



VALIDATION REPORT SİLİVRİ ENERJİ A.Ş.

VALIDATION OF THE SİLİVRİ WIND POWER PLANT, TURKEY

REPORT No.BVC/TURKEY-VD/
CER.TR2106978.15.C45/2015

REVISION No. 02

BUREAU VERITAS CERTIFICATION

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VALIDATION REPORT



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Client: Silivri Enerji A.Ş.	Client ref.: Mr. Abdulhadi Çiftçi
Summary: Bureau Veritas Certification has conducted the validation of Silivri Wind Power Plant, owned by Silivri Enerji A.Ş which is located at Silivri district in İstanbul province, on the basis of UNFCCC criteria for the CDM, as well as Gold Standard (GS) v.2.2 and criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria. The validation scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design document and additional background documents; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures. The first output of the validation process is a list of Clarification Requests, Corrective Actions Requests, and Forward Actions Requests (CLs, CARs and FARs), presented in Appendix A. Taking into account this output, the project proponent revised its project design document. In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology ACM0002 Version 16 and meets all relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests the registration of the project as a GS-VER project activity. Crediting period type is renewable (7 years) which is planned to be renewed twice and expected start & end date of crediting period is 20/08/2014 – 19/08/2021. During the seven years of its first renewable crediting period, the project is likely to achieve the estimated annual emission reductions of 80,442 tCO₂e.	

Report No.: BVC/TURKEY-VD/ CER. TR2106978.15.C45/2015	Subject Group: GS-VER
Project title: Silivri Wind Power Plant, Turkey	
Work carried out by: Mr. Onur YILMAZ - Team Leader Mr. Murat GENCER - Financial Specialist	
Internal Technical Review carried out by: Mr. Furkan SADIKOGLU	
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Work approved by:

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Abbreviations

BVCH	Bureau Veritas Certification Holding SAS
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CL	Clarification Request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DOE	Designated Operational Entity
FAR	Forward Action Request
GHG	Green House Gas(es)
MoV	Means of Verification
MP	Monitoring Plan
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PPA	Power Purchase Agreement
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
TEIAS	Turkish Electricity Transmission Corporation
PMUM	Market Financial Settlement Center
WPP	Wind Power Plant
EIA	Environmental Impact Assessment

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1. INTRODUCTION

Silvri Enerji A.Ş. has commissioned Bureau Veritas Certification to validate its GS-VER project Silvri Wind Power Plant, Turkey (hereafter called “the Project”) at Marmara region, İstanbul province.

This report summarizes the findings of the validation of the Project, performed on the basis of UNFCCC criteria, as well as GS v.2.2 and criteria given to provide for consistent project operations, monitoring and reporting.

1.1. Objective

The objective of a validation is to provide a thorough and independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan, and the project's compliance with relevant UNFCCC, GS v.2.2 and host country criteria are validated in order to confirm that the project design, as documented, is sound and reasonable, and meets the applicable GS-VER requirements and the 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 voluntary emission reductions (VERs).

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

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

1.3. Validation Team

The assessment team and internal technical reviewer team consist of the following personnel:

FUNCTION	NAME	TA 1.2	TA XX	TASK PERFORMED*
Team Leader	Mr. Onur YILMAZ	☒	☐	☒ DR ☒ SV ☐ RI ☐ TR
Technical Specialist	Mr. Murat GENCER	☐	☐	☒ DR ☐ SV ☐ RI ☐ TR
Internal Technical Reviewer (ITR)	Mr. Furkan SADIKOGLU	☒	☐	☐ DR ☐ SV ☐ RI ☒ TR

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

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 07.0 of the Clean Development Mechanism Validation and Verification Standard, issued by CDM Executive Board after its 79th meeting on 01/07/2014 (Ref-04). 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 (GS-VER-PDD) submitted by Lifenerji Ltd. Şti. and additional background documents related to the project design and baseline were reviewed.

Furthermore, cross checks were made between information provided in the GS-VER-PDD and information from sources other than those used, the DOE's sectorial or local expertise and, independent background investigations.

To address Bureau Veritas Certification corrective action and clarification requests, Lifenerji Ltd. Şti. revised the GS-VER-PDD and resubmitted it on 22/12/2015.

The validation conclusions presented in this report relate to the project as described in the GS-VER-PDD version 03.

2.2. Follow-up Interviews

On 27/08/2015, Bureau Veritas Certification performed a site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Silivri Enerji A.Ş. and Lifenerji Ltd. Şti. and local stakeholders were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Silivri Enerji A.Ş. (the Project Owner)	➤ Project background information and CDM consideration. ➤ Project technology, operation and maintenance. ➤ Project approval and implementation status. ➤ Project management and monitoring plan. ➤ Stakeholder consultation process. ➤ Common practice in the area. ➤ Government policies related to the project activity.
Local Stakeholder	➤ Project background in details



	➤ Stakeholder comments ➤ Social and environmental impact of the project ➤ GS Sustainability matrix
Lifenerji Ltd. Şti. (the Consultant)	➤ Applicability of selected methodology. ➤ Baseline determination. ➤ Emission reductions calculation. ➤ Emission reduction monitoring plan.

2.3. Resolution of Clarification, Corrective and Forward Action Requests

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

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

- (a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable, verifiable and additional emission reductions;
- (b) The applicable GS-VER requirements have not been met;
- (c) There is a risk that emission reductions cannot be monitored or calculated.

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

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

To guarantee the transparency of the validation process, the issues raised, the responses provided by the project participants, the means of validation of such responses and references to any resulting changes in the GS-VER-PDD or supporting annexes are documented in the Validation 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 Team Leader provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

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

- The validation activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM and GS rules and requirements.
- The review encompasses all aspects related to the project which includes project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, review of the stakeholder comments and responses, closure of CARs and CLs during the validation exercise, review of sample documents.

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

After the agreement of the responses to the Clarification Requests from the validation team as well as the PP(s), the finalized validation report is accepted for further processing such as uploading via the UNFCCC interface.

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, Corrective and Forward 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 16 CAR(s), 04 CL(s) and 02 FAR(s).

The CARs and CLs were closed out 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 corresponds to the VVS paragraph.

3.1. Approval (43-44)

Approval is not applicable as the project is developed as a Gold Standard VER project.

3.2. Authorization (49)

Authorization is not applicable as the project is developed as a Gold Standard VER project.

3.3. Sustainable Development (52)

As the project is a GS-VER project it is not applicable for the host Part's DNA to confirm the contribution of the Project to the sustainable development of the host party. Please refer to section 3.1 of this report.

However, according to GS requirements as a sustainability monitoring plan is applicable and related parameters are available in detail in the project GS Passport (Ref-03). These parameters can also be seen in the monitoring plan, section 3.10 of this report.

3.4. Modalities of Communications (58,61)

N/A as the project is GS-VER.

3.5. Project Design Document (63)

Bureau Veritas Certification hereby confirms that the GS-VER-PDD complies with the latest forms of the guidance documents for completion of GS-VER-PDD.

3.6. Changes in the Project Activity (17)

Webhosting is not applicable as the project is GS-VER.

3.7. Project Description (69)

The Project is purchase, installation and operation of 18 wind turbines by Silivri Enerji A.Ş. The project is a newly built farm which located in Marmara region, İstanbul province, which has geographical coordinates of the wind turbines are confirmed through the EMRA generation license (Ref-11). The turbines coordinates are confirmed as follows;

Wind Turbine No.	Latitude (N)	Longitude (E)
T1	41° 10' 19.2288"	28° 15' 30.7723"
T2	41° 10' 16.8816"	28° 15' 42.7736"
T3	41° 10' 15.1212"	28° 15' 55.4856"
T4	41° 10' 14.3760"	28° 16' 36.5837"
T5	41° 10' 06.9600"	28° 16' 38.7999"
T6	41° 10' 13.6488"	28° 17' 18.7547"
T7	41° 10' 00.6852"	28° 17' 20.7751"
T8	41° 09' 53.9388"	28° 17' 26.6504"
T9	41° 09' 48.0168"	28° 17' 34.3867"
T10	41° 09' 18.1836"	28° 17' 31.5264"
T11	41° 10' 27.7932"	28° 16' 31.3508"
T12	41° 09' 17.8056"	28° 18' 10.6051"
T13	41° 09' 08.5356"	28° 18' 15.9560"
T14	41° 09' 03.8664"	28° 18' 24.5725"
T15	41° 09' 01.8648"	28° 18' 38.2183"
T16	41° 09' 01.4292"	28° 19' 16.3491"
T17	41° 09' 15.8508"	28° 19' 28.2658"
T18	41° 09' 12.2832"	28° 19' 39.6063"

The project will involve of 18 Nordex N100/2500, with each 2500 kWe capacity in the project site to reduce GHG emissions and increasing energy deficit in Turkey. Project site was visited by the validation team as the project activity was in operation. Turbine capacities and coordinates are confirmed through the EMRA Generation License (Ref-11).

The estimated (P75) annual electricity generation is 143,327 MWh (Ref-12) by the project activity which is constituted of different fuel sources, mainly fossil fuels. The project activity will contribute further dissemination of wind energy and extension of national power generation.

The project will result in annual emission reductions of 80,442 tCO₂e during the seven years of its first renewable crediting period which is started on 20/08/2014.

The validation team confirms that the estimated PLF of 36.4 % is sourced from the Silivri WPP Generation License (Ref-11). The PLF is calculated as;

$$PLF = 143,327,000 / (45,000 * 8760) * 100 = \% 36.4$$

(*PLF = Annual Gen / Installed Cap. x Working Hours*) which is complying with the Paragraph 3 (b) of "Guidelines for the Reporting and Validation of Plant Load Factors" version 01.

Annual electricity generation is confirmed through Silivri WPP Wind and Energy Production Assessment Report (Ref-12) page 10 Table 0-5 (P75). Turbine Purchase Agreement (Ref-14) was also provided to the validation team to validate the indicated values.

The project activity with 45 MWe qualifies as **Type I**: Renewable energy project activities with a maximum output capacity are more than 15 MW and therefore the project activity is large scale project activity.

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

The processes undertaken by the validation team to validate the accuracy and completeness of the project description include conducting a physical site inspection, sampling, reviewing available designs and feasibility studies, conducting comparison analysis with equivalent projects.

Bureau Veritas Certification hereby confirms that the project description in the final PDD is accurate and complete in all respects.

3.8. Baseline and Monitoring Methodology

3.8.1. Applicability of the selected Methodology (77)

The Project uses the approved consolidated baseline and monitoring methodology ACM0002 Version 16 – "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Ref-05).

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

- (1) **Applicability condition 1:** The project is a Greenfield, grid-connected wind power plant project. This was confirmed through the site observations and EMRA generation license (Ref-11).
- (2) **Applicability condition 2:** The project is the installation of a new wind power plant at a site where no renewable power plant was operated prior to the implementation of the project

activity. This was confirmed through the site observations and EMRA generation license (Ref-11).

- (3) **Applicability condition 3:** The project activity doesn't involve the installation of a hydro power plant. This was confirmed through the site observations and EMRA generation license (Ref-11).
- (4) **Applicability condition 4:** The project activity doesn't involve the installation of a biomass fired power plant. This was confirmed through the site observations and EMRA generation license (Ref-11).
- (5) **Applicability condition 5:** The project activity is installation of a new grid connected wind power project and doesn't involve switching from fossil fuel to renewable energy sources. This was confirmed through the site observations and EMRA generation license (Ref-11).
- (6) **Applicability condition 6:** The project activity is a new grid connected wind power plant and no retrofit, replacement or capacity additions exists in the project activity. This was confirmed through the site observations and EMRA generation license (Ref-11).

The project is a large-scale project which qualifies as Type I: Renewable energy project activities with a maximum output capacity are more than 15 MW. The installed capacity of the proposed project activity is confirmed through the Silivri Enerji A.S. & Nordex Energy Turbine Purchase Agreement (Ref-14) as 45 MWe which is higher than 15 MW.

The project activity will not have a capacity extension at any year of the crediting period. With respect to the turbine agreement, the production capacity of power plant is definite. Hence the project activity will meet the limits of the large-scale project activity types with 45 MWe installed capacity.

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

3.8.2. Project Boundary (86-87)

The validation team has validated the project boundary by:

- (a) Assessing the relevant documents including generation license (Ref-11) and EIA not required certificate (Ref-15).
- (b) Observing the physical site and equipment used in the process.

The spatial extent of the project boundary is clearly defined in line with ACM0002 Version 16 as the project power plant and all power plants connected physically to the electricity system that the CDM (GS-VER) project power plant is connected to.

The greenhouse gases and emission sources included in the project boundary are CO₂ emissions in the baseline arising from the fossil fuel fired power plants in the national grid that are displaced due to project activity. There are no project emissions as the project does not involve an emergency generator.

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

3.8.3. Baseline Identification (94-95)

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

Since the project is the installation of a new grid connected renewable power plant, the baseline scenario has been identified, in line with the applied methodology ACM0002, v.16, as "Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the 'Tool to calculate the emission factor for an electricity system', Version 04 under Section B.6.3 of GS-VER-PDD.

In line with the requirements of the applied tool, the Simple Operating Margin Emission Factor ($EF_{grid,OM\ simple,y}$) has been calculated ex-ante, using TEIAS data for 2011-2013 period which is actual data during the investment decision date.

The operating margin is calculated as **0,6407 tCO₂ / MWh**. The operating margin calculation is checked and accepted by the validation team through the actual references for the project activity.

For BM factor calculation, since no official emission factors for different fuel types are available, lower confidence default values of IPCC Guidelines are applied.

Energy Source	Effective CO ₂ Emission Factor $EF_{CO_2,m,l,y}$ (tCO ₂ /TJ)	Average Conversion Efficiency ($\eta_{m,y}$)	Emission Factor of the Power Unit $EF_{EL,m,y}$ (tCO ₂ /MWh)
Natural Gas	54.3	60%	0.325
Lignite	90.9	50%	0.655
Coal	89.5	50%	0.644
Fuel Oil	72.6	46%	0.568
Hydro	n.a.	n.a.	0.0
Wind	n.a.	n.a.	0.0
$EF_{grid,BM,y}$ (tCO ₂ /MWh)	0.3230		

The Build Margin Emission Factor ($EF_{grid,BM,y}$) has been determined as **0.3230 tCO₂/MWh** and has been found appropriate by the validation team.

