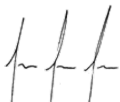




**Verification and certification report form for
CDM project activities
(Version 03.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the project activity	Orosi Wind Power Project 6652
Scale of the project activity	<input checked="" type="checkbox"/> Large-scale <input type="checkbox"/> Small-scale
Version number of the verification and certification report	02
Completion date of the verification and certification report	11/02/2021
Monitoring period number and duration of this monitoring period	Third monitoring period 01/01/2017 – 31/12/2019
Version number of the monitoring report to which this report applies	3.0
Crediting period of the project activity corresponding to this monitoring period	Renewable 15/01/2015 – 14/01/2022
Project participants	Inversiones Eólicas de Orosí Dos, S.A. (IEDO) (Private Entity)
Host Party	Costa Rica
Applied methodologies and standardized baselines	Approved consolidated baseline and monitoring methodology ACM0002 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources. Version 12.3.0
Mandatory sectoral scopes	Sectoral scope: 1 – Energy industries (renewable / non renewable sources)
Conditional sectoral scopes, if applicable	No applicable.
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	79,787 tCO ₂ e per year (239,361 tCO ₂ e for a period of 3 years)
Certified amount of GHG emission reductions or GHG removals for this monitoring period	255,626 tCO ₂ e (3 years)
Name and UNFCCC reference number of the DOE	Colombian Institute for Technical Standards and Certification (ICONTEC) – E-0024
Name, position and signature of the approver of the verification and certification report	 Juan Sebastian Salazar Technical Director

SECTION A. Executive summary

ICONTEC performed the verification of the third monitoring period of the first crediting period, of the registered CDM project: Orosi Wind Power Project in Costa Rica on the basis of UNFCCC criteria contained in Article 12 of the Kyoto Protocol and CDM modalities and procedures according to the Marrakech Agreement, the criteria of the CDM Executive Board and the host country, as well as the operational and technical monitoring criteria specific to this type of project.

The proposed project activity under verification process is based on the consolidated baseline methodology for grid-connected electricity generation from renewable sources ACM0002, version 12.3.0. The Orosí Wind Power Project (the "Project") involves using renewable wind power to provide affordable electrical energy to the Costa Rican grid. The Project is located in Costa Rica, in the community of Quebrada Grande, Municipality of Liberia, in Guanacaste Province.

The main purpose of the Project is to provide electricity to the growing requirement in Costa Rica, using a sustainable and competitive resource: the wind. The Project consists on the installation of 25 wind turbine, with 2 megawatt ("MW") Gamesa series G87s (also known as G9X) wind turbine generators (WTG), for a total capacity of 50 MW. Orosí is expected to provide 226.2 GWh per year to the Instituto Costarricense de Electricidad ("Costa Rican Electricity Institute" or "ICE"), which is the national grid's authority in Costa Rica. The wind energy generated by the Project displace generation required from more carbon intensive plants.

The verification process consisted of the following three phases:

- I. Desk review of the monitoring documentation, registered PDD, validation report, previous verification reports and relevant information (e.g. IPCC reports).
- II. Virtual visit, remote audit and follow-up interviews with project stakeholders
- III. Resolution of outstanding issues and the issuance of the final verification report.

The review of the monitoring documentation, project's documentation, registered PDD, previous validation report at registration stage, validation report post registration change, relevant information and interviews allowed ICONTEC to collect enough evidence to completely assess the verification criteria and determinate that the project has been implemented as planned and as it has been described in the revised PDD version 5 and complied with relevant CDM requirements.

Emission reductions were correctly calculated based on the revised PDD and the monitoring equipment's, the claimed emission reductions are reliably. The monitoring system is in place. ICONTEC can confirm that the GHG emission reductions are calculated without material misstatements.

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Leader auditor	IR	Urrego Ortiz	Erika Lucia	Employee	X	X	X	X
2.	Technical	EI	Gomez	Fernando	Freelance	X	X	X	X

	expert		Gomez					
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B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	EI	Ramirez	Francy	Freelance
2.	Approver	IR	Salazar	Juan Sebastian	Employee

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Human error in the quantification of emissions	Medium	The monitoring data is downloaded directly from the electricity meters located at the energy delivery point to the interconnected electrical system from Costa Rica. This data is used to calculate the emissions reduction. So there is medium potential risk of errors/errors, omissions or misstatements.	To cross check 100% of energy generation stated in emission reduction calculation file CDM_MR_OROSI.xlsx /3/ with the receipts monthly of sales issued by IEDO to ICE /10/ and also with the information available in reports of closed, issued daily by monitoring system of platform schneider electric /11/. It will be reviewed the formulae used in the spreadsheet used for emissions reduction calculation /4/.
2.	Undue reliance on a designed information system, which may lead to Omissions and misstatements in data transfer from raw data into digital Excel ER spreadsheet	Low	Ineffective quality control of data transfer due to unclear QA/QC procedure.	To check the Quality Management procedures and instructive. PP may demonstrate how to transfer data and how this is crosschecked. To conduct interviews with related personnel whether procedure is actually conducted.
3	Calibration delays on monitoring equipment	Low	It is defined a frequency for calibration activities of power meters in the monitoring plan /2/ at least once every year as per the Costa Rican legislation for the energy exchange.	In the audit plan was included the assessment of all calibration certificates (100%).
4	Missing data due to failure of measurement equipment	Low	Main and backup meters are installed at the Pailas substation and the PP has emergency procedures for recovery the data.	Verify if related meters are installed as per monitoring plan. Confirm if emergency procedure is known or has been used by the related personnel via interviews.

5	Realization of the virtual audit, remote visit, and virtual interviews	Medium	Due to the worldwide declaration of a pandemic by COVID-19 and in compliance with the guideline of the Meeting report CDM Executive Board 108th, ICONTEC will apply alternative measures of verification.	Icontec will carry out the audit by Microsoft teams with availability of video in real time to carry out the interviews, for on-site visits could be use a video call. Additionally, during the interviews, documents can be shared in real time with the option of screen sharing or via email.
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C.2. Consideration of materiality in conducting the verification

A risk assessment was undertaken by the verification team by means of virtual visit and document review.

In order to assess possible material misstatements, it was established a threshold based on the provisions stated in the VVS/UN3/ paragraph 326 (c), 2 per cent of the emission reductions, for this project activity:

$$255,626 \text{ tCO}_2\text{e} / 3 \text{ year} = 85,207^1 \times 2\% = 1,704.14$$

The audit team checked all information provided in the ER spreadsheet /3/ and its sources in order to find possible material misstatements, hence, no sampling plan was required in the monitoring plan. The verification team is able to confirm that all material misstatements were properly conducted and the required corrections were performed by the PP on the version 3.0 of the MR, therefore, the audit team can confirm that a reasonable level of assurance was achieved.

SECTION D. Means of verification

D.1. Desk/document review

The verification of the project documentation provided by the project proponent is based upon both quantitative and qualitative information on emission reductions. Quantitative information comprises the reported figures in the PDD and MR submitted together with this report. Qualitative information comprises information on internal management controls, calculation procedures, and actions for transferring of data, frequency of emission reports, and review and internal audit of calculations.

