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VER (GS)-Verification Report

Innores Elektrik Üretim A. S.

Initial and First periodic Verification of the Registered VER Project
under Gold Standard

“Yuntdağ 42.5 MW Wind Power Project”
in Turkey

Monitoring period: 07-03-2008 to 30-04-2009

Report No. 1338474-352

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TÜV SÜD Industrie Service GmbH
Carbon Management Service
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Executing Operational Unit:				
TÜV SÜD Industrie Service GmbH, Carbon Management Service Westendstrasse 199 - 80686 Munich, Federal Republic of Germany				
Project Participant (client):				
Innores Elektrik Üretim A. S. Bayar Cad. Gülbahar Sok. No:14, Kozyatagi, Istanbul, Turkey				
Registration number / Project Title			GS352 / “Yuntdag 42.5 MW Wind Power Project” in Turkey	
Monitoring period:			07-03-2008 to 30-04-2009	
First Monitoring Report (version/date)			Version 2.1 / 12-05-2009	
Final Monitoring Report (version/date)			Version 2.4 / 25-08-2009	
Summary:				
TÜV SÜD Industrie Service GmbH has performed the Initial and First periodic verification of the registered GS-VER project GS352 under Gold Standard: “Yuntdağ 42.5 MW Wind Power Project”. The project site is situated in Yuntdag, Bergama region, Izmir. It use wind power to produce electricity with the help of wind turbine/generator sets. The generated power is transmitted to Turkish public grid system (ALOSBI Transformer Station) via a 154kV high voltage transmission line. The management of Innores Elektrik Üretim A. S. is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions. A document review, followed by a site visit on 04-06-2009 was conducted to verify the information submitted by the project participant regarding the present verification period. Based on the assessment carried out, the verifier confirms that : - the project has been implemented and operated in accordance with the description given in the registered GS-VER PDD (version 03, 28-07-2008, registration date 31-07-2008). - the project is completely implemented as described in the registered GS-VER PDD. - the monitoring plan complies with the applied methodology (“Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002) Version 06 and the monitoring has been carried out as exactly following the monitoring plan. Installed equipments essential for generating emission reductions run reliably and the meters are calibrated appropriately. The project is generating emission reductions as a VER-GS project. The verifier can confirm that the GHG emission reductions are calculated without material misstatements. Our opinion refers to the project’s GHG emissions and resulting GHG emission reductions reported, both determined due to the valid and registered project’s baseline, its monitoring plan and its associated documents. Based on the information we have seen and evaluated we confirm that the implementation of the project resulted in 94,532 t CO₂e (for 2008 =68,435 tCO₂e and for 2009 =26,096 tCO₂e)of emission reductions during the first verification period 07-03-2008 to 30-04-2009. There is no project and leakage emission due to this project.				
Verification team:			Internal Quality Control:	
- Thomas Kleiser (Assessment Team Leader) - Robert Mitterwallner (GHG Auditor) - Dr. Nuri Mol (GHG Auditor) - Bhai Raja Maharjan (GHG Auditor Trainee)			Zhang, Rachel Certification body “climate and energy”	

Abbreviations

ACM	Approved Consolidated Methodology
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM-EB	CDM Executive Board
CER	Certified Emission Reduction
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
CO₂e	Carbon dioxide equivalent
CR / CL	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse Gas (es)
GS	Gold Standard
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
KP	Kyoto Protocol
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-Governmental Organisation
OM	Operational Margin
PDD	Project Design Document
PMUM	Commercial Department for Approval of Final Invoices (affiliate of TEIAS)
PP	Project Participant
TEIAS	Turkish Public Grid Operator
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VER	Verified Emission Reduction
VVM	Validation and Verification Manual

Main Documents (referred to in this report)

Methodology (name / version)	ACM 0002, Version 06	
Registered PDD:	Version 1, date 09-08-2007 Version 3, date 28-07-2008	
Revised Monitoring Plan:	N/A	
	Version	Date
Published Monitoring Report	2.1	12-05-2009
Revised Monitoring Report	2.4	25-08-2009
Project documentation link:	https://gs1.apx.com/mymodule/ProjectDoc/EditProjectDoc.asp?id1=352	

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Annex 1: Verification Protocol

Annex 2: Information Reference List

1 INTRODUCTION

1.1 Objective

Innores Elektrik Üretim A. Ş. has commissioned an independent verification by TÜV SÜD Industrie Service GmbH (TÜV SÜD) of its registered VER-GS project: “Yuntdağ 42.5 MW Wind Power Project” in Turkey.

The objective of the verification work is to check compliance with GS version 1 requirements and the VER+ standard. According to this assessment TÜV SÜD shall:

- ensure that the project activity has been implemented and operated as per the registered GS-VER PDD “Yuntdağ 42.5 MW Wind Power Project ” Version 3, 28-08-2008, and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place,
- ensure that the published MR and other supporting documents provided are complete and verifiable and in accordance with applicable GS-VER CDM and GS requirements,
- ensure that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology,
- evaluate the data recorded and stored as per the “Approved Consolidated Baseline and Monitoring Methodology for grid-connected electricity generation from renewable sources” ACM 0002, Version 06.

1.2 Scope

The verification scope is defined as an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the Designated Operational Entity. The verification is based on the submitted monitoring report, the validated project design documents including its monitoring plan and validation report, the applied monitoring methodology ACM 0002 version 06, relevant decisions, clarifications and guidance from the CMP and the EB and any other information and references relevant to the project activity’s resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance of Gold Standard.

TÜV SÜD has, based on the requirements in the GS version 1 and VVM 2008 applied a rule-based approach. The principles of accuracy and completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion.

The verification considers both quantitative and qualitative information on emission reductions.

The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 GHG Project Description

Project activity:	“Yuntdağ 42.5MW Wind Power Project” in Turkey
Gold Standard registration number:	GS352
Project Participants:	Innores Elektrik Üretim A. Ş.
Location of the project:	Yuntdağ, Bergama region, 100 km north of Izmir, Turkey North Latitude 431°39’56” to 431°02’88” East Longitude 51°66’33” to 51°54’31”
Date of GS registration:	31-07-2008



Starting date of the crediting period: 07-03-2008

Yuntdag 42.5MW Wind Power Project is a renewable energy project. The plant will catch the wind energy to convert into electric energy with the help of wind turbine/generator sets. It is a renewable energy source. It consists of 17 wind turbine-generator units with each capacity of 2.5MW. The wind blade is 90 m in diameter and hub height is 80 m. The manufacturer of the turbine is Nordex. It is expected to generate 160,834MWh energy annually. This generated power will be transmitted to the Turkish public grid via ALOSBI 154 kV TM station. At the time of the verification, the wind farm was in full operation.

2 METHODOLOGY

2.1 Verification Process

The verification process is based on the approach depicted in the GS version 1 and VVM 2008. Standard auditing techniques have been adopted. The verification team performs first a desk review, followed by an on-site visit which results in a protocol including all the findings. The next step is to close out the findings through direct communication with the PPs and finally prepare the verification report. This verification report and other supporting documents then undergo an internal quality control by the CB “climate and energy” before submission to the Gold Standard.

2.2 Verification Team

The appointment of the team takes into account the coverage of the technical area(s), sectoral scope(s) and relevant host country experience for verifying the ER achieved by the project activity in the relevant monitoring period for this verification.

The verification team was consisting of the following members:

Name	Qualification	Coverage of scope	Coverage of technical area	Host country experience
Thomas Kleiser	ATL	☒	☒	☐
Robert Mitterwallner	GHG-Auditor	☒	☒	☒
Dr. Nuri Mol	GHG-Auditor	☒	☒	☒
Bhai Raja Maharjan	GHG-Auditor Trainee	☒	☐	

Thomas Kleiser is head of CDM/JI division within TÜV SÜD and is an assessment team leader for CDM and JI projects at TÜV SÜD Industrie Service GmbH. In this position he is responsible for the implementation of validation and certification processes for GHG mitigation projects. He has participated in more than 100 CDM and JI project assessments.

Robert Mitterwallner is a GHG-Auditor with a background as auditor for environmental management systems (according to ISO 14001), as expert in environmental permit procedures for industrial plants and as expert for environmental impact studies assessment. He is located at TÜV SÜD Industrie Service in Munich since 1990. He has received training in the JI determination as well as CDM validation process and applied successfully as GHG Auditor for the scopes energy industries, manufacturing industries, chemical industries, transport, mining/mineral production, metal production, solvent use and waste handling / disposal.

Dr. Nuri Mol has been working for 20 years as expert and consultant in environmental sector. He is consultant to various industries, e.g. iron & steel, food, water supply, hazardous waste management. He received intensive training at Carbon Management Service with TÜV SÜD and participated in 20 validation and verification processes. Dr. Mol is qualified GHG auditor TÜV.

Bhai Raja Maharjan is an auditor trainee for CDM/JI projects at TÜV SÜD Industrie Service GmbH. He has extensive experience in Renewable Energy Projects. He holds a Bachelor degree in Electrical Engineering and M.Sc. degree in Renewable Energy. Before joining the TÜV SÜD Industrie Service GmbH he has worked in various multinational companies as an Engineer and Renewable Energy expert.

2.3 Review of Documents

The Monitoring Report version 2.1, date 12-05-2009 was prepared and submitted by the project developer FutureCamp İklim ve Enerji Ltd. Şti., consultant to project participant Innores Elektrik Üretim A.Ş. which was made publicly available on the TÜV SÜD Carbon Management Service website before the verification activities started. The published MR was assessed based on all the relevant documents as listed earlier. The aim of the assessment in the desk review was to verify the completeness of the data and the information presented in the MR. The compliance check of the MR with respect to the monitoring plan depicted in the registered GS-VER PDD and the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures was paid. The evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions was also carried out. A complete list of all documents reviewed is available in Annex 2 of this report. The desk review was held on 01.06.2009.