In accordance with the methodology of the "Tool to calculate the emission factor for an electricity system", Version 04; Project participant determined the Combined Margin Emission Factor as **0.5612 tCO₂/MWh** and this have been confirmed by the validation team with reviewing all baseline calculation sheet equations and confirming the parameters used for the calculations and their relevant sources.

Bureau Veritas Certification hereby confirms that:

- (a) All the assumptions and data used by the project participants are listed in the GS-VER-PDD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the GS-VER-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 sectorial policies and circumstances are considered and listed in the GS-VER-PDD;
- (e) The approved baseline methodology has been correctly applied to identify the most plausible baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed project activity.

3.8.4. Algorithms and/or Formulae used to determine Emission Reductions (99-100)

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

Project installed capacity has been validated as 45 MWe through the Silivri Enerji A.S. & Nordex Energy Turbine Purchase Agreement (Ref-14). Project site was visited by the validation team as the project activity was in operation.

According to annual electricity generation and installed capacity the PLF is calculated and confirmed as 36.4 %.

Technical lifetime of the project was determined as 25 years and 0 months in line with the guidance of "Tool to determine the remaining lifetime of equipment", Version 01 for onshore wind turbines. This has also been assumed as the project lifetime.

According to the requirements of the applied methodology, ACM0002 Version 16;

Project emissions of the project have been evaluated as:

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

Where:

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

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

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

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

Project being based on wind energy, none of the PE parameters are applicable according to ACM0002 Version 16 and the **project emissions are (PE_y) 0**.

Leakage Emission (LE_y) for the project has not been considered, in line with the applied methodology ACM0002 Version 16 and the **leakage emissions are (LE_y) 0**.

Baseline Emissions of the project has been evaluated as:

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

Where:

BE_y = Baseline emissions in year y (tCO₂/yr).

EG_y = Electricity supplied by the project activity to the grid (MWh).

EG_{baseline} = Baseline electricity supplied to the grid in the case of modified or retrofit facilities (MWh). For new power plants this value is taken as zero.

EF_{grid,CM,y} = Combined margin CO₂ emission factor for grid connected power generation in year y

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

BE_y = 143,327 MWh/year x 0.5612 tCO₂/MWh = 80,442 tCO₂e and since no project emissions are considered,

Emission Reductions of the project has been evaluated as:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂e/yr).

BE_y = Baseline emissions in year y (tCO₂/yr).

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

LE_y = Leakage emissions in year y (tCO₂e/yr).

$$ER_y = BE_y - 0 - 0 = BE_y = 80,442 \text{ tCO}_2\text{e}$$

Bureau Veritas Certification hereby confirms that:

- (a) All assumptions and data used by the project participants are listed in the GS-VER-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 GS-VER-PDD;
- (c) All values used in the GS-VER-PDD are considered reasonable in the context of the proposed project activity;

- (d) The baseline methodology and corresponding tool(s) have 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 GS-VER-PDD.

3.9. Additionality (104)

As required by the selected methodology, the additionality of the Project has been demonstrated by applying "Tool for the demonstration and assessment of additionality", Version 07.0.0. Under demonstration of additionality first of all alternative projects have been identified for define the alternative realistic scenarios instead of the project activity.

However consistency with mandatory laws and regulations has been demonstrated. The Investment Analysis and Common Practice Analysis have been done for the project activity.

The main input values have been confirmed through the financial analysis IRR spreadsheet of the project activity and other sectorial data's has been confirmed by the financial specialist through the sectorial knowledge.

3.9.1. Prior consideration of the Clean Development Mechanism (112)

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

Table 2 Timeline of the Project

Date	Events	Reference
11/06/2009	EIA Not Required Certificate	Ref-15
06/01/2012	Agreement with Carbon Consultant	Ref-16
03/02/2012	Wind Analysis & Energy Production Assessment	Ref-12
15/03/2013	Turbine Supply Agreement <i>Investment decision date</i> <i>This is also the real action date as well as the starting date of the project activity</i>	Ref-14
29/03/2013	Loan Agreement	Ref-17
29/04/2013	Obtaining Generation License	Ref-11
21/10/2013	Start of Construction Activities	Ref-18
20/08/2014	Start of the first crediting period <i>This is also the project commissioning date</i>	Ref-19

From the table above, the validation team is able to verify that the project activity start date determined as 15/03/2013 in the GS-VER-PDD is appropriate and is the earliest of the dates at which either the implementation or construction or real action of the Project began. This is in accordance with the latest CDM glossary, which is in turn referred to by GS.

The validation team has assessed Agreement with Carbon Consultant dd. 06/01/2012 (the signed document by Silivri Enerji A.Ş. and Lifenergy Ltd. Şti. copy was validated) and confirms that the project participants has an awareness of the VER prior to the project activity start date, and the benefits of the GS-VER were a decisive factor in the decision to proceed with the project.

The validation team has also checked the agreements for carbon development and validation serviced and is able to verify that all documents are reliable and authentic.

There is less than two years of a gap between the documented evidence. Therefore the project participants demonstrated that real and continuing actions were taken to secure GS-VER status for the project in parallel with its implementation.

On the other hand, project construction activities have been started during the validation. The starting date of the project activity is confirmed as 15/03/2013 through the signed date of turbine agreement (Ref-14). Start of the first crediting period has been confirmed as 20/08/2014 through the provisional acceptance protocol (Ref-19).

Bureau Veritas Certification hereby confirms that the proposed project activity complies with the requirements related to the prior consideration of the CDM.

3.9.2. Identification of Alternatives (116)

The plausible and credible alternatives to the Project were identified as per "Tool for the demonstration and assessment of additionality", Version 07.0.0.

- (1) **Alternative 1:** The proposed project activity undertaken without being registered as a GS – VER project activity.
- (2) **Alternative 2:** Other realistic and credible alternative scenario(s) to the proposed GS – VER project activity scenario that deliver electricity with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology.
- (3) **Alternative 3:** Continuation of the current situation (Silivri WPP is not built).

Alternative 1 is not realistic, since the investment analyzes shows that the project is not economically feasible without GS VER credit income and also other project activities delivering same electricity in the same project area (**Alternative 2**) is not realistic for Project Participant.

Alternative 3 is described as realistic scenarios. If the Silivri WPP is not built, the same amount of electricity would be generated by the operation of grid-connected power plants and by the addition of new generation sources.

Investment analysis shows that the without GS-VER credit income the project is not feasible.

Bureau Veritas Certification considers the listed alternatives to be credible and complete.



3.9.3. Investment Analysis (123)

Analysis method

Project will be receiving revenues from electricity sales to the grid hence it is not eligible for simple cost analysis.

The investment comparison analysis is also not applicable for the proposed project activity because the baseline scenario, providing the same annual electricity output by the Turkish National Grid, is not an investment project.

Benchmark

“Tool for the demonstration and assessment of additionality” Version 07.0.0 which suggests ‘Estimates of the cost of financing and required return on capital (e.g commercial lending rates and guarantees required for the country and the type of project activity concerned), based on the bankers views and private equity investors/funds’. In relation to this, the benchmark is confirmed as 15% through the World Bank loan appraisal document (Ref-28).

The Benchmark is confirmed through the most current reference of World Bank loan appraisal dd. May 2009 for the wind power investments in Turkey. According to World Bank loan appraisal document, threshold equity IRR for wind power investments in Turkey is 15%, so the Benchmark rate is found acceptable for the project activity by the validation team.

Data source

The input values are taken from Financial Analysis Excel, which was compiled by Lifenerji Ltd. Şti. (Ref-03). The validation team confirms that the values used in the GS-VER-PDD and associated annexes are fully consistent with the Financial Analysis excel.

Main investment cost is defined as the turbine agreement dd. 15/03/2013 has been provided to the validation team. It is 72% of the total project cost. The agreement signed between Nordex Energy GmbH & Silivri Enerji A.S. (Ref-14).

CAR05 has been raised by the validation team for the basic parameters for financial analysis such as total investment, loan amount, interest rate, production expenses. And then all items of total investment with references are indicated under Table 9 of the GS-VER-PDD. As a result the corrective action request is closed.

The project's other investment items as electrical and construction works, contingency charges, expropriation and grid connection cost which contain 28% of the total investment are confirmed through the Financial Analysis Excel (Ref-03).

Based on the conclusion of the Financial Analysis Excel, the PP decided to proceed with the Project on 06/01/2012 with the consideration of VER revenues (Ref-16).

Given that the project owners are realizing the project on the factory grounds and with their own sources and the on-going wind measurements, the time period between the Financial Analysis Excel and the implementation was found to be acceptable considering the inflation and that the realized figures are comparable and more conservative than the Financial Analysis Excel (Ref-03).

Input value

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

Item	Value	Units	Source
Total Investment	48,923,028	€	Turbine & Other Cost Agreement (Ref-14)
Loan	70	%	Loan Agreement - 29.03.2013 (Ref-17)
Equity	30	%	Loan Agreement - 29.03.2013 (Ref-17)
Production Expenses	2,176,245	\$/year average	Financial Analysis IRR Spreadsheet (Ref-03)
Installed Capacity	57.5 MWm/45 MWe	MW	Generation License (Ref-11)
Yearly electricity Generation	143,327	MWh/Year	Wind Analysis & Energy Production Assessment Report (Ref-12)
Electricity feed in tariff	55	€/MWh	http://www.epdk.gov.tr/documents/elektrik/mevzuat/kanun/Elk_Kanun_Yek_Kanun.doc (Page 9, Table 1)
Operating Costs	2.34	Million €	Financial Analysis IRR Spreadsheet (Ref-03)
Revenue	7.69	Million \$	Financial Analysis IRR Spreadsheet (Ref-03)
Corporate tax	20	%	-

Indicator Calculation

Based on the input values from the Financial Analysis Excel and Loan Agreements that are valid and applicable at the time of investment decision, the equity IRR of the Project without VER revenues is 10.01 %, lower than the benchmark (15 %), which shows that the Project is not financially attractive in the absence of VER benefits.

Equity IRR for a 25 years period is calculated is based on post tax cash flow. It takes the equity cash flow after tax in consideration which includes initial equity inflow, sales revenue, production & financial expenses and corporate tax. VAT doesn't have any impact on the depreciation and profitability figures but it affects the cash flow (equity IRR).

The validation team has reviewed the IRR calculation spreadsheet (Ref-03) and confirms that the calculation and presentation are consistent with the "Guidelines on the Assessment of Investment Analysis" version 05. The data sources as well as the analysis approach is reliable and in accordance with local accounting regulations or international best practice.

Sensitivity Analysis

Variables including the initial investment cost, that constitute more than 20 % of either total project costs or total project revenues were taken as uncertainty factors for sensitive analysis to determine under what conditions variations in the result would occur, and the likelihood of these condition:

- Investment Cost

The variable is determined between 10% increasing and 10% decreasing. Even when the cost is reduced by 10%, the project IRR reached 12.80% without VER and when the cost is increased by 10%, the project IRR becomes to 8.08%. The sensitivity analysis on investment

cost shows that, when the investment cost decreased 10%, the project IRR is still much lower than the benchmark.

Table 3 Sensitivity Analysis with Investment Cost

Fluctuating Indicators	IRR	Fluctuations		
		-10%	0%	10%
Investment Cost	Project IRR	12.80	10.01	8.08

▪ Operating Cost

The variable is determined between 10% increasing and 10% decreasing. Even when the operating cost is reduced by 10%, the project IRR reached 11.54% without VER and when the cost is increased by 10%, the project IRR becomes to 8.33%. The sensitivity analysis on production expenses shows that, when the production expenses decreased 10%, the project IRR is still much lower than the benchmark.

Table 4 Sensitivity Analysis with Operating Cost

Fluctuating Indicators	IRR	Fluctuations		
		-10%	0%	10%
Operating Cost	Project IRR	11.54	10.01	8.33

▪ Electricity Sales Revenue (Energy Yield)

The variable is determined between %10 increasing and %10 decreasing. Even when the electricity selling price is increased by 10%, the project IRR reaches to 12.65 % without VER and when the electricity selling price is reduced by 10%, the project IRR becomes to 7.38 %. It shows that the project IRR is still lower than the benchmark rate by 10% increasing.

Table 5 Sensitivity Analysis with Sales Revenue

Fluctuating Indicators	IRR	Fluctuations		
		-10%	0%	10%
Energy Yield	Project IRR	7.38	10.01	12.65

▪ Electricity Price

The variable is determined between %10 increasing and %10 decreasing. Even when the electricity price is increased by 10%, the equity IRR reaches to 12.65 % without VER and when the electricity price is reduced by 10% the equity IRR becomes to 7.38 %. It shows that the project IRR is lower than the benchmark rate by 10% increasing.

Table 6 Sensitivity Analysis with Electricity Price

Fluctuating	IRR	Fluctuations		
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Indicators		-10%	0%	10%
Electricity Price	Project IRR	7.38	10.01	12.65

The validation team considers that the range of variations is reasonable in the project context. The analysis provided a cross-check on the suitability of the assumptions used in the development of the investment analysis.

The conclusion that the project activity is unlikely to be financially/economically attractive is robust to reasonable variations in the critical assumptions. All financial analysis are checked and confirmed by the financial expert of the validation team.

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

3.9.4.Barrier Analysis (127)

The validation team confirms that issues that have a direct impact on the financial returns of the project activity are not considered barriers and have an assessed by investment analysis. Barrier analyses have not been used.

3.9.5.Common Practice Analysis (130)

The common practice is confirmed through the "Tool for the demonstration and assessment of additionality", version 7.0.0 and according to the Guidelines on Common Practice version 02.0. The steps of the common practice are validated as follows through the tool and guideline as follows;

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

The project capacity is 45 MWe. The range for the project activity is between 22.50 MWe and 67.50 MWe according to step 1.