Main documents provided by the project proponent reviewed during the desk review stage were:

- PDD Orosí wind power project version 5, dated on 25/01/2021 with track changes and clean /1/
- Monitoring report Orosí wind power project as submitted to UNFCCC, version 01, dated on 04/12/2020 /2/
- Emission reduction calculation file CDM_MR_OROSI.xlsx /3/

In addition to the monitoring documentation provided by the project proponent, ICONTEC reviewed:

- Registered PDD Orosí wind power project version 4, dated on 15/09/2014 /1/
- Validation Report issued by TÜV NORD CERT GmbH, Report N°: 8621 – 12/028, dated on 10/10/2012. /4/
- Previous verification and certification report Orosí Wind power project, second monitoring period (07/09/2015 to 31/12/2016) /5/.
- Previous monitoring report Orosí wind power project version 1.0, dated 06/04/2017 /6/

¹ This is the value of estimated emission reduction per year.

- Consolidated baseline methodology for grid-connected electricity generation from renewable sources ACM0002, version 12.3.0/UN1/
- Tool to calculate the emission factor for an electricity system, version 07.0/UN2/
- CDM validation and verification standard for project activities, version 02.0 /UN3/
- CDM project standard for project activities, version 02.0 /UN4/
- CDM project cycle procedure for project activities, version 02.0 /UN5/
- Monitoring report form for CDM project activity, version 07.0 /UN6/Guideline Application of materiality in verifications, version 02.0 /7/

A compilation of the documents related to the verification activities has been included on Appendix 3.

D.2. On-site inspection

According to the restrictions caused by COVID-19, on the Meeting report CDM Executive Board 108th, was extend the period in which designated operational entities (DOEs) may apply alternative measures of validation/verification to mandatory on-site inspections until 30 June 2021. For this reason, the validation of PRC and verification were conducted without on-site inspection.

A virtual visit and audit remote were carried out between 13/01/2021 to 14/01/2021 as part of the verification audit for the third monitoring period (01/01/2017 to 31/12/2019) where the following activities were performed:

Duration of on-site inspection: 13/01/2021 to 14/01/2021				
No.	Activity performed on-site	Site location	Date	Team member
1.	Description of the nature of the project, its implementation and its operation.	Audit remote on Project's site	13/01/2021	Erika Urrego Fernando Gomez
2	Virtual tour by the project's facility, include the interconnection point of the project activity.			
3	Compliance of monitoring activities with the registered monitoring plan			
4	Review of project design document: updating relevant sections, using latest valid version of the PDD form for the revised PDD.			
5	Compliance of the registered monitoring plan with the methodologies including applicable tools.			
6	Compliance of the monitoring report with the monitoring report form.		14/01/2021	
7	Monitoring Plan and description of the permanent change to the registered monitoring plan.			
8	Compliance of the project implementation and operation with the registered PDD			
9	Assessment of data and calculation of emission reductions			

All the activities of the previous plan were carried out through a remote audit by the Microsoft teams platform, a virtual interview was held with those responsible for capturing the information, reviewing documents, videos /13/ and photos of the infrastructure and equipment, time real online. These means of auditing were sufficient to cover the purposes of the verification.

D.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Castro	Sofía	CDM Consultant	13 to 14 /01/2021	Description of the nature of the project, its implementation and its operation. Virtual tour by the project's facility, include the interconnection point of the project activity. Compliance of monitoring activities with the registered monitoring plan Review of project design document: updating relevant sections, using latest valid version of the PDD form for the revised PDD. Compliance of the registered monitoring plan with the methodologies including applicable tools. Compliance of the monitoring report with the monitoring report form. Monitoring Plan and description of the permanent change to the registered monitoring plan. Compliance of the project implementation and operation with the registered PDD Assessment of data and calculation of emission reductions	Erika Urrego Fernando Gomez
2.	García	Steven	Planning and Reliability Analyst			
3.	Nino	Luis	Operations coordinator			
4.	Alvarado	Josh	Plant manager			

D.4. Sampling approach

ICONTEC checked 100% of project's information hence, no sampling approach was required.

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	CL 02		
Compliance of the project implementation and operation with the registered PDD			
Post-registration changes			
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines			

Compliance of monitoring activities with the registered monitoring plan	CL 03 CL 04 CL 05	CAR 01	
Compliance with the calibration frequency requirements for measuring instruments	CL 01 CL 06		
Assessment of data and calculation of emission reductions or net removals			
Assessment of reported sustainable development co-benefits			
Global stakeholder consultation			
Others (please specify)			
Total	06	01	

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	<p>The monitoring report for third monitoring period (01/01/2017 to 31/12/2019) version 1.0, dated 04/12/2020 was publicly available on 14/12/2020, prior to the start of the verification activities. No comments were received.</p> <p>During this stage the information of monitoring report version 1 was compare with Monitoring report form for CDM project activity (Version 07.0), to confirm that the information was according with the fulfilment's instructions.</p> <p>During the verification, mistakes and clarifications were identified. The PP conducted the requested corrections on the latest version 3.0 of the MR /2/. It can be confirmed that the monitoring report is complete, transparent and in accordance with the approved PDD, relevant CDM requirements and applicable monitoring report from. ICONTEC confirms that the MR version 3.0 is free of material misstatements</p>
Findings	<p>CL 02 was identified because the monitoring report had text in Spanish, non-fulfillment of the instructions for completion.</p> <p>Please see Appendix 4 for more details.</p>
Conclusion	<p>After the PP sent the MR version 3, dated 09/02/2021, with attention to the findings, ICONTEC was able to conclude that the monitoring report meets the requirements of the CDM-MR-FORM version 07.0 and the information.</p>

E.2. Remaining forward action requests from validation and/or previous verifications

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Not applicable.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	<p>At the time of the desk review, the audit team assessed the implementation of the project reported on MR version 1.0, against the one established on the registered PDD. No inconsistencies were found.</p> <p>During the virtual visit, the implementation status and monitoring plan reported on MR version 1.0 were compared with the virtual evidence (Videos on site sent by the PP for purpose of the audit /13/), one-line diagram /24/ and virtual interviews. No inconsistencies were found.</p> <p>All phases of implementation, progress, and operation's starting has been concluded according to the registered PDD /1/.</p>
Findings	No finding was raised regarding to this issue.
Conclusion	The audit team can confirm that:

	<ul style="list-style-type: none"> - The post registration change /9/ request by the PP does not affect the compliance of the project implementation. - The project is 100% implemented and has no pending activities to be executed in accordance with the provisions of the revised and registered PDD /1/. - The implementation of the project is consistent with the information provided in the revised and approved PDD (Physical features such as technology project equipment, monitoring and metering equipment). - The project is operated as per the revised and approved PDD /1/. - Information provided in the MR is in accordance with that stated in the revised PDD /1/.
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E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents²

No temporary deviations have been approved by the Board for this monitoring period or will be submitted with the request for issuance.

E.4.2. Corrections

During the virtual audit for the verification stage, section D.1 data and parameters fixed ex-ante of the monitoring report version 1.0 of 04/12/2020 / 2 / was compared with PDD version 4, section B.6.2 Data and parameters fixed ex ante, and it was found that in this section of the PDD the parameters used to calculate the emission factor were found, but the emission factor EF_{grid} , CM, 2008, 2009, 2010 was not found. As it is a fixed parameter for the entire crediting period, ICONTEC asked the PP to include EF_{grid} , CM, 2008, 2009, 2010, value applied: 0.3528, in section B.6.2 of the revised PDD.

ICONTEC identified CL 4, requesting the PP to include in section B.6.2 the data and parameters established ex ante of the revised PDD, the parameter fixed ex-ante EF_{grid} , CM, 2008, 2009, 2010.

Please see Appendix 4 of validation report for post-registration changes for CDM project activities for more details /9/.