2.4 On-site Assessment and follow-up Interviews

On 04-06-2009, TÜV SÜD performed a physical site inspection and on-site interviews with project stakeholders to:

- confirm the implementation and operation of the project,
- review the data flow for generating, aggregating and reporting the monitoring parameters,
- confirm the correct implementation of procedures for operations and data collection,
- cross-check the information provided in the MR documentation with other sources (raw data),
- check the monitoring equipments against the requirements of the GS-VER PDD and the approved methodology, including calibrations, maintenance, etc.,
- review the calculations and assumptions used to obtained the GHG data and ER,
- identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.

A list of the persons interviewed during this verification activity is included in Annex 2.

2.5 Quality of Evidence to Determine Emission Reductions

Among many others the following relevant and reliable evidences have been used by the audit team during the verification process:

- Final validation report [IRL 4]
- Monitoring report version 2.1 [IRL 6]
- Final revised monitoring report [IRL 7]
- Grid connection and usage agreement [IRL 11]
- Meter calibration and product specification report on meters [IRL 16]
- Protocol on meter programming and testing [IRL 18]
- Test certificate of main and backup meter (calibration certificate) [IRL 20, 21]
- First index registration of meters at startup [IRL 22]
- Manual meter data reading and recording sheets (Logbooks) [IRL 23]
- Monthly meter data protocol on generated and consumed energy at the Wind Power Plant : monitoring Period [IRL 24]
- Final monthly meter data issued by PMUM considering the electricity purchased from the grid and grid losses [IRL 25]

- Monthly invoices issued to TEIAS for the electricity amount supplied **to** the grid (as fixed in the PMUM data) [IRL 26]
- Monthly invoices issued to TEIAS for the electricity amount supplied **from** the grid (as fixed in the PMUM data) [IRL 27]
- SCADA data records on energy generation at 660 V for each WTG unit [IRL 28]
- Excel Workbook on calculation of emission reductions [IRL 29]
- SCADA Monthly Wind Farm Performance Report (including : Load Factor) [IRL 39]
- Approved Single Line Diagram indicating the meters and connections to the ALOSBI 154kV HV transmission line [IRL 41]
- Logbook samples of the HV Operation Unit (English) [IRL 46]
- MoM of the ad-hoc meeting with the surrounding villagers on various issues, e.g. noise, use of new road [IRL 47]
- Interview with villagers on bird collision aspect linked with the Wind Power Plant [IRL 48]

Sufficient evidence covering the full verification period in the required frequency is available to validate the figures stated in the final MR. The source of the evidences will be discussed in chapter 3 of this report. Specific cross-checks have been done in cases that further sources were available. All figures in the monitoring report were cross-checked by the audit team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

2.6 Resolution of Clarification and Corrective and Forward Action Requests

The objective of this phase of the verification process was to resolve any outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the GHG emission reduction calculation. The findings raised as Forward Action Requests (FARs) indicated in previous validation report was clarified during communications between the PP and TÜV SÜD.

To guarantee the transparency of the verification process, the concerns raised, based on the desk review and subsequent on-site audit assessment and follow up interviews, together with the responses given are documented in Annex 1 (verification protocol).

A Corrective Action Request is raised where TÜV SÜD identifies:

- non-conformities in monitoring and/or reporting with the monitoring plan and/or methodology;
- that the evidence provided is not sufficient to prove conformity;
- mistakes in assumptions, data or calculations that impair the ER;
- FARs stated during validation that are not solved until the on-site visit.

A Clarification Request is raised where TÜV SÜD does not have enough information or the information is not clear in order to confirm a statement or data.

A Forward Action Request is raised where TÜV SÜD identifies that monitoring and/or reporting required special attention or adjustments for the next verification period.

Information or clarifications provided as response to a CAR, CL or FAR could also lead to a new CAR.

2.7 Internal Quality Control

As an ultimate step of verification the final documentation including the verification report and the protocol have to undergo an internal quality control by the Certification Body (CB) “climate and energy”, i.e. each report has to be finally approved either by the Head of the CB or the Deputy. In case one of these two persons is part of the assessment team the approval can only



be given by the other one. If the documents have been satisfactorily approved, the Request for Issuance will be submitted to the Gold Standard along with the relevant documents.

3 VERIFICATION RESULTS

In the following sections the results of the verification are stated. The verification results relate to the project performance as documented and described in the final Monitoring Report (25-08-2009, version 2.4). The verification findings for each verification subject are presented below:

3.1 FARs from Validation / Previous Verification

There was no FARs from the previous validation report.

3.2 Project Implementation in accordance with the registered Project Design Document

The project is fully implemented according to the description presented in the GS-VER PDD. The verifier confirms, through the visual inspection that all physical features of the proposed GS VER project activity including data collecting systems and storage have been implemented in accordance with the registered GS-VER PDD. The project activity is completely operational and this has been confirmed on-site.

No data and/or variables presented in the MR differ significantly from the stated in the registered GS-VER PDD, which would cause an increment of the ER in this period or in future periods in relation to the estimates in the registered PDD.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The monitoring plan is in accordance with the approved methodology, ACM 0002, Version 6, applied by the proposed GS VER project activity.

3.4 Compliance of the Monitoring with the Monitoring Plan

The monitoring has been carried out in accordance with the monitoring plan contained in the registered GS-VER PDD. All parameters were monitored and determined as per the Monitoring Plan.

The verification of the parameters required by the monitoring plan is provided as follows:

Data / Parameter:	GENy
Data unit:	MWh
Description:	Net amount of Power Supplied to the Grid by the project : The electricity is measured by bidirectional meters, which measure simultaneously “electricity supplied to the grid” and “electricity imported from the grid”. Both data are recorded in the log book. The net electricity is the difference between “electricity supplied to the grid” minus “electricity imported from the grid”.
Source of data used:	The data sources checked and used : - Raw data recorded by both meters (1x main and 1x backup) - Raw data manually recorded in excel spreadsheets (1xdaily) - Monthly Data Protocol - External Backup data - Invoice Data - Logbook - SCADA data (internal) controlled by turbine supplier Nordex were read and crosschecked.

	The metering equipment used has been calibrated according to the requirements of the approved monitoring plan, e.g. the meters are owned and checked by the grid operator TEIAS, who is in charge for the accuracy and reliability of the meters.
Means of verification/Comments:	The verification team verified that the net amount of power supplied to the Grid by the wind power plant used in the calculation sheet (excel sheet) and reported in the MR are correct and traceable to the raw data. Furthermore, the raw data from the daily log books recording and monthly calculation sheet has been checked through recalculation of all values and found to be correct by the verification team. Also the stated values have also been verified from the sales invoices.
Cross-check	The net electricity generation at the power plant was cross-checked against the daily recorded log book and the electricity meters. Also cross checked against the monthly recorded (as per required by methodology and GS-VER PDD) log book as well. The electricity meters were checked and sealed by grid company. The value metered by the metering instruments is used as a plausibility check of the values indicated in the invoices.

With respect to GS requirements, the project has to comply with the parameters in Sustainable Development Assessment Matrix (see chapter 3.4.1, VVM-GS). Even most of the parameters remain unchanged; the project owner has defined 3 indicators out of this Matrix to be audited regularly, as to identify any short term fluctuations:

- Economic and technological development -Employment (ID2) : Local job creation
- Local/regional/global environment –Other pollutants (ID3): The use of the new road
- Local/regional/global environment –Biodiversity (ID4) : Bird Collision

The verification of these parameters required by the monitoring plan (version V.3 28.07.2008) according to the Gold Standard requirements (see also Annex 2, MR) are provided as follows:

Data / Parameter:	Employment (ID2): Local job creation
Data unit:	
Description:	As for GS-VER PDD chapter D.2: Number of staff trained, certificated by Nordex and Innoreas A.Ş. regarding technical and security issues Detailed information on the staff employed by the operator is described in the submitted management documents : - Organisation, Job Description, Personnel Qualification (certificates), Labour Insurance contracts (employment certificates) - Training (update), Qualification (update)
Source of data used:	The management documents presented to the audit team was used for the evaluation of this issue. Further documents submitted to the audit team were: - Labour insurance (employment certificate) - Residence register
Means of verification/Comments:	All training certificates and further qualification measures regarding the qualification of the personnel have been documented and presented to the audit team. The working environment and working conditions were in a positive shape The number of employees within this verification period : High Voltage (HV) Team: It consists of 5 specialists. Nordex Service Team: It consists of 3 specialists. Security Guard Team: It consists of 4 employees. Plant Manager : 1 employee Technical Manager : 1 employee In total, there are 14 employees at Yuntdağ Wind Power Plant. The working environment and working conditions were in a positive shape.
Cross-check	The personnel in duty at the day of the onsite assessment were interviewed. They were identified as the personnel of the plant by crosschecking the information regarding labor insurance and residence register.

