of approval? State the country.	VVM	45	N/A	N/A	OK	OK
1.2. Does the letter of approval from DNA of each Party confirm that : - The Party is a Party of the Kyoto Protocol - The participation is voluntary - In the case of the host Party, the proposed CDM project activity contributes to the sustainable development of the country - Refers to the precise proposed CDM project activity title in the PDD being submitted for registration	VVM	45	N/A	N/A	OK	OK
1.3. Is(are) the letter(s) of approval unconditional with respect to (1.2) above?	VVM	46	N/A	N/A	OK	OK
1.4. Has(ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA)? If there is doubt with respect to (1.2) above, was verified with the DNA that the letter of approval	VVM	47	N/A	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments		Draft Concl	Final Concl
is valid for the proposed CDM project activity under validation?						
2. Participation						
2.1. Have all project participants been listed in a consistent manner in the project documentation?	VVM	51	N/A	N/A	OK	OK
2.2. Is the information in tabular form of section A.3 consistent with the contact details provided in Annex 1 of the PDD?	VVM	52	N/A	N/A	OK	OK
2.3. Has the participation of each of the project participants been approved by at least one Party involved, either in a letter of approval or in a separate letter specifically to approve participation?	VVM	52	N/A	N/A	OK	OK
2.4. Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	N/A		OK	OK
2.5. Has the approval of participation issued from the relevant DNA?	VVM	53	N/A	N/A	OK	OK
3. Project design document						
3.1. Is the PDD used as a basis for validation prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website?	VVM	55	Yes, the PDD used for validation has version number 03 (in effect as of 28 July 2006) which is in accordance with the latest template and guidance from the CDM Executive Board on the UNFCCC website.		OK	OK
3.2. Is the PDD in accordance with the applicable CDM	VVM	56	Yes, PDD is in accordance with the		OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
requirements for completing the PDD?			applicable CDM requirements for completing the PDD. According to the comparison of the PDD with the PDD format (version number 03-in effect as of 28 July 2006), all titles have been included in the PDD.		
3.3. In CDM-PDD section A.1 -Title of project -Current version number and date of document	EB 41	Ann 12	Title of the project is given as Balıkesir Susurluk 45 MW Wind Farm Project-Turkey with version number 01 and dated to 27/05/2010.	OK	OK
3.4. In CDM-PDD section A.2, are following provided?	EB 41	Ann 12		OK	OK
3.4.1. A brief description of the project activity covering purpose which includes the scenario existing prior to the start of project, project scenario and baseline scenario	EB 41 - VVM	Ann 12 - 58 59 60	As explained in EB 41 Annex 12 "Guidelines for completing the PDD", please indicate the scenario existing prior to project activity and provide detailed information about the baseline scenario.	CL-1	OK
3.4.2. Does the proposed CDM project activity involve the alteration of an existing installation or process?	VVM	63	No, the proposed CDM project activity does not involve the alteration of an existing installation or process. This is observed during site visit.	OK	OK
3.4.3. Explanation on how the GHG emission reductions effected.	EB 41	Ann 12	As explained in EB 41 Annex 12 "Guidelines for completing the PDD", please explain how GHG emission reductions are achieved making reference to scenarios, sources and	CAR-1	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			gases.		
3.4.4. The PP's views on the contribution of project activity to sustainable development	EB 41	Ann 12	<p>The contribution of the project to sustainable development is clearly defined in section A.2. of the PDD.</p> <p>Please provide objective evidence for the following ways to contribute to sustainable development: "contribution to local economy", "supporting the local economy during construction stage" and "contribution to social development".</p>	CL-2	OK
3.5. In CDM-PDD section A.3, are following provided in the tabular format? <ul style="list-style-type: none"> - List of project participants and parties - Identification of Host Party - Indication whether the Party wishes to be considered as project participant 	EB 41 VVM	Ann 12 51,52	<p>The project participant company (Alentek Enerji) and its shareholders are indicated.</p> <p>Turkey ratified the Kyoto Protocol 28 May 2009 but as she has not signed it yet she is only present in voluntary markets. The PP is Alentek Enerji and there is no host party.</p> <p>Please delete information regarding Turkey being a host country.</p> <p>The information has been provided in tabular format.</p>	CL-3	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
3.6. In CDM-PDD section A.4.1, are following provided?	EB 41	Ann 12		OK	OK
3.6.1. Physical description, location, host party(ies) and address as required	EB 41	Ann 12	Physical description and location have been given as Marmara Region/Balıkesir Province/Susurluk District, near Omerkoy and Demirkapı Villages.	OK	OK
3.6.2. Detailed physical location with unique identification of the project activity (e.g. Longitude/latitude)	EB 41	Ann 12	Please provide GPS data (coordinates).	CL-4	OK
3.7. In CDM-PDD section A.4.2, is the list of categories of project activities provided?	EB 41	Ann 12	According to Gold Standard requirements III.d.2 (that is given in Gold Standart webpage), eligible project type is listed as “renewable energy supply”. According to UNFCCC, category is “Energy industries (renewable - / non-renewable sources)”.	OK	OK
3.8. In CDM-PDD section A.4.3, are following provided?	EB 41	Ann 12		OK	OK
3.8.1. A description of how environmentally safe and sound technology, and know-how, is transferred to the Host Party(ies)	EB 41	Ann 12	No description other than technical properties is given about the equipment to be transferred to host country. Please provide details about how environmentally safe and sound technology, and know-how, is transferred.	CL-5	OK
3.8.2. Further explanation of purpose of project activity	EB 41	Ann	As explained in EB 41 Annex 12	CAR-2	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
with scenario existing prior to the start of project, scope or present activities and the baseline scenario		12	“Guidelines for completing the PDD”, please explain project activity purpose making reference to existing, project and baseline scenarios (technology, lifetime of equipment, efficiencies, emission sources and GHGs, services outside project boundary).		
3.8.3. List and arrangement of the main manufacturing/production technologies, systems and equipments involved	EB 41	Ann 12	<p>List and arrangements of the main manufacturing/production technologies, systems and equipments involved are given in the project description report.</p> <p>It is indicated in the PDD that the “The Project involves the installation of 18 turbines(18* 2,5 MW) and the development of a 29,326 m. transmission line between the proposed project area and the national grid. According to production license, 112,227MWh/year of electricity generated by the Project will be delivered to the Turkish national grid. They have recently applied EMRA (EPDK) for a license alteration to change turbine sizes and respectively annual electricity generation. Installed</p>	CAR-21	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			<p>capacity remains the same, while the annual electricity generation rises up to 136,176 MWh/year".</p> <p>A.2. on p.2 refers to 112,227,600 kWh annual power generation whereas 136,176,000 kWh are given on p.5, A.4.3.</p> <p>Transmission line information is different in sections A.2 and A.4.3.</p> <p>Please clarify and provide updated licence to DOE.</p>		
3.8.4. The emissions sources and GHGs involved	EB 41	Ann 12	In Section B3, Table 1 of the PDD, the emission sources are indicated as CO2 for baseline and no emissions for project activity. This is in compliance with ACM002 v:11.	OK	OK
3.9. In CDM-PDD section A.4.4, is the estimation of emission reductions provided as requested in a tabular format?	EB 41	Ann 12	Annual estimations of emission reductions, total emission reductions and number of crediting years is given in Section A.4.4. of the PDD. Information is in tabular format.	OK	OK
3.10. In CDM-PDD section A.4.5, is information regarding public funding provided?	EB 41	Ann 12	It is indicated that project does not obtain any public funding. ODA	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			declaration is provided to DOE.		
3.11. In CDM-PDD section (Baseline identification)	EB 41	Ann 12			
3.11.1. The approved methodology and version number	EB 41 VVM	Ann 12 69	Approved methodology is ACM002 “consolidated baseline methodology for grid connected electricity generation from renewable sources”, v:11. The document is valid from 26 February 2010, and is the latest version in the date of submittal.	OK	OK
3.11.2. Are the following applicability conditions of the methodology ACM0002 met?	VVM	70		OK	OK
3.11.2.1. This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plants); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).	ACM	0002	Yes, the project is a grid-connected renewable power generation project activities that install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plants). Methodology is correct. In the PDD section B.2. the project is identified as a “capacity addition”. During site visit it was observed that project is “installation of a power plant”. Please clarify	CL-47	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
3.11.2.2. The project activity is the installation, capacity addition, retrofit or replacement of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit	ACM	0002	The project activity is the installation of a power plant/unit of wind power plant.	OK	OK
3.11.2.3. In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects which use Option 2: on page 10 to calculate the parameter EGPJ,y): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.			N/A	OK	OK
3.11.2.4. In case of hydro power plants, one of the following conditions must apply: - The project activity is implemented in an existing reservoir, with no change in the volume of reservoir; or - The project activity is implemented in an existing	ACM	0001	N/A	OK	OK



BUREAU
VERITAS

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
<p>reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the Project Emissions section, is greater than 4 W/m²; or</p> <ul style="list-style-type: none"> - The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m². 					
<p>3.11.2.5. The methodology is not applicable to the following conditions. Please confirm</p> <ul style="list-style-type: none"> • Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity • Biomass fired power plants; • Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m². 	ACM	0002	The project activity does not involve switching from fossil fuels to renewable energy sources, is not a biomass fired power plant and is not a hydro power plant.	OK	OK
<p>3.12. Does the PDD correctly describe the project boundary, including the physical delineation of the proposed CDM project activity included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity?</p>	VVM	77 78	As stated in the PDD Section B.3., according to methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", version 11, the spatial extent of the project boundary includes the project site and all power plants connected physically to the Turkish National Grid.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
3.13. In CDM-PDD section B.3, are following provided? (a) Description of all sources and gases included in the project boundary in the table (b) A flow diagram of the project boundary physically delineating the project activity with all equipments, systems and flows of mass and energy etc	VVM EB 41	79 Ann 12	Emissions have been identified and explained in Section B.3, Table 1. Please provide a flow diagram of the project boundary physically delineating the project activity with all equipments and systems.	CL-6	OK
3.14. Is an explanation how the most plausible baseline scenario is identified in accordance with the selected baseline methodology is provided in CDM-PDD section B.4?	EB 41	Ann 12	The reason to choose the baseline scenario as “electricity delivered to the grid by the project activity which would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources” is that project is installation of new grid connected renewable power plant, as indicated in ACM002.	OK	OK
3.14.1. If the project activity is the install a new grid-connected renewable power plant/unit (greenfield plant), is the baseline scenario identified appropriately in accordance with the ACM0002 Ver.10?	ACM	0002	Yes, baseline definition is correct as in ACM002 v:10 it indicates that “If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following: Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			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"		
3.14.2. If the project activity is a capacity addition to existing grid-connected renewable power plant/unit, is the baseline scenario identified appropriately in accordance with the ACM0002 Ver.10 and the point of time at which the generation facility would likely be replaced or retrofitted (DATE Baseline Retrofit) defined reasonably?	ACM	0002	N/A	OK	OK
3.14.3. If the project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit, is the baseline scenario identified following step-wise procedure in accordance with the ACM0002 Ver.10?	ACM	0002	N/A	OK	OK
3.14.3.1. Are the realistic and credible alternative baseline scenarios for power generation appropriately identified following the Step 1 of the "Combined tool to identify the baseline scenario and demonstrate additionality"? (Step 1)	ACM	0002	Alternative baseline scenarios have been identified in accordance with "tool for the demonstration and assessment of additionality v:5.2". Alternatives are "The proposed project activity undertaken without being registered as a VER project activity" and "Continuation of the current situation (no project activity or other	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			alternatives undertaken)"		
3.14.3.2. Are the realistic and credible alternative baseline scenarios i.e. P1, P2 and P3 appropriately applied Barrier analysis following the Step 2 of the "Combined tool to identify the baseline scenario and demonstrate additionality"? (Step 2)	ACM	0002	Barrier analyses have been applied in accordance with "tool for the demonstration and assessment of additionality v:5.2".	OK	OK
3.14.3.3. If more than one alternative is remaining after Step 2, is Investment analysis appropriately applied (apply an Investment Comparison as per step 3 of the "Combined tool to identify the baseline scenario and demonstrate additionality" or a Benchmark Analysis as per step 2b of the "Tool for the demonstration and assessment of additionality")? (Step 3)	ACM	0002	Investment analysis has been applied.	OK	OK
3.15. Does the PDD identify the baseline for the proposed CDM project activity, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed CDM project activity?	VVM	80	Yes, baseline is the case where thermal power plants are used to generate electricity which is in line with the current situation in Turkey (as shown in Tables 3,4 and 5).	OK	OK
3.16. Has any procedure contained in the methodology to identify the most reasonable baseline scenario, been correctly applied?	VVM	81	In ACM002 v:10 it indicates that "If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following: Electricity delivered to the grid by the project activity would have otherwise	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			<p>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".</p> <p>The baseline is determined in accordance to the methodology.</p>		
3.17. Does the selected methodology require use of tools (such as the "Tool for the demonstration and assessment of additionality" and the "Combined tool to identify the baseline scenario and demonstrate additionality") to establish the baseline scenario?	VVM	81	<p>No, the baseline is directly stated in the methodology as "If the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario is the following: 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". No tools are used to determine the baseline.</p>	OK	OK
3.18. Does the methodology require several alternative	VVM	82	No alternatives are considered in	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
scenarios to be considered in the identification of the most reasonable baseline scenario?			identification of the baseline scenario. Please refer to 3.17.		
3.19. Are the documents and sources referred to in the PDD correctly quoted and interpreted And are they cross checked with other verifiable and credible sources, such as local expert opinion, if available? (identify the sources)	VVM	83	In-text references in section B.5 appear as "Error! Reference source not found". Please correct as necessary. "Board decision (ref 3), credit contract (ref 4) and production license (ref 6) have been submitted to validation team. Other references to web pages have been checked by means of availability by DOE.	CAR-3	OK
3.20. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed CDM project activity?	VVM	84	Identification of baseline scenario does not have requirements for Greenfield projects.	OK	OK
3.21. Have all relevant policies and circumstances been identified and correctly considered in the PDD, in accordance with the guidance by the CDM Executive Board?	VVM	84	Please provide evidence that national and sectoral policies and circumstances, power sector expansion plans and economic situation in project sector have been taken into account.	CL-7	OK
3.22. Does the PDD provide a verifiable description of the identified baseline scenario, including a description of the technology that would be employed and/or	VVM	85	Please provide a flowsheet of the process and explain in detail the baseline scenario.	CL-8	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
the activities that would take place in the absence of the proposed CDM project activity?					
3.23. In CDM-PDD section B.5, are following provided?	EB 41	Ann 12		OK	OK
3.23.1. Explanation and Justification of how and why this project activity is additional and therefore not the baseline scenario in accordance with the selected baseline methodology	EB 41	Ann 12	It has been indicated that Iltek AS. has other hydro projects. Please explain why investment in thermal or hydro power is not an option. Besides, in webpage http://www.epdk.gov.tr/lisans/elektrik/yek/ozelhukum/sagapKapakliRES.pdf It is seen that Iltek has other wind projects, too.	CAR-4	OK
3.23.2. Has the latest version of the "Tool for the demonstration and assessment of additionality" been used?	ACM	0002	Yes, "Tool for the demonstration and assessment of additionality version 5.2" has been used and it is the latest version.	OK	OK
3.23.3. Evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity, if the starting date of the project activity is before the date of validation	EB 41	Ann 12	Please clearly state the start date of the project (also in 3.32.1).	CAR-5	OK
3.24. In CDM-PDD section B.6.1, are following provided? (Algorithms and/or formulae used to determine emission reductions)	EB 41	Ann 12			
3.24.1. Explanation how the procedures, in the	EB 41	Ann	Explanations have been made about	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
approved methodology to calculate project emissions, baseline emissions, leakage emissions and emission reductions are applied to the proposed project activity		12	procedures, emissions and emission reductions.		
3.24.2. Do the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring methodology?	VVM	88	<p>The steps and equations are correct as indicated in the PDD.</p> <p>Expert:</p> <p>Regarding the OM calculations: The petroleum products are aggregated under the header "Fuel Oil" but include diesel oil, fuel oil and naphta. The lower emission factor for Gas/Diesel Oil has been employed for all of them. However, TEIAS provides the fuel data for petroleum products at a disaggregated level and the IPCC guideline includes different emission factors for each fuel type. The "fuel oil" category needs to be disaggregated to feature a more accurate calculation.</p> <p>Regarding the BM calculations: The set of power capacity additions in the electricity system that comprise 20% of the system generation needs to be</p>	CAR-6	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			<p>considered. The sum of all capacity additions considered (39,852 GWh) seems to meet this criteria; however, once the power plants registered as CDM project activities are excluded, the sample group generation falls below the 20% hurdle (38,150 < 39,684) and needs to be extended accordingly.</p> <p>Please disaggregate "fuel oil" category to feature a more accurate calculation.</p> <p>Please extend sample group so that the sample group generation does not fall below the % 20 of total installed capacity when CDM projects are excluded.</p>		
3.24.2.1. Are the Project emissions appropriately calculated?	ACM	0002	Project emissions are indicated as "zero" for wind projects.	OK	OK
3.24.2.2. Are the Baseline emissions appropriately calculated specifically for (a) greenfield plants or (b) retrofit and replacements or (c) capacity additions?	ACM	0002	This CAR will be closed after all the other CAR/CL related to calculations are closed.	CAR-7	OK
3.24.2.3. Are the Leakage emissions appropriately calculated?	ACM	0002	No leakage emissions are considered.	OK	OK
3.24.2.4. Are the Emission reductions appropriately calculated?	ACM	0002	Please provide references for "NCV" values in EFOM sheet.	CAR-8	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			Please provide references for “net generation” values in EFOM sheet.		
3.24.3. Have the equations and parameters in the PDD been correctly applied with respect those in the select approved methodology?	VVM	89	Yes, equations in the PDD are correctly applied with respect those in the select approved methodology.	OK	OK
3.24.4. Does the methodology provide for selection between different options for equations or parameters?	VVM	89	<p>The methodology ACM0002 refers to the use of “tool to calculate the emission factor for an electricity system v:2”.</p> <p><input type="checkbox"/> Step 1: The relevant electric power system is identified in accordance with the tool. The national grid of Turkey is used as electric power system for project activity.</p> <p><input type="checkbox"/> Step 2: This step is optional and there are two options in the step 2. Option 1 can be chosen if only grid power plants are included in the calculation of operating margin and build margin emission factor.</p> <p>Please make a selection between option I or option II.</p> <p><input type="checkbox"/> Step 3: There are four methods</p>	CAR-22	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			<p>for calculation of the operating margin emission factor. Since the average share of electricity generation by low-cost/must-run plants for five most recent years is found to be less than 50%, option (a) is chosen. The simple OM emission factor can be calculated using either of the two data vintages: Ex-ante option and ex-post option. The ex-ante option is selected to carry out the baseline methodology for the Project.</p> <p><input type="checkbox"/> Step 4: There are two options (Option A and Option B) in the Step 4 of "Tool to calculate the emission factor for an electricity system" version 02. Option B is used for simple OM calculation.</p> <p>The option of "data on the total electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system" is used for calculation of the simple OM emission factor. Reason for this choice is that there is no plant specific data in</p>		