The PP sent the revised PDD version 5, dated 25/01/2021, with attention to the finding, ICONTEC verified that the correction in the new version of the PDD is a faithful reflection of the real information of the project and that includes the parameter in Section B .6.2 of the revised PDD is correct and is in accordance with the applied methodology, the registered monitoring plan and the other applied methodological normative documents.

E.4.3. Changes to the start date of the crediting period

The project participant did not change the start date of the crediting period during the current monitoring period.

However it is worth to drawn attention in the fact that in February 17th/2015 (effective approval date), the CDM executive board approved a change in the start date of the crediting period with the code PRC-6652-001, as the audit team verified by means of searching in the UNFCCC Website³

² Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied(selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

³ <http://cdm.unfccc.int/PRCContainer/finalized>

E.4.4. Inclusion of a monitoring plan

There is not inclusion of a monitoring plan to the registered project activity has been approved by the Board during this monitoring period or is to be submitted with the request for issuance

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

There is a permanent change from the registered monitoring plan and it is submitted with this request for issuance. The explanation of the change is described below:

The original monitoring system, as defined in the last validated PDD/1/, and applied from October 2nd, 2015 until April 30th, 2017, consisted in measure the energy delivered by Orosi power plant to the national grid $EG_{facility,y}$ at Pailas substation through the dedicated transmission line Orosí – Pailas.

As defined in the PRC requested, in May 1st 2017 two new power plants, called Vientos de la Perla Wind Project and Vientos de Miramar Wind Project were connected to the Orosi Substation, such that the three power plants share the transmission line “Orosí – Pailas” in order to deliver their energy production to the national grid at Pailas Substation.

Under this condition it is not possible to continue measuring $EG_{facility,y}$ directly at the end of the transmission line Orosi-Pailas at Substation Pailas.

A new procedure for obtaining $EG_{facility,y}$ was established by the PP, consisting in the application of the following approach:

$EG_{facility,y} = M_{O,y} - ((M_{OT,y} - M_{P,y}) M_{O,y} / M_{OT,y})$, where:

$M_{O,y}$ = Quantity of gross electricity generation that is produced by Orosí Project in year y and is measured at the Orosi Substation (MWh/yr).

$M_{OT,y}$ = Quantity of total gross electricity generation that is produced by all plants connected to the Orosi substation, in year y (MWh/yr)

$M_{P,y}$ = Quantity of net electricity generation that is produced by all plants (Orosí, Vientos de la Perla and Vientos de Miramar power plants) and fed into the grid in year y as measured at the Las Pailas substation (MWh/yr).

Under this approach, $EG_{facility,y}$ is obtained by subtracting the transmission losses proportionally to the energy delivered by each power plant at the commence of the transmission line, where $(M_{OT,y} - M_{P,y})$ are the total losses and $M_{O,y} / M_{OT,y}$ is the proportion corresponding to Orosí power plant.

The procedure of measure established that Orosí project have two bi-directional meters (main and backup), described as M_O , installed at the Orosí substation (high voltage bus). This meter is used to measure gross electricity generated by the Plant.

Another pair of meters (main and backup), described as M_{OT} , are installed also in the Orosí Substation that measure the total incoming energy from all the plants delivering to the substation.

The Metering Point used for billing purposes is located in Las Pailas Substation (ST Las Pailas), property of ICE, where another pair of meters, main and a back-up were installed (M_P). These meters measure the total net energy coming from the Orosi Substation. The energy loses in the transmission line between the two substations will be distributed proportionally according to the energy delivered by each power plant as measured at the Orosi substation.

ICONTEC verified this change by comparison of the power purchase contract No. 2013000037 signed between Instituto Costarricense de Electricidad – ICE (On English Costa Rican Electricity Institute – ICE) and Inversiones Eólicas de Orosí Dos, S.A. (IEDO) on August 1st, 2013 /7/ with the addendum No.4 /8/ to the same contract where was added the connection of the new plants and the procedure to measure the energy of each one.

In the view of the DOE, this is the right way to obtain $EG_{\text{facility},y}$ under the new situation. By the way, the DOE confirmed that, in fact, this is the approach defined in the PPA signed jointly by Orosí and ICE /7/, /8/.

ICONTEC confirm that this change does not produce increase in emission reductions or affects the calculations of the reduction of emissions estimated in the previous PDD /1/.

This change was described by the PP in the monitoring report version 3.0, dated 09/02/2021 /2/.

It was identified the CL 2 and CL 3.

CL 2 was requested to PP clarified information about the meter main used to $EG_{\text{facility},y}$, and the parameters M_O , M_{OT} and CL 3 because on section Section B.7.3 Other elements of monitoring plan, it is not clear the use of the expression “each plant in year y”.

Please see Appendix 4 of validation report for post-registration changes for CDM project activities for more details /9/.

ICONTEC deems that the proposed approach to obtain $EG_{\text{facility},y}$ is in compliance with the applied methodology, and do not reduce the level of accuracy of the monitoring. In fact, assigning the electrical losses to each plant sharing the transmission line proportionally to its energy production, it is technically equivalent to the transmission losses occurring when the transmission line is dedicated only to each plant.

After the PP sent the revised PDD version 5, dated 25/01/2021 /1/, with attention to the findings, ICONTEC was able to conclude that the permanent change on the registered monitoring plan is in compliance with the applied methodology and the other applied methodological normative documents. Also, with the relevant requirements in the CDM project standard for project activities /UN4/.

This change on the registered monitoring plan do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan and neither a reduction in the accuracy of the calculation of GHG emission reductions, because the electric meters comply with the regulations Costa Rica that established the precision rating of +/- 0.2% and at least 0.2 class

Permanent changes to the Monitoring plan involved in this Verification Report have not yet approved by the Board; they are seeking for approve by the Board, through Validation report for post-registration changes for CDM project activities Orosí Wind Power Project version 02, dated 11/02/2021.

E.4.6. Changes to the project design

There are no proposed or actual changes to the project design of the registered CDM project activity reported of identified during the current monitoring period.

E.4.7. Changes specific to afforestation and reforestation project activities

Not applicable.

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	<p>During the desk review phase, it was checked the monitoring plan against the monitoring methodology ACM0002, version 12.3.0./UN1/</p> <p>ICONTEC declares that the registered monitoring plan is in accordance with the approved methodology ACM0002, version 12.3.0 and the registered PDD version 4 and revised PDD version 5 /1/.</p>
Findings	No finding was raised on this issue.
Conclusion	According to the registered PDD version 4 and revised PDD version 5 /1/, the CDM project activity Orosi Wind Power Project was monitored following the guidelines of the approved consolidated baseline methodology for grid-connected electricity generation from renewable sources, ACM 0002 version 12.3.0.