Further parameter out of the SDA Matrix is as follows:

Data / Parameter:	Other pollutants (ID3) : Use of the new road
Data unit:	
Description:	As for PDD chapter D.2 : Number of employment created by the project monitored by the monthly salary payment sheet Due to the project activity, a new road was built by the project owner. The new road was open for public use. In an interview held on 04.06.2009 by the audit team, the villagers were asked to comment on the effect of the new road. According to the villagers, the new road made a better connection to the surrounding. Furthermore they confirmed less traffic through the village center and less environmental pollution, e.g. noise, dust.
Source of data used:	Interview with the villagers
Means of verification/Comments:	Physically inspecting the site by the audit team during onsite audit and interviewing with local villagers.
Cross-check	Direct talks with the villagers during the interview

Further parameter out of the SDA Matrix is as follows:

Data / Parameter:	Biodiversity (ID4) : Bird Collision
Data unit:	
Description:	As part of the biodiversity issue, the possible effect of the operating wind farm on the bird collision was evaluated by the project participant. The villagers were asked about bird collisions caused by the blades. No negative effects were observed by the villagers, as expressed during the onsite audit on 04.06.2009.
Source of data used:	Interview with villagers
Means of verification/Comments:	The blades are painted in special colors as to prevent bird to collide with the blades.
Cross-check	Interview with villagers

3.5 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

All data has been available and all the parameters have been monitored in accordance with the registered GS-VER PDD Monitoring Plan. There were no gaps in data reporting. The audit team has been provided with data covering the whole monitoring period (07/03/2008–30/04/2009). The main data, the exported and imported electricity is measured by main and backup meter continuously and is recorded by a trained professional meter reader in the log book. The accuracy of the used meters is 0.5s. The verification was done according to approved validation and verification manual.

The reported data has been verified and cross checked against other sources when available as explained above in chapter 3.4. Also, the verifier confirms that the methods and formulae used to obtain the baseline emissions are appropriate. This has been done in accordance with the methods and formulae described in the registered GS-VER PDD (Version 03, date 28-07-2008) and monitoring plan and applicable methodology. The values have been correctly applied and the calculations are transparently presented.

The net electricity exported to the grid company was calculated by EGexport minus EGimport. In addition, all the input data was kept in retraceable form in multiple paper copies as well as in a computer system. The calculation spreadsheets were integral part of the log-books.

All figures in the revised monitoring report [IRL 18] were cross-checked by the audit team using an excel spreadsheet. All emission reduction calculations were found appropriate in this excel spreadsheet. Regarding information/process flow, data transfer and data trails, the necessary procedures have been defined in the protocol (Annex-1) and was also checked during on site audit.

Revised Excel spreadsheet [IRL 29] was also cross-checked in detail. In first version of excel spreadsheet the audit team found some minor mistake in the excel sheet. The PP was asked to correct it. The PP has submitted the new excel sheet with correction [IRL 29].

The emission factor was calculated according to the baseline methodology ACM0002 / Version 06. The combined baseline emission factor was calculated as an ex-ante that is $EF_y = 0.7086$ tCO₂/MWh for this particular monitoring period. The verifier confirms that all the data have been correctly justified.

4 SUMMARY OF FINDINGS

The verifier can confirm that the published MR and related documents are complete and verifiable in accordance with the CDM requirements. All the findings raised by the verification team, the responses by the PPs and the conclusion from the team are presented in Annex 1, the means of verification and resulting changes in the MR or related documents are stated as follows:

CAR 1: In response to the Clarification Request#3, excel spreadsheets were submitted to the audit team (correspondence from 26.06.2009).
 Please indicate relevant titles in the spread sheets in English as to make documents easy to understand in international communication.

CAR 1, means of verification

In response, the PPs have submitted revised spreadsheet with requested information. The audit team has checked the submitted revised spreadsheet against the note taken during onsite audit and it was found to be correct. Hence, this issue is closed.

CAR 1, changes in the MR or related documents

The spreadsheet has been updated accordingly.

CAR 2: Please put the EF=0.7068 explicitly on the top of the last column on the table in chapter B.3.2.2. in the Monitoring Report (pp. 9)

CAR 2, means of verification

In response, the PPs have submitted the new revised MR with requested information. The audit team has checked the submitted revised MR with the notes taken during on site audit and it was found to be correct. Hence, this issue is closed.

CAR 2, changes in the MR or related documents

The MR has been updated accordingly.

CR 1: In response to the Clarification Request#3, excel spreadsheets were submitted not completely to the audit team (correspondence from 26.06.2009).
 Please give an explanation for the period March 2008 and April 2008, why the excel sheets have not been delivered to audit team.

CR 1, means of verification

In response, the PPs have delivered the requested information and submitted revised excel sheet. The audit team has checked the submitted revised documents with the notes taken during on site audit and it was found to be correct. Hence, this issue is closed.

CR 1, changes in the MR or related documents

The excel sheet has been updated accordingly.

CR 2: FutureCamp İklim ve Enerji Şti. signs for the Monitoring Report (chapter A.8), whereas FutureCamp GmbH signs for the GS VER consultancy (chapter B.2.2).
 Is this two separate entity or one, Please clarify.

CR 2, means of verification

In response, the PPs have clarified that they are two separate entities legally; however FutureCamp GmbH has control on FutureCamp iklim ve Enerji Ltd. And both companies work

together on the project.

The audit team has checked and it was found to be correct. Hence, this issue is closed.

CR 2, changes in the MR or related documents

N/A

CR 3: Please present the existing QM measures and documentation in a systematic way. External as well internal QM procedures should be implemented and documented.

CR 3, means of verification

In response, the PPs have explained that they do not implement any QM system, however they do have a systematic way of dealing daily works and proof has been submitted to DOE. The audit team has checked the submitted documents against the notes taken on site and it was found to be correct. Hence, this issue is closed.

CR 3, changes in the MR or related documents

N/A

CR 4: Please provide more evidence on the training of Nordex staff.

CR 4, means of verification

In response, the PPs have provided the training and qualification of the Nordex staff to DOE. The audit team has checked the certificate against the notes taken during on site audit and it was found to be correct. Hence, this issue is closed.

CR 4, changes in the MR or related documents

N/A.

CR 5: Please provide evidence on excel spreadsheet right from the operation start up (first and last day of each month within the crediting period).

CR 5, means of verification

In response, the PPs have submitted the excel spreadsheets with manual records to the DOE. The raw data was used for cross check regarding the data consistency. The audit team has checked the submitted information against the notes taken during on site audit and it was found to be correct. Hence, this issue is closed.

CR 5, changes in the MR or related documents

N/A.

CR 6: Please provide evidence on PC data archiving measures.

CR 6, means of verification

In response, the PPs have explained in detail regarding PC data archiving and also mentioned that the PC in WPP is backed up in an external hard disc every week. This has been verified by the audit team against the notes taken during on site visit and it was found to be correct. Hence, this issue is closed.

CR 6, changes in the MR or related documents

N/A.

CR 7: Please provide evidence on monthly energy balance data recorded by the SCADA system, covering the verification period.

CR 7, means of verification

In response, the PPs have submitted monthly energy balance data recorded by SCADA to the DOE.

The submitted data has been checked by the audit team against the notes taken during on site visit and it was found to be correct. Hence, this issue is closed.

CR 7, changes in the MR or related documents
N/A.
CR 8: Please indicate the SDI parameters (numbers, description) precisely, as outlined in the PDD.
CR 8, means of verification
In response, the PPs have submitted revised monitoring report with the 3 SDI matrix parameters to the DOE. The audit team has checked the submitted MR against the registered GS-VER PDD and it was found to be correct. Hence, this issue is closed.
CR 8, changes in the MR or related documents
The MR has been updated accordingly.
CR 9: Please provide evidence on the calibration and reset of the main meter on 07.03.2008.
CR 9, means of verification
In response, the PPs have provided meter calibration and reset of the meter documents issued by TEIAS that is responsible for it to the DOE for cross-check. The audit team has checked the submitted documents against the notes taken during on site audit and it was found to be correct. Hence, this issue is closed.
CR 9, changes in the MR or related documents
N/A.
CR 10: Please provide evidence on the calibration and reset of the backup meter on 07.03.2008.
CR 10, means of verification
In response, the PPs have provided evidence on the calibration and reset of the main and back up meter to the DOE for cross-check. The audit team has checked the submitted documents against the notes taken during on site audit and it was found to be correct. Hence, this issue is closed.
CR 10, changes in the MR or related documents
N/A.
CR 11: Please comment on the noise issue and check, if the noise levels received at the villages are above critical values.
CR 11, means of verification
In response, the PPs have spot check noise according to the evaluation of environmental noise and management regulation and are recorded lower value than the limits. The audit team has reviewed the report against the evaluation of environmental noise and management regulation and found it is lower than limits. However, Audit team further requested to conduct more study regarding this, please see FAR 2. Hence, this issue is closed at the moment.
CR 11, changes in the MR or related documents
N/A.
FAR 1: A guide on quality management measures regarding the Yuntdag Wind Farm should be prepared and implemented.
FAR 1, means of verification
In response, the PPs have response that it will be improved in line with quality management measures. The audit team has to check this issue in next periodic verification.
FAR 1, changes in the MR or related documents
N/A.



FAR 2: Continuous noise measurements in the surrounding villages by a 3 rd Party may be necessary for clear evidence.
FAR 2, means of verification
The audit team will check this issue in next periodic verification.
FAR 2, changes in the MR or related documents
N/A.

5 VERIFICATION STATEMENT

TÜV SÜD Industrie Service GmbH has performed the Initial and First periodic verification of the GS-VER project: “Yuntdag 42.5MW Wind Power Project” in Turkey. The verification is based on the VER standard and VVM 2008 Gold Standard version 1 requirements.

The management of Innores ElectriK Üretim A. S. is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions on the basis set out within the documents “GS Validation and verification manual for VER projects” and the project’s Monitoring Plan indicated in the GS registered PDD version 03 register date 31-07-2008 and the applied methodology ACM0002, version 06.

The verifier can confirm that:

- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the project is operated as planned and described in the validated and registered project design document;
- that the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- that the monitoring system is in place and generates GHG emission reductions data;
- that the GHG emission reductions are calculated without material misstatements;
- that the monitoring plan in Monitoring Report is as per the registered GS-VER PDD;
- that the monitoring plan in registered GS-VER PDD is as per the applied methodology.