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			<p>Turkey.</p> <p>Step 5: In this step, a generation-weighted average emission factor is calculated based on a sample of power plants, which have been taken into operation recently. The sample group of power plants/units m used to calculate the build margin consists of two options (Option a and Option b). For conducting the calculations, Option b is selected, because this option results in a larger electricity generation. In terms of vintage data, there are two options available: Option 1 (ex-ante) and Option 2 (ex-post).</p> <p>Please indicate which option is selected.</p>		
3.24.5. If yes, has adequate justification been provided and correct equations and parameters been used in accordance with the methodology selected?	VVM	89	Adequate justification has been provided and correct equations and parameters been used in accordance with the methodology selected.	OK	OK
3.24.6. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	89	Correct equations and parameters have been used.	OK	OK
3.24.7. Appropriate and correct?	VVM	90	Correct equations and parameters	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			have been used.		
3.24.8. Applicable to the proposed CDM project activity?	VVM	90	Equations and parameters are applicable.	OK	OK
3.24.9. Resulting in a conservative estimate of the emission reductions?	VVM	90	Expert: For the generation efficiencies, the real values of present thermal power plants have been used from Türkiye Çevre Atlası prepared by Ministry of Environment and Forestry. However, the document has been published in 2004 and refers to data from power plants of all vintages in operation. On the other hand, the BM comprises most recently built power plants which are expected to be of higher efficiency. Hence using the default efficiency factors in the TOOL (for new power plants built after 2000), which are slightly higher, would be more appropriate. Please use the default efficiency factors in the tool for the generation efficiencies of present thermal power plants.	CAR-9	OK
3.24.10. A compilation of information on the data and parameters that are not monitored throughout the crediting period but that are determined only once and thus remains fixed throughout the	EB 41	Ann 12	The mentioned data are EGgross, FCi, Electricity imports, NCV, EFco2, efficiency, capacity additions.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
crediting period and that are available when validation is undertaken					
3.24.11. Explanation and justification for the choice of the source of data	EB 41	Ann 12	<p>All references are from TEIAS, IPCC and Ministry of Environment of Turkey. References are trustworthy.</p> <p>In section B.6.2. in the tables of data/parameters that are available at validation, please clarify the “value applied” cells. Please clearly indicate in the documentation the tables referred to in this section.</p> <p>Expert: The referencing to tables on p.16-18 needs to be revised. The headers of tables 10-12 refer to past years and do not correspond to the data in the tables.</p>	CAR-10	OK
3.24.12. Clear and transparent references or additional documentation in Annex 3	EB 41	Ann 12	References are publicly available, clear, valid and transparent.	OK	OK
3.24.13. Where values have been measured, a description of the measurement methods and procedures (e.g. which standards have been used), indicated the responsible person/entity having undertaken the measurement, the date of measurement(s) and the measurement results	EB 41	Ann 12	There are no measured values among data/parameters that are available at validation in section B.6.2.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
3.25. In CDM-PDD section B.6.3, are following provided?	EB 41	Ann 12		OK	OK
3.25.1. A transparent ex ante calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the approved methodology	EB 41	Ann 12	Calculations are transparent and clear.	OK	OK
3.25.2. Documentation how each equation is applied, in a manner that enables the reader to reproduce the calculation	EB 41	Ann 12	The calculations are reproducible.	OK	OK
3.25.3. Additional background information and or data in Annex 3, including relevant electronic files (i.e. spreadsheets)	EB 41	Ann 12	Annex 3 represents build margin of plants. For other data the references are checked.	OK	OK
3.26. In CDM-PDD section B.6.4 are, the results of the ex ante estimation of emission reductions for all years of the crediting period, provided in a tabular format?	EB 41	Ann 12	Table is in tabular format.	OK	OK
3.27. In CDM-PDD section B.7.1, are following provided?	EB 41	Ann 12		OK	OK
3.27.1. Specific information on how the data and parameters that need to be monitored would actually be collected during monitoring for the project activity	EB 41	Ann 12	It is indicated that annual electricity generated and supplied to the grid will be measured continuously by two parallel energy meters, main measuring device and back up measuring device.	OK	OK
3.27.2. For each parameter the following below	EB 41	Ann		OK	OK



BUREAU
VERITAS

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
information, using the table provided:		12			
3.27.2.1. 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.	EB 41	Ann 12	It is indicated in the PDD that source of data will be own measurements with own calibrated and sealed energy meters.	OK	OK
3.27.2.2. Where data or parameters are supposed to be measured, specify the measurement methods and procedures, how the measurement is undertaken: (i) A description of the QA/QC procedures (if any) that should be applied; (ii) Where relevant: any further comment.	EB 41	Ann 12	It is indicated in the PDD that the energy meters to be used will be calibrated and sealed by TEIAS which is also the authority to charge fees. Regular maintenance will also be held by TEIAS every 6 months.	OK	OK
3.28. In CDM-PDD section B.7.2, is a detailed description of the monitoring plan provided?	EB 41	Ann 12	Emission reductions will be measured via amount of electricity generated and therefore energy meters. The measuring will be continuous. Regular maintenance will also be held by TEIAS every 6 months. Please clearly indicate the responsibilities for and institutional arrangements for data collection and archiving.	CL-9	OK
3.29. Are all data monitored as per monitoring methodology?	ACM	0002	Only default data to be monitored is electricity generation and it is included in the monitoring plan.	CL-10	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			In the Project Report pg 30/75 it is stated that a cesspool will be installed. However, during site visit "wastewater treatment via limestone" was pronounced. Please clarify and include wastewater treatment in the monitoring plan.		
3.30. Are all data collected as part of monitoring archived electronically and kept at least for 2 years after the end of the last crediting period?	ACM	0002	According to EB 41 Annex 12, data monitored and required for verification and issuance are to be kept for two years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later. Please provide information about data storage plan.	CL-11	OK
3.31. In CDM-PDD section B.8, are following provided?	EB 41	Ann 12		OK	OK
3.31.1. Date of completion of the application of the methodology to the project activity study in DD/MM/YYYY	EB 41	Ann 12	Date of completion of the application of the methodology to the project activity study is given as 02/05/2010.	OK	OK
3.31.2. Contact information of the person(s)/entity(ies) responsible for the application of the baseline and monitoring methodology to the project activity	EB 41	Ann 12	Contact information of the entity responsible for the application of the baseline and monitoring methodology to the project activity is provided.	CL-12	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			Please indicate contact person name.		
3.31.3. Indication if the person/entity is also a project participant listed in Annex 1	EB 41	Ann 12	Please indicate if the person/entity is also a project participant listed in Annex 1.	CL-13	OK
3.32. In CDM-PDD section C.1.1, are following provided?	EB 41	Ann 12		OK	OK
3.32.1. Is the project's starting date clearly defined and evidenced?	EB 41	Ann 12	<p>According to EB 41 annex 12 the starting date of a CDM project activity is the earliest of the date(s) on which the implementation or construction or real action of a project activity begins/has begun. Also, a description of how this start date has been determined, and a description of the evidence available to support this start date should be included.</p> <p>Please clearly identify project start date (as in 3.23.3) and justify the choice of date.</p>	CAR-11	OK
3.33. In CDM-PDD section D., are the conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the Host Party, if environmental impacts are considered significant by the project participants or the Host, provided?	EB 41	Ann 12	EIA exemption document has been provided to DOE. There are no significant environmental impacts of the project; therefore, there is no need to mitigation measures.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
3.34. In CDM-PDD section E.1, are the following provided?	EB 41	Ann 12		OK	OK
3.34.1. The process by which comments by local stakeholders have been invited and compiled. An invitation for comments by local stakeholders shall be made in an open and transparent manner, in a way that facilitates comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted.	EB 41	Ann 12	In the GS Passport LSC Report, an invitation tracking table has been established. Stakeholders have been invited via e-mail, personal invitation, newspaper ad (submitted to validation team) and samples to invitations have been included. Please also describe in the PDD the process by which comments by local stakeholders have been invited and compiled.	CL-14	OK
3.34.2. The project activity is described in a manner, which allows the local stakeholders to understand the project activity, taking into account confidentiality provisions of the CDM modalities and procedures.	EB 41	Ann 12	Please provide evidence in the PDD that the project activity is described in a manner, which allows the local stakeholders to understand the project activity.	CL-15	OK
3.34.3. The local stakeholder process has been, completed before submitting the proposed project activity to the DOE for validation.	EB 41	Ann 12	Yes, local stakeholder process has been completed before submitting the proposed project activity to the DOE for validation.	OK	OK
3.35. In CDM-PDD section E.2, are following provided?	EB 41	Ann 12		OK	OK
3.35.1. Identification of local stakeholders that have	EB 41	Ann	The original comments by stakeholders	CL-16	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
made comments		12	are included in the LSC Report. Please clarify why there is less number of comments than participants.		
3.35.2. A summary of these comments.	EB 41	Ann 12	A summary of comments are given in the PDD. Comments are also given in the LSC Report.	OK	OK
3.36. In CDM-PDD section E.3 is the explanation of how due account have been taken of comments received from local stakeholders provided?	EB 41	Ann 12	It is indicated that no major changes were made in the project.	OK	OK
3.37. In CDM-PDD Annex 1, are the following provided?	EB 41	Ann 12		OK	OK
3.37.1. Contact information of project participants	EB 41	Ann 12	Please fill in contact information table in Annex-1	CAR-12	OK
3.37.2. For each organization listed in section A.3 the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail	EB 41	Ann 12	Please fill in contact information table in Annex-1	CAR-13	OK
3.38. In CDM-PDD Annex 2, is information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties provided?	EB 41	Ann 12	It has been indicated that no public funding has been obtained.	OK	OK
3.39. In CDM-PDD Annex 3, is the background information used in the application of the baseline	EB 41	Ann 12	Background information used in the application of the baseline	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
methodology provided?			methodology (build margin of plants that make up %20 of total electricity generation) is provided in Annex 3.		
3.40. In CDM-PDD Annex 4, is the background information used in the application of the monitoring methodology provided?	EB 41	Ann 12	Please provide Annex 4.	CAR-14	OK
4. Additionality of a project activity					
4.1. General checklist for additionality					
4.1.1. Does the CDM-PDD state the latest version of the additionality tool being used?	VVM	94	Yes, CDM-PDD states the latest version of the additionality tool being used (version 05.2).	OK	OK
4.1.2. Were the steps taken of the "Tool for the Demonstration and Assessment of Additionality" to assess additionality used:	EB 39	Ann 10	Yes, to assess additionality, the steps taken of the "Tool for the Demonstration and Assessment of Additionality" have been followed in order.	OK	OK
4.1.3. Have the following alternatives been included while defining alternatives as per sub-step 1a?	EB 39	Ann 10		OK	OK
4.1.3.1. The proposed project activity undertaken without being registered as a CDM project activity;	EB 39	Ann 10	The option of "The proposed project activity undertaken without being registered as a CDM project activity" has been considered.	OK	OK