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	<p>The monitoring parameters related to the GHG emission reductions in the project activity have been implemented in accordance with the monitoring plan contained in the registered PDD version 4 and revised PDD version 5 /1/.</p> <p>This compliance was verified through a comparison between data and parameters fixed ex ante, as defined in the Monitoring plan of the PDD /1/ Section B.6.2, with those presented in the MR /2/, Section D.1.</p> <p>Parameter $EF_{grid, CM}$, 2008, 2009, 2010, included in Table Section D.1 of the MR, value applied 0.3528, corresponds to Grid Emission Factor calculated in the registered PDD. The other parameters included in Table Section D.1 of the MR, i.e.: $NCV_{i,y}$, $EF_{CO2,i,y}$, $FC_{i,m,y}$, $EG_{m,y}$, $\eta_{m,y}$, are those used in the PDD in order to calculate $EF_{grid, CM}$. Given that $EF_{grid, CM}$ was defined to be fixed for the whole first crediting period, the DOE deems it is not necessary to monitor the factors used to calculate $EF_{grid, CM}$ at validation stage.</p>
Findings	Nevertheless, a simple idiom correction was required, regarding parameter $NCV_{i,y}$, CL 02.
Conclusion	<p>Data and parameters fixed ex ante, as defined in the Monitoring plan of the PDD, are the same as those presented in the MR. Likewise, values used in the MR and applied in ER spread sheets for the current monitoring period were the same defined in the registered PDD.</p> <p>After the PP sent the MR version 3, dated 09/02/2021, with attention to the finding, ICONTEC can conclude that parameters fixed ex ante, being all of them related to the Emission Factor of the national electric interconnected of Costa Rica are appropriate and they were correctly used in ER calculations in the monitoring report version 3.0 and it results in a traceable estimate of the emission reductions.</p>

E.6.2. Data and parameters monitored

Means of verification	<p>The following table includes all parameters monitored and describes how ICONTEC verified the fulfilment of each parameter with the registered monitoring plan, including the information flow and the values as reported in the MR, associated to the PRC described in Section E.4.5 above.</p> <table border="1"> <tr> <th colspan="2">Monitored Parameters</th></tr> <tr> <td>Monitored Parameter</td><td>$EG_{facility,y}$ from 01/01/2017 until 30/04/2017</td></tr> <tr> <td>Description</td><td>Quantity of net electricity generation supplied by the project plant/unit to the grid in period y</td></tr> <tr> <td>Value</td><td>January to April 2017: 89,470.4 MWh (4 months)</td></tr> </table>	Monitored Parameters		Monitored Parameter	$EG_{facility,y}$ from 01/01/2017 until 30/04/2017	Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in period y	Value	January to April 2017: 89,470.4 MWh (4 months)
Monitored Parameters									
Monitored Parameter	$EG_{facility,y}$ from 01/01/2017 until 30/04/2017								
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in period y								
Value	January to April 2017: 89,470.4 MWh (4 months)								

	Means of Verification	<p>Source of Data and Frequency:</p> <p>Data for calculating $EG_{\text{facility},y}$ comes from meters installed at the interconnection point in substation Pailas, named “Revenue Meters”. Energy flows (exports, from Orosi to Pailas, and imports, from Pailas to Orosi) are daily measured, transmitted and registered on the SCADA system housed in the control center of Orosi Wind Power Plant, as verified by the audit team.</p> <p>Used Equipment:</p> <p>Bidirectional Meters installed at substation Pailas, named “Revenue Meters, as depicted in Figure 2, Monitoring Report, are:</p> <p>Main meter: Model: ION 7650, Serial Number: MJ-1402A922-04 Back up meter: Model: ION 7650, Serial Number: MJ-1402A920-04.</p> <p>Verification of this equipment is given in Section E.7 below.</p> <p>Data Cross Checking:</p> <p>The PP have cross checked separately, on daily bases, the energy exported /11/ and the energy imported /12/, obtained from the meters, with the respective invoices /10/. This process is agree with Monitoring plan specifications.</p> <p>The DOE verified these crosschecking processes directly on the spreadsheet./3/.</p> <p>It was identified the CL 03. See appendix 4 for more details.</p> <p>As conclusion, the audit team found that the data reported is adequate, reliable and credible.</p> <p>Consistency Between the QA/QC defined in the Methodology:</p> <p>In accordance with the applied methodology /UN1/ Section III the QA/QC for this parameter consists of: “Cross check measurement results with records for sold electricity” as it was described above, this requirement is fulfilled.</p> <p>Consistency Between the QA/QC Established by the Project Participants in the PDD:</p> <p>In section B.7.1 of the PDD /2/ the QA/QC for this parameter consists of periodical calibration activities executed by ICE. The information regarding to calibration activities for this electricity measurement system related with energy produced and exported to Costa Rican electrical grid is described in Section E.7 on this report.</p> <p>Likewise, the QA/QC also has the crosschecked with the receipts of energy sales /12/, as it was described above, this requirement is fulfilled.</p>
	Monitored Parameter	$EG_{\text{facility},y}$ from 01/05/2017 – 31/12/2019

	Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in period y
	Value	May to December 2017: 109,142.4 MWh Year 2018: 262,443.9 MWh Year 2019: 263,988.2 MWh
	Means of Verification	<p>Source of Data and Frequency:</p> <p>Data for calculating $EG_{\text{facility},y}$ comes from meters installed at the interconnection point in substation Pailas, named "Revenue Meters" and meters installed in substation Orosi, following the approach proposed by the PP in the PRC requested jointly, as described in Section E.4.5 above.</p> <p>Energy flows (M_{OT}, total gross output from substation Orosi to substation Pailas; M_P, total input in substation Pailas coming from substation Orosi; M_O, gross output from Orosi power plant solely) are continuously measured, transmitted and registered, the corresponding to OROSI on the SCADA system housed in the control centre of Orosi Wind Power Plant, as verified by the audit team.</p> <p>Used Equipment:</p> <p>Bidirectional Meters installed at substations Orosi and substation Pailas, as depicted in Figure 3, Monitoring Report, are:</p> <p>M_{OT}: Main meter: Model: ION 7650, Serial Number: MJ-1604A326-05 Back up meter: Model: ION 7650, Serial Number: MJ-1604A325-05.</p> <p>M_O: Main meter: Model: ION 7650, Serial Number: MJ-1604A324-05 Back up meter: Model: ION 7650, Serial Number: MJ-1604A323-05.</p> <p>M_P: Main meter: Model: ION 7650, Serial Number: MJ-1402A922-04 22-04-2015 Back up meter: Model: ION 7650, Serial Number: MJ-1402A920-04 22-04-2015</p> <p>Verification of this equipment is given in Section E.7 below</p> <p>Data Cross Checking:</p> <p>The PP have cross checked separately, on monthly bases, the energy exported /10/ and the energy imported /12/, obtained by applying the formula</p> $EG_{\text{facility},y} = M_{O,y} - ((M_{OT,y} - M_{P,y}) M_{O,y} / M_{OT,y}),$ <p>where the parameters of the formula are obtained from the meters, with the respective invoices. This process is agreed with Monitoring plan adjusted in the PRC to be approved.</p> <p>ICONTEC identified the CAR 01, during the crosschecking processes, the information was clarified by the PP on the spreadsheet version 3/3/.</p> <p>ICONTEC identified the CL 4 because the 2019 raw energy consumption data for the project was not available. The PP explained that the hard disk of the computer where the SCADA was located failed and for this reason, it used the raw data sent by ICE obtained directly from the electricity meter. /12/. It is important to clarify that the SCADA data was crosscheck with</p>

the ICE invoices /12/. ICONTEC reviewed the report ION Commercial Measurement Software Event Sept and Oct 2019 /14/, issued November 5, 2019 where was indicated the replacement of the hard disk of PC. See spreadsheet CDM_MR_OROSI v3.xlsx, sheet Orosi. See appendix 4 for more details.

Consistency Between the QA/QC defined in the Methodology:

In accordance with the applied methodology /UN1/ Section III the QA/QC for this parameter consists of: “Cross check measurement results with records for sold electricity” as it was described above, this requirement is fulfilled.

Consistency Between the QA/QC Established by the Project Participants in the PDD:

In section B.7.1 of the PDD /2/ the QA/QC for this parameter consists of periodical calibration activities executed by ICE. The information regarding calibration activities for this electricity measurement system related with energy produced and exported to Costa Rican electrical grid is described in Section E.7 on this report.