Our opinion refers to the project’s GHG emissions and resulting GHG emission reductions reported both determined due to the valid and registered project’s baseline, its monitoring plan and its associated documents.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period: From 07.03.2008 to 30.04.2009

Verified emissions in the above reporting period:

Emission reductions generated in 2008 (7 March to 31 December 2008): 68,435tCO₂e

Emission reductions generated in 2009 (1 January to 30 April 2009): 26,097tCO₂e

Total:

Baseline emissions: 94,532 t CO₂e

Project emissions: 0 t CO₂e

Leakage emission: 0 t CO₂e

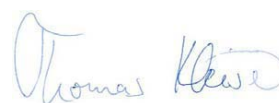
Emission reductions: 94,532 t CO₂e

Munich, 26-11-2009



Zhang Rachel
Certification body “climate and energy”

Munich, 26-11-2009



Thomas Kleiser
Assessment Team Leader



Annex 1: Verification Protocol

Verification Protocol

Project Title: Initial and First periodic verification of “Yuntdağ 42.5 MW
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Yuntdağ 42.5 MW Wind Power Project, Turkey

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1. Project Activity Implementation

1.1. Technology

PDD	Verified Situation	Conclusion
Location (s)		
Description / Address: Yuntdag 42.5 MW Wind Power Project is a renewable energy project. The purpose of this project is to produce electricity from wind power and feed it into the public grid. Address : The project is situated near the villages Yuntdağ, Balaban and Koyuneli, Aliaga province, Izmir region, Turkey. It is around 100 km north of Izmir, Turkey.	Yuntdag Wind PP is situated in Bergama district, approx. 100 km from the city of Izmir, Aegean region. It is near to the villages Koyuneli, Balaban and İsmaili. The wind power plant is spread over an area of 115,515.87 m2.	☒
GPS coordinates of the project site : North 431°02'88" to 431°39'56" East 51°54'31" to 51°70'36" (GPS coordinates were given for all turbines)	The location of the Yuntdağ 42.5 MW Wind Farm project has been identified in a google map. The plant is about 500 m a.s.l.	☒
Technical Equipment – Main Components		
Component 1: Turbines (17 in num-	The Yuntdag 42.5 MW Wind Farm Project consists of 17 wind turbines Nordex N90,	☒

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PDD	Verified Situation	Conclusion
bers) <i>Description</i> Nordex N90, each with capacity of 2.5 MW, (90m diameter and hub height is 80m)	2.5 MW, 90 m diameter, 80 m hub height, each. Notes : Technical Description of Nordex N90/2500 LS and Nordex N90/2500 HS received. Drawings and technical information of transformer produced with Elektro-Bau AG are submitted. During the audit Turbine Number 9 was in service. Aviation warning lights are available. T+G logbook of Turbine units are available. A sample (T+ G No.1) has been submitted to the audit team.	
<i>Component 2 : Wind Farm Sub station</i> <i>Technical Features</i> 34.5 kV underground cable	The substation is in operation.	☒
<i>Component 3 :Transmission line</i> <i>Description:</i> 154 kV (from wind farm to the public grid) <i>Technical Features</i> 34.5 kV underground cable	The electricity generated at the turbine units is transformed to 34.5 kV at the Trafo unit onsite. The 154 kV transmission line of 26 km length connects the electricity to ALOSBI TM station and supplies the electricity to the public grid.	☒
<i>Component 4: Generator (not given)</i> <i>Technical Features</i> (not given)	Each turbine is combined with an integrated generator. The generators have been supplied by Nordex.	☒

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PDD	Verified Situation	Conclusion
Operation Status during verification		
Approvals / Licenses - Electricity production license issued by EMRA - Power Purchase Agreement with the grid operator • Site construction Permissions The initial production license for the project participant Innorees has been issued for on 04 June 2004 by EMRA for an operation period of 30 years.	The plant is operational since 07.03.2008. The licence for electricity production of the Yuntdag Wind PP was issued by EMRA ; licence number EÜ/325-2/457 dated 4th of June, 2004 and is valid until 04 June 2034. The license has been revised on 19.06.2008 by extending the operation period up to 49 years at the same capacity of 42.5 MW. The contract for the usage of the public grid was signed between the grid operator TEIAS and the project participant. As the wind farm is established in rural area out of city centre, the permission for construction received from Ministry of Environment and Forestry. Note : Yuntdag Wind Farm milestones 04.06.2004 : Licence Issuance by EMRA for Innorees Elektrik Üretim Ltd. 11.01.2007 : Purchase of Innorees shares by Dost Enerji 31.12.2007 : Final Approval of the project by Ministry of Energy and Nat. Resources 05.02.2008 : Tests of the first six turbines started 07.03.2008 : Startup Operation with six turbines 18.03.2008 : Validation Report issued by SGS 21.05.2008 : Commissioning of 11 T+G units 04.06.2008 : Startup operation of 11 T+G units, Wind Farm full operational 26.06.2008 : Application to Gold Standard 31.07.2008 : Registration of the project to Gold Standard	☒
Actual Operation Status N/A	Under construction ☐ In operation X	☒

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PDD	Verified Situation	Conclusion
	Out of operation ☐ Reason (when out of operation):	
Remarks to Special Operational Status During the Verification Period	During the audit Turbine Number 9 was in maintenance service.	☒

1.2. Organization

PDD	Verified Situation	Conclusion
Project Participant (s) add additional participants if necessary		
Entity : Innores Elektrik Üretim A.Ş. ("Innores"). Responsible person: Mr. Ruhi Dogusoy	The electricity production licence for Yuntdag 42.5 MW Wind PP has been issued for Innores Elektrik Üretim Ltd on 04 June 2004. Innores is the project participant. Innores was purchased by Dost Enerji in 2007. The related Commercial Gazette is attached. Dost Enerji Üretim Sanayi ve Ticaret A.Ş. has been formed in 2006. Dost Enerji has acquired several licences for renewable energy generation plants.	☒
GS VER Project management: Mr. Ali Ruhi Doğusoy is the representative of the project owner in GS VER Management.	Mr. Ali Ruhi Doğusoy is the responsible manager for GS VER project management. The PDD and the Monitoring Reports are prepared by the project consultant Future-Camp.	☒

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1.3. Quality Management System

PDD	Verified Situation	Conclusion
Quality Management Manual: The project owner does not implement a special QM system (ISO 9001, ISO 14001). manual provided	No defined ISO management system (ISO 9001:2008 ; ISO 14001 etc) established in Innores. But the plant owner implements relevant operational and emergency procedures onsite. An operation and maintenance manual for T + G has been submitted by the supplier Nordex. A SCADA system is defined in Operational and Maintenance Manual of Nordex Clarification Request#3 : Please present the existing QM measures and documentation in a systematic way. External as well internal QM procedures should be implemented and documented.	CR#3
Responsibilities: The responsibilities for the operation and management are defined (section D.4). Plant managers are responsible for the operation and maintenance and monitoring.	An Organisation chart has been submitted. Job descriptions for the Wind Power plant staff are defined.	☒
Qualification and Training: The training will make sure the relevant personnel to master the necessary operation and monitoring knowledge, know well the working principle and the fundamental structure of Wind power generator, understand	Relevant certificates and proves concerning health, safety and environment of the plant staff have been submitted to the audit team:. Certificates of Mr. İsa Alkan (Yuntdağ Wind Farm plant manager), Mr. Nurullah Çelik (Technical Manager Dost Enerji) and of other staff have been presented. There is a separate operating team for T+G units. This team is trained and managed by Nordex. A maintenance and service Agreement has been signed with Nordex Co. on 12th of February, 2007, with a validity of 5 years.	CR#4

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the reasons of common malfunction and the corresponding solving methods, and understand the request of GS-VER on the monitoring system. Project owner will organize professional training periodically to improve the professional skill of the operators	The operation and maintenance of High Voltage units are managed by Güngör Elektrik, an external company. The plant owner has an agreement with Güngör Elektrik, which includes the job description for the HV staff (item 9 of agreement) Clarification Request CR#4 : Please provide more evidence on the training of Nordex staff.	
Implementation of QM-system	The managing staff of the wind power plant has gained intensive training on ISO 9001, as. The management has implemented relevant operational procedures for a reliable plant operation and data management. See also remarks above	☒

1.4 Remaining FARs from previous Verifications (or forwarded issues of validation report)

Remaining Requests from Previous Verifications	Summary of project owner response	Audit team conclusion
Forward action request No. 1 : There are no Forward Action Request (FAR) open issues in the final validation report (18.03.2008, SGS).	No Forward Action Request available, all the issues are closed in validation report	☒

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2. Data Management System

2.1. Description

Structure of raw data archiving				
Describe all the different data collection systems				
Type	Name	Responsible	Procedures	Comments
Manual	Operation measurement sheet and daily meter reading records.	Trained employees from the wind power plants and HV technician	Raw data in hard copy is preserved in metal cupboards and archived onsite the wind farm.	☒
PLC 1	Computer a onsite	plant manager	Company owned lap-top being used by the plant manager, entering only possible with his personal password In Izmir and Istanbul offices reports sent via e-mail, hourly records are stored.	☒
PLC 2	Computer b SCADA system onsite	Nordex, Innores	A SCADA system allows the remote supervision and control of the turbine + generator units. The generated electricity is recorded online and stored at the integrated PC to each T+ G unit. The plant personnel has access to reading the recorded data	☒

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<i>Accounting</i>	<i>Invoice</i>	Innores Management	The invoice for the electricity supplied to the grid is issued by Innores to TEIAS, the purchaser.	☒
<i>Electronically</i>	<i>Computer</i>	TEIAS, INNORES	The generated electricity is read and recorded online by meters maintained and operated by the grid operator TEIAS. The generated electricity is documented in monthly protocols, which are mutually agreed by plant operator and TEIAS.	☒
<i>External data</i>	<i>EFy</i>	Registered GS-VER PDD	N/A	
Key Reporting Risks: See remarks above Risk Classification: See remarks above Further Remarks: See remarks above				