Step 2: Identify similar projects (both CDM and non-CDM) which fulfill all of the following conditions:

- (a) The projects are located in the applicable geographical area; (Turkey)
- (b) The projects apply the same measure as the proposed project activity; (Renewable Energy Projects)
- (c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity; (Wind Power Plants)
- (d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant; (N.A.)

(e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1; (22.50 MW – 67.50 MW)

(f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity; (N.A.)

Step 3: Within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number N_{all} .

From the list obtained from TEIAS Capacity Projection Report (2012-2016) (Ref-24), the projects registered as VER projects and projects under validation are excluded.

Satisfying the steps 2 and 3,

$N_{all} = 0$

Step 4: Within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff} .

When both the fuel types of the power plants and the company types are taken into account, the number of companies that apply technologies different that the technology applied in the proposed project activity,

$N_{diff} = 0$

Step 5: Calculate factor $F=1-N_{diff}/N_{all}$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.

$$F = 1 - N_{diff} / N_{all}$$

$$= 1 - (0/0)$$

Factor F is therefore **unidentified**.

If the factor F is greater than 0.2 and $N_{all} - N_{diff} = 1$ is greater than 3, the proposed project activity is a “common practice”. Since factor F is unidentified and also $N_{all}-N_{diff}$ is 0, Bureau Veritas Certification hereby confirms that the proposed GS-VER project activity **is not a common practice** as per the guidelines. The calculations are checked and confirmed through the TEIAS Capacity Projection Report (2012-2016).

(<http://www.teias.gov.tr/YayinRapor/APK/projeksiyon/KAPASITEPROJEKSIYONU2012.pdf>)

In conclusion, as demonstrated in accordance with ACM0002 / Version 16, “Tool for the demonstration and assessment of additionality” – Version 07.0.0, the proposed VER project activity is additional.

3.10. Monitoring Plan (133)

The Project uses the approved consolidated monitoring methodology ACM0002 Version 16 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”.

Applicability of this methodology is justified in GS-VER-PDD in section B.2. Referring to the discussions on the applicability of the methodology in section 3.8.1 above, the validation team considers that the selected monitoring methodology is applicable to the Project.

Data and Parameters Monitored

$EG_{facility,y}$

Quantity of net electricity supplied to the grid in year y:

Regarding to ACM0002 Version 16, $EG_{facility,y}$ parameter is the only parameter to be monitored. For the project activity there will be two electricity meters (one main and one reserve) at the substation. The parameter will be measured continuously by TEIAS meters and recorded monthly.

CAR09 has been raised by the validation team for the crosscheck parameter of generation data and then the following definition is added as the crosscheck of the parameter is the PMUM records. As a result the corrective action request is closed.

The net electricity export/supplied to a grid is the difference between the measured quantities of the grid electricity export and import. The cross check of the parameter will be done with the PMUM records. In addition, the monthly meter readings are defined as the data source.

The technical specifications of the power meters should be in line with Measure and Metering Devices Regulation by Ministry of Industry and Trade. In addition, the metering devices are in line with the technical requirements which are set out by the Communiqué for Metering Devices to be used in the Electricity Market (Ref-34).

The capacity of the transmission line connected is 34.5 kVA, the accuracy class for power meters have been defined in the Communiqué for Power Meters as 0.5S class. The calibration will be implemented in accordance with the related standard procedures. The periodical maintenance is under the responsibility of TEDAS and has been fixed as once 10 years.

FAR02 has been raised by the validation team for the adequateness of the meter specifications as well as initial calibration and serial number information shall be verified during initial verification as the meters are not yet available to the validation team.

The necessary regulations regarding to electricity generation and metering are checked by the validation team. The monitoring plan of the $EG_{facility,y}$ parameter is line with the necessary regulations.

The validation team considers that the description of the monitoring plan contains all necessary parameters, that they are described and that the means of monitoring described in the plan complies with the requirements of the methodology including applicable tool(s).

Sustainability Monitoring Plan***Air Quality***

Amount of CO, NMVOC and particulate matter emissions during construction of the project activity will be monitored.

During the monitoring period; CO, NMVOC and particulate matter emission reduction will be monitored through the electricity generation of the project activity annually. The proposed project activity is expected to avoid 23 tons CO/year and 4.9 tons NMVOC/year with an expected annual electricity generation of 143,327 MWh/year.

The other air quality parameter is level of dust emissions during construction of the project activity. There is no construction activity at the project area recently and the main goal is to keep minimum level of dust pollution at the following periods. This parameter will be also monitored by Assigned technician by Plant Manager

It is confirmed by the validation team through the interviewing with locals and headmen of the villages that all precautions regarding to dust emissions had been taken during the construction of the project activity.

Water Quality and Quantity

The project activity is wind power plant so significant amount of wastewater discharge is avoided. During the monitoring period avoided wastewater discharged by project activity will be calculated through the total electricity generation.

On the other hand wastewater produced by workers during both construction and operation will be handled in accordance with regulations (Ref-13). This water is collected in an impermeable septic tank which will be periodically transferred to the waste treatment plant during the operation of the project activity.

It will be monitored through the records of transfer of waste water from power plant by vacuum trucks if it was performed. Assigned technician by Plant Manager will be the responsible for monitoring.

Quality of Employment

The employees will be trained on Health & Safety issues during construction and operation phases in order to raise their operational and knowledge level.

During the monitoring period training attendance list and/or certificates will be provided to verification team. This parameter will be monitored once for each monitoring period by Assigned technician by Plant Manager.

Quantitative Employment and Income Generation

The proposed project activity will create job opportunities and as a result increase income generation. The social security system through a contract will be also changing living standards of the local people.

On the other hand number of local employment will be monitored through the social insurance registry receipts of the employees once for each monitoring period. Assigned technician by Plant Manager will be responsible for monitoring.

Other Pollutants

All wastes are disposed in line with the regulations (Ref-13). The solid waste will firstly be separated for recycling if possible; otherwise it will be collected in rubbish bins. It will be monitored through the official records by letter of an appropriate company for regular transfer of solid wastes from power plant.

It is observed by the validation team during the site visit that distance of the project activity to closest settlement (Akören and Gazitepe Village) is more than 3 km. Even so noise measurements have been made at the nearest settlement and determined as below the limits set by Turkish Regulation on assessment and Management of Environmental Noise for day and night time. It is confirmed through the Silivri WPP Project Introductory File (Ref-13).

It is confirmed by the validation team through the interviewing with locals and headmen of the villages during the validation site visit that there are no any negative feedbacks about the noise issue during the operation of the project activity.

“Do No Harm” Assessment

SP 1: It is confirmed that the project aspects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project activities are not complicit in Human Rights abuses. Turkey is a member of United Nations and part of UN Agreement on Human Rights. (<http://www.resmigazete.gov.tr/arsiv/7217.pdf>)

SP 2: No settlements are too close to the project site. Therefore, the project doesn't cause any resettlement. It is confirmed through the Silivri WPP Project Introductory File (Ref-13).

SP 3: The project activity isn't any damage, alteration or removal to the critical cultural heritage. Because the project location isn't involve to any critical cultural heritage. In addition; the project activity is not within the boundaries of archaeological protected area. It is confirmed through the Silivri WPP Project Introductory File (Ref-13). Cultural and environmental heritage is also protected against alteration, damage or removal by the law.

SP 4: Regarding to this principle, it is confirmed that being part of an association and collective bargaining is a legal right of all employees in Turkey. Turkey has ratified ILO 87 Freedom of Association and 98 Right to Organize and Collective Bargaining Convention.

(http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO::P11200_COUNTRY_ID:102893)

SP 5: The project does not involve and is not complicit in any form of forced or compulsory labor. It is confirmed through ILO 29 Forced Labour Convention.

(http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO::P11200_COUNTRY_ID:102893)

SP 6: According to Worst form of child labor the project does not employ and is not complicit in any form of child labor. Turkey has ratified ILO 138 Minimum Age Conventions and 182 Worst Forms of Child Labour Convention.

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(http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO::P11200_COUNTRY_ID:102893)

SP 7: The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation, or any other basis through the ILO 100 Equal Remuneration Convention and 111 Discrimination (Employment and Occupation) Convention.

(http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO::P11200_COUNTRY_ID:102893)

SP 8: The project provides workers with a safe and healthy working conditions and health & safety training. The project owner will follow necessary regulations during construction and operational phase of the project. This issue is protected by Labor Law and regulations and UN Agreement on Human Rights. All the employees will be trained about health and safety issues during construction and operation phase of the project activity. It is confirmed through the Silivri WPP Project Introductory File (Ref-13).

(<http://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf>)

SP 9: The project takes a precautionary approach in regard to environmental challenges and isn't complicit in practices contrary to the precautionary principle. EIA not required document dd. 11/06/2009 (Ref-15) has also provided to the validation team. Regulations which entered into force with Environmental Law Numbered 2872 will be followed.

All the precautions are taken and mitigation measures are defined for the possible environmental impacts of the project. It is confirmed through the Silivri WPP Project Introductory File (Ref-13). (<http://www2.cevreorman.gov.tr/yasa/k/2872.doc>)

SP 10: The project activity doesn't involve and isn't complicity in significant conversion or degradation of critical natural habitats through the Silivri WPP Project Introductory File (Ref-13).

As explained in the 9th safe guarding principle, negative impact of the proposed project activity to the environmental would be minimum. Also Turkey has its own legislations regarding the protected areas and is a party of many international agreements regarding the protected areas.

SP 11: The project doesn't involve and isn't complicit in any kind of corruption regarding to Turkey is a party to UN Convention against Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

(https://treaties.un.org/Pages/ViewDetails.aspx?mtdsg_no=XVIII-14&chapter=18&lang=en)

The Sustainable Development has been discussed in the GS Passport of the project activity. It is confirmed that project does not cause any negative impact on the sustainable development.

Indicators and scores are confirmed by the validation team as;

Indicator	Score
Air Quality	+
Water Quality and quantity	+
Soil Condition	0
Other pollutants	0
Biodiversity	0
Quality of employment	+



Livelihood of the poor	0
Access to affordable and clean energy services	0
Human and institutional capacity	0
Quantitative employment and income generation	+
Access to investment	0
Technology transfer and technological self-reliance	0

1. **Air Quality “+”:** It is confirmed that the project activity will have a positive impact on CO and NMVOC emission reductions via replacing fossil fuel for electricity generation. The other air quality parameter is level of dust emissions during construction of the project activity. There was no construction activity at the project area during the site visit but there will be some dust emissions during construction of the roads and turbine spots. This parameter is also added in discussed under the sustainability monitoring plan section.
2. **Water Quality and Quantity “+”:** The amount of wastewater to be discharged to the environment by project activity and wastewater produced by workers will be monitored and the records of the transfer of waste water from power plant by vacuum trucks if it was performed according to Regulation on Waste Water Control (Ref-35). This parameter is also discussed under sustainability monitoring plan section of the validation report.
3. **Soil Condition “0”:** The project activity will not produce any chemicals or hazardous waste thus; it will not pollute the soil condition in quality and quantity. Excavated soil will be used for landscaping (Ref-13) and it will not have negative impact on soil condition.
4. **Other Pollutants “0”:** All wastes are disposed in line with the regulations (Ref-13). The solid waste will firstly be separated for recycling if possible; otherwise it will be collected in rubbish bins. It will be monitored through the official records by letter of an appropriate company for regular transfer of solid wastes from power plant. During the operation of the wind farm there will be some noise due to turbines. However, there will be no negative impact on the settlement areas in this project due to distance (Ref-13).
5. **Biodiversity “0”:** No bird strikes were observed through the observation of measures during the validation site visit.
6. **Quality of Employment “+”:** The employees are being trained on Health & Safety issues during construction and operation phases. During the monitoring period training attendance list and/or certificates will be provided to verification team. This parameter will be monitored once for each monitoring period by Project Owner. This parameter is also discussed under sustainability monitoring plan section of the validation report.
7. **Livelihood of the poor “0”:** The project activity will have indirect effect to changing living standards of the local people and number of people living under poverty line. The project owner will be made contributions for improved living conditions in the villages.
8. **Access to affordable and clean energy services “0”:** The project activity is a wind power plant that will contribute to the National Grid with a clean, renewable and national source of energy. Hence the project will decrease dependency on import fossil fuels.

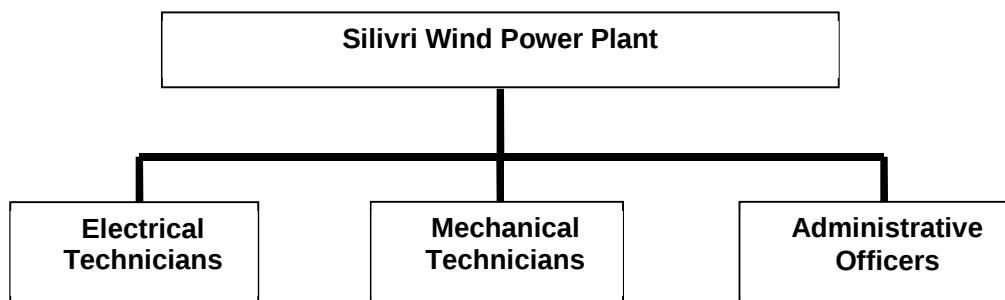
Since the improved access to energy services doesn't affect the local public, the parameter is scored as "0".

9. **Human and institutional capacity "0"**: The project owner wants to contribute the local women employment. However, due to lack of interest of women to these kinds of jobs stemming from norms of society, impact of the project to this indicator is expected to be neutral.
10. **Quantitative employment and income generation "+"**: The proposed project activity will create job opportunities for the local people and as a result increase income generation. On the other hand number of local employment will be monitored through the social insurance registry receipts of the employees once for each monitoring period. This parameter is also discussed under sustainability monitoring plan section of the validation report.
11. **Access to Investment "0"**: The project is a renewable energy project. This renewable energy project will decrease fossil fuel (natural gas and oil) imports for electricity generation and result in net foreign currency saving in Turkey. However, the impact is too small to be monitored so the parameter is scored as "0".
12. **Technology transfer and technological self-reliance "0"**: Wind power technology is already well-known technology in Turkey. The contribution of the project is assessed negligible because wind technology sector is common and there are similar projects in this part of region so the parameter is scored as "0".