Likewise, the QA/QC also has the crosschecked with the receipts of energy sales /12/, as it was described above, this requirement is fulfilled.

Monitored Parameter	Mo,y
Description	Quantity of gross electricity generation that is produced by Orosi plant in year y and is measured at the Orosi Substation.
Value	109,447.8 (2017) + 263,098.3 (2018) + 264,673.7 (2019)
Means of Verification	<p>Source of Data and Frequency:</p> <p>Data for Mo,y comes directly from meters Mo, is measured daily.</p> <p>Used Equipment:</p> <p>Main meter: Model: ION 7650, Serial Number: MJ-1604A324-05 Back up meter: Model: ION 7650, Serial Number: MJ-1604A323-05.</p> <p>Verification of this equipment is given in Section E.7 below</p> <p>Data Cross Checking:</p> <p>This parameter has been cross checked according to the procedures defined in the Monitoring plan of the revised PDD. /1/.</p> <p>Consistency Between the QA/QC defined in the Methodology:</p> <p>In accordance with the applied methodology /UN1/ Section III</p>

		<p>the QA/QC for this parameter consists of: “<i>Cross check measurement results with records for sold electricity</i>” as it was described above, this requirement is fulfilled.</p> <p>Consistency Between the QA/QC Established by the Project Participants in the PDD:</p> <p>In section B.7.1 of the PDD /2/ the QA/QC for this parameter consists of periodical calibration activities executed by ICE. The information regarding calibration activities for this electricity measurement system related with energy produced and exported to Costa Rican electrical grid is described in Section E.7 on this report.</p> <p>Likewise, the QA/QC also has the crosschecked with the receipts of energy sales /12/, as it was described above, this requirement is fulfilled.</p>
	Monitored Parameter	M_{OT,y}
	Description	Quantity of total gross electricity generation that is produced by all plants connected to the Orosi substation.
	Value	199,006.7 (2017) + 479,546 (2018) + 469,549.5 (2019)
	Means of Verification	<p>Source of Data and Frequency:</p> <p>Data for M_{OT,y} comes directly from meters M_{OT}, is measured daily.</p> <p>Used Equipment:</p> <p>Main meter: Model: ION 7650, Serial Number: MJ-1604A326-05 Back up meter: Model: ION 7650, Serial Number: MJ-1604A325-05.</p> <p>Data Cross Checking:</p> <p>This parameter has been cross checked according to the procedures defined in the Monitoring plan of the revised PDD. /1/.</p> <p>ICONTEC identified the CL 5 for difference of the value of MT for January and September 2019 between the figure reported on CDM_MR_OROSI.xlsx and raw data. The PP made the correction of the data on spreadsheet version 3.</p> <p>Consistency Between the QA/QC defined in the Methodology:</p> <p>In accordance with the applied methodology /UN1/ Section III the QA/QC for this parameter consists of: “<i>Cross check measurement results with records for sold electricity</i>” as it was described above, this requirement is fulfilled.</p> <p>Consistency Between the QA/QC Established by the Project Participants in the PDD:</p> <p>In section B.7.1 of the PDD /2/ the QA/QC for this parameter</p>

		<p>consists of periodical calibration activities executed by ICE. The information regarding calibration activities for this electricity measurement system related with energy produced and exported to Costa Rican electrical grid is described in Section E.7 on this report.</p> <p>Likewise, the QA/QC also has the crosschecked with the receipts of energy sales /12/, as it was described above, this requirement is fulfilled.</p>
	Monitored Parameter	M_{P,y}
	Description	Quantity of net electricity generation that is produced by all plants and fed into the grid in year y as measured at the Las Pailas substation.
	Value	198,451.8 (2017) + 478,354.6 (2018) + 468,333.7 (2019)
	Means of Verification	<p>Source of Data and Frequency:</p> <p>Data for M_{P,y} comes directly from meters M_P, is measured daily.</p> <p>Used Equipment:</p> <p>Main meter: Model: ION 7650, Serial Number: MJ-1402A922-04 22-04-2015</p> <p>Back up meter: Model: ION 7650, Serial Number: MJ-1402A920-04 22-04-2015</p> <p>Verification of this equipment is given in Section E.7 below</p> <p>Data Cross Checking:</p> <p>This parameter has been cross checked according to the procedures defined in the Monitoring plan of the revised PDD. /1/.</p> <p>Consistency Between the QA/QC defined in the Methodology:</p> <p>In accordance with the applied methodology /UN1/ Section III the QA/QC for this parameter consists of: “<i>Cross check measurement results with records for sold electricity</i>” as it was described above, this requirement is fulfilled.</p> <p>Consistency Between the QA/QC Established by the Project Participants in the PDD:</p> <p>In section B.7.1 of the PDD /2/ the QA/QC for this parameter consists of periodical calibration activities executed by ICE. The information regarding calibration activities for this electricity measurement system related with energy produced and exported to Costa Rican electrical grid is described in Section E.7 on this report.</p> <p>Likewise, the QA/QC also has the crosschecked with the receipts of energy sales /12/, as it was described above, this requirement is fulfilled.</p>

Findings	CL 03, CL 04, CL 05 and CAR 01, were identified during the verification, please see appendix 4 for more details.
Conclusion	<p>After the PP sent the monitoring report version 3, dated 09/02/2021 and CDM_MR_OROSI v3.xlsx, with attention to the findings, ICONTEC could verify the completeness and integrity of the data used by the project proponents for the emission reductions calculations.</p> <p>During the verification, ICONTEC was able to verify that the parameters are properly measured according to the monitoring plan and the revised PDD, and that the information is consistent with the secondary information sources used to verify the information.</p> <p>ICONTEC can conclude that the data aggregation is appropriate to comply with the methodology and in accordance to PDD/common practice/operation of metering equipment.</p> <p>As a general cross check of the data, ICONTEC verified the backup system /11/ of the company and cross checked the information of the ERs spreadsheet /3/ with the backup files, which include the raw data information generated by SCADA system.</p> <p>In conclusion the process of data management, transfer, storage and reporting was carried out in compliance with the monitoring plan, the revised PDD /1/ and the applied methodology /UN1/.</p> <p>ICONTEC can thus conclude that:</p> <p>The monitoring has been carried out in accordance with the monitoring plan contained in the revised PDD /1/.</p> <p>The parameters stated in the monitoring plan of the revised PDD have been correctly and sufficiently monitored and listed. The monitored data for required parameters have been verified by ICONTEC and have been found complete, reliable and consistent.</p>

E.6.3. Implementation of sampling plan

Means of verification	The PP did not apply a sampling approach for the determination of data and parameters monitored.
Findings	There is no finding regarding to this issue.
Conclusion	No sampling approach was applied by the PP in order to determine the monitored parameters.