2.2. Raw Data Archiving and Protection measures

Name	Description of data archiving and protection measures	Risks and comments	Concl.
<i>Operation measurement sheet and daily meter reading records</i>	The data recorded manually is transferred to excel files at PC on-site. The soft copies of the records are kept as external backup and at external PCs in the Headquarters.	Clarification Request CR#5 : Please provide evidence on excel spreadsheet right from the operation startup (first and last day of each month)	CR#5

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		within the crediting period).	
<i>Computer a</i>	Measured data of the main and auxiliary meters are recorded manually and transferred in excel files in the PC onsite. The soft copies of the records are kept as external backup and at external PCs in the Headquarters.	Clarification Request CR#6 : Please provide evidence on PC data archiving measures.	CR#6
<i>Computer b</i>	Several parameters important for the performance check (e.g. generated electricity, wind duration, load factor, availability) of the Turbine + Generator unit are online recorded by a SCADA system operational onsite. SCADA is controlled and maintained by NORDEX.	The plant staff of Innorens onsite has only access to read the recorded data. Only Nordex staff is allowed to enter the SCADA system details.	☒
<i>Invoice</i>	The invoices are kept in the headquarters of Innorens / Dost Enerji		☒
<i>Form e</i>	The monthly protocols are kept in PCs onsite and at headquarters of Dost Enerji		☒
Key Reporting Risks: 4 high voltage technicians are responsible for reporting. Daily reporting forms are used to inform TEIAS ALOSBI (TEIAS Aliağa Organize Sanayi Bölgesi, İzmir) about actual capacity. Risk Classification: Low. The raw data is the most important source for accounting. The grid operator is continuously on cross check of the recorded manual data. The reliable operation of meters is also important for the data cross check. The operation is controlled by direct contact between the plant operator staff and TEIAS. This reduces the risk of failures. Further Remarks: There are efforts by the grid operator for online data recording and transfer to TEIAS operation center. A pilot project for its implementation has started in 2009.			☒

2.3. Data transfer

Description of data transfer from raw data archiving to calculation tool			
Name	Description and responsibilities	Risks and comments	Concl.
<i>Form a</i>	The data is recorded manually (several times daily).	see remarks above	☒

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<i>Computer a</i>	The raw data is transferred by the plant manager to a PC.	The data stored at the PC onsite is transferred via email to PCs at the headquarters. There is also an external backup data storage system used on-site.	☒
<i>Computer b</i>	The SCADA system records and transfers the data online to the HQ of turbine supplier.	Clarification Request CR#7: Please provide evidence on monthly energy balance data recorded by the SCADA system, covering the verification period.	CR#7
<i>Invoice</i>	The monthly protocol signed by TEAIS and the plant operator is transferred to PMUM, for final approval. Adjustments on data (transmission losses, etc.) done by PMUM are sent to the plant operator. The invoice is issued monthly by the plant operator upon this finally agreed data.	The invoice data may be lower than the net electricity supplied to the grid.	☒
<i>Form e</i>	The monthly generated and consumed electricity is filled in the monthly protocol. It is mutually agreed and signed by the plant manager and the TEIAS meter reading staff. data is read and recorded onsite by TEIAS monthly and stored in TEIAS facilities		☒
Key Reporting Risks: The consistency of data transfer is checked by the plant operator and TEIAS on a daily basis. Risk Classification: Low. Any inconsistency in data transfer can be identified by various control mechanisms: External cross check by TEIAS (daily, monthly) and internal cross check by plant operator (daily, SCADA). Monthly back ups in Istanbul, systematic back ups in Izmir. Further Remarks: -			☒

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2.4. Data Processing

Description of data processing from transferred data to final results in the calculation tool			
Step	Description	Risks and comments	Concl.
Consistency	Yes, all abbreviations and units are consistent with GS-VER PDD and methodology and traceable to the raw data. The final results are calculated upon the transferred data. This follows the procedures in the methodology.	The data is checked and found to be consistent.	☒
Calculation Tool description	The process of emission reductions calculation has been clearly described in chapter B. B.3 of the monitoring report. The formulae, intermediate steps and constants are in compliance with the methodology and GS-VER PDD. The emission reductions $ER_y = BE_y - PE_y - Ly$. Where, BE_y= Baseline Emissions PE_y= Project Emissions and Ly= Leakages And Project activity emissions are: $PE_y = 0$. The leakage from the project is: $Ly = 0$. The baseline emissions of the Project are given as: $BE_y = GEN_y \times EF_y$ EF_y is the CO2 emission factor of the Turkey in tCO2/MWh. (calculated ex-ante and will not be updated during the first crediting period).	The calculation tool has been checked and found to be correct.	☒

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	EFy= 0.7086tCO₂e/MWh. The EF is consistent with the GS-VER PDD. The net electricity supplied to the Grid has been verified on site. The data is calculated according to the imported to grid and exported to grid.		
Transformation from transferred data to useable data	Raw data (excel spreadsheet prepared by the plant operator), and the internal stored meter data read monthly by the TEIAS staff is transferred to the mutually agreed and signed monthly protocol. This protocol data is useable for the net electricity generation, e.g. for the Emission Reduction calculations (see also chapter 2.1). The monthly protocol data is used by PMUM for adjustments considering the transmission losses. The adjusted data is used then for the invoice issuance.	There is a clear procedure for data transfer and data processing set by TEIAS. This procedure was followed by the involved parties.	☒
Elimination of not plausible data	The data for the fixed crediting period can be used for further processing. Not plausible data didn't exist in the monitoring period. All data are plausible for this monitoring period.	The data out of the crediting period (07.03.2008-30.04.2009) was not considered in the data processing.	☒
Transformation from useable data to input data for further calculation	The monthly protocol data is used by PMUM for adjustments considering the transmission losses. The adjusted data is used then for the invoice issuance which is use a snout data for further calculation	The transmission losses are determined by the grid operator. The project participant has to accept this amount.	☒
Ex-ante data	The Combined Margin Emission Factor EF is determined in the GS-VER PDD which will not be updated during the first crediting period. EFy=0.7086tCO ₂ e/MWh..	EF=0.7068 has been used in emission reduction calculations.	☒
Default parameter	N/A	N/A	☒
Formulae check	All formulae included in the emission reduction calculation sheet are in compliance with the description of chapter B in the monitor-	The formulae are applied according to the methodology.	☒

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	ing report.		
Rounding functions	Rounded down	The rounding is done in a conservative manner. Final check after onsite audit.	☒
Calculation tool changes and protection measures	The CER calculation sheet is protected against unauthorized changes.	N/A	☒
Key Reporting Risks: Process of raw data is the responsibility of TEIAS and plant manager. Procedure is explained in page 8 of Monitoring Report. There is not any control mechanism to check the data on hourly basis. ALOSBI (TEIAS TM operator) checks the data hourly (by telephone). The TEIAS HV grid operation center in İzmir Işıkent gets the hourly voltage values separately. A final control is made on TEIAS monthly protocol. Only plant manager can enter the computer where the data is stored in the wind farm. Risk Classification: Low. Various independent cross check mechanisms reduce the risk of failure. Further Remarks:			☒

2.5. Work Instruction out of protocol Algorithms

Description of data processing from transferred data to final results in the calculation tool			
Step	Description	Risks and comments	Concl.
Methodology formulae	$1 \text{ ERY} = \text{BEy} - \text{PEy} - \text{Ly}$ $2 \text{ BEy} = \text{GENy} * \text{EFy}$		
Describe the use of each formula in the calculation tool	$\text{ER} = \text{GEN} * \text{EFy} \text{ (E4*E$20)}$ $\text{ERY} = \text{BEy}$ Total emission reductions! F18 = sum of F4 to F17 GENy Sum of E4 to E17 from raw data electricity Exported minus imported.		

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	<i>EFy emission factor, E20 from GS-VER PDD</i>		
Report any additional calculation use to obtain values use in the formulae	N/A		
Key Reporting Risks: All data can be cross-checked; mistakes might happen, but can be traced back, evaluated and be deleted Risk Classification: Low, because cross- check is possible. Further Remarks: No further remarks.			

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3. Monitoring Plan Implementation

3.1 List of Parameter to be monitored

ID-PDD	ID-Meth.	ID-Internal	Description	Conclusion
Instrumentation				
GENy	GENy	GENy	GENy, Generated Net Electricity	☒
-				
Sampling				
n/a	n/a	n/a	n/a	☒
Accounting				
Invoice	Invoice	Invoice	Invoice for Generated Net Electricity	☒
-				
External Data <i>insert all components that are coming from external data sources as necessary due to PDD and applied methodology version</i>				
EFy	IEFy	EFy	Baseline emission factor of the grid	☒
Others				
ID1	ID1	ID1	Employment (numbers)	☒
ID2	ID2	ID2	Other pollutants (use of the new roads)	☒
ID3	ID3	ID3	Biodiversity Note : According to the GS-VER PDD, 4 parameters out of the Sustainability Development	CR#8

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ID-PDD	ID-Meth.	ID-Internal	Description	Conclusion
			Indicators (SDI) Matrix are mentioned for monitoring, but 3 of them are identified in the Monitoring Report. As mentioned in GS-VER PDD, there are 3 parameters existing : • Local job creation • Use of the new road • Bird collisions Clarification Request#8 : Please indicate the SDI parameters (numbers, description) precisely, as outlined in the PDD.	