BUREAU
VERITAS

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.1.3.2. Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;	EB 39	Ann 10	In section B.5. sub-step 1.a. 1-b, it is indicated that there are no other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality. Please discuss why thermal or hydropower projects are not considered as alternatives.	CL-17	OK
4.1.3.3. If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	EB 39	Ann 10	The option of "continuation of the current situation (no project activity or other alternatives undertaken)" has been considered.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.1.4. Has the outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project activity done correctly?	EB 39	Ann 10	<p>The outcomes of Step 1a should include:</p> <p>(a) The proposed project activity undertaken without being registered as a CDM project activity;</p> <p>(b) Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services (e.g., cement) or services (e.g. electricity, heat) with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;</p> <p>(c) If applicable, continuation of the current situation (no project activity or other alternatives undertaken)</p> <p>Options (a) and (c) have been taken into account but other renewable energy sources have not been evaluated. Please discuss why thermal or hydropower projects are not considered as alternatives (refer to 4.1.3.2.)</p>	CL-18	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.1.5. Is the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution, and outcome of Step 1.b is thus concluded?	EB 39	Ann 10	Yes, it is indicated that the alternatives are in compliance with all mandatory applicable legal and regulatory requirements.	OK	OK
4.1.6. If an alternative does not comply with all mandatory applicable legislation and regulations, has it been shown that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that noncompliance with those requirements is widespread in the country?	EB 39	Ann 10	N/A	OK	OK
4.1.7. Has PP selected Step 2 (Investment analysis) or Step 3 (Barrier analysis) or both Steps 2 and 3?	EB 39	Ann 10	The PP has decided to do Step 2 (Investment analysis) and Step 3 (Barrier analysis).	OK	OK
4.1.8. In step 2, have all the sub-steps as below been followed?	EB 39	Ann 10		OK	OK
4.1.9. In sub-step 2a has the determination of appropriate method of analysis done as per the guidance as below?	EB 39	Ann 10		OK	OK
4.1.9.1. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income (Option I).	EB 39	Ann 10	Since the project generates financial benefits (by selling electricity) other than carbon credit related income, Option I can not be used.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.1.9.2. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III). Specify option used with justification.	EB 39	Ann 10	Option II is applicable to projects where alternatives should be similar investment projects in terms of generation capacity. Since the baseline for the project is generation of the electricity by the grid, no similar investment project exist. Option III has been chosen for the demonstration of additionality of the project.	OK	OK
4.1.10. Has the below guideline followed for sub-step 2b Option I. Apply simple cost analysis? Document the costs associated with the CDM project activity and the alternatives identified in Step1 and demonstrate that there is at least one alternative which is less costly than the project activity.	EB 39	Ann 10	N/A	OK	OK
4.1.11. Has the below guideline followed for sub-step 2b Option II. Apply investment comparison analysis? Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service most suitable for the project type and decision-making context. Please specify	EB 39	Ann 10	N/A	OK	OK
4.1.12. Has the most suitable benchmark for the project been determined in Sub-step 2b?	EB 39	Ann 10	Cost of equity is used for benchmark.	OK	OK
4.1.12.1. Which source shall the discount rates and benchmarks derived from? Please specify	EB 39	Ann 10	Cost of equity will be calculated using Capital Asset Pricing Model (CAPM).	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
benchmark and justify.					
4.1.13. Has the below guideline followed for Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III)?	EB 39	Ann 10		OK	OK
4.1.13.1. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA, etc, where applicable), and, as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.	EB 39	Ann 10	Equity IRR is the financial indicator.	OK	OK
4.1.13.2. Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CDM-PDD, or in separate annexes to the CDM-PDD.	EB 39	Ann 10	Investment analysis is transparent.	OK	OK
4.1.13.3. Justify and/or cite assumptions.	EB 39	Ann 10	Assumptions are justified.	OK	OK
4.1.13.4. In calculating the financial/economic indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions.	EB 39	Ann 10	Cash flow pattern is used.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.1.13.5. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.	EB 39	Ann 10	Assumptions and inputs are consistent.	OK	OK
4.1.13.6. Present in the CDM-PDD a clear comparison of the financial indicator for the proposed CDM activity. Please specify details for above.	EB 39	Ann 10	PDD provides a clear description of the financial indicator.	OK	OK
4.1.13.7. Is the period of assessment limited to the proposed crediting period of the CDM project activity?	EB 41	Ann 45	The analysis is done for a period of 22 years and it is not limited to the crediting period.	OK	OK
4.1.13.8. Does the project IRR and equity IRR calculations reflect the period of expected operation of the underlying project activity (technical lifetime), or - if a shorter period is chosen - include the fair value of the project activity assets at the end of the assessment period?	EB 41	Ann 45	For the analysis which is done for a period of 22 years, the fair value calculation is done. However, since it is not so significant it is neglected.	OK	OK
4.1.13.9. Does the IRR calculation include the cost of major maintenance and/or rehabilitation if these are expected to be incurred during the period of assessment?	EB 41	Ann 45	Major costs are included.	OK	OK
4.1.13.10. Do the project participants justify the appropriateness of the period of assessment in the context of the underlying project activity, without reference to the proposed CDM crediting period?	EB 41	Ann 45	The assessment period of the project is in line with the crediting period.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.1.13.11. Does the cash flow in the final year include a fair value of the project activity assets at the end of the assessment period?	EB 41	Ann 45	The fair value calculation is done in the analysis. However, since it is not so significant it is neglected.	OK	OK
4.1.14. Has the below guideline followed for Sub-step 2d: Sensitivity analysis (only applicable to Options II and III)? Include a sensitivity analysis that shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions.	EB 39	Ann 10	The sensitivity analysis is done and it reflects all reasonable conditions.	OK	OK
4.1.15. Has the outcome of Step 2 clearly mentioned with justification?	EB 39	Ann 10	Outcome is given at the end of Section B.5. as "Based on the above statement, it can be concluded that the project activity (as a large scale project) faces barriers that prevent the implementation of the project without VER revenues, therefore the project activity can be considered as 'additional'."	OK	OK
4.1.16. Have the barrier analysis been conducted?	EB 39	Ann 10	Yes, barrier analysis has been conducted and results have been discussed in Section B.5.	OK	OK
4.1.17. In step 4: Common practice analysis has all the sub-steps as below followed?	EB 39	Ann 10		OK	OK
4.1.17.1. Has the below guideline followed for Sub-step 4a: Analyze other activities similar to the proposed project activity? Provide an analysis of any other activities that are operational and that	EB 39	Ann 10	Other activities similar to the proposed project activity have been analyzed. A list of wind projects in Turkey has been provided with reference of EPDK. To	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
are similar to the proposed project activity. Other CDM project activities are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.			exclude other CDM projects, the list has been reduced to wind projects that did not receive VER credits. It has been indicated that among the remaining five projects, two are BOT, two are autoproducers and one has very low installed capacity.		
4.1.17.2. Has the below guideline followed for Sub-step 4b: Discuss any similar Options that are occurring?	EB 39	Ann 10	Similar options have been discussed and it is indicated that all but 5 of the projects have applied or registered VERs and the mentioned 5 are not comparable with Susurluk project (refer to 4.1.17.1).	OK	OK
4.1.18. Has the outcome from Step 4 clearly mentioned in PDD?	EB 39	Ann 10	Yes, only 5 wind projects have been realized without VERs and 2 of them are BOT projects, 2 of them are auto producers and 1 of them is very small scale, not comparable with this project.	OK	OK
4.2. Prior consideration of the clean development mechanism					
4.2.1. Is the project activity start date prior to the date of publication of the PDD for stakeholder comments?	VVM	96	The start date is accepted as the date of turbine contract (August 2010).	OK	OK
4.2.2. If yes, were the CDM benefits considered necessary in the decision to undertake the project as a proposed CDM project activity?	VVM	96	CDM benefits were considered necessary for the project. Board decisions dated to 12/10/2009 for the use of VER credits and agreement with a VER consultant dated to 16/11/2009	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			were submitted to the validation team.		
4.2.3. Is the start date of the project activity, reported in the PDD, in accordance with the "Glossary of CDM terms", which states that "The starting date of a CDM project activity is the earliest date at which either the implementation or construction or real action of a project activity begins"?	VVM	97	As agreed during the site visit; the start date is accepted as the date of land permit (03/05/2010). Please indicate the project start date in the PDD.	CAR-15	OK
4.2.4. Does the project activity require construction, retrofit or other modifications?	VVM	97	Please indicate project start date. Project activity requires construction	CAR-16	OK
4.2.5. Is it ensured that the date of commissioning cannot be considered as the project activity start date?	VVM	97	Please indicate project start date. Date of commissioning is not considered as the project activity start date	CAR-17	OK
4.2.6. Is it a new project activity (project activities with starting date on or after 02 August 2008) or an existing project activity (project activities with a start date before 02 August 2008)?	VVM	98	Please state in PDD that this is a new project activity (project activities with starting date on or after 02 August 2008).	CL-19	OK
4.2.7. For a new project, for which PDD has not been published for global stakeholder consultation or a new methodology proposed to the Executive Board before the project activity start date, had the PP informed the Host Party DNA and/or the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status?	VVM	99	Please indicate project start date.	CAR-18	OK
4.2.8. For an existing project activity, for which the start date is prior to the date of publication of the PDD	VVM	100	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
for global stakeholder consultation, are the following evidences provided:					
4.2.8.1. Evidence that must indicate that awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project,	VVM	100	Please refer to 4.2.2.	OK	OK
4.2.8.2. Reliable evidence from project participants that must indicate that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation	VVM	100	Please indicate project start date.	CAR-19	OK
4.3. Identification of alternatives					
4.3.1. Does the approved methodology that is selected by the proposed CDM project activity prescribe the baseline scenario and hence no further analysis is required?	VVM	103	Yes, the approved methodology that is selected by the proposed CDM project activity prescribes the baseline scenario. No further analysis is required.	OK	OK
4.3.2. If no, does the PDD identify credible alternatives to the project activity in order to determine the most realistic baseline scenario?	VVM	103	Yes, credible alternatives to the project activity in order to determine the most realistic baseline scenario have been identified but other renewable energy types and thermal power should be discussed in more detail.	CL-20	OK
4.3.3. Does the list of alternatives given in the PDD ensure that: - One of the options that the project activity is undertaken without being registered as a proposed	VVM	104	Please refer to 4.1.4.	CL-21	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
CDM project activity - The list contains all plausible alternatives - The alternatives comply with all applicable and enforced legislation					
4.4. Investment analysis					
4.4.1. If investment analysis has been used to demonstrate the additionality of the proposed CDM project activity, does the PDD provide evidence that the proposed CDM project activity would not be:	VVM	106		OK	OK
4.4.1.1. The most economically or financially attractive alternative?	VVM	106	Without VER revenue, IRR of the project is difficult to reach the benchmark, which supports the conclusion that the proposed project is unlikely to be financially attractive	OK	OK
4.4.1.2. Economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs)?	VVM	106	Without VER revenue, IRR of the project is difficult to reach the benchmark, which supports the conclusion that the proposed project is unlikely to be financially attractive	OK	OK
4.4.2. Was this shown by one of the following approaches?	VVM	107		OK	OK
4.4.2.1. Demonstrate that the proposed CDM project activity would produce no financial or economic benefits other than CDM-related income.	VVM	107	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.4.2.2. The proposed CDM project activity is less economically or financially attractive than at least one other credible and realistic alternative.	VVM	107	The project is considered as additional to the baseline scenario	OK	OK
4.4.2.3. The financial returns of the proposed CDM project activity would be insufficient to justify the required investment.	VVM	107	N/A	OK	OK
4.4.3. Was a thorough assessment of all parameters and assumptions used in calculating the relevant financial indicator, and determine the accuracy and suitability of these parameters using the available evidence and expertise in relevant accounting practices conducted?	VVM	109	All parameters and assumptions used are assessed.	OK	OK
4.4.4. Was the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur and the likelihood of these conditions assessed?	VVM	109	Sensitivity analysis is assessed.	OK	OK
4.4.5. To determine this, was it assessed whether it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark by: <ul style="list-style-type: none"> a. Assessing previous investment decisions by the project participants involved, and b. Determining whether the same benchmark has been applied, or c. Determining if there are verifiable circumstances that have led to a change in the benchmark 	VVM	110	No investment would be made at a rate of return lower than the benchmark.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
4.4.6. Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed project activities?	VVM	111	<i>Please provide a table of IRR inputs clearly indicating</i> --input name --input value --name of reference document --page/column number of related value	CAR-24	OK
4.4.7. If yes: (EB38 para.54)	VVM	111			
4.4.7.1. Has the FSR been the basis of the decision to proceed with the investment in the project, i.e. that the period of time between the finalization of the FSR and the investment decision is sufficiently short for the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed?	VVM	111	Only annual generation data is taken from the wind energy report (FSR is not mandatory for wind projects in Turkey). The other inputs are taken from proposals specific to the project. Inputs are based on documents dated before the investment decision date (turbine contract-August 2010)	OK	OK
4.4.7.2. Are the values used in the PDD and associated annexes fully consistent with the FSR? If not, was the appropriateness of the values validated?	VVM	111	Values used in the PDD are consistent with the references.	OK	OK
4.4.7.3. 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?	VVM	111	Cross checking is provided with experts opinions.	OK	OK
4.5. Barrier analysis					
4.5.1. Has barrier analysis been used to demonstrate the additionality of the proposed CDM project activity?	VVM	113	Yes, barrier analysis has been used to demonstrate the additionality of the	OK	OK