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	<p>The following table includes the current monitoring equipment for the parameters above mentioned and the information about equipment identification and calibration records. ICONTEC verified that there was a delay in the calibration activities during this monitoring period under assessment and issued the CL 01.</p> <p>For the operation period from 01/01/2017 to 30/04/2017, two electronic line meters were used that continuously measure power generation at the point of delivery.</p> <p>For billing purposes of operation period from 01/01/2017 to 30/04/2017, the bidirectional meters used are those located in the Las Pailas substation, owned by ICE, and the electricity will be determined at the 230 kV Pailas substation Revenue Meters (both for energy delivered to and consumed from the Grid). Electricity consumption from the grid (for start-up or auxiliary purposes) is deducted from gross exports to the latter in order to obtain net electricity supplied to the NES. All electric meters have an accuracy rating of +/- 0.2%</p>
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Monitoring Equipment

Parameter	Equipment	Calibration Frequency	Calibration Records	Date of Calibration
$EG_{\text{facility},y}$ from 01/01/2017 until 30/04/2017	Main measurement equipment: Serial Number: MJ-1402A922-04 Model ION 7650	1 year	Verification Report ICE- UVE-2016-0183 /15/	Verification date: 17/05/2016 Valid until 16/05/2017
	Back-up measurement equipment Serial Number: MJ-1402A920-04 Model ION 7650			

In section E.4.5 above, the new formula used to calculate energy generation (O_M) for the operation period from 01/05/2017 to 31/12/2019 by the Orosi project is explained. This formula is associated with the installation of new electricity meters (main and backup) located in the Orosi substation that will measure the energy delivered by the new plants connected to this substation (M_{OT}).

For billing purposes, the meters used are those located in the Las Pailas substation, owned by ICE, where other meters (main and backup) were installed. These meters measure the total net energy (M_P) that enters the Orosi substation.

The energy losses in the transmission line are distributed proportionally according to the amount of energy delivered by each plant in the Orosi substation.

With the connection of the new generation plants in the Orosi substation, ICE delivered an official report of the calibration report of the main and backup meters of Orosi plant measurement system, located in the Pailas substation, approving the tests of calibration performed on May 2, 2017/16/.

ICE, through the Electrical Verification Unit (UVE), issues a single calibration certificate for the two main and backup meters.

Parameter	Equipment	Calibration Frequency	Calibration Records	Date of Calibration
M_P from 01/05/2017 until 31/12/2019	Main measurement equipment: Serial Number: MJ-	1 year	Verification Report ICE- UVE-2017-0040 /16/	Verification date: 02/05/2017 Valid until 01/05/2018

		1402A922-04 Model ION 7650		Intervention Report ICE-OI-2018-080 /17/	Verification date: 17/05/2018 Valid until 16/05/2019
		Back-up measurement equipment			
		Serial Number: MJ-1402A920-04 Model ION 7650		Intervention Report ICE-OI-2019-057 /18/	Verification date: 22/05/2019 Valid until 21/05/2020

Parameter	Equipment	Calibration Frequency	Calibration Records	Date of Calibration
M_O from 01/05/2017 until 31/12/2019	Main measurement equipment:	1 year	Schneider Electric certificate of compliance and calibration /20/	Verification date by manufacturer: 15/04/2016 The validity is explained in the paragraph at the end of the table.
	Serial Number: MJ-1604A324-05 Model ION 7650		Intervention Report ICE-OI-2018-078 /19/	Verification date: 16/05/2018 Valid until 15/05/2019
	Back-up measurement equipment		Intervention Report ICE-OI-2019-055 /21/	Verification date: 10/05/2019 Valid until 09/05/2020
	Serial Number: MJ-MJ-1604A323-05 Model ION 7650			

Parameter	Equipment	Calibration Frequency	Calibration Records	Date of Calibration

	MoT from 01/05/2017 until 31/12/2019	Main measurement equipment:	1 year	Schneider Electric certificate of compliance and calibration /20/	Verification date by manufactur er: 14/04/2016 The validity is explained in the paragraph at the end of the table.
		Serial Number: MJ- 1604A326-05 Model ION 7650		Intervention Report ICE- OI-2018-079 /23/	Verification date : 15/05/2018 Valid until 14/05/2019
		Back-up measurement equipment		Intervention Report ICE- OI-2019-056 /22/	Verification date: 09/05/2019 Valid until 08/05/2020
		Serial Number: MJ-MJ- 1604A325-05 Model ION 7650			
<p>According to the Record of installation meters and certificate of compliance and calibration of 2016 /20/, the Mo and MoT meters began their installation process by Siemens at the Orosi substation on April 15th, 2016, ending on July 13th, 2016. The calibration of these meters, at the time of their installation, was supported by the manufacturer's certificate issued by Schneider Electric /20/.</p> <p>Because the PPA and the Costa Rican legislation establish that the meters must be calibrated one year after their entry into operation and this date corresponds to 01/05/2017, the meters were calibrated one year later as indicated in the tables above.</p> <p>The PP reported that these meters only came into operation in May 2017, when they were incorporated into the calculation of commercial energy, this was confirmed by ICONTEC through the review of the official meter calibration verification report issued by ICE on 12/06/2017/16/. Due to the situation presented, the PP conservatively applied the maximum permissible error of the equipment's $\pm 0.2\%$, for the period 01/05/2017 to 31/05/2018. Please see file CDM_MR_OROSI v3.xlsx, sheet ER OROSI cell J5 to J17.</p> <p>The PP also had delay in the calibration of electricity meter Mp during may 2019 and applied the maximum permissible error of the equipment $\pm 0.2\%$, for this month. Please see file CDM_MR_OROSI v3.xlsx, sheet ER OROSI cell J29.</p> <p>ICONTEC verified that the energy metrological laboratory of ICE is accreditation by Costa Rican Accreditation Body (ECA), Certificate LC-036/125 under ISO 17025:2017 /25/.</p>					
Findings		CL 1 related with the delay on the calibration frequency of electric meters.			
Conclusion		ICONTEC verified the correction on the CDM_MR_OROSI v3.xlsx and concluded that the detected calibration delays were penalized in accordance with the established guidelines in the latest version of VVS /UN3/ and PS /UN4/.			

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	<p>Baseline GHG emission was calculated by applying the methodology, as the product of baseline energy generation times the grid emission factor, i.e</p> $ER_y = EG_{facility,y} \cdot EF_{grid,CM}$ <p>The grid emission factor was correctly assigned as 0.3528 (tCO₂/MWh) for the whole monitoring period, as validated and verified in Section E.6.1 above.</p> <p>For the period January-April 2017, $EG_{facility,y}$ was calculated as the net energy supplied by the power plant to the national grid at substation Pailas. This net energy was calculated as the difference between energy exported and energy imported, as measured in substation Pailas with main bidirectional meter MJ-1402A922-04 (or back up bidirectional meter MJ-1402A920-04).</p> <p>The audit team verified the data and calculations in the spreadsheet CDM_MR_OROSI v3, and found them correct.</p> <p>For the period May 2017 onwards, $EG_{facility,y}$ was calculated, in the same way, as the net energy supplied by the power plant to the national grid at substation Pailas. Nevertheless, according to the PRC, two new plants were connected to substation Orosi, using the same transmission line towards substation Pailas, thus preventing the application of the same scheme. In the new approach, $EG_{facility,y}$ was calculated using the formula $EG_{facility,y} = M_{O,y} - ((M_{OT,y} - M_{P,y}) M_{O,y} / M_{OT,y})$</p> <p>where:</p> <p>$M_{O,y}$ = Quantity of gross electricity generation that is produced by each plant in year y and is measured at the Orosi Substation (MWh/yr).</p> <p>$M_{OT,y}$ = Quantity of total gross electricity generation that is produced by all plants connected to the Orosi substation, in year y (MWh/yr)</p> <p>$M_{P,y}$ = Quantity of net electricity generation that is produced by all plants and fed into the grid in year y as measured at the Las Pailas substation (MWh/yr). Note that these are the same plants that deliver to the Orosi substation, but measure at a later point.</p> <p>Each parameter was obtained as measurement of respective meters, as verified in Section E.6.2 above.</p> <p>The DOE verified the data and calculations in the spreadsheet CDM_MR_OROSI v3.xlsx, and found that the data of 255,626 tCO_{2e} is correct.</p>
Findings	No finding was raised on this issued
Conclusion	ICONTEC concludes that baseline emission reductions have been correctly calculated without material misstatements.