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3.2 Monitoring Instrumentation

3.2.1 Instrument 1

Back to 3.1. List of Parameter to be monitored

PDD	Verified Situation	Conclusion
Instrumentation Information		
ID-PDD: GENy	Electricity meter (main), CIRCUTOR	☑
ID-Internal: GENy		☑
Data to be Measured:	Net electricity supplied to the grid GENy : It is a bidirectional-meter; recording the electricity supplied to the grid and also the electricity imported from the grid.	☑
Data Logging:	Online registration	☑
Archiving of Raw Data:	Storage in the integrated device, back up to 1 month	☑
Measurement Principle:	3 phase 4 quadrant digital meter, with billing upon load profiles	☑
Period of Operating Time:	From 07.03.2008 onwards continuously	☑
Instrument Type:	CIRWATT	☑
Serial Number:	342 724 941	☑
Manufacturer Model Nr.:	402 LT 5A – 29D	☑
Specific Location:	At 154 kV high voltage line	☑
Measurement Range:	Active 0.2s, reactive 0.5	☑
Measurement Unit:	MWh	☑
Calibration:	Clarification Request#9 : Please provide evidence on the calibration and reset of the meter on 07.03.2008.	CR# 9

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Required Calibration Frequency:	10 years	☒
Uncertainty Level:	Calibration documents submitted	☒
Monitoring & Calculation		
Reading Frequency:	hourly	☒
Recording Frequency:	daily and monthly basis	☒
Trouble Shooting:	Responsibility on TEIAS	☒

Inspection Results During Verification			
Operation of Instrumentation	Method of Verification	Verification Results	Conclusion
Measuring Principle: Continuous measurement	The working status of the meter has been inspected.	The energy can be read and recorded.	☒
Installation: As per the GS-VER PDD, the project owner will install the meter.	Checking date of installation and installed by TEIAS	The installed meters are in operation	☒
Functionality: Bidirectional meter	<i>Functionality of the meter has been verified on-site</i>	See the instruction manual	☒
Quality assurance: All the meters are calibrated at least once a year. Calibration records	<i>Meter verification and calibration certificates have been verified during onsite.</i>	Done by TEIAS, grid operator	☒

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of meters are available to the verifier.			
Maintenance: The meter will be maintained by grid company.	<i>The maintenance status has been verified on-site.</i>	Done by TEIAS, grid operator	☒
Key Reporting Risks: The meters are owned and maintained by TEIAS. The validation is done by Circutor, the calibration by TEIAS Risk Classification: Low. The plant operation and data acquisition are controlled frequently by TEIAS (daily). Any failure or malfunction can be detected in a shorter period. Further Remarks:			☒

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3.2.2. Instrument 2

PDD	Verified Situation	Conclusion
Instrumentation Information		
ID-PDD: EG	Electricity meter (backup), CIRCUTOR	☑
ID-Internal: EG		☑
Data to be Measured:	Net electricity supplied to the grid GENy : It is a bidirectional-meter recording the electricity supplied to the grid and also the electricity imported from the grid.	☑
Data Logging:	Online registration	☑
Archiving of Raw Data:	Storage in the integrated device, back up to 1 month	☑
Measurement Principle:	3 phase 4 quadrant digital meter, with billing upon load profiles	☑
Period of Operating Time:	From 07.03.2008 onwards continuously	☑
Instrument Type:	CIRWATT	☑
Serial Number:	342 73 19 03	☑
Manufacturer Model Nr.:	402 – LT5A – 29D	☑
Specific Location:	154 KV high voltage line	☑
Measurement Range:	Active 0.2s, reactive 0.5	☑
Measurement Unit:	MWh	☑
Calibration:	Clarification Request#10 : Please provide evidence on the calibration and reset of backup meter on 07.03.2008.	CR#10

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Required Calibration Frequency:	10 years	☒
Uncertainty Level:	Calibration documents submitted	☒
Monitoring & Calculation		
Reading Frequency:	hourly	☒
Recording Frequency:	daily and monthly basis	☒
Trouble Shooting:	The meters are maintained and operated by TEIAS. They are with the responsibility of TEIAS	☒

Inspection Results During Verification			
Operation of Instrumentation	Method of Verification	Verification Results	Conclusion
Measuring Principle: Continuous measurement	The working status of the meter has been inspected.	The energy can be read and recorded.	☒
Installation: <i>As per the GS-VER PDD, the project owner will install the meter.</i>	Checking date of installation and installed by TEIAS	The installed meters are in operation	☒
Functionality: Bidirectional meter	<i>Functionality of the meter has been verified on-site</i>	See the instruction manual	☒
Quality assurance: All the meters are calibrated at least once a	<i>Meter verification and calibration certificates have been verified during onsite.</i>	Done by TEIAS, grid operator	☒

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year. Calibration records of meters are available to the verifier.			
Maintenance: The meter will be maintained by grid company.	<i>The maintenance status has been verified on-site.</i>	Done by TEIAS, grid operator	☒
Key Reporting Risks: The meters are owned and maintained by TEIAS. The validation is done by Circutor, the calibration by TEIAS Risk Classification: Low. The plant operation and data acquisition are controlled frequently by TEIAS (daily). Any failure or malfunction can be detected and in a shorter period. Further Remarks:			☒

3.3 Sampling Information (not relevant)

3.3.1 Sampling Point i

3.3.2 Sampling Point i

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3.4 Accounting information

Back to 3.1. List of Parameter to be monitored

PDD	Verified Situation	Conclusion
Accounting Information		
ID-PDD:GENy		☑
ID-Internal: Invoice	Invoices of 14 months are available and calculation controlled. (starting from March 2008 till April 2009) No significant deviation between the main meter and the back up meter. Monthly data protocols have been submitted Invoice issued to TEIAS in April 2009 SCADA data has been submitted	☑
Description of Accounted Component:	GENy, Generated Net Electricity	☑
Accounting Unit:	MWh	☑
Quality Assurance Measures / System:	see remarks in chapter 1.3	☑
Account Archived:	The accounts are stored at TEIAS and the project participant (soft- and hard copies).	☑
Account Credible / in Line with PDD:	The calculations are checked. See remarks above	☑
Key Reporting Risks: Documents should be reserved for 2 years after the completion of the crediting period. Risk Classification: Low. The invoices are cross checked both by the supplier (PP) and the buyer (TEIAS). Further Remarks: N/A		☑

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3.5 External Data

PDD	Verified Situation	Conclusion
<i>External Data list all external data components which have been used during the monitoring period; use a separate table for each single component</i>		
ID-PDD:EFy	EFy	☒
ID-Internal:	EFy	☒
Description of Data / Data Refers to:	CO2 emission factor of the Turkish Power Grid	☒
Unit of Data (if appropriate):	tCO2e/MWh	☒
Date of Data Income:	Please see the GS-VER PDD	☒
Source of Data:		☒
Reliability of Data Source:		☒
Is the Data up-to-date?	Yes	☒
Uncertainty Level:	N/A	☒
Key Reporting Risks: None. Risk Classification: N/A Further Remarks: N/A		☒

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3.6 Others

PDD	Verified Situation	Conclusion
Others		
ID-PDD: ID1	Employment (numbers) Job creation Security 1 Mustafa Günelan, Mete Security Co, from Bergama Security 2 Abdullah Özer, from Bergama Security 3 Ali Köycüoğlu, from Bergama Security 4 Halil Göngör, from Bayramcılar Village, 10 km. distance Ali Tilki, from İsmaili Village, transports water to wind farm Mayor Şerif Kutsi transports the employees with minibuses The participants seem to be satisfied with job creation. It's accepted that due to competency requirements only limited recruitment is possible.	☒
ID-Internal: ID1		☒
Description of Component:	As per GS-VER PDD : Number of staff trained, certificated by Innores and Nordex regarding technical and security issues Detailed information on the staff employed by the operator is described in the submitted management documents, Procedures on organisation, job description, staff qualification	☒

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Unit of Component (if appropriate):	-	☒
Date Component:	Date	☒
Source of Component:	The information was included in the management documents presented to the audit team.	☒
Reliability of Source:	Personnel qualification and contracts were certified by official entities.	☒
Up-to-date?	The certificates were updated, where necessary.	☒
Uncertainty Level:	low	☒
Key Reporting Risks: Due to the wind power plant construction and operation, new jobs were created. Further economic activities for local people were generated (water supply, lunch supply to the plant) Risk Classification: Low. A minimum amount of employees are required for the safe operation of the plant, thus creating sustainable job opportunities for local people. Further Remarks:		☒

Back to 3.1. List of Parameter to be monitored

PDD	Verified Situation	Conclusion
Others		
ID-PDD: ID 2	Other Pollutants (use of new roads) Positive effects of the new road. The villagers can utilise the new road. The number of cars driving inside the village is decreased, decreasing noise, traffic accident and security risks	☒
ID-Internal: ID2		☒
Description of Component:	N/A	☒
Unit of Component (if appropriate):	N/A	☒

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Date Component:		☒
Source of Component:		☒
Reliability of Source:		☒
Up-to-date?		☒
Uncertainty Level:		☒
Key Reporting Risks: Risk Classification: Further Remarks:		☒

PDD	Verified Situation	Conclusion
Others		
ID-PDD: ID 3	Biodiversity: According to the GS-VER PDD, The wind farm area is not on the route of the birds. There were no comments from meeting participants on this issue.	☒
ID-Internal: ID3	-	☒
Description of Component:	N/A	☒
Date Component:	N/A	☒
Reliability of Source:	N/A	☒
Up-to-date?	N/A	☒
Key Reporting Risks: N/A Risk Classification: N/A Further Remarks: N/A		☒

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4 Data Verification (not required for initial verification)

4.1 Internal Review

Description and performance of internal review			
	Description	Comments	Concl.
Procedure	The internal verifier/supervisor double checks the collection and recording of the daily electricity data with on-site meter readings in order to avoid manual errors. The GS-VER officer double checks the monthly meter readings and the statistical table of electricity export.	<i>The meter will be read continuously and double checked by the staff. The monthly records are double checked by the Project owner. The description in the GS-VER PDD is in consistency with the situation found on-site.</i>	☒
Documentation	Daily/monthly monitoring records; Sales invoices	All documents have been checked and verified on-site and all data were ok at verification.	☒
Responsibilities	Data verifier	See remarks in chapter 1.3	☒
Key Reporting Risks: N/A Risk Classification: N/A Further Remarks: N/A			