BUREAU
VERITAS

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			proposed CDM project activity.		
4.5.2. If yes, does the PDD demonstrate that the proposed CDM project activity faces barriers that: a. Prevent the implementation of this type of proposed CDM project activity? b. Do not prevent the implementation of at least one of the alternatives?	VVM	113	<p>Investment barriers (that Turkey is not a safe country for investment and no bank loan can be found): In the PDD it is said that a creditor is expected to be found on 11 June 2010. Please update the information. If a creditor has been found, please provide a letter indicating that CDM incentives have played positive effect for obtaining the credit.</p> <p>Technical barriers (that the firm has no wind experience): this barrier is not accepted for this project as this could be overcome by hiring experienced employees which are available in Turkey. Please update accordingly.</p> <p>Barriers due to prevailing practice (development of a grid connection, transmission line fee, legislative barriers, low share of wind energy in Turkey energy breakdown, government promoting coal): as this project is not "first of its kind" it is not subject to this type of barriers.</p>	CL-22	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			Please remove technical barriers and barriers due to prevailing practice from the barrier analysis.		
4.6. Common practice analysis					
4.6.1. Is this a large-scale or first-of-its kind small-scale project activity?	VVM	117	Please indicate in the PDD that this is large scale project.	CL-23	OK
4.6.2. Was common practice analysis carried out as a credibility check of the other available evidence used by the project participants to demonstrate additionality?	VVM	117	Yes, common practice analysis was carried out as a credibility check of the barrier analsis which used by the project participants to demonstrate additionality	OK	OK
4.6.3. Was it assessed whether the geographical scope (e.g. defined region) of the common practice analysis is appropriate for the assessment of common practice related to the project activity's technology or industry type? (For certain technologies the relevant region for assessment will be local and for others it may be trans-national /global.)	VVM	118	Please discuss in the PDD why it is appropriate that the region is the entire host country.	CL-24	OK
4.6.4. Was a region other than the entire host country chosen?	VVM	118	No, entire host country is chosen as region.	OK	OK
4.6.5. If yes, was the explanation why this region is more appropriate assessed?	VVM	118	N/A	OK	OK
4.6.6. Using official sources and local and industry expertise, was it determined to what extent similar and operational projects (e.g., using similar	VVM	118	All wind projects in host country have been taken into account. References to wind projects are governmental	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
technology or practice), other than CDM project activities, and have been undertaken in the defined region?			sources.		
4.6.7. Are similar and operational projects, other than CDM project activities, already “widely observed and commonly carried out” in the defined region?	VVM	118	Yes, in the region, there are 5 similar and operational projects which are not CDM projects. This has been indicated in PDD.	OK	OK
4.6.8. If yes, was it assessed whether there are essential distinctions between the proposed CDM project activity and the other similar activities?	VVM	118	There are essential distinctions between the proposed CDM project activity and other similar activities Distinctions have been explained as the other projects being BOT projects, autoproducers and low installed capacity.	OK	OK
5. Monitoring plan					
5.1. Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVM	120	The monitoring plan is based on the approved monitoring methodology applied to the proposed CDM project activity.	OK	OK
5.2. Does the monitoring plan contain all necessary parameters?	VVM	121	Yes, the monitoring plan contains the information “data unit, description, source of data, value of data, description of methods to be applied and QA/QC to be applied” as indicated in the methodology.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
			Refer to 3.30.		
5.3. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVM	121	Yes, electricity generated will be measured with two metering devices continuously and this is sufficient.	OK	OK
5.4. Are the means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified?	VVM	121	Yes, measurement of electricity generated is sufficient to show the emission reductions.	OK	OK
6. Sustainable development					
6.1. Does the CDM project activity assists Parties not included in Annex I to the Convention in achieving sustainable development?	VVM	123	Yes, contributions are listed in section A.2.	OK	OK
6.2. 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?	VVM	124	N/A	OK	OK
7. Local stakeholder consultation					
7.1. Were local stakeholders (public, including individuals, groups or communities affected, of likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity) invited by the PPs to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC website?	VVM	126	Yes, LSC was made before submittal of PDD to DOE.	OK	OK


**BUREAU
VERITAS**

VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	comments	Draft Concl	Final Concl
7.2. Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVM	127	Yes, stakeholders were invited to make comments.	OK	OK
7.3. Is the summary of the comments received as provided in the PDD complete?	VVM	127	Please add all comments by whole participant list.	CAR-20	OK
7.4. Have the project participants taken due account of any comments received and described this process in the PDD?	VVM	127	No due account has been taken. Please update this after addition of all comments.	CL-25	OK
8. Environmental impacts					
8.1. Have the project participants submitted documentation on the analysis of the environmental impacts of the project activity?	VVM	129	EIA exemption letter has been provided to the validation team.	OK	OK
8.2. Have the project participants undertaken an analysis of environmental impacts?	VVM	130	Yes.	OK	OK
8.3. Does the host Party require an environmental impact assessment?	VVM	130	An environmental impact assessment has been made. EIA Exemption document has been provided to DOE.	OK	OK
8.4. If yes, have the environmental impact assessment approved by local government?	VVM	130	N/A	OK	OK

Table 2 Legal Requirements

CHECKLIST QUESTION	Ref.	MoV *	COMMENTS	Draft Concl	Final Concl
1. Legal requirements					
1.1. Is the project activity environmentally licensed by the competent authority?	2	DR	EIA Exemption document has been presented to validation team.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	MoV *	COMMENTS	Draft Concl	Final Concl
1.2. Are the conditions of the environmental license being met?	2	DR	EIA Exemption document has been presented to validation team. EIA Exemption document has been provided to validation team.	OK	OK
1.3 Are the conditions of the Designated National Authority being met?	2	DR	There are no conditions of DNA.	OK	OK

Table 3 Gold Standart

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
A. Project Title					
a. Is the Project title given in the Passport the same as in the PDD?	T-1.6	DR	The title in the PDD is "Balıkesir Susurluk 45 MW Wind Farm Project-Turkey" and the title in the passport is "Susurluk Wind Farm Project-Turkey". Please revise title of passport in accordance with PDD.	CL-26	OK
B. Project Description					
a. Is the Project description given in the Passport consistent with the one given in the PDD?	T-1.6	DR	Yes, the Project description given in the Passport consistent with the one given in the PDD.	OK	OK
b. Has the estimated start date of construction been given under the Project description?	Annex R	DR	Please indicate start date of construction in project description.	CL-27	OK
C. Proof of project eligibility					
1. C.1. Scale of Project					



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
a. Has the scale of the Project activity been defined as per Gold Standard Toolkit Section 1.2.1?	T-1.2.1	DR	Scale has been defined as "large scale" as the project exceeds the boundary 15 MW. It is also marked as a voluntary market project.	OK	OK
b. Does the project proponent have a written statement (e.g. in the PDD) against de-bundling of the project? (De-bundling of small and large-scale projects to create micro-scale projects is not allowed.)	T-3.5.1	DR	Please include a written statement against de-bundling.	CL-28	OK
2. C.2. Host Country					
a. Does the host country have cap on its GHG emissions?	T-1.2.2	DR	Turkey ratified the Kyoto Protocol 28 May 2009 but as she has not signed it yet she is only present in voluntary markets. Turkey has no GHG cap.	OK	OK
b. If the answer to the above question is yes, then has the Project proponent provided an official approval from the relevant local authorities stating that an equivalent amount of allowances will be retired to back-up the GS VERs issued?	T-1.2.2	DR	N/A	OK	OK
c. If the host country does not have a cap on its GHG emissions, has it been stated in the Passport?	T-1.2.2	DR	N/A	OK	OK
3. C.3. Project Type					
a. Is the Project a Renewable Energy Supply Project or an End-use Energy Efficiency Improvement Project? (If not, the validation	T-1.2.3	DR	According to Toolkit 1.2.3. project is a renewable energy supply project.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
has to be aborted)					
b. Has the Project type and eligibility of the Project activity been defined as per Annex C of Gold Standard Toolkit?	T-1.2.3	DR	In Annex C of Gold Standard Toolkit, there are no specific eligibility criteria for wind projects so Annex C is not considered.	OK	OK
c. Has a previous announcement of the project going ahead without the revenues from carbon credits been made?	T-1.2.6	DR	No, it is indicated that no previous announcement of the project going ahead without the revenues from carbon credits have been made.	OK	OK
d. If the answer to the above question is yes, has the project subsequently been cancelled or the design has been significantly revised?	T-1.2.6	DR	N/A	OK	OK
e. If the answer to question (c) is no, have the Project Proponents provided a pre-announcement statement under section C.3 in the Gold Standard Passport, attesting that no such previous announcement has been made?	T-1.2.6	DR	A statement has been made about pre announcement. It is indicated that as carbon credit is important in proceeding of the project, no announcements have been made.	OK	OK
4. C.4. Greenhouse Gas					
a. Does the project reduce emissions of one or more of the following an GHG? Carbon dioxide, methane, nitrous oxide?	T-1.2.4	DR	It is indicated that the project reduces CO2 emissions.	OK	OK
5. C.5. Project registration type					
a. Does the project apply the correct project cycle (regular vs. pre-feasibility assessment)?	T-3.5.1	DR	Yes. Project is not applying for retroactive registration, does not have preliminary eligibility criteria and is not rejected by UNFCCC so it is	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			not applying for pre-feasibility. It is regular.		
b. Is the Project activity a regular registration?	T-1.2.6	DR	Yes, the Project activity a regular registration.	OK	OK
c. Is the Project activity a retroactive registration?	T-1.2.6	DR	No, the Project activity a retroactive registration.	OK	OK
d. If the answer to the above question is yes, has the Project proponents applied to the Gold Standard for the pre-feasibility assessment?	T-1.2.6	DR	N/A	OK	OK
e. If the answer to the above question is yes, then has the Project proponent provided the Gold Standard pre-feasibility assessment feedback to the DOE?	T-2.5	DR	N/A	OK	OK
f. Does the Project activity need preliminary evaluation? (Large hydro or palm-oil related project as defined in Annex C of the Toolkit)	T-2.5	DR	The Project activity does not need preliminary evaluation.	OK	OK
g. If the answer to the above question is yes, has the Project proponents applied to the Gold Standard for the pre-feasibility assessment?	T-2.5	DR	N/A	OK	OK
h. If the answer to the above question is yes, then has the Project proponent provided the Gold Standard pre-feasibility assessment feedback to the DOE?	T-2.5	DR	N/A	OK	OK
i. Has the Project activity been rejected by UNFCCC?	T-2.5	DR	No, it has not been rejected.	OK	OK
j. If the answer to the above question is yes, has the Project proponents applied to the	T-2.5	DR	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
Gold Standard for the pre-feasibility assessment?					
k. If the answer to the above question is yes, then has the Project proponent provided the Gold Standard pre-feasibility assessment feedback to the DOE?	T-2.5	DR	N/A	OK	OK
l. Are there any double counting occurring with other certification schemes?	T-3.5.1	DR	Please indicate if there is double counting with other certification schemes.	CL-29	OK
D. Unique project identification					
6. D.1. GPS-coordinates of Project location					
a. Has the Project proponent stated the exact GPS coordinates of Project location for point source activities and the boundaries for projects spread over a broader area?	T-1.6	DR	GPS coordinates for project location have been given in the passport and coordinates of the turbines have been given in Table 4 of the project document.	OK	OK
b. For Programme of Activity projects have the Project Proponent explained the reasoning behind the definition of the project location and coordinates carefully?	T-1.6	DR	This is not a Programme of Activity project.	OK	OK
7. D.2. Map					
a. Have the coordinates been illustrated with a map? (Optional)	T-1.6	DR	Yes. Maps are presented in the passport.	OK	OK
E. Outcome stakeholder consultation process					
8. E.1. Assessment of stakeholder comments					
a. Has the Project proponent inserted the	Annex	DR	Assessment of comments table has been	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
"Table ii-Assessment of Stakeholder Comments" which was given under section B5 of the Stakeholder Consultation Report?	R, E.1		inserted.		
b. Has the Project proponent given a summary of alterations based on stakeholders comments?	Annex R, E.1	DR	No alterations have been made upon comments.	OK	OK
c. Has an invitation tracking table been filled out?	T-3.5.1	DR	Yes, the invitation tracking table is presented in Section iii of the Local Stakeholder Consultation report.	OK	OK
d. Are copies of invitations published/sent out available?	T-3.5.1	DR	Invitations are included in LSC (e-mails, newspaper ads).	OK	OK
e. Has a non-technical summary in local language been included in the Local Stakeholder Consultation report, as well as an English summary?	T-3.5.1	DR	Turkish and English versions of non-technical summary are presented in the Local Stakeholder Consultation report.	OK	OK
f. Is a participant list presented?	T-3.5.1	DR	A participant list is presented in section C.1. of the Local Stakeholder Consultation report.	OK	OK
g. Are stakeholder evaluation forms available?	T-3.5.1	DR	10 stakeholders have filled in the stakeholder evaluation form out of the 34 participants.	OK	OK
h. Are minutes of the meeting(s) available?	T-3.5.1	DR	Meeting minutes are given in LSC section C.3. i.	OK	OK
i. Has due account been made on comments received?	T-3.5.1	DR I	No major change has been made in the project.	OK	OK
j. If stakeholders required a revisit for the sustainable development assessment, has this been done?	T-3.5.1	DR	A revisit had been requested. It was indicated that a feed back round would be made after the report has been published in GS webpage. It has been clarified during the site visit that after the report is published, a feedback round has	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			<p>been carried on. PDD, LSC Report and Passport documents have been sent as electronic copy to authorities and hard copies have been left to village house. 16 local people have seen the documents (signatures have been submitted to DOE) and no negative comments have been received. There was no return for authorities who were electronically mailed.</p>		
<p>k. Is the consolidated sustainable development matrix presented based on own 'preliminary' scoring and the matrix from the outcome of the blind stakeholder exercise.</p>	T-3.5.1	DR	<p>Yes both matrices have been used to construct consolidated matrix.</p> <p>In own matrix air quality, other pollutants, access to affordable and clean energy, balance of payments and services were the matters that the project was claimed to have positive effect on.</p> <p>Regarding access to affordable and clean energy, there is only one grid in Turkey and end users still buy the electricity from the same price so this indicator does not have positive effect.</p> <p>Regarding balance of payments and investments, the share of renewables is very low among fossil fuels and also the share of this project among other wind projects is very low too. The project does not have significant positive effect.</p>	CL-30	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			Please give more detailed explanation about sustainable development matrix explanations and include all indicators and revise scoring.		
I. Were comments accepted and received by email or other means actually considered?	T-3.5.1	DR	Comments were received with forms during the LSC meeting.	OK	OK
9. E.2. Stakeholder Feedback Round (Can be performed in parallel to the validation process)					
a. Has the Project proponent organized a stakeholder feedback round to give feedback to the stakeholders on how their comments have been taken into account?	T-2.11	DR	Yes, a stakeholder feedback round was organized to give feedback to the stakeholders on how their comments have been taken into account.	OK	OK
b. Did the stakeholder feedback round include a physical meeting? (optional)	T-2.11		No, it did not include a meeting. PDD, LSC Report and Passport documents have been sent as electronic copy to authorities and hard copies have been left to village house. 16 local people have seen the documents (signatures have been submitted to DOE) and no negative comments have been received. There was no return for authorities who were electronically mailed. (Please refer to E.1.j.	OK	OK
c. Have all the stakeholders invited for participation in the Local Stakeholder Consultation been included in the Stakeholder Feedback Round?	T-2.11		Most of the names who signed the feedback round document review list do not match the list of the first meeting participants. Please clarify the reason.	CL-31	OK
d. Have all of the following documents been	T-3.5.1		Please provide references for these mentioned	CL-32	OK



BUREAU
VERITAS

VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
<p>made available to the public for a period of at least two months prior to completion of the validation:</p> <p>a. The Latest version of the complete PDD (including the EIA, if applicable);</p> <p>b. A non-technical summary of the project (in appropriate local language(s)); and English summary.</p> <p>c. The (revised) Passport</p> <p>d. if applicable, supporting documentation such as an environmental impact assessment (EIA) (if available, in appropriate local language(s)); in the case of an EIA, at least a one-page English summary is required</p> <p>e. Additional, non-translated information must be made available as well and shall be translated to the local language upon any justified request of a stakeholder.</p>			documents.		
e. Did the Project proponent also prepare hard copies to be publicly displayed at local places like the post Office, municipality, etc?	T-2.11		Please refer to E.2.b	OK	OK
f. If the Project is a retroactive Project, did the	T-2.11		N/A	OK	OK