Implementation of the Monitoring Plan

The project Owner is the responsible for the implementation and oversight of the monitoring plan as well as data management. The period of storage of monitoring data will not be less than 2 years after the end of crediting period or till the last issuance of VER's for the project activity, whichever occurs later. The Project Participant will be responsible for storage of data received from the measuring devices.

Organizational roles are clearly stated as below diagram.



Monitoring data is collected in accordance with the agreement done between the project owner and Turkish Electricity Distribution Company (TEDAS) which provides the infrastructure for the connection to the national grid.

The metering system is defined in the agreement as two groups; main meter and spare meter. The meters are placed at the point the electricity is fed to the grid and sealed on behalf of the both parties.

Maintenance and calibration of TEIAS meters will be carried out according to the System Usage Agreement (Ref-23). All requirements and specifications of the meters will be done according to Communiqué on the counter to be used in the Electricity Market by Energy Market Regulatory Authority (EMRA) on 22/04/2011 (Ref-36).

The main and spare meter readings are recorded monthly and cross-checked whether calibration is required. The capacity of the transmission line connected is 34.5 kVA, the accuracy class for power meters have been defined in the Communiqué for Power Meters as 0.5S class. The calibration will be implemented in accordance with the related standard procedures. The periodical maintenance is under the responsibility of TEDAS and has been fixed as once in 10 years.

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

Bureau Veritas Certification hereby confirms that the monitoring plan complies with the requirements of the methodology including applicable tool(s), the monitoring arrangements described in the monitoring plan are feasible within the project design and the project participants are able to implement the described monitoring plan.

3.11. Environmental Impacts (137)

The project participants conducted an analysis of the environmental impacts of the proposed project activity, including trans boundary impacts as a part of the national EIA procedures. However the project is EIA exempt as it is not included in activities determined in the Annex-2 of the EIA Regulations. This was made official and was validated through the decision of the Istanbul Provincial Environment and Forestry Directorate (Ref-15).

Aspects of the project's possible environmental impacts were also assessed by GS procedures as detailed in the GS-VER-PDD, GS Passport for the project (Ref-03) and Project Introductory File (Ref-13) which has been prepared on October 2008.

Due to project size and location almost no impact is expected which is found acceptable by BVC after on-site observations and assessment of the project characteristics.

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

3.12. Local Stakeholder Consultation (140)

Local stakeholder consultation (LSC) process was not held since the project activity is a retroactive project.

Stakeholder Feedback Round has been realized in compliance with the GS procedures governing the issue between the dates 01/09/2015 – 16/11/2015. The beginning of two months Stakeholder Feedback Round has been through e-mails and delivery of several hard copies of the mentioned documents for those who don't have an e-mail address. During this 2 months period, all project information was published on web site of Lifenerji Ltd. Şti. enabling stakeholder to reach and comment on the documents.

FAR01 has been raised by the validation team for the Stakeholder Feedback Round (SFR) process and relevant comments of all stakeholders about the project activity. Then the duration of the Stakeholder Feedback Round and relevant comments are provided to the validation team. As a result the forward action request is closed.

BVC conducted live interviews with Akören Village residents as well as community leaders during the site visit dd. 27/08/2015. Interviewed people could be seen in Section 6 "Persons Interviewed" of this report.

One again the contained nature of the project and its distance to Akören resulted in no negative feedback on any potential issues related to project activity implementation and operation. During the site visit, possible negative and positive impacts of the project activity were discussed with the stakeholders.

One of the stakeholders named Osman Kivilcim and Cemalettin Göksu (Akören Village Locals) declared that locals have no problems on expropriation on their lands and he has no negative opinion regarding to project activity.

The other stakeholder who is village headmen of the Akören Village (his name is Hüseyin Ergin) said that he has no negative complaint according to expropriation and he declared that villager's grievances were resolved as soon as possible. He hopes that the project activity will provide job opportunities to the local people.

One of the stakeholders named Mustafa Uzunoğlu (Gazitepe Village Farmer) declared that he has no negative opinion regarding to project activity.

The other village stakeholder who is village headman of the Gazitepe Village (his name is Kamil Gümüş) said that he has no negative opinion regarding to project activity.

Bureau Veritas Certification hereby confirms that comments that are relevant for the proposed project activity have been invited from local stakeholders, the summary of the comments received as provided in the GS-VER-PDD is complete, the project participants have taken due account of all comments received and have described this process in the GS-VER-PDD.

4. COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

Webhosting is not applicable since the project is GS-VER. However, GS regulated stakeholder process is summarized in section 3.12 of this report and is presented in detail in the project LSC Report and GS Passport.

In addition, all these documents have been made available under the GS registry webpage (www.markit.com) as required by GS.

5. VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the Silivri Wind Power Plant, Turkey, which is located at Silivri district in İstanbul province. The validation was performed on the basis of UNFCCC criteria for the CDM, and host country criteria, as well as GS requirements v2.2 and criteria given to provide for consistent project operations, monitoring and reporting.

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

The project correctly applies the approved consolidated baseline and monitoring methodology ACM0002 Version 16 and uses the latest tool, guidelines for demonstration of the additionality.

By displacing fossil fuel powered generation sources in the national interconnected grid, the project is likely to result in reductions of GHG emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated annual emission reductions of 80,442 tCO₂e during the seven years of its first renewable crediting period.

The review of the project design documentation and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM, GS v.2.2 and the relevant host country criteria. Bureau Veritas Certification thus requests registration of the project as a GS-VER project activity.



Mr. Furkan SADIKOGLU
Internal Technical Reviewer
05/01/2016



Mr. Onur YILMAZ
Team Leader
05/01/2016

6. REFERENCES

Category 1 Documents:

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

- /1/ PDD_Silivri WPP_v01_18.08.2015
GS_Passport_Silivri WPP_v01_18.08.2015
Silivri IRR_v01_18.08.2015
CM_Silivri_v01_18.08.2015
Common Practice_Silivri_v01_18.08.2015

- /2/ PDD_Silivri WPP_v02_23.11.2015
GS_Passport_Silivri WPP_v02_23.11.2015
Silivri IRR_v02_23.11.2015
CM_Silivri_v01_18.08.2015
Common Practice_Silivri_v01_18.08.2015

- /3/ PDD_Silivri WPP_v03_22.12.2015
GS_Passport_Silivri WPP_v02_23.11.2015
Silivri IRR_v03_22.12.2015
CM_Silivri_v02_08.12.2015
Common Practice_Silivri_v01_18.08.2015

Category 2 Documents:

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

- /4/ Clean Development Mechanism Validation and Verification Standard, Ver.07
- /5/ UNFCCC Approved consolidated baseline and monitoring methodology ACM0002 Version 16.0.0 – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”
- /6/ UNFCCC’s Methodological Tool: “Tool for the demonstration and assessment of additionality” Version 07.0.0.
- /7/ UNFCCC’s Methodological Tool: “Tool to calculate the emission factor for an electricity system” Version 04.0.0.
- /8/ UNFCCC’s Methodological Tool: “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” Version 02.0.0.
- /9/ UNFCCC’s Methodological Tool: “Tool to determine the remaining lifetime of equipment” Version 01.0.0.
- /10/ UNFCCC’s Guidelines for the reporting and validation of plant load factors, version 01
- /11/ Silivri WPP EMRA Generation License - 29/04/2013
- /12/ Silivri WPP Wind and Energy Production Assessment Report - 03/02/2012
- /13/ Silivri WPP Project Introductory File - 10/2008
- /14/ Silivri Enerji A.S. & Nordex Energy Turbine Purchase Agreement - 15/03/2013
- /15/ Directorate of Provincial Environment and Forest EIA Not Required Certificate - 11/06/2009
- /16/ Agreement with Carbon Consultant - 06/01/2012
- /17/ Silivri WPP Project Loan Agreement - 29/03/2013
- /18/ Silivri WPP Start of Construction Activities - 21/10/2013
- /19/

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- /20/ Silivri WPP Provisional Acceptance Protocol - 20/08/2014
- /21/ TEIAS System Connection Agreement
- /22/ Silivri WPP Land Use Agreement - 29/06/2015
- /23/ Silivri WPP Single Line Diagram
- /24/ TEIAS System Usage Agreement www.teias.gov.tr/sistemkullanim1.doc
- /25/ <http://www.teias.gov.tr/YayinRapor/APK/projeksiyon/KAPASITEPROJEKSIYONU2013.pdf>
- /26/ http://www.epdk.gov.tr/documents/elektrik/mevzuat/kanun/Elk_Kanun_6446.doc
- /27/ http://www.epdk.org.tr/documents/elektrik/mevzuat/kanun/Elk_Kanun_Yek_Kanun.doc
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- /32/ http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf
- /33/ http://www.epdk.gov.tr/documents/elektrik/mevzuat/yonetmelik/elektrik/dengeleme_uzlastirma/DUYson.doc
- /34/ http://www.epdk.gov.tr/documents/elektrik/mevzuat/teblig/elektrik/sayaclar_hakkinda/Elk_Tblg_Sayaclar.doc
- /35/ <http://www.mevzuat.gov.tr/Metin.Asp?MevzuatKod=7.5.6381&MevzuatIliski=0&sourceXmlSearch>
- /36/ Regulation on Waste Water Control
Energy Market Regulatory Authority (EMRA) on 22/04/2011

Persons interviewed:

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

Silivri Enerji A.Ş.

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Lifenerji Ltd.Şti.

- /2/ İklim Dirlik Consultant - +90 312 481 21 42
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Local Stakeholder

- /3/ Kamil Gümüş Headman of the Gazitepe Village - +90 532 425 44 73
- /4/ Hüseyin Ergin Headman of the Akören Village - +90 535 781 15 47
- /5/ Osman Kivılcım Local (Retired from the Bağkur) - +90 542 734 55 67
- /6/ Cemalettin Göksu Local (Retired Farmer)
- /7/ Mustafa Uzunoğlu Local (Retired from the SSK)



7. CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Mr. Onur YILMAZ	Bureau Veritas Certification, Turkey	Team Leader, Climate Change Verifier Onur Yilmaz is a Mechanical Engineer and also Energy Manager as 5 years of consulting experience on energy efficiency. He has experience in conducting pre audits and audits in industrial and buildings establishments. He has also participated online seminars and trainings on Gold Standard.
Mr. Furkan SADIKOGLU	Bureau Veritas Certification, Turkey	Technical Reviewer, Climate Change Lead Verifier. Furkan Sadıkoğlu is an Electrical & Electronics Engineer. He has an experience in renewable energy and LED lightning sectors and he has over 2 years' experience in energy sectors. He has participated online seminars in the Gold Standard Academy in 2012 and 2013 and is a lead verifier for GHG emission reduction projects.
Mr. Murat GENCER	RiskTürk Software Development and Consultancy	Financial Specialist, Master of Economics – 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.



Appendix A: LARGE SCALE PROJECT ACTIVITIES VALIDATION PROTOCOL (rev 10.3)

Table 1 Validation requirements based on VVS version 07.0 (EB 79 Annex 4), PS version 07.0 (EB 79 Annex 3), PCP version 07.0 (EB 79 Annex 5), and Guidelines for completing the PDD form version 01.0 (EB 66 Annex 9)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Part I Cover Page					
(a) Is the title of the project activity provided?	PDD		Title of the project is given as Silivri Wind Power Plant, Turkey	OK	OK
(b) Is the version number of the PDD indicated?	PDD		Version number of the PDD is given as 01	OK	OK
(c) Is the completion date of the PDD provided in DD/MM/YYYY format?	PDD		Completion date of the PDD is given as 18/08/2015.	OK	OK
(d) Are project participants indicated?	PDD		Project participant is given as Silivri Enerji A.Ş.	OK	OK
(e) Is the host party(ies) indicated?	PDD		Host party is given as Turkey	OK	OK
(f) Is the sectorial scope and selected methodology(ies) indicated?	PDD		The selected methodology (ACM0002 Verison 16) seems to be valid when project documents are submitted to DOE.	OK	OK
(g) Is the estimated amount of annual average GHG emission reductions indicated?	PDD		On the cover page estimated emission reduction is given as 80,442 tCO ₂ /year.	OK	OK
Part II PDD					
Description of project activity					
A.1 Purpose and general description of project activity					