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4.2 Usage of default values

Description and performance of internal review			
	Description	Comments and Results	Concl.
Procedure	The grid emission factor $EF_y = 0.7086$	The emission factor $EF_y=0.7068$ has been used in Emissions Reductions calculations correctly.	☒
Documentation	See GS-VER PDD, Validation Report, MR		☒
Responsibilities	Project Participant, Project Developer		☒
Key Reporting Risks: Risk Classification: Further Remarks:			☒

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4.3 Reproducibility

Description and performance of the assessment			
	Description	Comments and Results	Concl.
Procedure	The SCADA recording data has been used for cross check of the generated electricity.	Note : A final check of SCADA data, manual data, protocol data and invoices data has been done by the audit team.	☒
Key Reporting Risks: Risk Classification: Further Remarks:			☒

4.4 Peculiarities

N/A

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4.5 Reliability and Plausibility

Description of crosschecks and plausibility checks			
	Description	Comments and Results	Concl.
Performance	External check, reliability of meters • TEIAS • SCADA (sample document, Nordex Scada page) • TEIAS ALOSBI • PMUM	See remarks above. Only the licence owner (Innores / Dost Enerji) has a permission to enter the PMUM website and check the data processed by PMUM / TEIAS. The Innores management has provided PMUM data to the audit team. Forward Action Request FAR#1 : A guide on quality management measures regarding the Yuntdağ Wind Farm should be prepared and implemented.	☒ FAR 1
Key Reporting Risks: N/A Risk Classification: Low. Please see FAR 1. Further Remarks: N/A			☒

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4.6 Completeness and Correctness

Description of completeness and correctness			
	Description	Comments and Results	Concl.
Correctness	The presented data covers the verification period mentioned in the monitoring report and all data were cross-checked and verified during on-site audit.	The data is correct.	☒
Completeness	Data covering the whole monitoring period have been provided to the DOE and verified by the same.	The data is complete.	☒
Key Reporting Risks: Risk Classification: Further Remarks:			☒

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5 Additional requirements (not required for initial verification)

Description of additional requirements to be checked			
	Description	Comments and Results	Concl.
		Note : During the public meeting held on 04 June 2009 onsite, the villagers and local representatives raised the issue of noise. According to inhabitants from Balaban and Koyuneli villages, there was a continuous noise coming from the Wind Farm during its operation. This noise can be heard stronger at high wind rates. Clarification Request#11 : Please comment on the noise issue and check, if the noise levels received at the villages is above critical values. Forward Action Request FAR#2: Continuous noise measurements in the surrounding villages by a 3rd party may be necessary for clear evidence.	CR#11 FAR 2
Key Reporting Risks: The issue of noise pollution can be evaluated only when measured data is available.			☒

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Risk Classification: The impact on health of the villagers can be judged in a long periodic monitoring.	
Further Remarks:	

6 Data Reporting (not required for initial verification)

Description of the Monitoring Report		
	Comments and Results	Concl.
Compliance with UNFCCC regulations	The monitoring report seems to be in compliance with the GS-VER regulations. The monitoring period is indicated clearly.	☒
Completeness and Transparency	The monitoring period is indicated in the monitoring report.	☒
Correctness	The data track is complete	☒
Key Reporting Risks: Risk Classification: Further Remarks:		☒

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7 Compilation and Resolutions of CARs, CRs and FARs: Yuntdağ 42.5 MW Wind Power Project, Turkey

Corrective Action Requests by audit team	Summary of project owner response	Audit team conclusion
<u>Corrective Action Request #1 :</u> In response to the Clarification Request#3, excel spreadsheets were submitted to the audit team (correspondence from 26.06.2009). Please indicate relevant titles in the spread sheets in English as to make documents easy to understand in international communication.	Relevant titles in the excel spread sheet has been translated to English for a better communication and provided along this protocol for audit team (please see APEENDIX-1 attached)	☑ The excel spreadsheets with manual records were translated in to English and submitted to the audit team. This makes it possible for international understanding.
<u>Corrective Action Request #2 :</u> Please put the EF=0.7068 explicitly on the top of the last column on the table in chapter B.3.2.2. in the Monitoring Report (pp. 9)	This has been revised. Please see page 9 of MR.	☑ The combined margin emission factor EF=0.7068 is set explicitly in front of the table in chapter B.3.2.2 as to follow the calculation procedure.

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Clarification Requests by audit team	Summary of project owner response	Audit team conclusion
<u>Corrective Action Request #1 :</u> In response to the Clarification Request#3, excel spreadsheets were submitted to the audit team (correspondence from 26.06.2009). Please indicate relevant titles in the spread sheets in English as to make documents easy to understand in international communication.	Relevant titles in the excel spread sheet has been translated to English for a better communication and provided along this protocol for audit team (please see APEENDIX-1 attached)	☒ The excel spreadsheets with manual records were translated in to English and submitted to the audit team. This makes it possible for international understanding.
<u>Corrective Action Request #2 :</u> Please put the EF=0.7068 explicitly on the top of the last column on the table in chapter B.3.2.2. in the Monitoring Report (pp. 9)	This has been revised. Please see page 9 of MR.	☒ The combined margin emission factor EF=0.7068 is set explicitly in front of the table in chapter B.3.2.2 as to follow the calculation procedure.
<u>Clarification Request #1:</u> In response to the Clarification Request#3, excel spreadsheets were submitted not completely to the audit team (correspondence from 26.06.2009). Please give an explanation for the the period March 2008 and April 2008, why the excel sheets have not been delivered to audit team.	Regarding Clarification request#3 all data for daily meter reading records were sent to audit team. However, regarding month March 2008 and April 2008 were not submitted in excel format because these two months data were saved as hard copy. After April 2008, Innore started to transfer data to excel sheet.	☒ The missing excels spreadsheets of March 2008 and April 2008 was submitted as pdf of original hard copy. The data was in compliance with the following months and was considered in cross check calculations.
<u>Clarification Request #2:</u> FutureCamp İklim ve Enerji Şti. signs for the the Monitoring Report (chapter A.8), whereas FutureCamp GmbH signs for the GS VER consultancy (chapter B.2.2).	FutureCamp İklim ve Enerji Ltd. Şti. is recently founded in Turkey as subsidiary company of FuturCamp GmbH. Although they are two separate entities legally, FutureCamp GmbH has control on FutureCamp İklim ve Enerji Ltd. and also the team of both companies works	☒ As expressed in the documents, FutureCamp is project developer and carbon consultant right from the beginning of the Yuntdağ project. The FutureCamp İklim ve Enerji Ltd. is a new company funded in Turkey and signs for

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Clarification Requests by audit team	Summary of project owner response	Audit team conclusion
Is this two separate entity or one, Please clarify.	together on the projects.	the monitoring report of the initial and first periodic verification of Yuntdağ Wind Power Plant project.
Clarification Request CR#3 (chapter 1.3): Please present the existing QM measures and documentation in a systematic way. External as well internal QM procedures should be implemented and documented.	Innores Elektrik Üretim A.Ş (Innores) does not implement any QM system; however Innores has a systematic way of dealing daily works. Organizational chart was submitted to Audit team, which includes job descriptions. This is a general diagram showing how Innores develop management systems. This Management system will be further improved independently from any special QM system.	The presented documents and implemented operational procedures (OP) show a clear approach of the management towards the plant operation and data management. The OP can be followed clearly. But see FAR#1.
Clarification Request CR#4 (chapter 1.3) : Please provide more evidence on the training of Nordex staff.	Innores has a maintenance and service agreement with Nordex which responsible for providing staff in that context and responsible for training of these staff. Training certificates of these staff are provided to Audit team along this document.	☒ Evidence on the training and qualification of the Nordex staff has been presented to the audit team. The team consists of 3 specialists qualified for the maintenance of the wind power plant.
Clarification Request CR#5 (chapter 2.2): Please provide evidence on excel spreadsheet right from the operation startup (first and last day of each month within the crediting period).	Monthly data regarding energy production is submitted to Audit team along this document.	☒ The excel spreadsheets with manual records were submitted to the audit team. The raw data was used for cross check regarding the data consistency.
Clarification Request CR#6 (chapter 2.2) :	After data was read from meters and written down on daily energy production sheet, this	☒

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Clarification Requests by audit team	Summary of project owner response	Audit team conclusion
Please provide evidence on PC data archiving measures.	data transferred to PC and shared with different offices of Innores in Izmir and Istanbul. Daily e-mail sample is provided to Audit team along this document. The PC in WPP is backed up in an external hard disc every week.	The data archiving measures were presented to the audit team. The external backup was checked during the assessment onsite, further data sources from PMUM (TEIAS) website were also made available to the audit team.
Clarification Request CR#7 (chapter 2.3): Please provide evidence on monthly energy balance data recorded by the SCADA system, covering the verification period.	Monthly energy balance data recorded by SCADA system is provided along this document.	☒ The SCADA data with various parameters was made available to the audit team. The generated electricity at the 690 V Generator unit was used for cross check with TEIAS monthly protocol data and the PMUM invoices. The invoice data was found to be 2-4 % lower than the SCADA data, this due to supply from the grid and transmission losses.
Clarification Request CR#8 (chapter 3.1) : Please indicate the SDI parameters (numbers, description) precisely, as outlined in the PDD.	Monitoring report has been amended in this sense.	☒ The 3 SDI Matrix parameters were listed as indicated in the PDD. : Local job creation, use of new road, bird collision. These parameters were explained in chapter C.1 and C.2 extensively. The plant operation is assured by 14 employees; the new road has positive effect on the transport and the village traffic.
Clarification Request CR#9 (chapter 3.2.1) : Please provide evidence on the calibration and	The documents provided by TEİAŞ which is responsible for meters, calibration and reset of	☒ Evidence on the reset of the meters on