BUREAU
VERITAS

VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
stakeholder feedback round include a site visit by the stakeholders participating in the process?					
g. If the Project is a retroactive Project, did the Project proponent follow the guidance provided by the Gold Standard in the pre-feasibility assessment?	T-2.11		N/A	OK	OK
h. Does the stakeholder feedback round report given in the Passport include the following information: a. How the feedback round was organized (A description of the procedure followed to invite comments, including addressing all the details of the oral hearing such as place, date, participants, language, local or national Gold Standard NGO supporters, etc.), b. What the outcomes of the feedback round are (All written or oral comments received.) c. How did the Project proponents followed up on the feedbacks. (The argumentation on whether or not comments are taken into account and the respective changes to the project design.)	T-3.5.1		In passport version 01, only the plans about stakeholder feedback round have been included. Please give the said details if the round has been realized.	CL-33	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
F. Outcome Sustainability assessment					
10. F.1. 'Do no harm' Assessment					
a. Has the Project proponents considered the critical issues for their Project type that are listed in Annex C of Gold Standard?	T-2.4.1	DR	There are no critical issues for wind projects.	OK	OK
b. Have the Project participants discussed all of the safeguarding principles with the stakeholders?	T-2.4.1	DR	All relevant principles have been discussed except for number 10. Please show evidence for compliance for safeguarding principle 10 (that no critical habitat exists in project site).	CL-34	OK
c. Have the Project participants introduced mitigation measures for the safeguarding principles with a medium to high risk?	T-2.4.1	DR	Measures have been introduced as with low risk. Please show evidence that health and safety concerns have low risk.	CL-35	OK
d. Does the 'Do No Harm' Assessment base on accurate information and have the reference sources been included?	T-3.5.1	DR	Please provide references for "do no harm assessment" (EIA, training reports).	CL-36	OK
11. F.2. Sustainable Development matrix					
a. Has the Sustainable Development Matrix table been inserted in the Passport?	AnnexR, F.2	DR	Sustainable development matrix is presented.	OK	OK
b. Has the project been scored on the following indicators?: a. Environmental b. Social c. Technological d. Economic	T-2.4.2	DR	The said indicators have been used for scoring.	OK	OK
c. Have the corresponding parameters to	T-2.4.2	DR	Parameters have not been selected for each	CL-37	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
represent the status of each of the indicators been selected?			indicator. Please clearly explain the effect of the project on each indicator. Define why the score should be "zero" for relevant indicators.		
d. Is the baseline situation and the situation aimed for the project described for each parameter?	T-2.4.2		Baselines have not been given for each parameter. Please include all indicators.	CL-38	OK
e. Are the indicators connected to the localized MDG's (Milenium Development Goals) when possible?	T-2.4.2	DR	Yes, air quality and other pollutants indicators are related to "MDGF 7: Ensure environmental sustainability".	OK	OK
f. Was the reason for choice of the parameters described?	T-2.4.2	DR	Please include all indicators.	CL-39	OK
g. Have all of the indicators been scored 'negative', 'positive' or 'neutral' in comparison with the baseline situation?	T-2.4.2	DR	Please include all parameters and revise scoring.	CL-40	OK
h. If there are any 'negative' indicators, are there any mitigation measures for these indicators?	T-2.4.2	DR	<p>There are two negative scores in these evaluations:</p> <ul style="list-style-type: none"> -soil drying because of the wind circulation caused by turbines (explanation: clean energy generation by wind energy has an overall positive effect on combating desertification considering the emission reductions it shall achieve) -noise levels that may disturb the livestock feeding near the wind farm(explanation: It is stated in many resources that the livestock are not disturbed by wind farms) 	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			There are no mitigation measures and scoring is not changed.		
i. Has the matrix been filled by the stakeholders during the Local Stakeholder Consultation?	T-2.4.2	DR	Yes, stakeholders were asked to score the matrix during LSC. This is mentioned in the minutes of the meeting. Forms of stakeholder evaluation have been presented.	OK	OK
j. Were there any negative scores during the stakeholder consultation?	T-2.4.2	DR	There are two negative scores in these evaluations: -soil drying because of the wind circulation caused by turbines (explanation: clean energy generation by wind energy has an overall positive effect on combating desertification considering the emission reductions it shall achieve) -noise levels that may disturb the livestock feeding near the wind farm(explanation: It is stated in many resources that the livestock are not disturbed by wind farms)	OK	OK
k. If the answer to the above question is yes, has the sustainability assessment been revisited?	T-2.4.2	DR	Please refer to above question.	OK	OK
l. Have the project indicators been classified in three categories namely "environment", "social development" and "economic and technological development" under the	Annex I	DR	Indicators have been classified accordingly.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
sustainable development matrix?					
m. Does the project contribute positively to least at two of the three categories and neutral to the third category?	T-2.4.2	DR	Please provide all stakeholder reports and update this section.	CL-41	OK
n. Is the matrix based on existing sources of information? (can include data from existing reports, results from stakeholder consultations, and experiences with similar projects in similar situations, etc. Where data are unavailable or are of poor quality, or severely outdated, independent opinions and expert judgments can also be used.)	T-3.5.1	DR	Please update the references after updating the indicators.	CL-42	OK
o. Are the data or expert opinions presented in a sufficient degree of detail and transparency?	T-3.5.1	DR	Data and references for comments are clear.	OK	OK
p. Are the data uncertainties clearly stated, if possible with associated margins of error?	T-3.5.1	DR	There are no uncertainties to be stated.	OK	OK
q. Is the scoring reproducible and verifiable?	T-3.5.1	DR	Scoring is reproducible and verifiable.	OK	OK
r. Does the project demonstrate clear benefits in terms of sustainable development?	T-2.4.2	DR	This CL is to be closed after all other CAR/CL have been closed.	CL-43	OK
G. Sustainability Monitoring Plan					
a. Are the mitigation actions included in the monitoring plan?	T-2.4.3	DR	Non-neutral Sustainable Development Indicators should be monitored in the Sustainability Monitoring Plan. Please prepare a monitoring plan for indicators (mitigation measure, related parameter, current, baseline situations and	CAR-23	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
			future target, way of monitoring (how, when, who). Please consider the questions in this section of the protocol while preparing the plan.		
b. Are all the non-neutral indicators included in the monitoring plan?	T-2.4.3	DR	All the non-neutral indicators are included in the monitoring plan (air quality, other pollutants, quality of employment and balance of payments and investment).	OK	OK
c. Is the current status (or expected status under the baseline) of the parameters, the future status and the way they will be monitored described in the monitoring plan?	T-2.4.3	DR	Current status of the parameters are described.	OK	OK
d. Have the project proponents identified parameters that can be used to properly monitor each non-neutral Sustainable Development Indicator according Annex I of the Toolkit?	T-2.4.3	DR	Parameters are identified accordingly.	OK	OK
e. Are chosen parameters relevant to the indicators?	T-3.5.1	DR	Parameters are relevant to the indicators.	OK	OK
f. Are these parameters planned to be monitored over the crediting period and on a recurrent basis?	T-2.4.3	DR	Parameters are planned to be monitored yearly over the crediting period.	OK	OK
g. Are all mitigation measures put in place to prevent violation or the risk of violating a safeguarding principle of the 'Do No Harm' Assessment or to 'neutralize' a Sustainable Development Indicator included in the	T-2.4.3	DR	Mitigation measures for DNH assessment and SD indicators are included in the monitoring plan.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	GS Ref.	MoV	COMMENTS	Draft Concl	Final Concl
monitoring plan?					
h. Is the sustainability monitoring plan clear about who will monitor with what frequency?	T-3.5.1		Responsibilities and frequencies are clearly stated.	OK	OK
i. Is the monitoring plan feasible?	T-3.5.1		Monitoring plan is feasible.	OK	OK
12. ANNEX 1 ODA declaration					
a. Does the project receive ODA under the condition that the credits coming out of the project are transferred to the donor country?	T-3.5.1	DR	As host country Turkey is listed in ODA recipient list, please declare a written declaration of your projects non-use of ODA.	CL-45	OK
b. Is a scanned copy of the Official Development Assistance Declaration statement signed by the project owner given in Annex 1?	Annex D	DR	No declaration has been included, please declare a written declaration of your projects non-use of ODA.	CL-46	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	Summary of project owner response	Validation team conclusion
CAR 1: As explained in EB 41 Annex 12 "Guidelines for completing the PDD", please explain how GHG emission reductions are achieved making reference to scenarios, sources and gases.	Table1 3.4.3.	Explained how GHG emission reductions are achieved making reference to scenarios,	Review 1: It is indicated in section A.4.3. of the PDD v2 that "The project activity will reduce CO2 emissions from the baseline



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		sources and gases.	scenario electricity generation that is produced by mainly fossil fuel-fired power plants within the Turkish national grid according to ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” (version 11)”. <u>The clarification request is closed.</u>
CAR 2: As explained in EB 41 Annex 12 “Guidelines for completing the PDD”, please explain project activity purpose making reference to existing, project and baseline scenarios (technology, lifetime of equipment, efficiencies, emission sources and GHGs, services outside project boundary).	Table1 3.8.2.	Explained project activity purpose making reference to existing project and baseline scenarios.	Review 1: According to section A.2, the objective of proposed Gold Standard VER project activity is to generate renewable electricity from wind energy and feed it into power grid, consequently displace the fossil sourced electricity with renewable one in Turkish national grid. <u>The clarification request is closed.</u>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CAR 3: In-text references in section B.5 appear as “Error! Reference source not found”. Please correct as necessary.</p> <p>“Board decision (ref 3), credit contract (ref 4) and production license (ref 6) have been submitted to validation team.</p> <p>Other references to web pages have been checked by means of availability by DOE.</p>	Table1 3.19.	Corrected all reference errors in Section B5.	<p>Review 1:</p> <p>References are correct.</p> <p><u>The clarification request is closed.</u></p>
<p>CAR 4: It has been indicated that Iltek AS. has other hydro projects. Please explain why investment in thermal or hydro power is not an option.</p> <p>Besides, in webpage http://www.epdk.gov.tr/lisans/elektrik/yek/ozelhukum/sagapKapakliRES.pdf It is seen that Iltek has other wind projects, too.</p>	Table1 3.23.1.	Hydro and thermal have taken account as a third option.	<p>Review 1:</p> <p>Hydro and thermal PP’s have been determined as alternatives to project activity but not found to be realistic as “Being a private entity, Eksim Holding doesn’t have to invest power investments even proposed project activity. Also, in the proposed project area there is no hydro or other sources available for electricity generation, other project activities delivering same electricity is <i>not</i> realistic for project participant”.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p><u>The clarification request is closed.</u></p>
<p>CAR 5: Please clearly state the start date of the project (also in 3.32.1).</p>	<p>Table1 3.23.3.</p>	<p>Stated.</p> <p>Response 2: The turbine contract is indeed 18/8. Necessary change was made in PDD and GS password.</p> <p>All date information was checked and corrected if necessary in Table 10 of the PDD</p> <p>Response 3 The word of Vestas was</p>	<p>Review 1:</p> <p>Start date of the project is indicated as turbine contract date with Vestas (16/08/2010). The turbine contract provided to DOE is with Nordex and dated to 18/8/2010. Please clarify.</p> <p>The dates in Table 10 of the PDD v2 are slightly different.</p> <p>-Day information for license is not in line with the license Day information for land permit is not in line with the permit -Day information for board decision and - VER credit contract are missing -Year information for financial closure is missing</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>deleted in PDD pg 14</p> <p>Financial closure agreement was sent to DOE</p>	<p>Please clarify.</p> <p><u>The clarification request is still open.</u></p> <p>Review 2:</p> <p>The turbine contract is signed with Nordex but in PDD pg 14, Vestas is mentioned. Please revise as necessary.</p> <p>Date information problems are fixed.</p> <p>A financial closure agreement dated 19/8/2010 is not available to DOE. Please provide the document pages showing company names and dates.</p> <p><u>The clarification request is still open.</u></p> <p>Review 3:</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>Vestas is deleted from the PDD.</p> <p>A financial closure agreement dated 19/8/2010 is available to DOE.</p> <p>Start date is defined as turbine purchase agreement with Nordex which is the first real action for the project.</p> <p><u>The clarification request is closed.</u></p>
<p>CAR 6: The steps and equations are correct as indicated in the PDD.</p> <p>Expert:</p> <p>Regarding the OM calculations: The petroleum products are aggregated under the header "Fuel Oil" but include diesel oil, fuel oil and naphta. The lower emission factor for Gas/Diesel Oil has been employed for all of them. However, TEIAS provides the fuel data for petroleum products at a disaggregated level and the IPCC guideline includes different emission factors for each fuel type. The "fuel oil" category needs to be disaggregated to feature a</p>	Table1 3.24.2.	<p>Necessary changes have been made for fuel aggregation into diesel oil, fuel oil and naphta.</p> <p>Sample group are extended.</p>	<p>Review 1:</p> <p>Expert opinions are awaited.</p> <p><u>The clarification request is still open.</u></p> <p>Review 3:</p> <p>Requested revisions are made. The applied changes are accepted.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>more accurate calculation.</p> <p>Regarding the BM calculations: The set of power capacity additions in the electricity system that comprise 20% of the system generation needs to be considered. The sum of all capacity additions considered (39,852 GWh) seems to meet this criteria; however, once the power plants registered as CDM project activities are excluded, the sample group generation falls below the 20% hurdle (38,150 < 39,684) and needs to be extended accordingly. Please disaggregate "fuel oil" category to feature a more accurate calculation.</p> <p>Please extend sample group so that the sample group generation does not fall below the % 20 of total installed capacity when CDM projects are excluded.</p>			<p><u>The clarification request is closed.</u></p>
<p>CAR 7: This CAR will be closed after all the other CAR/CL related to calculations are closed.</p>	Table1 3.24.2.2.		<p>Review 1:</p> <p>Baseline emissions appropriately calculated.</p> <p><u>The clarification request is closed.</u></p>
<p>CAR 8: Please provide references for "NCV" values in EFOM sheet.</p>	Table1 3.24.2.4.	References given for NCV values in EFOM	<p>Review 1:</p> <p>Please provide revised EF</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
Please provide references for "net generation" values in EFOM sheet.		sheet. Review 2: EF Calculation sheet was sent to DOE on 0.12.2010	calculation sheet to DOE. <u>The clarification request is still open.</u> Review 2: Revised EF calculation sheet is available to DOE. <u>The clarification request is closed.</u>
CAR 9: Expert: For the generation efficiencies, the real values of present thermal power plants have been used from Türkiye Çevre Atlası prepared by Ministry of Environment and Forestry. However, the document has been published in 2004 and refers to data from power plants of all vintages in operation. On the other hand, the BM comprises most recently built power plants which are expected to be of higher efficiency. Hence using the default efficiency factors in the TOOL (for new power plants built after 2000), which are slightly higher, would be more appropriate. Please use the default efficiency factors in the tool for the generation efficiencies of present thermal power plants.	Table1 3.24.9.	The default efficiency factors from TOOL has been taken for calculations.	Review 1: Expert opinions are awaited. <u>The clarification request is still open.</u> Review 2: The default efficiency factors from TOOL has been taken for calculations. <u>The clarification request is closed.</u>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CAR 10: All references are from TEIAS, IPCC and Ministry of Environment of Turkey. References are trustworthy.</p> <p>In section B.6.2. in the tables of data/parameters that are available at validation, please clarify the “value applied” cells. Please clearly indicate in the documentation the tables referred to in this section.</p> <p>Expert: The referencing to tables on p.16-18 needs to be revised. The headers of tables 10-12 refer to past years and do not correspond to the data in the tables.</p>	Table1 3.24.11.	Value applied cells were clarified. The references on p-16-18 has been corrected.	<p>Review 1:</p> <p>References for “value applied” cells have been corrected.</p> <p>Expert opinions are awaited.</p> <p><u>The clarification request is still open.</u></p> <p>Review 2:</p> <p>Requested revisions are made. The applied changes are accepted.</p> <p><u>The clarification request is closed.</u></p>
<p>CAR 11: According to EB 41 annex 12 the starting date of a CDM project activity is the earliest of the date(s) on which the implementation or construction or real action of a project activity begins/has begun. Also, a description of how this start date has been determined, and a description of the evidence available to support this start date should be included.</p>	Table1 3.32.1.	The date of real action of a project has been determined with wind turbine purchase contract and financial closure.	<p>Review 1:</p> <p>Start date of the project is indicated as turbine contract date with Vestas (16/08/2010). The turbine contract provided to DOE is with Nordex and dated to 18/8/2010. Please clarify.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
Please clearly identify project start date (as in 3.23.3) and justify the choice of date.		<p>Response 2: Turbine purchase contract is 18/08</p> <p>The dates were corrected in Table 10 of PDD</p> <p>The Land permit is available to your consideration. See attached document with named "Balıkesir Orman Kesin İzni"</p>	<p>The dates in Table 10 of the PDD v2 are slightly different:</p> <ul style="list-style-type: none"> -Day information for licence is not lin line with the licence -Day information for board decision and VER credit contract are missing -Year information for financial closure is missing <p>Please clarify.</p> <p>Please also provide the land permit so that all the dates in the timeline are validated with objective evidences(documents). -</p> <p><u>The clarification request is still open.</u></p> <p>Review 2:</p> <p>The turbine contract is signed</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>with Nordex but in PDD pg 14, Vestas is mentioned. The revision was asked in CAR-5.</p> <p>Date information problems are fixed.</p> <p>Land permit is provided to DOE.</p> <p><u>The clarification request is closed.</u></p>
CAR 12: Please fill in contact information table in Annex-1	Table1 3.37.1.	Filled in.	<p>Review 1:</p> <p>Contact information is provided.</p> <p><u>The clarification request is closed.</u></p>
CAR 13: Please fill in contact information table in Annex-1	Table1 3.37.2.	Filled in	<p>Review 1:</p> <p>Contact information is provided.</p> <p><u>The clarification request is closed.</u></p>
CAR 14: Please provide Annex 4.		Annex 4 provided	<p>Review 1:</p> <p>No extra monitoring information</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			is given in annex 4. <u>The clarification request is closed.</u>
CAR 15: As agreed during the site visit; the start date is accepted as the date of land permit (03/05/2010). Please indicate the project start date in the PDD.	Table1 4.2.3.	Project start date is 16/08/2010 with turbine purchase contract. The land permit is also submitted to you. Minor construction works have been made until 16/08/2010	Review 1: The start date is accepted as the date of turbine contract (August 2010) <u>The clarification request is closed.</u>
CAR 16: Please indicate project start date.	Table1 4.2.4.	Clarified	Review 1: The start date is accepted as the date of turbine contract (August 2010) <u>The clarification request is closed.</u>
CAR 17: Please indicate project start date.	Table1 4.2.5.	Clarified	Review 1:



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>The start date is accepted as the date of turbine contract (August 2010)</p> <p><u>The clarification request is closed.</u></p>
CAR 18: Please indicate project start date.	Table1 4.2.7.	Clarified	<p>Review 1:</p> <p>The start date is accepted as the date of turbine contract (August 2010)</p> <p><u>The clarification request is closed.</u></p>
CAR 19: Please indicate project start date.	Table1 4.2.8.2.	Clarified	<p>Review 1:</p> <p>The start date is accepted as the date of turbine contract (August 2010)</p> <p><u>The clarification request is closed.</u></p>
CAR 20: Please add all comments by whole participant list.	Table1 7.3.	Added.	<p>Review 1:</p> <p>Comments have been added.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<u>The clarification request is closed.</u>
<p>CAR 21: List and arrangements of the main manufacturing/production technologies, systems and equipments involved are given in the project description report.</p> <p>It is indicated in the PDD that the “The Project involves the installation of 18 turbines(18* 2,5 MW) and the development of a 29,326 m. transmission line between the proposed project area and the national grid. According to production license, 112,227MWh/year of electricity generated by the Project will be delivered to the Turkish national grid. They have recently applied EMRA (EPDK) for a license alteration to change turbine sizes and respectively annual electricity generation. Installed capacity remains the same, while the annual electricity generation rises up to 136,176 MWh/year”.</p> <p>A.2. on p.2 refers to 112,227,600 kWh annual power generation whereas 136,176,000 kWh are given on p.5, A.4.3. ok</p> <p>Transmission line information is different in sections A.2</p>	Table1 3.8.3.	<p>Response 1:</p> <p>Necessary explanation was made in A2 of PDD</p> <p>The length of transmission line was corrected in section A.4.3 of PDD</p>	<p>Review 2:</p> <p>Clarification about turbine numbers is made with statement “According to first issue of the production license, 112,227 MWh/year* of electricity generated by 60 pieces of 750 kW wind turbines will be delivered to the Turkish national grid. However, they have applied EMRA (EPDK) for a license alteration to change turbine sizes two times; at first time the turbines sizes changed to 22 pieces 2 MW and 1 piece 1 MW and at the second time, turbine sizes changed to 18 pieces of 2,5 MW wind turbines. Although the installed capacity remains the same (45 MW), according to Geonet</p>



BUREAU
VERITAS

VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>and A.4.3. ok</p> <p>Please clarify and provide updated licence to DOE.</p>			<p>Umweltconsulting GmbH report, the annual electricity generation rises up to 136,176 MWh/year* because of the high energy yield of 2,5 MW turbines comparing to 750 kW ones. As a summary, the project involves the installation of 18 turbines(18 * 2,5 MW) with 136,176 MWh electricity generation yearly and the development of a 29,326 m. transmission line between the proposed project area and the national grid".</p> <p>License and connection agreement are also provided to DOE.</p> <p><u>The clarification request is closed.</u></p>
<p>CAR 22: The methodology ACM0002 refers to the use of "tool to calculate the emission factor for an electricity system v:2".</p>	<p>Table 1 3.24.4</p>	<p>Response 1: The options have been</p>	<p>Review 2: Only grid connected power</p>

* According to Geonet Umweltconsulting GmbH report (available to DOE)



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p><input type="checkbox"/> Step 1: The relevant electric power system is identified in accordance with the tool. The national grid of Turkey is used as electric power system for project activity.</p> <p><input type="checkbox"/> Step 2: This step is optional and there are two options in the step 2. Option 1 can be chosen if only grid power plants are included in the calculation of operating margin and build margin emission factor. Option 1</p> <p>Please make a selection between option I or option II.</p> <p><input type="checkbox"/> Step 3: There are four methods for calculation of the operating margin emission factor. Since the average share of electricity generation by low-cost/must-run plants for five most recent years is found to be less than 50%, option (a) is chosen. The simple OM emission factor can be calculated using either of the two data vintages: Ex-ante option and ex-post option. The ex-ante option is selected to carry out the baseline methodology for the Project.</p> <p><input type="checkbox"/> Step 4: There are two options (Option A and Option B) in the Step 4 of “Tool to calculate the emission factor for an electricity system” version 02. Option B is used for simple OM calculation.</p> <p>The option of “data on the total electricity generation of all</p>		<p>chosen in B.6.1 of PDD</p>	<p>plants are chosen (option 1) in Step 2.</p> <p>All other selections for steps in EF calculations are adequately made.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>power plants serving the system and the fuel types and total fuel consumption of the project electricity system” is used for calculation of the simple OM emission factor. Reason for this choice is that there is no plant specific data in Turkey.</p> <p>Step 5: In this step, a generation-weighted average emission factor is calculated based on a sample of power plants, which have been taken into operation recently. The sample group of power plants/units m used to calculate the build margin consists of two options (Option a and Option b). For conducting the calculations, Option b is selected, because this option results in a larger electricity generation. In terms of vintage data, there are two options available: Option 1 (ex-ante) and Option 2 (ex-post).</p> <p>Please indicate which option is selected.</p>			
<p>CAR 23: Non-neutral Sustainable Development Indicators should be monitored in the Sustainability Monitoring Plan. Please prepare a monitoring plan for indicators (mitigation measure, related parameter, current, baseline situations and future target, way of monitoring (how, when, who). Please consider the questions in this section of the protocol while preparing the plan.</p>	Table 3 G.a	<p>Response 1:</p> <p>Sustainability monitoring plan section has been updated in Section E of LSC report</p>	<p>Review 1:</p> <p>The changes in sustainable development matrix etc. should be revised only in the Gold Standard Passport, LSC report should remain as it was initially prepared.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>The monitoring plan is prepared in accordance with the GS rules.</p> <p><u>The clarification request is closed.</u></p>
<p>CAR-24: Please provide a table of IRR inputs clearly indicating --input name --input value --name of reference document --page/column number of related value</p> <p>All IRR inputs should be validated with documents before turbine agreement date (august 2010) as it is first real action for the project.</p>	Table1 4.4.6.	All IRR inputs have been listed with required documentations Please find IRR Inputs.doc file	<p>Review 1:</p> <p>IRR Inputs have been validated with references that are dated before August 2010 (start date for project)</p> <p><u>The clarification request is closed.</u></p>
<p>CAR-25: As it is seen from the IRR analysis, 10 year is used to find the depreciation amounts for the investment as a whole. However, depreciation periods should be different in different asset classes. Please apply the Turkish Accounting Rules for the depreciation calculations.</p>		Depreciation periods have been re-calculated according to "Turkish accounting rules"	Issue is corrected.
<p>The salvage value is taken as the 10% of the initial investment cost. Please subtract the total depreciated value from the initial investment cost value to find the salvage value.</p>		To find the salvage value, total depreciated value has been	There is no salvage value calculation in excel file "Susurluk RES IRR". Please clarify.



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		subtracted from the initial investment cost value Response 2: Because the salvage value is too low (negligible), salvage value has not been taken in account.	Review 2: The salvage value can be neglected.
Please add back the depreciation value to find the equity cash flow		Depreciation value has been already added back to find Equity cash flow. Response 2: Depreciation has been added back to the net profit to obtain	Depreciation is calculated in P&L table. However, it should have been added back to the net profit to obtain the free cash flow. Please do the necessary corrections. Review 2: Depreciation is added.



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		the free cash flow.	
<p>Since the analysis is done on € basis there is no need to apply inflation on the OPEX. Moreover, it can be assumed that depreciation of € is equal to inflation rate. So, please remove the inflation for the OPEX.</p>		Inflation rate for OPEX has been removed from the sheet	OK
<p>The IRR calculation structure has some problems. If project IRR is to be calculated then the following steps should have been followed correctly:</p> <ul style="list-style-type: none"> a. Depreciation should have been added back to the cash flow after corporate tax is calculated. b. Interest expenses should have been added back to the cash flow after corporate tax is calculated. c. Both investment cost either financed by equity or by debt should have been put into cash flow. 		<p>a.) Depreciation has been added to the cash flow as in line 45 (EBTDA) of “IncSt CashF Maturity Yearly “ sheet of IRR calculation sheet</p> <p>b.) Loan costs (interest expenses) have been added to cash flow as in line 16 (EBTDA) of “IncSt CashF Maturity Yearly “ sheet of IRR calculation sheet</p>	<p>a) Depreciation is calculated before net profit is obtained. In addition to this, it should have been added back to the net profit to obtain the free cash flow.</p> <p>b) Loan cost line in 16 and 49 are not same.</p> <p>Please clarify.</p> <p>Review 2:</p> <p>The clarifications are acceptable. Necessary statements regarding the type of IRR calculation is corrected in PDD. Closed</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>c.)Both investment costs either financed by equity or debt have been added into cash flow as in line 48 amd 49 (Capex Debt and principal payments) of “IncSt CashF Maturity Yearly “ sheet of IRR calculation sheet</p> <p>Response 2: a In IRR calculation, EBITDA has been calculated in which depreciation is included.</p>	



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>b. Loan cost was distributed monthly for the months before the payment in "Income accrual calculation", while loan cost was shown on payment months in cash flow plan.</p> <p>The Equity IRR has been calculated, while in the PDD it was stated as project IRR. Necessary changes have been made in PDD.</p>	
Please update the investment analysis based on the		Updated	There are some more things to



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
new IRR outputs.		Response 2: The Equity IRR has been calculated, while in the PDD it was stated as project IRR. Necessary changes have been made in PDD.	be corrected. Review 2: Closed
Please indicate if there are some additional costs in the loan agreement such as commission etc.		No additional costs (all is included)	Closed
Please apply corporate tax for the fair value income at the end of the assessment period.		Corporate tax has been applied for the years with positive income Response 2: Necessary changes have been made in	The question is misunderstood. First, in the IRR analysis it is seen that fair value is not calculated properly. Second, we are indicating the corporate tax due to the fair/salvage value income at the end of assessment period. Not the yearly corporate taxes due to the positive incomes.



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		PDD. The main problem was the IRR sheet has been calculated for Equity, while in the PDD it was stated as project IRR.	Please clarify. Review 2: Closed
Please clearly mention how the sensitivity figures can be reproduced by us. Or, please make it reproducible.		To reproduce the sensitivity figures, please open "Assumptions" sheet of Susurluk RES IRR. xls and change the sensitivity figures by +/- 10% or +/- 5% at below cells; To reproduce total investment cost, change the value "C9"	Explanation is satisfactory. But, please update the sensitivity table based on the updated IRR analysis. Review 2: Closed.