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.1.1 Is a brief description of the project activity provided, including a summary of the scope of activities/ measures that are to be implemented within the project activity?	PDD PS	31(b)	Total capacity and annual electricity generation of the project activity are confirmed through the Electricity Generation License and Wind Assessment Report.	OK	OK
A.1.2 Are the scenario existing prior to the start of project and baseline scenario indicated?	PDD		The scenario existing prior to the start of project and baseline scenario are indicated under section A.1 of the GS-VER-PDD.	OK	OK
A.1.3 Does it explain how the project activity will reduce GHG emissions or increase GHG removals?	PS	31(c)	The project will displace the same amount of electricity generated by the grid dominated with fossil fired power plants.	OK	OK
A.1.4 Is the estimated of annual average and total GHG emission reductions for the chosen crediting period provided?	PDD		The electricity produced by project activity will result in a total emission reduction of 80,442 tCO ₂ e per year but total emission reductions for the chosen crediting period is not provided.	CAR01	OK
A.1.5 Is a brief description of how the project activity contributes to sustainable development provided?	PDD		Sustainable development specific goals are provided under section A.1 of the GS-VER-PDD.	OK	OK
A.1.6 In order to determine whether the description of the proposed project activity in the PDD is accurate, complete, and provides an understanding of the proposed CDM project activity, does the DOE conducted a physical site visit to assess the Project? If not, please justify.	VVS	65	The physical site visit was conducted on 27/08/2015 by the validation team to validate the description of the project activity provided in the GS-VER-PDD.	OK	OK
A.1.7 For all other proposed CDM project activities not referred to in VVS paragraphs 65-66, does the	VVS	67	The project activity is a large scale project and hence the DOE has undertaken a	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
DOE undertaken the validation of project description by reviewing available designs and feasibility studies and should conduct comparison analysis with equivalent projects, as appropriate.			physical site visit to validate the project description. Hence this clause is not applicable.		
A.1.8 If the proposed CDM project activity involves the alteration of an existing installation or process, does the project description state the differences resulting from the project activity compared to the pre-project situation?	VVS	68	Not applicable as the project activity is a Greenfield project.	OK	OK
A.2 Location of project activity					
A.2.1 Is the host party(ies) indicated?	PDD		Turkey has ratified the Kyoto Protocol however not set any emission reduction target; hence, it is not listed as an Annex B country of the Kyoto Protocol and will not be a host for Clean Development Mechanism (CDM) or Joint Implementation (JI) projects until the end of 2012, because of its particular situation. There is no DNA in Turkey. Hence, the checklist question is N/A.	OK	OK
A.2.2 Is region/state/province etc. indicated?	PDD		Marmara Region / İstanbul	OK	OK
A.2.3 Is City/Town/Community etc. indicated?	PDD		Silivri District in İstanbul province.	OK	OK
A.2.4 Are the details of physical location of the project activity provided?	PDD		The turbine coordinates with reference are provided on Table 1 under section A.2.4 of the GS-VER-PDD.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.3 Technologies and measures					
A.3.1 Are there a list and the arrangement of the main manufacturing/ production technologies, systems and equipment involved?	PDD		Technical specifications of the wind turbines are provided with reference on Table 2 under section A.3 of the GS-VER-PDD. But it is not described in this section that how many Nordex wind turbines with a unit capacity of 2,500 kW the project activity involve?	CAR02	OK
A.3.1.1 Is the information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies included in the description?	PDD		Technical lifetime of the equipment and plant load factor are described through the clear references under section A.3 of the GS-VER-PDD.	OK	OK
A.3.1.2 Are the monitoring equipment's and their location in the systems included in the description?	PDD		The single line diagram which shows the monitoring equipment's and their location of the project activity including metering points is not provided under section A.3 of the GS-VER-PDD.	CAR03	OK
A.3.2 Are energy and mass flows and balances of the systems and equipment included in the project activity provided?	PDD		Energy and mass flows and balances of the systems and equipment included in the project activity are not provided under section A.3 of the GS-VER-PDD.	CAR03	OK
A.3.3 Are the types and levels of services provided by the systems and equipment that are being modified and/or installed under the project activity and their relation, if any, to other manufacturing/	PDD		Not applicable as it is a green field project.	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
production equipment and systems outside the project boundary provided?					
A.3.4 Does the description clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario?	PDD		In the absence of the project activity, the electrical energy would have been delivered to the grid through a mix of existing power generation resources.	OK	OK
A.3.5 Is a list of facilities, systems and equipment in operation under the existing scenario prior to the implementation of the project activity provided?	PDD		Turkish national grid is the baseline.	OK	OK
A.3.6 Is a list of facilities, systems and equipment in the baseline scenario provided?	PDD		Turkish national grid is the baseline.	OK	OK
A.3.7 Is a description of how technologies and measures and know-how to be used are transferred to the Host Party(ies) included?	PDD		It is described under section A.3 of the GS-VER-PDD.	OK	OK
A.4 Party(ies) and project participant(s)					
A.4.1 Are following information provided in a tabular format?					
A.4.1.1 List of project participants and parties	PDD		Under section A.4 project participant list is provided.	OK	OK
A.4.1.2 Identification of Host Party	PDD		There is no DNA in Turkey. Hence, the checklist question is N/A.	OK	OK
A.4.1.3 Indication whether the Party wishes to be considered as project participant	PDD		There is an indication about the issue. N/A	OK	OK
A.5 Public funding of project activity					



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
A.5.1 Is it indicated whether the project activity receives public funding from Annex I Parties?	PDD		The A.5 section of the PDD mentions that "The project activity does not have any public funding or Official Development Assistance (ODA) funding".	OK	OK
A.5.2 In case where public funding from Annex I Parties is involved, are followings provided? (a) Information on Parties providing public funding (b) Attached in Appendix 2: the affirmation obtained from such Parties that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties	PS	34	N/A	OK	OK
Application of selected approved baseline and monitoring methodology					
Reference of methodology					
Is the selected methodology (ies) indicated with exact reference (number, title and version)?	PDD		The selected methodology is indicated as "ACM0002 Version 16.0.0 <i>Consolidated baseline methodology for grid-connected electricity generation from renewable sources</i> ".	OK	OK
Are the baseline and monitoring methodologies selected by the project participants the valid versions of those approved by the Board?	VVS	70	The selected methodology (ACM0002 Verison 16) seems to be valid when project documents are submitted to DOE.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Are there any tools and other methodologies to which the selected methodology indicated?	PDD		Latest version of the tools are referred as below; 1. "Tool for the demonstration and assessment of additionality", Version 07.0.0 2. "Tool to calculate the emission factor for an electricity system", Version 04.0 3. "Tool to determine the remaining lifetime of equipment", Version 01.	OK	OK
Has specific guidance and/or clarifications provided by the Board with respect to the approved methodology and any applicable tools been applied?	VVS	71	N/A	OK	OK
Is there any deviation or clarification requested for the approved methodology?	VVS	78-81	N/A	OK	OK
Applicability of methodology					
Is the selected baseline and monitoring methodology applicable to the project activity and that the selected version valid at the time of submission of the proposed project activity for registration?	VVS	73-75	The selected baseline and monitoring methodology is applicable to the project activity and the valid version of ACM0002 methodology is used at the time of submission of the proposed project activity for registration.	OK	OK
Does the project activity meet each of the applicability conditions of the approved methodology or other methodology component referred to therein?	PDD VVS	76	Applicability conditions of ACM0002 Version 16.0.0 are not completely described with objective references in section B.2 of the PDD.	CL01	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Project boundary					
Are the emission sources and GHGs included in the project boundary for the purpose of calculating project emissions and baseline emissions described using the table provided?	PDD		Under the project boundary section boundary listed in the table is line with the methodology.	OK	OK
Is a flow diagram of the project boundary presented, physically delineating the project activity?	PDD		An operation diagram of the project is provided under Figure 3 of the GS-VER-PDD.	OK	OK
Does the flow diagram include the equipment, systems and flows of mass and energy described? In particular, is the emission sources and GHGs included in the project boundary and the data parameters to be monitored indicated in the diagram?	PDD VVS	82	Connection agreement to the grid is not provided.	CAR04	OK
Establishment and description of baseline scenario					
Is an explanation how the baseline scenario is established in accordance with the selected baseline methodology provided?	PDD VVS	89	The project applied CDM-EB approved "ACM0002: Grid connected renewable electricity generation from renewable sources - Version 16." EF _{grid,CM} is calculated according to the "Tool to calculate the emission factor for an electricity system" version 04.	OK	OK
When establishing the baseline scenario, and where "future anthropogenic emissions by sources are projected to rise above current levels due to the	PS	42	N/A	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
specific circumstances of the host Party”, do the project participants follow the “Guidelines on the consideration of suppressed demand in CDM methodologies”?					
Does the approved methodology that is selected by the proposed CDM project activity prescribe the baseline scenario and hence no further analysis is required?	VVS	113, 115	ACM0002 Version 16 is used for the baseline determination.	OK	OK
If no, does the PDD identify credible alternatives to the project activity in order to determine the most realistic baseline scenario?	VVS	114	OK	OK	OK
Does the list of alternatives given in the PDD ensure that: (a) One of the options that the project activity is undertaken without being registered as a proposed CDM project activity (b) The list contains all plausible alternatives (c) The alternatives comply with all applicable and enforced legislation	VVS	114	Under Step 1a, 3 alternatives are indicated according to “Tool for the demonstration and assessment of additionality” version 7.0.0 a) The project undertaken without being registered as a GS-VER project activity. b) Other project activities delivering same electricity in the same project area c) Continuation of the current situation, i.e. Silivri WPP is not built.	OK	OK
Has any procedure contained in the methodology to identify the most reasonable baseline scenario, been correctly applied?	PDD VVS	89	Yes, the procedure contained in the methodology to identify the most reasonable baseline scenario has been correctly applied.	OK	OK
Is the baseline identified for the proposed project activity	VVS	88		OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed project activity?			N/A		
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?	VVS	89	The methodology refers to “Tool for the demonstration and assessment of additionality (Version 7.0.0)”.	OK	OK
Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	VVS	90	Yes, the methodology requires several alternative scenarios to be considered in the identification of the most reasonable baseline scenario.	OK	OK
Are the documents and sources referred to in the PDD correctly quoted and interpreted and are they crosschecked with other verifiable and credible sources, such as local expert opinion, if available?	PDD VVS	91	References are correctly provided.	OK	OK
Does the PDD provide a description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity?	VVS	92	The baseline scenario is identified according to the “Baseline Methodology Procedure” of ACM0002 Version 16.	OK	OK
Have all applicable CDM requirements been taken into account in the identification of the baseline	VVS	93	The baseline scenario is identified according to the “Baseline Methodology	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
scenario for the proposed project activity?			Procedure" of ACM0002 Version 16.		
Has relevant national and/or sectoral policies and circumstances (type E+ or E-), such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector been taken into account?	VVS	93	N/A	OK	OK
Is a transparent description of the baseline scenario provided?	PDD		Transparent description of the baseline scenario is provided.	OK	OK
Demonstration of additionality					
Is the project activity demonstrated additional in accordance with the selected methodology (ies)?	PDD		The project activity demonstrated additional in accordance with the selected methodology through Investment analysis.	OK	OK
Where the procedure in the selected methodology(ies) and/or tool involves several steps, is it described how each step is applied and is the outcome of each step transparently documented?	PDD		"Tool for the Demonstration and Assessment of Additionality (Version 07.0.0)" is taken into account for additionality section.	OK	OK
Is the method selected to demonstrate additionality clearly indicated?	PDD		Investment analysis applied.	OK	OK
If investment analysis is used:					
Are all relevant assumptions and parameters used in the analysis listed?	PDD		Options are described according to "Tool for the demonstration and assessment of additionality" Version 7.0.0	OK	OK
Is the latest version of the "Guidelines on the	VVS	118	Version 05 is applied.	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
assessment of investment analysis" applied?					
Is project activity one of the following cases in regards to investment analysis:	VVS	119			
The proposed project activity would produce no financial or economic benefits other than CDM-related income;	VVS	119(a)	The proposed project generates financial and economic benefits via the sales of electricity other than carbon revenues.	OK	OK
The proposed project activity is less economically or financially attractive than at least one other credible and realistic alternative;	VVS	119(b)	All scenarios are consistent with the baseline definition of ACM0002 / Version 16.0 where it defines the baseline scenario as the amount of electricity that would be delivered to the grid by the project activity, generated by the operation of existing grid-connected power plants and by the addition new generation sources.	OK	OK
The financial returns of the proposed project activity would be insufficient to justify the required investment.	VVS	119(c)	Basic parameters for financial analysis such as total investment, loan amount, interest rate, production expenses etc. on Table 9 are not provided under Investment Analysis section of the GS-VER-PDD.	CAR05	OK
Has the accuracy of financial calculations carried out for investment analysis been verified as follows:	VVS	120			
Determine the suitability of the financial indicator selected by the project participants and conduct a thorough assessment of all parameters and assumptions used in	VVS	120(a)	1. Instead of multiplying the whole asset value by 75%, please use different depreciation periods for Main & Supplementary Equipments and Other		



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
calculating such financial indicators, and determine the accuracy and suitability of these parameters using available evidence and applying its expertise in relevant accounting practices			Costs seperately. Then, please use sensitivity parameters for each asset classes instead of only total value. 2. Please present the rationale behind the fair value multiplier of 10%. 3. Please confirm that construction is completed in 1 year only. 4. Please indicate if there is any rental fee or not?	CAR06	OK
Cross-check the parameters against third-party or publicly available sources, such as invoices or price indices	VVS	120(b)	Loan proposal document and construction agreement such as site delivery protocol or other construction activity documents are not provided.	CAR07	OK
Review, as appropriate, feasibility reports, public announcements and annual financial reports related to the proposed project activity and the project participants	VVS	120(c)	Is there a pre-feasibility assessment report or annual financial reports for the project activity?	CL02	OK
Assess the correctness of computations carried out and documented by the project participants; and	VVS	120(d)	See to CAR06	CAR06	OK
Assess, where applicable, the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions.	VVS	120(e)	Sensitivity analysis are determined and mentioned under Investment Analysis section of the GS-VER-PDD.	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
If benchmark analysis is used:					
Is the benchmark clearly indicated?	PDD		The benchmark is clearly indicated under Investment Analysis section of the GS-VER-PDD.	OK	OK
Is the type of benchmark applied suitable for the type of financial indicator presented?	VVS	121(a)	The type of benchmark applied is suitable for the type of financial indicator presented.	OK	OK
Does the risk premiums applied in determining the benchmark reflect the risks associated with the project type or activity?	VVS	121(b)	See to CAR06.	CAR06	OK
Is it reasonable to assume that no investment would be made at a rate of return lower than the benchmark?	VVS	121(c)	See to CAR06.	CAR06	OK
If cost comparison is used:					
Are the scenarios compared described?	PDD		N/A	OK	OK
If PPs rely on values from FSR:	VVS	122			
Has the FSR been the basis of the decision to proceed with the investment in the project?	VVS	122(a)	See to CAR07.	CAR07	OK
Are the values used in the PDD and associated annexes fully consistent with the FSR? If inconsistencies occur, was the appropriateness of the values validated?	VVS	122(b)	See to CL02.	CL02	OK
On the basis of its specific local and sectoral expertise, is confirmation provided, by	VVS	122(c)	Time Schedule of the Project Activity is given under section B.5 of the GS-VER-	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
cross-checking or other appropriate manner, that the input values from the FSR are valid and applicable at the time of the investment decision?			PDD. Investment decision date is determined as electromechanical equipment contract (15.03.2013).		
If barriers analysis is used:					
Is the "Guidelines for objective demonstration and assessment of barriers" followed?	PS	48	N/A	OK	OK
Is it ensured that only the most relevant barriers selected?	PDD		N/A	OK	OK
Is the credibility of the barriers justified with key facts and/or assumptions and the rationale?	PDD		N/A	OK	OK
Is it ensured that issues that have a direct impact on the financial returns of the project activity are not considered as barriers but assessed by investment analysis? This does not refer to either: (a) Risk related barriers (b) Barriers related to the unavailability of sources of finance for the project activity	VVS	125	N/A	OK	OK
Were the barriers determined as real?	VVS	126(a)	N/A	OK	OK
Were the barriers determined as preventing the implementation of the project activity but not the implementation of at least one of the possible alternatives?	VVS	126(b)	N/A	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Common Practice Analysis					
If the project type is first-of-its kind, do the project participants consider "Guidelines on additionality of first-of-its-kind project activities"?	VVS PS	128 49(a)	N/A	OK	OK
If the project type is not first-of-its kind, has common practice analysis been conducted considering "Guidelines on common practice"?	VVS PS	128 49(b)	Common practice analysis is applied according to Guidelines on Common practice version 02.0.	OK	OK
Was it assessed whether the geographical scope of the common practice analysis is appropriate for the assessment related to the project activity's technology or industry type?	VVS	129(a)	Common practice analysis is applied according to Guidelines on Common practice version 02.0.	OK	OK
Was it determined to what extent similar and operational projects, other than CDM project activities, and have been undertaken in the defined region?	VVS	129(b)	Common practice analysis is applied according to Guidelines on Common practice version 02.0.	OK	OK
Are similar and operational projects, other than CDM project activities, already "widely observed and commonly carried out" in the defined region? Is it assessed whether there are essential distinctions between the proposed CDM project activity and the other similar activities?	VVS	129(c)	Common practice analysis is applied according to Guidelines on Common practice version 02.0.	OK	OK
Prior consideration of the clean development mechanism					
If the project activity start date prior to the date of	PDD				