E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	In accordance with the provisions of applied methodology ACM0002 version 12.3.0 /UN1/: no leakage effects need to be accounted under this methodology.
Findings	N/A
Conclusion	N/A

E.8.3. Calculation of leakage GHG emissions

Means of verification	In accordance with the provisions of applied methodology ACM0002 version 12.3.0 /UN1/: no leakage effects need to be accounted under this methodology.
Findings	There is no finding regarding to this issue.
Conclusion	ICONTEC confirms that no leakage needs to be considered.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	In accordance with the applied methodology /UN1/ and the description provided in section E.8.1, E.8.2 and E.8.3: $ER_y = BE_y$ $ER_y = 255,626 \text{ tCO}_{2e}$
Findings	No finding was raised on this issued.
Conclusion	<p>The data used for determination of the emission reductions are available and have been monitored in accordance with the revised monitoring plan and methodology ACM0002, version 12.3.0.</p> <p>The data used for the calculation of ERs in this monitoring period were verified and they were found consistent with those reported in the revised PDD.</p> <p>The appropriate methods and formulae for calculating baseline emissions, project emissions and leakage were followed in accordance with the revised PDD and applied methodology.</p> <p>The assumptions, emission factors and default values applied in the MR version 3.0 and the calculations were correctly justified.</p>

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	<p>In the revised PDD /1/ the PP stated an estimated emissions reduction of 79,787 tCO_{2e} per year. For this monitoring period the equivalent ERs are, regarding to revised PDD, 239,361 tCO_{2e}. However, the ERs calculated for this monitoring period under assessment are 255,626 tCO_{2e}.</p> <p>The PP described this situation in the MR version 3.0 in section E.6</p>
Findings	No finding was raised on this issued.
Conclusion	<p>ICONTEC verified that the emissions reduction reported in the MR version 3.0 are slightly higher (6,4%) that the estimated in the PDD.</p> <p>ICONTEC confirms the reported emissions reduction claimed by the PP are reasonable credible and reliable.</p>

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	<p>In order to assess the difference from estimated ERs in the revised PDD, the audit team asked, for the monitoring information regarding to electricity generation forecast by IEDO and the actual electricity generation during the monitoring period under assessment.</p> <p>The audit team reviewed the data of the revised PDD Vs Records called reports of closed /11/ for the monitoring period under assessment. It was noticed that during 2018 and 2019 there was an increase of the electricity generation regarding with the forecast done by IEDO. This rationale is coherent with the explanation provided by the PP in the MR version 3.0, section E.6.</p>
Findings	No finding was raised on this issued.
Conclusion	<p>ICONTEC confirms that the explanation for the emission reductions of the project activity during the verification period is reasonable and that there are no non-conservative aspects associated with it.</p> <p>Besides, ICONTEC confirms that there is no information on data and variables in the MR that is different from the revised PDD and would cause an increase in estimates of the emission reductions in the current monitoring period or in future monitoring periods.</p>

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	Following the statements in the applied methodology and previously explained in section E.8.4 on this report the emissions reductions belongs to period from January 1 st /2013 onwards:																				
	$ER_y = BE_y = EG_{facility,y} \times EF_{grid,CM,y}$																				
	<table><tr><th>y</th><th>EG_{PJ,y} (MWh)</th><th>EF_{grid,CM,y} (tCO₂ / MWh)</th><th>BE_y (tCO_{2e})</th></tr><tr><td>2017</td><td>198,612,8</td><td>0.3528</td><td>69,993</td></tr><tr><td>2018</td><td>262,443,9</td><td>0.3528</td><td>92,505</td></tr><tr><td>2019</td><td>263,988,2</td><td>0.3528</td><td>93.128</td></tr><tr><td>Total</td><td>725,045</td><td></td><td>255,626</td></tr></table>	y	EG _{PJ,y} (MWh)	EF _{grid,CM,y} (tCO ₂ / MWh)	BE _y (tCO _{2e})	2017	198,612,8	0.3528	69,993	2018	262,443,9	0.3528	92,505	2019	263,988,2	0.3528	93.128	Total	725,045		255,626
	y	EG _{PJ,y} (MWh)	EF _{grid,CM,y} (tCO ₂ / MWh)	BE _y (tCO _{2e})																	
	2017	198,612,8	0.3528	69,993																	
	2018	262,443,9	0.3528	92,505																	
2019	263,988,2	0.3528	93.128																		
Total	725,045		255,626																		
$ER_y=255,626 \text{ tCO}_{2e}$																					
Findings	No finding was raised regarding to this issue.																				
Conclusion	ICONTEC deems that the current ERs have been correctly reported on the period from 1 January 2013 onwards.																				

E.9. Assessment of reported sustainable development co-benefits

Means of verification	The project activity does not have monitored sustainable development co-benefits.
Findings	No finding was raised on this issue.
Conclusion	Since, there is not monitored sustainable development co-benefits of the project activity, it is no necessary to assess this issue.

E.10. Global stakeholder consultation

Means of verification	<p>The MR version 01 /1/ submitted by IEDO was made publicly available on the UNFCCC website on 14/12/2020 during the time specified in the Project Cycle Procedure/UN5/ paragraphs 183 and 184.</p> <p>Parties, stakeholders and NGOs were invited to provide comments through the website. No comments were received during the public consultation nor at the moment of submission of this report for issuance of certified emissions.</p>
Findings	No finding was raised on this issue.
Conclusion	Since there was no comments in the global stakeholder consultation, it is no necessary to assess the actions taken regarding any comment

SECTION F. Internal quality control

This report includes the verification findings that underwent a technical review before being submitted to UNFCCC.

The technical review and the quality control process was performed by an internal technical reviewer team in accordance with the ICONTEC's internal procedures for carrying out validation, verification and certification audits of CDM project activities. After this step the submission for requesting for issuance has been conducted.

The technical reviewers are qualified in accordance with the ICONTEC's professional qualification scheme for CDM validation and verification.

SECTION G. Verification opinion

ICONTEC was engaged by Inversiones Eólicas de Orosí Dos, S.A. (IEDO) to verify the greenhouse gas (GHG) emission reductions reported by the CDM project Orosi Wind Power

Project, registration number 6652, owned by PP for the third monitoring period of 01/01/2017 – 31/12/2019, equating to 255,626 tCO₂e.

The verification was performed based on the requirements set by the CDM and relevant guidance provided by CMP and the CDM Executive Board. ICONTEC considers that the project's GHG emissions and resulting GHG emissions reductions reported in the monitoring report version 3.0 dated on 09/02/2021, are fairly stated.

ICONTEC confirms that the project is implemented as described in the revised PDD submitted with this verification. Installed equipment essential for generating emission reductions are running reliably and calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions as a CDM project.

Inversiones Eólicas de Orosi Dos, S.A. (IEDO) is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's monitoring and verification plan.

Inversiones Eólicas de Orosí Dos, S.A. (IEDO) is responsible for developing and keeping records and reporting procedures in accordance with the monitoring plan.

ICONTEC received the information and asked for explanations deemed necessary to provide enough evidence about the amount of GHG emissions and the calculation of the GHG emission reductions.

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

It is ICONTEC's responsibility to set an independent GHG verification opinion on the GHG emissions from the project and approved a baseline for the monitoring period.

ICONTEC utilizes a risk-based approach that draws on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate them. ICONTEC's examination process includes test-based assessments of all evidence relevant to the amounts and disclosures of a project's GHG emissions and the calculations of such reductions for the reporting period.