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		Respectively, For operational cost, change "G18" For electricity price or Electricity generation, change "G22" Response 2. Updated	
			<u>The clarification request is closed.</u>
CL-1: As explained in EB 41 Annex 12 "Guidelines for completing the PDD", please indicate the scenario existing prior to project activity and provide detailed information about the baseline scenario.	Table1 3.4.1.	Provided	Review 1: Project and baseline descriptions are given as "The project was planned and acquired license to develop 45 MW onshore wind farm located in the Balıkesir province, Susurluk District in Turkey. The Project involves the installation of 18 turbines(18 * 2,5 MW)



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>and the development of a 29,326 m. transmission line between the proposed project area and the national grid. According to production license, 112,227 MWh/year of electricity generated by the Project will be delivered to the Turkish national grid. They have recently applied EMRA (EPDK) for a license alteration to change turbine sizes and respectively annual electricity generation. Installed capacity remains the same, while the annual electricity generation rises up to 136,176 MWh/year.</p> <p>The annual emission reductions are estimated as 82,658.8 tCO₂-eq/year. The baseline scenario has been defined as the generation of the same amount of electricity by the national grid which is dominated by thermal power plants. The main</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>emission source of electricity generation in fossil fuel fired power plants that are connected to National Grid is CO2 as in baseline scenario. Compared to that baseline scenario, the project will have positive influences on sustainable development in the region and in Turkey".</p> <p><u>The clarification request is closed.</u></p>
<p>CL 2: The contribution of the project to sustainable development is clearly defined in section A.2. of the PDD. Please provide objective evidence for the following ways to contribute to sustainable development: "contribution to local economy", "supporting the local economy during construction stage" and "contribution to social development".</p>	<p>Table1 3.4.4.</p>	<p>The objective evidences are submitted to you</p>	<p>Review 1:</p> <p>Contribution to local economy and supporting the local economy during construction stage: bills for local purchases are submitted to validation team: construction materials, food, concrete and gasoline.</p> <p>A signed indication from the Demirkapı village head Tayyar</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>Barsbay is provided to DOE. This letter reports that “water pipes damaged due to project have been renewed by the PP”.</p> <p>contribution to social development: social security records of 5 employees who reside in the nearby villages are presented to DOE.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 3: The project participant company (Alentek Enerji) and its shareholders are indicated.</p> <p>Turkey ratified the Kyoto Protocol 28 May 2009 but as she has not signed it yet she is only present in voluntary markets. The PP is Alentek Enerji and there is no host party.</p> <p>Please delete information regarding Turkey being a host country.</p> <p>The information has been provided in tabular format.</p>	Table1 3.5.	<p>Deleted information regarding Turkey being a host country</p> <p>Response 2: A statement was inserted in section A.3</p>	<p>Review 1:</p> <p>Please include a statement sentence in the PDD v2 that the table in section A.3. is the table of shareholders and their shares.</p> <p><u>The clarification request is still open.</u></p> <p>Review 2:</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			Section A.3 is OK now. <u>The clarification request is closed.</u>
CL 4: Please provide GPS data (coordinates).	Table1 3.6.2.	GPS coordinates inserted	Review 1: Coordinates have been provided in the PDD v2 and they are in line with the project report. <u>The clarification request is closed.</u>
CL 5: No description other than technical properties is given about the equipment to be transferred to host country. Please provide details about how environmentally safe and sound technology, and know-how, is transferred.	Table1 3.8.1.	Provided the details about how environmentally safe and sound technology and know how is transferred.	Review 1: It is indicated in section A.4.3. of the PDD v2 that "3 pieces Nordex N90 and 15 pieces Nordex N100 Wind Turbines will be erected in Susurluk Wind Farm. Turbines will be transported from Europe to the project site." And therefore technology transfer is accomplished.



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>Technical properties of the turbines are explained in the PDD v2 and catalogues are also provided to DOE.</p> <p>The project is environment and noise friendly due to;</p> <ul style="list-style-type: none"> • The absence of rotatic hydraulic system. • The enclosed grease and oil collecting pans. • The hydraulics with all lines in the area of the oil pan meaning that no oil can be polluted the environment. • Helical gearing of all gearwheels reduces the noise level within gerabox. • The vibrations in the generator are either not transmitted or are damped.



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<u>The clarification request is closed.</u>
<p>CL 6: Emissions have been identified and explained in Section B.3, Table 1.</p> <p>Please provide a flow diagram of the project boundary physically delineating the project activity with all equipments and systems.</p>	Table1 3.13.	Flow diagram is inserted	<p>Review 1:</p> <p>A flow diagram of the project boundary physically delineating the project activity with all equipments and systems is inserted in section B.3 of the PDD v2. drawing is also submitted as PDF to DOE.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 7: Please provide evidence that national and sectoral policies and circumstances, power sector expansion plans and economic situation in project sector have been taken into account.</p>	Table1 3.21.	<p>Provided evidences</p> <p>Response 2: Evidences that national and sectoral policies and circumstances, power sector expansion plans and situation is</p>	<p>Review 1:</p> <p>Project owners are kindly requested to reply the clarification requests “giving references to the related changes they have made like the page number of the change”. Please explain giving more details how the evidences are provided using references as “as added to section XX” or</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>given in section B.4 on pages 12-13</p>	<p>“YYY changes have been made in sections AA and BB etc”.</p> <p><u>The clarification request is still open.</u></p> <p>Review 2:</p> <p>The projections for installed capacity and built in capacity are considered.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 8: Please provide a flowsheet of the process and explain in detail the baseline scenario.</p>	<p>Table1 3.22.</p>	<p>Provided flowsheet</p> <p>Response 2:</p> <p>All references were provided in section B.4,12-13</p>	<p>Review 1:</p> <p>Baseline scenario is explained in summary in section B.4.</p> <p>Please provide references for the data presented in section B.4.</p> <p><u>The clarification request is still open.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>Review 2:</p> <p>References have been provided.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 9: Emission reductions will be measured via amount of electricity generated and therefore energy meters. The measuring will be continuous. Regular maintenance will also be held by TEIAS every 6 months.</p> <p>Please clearly indicate the responsibilities for and institutional arrangements for data collection and archiving.</p>	Table1 3.28.	The responsibilities for institutional arrangements have been indicated for data collecting and archiving.	<p>Review 1:</p> <p>Responsibilities have been defined for measurement and data collection.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 10: Only default data to be monitored is electricity generation and it is included in the monitoring plan.</p> <p>In the Project Report pg 30/75 it is stated that a cesspool will be installed. However, during site visit “wastewater treatment via limestone” was pronounced. Please clarify and include wastewater treatment in the monitoring plan.</p>	Table1 3.29.	A Cesspool will be installed instead of “wastewater treatment plant”	<p>Review 1:</p> <p>It is indicated once again that a cesspool will be installed and not a water treatment system as pronounced during site visit.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 11: According to EB 41 Annex 12, data monitored and required for verification and issuance are to be kept for two</p>	Table1 3.30.	Information provided for data	<p>Review 1:</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>years after the end of the crediting period or the last issuance of CERs for this project activity, whichever occurs later.</p> <p>Please provide information about data storage plan.</p>		storage plan.	<p>It is indicated in the PDD v2 that all collected data will be archived electronically and kept at least for 2 years after the end of the last crediting period.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 12: Contact information of the entity responsible for the application of the baseline and monitoring methodology to the project activity is provided.</p> <p>Please indicate contact person name.</p>	Table1 3.31.2.	Indicated	<p>Review 1:</p> <p>The contact information of the responsible person for the application of baseline and methodology is indicated in the PDD v2.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 13: Please indicate if the person/entity is also a project participant listed in Annex 1.</p>	Table1 3.31.3.	Indicated	<p>Review 1:</p> <p>It is indicated in the PDD that the entity is not a project participant listed in Annex 1.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CL 14: In the GS Passport LSC Report, an invitation tracking table has been established. Stakeholders have been invited via e-mail, personal invitation, newspaper ad (submitted to validation team) and samples to invitations have been included.</p> <p>Please also describe in the PDD the process by which comments by local stakeholders have been invited and compiled.</p>	Table1 3.34.1.	Sample invitations have been included. Comment compiling process described.	<p>Review 1:</p> <p>Summary of invitations and comments have been included in the PDD v2.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 15: Please provide evidence in the PDD that the project activity is described in a manner, which allows the local stakeholders to understand the project activity.</p>	Table1 3.34.2.	Described.	<p>Review 1:</p> <p>Project activity is described in a manner, which allows the local stakeholders to understand the project activity.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 16: The original comments by stakeholders are included in the LSC Report.</p> <p>Please clarify why there is less number of comments than participants.</p>	Table1 3.35.1.	Most of local people gives their support to the project. The local people preferred to raise comments by words instead of	<p>Review 1:</p> <p>Explanation is accepted by the validation team.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		filling the questionnaire or writing their comments.	
<p>CL 17: In section B.5. sub-step 1.a. 1-b, it is indicated that there are no other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality. Please discuss why thermal or hydropower projects are not considered as alternatives.</p>	Table1 4.1.3.2.	Thermal and Hydro considered as a third scenario.	<p>Review 1:</p> <p>Hydro and thermal PP's have been determined as alternatives to project activity but not found to be realistic as "Being a private entity, Eksim Holding doesn't have to invest power investments even proposed project activity. Also, in the proposed project area there is no hydro or other sources available for electricity generation, other project activities delivering same electricity is <i>not</i> realistic for project participant".</p> <p><u>The clarification request is closed.</u></p>
<p>CL 18: The outcomes of Step 1a should include: (a) The proposed project activity undertaken without being</p>	Table1 4.1.4.	Included and described why	<p>Review 1:</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>registered as a CDM project activity; (b) Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services (e.g., cement) or services (e.g. electricity, heat) with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology; (c) If applicable, continuation of the current situation (no project activity or other alternatives undertaken)</p> <p>Options (a) and (c) have been taken into account but other renewable energy sources have not been evaluated. Please discuss why thermal or hydropower projects are not considered as alternatives (refer to 4.1.3.2.)</p>		hydro and thermal are not considered as an alternative.	<p>Please refer to Review 1 to CL-17.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 19: Please state in PDD that this is a new project activity (project activities with starting date on or after 02 August 2008).</p>	Table1 4.2.6.	Stated.	<p>Review 1:</p> <p>In section B.5 of the PDD v2 it is stated that this is a new project activity.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 20: Yes, credible alternatives to the project activity in order to determine the most realistic baseline scenario</p>	Table1 4.3.2.	Discussed in more detail.	<p>Review 1:</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
have been identified but other renewable energy types and thermal power should be discussed in more detail.			Please refer to Review 1 to CL-17. <u>The clarification request is closed.</u>
CL 21: Please refer to 4.1.4.	Table1 4.3.3.	Referred	Review 1: Please refer to Review 1 to CL-17. <u>The clarification request is closed.</u>
<p>CL 22: Investment barriers (that Turkey is not a safe country for investment and no bank loan can be found): In the PDD it is said that a creditor is expected to be found on 11 June 2010. Please update the information. If a creditor has been found, please provide a letter indicating that CDM incentives have played positive effect for obtaining the credit.</p> <p>Technical barriers (that the firm has no wind experience): this barrier is not accepted for this project as this could be overcome by hiring experienced employees which are available in Turkey. Please update accordingly.</p> <p>Barriers due to prevailing practice (development of a grid</p>	Table1 4.5.2.	<p>information updated. Letter from bank has been inserted.</p> <p>Experienced technical employees are available in Turkey. But it doesn't mean that company have developed</p>	<p>Review 1:</p> <p>Barriers should be supported with strong claims and documented references in order to be accepted by the further approval mechanisms of this protocol.</p> <p>Review 2:</p> <p>-Bank from the letter is a proof for investment barrier.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>connection, transmission line fee, legislative barriers, low share of wind energy in Turkey energy breakdown, government promoting coal): as this project is not “first of its kind” it is not subject to this type of barriers.</p> <p>Please remove technical barriers and barriers due to prevailing practice from the barrier analysis.</p>		<p>know how and experiences on administrative levels for challenging to realize their first wind farm project.</p> <p>The length of the grid connection is the longest one in any wind farm projects in Turkey. Thus, this is certainly barrier compare with others.</p> <p>It is true that the project is not the first of its kind project. However the share of wind electricity is still too low, and</p>	<p>-Technical barriers and barriers due to prevailing practice have been removed from the PDD.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		there are still described prevailing practices existing against wind projects.	
		<p>Response 2:</p> <p>Regarding the claim of the longest grid connection of the project in Turkey, there is no public information available to prove. Therefore, it is deleted.</p>	<p>Review 1:</p> <p>-Please provide objective evidences for the claim “The grid connection consists of 29,3 km of transmission line which is the longest within all wind energy projects in Turkey”</p> <p>Review 2:</p> <p>Barrier is removed from the analysis.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>Lack of experience barrier is discussed in detail. Generation license is given as reference to show license alteration details.</p> <p>Response 3</p> <p>Explanation has been given how VER revenue remove technical barrier. On page 16</p> <p>Response 4</p> <p>Technical barriers were removed</p>	<p>Review 1:</p> <p>-Please discuss with more details and evidences why the lack of technical experience prevents the project implementation.</p> <p>Review 2:</p> <p>It is claimed in the PDD that as the PP lacked experience, the license application was changed two times and this was a cumbersome process.</p> <p>EB50 Annex 13 states that “Demonstrate in an objective way how the CDM alleviates each of the identified barriers to a level that the project is not prevented anymore from occurring by any of the barriers. Provide transparent and documented evidence, and offer conservative interpretations of</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>this documented evidence. Anecdotal evidence can be included, but alone is not sufficient proof”.</p> <p>Taking into account the above paragraph, please discuss how VER revenues remove this barrier and provide the implementation of the project.</p> <p>Review 3:</p> <p>According to EB 50 annex 13 “GUIDELINES FOR OBJECTIVE DEMONSTRATION AND ASSESSMENT OF BARRIERS”:</p> <p>“While demonstrating barriers related to technologies and skilled labour, information should include nature of company, organization and its</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>ownership, and previous experience with similar project (that is under consideration for CDM) in other Locations”.</p> <p>According to website of Iltek and Exim, the mother company of Alentek, the holding has other wind projects, too and has been measuring wind speeds since more than 10 years. This statement does not match with the above definition of EB 50 Annex 13.</p> <p>Also according to guideline 3 of EB 50 Annex 13, “In order to make an objective claim for a specific barrier, the PDD confirms the existence of the barrier by demonstrating, for each of the barrier, that in similar circumstances (in similar industries/sectors, in companies of similar size and ownership</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>structure, in similar projects) the barriers actually prevented the implementation of other project(s).</p> <p>Please discuss the barrier considering these.</p> <p>Review 4:</p> <p>Technical barriers and barriers due to prevailing practice have been removed from the PDD.</p>
		<p>Grid connection agreement with TEIAS is provided It can be seen from the agreement that development costs must be burdened by Alentek.</p> <p>Response 3</p>	<p>Review 1:</p> <p>-Please show objective evidence that the claim “Overall the project participants are fully dependent on TEIAS for their grid connection and might have to be burdened by increased capital costs either due to construction of a new transformer station and long distance transmission lines” is valid for Susurluk project.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>Explanation has been given how VER revenue can relief the difficulties of the project on page 17</p> <p>Response 4</p> <p>Barriers due to the prevailing practice were removed.</p>	<p>Review 2:</p> <p>In page 2 and Clause 5 of the connection agreement, it is indicated that transmission line is to be built by the investor and to be deduced between TEIAS and investor. Please show how “VER revenues; an amount to be obtained by the PP in upcoming years of the project” can relieve the transmission line difficulty.</p> <p>Review 3:</p> <p>Barriers due to prevailing practice can only be used if the project is “first of its kind”.</p> <p>According to guideline 3 of EB 50 Annex 13, “In order to make an objective claim for a specific barrier, the PDD confirms the existence of the barrier by</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>demonstrating, for each of the barrier, that in similar circumstances (in similar industries/sectors, in companies of similar size and ownership structure, in similar projects) the barriers actually prevented the implementation of other project(s).</p> <p>Besides, according to guideline 4 of EB 50 Annex 13, “barriers that can be mitigated by additional financial means can be quantified and represented as costs and should not be identified as a barrier for implementation of project while conducting the barrier analysis, but rather should be considered in the framework of investment analysis”.</p> <p>The financial burden of the grid connection and expropriation fees could be included in the</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>IRR analysis.</p> <p>Please discuss the barrier considering these.</p> <p>Review 4:</p> <p>Technical barriers and barriers due to prevailing practice have been removed from the PDD.</p>
		<p>“Transmission line fee” and “Bureaucratic and legislative” barriers are deleted.</p>	<p>-Please explain how the transmission line fee affects the project. Is the transmission line and grid connection to be provided by TEIAS or built by the PP. Please clarify with evidences.</p> <p>-“Bureaucratic and legislative barriers” discussed in the PDD are not new concepts that did not exist before the implementation of the project. Therefore, they can not be</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>considered as barriers but “difficulties”. Please discuss.</p> <p>Review 2:</p> <p>Barriers are removed.</p>
			<p>According to guideline 3 of EB 50 Annex 13, “In order to make an objective claim for a specific barrier, the PDD confirms the existence of the barrier by demonstrating, for each of the barrier, that in similar circumstances (in similar industries/sectors, in companies of similar size and ownership structure, in similar projects) the barriers actually prevented the implementation of other project(s).</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>Regarding the barrier “wind capacity constitutes a low share of the total generation capacity”, please demonstrate that barrier prevents the implementation of similar projects.</p>
			<p>Regarding investment analysis, is there a loan agreement between the bank and the company which states that “credit is only to be given under the condition that project benefits from VER revenues? If there is one please provide the related pages to DOE.</p> <p>Review 2:</p> <p>-Bank from the letter is a proof for investment barrier.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<u>The clarification request is closed.</u>
CL 23: Please indicate in the PDD that this is large scale project.	Table1 4.6.1.	Indicated	Review 1: It is indicated in the PDD v2 that the project is large scale. <u>The clarification request is closed.</u>
CL 24: Please discuss in the PDD why it is appropriate that the region is the entire host country.	Table1 4.6.3.	Discussed	Review 1: It is indicated in the PDD v2 that the project boundary is National Electricity Grid of Turkey. <u>The clarification request is closed.</u>
CL 25: No due account has been taken. Please update this after addition of all comments.	Table1 7.4.	No due account has been taken.	Review 1: It is indicated in the PDD v2 that No due account has been taken. <u>The clarification request is closed.</u>
CL 26: The title in the PDD is "Balıkesir Susurluk 45 MW Wind Farm Project-Turkey" and the title in the passport is	T-1.6.	Revised	Review 1:



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
"Susurluk Wind Farm Project-Turkey". Please revise title of passport in accordance with PDD.			<p>GSP title is revised as "Balıkesir Susurluk 45 MW Wind Farm Project – Turkey". Title is now in accordance with the PDD v2.</p> <p><u>The clarification request is closed.</u></p>
CL 27: Please indicate start date of construction in project description.	Annex R	Indicated	<p>Review 1:</p> <p>Start date is indicated in the PDD v2.</p> <p><u>The clarification request is closed.</u></p>
CL 28: Please include a written statement against de-bundling.	T-3.5.1.	Included	<p>Review 1:</p> <p>This is a large scale project anyway. Bundling is not a subject for this project.</p> <p><u>The clarification request is closed.</u></p>
CL 29: Please indicate if there is double counting with other certification schemes.	T-3.5.1.	Indicated	<p>Review 1:</p> <p>There is no double counting with</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>other certification schemes.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 30: Yes both matrices have been used to construct consolidated matrix.</p> <p>In own matrix air quality, other pollutants, access to affordable and clean energy, balance of payments and services were the matters that the project was claimed to have positive effect on.</p> <p>Regarding access to affordable and clean energy, there is only one grid in Turkey and end users still buy the electricity from the same price so this indicator does not have positive effect.</p> <p>Regarding balance of payments and investments, the share of renewables is very low among fossil fuels and also the share of this project among other wind projects is very low too. The project does not have significant positive effect.</p> <p>Please give more detailed explanation about sustainable development matrix explanations and include all indicators and revise scoring.</p>	T-3.5.1.	<p>Affordable and clean energy indicator has been changed to "0" from "+"</p> <p>Balance of payments indicator is still considered as + indicator, regardless of its size, the project supports balance of payments of Turkey to reduce 180 mio USD worth Natural Gas imports during the lifetime period.</p>	<p>Review 1:</p> <p>The matrix is now in accordance with the tools and methodology.</p> <p>As this is a large scale project, it can be accepted that project has + effect on balance of payments.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>The parameter "Quality of Employment" has been revised to "+" from "0"</p> <p>More detailed information given for each parameters.</p>	
<p>CL 31: Most of the names who signed the feedback round document review list do not match the list of the first meeting participants. Please clarify the reason.</p>	T-2.11.	<p>There is no specific reason. Two sets of hard copies have been delivered to muhtar's office and the local people who reviewed these documents, has signed in list.</p>	<p>Review 1:</p> <p>Explanation is accepted by the validation team.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 32: Please provide references for these mentioned documents.</p>	T-3.5.1.	Provided	<p>Review 1:</p> <p>Valid references have been provided for SFR documents.</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<u>The clarification request is closed.</u>
CL 33: In passport version 01, only the plans about stakeholder feedback round have been included. Please give the said details if the round has been realized.	T-3.5.1.	Detailed	Review 1: SFR results have been provided in GSP section E2. signatures dated 14/06/2010 have been provided to DOE. <u>The clarification request is closed.</u>
CL 34: All relevant principles have been discussed except for number 10. Please show evidence for compliance for safeguarding principle 10 (that no critical habitat exists in project site).	T-2.4.1.	Showed evidence Review 2: Assessment of number 10 risk of do-not harm assessment has been changed from low to medium. Although fountain is only 1mx2 m., over	Review 1: Only the safeguarding principle “The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments” is scored “medium”. The rest are low impact. References have been provided for all principles and are valid. During the site visit a fountain was observed and the PP told



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>18000 m2 area reserved as protection area. PP applied to necessary organization for necessary permits. All correspondences are sent for your consideration.</p>	<p>the validation team that “necessary permits would be obtained” for the fountain. Please provide updated information.</p> <p><u>The clarification request is still open.</u></p> <p>Review 2:</p> <p>Documents related to the application to legal authorities for the fountain are available to DOE. The fountain will be preserved and the land surrounding the fountain will be rented for the construction of the roads of the project a bit far away from the fountain.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 35: Measures have been introduced as with low risk. Please show evidence that health and safety concerns have low risk.</p>	<p>T-2.4.1.</p>	<p>Changed to medium risk</p>	<p>Review 1:</p> <p>The risk of “health and safety</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			<p>concerns” has been changed from low to medium. Mitigation measures are trainings.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 36: Please provide references for “do no harm assessment” (EIA, training reports).</p>	T-3.5.1.	Provided	<p>Review 1:</p> <p>References have been provided for all principles and are valid.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 37: Parameters have not been selected for each indicator. Please clearly explain the effect of the project on each indicator. Define why the score should be “zero” for relevant indicators.</p>	T-2.4.2.	Explained in detail	<p>Review 1:</p> <p>Parameters have been selected and references have been provided for each indicator. Scoring bases are explained in detail.</p> <p><u>The clarification request is closed.</u></p>
<p>CL 38: Baselines have not been given for each parameter. Please include all indicators.</p>	T-2.4.2.	Given	<p>Review 1:</p> <p>Baselines have been provided</p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
			for each indicator. <u>The clarification request is closed.</u>
CL 39: Please include all indicators.	T-2.4.2.	Included	Review 1: Choice of the parameters is described for each parameter. <u>The clarification request is closed.</u>
CL 40: Please include all parameters and revise scoring.	T-2.4.2.	Included and revised scoring	Review 1: Scoring is correct and accepted by the DOE. <u>The clarification request is closed.</u>
CL 41: Please provide all stakeholder reports and update this section.	T-2.4.2.	Provided	Review 1: The project positively contributes to all categories. The clarification request is closed.
CL 42: Please provide all stakeholder reports and update	T-3.5.1.	Provided	Review 1:



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
this section.			<p>The matrix is based on existing sources of information.</p> <p>The clarification request is closed.</p>
CL 43: This CL is to be closed after all other CAR/CL have been closed.	T-2.4.2.		<p>Review 1:</p> <p>The project demonstrates clear benefits in terms of sustainable development.</p> <p><u>The clarification request is closed.</u></p>
CL 45: As host country Turkey is listed in ODA recipient list, please declare a written declaration of your projects non-use of ODA.	T-3.5.1.	Declared	<p>Review 1:</p> <p>ODA declaration is provided.</p> <p><u>The clarification request is closed.</u></p>
CL 46: No declaration has been included, please declare a written declaration of your projects non-use of ODA.	Annex D	Declared	<p>Review 1:</p> <p>ODA declaration is provided.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CL-47: Yes, the project is a grid-connected renewable power generation project activities that install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plants). Methodology is correct.</p> <p>In the PDD section B.2. the project is identified as a “capacity addition”. During site visit it was observed that project is “installation of a power plant”. Please clarify</p>	Table 1 3.11.2.1.	Corrected.	<p>Review 1:</p> <p>The project consists of installation of wind power plant is a grid-connected electricity generation project.</p> <p><u>The clarification request is closed.</u></p>
<p>CL-48: Please define lifetimes according to EB 50 Annex 15 and if necessary include equipment renewal costs in the IRR.</p>	EB50 Annex 15	<p>Response 1</p> <p>As provided in IRR Input_02.doc file, According to EB 50 Annex 15;</p> <p>“ The tool may, for example, be used for project activities which involve the replacement of existing equipment with</p>	<p>Review 1:</p> <p>Please include the reference for 20 years of lifetime in the PDD.</p> <p>Please use the definitions in EB50 Annex 15 to define technical and operational lifetimes for the project.</p> <p>Please discuss in the PDD for how many years the IRR analysis is carried out and if it is appropriate considering the lifetime.</p> <p><u>The clarification request is still</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		<p>new equipment or which retrofit existing equipment as part of energy efficiency improvement activities. “</p> <p>The default lifetime for onshore wind project is 25 years which is higher than proposed lifetime of the project. Therefore there will be no replacement or retrofitting of equipment during proposed 20 years lifetime</p>	<p><u>open.</u></p> <p>Review 2:</p> <p>According to “Tool to determine the remaining lifetime of equipment” (EB 50 Annex 15), manufacturer’s information for the technical lifetime of the equipment may be used. In our case, manufacturer company Nordex states that their wind turbines’ technical lifetime is 20 years. In parallel with technical lifetime, operational lifetime of the project was taken as 20 years on IRR calculation.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		Response 2: Reference has been given for 20 years of lifetime in PDD, according to EB50 annex 15 definitions. (under the assumption table on PDD)	
CL49 The final request date for the methodology version 11 is 17 May 2011. Version shall be updated to v12 in the PDD.		Methodology version was updated to V12 in the PDD	Review 1: Version of ACM0002 was revised as v12 throughout the PDD. <u>The clarification request is closed.</u>
CL50 Ertürk A.Ş. 0.85 MW at İstanbul-Silivri is not listed in the wind farms list. Please clarify.		Erturk AS project was added into the Table 12 in the PDD	Review 1: Correction is made in the PDD. <u>The clarification request is closed.</u>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
<p>CL51 The accuracy level of the monitoring devices is missing in the PDD. Please provide documents regarding electricity meters (technical specifications, error ranges, calibration records if any) and include relevant information about meters in the PDD.</p>		<p>The required accuracy level of monitoring devices is added into the Section 7.1 “QA/QC procedures to be applied.”</p> <p>All relevant information regarding monitoring device is added into Section 1 “Description of measurement methods and procedures to be applied.”</p> <p>“The first index protocol between Alentek and TEIAS” is available for your</p>	<p>Review 1:</p> <p>Detailed information about the Meters is provided in the PDD.</p> <p>First meter reading protocol and technical catalogues of the meters are provided to DOE.</p> <p>As indicated in the catalogues, accuracy classes are “0.2S for active and 2 for Reactive” power.</p> <p><u>The clarification request is closed.</u></p>



VALIDATION REPORT

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project owner response	Validation team conclusion
		consideration.	
<p>FAR1: Although the project is not in bird migration routes, as the project is a large scale GS wind project, bird deaths should be questioned (with local stakeholders) in first verification.</p>			



VALIDATION REPORT

1. GUIDELINES FOR COMPLETING CDM-PDD, CDM-NMB and CDM-NMM – Version 07 – 02 August, 2008
2. APPROVED CONSOLIDATED BASELINE AND MONITORING METHODOLOGY ACM0002– Version 10 – 11 June, 2009
3. TOOL FOR THE DEMONSTRATION AND ASSESSMENT OF ADDITIONALITY –Version 05.2 – 26 August, 2008
4. TOOL TO CALCULATE THE EMISSION FACTOR FOR AN ELECTRICITY SYSTEM-Version 01.1-29 July, 2008
5. PARAGRAPH 54 OF EB 38TH MEETING REPORT – 14 March, 2008.
6. EB 41ST ANNEX 46: GUIDANCE ON THE DEMONSTRATION AND ASSESSMENT OF PRIOR CONSIDERATION OF THE CDM–Version 01-02 August, 2008
7. VALIDATION AND VERIFICATION MANUAL Version 01.1 –EB 51 Annex 3– 04 December, 2009.
8. Combined tool to identify the baseline scenario and demonstrate additionality version 02.2–EB 28TH Annex 14 – 26 August, 2008.





9. GUIDELINES FOR COMPLETING CDM-PDD, CDM-NMB and CDM-NMM – Version 07 – 02 August, 2008
10. APPROVED CONSOLIDATED BASELINE AND MONITORING METHODOLOGY ACM0002– Version 10 – 11 June, 2009
11. TOOL FOR THE DEMONSTRATION AND ASSESSMENT OF ADDITIONALITY –Version 05.2 – 26 August, 2008
12. TOOL TO CALCULATE THE EMISSION FACTOR FOR AN ELECTRICITY SYSTEM-Version 01.1-29 July, 2008
13. PARAGRAPH 54 OF EB 38TH MEETING REPORT – 14 March, 2008.
14. EB 41ST ANNEX 46: GUIDANCE ON THE DEMONSTRATION AND ASSESSMENT OF PRIOR CONSIDERATION OF THE CDM–Version 01-02 August, 2008
15. VALIDATION AND VERIFICATION MANUAL Version 01.1 –EB 51 Annex 3– 04 December, 2009.
16. Combined tool to identify the baseline scenario and demonstrate additionality version 02.2–EB 28TH Annex 14 – 26 August, 2008.