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
publication of the PDD for stakeholder comments, were the CDM benefits considered necessary in the decision to undertake the project as a proposed CDM project activity?	VVS	105	The board decision or carbon consultant agreements are not provided to the validation team.	CAR08	OK
Is the start date of the project activity, reported in the PDD, the earliest date at which either the implementation or construction or real action of a project activity begins?	VVS	106	Starting date of the project activity is the signing of an agreement with the turbine supplier. The actual contract date is 15/03/2013.	OK	OK
If the project activity requires construction, retrofit or other modifications, is it ensured that the date of commissioning not considered as the project activity start date?	VVS	106	N/A	OK	OK
Is it a project activity with a start date on or after 02 August 2008, or before 02 August 2008?	VVS	106	The project activity start date is after 02 August 2008.	OK	OK
For a project activity with a start date on or after 02 August 2008, are the following provisions to be satisfied:					
Has the PP informed the Host Party DNA and the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status within 180days of the project activity start date?	PS VVS	27 107	N/A	OK	OK
Do the project participants inform the secretariat of the progress of the project activity every subsequent two years after the initial	PCP	9		OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
notification, until the PDD regarding the project activity has been published for global stakeholder consultation or, a new baseline and monitoring methodology is proposed or a revision of an approved baseline and monitoring methodology is requested for the project activity before the start date?			N/A		
For a project activity with a start date before 02 August 2008, are the following elements to be satisfied:	VVS	108			
Are evidence of their awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project provided?	PS VVS	28(a) 108	N/A	OK	OK
Are evidence that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation provided?	PS VVS	28(b) 108- 110	N/A	OK	OK
Is an implementation timeline of the proposed CDM project activity provided?	PS	28(c)	N/A	OK	OK
Emission reductions					
Explanation of methodological choices					
Does the PDD explain how the methods or methodological steps in the selected	PDD VVS	96	The B.6.1 section of the GS-VER-PDD describes the steps for the calculation of	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodology, for calculating project emissions, baseline emissions, leakage emissions and emission reductions are applied?			emission reduction in accordance with ACM0002 Version 16.		
In case the methodology(ies) include different scenarios or cases, does the PDD indicate and justify which scenario or cases applies to the project activity?	PDD		The baseline emission cases are line with the methodology ACM0002 Version 16 and "Tool to calculate the emission factor for an electricity system Version 04.0.0".	OK	OK
In case the methodology(ies) provide different options to choose from, does the PDD indicate and justify which option is chosen for the project activity?	PDD VVS	97	The baseline emission cases are line with the methodology ACM0002 Version 16 and "Tool to calculate the emission factor for an electricity system Version 04.0.0".	OK	OK
In case the methodology (ies) allow different default values, does the PDD indicate and justify which of the default values have been chosen for the project activity?	PDD		The baseline emission cases are line with the methodology ACM0002 Version 16 and "Tool to calculate the emission factor for an electricity system Version 04.0.0".	OK	OK
Data and parameters fixed ex-ante					
If data and parameters will not be monitored throughout the crediting period of the proposed project activity but have already been determined and will remain fixed throughout the crediting period, are all data sources and assumptions: (a) Appropriate and correct? (b) Applicable to the proposed CDM project activity?	PDD VVS	98	The baseline emission cases are line with the methodology ACM0002 Version 16 and "Tool to calculate the emission factor for an electricity system Version 04.0.0".	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
(c) Resulting in a conservative estimate of the emission reductions?					
For each piece of data or parameter, are tables provided in accordance with the instructions?	PDD		Tables for each piece of data and parameters are provided in accordance with the instructions.	OK	OK
Ex-ante calculations of emission reductions					
Is a transparent ex ante calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the approved methodology provided?	PDD		The baseline emission cases are line with the methodology ACM0002 Version 16 and "Tool to calculate the emission factor for an electricity system Version 04.0.0".	OK	OK
Is the information how each equation is applied, in a manner that enables the reader to reproduce the calculation, provided?	PDD		The information how each equation is applied to reproduce the calculation is provided under section B.6.3 of the GS-VER-PDD.	OK	OK
Is the information of additional background information and/or data provided in Appendix 4, including relevant electronic spreadsheets?	PDD		An excel sheet for the baseline emission is provided. (CM_Silivri-18.08.2015)	OK	OK
Is a sample calculation for each equation used provided, substituting the values used in the equations?	PDD		The information how each equation is applied to reproduce the calculation is provided under section B.6.3 of the GS-VER-PDD.	OK	OK
Summary of the ex-ante estimates of emission reductions					



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Are the results of the ex-ante estimation of emission reductions for all years of the crediting period, provided in a tabular format?	PDD		The results of the ex-ante estimation of emission reductions for all years of the crediting period are provided in a tabular format.	OK	OK
Monitoring Plan					
Data and parameters to be monitored					
Is specific information on how the data and parameters that need to be monitored would actually be collected during monitoring included?	PDD		EG _{facility,y} parameter is provided under the monitoring plan section of the GS-VER-PDD.	OK	OK
For each data or parameter, is the information completed, in a tabular format:					
The source(s) of data that will be actually used for the proposed project activity (e.g. which exact national statistics). Where several sources may be used, explain and justify which data sources should be preferred.	PDD		The crosscheck parameter of the data is not indicated under section B.7.1 of the GS-VER-PDD.	CAR09	OK
Is an estimate of the data/ parameter that will be monitored during the crediting period provided?	PDD		Yes, estimate for the parameter that will be monitored during the crediting period, has been tabulated in the B.7.1 of GS-VER-PDD.	OK	OK
Is the estimate provided in the PDD for this monitored data or parameter reasonable?	VVS	98	Under section B.7.1 estimated electricity generation is given as 143,327 MWh/yr.	OK	OK
Where data or parameters are to be measured, does it	PDD				



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
specify the measurement methods and procedures, standards to be applied, accuracy of the measurements, person/entity responsible for the measurements, and, in case of periodic measurements, the measurement intervals?			The net electricity generation supplied to the grid will be measured continuously by TEIAS meters and recorded monthly.	OK	OK
Is a description of the QA/QC procedures including the calibration procedures, where applicable, provided?	PDD		Calibration frequency of the meters is presented under the QA/QC procedures section of the B.7.1 of the GS-VER-PDD.	OK	OK
Is the purpose of data indicated?	PDD		The purpose of data is calculation of baseline and project emissions.	OK	OK
Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVS	131	The monitoring plan is based on the ACM0002 Version 16.	OK	OK
Does the monitoring plan contain all necessary parameters?	VVS	132(a)	The B.7.1 section of the GS-VER-PDD contains all the parameters in accordance with the applied methodology ACM0002 Version 16.	OK	OK
Do the means of monitoring described in the plan comply with the requirements of the methodology including applicable tool(s)?	VVS	132(a)	The monitoring plan is based on the ACM0002 Version 16.	OK	OK
Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVS	132(b)	The monitoring plan is based on the ACM0002 Version 16.	OK	OK
Are the means of implementation of the monitoring	VVS	132(b)			



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
plan, including the data management and quality assurance and quality control procedures, sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified?			The monitoring plan is based on the ACM0002 Version 16.	OK	OK
Sampling plan					
Are there any data and parameters monitored in section B.7.1 above to be determined by a sampling approach?	PDD		N/A	OK	OK
Is a description of the sampling plan provided in accordance with the recommended outline for a sampling plan in the "Standard for sampling and surveys for CDM project activities and programme of activities"?	PDD		N/A	OK	OK
Other elements of monitoring plan					
Is the operational and management structure that the project operator will implement in order to monitor emission reductions and any leakage generated by the project activity, described in the PDD?	PDD PS	56(a)	An organizational chart which show the operational and management structure of the project activity is provided on Figure 6 under section B.7.3 of the GS-VER-PDD.	OK	OK
Are the responsibilities for and institutional arrangements for data collection and archiving clearly indicated?	PDD PS	56(c)	The responsibilities for and institutional arrangements for data collection and archiving are not clearly indicated under section B.7.3 of GS-VER-PDD.	CL03	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Does the monitoring plan include provisions to ensure that data monitored and required for verification and issuance be kept and archived electronically for two years after the end of the crediting period or the last issuance of CERs, whichever occurs later?	PS	56(b)	Yes the monitoring plan described in the GS-VER-PDD states that data monitored and required for verification and issuance be kept and archived electronically for two years after the end of the crediting period or the last issuance of VERs, whichever occurs later.	OK	OK
Does the monitoring plan include uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables?	PS	56(e)	Monitoring plan includes uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables under B.7.1 section of the GS-VER-PDD.	OK	OK
Does the monitoring plan include specifications of the calibration frequency for the measuring equipments?	PS	56(f)	Monitoring plan includes specifications of the calibration frequency for the measuring equipment's under B.7.1 section of the GS-VER-PDD.	OK	OK
Duration and crediting period					
Duration of project activity					
Start date of project activity					
Is the start date of the project activity stated, in the format of DD/MM/YYYY?	PDD		The start date of project activity is the signing of an agreement with the turbine supplier. The actual contract date is 15/03/2013.	OK	OK
Does it describe how the start date has been determined and provide evidence to support	PDD		It is described how the start date has been determined under section C.1.1 of the GS-	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
this date?			VER-PDD. The turbine contract is provided.		
Expected operational lifetime of project activity					
Is the expected operational lifetime of the project activity stated in years and months?	PDD		The expected operational lifetime is given as 25 years but relevant reference is not provided.	CL04	OK
Crediting period of project activity					
Type of crediting period					
Is the type of crediting period chosen for the project activity stated?	PDD		Renewable crediting period is chosen.	OK	OK
In case a renewable crediting period was chosen, does it indicate whether it is the first, second or third?	PDD		It is the first crediting period.	OK	OK
Start date of crediting period					
Is the start date of crediting period stated in the format of DD/MM/YYYY?	PDD		Start date of the crediting period is the commissioning date of the project activity which was started to produce electricity on 20/08/2014. Also Provisional Acceptance Protocol is provided to the validation team.	OK	OK
Length of crediting period					
Is the length of crediting period stated in years and months?	PDD		The length of the first crediting period is 7 years, 0 months.	OK	OK
Environmental impacts					
Analysis of the environmental impacts					



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Is a summary of the analysis of the environmental impacts of the project activity and references to all related documentation provided?	PDD		A summary of the environmental impacts of the project activity with actual references are not described under section D.1 of the PDD.	CAR10	OK
Environmental impact assessment					
If an environmental impact assessment is required, are conclusions and references to all related documentation provided?	PDD		EIA not required certificate dd. 11/06/2009 is provided to the validation team.	OK	OK
Have the project participants undertaken an analysis of environmental impacts activity, including transboundary impacts, and whether those impacts are considered significant by the project participants or the host Party?	VVS	134	Environmental impact assessment is not mentioned clearly according to the project description report under section D.2 of the GS-VER-PDD.	CAR11	OK
If the host Party requires an environmental impact assessment, have the environmental impact assessment approved by local government?	VVS	135	EIA not required certificate is approved by governorship of İstanbul Province and Environmental and Forestry directorate dd. 11/06/2009.	OK	OK
Local stakeholder consultation					
Solicitation of comments from local stakeholders					
Did the project participants complete a local stakeholder consultation process and that due steps were taken to engage stakeholders and solicit comments for the proposed project activity?	VVS	138	N/A	OK	OK
Is the process by which comments from local	PDD		N/A	OK	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
stakeholders have been invited provided?						
Summary of comments received						
Are stakeholders that have made comments identified?	PDD		Summary of the comments received from the stakeholders is not given under section E.2 of the GS-VER-PDD.		CAR12	OK
Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVS	139 (a)	See to CAR12.		CAR12	OK
Is the summary of comments provided complete?	PDD VVS	139 (b)	See to CAR12		CAR12	OK
Report on consideration of comments received						
Is information provided to demonstrate that all comments received have been considered?	PDD VVS	139 (c)	Consideration of comments received from the stakeholders is not given under section E.3 of the GS-VER-PDD.		CAR13	OK
Approval and authorization						
General						
Is it indicated whether the letter(s) of approval from Party(ies) available at the time of submitting the PDD to the validating DOE?	PDD		N/A		OK	OK
Approval			COUNTRY A	COUNTRY B		
Has the DNA of each Party indicated as being involved in the proposed CDM project activity in section A.3	VVS	38	N/A	N/A	OK	OK