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Clarification Requests by audit team	Summary of project owner response	Audit team conclusion
reset of the main meter on 07.03.2008.	the meter have been already provided to Audit team.	07.03.2008 has been provided to the audit team. The calibration test of the meters has been done on 12.12.2007 and documented by TEIAS. The calibration reports by the meter supplier Circutor for main and auxiliary meters were issued on 30.11.2007 and 26.12.2007 respectively.
Clarification Request CR#10 (chapter 3.2.2) : Please provide evidence on the calibration and reset of the backup meter on 07.03.2008.	The documents provided by TEİAŞ which is responsible for meters, calibration and reset of the backup meter have been already provided to Audit team.	☒ Evidence on the reset of the main and backup meters on 07.03.2008 has been provided to the audit team. The calibration test of both meters has been done on 12.12.2007 and documented by TEIAS. The calibration reports by the meter supplier Circutor for main and backup meters were issued on 30.11.2007 and 26.12.2007 respectively.
Clarification Request CR#11 (chapter 5) : Please comment on the noise issue and check, if the noise levels received at the villages are above critical values.	According to the Evaluation of Environmental Noise and Management Regulation, Noise level for Industrial Plant cannot accede 70 dB (A). After commissioning of Yuntdağ WPP, Innore initiated a measuring work on noise	Spot check noise measurements in the surrounding villages done by the Project Participant show lower values than the limits. Continuous noise measurements at the surrounding villages by a 3 rd party may be necessary for clear evidence. See FAR#2.

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Clarification Requests by audit team	Summary of project owner response	Audit team conclusion
	level of Wind Power project, according to this report which is provided along this document, noise level in Koyuneli Village (700 metre away from closest turbine) is 54.3 and in Balaban village is 54.7 dB(A) which is much lower according to the regulations.	
Forward Action Requests by audit team	Summary of project owner response	Audit team conclusion
Forward Action Request FAR#1 : A guide on quality management measures regarding the Yuntdağ Wind Farm should be prepared and implemented.	Yuntdağ Wind Power Project has a management system; this system will be improved in line with quality management measures.	☑ This issue will be checked at the next periodic verification.
Forward Action Request FAR#2: Continuous noise measurements in the surrounding villages by a 3 rd party may be necessary for clear evidence.		☑ This issue will be checked at the next periodic verification.



Annex 2: Information Reference List

Final Report	26-11-2009	Initial and first periodic Verification of the "Yuntdag 42.5MW Wind power Project, Turkey"	Page 1 of 4	 Industrie Service
		Information Reference List		

Ref. No.	Issuance and/or submission date(dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
1	19.05.2006	Consolidated baseline methodology for grid-connected electricity generation from renewable energy sources, ACM 0002, version 06	UNFCCC homepage http://cdm.unfccc.int	
2	12.11.2007	PDD "Yuntdag 42.5 MW Wind Power Project", Version 02	FutureCamp	
3	28.07.2008	PDD "Yuntdag 42.5 MW Wind Power Project", Version 03, registered at Gold Standard	FutureCamp	
4	07.12.2007	Validation Report, initial version	SGS UK Ltd	
5	18.03.2008	Validation Report, final version	SGS UK Ltd	
6	12.05.2009	Monitoring Report v2.1, First Verification : 07/03/2008-30/04/2009	FutureCamp	
7	25.08.2009	Final revised Monitoring Report v2.4, First Verification : 07/03/2008-30/04/2009	FutureCamp	
8	11.01.2007	Registration of Innore from a Ltd to a Holding Company	Turkish Commercial Register Gazette	
9	04.06.2004	Electricity Generation License issued for Innore Elektrik Üretim A.Ş.	EPDK (EMRA) revised on 19.06.2008	
10	16.07.2007	Construction Permits and Land Use Rights for the Wind Plant	Ministry of Environment and Forestry (MoEF)	
11	12.12.2007	Grid connection and usage Agreement	TEIAS	
12	31.12.2007	Final Approval of the Wind Power Plant Project	Ministry of Energy	
13	01.12.2007	Health and Safety Precautions Agreement with 2 specialists during Plant Erection Phase	Innores	
14	2007-2008	Operational Procedures on Emergency Cases, Health and Safety Requirements at the plant	Innores	
15	07.03.2008	Provisional Acceptance of Startup for the first 6 turbine units (corr.15 MW)	Ministry of Energy	

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Ref. No.	Issuance and/or submission date(dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
16	03.08. 2007	Meter Calibration and Product Specification Report on Meters	Circutor	
17	30.11.2007	Technical Description of Cirwatt meters : Specifications and Programming information for electrical and electronic meters in compliance with EPDK requirements	Circutor	
18	12.12.2007	Protocol on Meter Programming and Testing	TEIAS	
19	22.03.2003	Directive on Meter Usage in Electricity Generation Facilities	EPDK (EMRA)	
20	30.11.2007	Test Certificate for Main meter - Calibration Report	Circutor	
21	26.12.2007	Test Certificate for Backup meter - Calibration Report	Circutor	
22	07.03.2008	First Index Registration of Meters at startup	TEIAS	
23	30.04.2009	Manual meter data reading and recording sheets (Logbook with daily manual meter readings and other relevant records: English and turkish)	Innores	
24	15.04.2008 to 15.05.2009	Monthly meter data protocol on generated and consumed energy at the Wind Power Plant : monitoring Period	TEIAS, Innores	
25	15.04.2008 to 15.05.2009	Final monthly meter data issues by PMUM considering the electricity purchased from the grid and grid losses	PMUM, TEIAS	
26	15.04.2008 to 15.05.2009	Monthly invoices issued to TEIAS for the electricity amount supplied to the grid (as fixed in the PMUM data)	Innores	
27	15.04.2008 to 15.05.2009	Monthly invoices issued by TEIAS for the electricity amount supplied from the grid (as fixed in the PMUM data)	TEIAS	
28	26.06.2009	SCADA data records on energy generation at 660 V for each WTG unit	Nordex	
29	12.11.2009	Excel Workbook on calculation of emission reductions	Innores	
30	31.12.2007	Map with turbine coordinates (1/10000)	Innores	
31	03.08.2007	Technical Description N90/2500 LS, N90/2500 HS	Nordex	

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Ref. No.	Issuance and/or submission date(dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
32	03.08.2007	Technical Description N90/2500 LS, N90/2500 HS (turkish)	Nordex	
33	06.03.2007	Service and Maintenance Agreement regarding WTG units	Nordex	
34	01.03.2008	Service and Maintenance Agreement regarding High Voltage units	Güngör Elektrik San. ve Tic. Ltd.	
35	23.11.2007	Erection report for TG unit 1 (No. 80614)	Nordex	
36	03.01.2008	Erection report for TG unit 1 (No. 80620)	Nordex	
37	28.02.2008	Erection report for TG unit 6 (No. 80619)	Nordex	
38	21.05.2008	Erection report for TG unit 6 (No. 80682)	Nordex	
39	From 03-2008 to 04 2009	SCADA Monthly Wind Farm Performance Report (including : Load Factor)	Nordex	
40	From 06-2008 to 05-2009	SCADA Wind Farm Performance Report (Availability, Error logbook)	Nordex	
41	31/12/2007	Approved Single Line Diagram indicating the meters and connections to the ALOSBI 154kV HV transmission line	TEIAS	
42	-	Educational Certificates for Yuntdağ Wind Power Plant staff	Various Universities	
43	-	Training Certificates for Yuntdağ Wind Power Plant staff	Various Entities	
44	26.06.2009	Training certificates of Nordex maintenance staff	Nordex	
45		Logbook samples of the HV Operation Unit (daily: front and back pages)	Innores	
46	24.07.2009	Logbook samples of the HV Operation Unit (english)	Innores	
47	04.06.2009	MoM of the ad-hoc meeting with the surrounding villagers on various issues, e.g. noise, use of new road	Innores	
48	30.04.2009	Interview with villagers on bird collusion aspect linked with the Wind Power Plant	Innores	
49	12.04.2008	Installation Protocol for the 52 kVA Deutz Diesel Generator Set	EMSA	

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Ref. No.	Issuance and/or submission date(dd/mm/yyyy)	Title/Type of Document	Author/Editor/ Issuer	Additional Information (Relevance in CDM Context)
50	25/02/2008	Warranty for 52 kVA Emergency Diesel Gen-Set	EMSA	
51	07.04.2007	Technical Document on the 34.5 kV TM-Station onsite	BEST	
52	25/02/2008	Warranty for 52 kVA Diesel Gen-Set	EMSA	
53	04.06.2009	Participants list	TÜV SÜD	
54	08/04/2009	On-site interviews conducted by TÜV SÜD. Verification Team: Bhai Raja Maharjan TÜV SÜD CMS, GHG Auditor Trainee Dr. Nuri MOL TÜV SÜD Turkey, GHG Auditor Yeşim BAŞAR TÜV SÜD Turkey, Trainee Interviewed People: Emre Samsun Innores A.Ş., Coordinator Nurullah Çelik Innores A.Ş., Technical Manager İsa Alkan Innores A.Ş., Plant Manager Zafer Aslanlı Innores A.Ş., Logistics Manager Faruk Yılmaz Güngör Elektrik Ltd. Farız Taşdan FutureCamp	TÜV SÜD	
55	24.04.2009	Protocol between Plant Operator and TEIAS on the Installation of a device for remote online data reading and recording	TEIAS	