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



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
one Party involved in a letter of approval?					
Is the information in tabular form in the PDD consistent with the contact information for project participants provided?	VVS	46	N/A	OK	OK
Are any entities other than those approved as project participants included in the PDD?	VVS	47	N/A	OK	OK
Has the approval of participation issued from the relevant DNA? And if in doubt, was it verified with the DNA that the approval of participation is valid for the proposed CDM project participants?	VVS	48	N/A	OK	OK
Part III Others					
A. Appendixes of PDD					
Appendix 1: Contact information of project participants					
For each organization listed in section A.4 of PDD, is the table in PDD completed, with the following mandatory fields: Organization, City, postcode, Country, Telephone and Fax, e-mail and Name of contact person?	PDD		Yes, the project participant contact details have been tabulated in the Appendix 1 of GS-VER-PDD.	OK	OK
Appendix 2: Affirmation regarding public funding					
If applicable, is the affirmation obtained from Parties providing public funding to the project Activity attached?	PDD		No public funding is involved in the project activity.	OK	OK
Appendix 3: Applicability of the selected					



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodology(ies)					
Is the background information on the applicability of the selected methodology provided?	PDD		The background information on the applicability of the selected methodology is provided in the Appendix 3 of GS-VER-PDD.	OK	OK
Appendix 4: Further background information on ex ante calculation of emission reductions					
Is the background information on the ex-ante calculation of emission reductions provided?	PDD		No, further background information on the ex-ante calculation of emission reductions provided in the Appendix 4 of GS-VER-PDD.	OK	OK
Appendix 5: Further background information on monitoring plan					
Is the background information used in the development of the monitoring plan provided?	PDD		No, further background information on monitoring plan provided in the Appendix 5 of GS-VER-PDD.	OK	OK
Appendix 6: Summary of post registration changes					
Is a summary of the post registration changes provided?	PDD		N/A	OK	OK
Global Stakeholder Consultation					
Is there any comment on the PDD of the proposed project activity received during Global Stakeholder Consultation process?	VVS	34	Global Stakeholder Consultation process hasn't been completed yet. When Global Stakeholder Consultation process is completed, received comments will be added to the GS-VER-PDD.	FAR01	OK



CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
If yes, have all comments been taken into account during the validation of the proposed project activity?	VVS	35	See to FAR01	FAR01	OK
If comments indicate that the proposed project activity does not comply with the CDM requirements and are not substantiated, is there any further clarification from the entity providing the comment?	VVS	36	See to FAR01	FAR01	OK
If yes, how comments received have been taken due account?	VVS	36	N/A	OK	OK
If no, are the comments as originally provided proceeded to assess?	VVS	36	N/A	OK	OK
Modalities of Communications (MoC)					
Has the corporate identity of all project participants and focal points included in MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories been validated by:	VVS	53	N/A	OK	OK
Directly checking evidence for corporate, personal identity and other relevant documentation; or	VVS	54(a)	N/A	OK	OK
Notarized documentation; or	VVS	54(b)	N/A	OK	OK
Written confirmation from the project participant or the coordinating/managing entity that all corporate and personal details, including specimen signatures, are valid and accurate.	VVS	54(c)	N/A	OK	OK



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

**TABLE 2** Validation requirements based on the Gold Standard Passport Requirements (version 2.1)

CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
Project Title				
Is the Project title given in the Passport the same as in the PDD?	T-1.6	Yes the project title given in the line with the GS-VER-PDD.	OK	OK
Project Description				
Is the Project description given in the Passport consistent with the one given in the PDD?	T-1.6	Total emission reductions for per year under section B of the GS Passport are not consistent with the given in the GS-VER-PDD.	CAR14	OK
Has the estimated start date of construction been given under the Project description?		The actual start date of the construction is given under the project description of the GS Passport.	OK	OK
Proof of project eligibility				
C.1. Scale of Project				
Has the scale of the Project activity been defined as per Gold Standard Toolkit Section 1.2.1?	T-1.2.1	The scale of the project activity has been defined as per GS Toolkit under section C.1. of the GS Passport. Scale has been defined as "large scale".	OK	OK
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	There is not a justification the project is de-bundled or not in the under section C.1 of the GS passport.	CAR15	OK
C.2. Host Country				
Does the host country have cap on its GHG emissions?	T-1.2.2	Turkey has ratified the Kyoto Protocol however not set any emission reduction target; hence, it is not listed as an Annex B country of the Kyoto Protocol.	OK	OK
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	T-1.2.2	N/A	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
equivalent amount of allowances will be retired to back-up the GS VERs issued?				
If the host country does not have a cap on its GHG emissions, has it been stated in the Passport?	T-1.2.2	The statement is given under section C.2. Statement is given as "Turkey will not commit to a cap on its greenhouse gas emissions".	OK	OK
C.3. Project Type				
Is the Project a Renewable Energy Supply Project or an End-use Energy Efficiency Improvement Project? (If not, the validation has to be aborted)	T-1.2.3	The project is renewable energy project.	OK	OK
Has the Project type and eligibility of the Project activity been defined as per Annex C of Gold Standard Toolkit?	T-1.2.3	The project is classified in the Renewable Energy source category as electricity from non-fossil and non-depletable energy sources, in this case from wind, is fed into the Turkish electricity grid.	OK	OK
Has a previous announcement of the project going ahead without the revenues from carbon credits been made?	T-1.2.3	It is indicated in Section C.3. of the GS Passport that there has been no pre-announcement statement regarding the execution of the project without the inclusion of carbon revenues.	OK	OK
If the answer to the above question is yes, has the project subsequently been cancelled or the design has been significantly revised?	T-1.2.3	N/A	OK	OK
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-1.2.3	A statement hasn't been provided about pre announcement under section C.3 of the GS Passport.	CAR16	OK
C.4. Greenhouse Gas				
Does the project reduce emissions of one or more of the following an GHG? Carbon dioxide, methane,	T-1.2.4	It is indicated in Section C.4 of the GS Passport that the project reduces Carbon dioxide emissions.	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
nitrous oxide?				
C.5. Project registration type				
Does the project apply the correct project cycle (regular vs. pre-feasibility assessment)?	T-3.5.1	The project activity is retroactive project.	OK	OK
Is the Project activity a regular registration?	T-1.2.5	No, the project activity is retroactive project.	OK	OK
Is the Project activity a retroactive registration?	T-1.2.5	Yes, the project activity is retroactive project.	OK	OK
If the answer to the above question is yes, has the Project proponents applied to the Gold Standard for the pre-feasibility assessment?	T-1.2.5	See to CL02	CL02	OK
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-1.2.5	See to CL02	CL02	OK
Does the Project activity need preliminary evaluation? (Large hydro or palm-oil related project)	T-1.2.5	N/A	OK	OK
If the answer to the above question is yes, has the Project proponents applied to the Gold Standard for the pre-feasibility assessment?	T-1.2.5	N/A	OK	OK
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-1.2.5	N/A	OK	OK
Has the Project activity been rejected by UNFCCC?	T-1.2.5	The project is a VER project and due to the position of the host country, the project proponents have never applied for registration under Kyoto mechanisms.	OK	OK
If the answer to the above question is yes, has the Project proponents applied to the Gold Standard for the pre-feasibility assessment?	T-1.2.5	N/A	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
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-1.2.5	N/A	OK	OK
Are there any double counting occurring with other certification schemes?	T-3.5.1	There is no double counting with other certification schemes. The project activity is not registered under any known certification schemes that are currently active in the host country.	OK	OK
Unique project identification				
D.1. GPS-coordinates of Project location				
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	GPS coordinates of project activity are given with the reference under section D.1 of the GS Passport	OK	OK
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	This is not a Programme of Activity project. Hence, checklist question is N/A.	OK	OK
D.2. Map				
Have the coordinates been illustrated with a map?	T-1.6	Geographic maps are included in the GS Passport.	OK	OK
Outcome stakeholder consultation process				
E.1. Assessment of stakeholder comments				
Has the Project proponent inserted the "Table ii- Assessment of Stakeholder Comments" in section B5 of the Stakeholder Consultation Report?	Annex R, E.1	N/A	OK	OK
Has the Project proponent inserted a summary of alterations based on stakeholders comments?	Annex R, E.1	N/A	OK	OK
Has an invitation tracking table been filled out?	T-3.5.1	N/A	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
Are copies of invitations published/sent out available?	T-3.5.1	N/A	OK	OK
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	N/A	OK	OK
Is a participant list presented?	T-3.5.1	N/A	OK	OK
Are stakeholder evaluation forms available?	T-3.5.1	N/A	OK	OK
Are minutes of the meeting(s) available?	T-3.5.1	N/A	OK	OK
Has due account been made on comments received?	T-3.5.1	N/A	OK	OK
If stakeholders required a revisit to the sustainable development assessment, has this been done?	T-3.5.1	N/A	OK	OK
Is the consolidated sustainable development matrix presented based on own 'preliminary' scoring and the matrix from the outcome of the blind stakeholder exercise.	T-3.5.1	N/A	OK	OK
Were comments accepted and received by email or other means actually considered?	T-3.5.1	N/A	OK	OK
E.2. Stakeholder Feedback Round (Can be performed in parallel to the validation process)				
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	The Stakeholder Feedback Round (SFR) hasn't been completed yet to apply to the comments of all stakeholders about the project implementation.	FAR01	OK
Did the stakeholder feedback round include a physical meeting? (optional)	T-2.11	The Validation Team conducted site visit on 27.08.2015.	OK	OK
Have all the stakeholders invited for participation in	T-2.11		FAR01	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
the Local Stakeholder Consultation been included in the Stakeholder Feedback Round?		See to FAR01.		
Have all of the following documents been made available to the public for a period of at least two months prior to completion of the validation: The Latest version of the complete PDD (including the EIA, if applicable); A non-technical summary of the project (in appropriate local language(s)); and English summary. The (revised) Passport 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 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.	T-3.5.1	The latest version of the complete GS-VER-PDD, a non-technical summary of the project and the GS Passport will be available to the public for a period of at least two months prior to completion of the validation.	OK	OK
Did the Project proponent also prepare hard copies to be publicly displayed at local places like the post Office, municipality, etc?	T-2.11	The Project proponent will also prepare hard copies of mentioned documents to be publicly displayed .	OK	OK
If the Project is a retroactive Project, did the stakeholder feedback round include a site visit by the stakeholders participating in the process?	T-2.11	Yes, the stakeholder feedback round included a site visit on 27/08/2015.	OK	OK
If the Project is a retroactive Project, did the Project proponent follow the guidance provided by the Gold	T-2.11	See to CL02	CL02	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
Standard in the pre-feasibility assessment?				
Does the stakeholder feedback round report given in the Passport include the following information: 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.), What the outcomes of the feedback round are (All written or oral comments received.) 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	See to FAR01	FAR01	OK
Outcome Sustainability assessment				
F.1. 'Do no harm' Assessment				
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	Project proponents considered the critical issues for their Project type that are listed in Annex C of Gold Standard.	OK	OK
Have the Project participants discussed all of the safeguarding principles with the stakeholders?	T-2.4.1	All safeguarding principles are discussed with the stakeholders.	OK	OK
Have the Project participants introduced mitigation measures for the safeguarding principles with a medium to high risk?	T-2.4.1	Mitigation measures have been defined for the safeguarding principles under section F.1 of the GS Passport.	OK	OK
Does the 'Do No Harm' Assessment base on accurate information and have the reference	T-3.5.1	The Project Introduction File of the project activity is provided to the validation team.	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
sources been included?				
<i>F.2. Sustainable Development matrix</i>				
Has the Sustainable Development Matrix table been inserted in the Passport?	Annex R, F.2	The Sustainable Development Matrix table is inserted in section F.2 of the GS Passport.	OK	OK
Has the project been scored on the following indicators?: Environmental Social Technological Economic	T-2.4.2	The project has been scored on all of the indicators given in Annex I of the GS Toolkit.	OK	OK
Have the corresponding parameters to represent the status of each of the indicators been selected?	T-2.4.2	Under section F.2 of the GS Passport mitigation measures of the parameters are added.	OK	OK
Is the baseline situation and the situation aimed for the project described for each parameter?	T-2.4.2	Under section F.2 of the GS Passport, baseline and target situations are added.	OK	OK
Are the indicators connected to the localized MDG's (Milenium Development Goals) when possible?	T-2.4.2	Yes, MDG's are included.	OK	OK
Was the reason for choice of the parameters described?	T-2.4.2	The reason for choice of the parameters was described.	OK	OK
Have all of the indicators been scored 'negative', 'positive' or 'neutral' in comparison with the baseline situation?	T-2.4.2	All of the indicators have been scored 'negative', 'positive' or 'neutral' in comparison with the baseline situation.	OK	OK
If there are any 'negative' indicators, are there any mitigation measures for these indicators?	T-2.4.2	There are no negative indicators.	OK	OK
Has the matrix been filled by the stakeholders during the Local Stakeholder Consultation?	T-2.4.2,	N/A	OK	OK
Were there any negative scores duing the stakeholder consultation?	T-2.4.2	N/A	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
If the answer to the above question is yes, has the sustainability assessment been revisited?	T-2.4.2	N/A	OK	OK
Have the project indicators been classified in three categories namely “environment”, “social development” and “economic and technological development” under the sustainable development matrix?		Indicators cover all environments, social, economic and technological parameters.	OK	OK
Does the project contribute positively to least at two of the three categories and neutral to the third category?	T-2.4.2,	This checklist question will be answered after needed corrections completed.	OK	OK
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	This checklist question will be answered after needed corrections completed.	OK	OK
Are the data or expert opinions presented in a sufficient degree of detail and transparency?	T-3.5.1	This checklist question will be answered after needed corrections completed.	OK	OK
Are the data uncertainties clearly stated, if possible with associated margins of error?	T-3.5.1	This checklist question will be answered after needed corrections completed.	OK	OK
Is the scoring reproducible and verifiable?	T-3.5.1	This checklist question will be answered after needed corrections completed.	OK	OK
Does the project demonstrate clear benefits in terms of sustainable development?	T-2.4.2	This checklist question will be answered after needed corrections completed.	OK	OK
Sustainability Monitoring Plan				
Are the mitigation actions included in the monitoring	T-2.4.3	Yes, mitigation actions are included in the	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
plan?		monitoring plan.		
Are all the non-neutral indicators included in the monitoring plan?	T-2.4.3	Yes, all non-neutral parameters included to the monitoring plan.	OK	OK
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	Yes, the current status of the parameters, the future status and the way of monitoring of the parameters under section G of the GS passport is clear.	OK	OK
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	N/A	OK	OK
Are chosen parameters relevant to the indicators?	T-3.5.1	N/A	OK	OK
Are these parameters planned to be monitored over the crediting period and on a recurrent basis?	T-2.4.3	The monitoring frequency for each parameter have been defined.	OK	OK
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 monitoring plan?	T-2.4.3	All of the mitigation measures are included in the SD Monitoring Plan.	OK	OK
Is the sustainability monitoring plan clear about who will monitor with what frequency?	T-3.5.1	Yes, the sustainability monitoring plan is clear about who will monitor the parameters with what frequency.	OK	OK
Is the monitoring plan feasible?	T-3.5.1	This section will be reviewed after all the CLs and CARs about the SD Monitoring plan are closed.	OK	OK
ANNEX 1 ODA declaration				
Does the project receive ODA under the condition that the credits coming out of the project are	T-3.5.1	The project does not receive ODA under the condition that the credits coming out of the project	OK	OK



CHECKLIST QUESTION	GS Ref.	COMMENTS	Draft Concl	Final Concl
transferred to the donor country?		are transferred to the donor country.		
Is a scanned copy of the Official Development Assistance Declaration statement signed by the project owner given in Annex 1?	Annex D	No, a scanned copy of the Official Development Assistance Declaration statement signed by the project owner is not given in Annex 1 of the GS Passport.	OK	OK

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
CAR01 The electricity produced by project activity will result in a total emission reduction of 80,442 tCO ₂ e per year but total emission reductions for the chosen crediting period is not provided.		Total emission reduction value for this crediting period, which is 563,094 tCO ₂ e is already given under Section B.6.4 and Section A.3.	Review 1: Total emission reduction value for this crediting period is added under section A.3 of the GS-VER-PDD. <u>The Corrective Action Request is closed.</u>
CAR02 Technical specifications of the wind turbines are provided with reference on Table 2 under section A.3 of the GS-VER-PDD. But it is not described in this section that how many Nordex wind turbines with a unit capacity of 2,500 kW the project activity involve?		Number of the turbines along with the selected model is now discussed under Section A.3.	Review 1: Number of turbines with a unit capacity of 2,500 kW is given under section A.3 of the GS-VER-PDD. <u>The Corrective Action Request is closed.</u>
CAR03 The single line diagram which shows the monitoring equipment's and their location of the		Single line diagram is now provided to DOE. The 18 of the turbine locations along with the metering	Review 1: Single Line Diagram is provided__under section A.3 of the GS-VER-PDD.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
project activity including metering points is not provided under section A.3 of the GS-VER-PDD.		device locations can be seen from the diagram. Besides, the figure s included under section b.3	<u>The Corrective Action Request is closed.</u>
CAR04 Connection agreement to the grid is not provided.		It is now provided.	<u>Review 1:</u> Connection Agreement is provided. <u>The Corrective Action Request is closed.</u>
CAR05 Basic parameters for financial analysis such as total investment, loan amount, interest rate, production expenses etc. on Table 9 are not provided under Investment Analysis section of the GS-VER-PDD.		The basic parameters are now included as a separate table above Table 9.	<u>Review 1:</u> Basic parameters for financial analysis are provided on the separate table under Investment Analysis section of the GS-VER-PDD. <u>The Corrective Action Request is closed.</u>
CAR06 1. Instead of multiplying the whole asset value by 75%, please use different depreciation periods for Main & Supplementary Equipments and Other Costs separately. Then, please use sensitivity parameters for each asset classes instead of only total value. 2. Please present the rationale behind the fair		1. IRR Excel Sheet is now revised accordingly. 2. Fair value is taken as 10 % to be on a more conservative side and is added to the last year of the cash flow in the IRR analysis. A proper reference is already included in the IRR Excel Sheet. 3. SGK records for the employees regarding the construction is given to DOE. Starting date of SGK is now used for the construction start date considering the fact that no employee	<u>Review 1:</u> 1. Please apply different depreciation periods for turbine and other costs. 2. OK 3. OK



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
value multiplier of 10%. 3. Please confirm that construction is completed in 1 year only. 4. Please indicate if there is any rental fee or not?		can work without a SGK record. 4. There is rental fee and the supporting document is now supplied to DOE. Also, this amount is included to Opex. Response 2: 1. Now, the assumption of %75 is removed from the calculations. Expropriation of land cost is not integrated into the calculation. The equipment cost and other costs are included into the calculation. Other than that, as stated in the reference document given in the "Investment and Financials" page, E47 cell depreciation period is taken as 10 years. Response 3: 1. Wind turbines have a depreciation period of 10 years. The equipment cost and the other costs (land cost is not integrated) are included into the calculation. In order to be	4. OK It is still open. Review 2: 1. Please use different depreciation period for the other cost (excl Expropriation Land Cost) (4358444.2599155) part. Only wind turbines have a depreciation period of 10 years. Not closed. Additional Notes: 1- Please explain why Loan Amount is changed from 34291028.3161676 (ref document: Silivri IRR_23 11 2015) to 38500000 (ref document Silivri IRR_22 12



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
		conservative depreciation period is now taken as 20 years, which is acceptable for both wind turbine and other costs. Additional Notes: 1. At first loan amount was calculated from the equity amount. The equity amount was subtracted from the total investment cost and the loan amount was found. Now instead, the "doc20151214114805" document is used as reference document. And the loan amount is taken from that reference document. The loan amount is subtracted from the total investment cost and the equity amount is found. Also, the agreement date is revised and taken from this agreement. 2. The sensitivity analysis is revised in a way that when the investment cost is changed +-10%, the depreciation amounts are also affected.	2015)? 2- Depreciation amounts don't change if we run the sensitivity parameter for the investment cost. Please revise the investment sensitivity parameter formulation in a way that annual depreciation amounts are effected by the investment cost increase/decrease scenarios in the sensitivity analysis. Review 3: 1. 10 years is seen in excel file, reference : sheet("Investment&Financials").cells("b44") Not closed Additional Notes: 1. OK 2. The formulation is corrected but when I



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
		Response 4: 1. Now cell b41 is corrected as 20 years in the Investment & Financial page. <u>Additional Notes:</u> 2. Now, equity IRR value along with the values coming from the sensitivity analysis is corrected in PDD.	run the +10% scenario the excel file calculates 9.01%, not 8.84% as it is seen in sensitivity table. Not closed. <u>Review 4:</u> OK <u>The Corrective Action Request is closed.</u>
CAR07 Loan proposal document and construction agreement such as site delivery protocol or other construction activity documents are not provided.		The agreements related with the construction are already submitted to DOE. However, loan agreement was not supplied. The loan agreement is now supplied to DOE. Response 2: 1. Construction start date is now taken as 21.10.2013 from the agreement "Ayyıldız hafriyat". 2. Now a reference document regarding the loan amount is supplied. As stated at that reference	<u>Review 1:</u> Construction start date evidence is not acceptable. This is the workplace registry information document. Provide site delivery protocol or construction agreement. Loan amount and date on the agreement are not the same the values on the IRR excel sheet. It is still open.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
		document, the interest rate, which is 6 % can be confirmed along with the repayment period and grace period. The loan amount is now revised according to the number stated in the document and the equity amount is calculated from the loan amount and the investment cost. Also, the date of signature of the document is taken.	<u>Review 2:</u> 1. Construction start document is provided as 21.10.2013 and acceptable. 2. Loan agreement is provided. Therefore loan amount and loan date are revised according to loan agreement. <u>The Corrective Action Request is closed.</u>
CAR08 The board decision or carbon consultant agreements are not provided to the validation team.		The carbon consultant agreement is provided to DOE.	<u>Review 1:</u> The carbon consultant agreement is provided. <u>The Corrective Action Request is closed.</u>
CAR09 The crosscheck parameter of the data is not indicated under section B.7.1 of the GS-VER-PDD.		It is now included that the monthly meter readings will be used to cross check the PMUM readings under Section B.7.1. Response: The explanation is now revised.	<u>Review 1:</u> Electricity meters are indicated as source of data but also PMUM readings will be used as a base. Please clarify. It is still open. <u>Review 2:</u>



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
			The crosscheck parameter of the data is revised under section B.7.1 of the GS-VER-PDD. <u>The Corrective Action Request is closed.</u>
CAR10 A summary of the environmental impacts of the project activity with actual references are not described under section D.1 of the PDD.		Refer to CAR11 Response 2: Refer to CAR 11	<u>Review 1:</u> Since the CAR11 is open.It is still open. <u>Review 2:</u> CAR11 has been closed. <u>The Corrective Action Request is closed.</u>
CAR11 Environmental impact assessment is not mentioned clearly according to the project description report under section D.2 of the GS-VER-PDD.		Now, information regarding the EIA not required certificate along with the project information file showing that the project would not have any negative impact over environment is included under this section. Response 2: The repeating sentence is now corrected and also project information file is now corrected as project introductory file.	<u>Review 1:</u> The same sentence is repeated and also Project Introductory File is given as Project Information File. It is still open. <u>Review 2:</u> Necessary changes are made under section D.2 of the GS-VER-PDD.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
			<u>The Corrective Action Request is closed.</u>
CAR12 Summary of the comments received from the stakeholders is not given under section E.2 of the GS-VER-PDD.		Since the project is a retroactive project there is no local stakeholder consultation. So, Section E is not applicable for this project.	<u>Review 1:</u> Since the project is a retroactive project, there is no need local stakeholder consultation. <u>The Corrective Action Request is closed.</u>
CAR13 Consideration of comments received from the stakeholders is not given under section E.3 of the GS-VER-PDD.		Please refer to CAR12.	<u>Review 1:</u> Since the CAR12 has been closed. <u>The Corrective Action Request is closed.</u>
CAR14 Total emission reductions for per year under section B of the GS Passport are not consistent with the given in the GS-VER-PDD.		Annual emission reduction value is now corrected under Section B of Passport.	<u>Review 1:</u> Annual emission reduction is revised as 80,442 tCO ₂ e under Section B of GS Passport in line with the GS-VER-PDD. <u>The Corrective Action Request is closed.</u>
CAR15 There is not a justification the project is de-bundled or not in the under section C.1 of the GS passport.		Section c.1 is related with the scale of the project, which is correctly chosen.	<u>Review 1:</u> The proposed project is not a small scale project. If the explanation is given as it is not a debundled component of another large scale project activity, this will be useful information but not required.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
			<u>The Corrective Action Request is closed.</u>
CAR16 A statement hasn't been provided about pre announcement under section C.3 of the GS Passport.		An explanation regarding this issue is now included.	<u>Review 1:</u> A statement has been provided about pre announcement under section C.3 of the GS Passport. <u>The Corrective Action Request is closed.</u>
CL01 Applicability conditions of ACM0002 Version 16.0.0 are not completely described with objective references in section B.2 of the PDD.		Version number of the table is now revised.	<u>Review 1:</u> Version number of the table is revised. <u>The Clarification Request is closed.</u>
CL02 Is there a pre-feasibility assessment report or annual financial reports for the project activity?		No, there is no such report.	<u>Review 1:</u> There is no such report as feasibility study report. <u>The Clarification Request is closed.</u>
CL03 The responsibilities for and institutional arrangements for data collection and archiving are not clearly indicated under section B.7.3 of GS-VER-PDD.		A detailed explanation regarding the data collection and achieving has been included under this section.	<u>Review 1:</u> The responsibilities for and institutional arrangements for data collection and archiving are clearly provided under section B.7.3 of the GS-VER-PDD.



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
			<u>The Clarification Request is closed.</u>
CL04 The expected operational lifetime is given as 25 years but relevant reference is not provided.		Technical lifetime, which is 25 years, is already proved by a proper reference under Section A.3. of PDD. The reference is : http://cdm.unfccc.int/methodologies/PA/methodologies/tools/am-tool-10-v1.pdf Response 2: The related reference document is now given under section c.1.2.	<u>Review 1:</u> Also provide the relevant reference of technical lifetime of wind turbines under section C.1.2 of the GS-VER-PDD. It is still open. <u>Review 2:</u> Relevant reference of technical lifetime of wind turbines is provided under section C.1.2 of the GS-VER-PDD <u>The Clarification Request is closed.</u>
FAR01 Global Stakeholder Consultation process hasn't been completed yet. When Global Stakeholder Consultation process is completed, received comments will be added to the GS Passport. The Stakeholder Feedback Round (SFR) hasn't been completed yet to apply to the comments of all stakeholders about the project implementation.		Received comments are now included and the SFR is ended.	<u>Review 1:</u> Stakeholder Feedback Round has been completed on 16 th of November 2015. Relevant comments of all stakeholders about the project activity are presented under section E.2 of the GS Passport. <u>The Forward Action Request is closed.</u>
FAR02		Initial calibration and serial number	<u>Review 1:</u>



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1/2/3/4	Summary of project owner response	Validation team conclusion
Adequateness of the meter specifications as well as initial calibration and serial number information shall be verified during initial verification as the meters are not yet available to the validation team.		information of the meters will be available during the verification stage.	The verification team will check and approve initial calibration and serial number of the meters through the meter specifications and calibration records during the verification stage.