ICONTEC can confirm that the GHG emissions reductions are calculated without material misstatements.

ICONTEC's opinion applies to the project's GHG emissions and the resulting GHG emission reductions reported and related to the validated and registered baseline, as well as the monitoring plan and its associated documents. ICONTEC confirms the following statements:

CDM project:	Orosi Wind Power Project
Reporting period:	01/01/2017 – 31/12/2019
Baseline emissions:	255,626 tCO ₂ e
Project emissions:	0 tCO ₂ e
Leakage:	0 tCO ₂ e
Emission Reductions:	255,626 tCO ₂ e

SECTION H. Certification statement

ICONTEC has been engaged by Inversiones Eólicas de Orosi Dos, S.A. (IEDO) to examine the greenhouse gas (GHG) emission reductions reported for Orosi Wind Power Project for the corresponding period, equating to 255,626 tonnes of CO₂ equivalent.

We consider that the project's GHG emissions and resulting GHG emissions reductions reported in the Monitoring Report version 3.0 (09/02/2021) are fairly stated. Monitoring Report first version was publicly available on 14/12/2020.

The owner of Orosi Wind Power Project is responsible for the preparation of the GHG emission data and the reported GHG emission reductions on the basis set out within the project's Monitoring and Verification Plan.

The owner of Orosi Wind Power Project is responsible for developing and keeping records and reporting procedures in accordance with the Monitoring Plan.

ICONTEC is responsible to set an independent GHG verification opinion on the GHG emissions from the Project activity and approved baseline for the same period.

For this verification audit ICONTEC was provided the information and asked for explanations we deemed necessary to provide enough evidence that the amount of GHG emission and the calculation of the GHG emission reductions, based on the Monitoring Report, are fairly stated for the reporting period. ICONTEC also confirm, that the post registration change, requested with this verification does not increased the reduction of emissions of the CDM project.

Our verification approach was based on the Kyoto Protocol requirements, Marrakech Agreement, as well as those defined by the CDM Executive Board.

ICONTEC's approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate them. Our examination includes review and assessment, of the evidence related to the project's GHG emission and calculations for this reporting period.

ICONTEC is able to certify that the emission reductions from the Orosi Wind Power Project during the third verification period from 01/01/2017 – 31/12/2019 equals to 255,626 tonnes of CO2 equivalent.

Appendix 1. Abbreviations

Abbreviations	Full texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CERs	Certified emission reductions
CL	Clarification Request
CO ₂ e	Carbon dioxide equivalent
CMI	Corporación Multi Inversiones (Multi Investment Corporation)
CROMSA	Costa Rica Operaciones y Mantenimiento S.A. (Costa Rica Operations and Maintenance S.A).
DNA	Designated National Authority
ECA	Entidad Costarricense de Acreditación - ECA Costa Rican Accreditation Body (ECA)
IEDO	Inversiones Eólicas de Orosí Dos, S.A.
ERs	Emission Reductions
GHG	Greenhouse Gases
ICONTEC	Colombian Institute of Technical Standards and Certification (Instituto Colombiano de Normas Técnicas y Certificación)
IPCC	Intergovernmental Panel on Climate Change
MR	Monitoring Report
ICE	Instituto Costarricense de Electricidad Costa Rican Electricity Institute
PCP	CDM Project Cycle Procedure
PDD	Project Design Document
PP	Project Participant
PRC	Post Registration Change
PS	CDM Project Standard for project activities
UNFCCC	United Nations Framework Convention for Climate Change
VVS	CDM Validation and Verification Standard for project activities

Appendix 2. Competence of team members and technical reviewers

ERIKA LUCIA URREGO ORTIZ
Lead auditor CDM

MAIN PROFESSIONAL EDUCATION

MSc on Quality and integral management. Universidad Santo Tomas en Convenio con ICONTEC. Bogotá, Colombia. April, 2013.

Magister Environmental Management Systems. Universidad Externado de Colombia. Bogotá D.C. September 2002

Zootechnician, Universidad Agraria de Colombia, Bogotá D.C. Colombia. August 1997.

Lead Auditor on Energy management systems under ISO 50001:2011 and version 2018. Bogotá, Colombia. Since July 2015.

Lead auditor on Quality Management Systems under ISO 9001, ICONTEC, Bogotá, Colombia. Since 2006.

Lead auditor on OHSAS 18001 and ISO 45001, ICONTEC, Bogotá D.C. Since July 2005.

Lead auditor Environmental management system under ISO 14001, ICONTEC, Bogotá, Colombia. Since 2002.

Updating on CDM Course, Ministry of Environment, Housing and Territorial Development, Bogotá D.C, Colombia. 2006

PROFESSIONAL EXPERIENCE

- ICONTEC (2006 – Actual)

To prepare and perform the certification services assigned as per her career plan qualification, according to the stated on the procedures. To provide guidance to the certification costumers about the technical aspects of the assigned services provision. To participate in changing or designing certification services, by changing or creating the respective procedures. Perform audits on schemes of ISO 9001, ISO 14001, OHSAS 18001, ISO 45001, ISO 50001.

Perform Validation and verification of CDM projects like lead on CDM, technical expert and lead auditor to scope 13. Responsible of the accreditation with UNFCCC.

- ASOCIACION COLOMBIANA DE PORCICULTORES-FNP (2003 – 2006) (Colombian Association of Pig Farmers)

To coordinate the activities to be performed by the Environmental Window Program in the various country areas. To allocate and execute resources engaged under the Cleaner Production agreements signed together with several environmental authorities. To lead the CDM project, focused to reduce methane (CH₄) emissions issued by animal waste.

To be aware of the Ecuadorian and Chilean methodologies already approved by the CDM's Executive Board for Hog Breeding Sector to elaborate a proposal for the hog breeding sector together with the Ministry of Environment, Housing and Territorial Development in order to join farms to CDM projects.

- FICHTNER GmbH & Co. KG (2001 – 2002)

To prepare, design and apply surveys focused to identify power consumption in the sector of slaughter, processed meat and food concentrate for animals

- Regional Environmental Authority (CAR Sumapaz) 1998 – 2001

To support the environmental management unities on technical concepts of processes, permissions, sanctions, control, monitoring and assessment in the proper and timely management of the Sumapaz area's natural resources.

EXPERIENCE IN CDM ACTIVITIES

Lead auditor on validation MDL:

1. Validation of Macano Small Hydro Power Plant, Panamá
2. Validation of Montenegro Landfill Gas Recovery and Flaring, Colombia
3. Validation of Monteria Landfill Gas Recovery and Flaring, Colombia
4. Validation of Pirgua Landfill Gas Recovery and Flaring, Colombia
5. Validation of Tunjita Diversion Hydroelectric Project, Colombia

6. Validation of El Toqui wind power project, Chile
7. Validation of Los Angeles Landfill Gas Flaring Project, Colombia
8. Validation of Ferreira Gomes Hydro Power Plant CDM Project, Brazil
9. Validation of BRASILM 1 - Avoidance of Methane Emissions through Composting of Manure Waste, Brazil
10. Validation of CGR Catanduva Landfill Gas Project, Brazil
11. Validation of Macaubas Landfill Gas Project, Brazil
12. Validation of Palmaceite Wastewater Treatment and Biogas Utilization Project, Colombia
13. Validation of Teresina Landfill Gas Project, Brazil
14. Validation of Maceio Landfill Gas Project, Brazil
15. Validation of SHP Morro Azul CDM Project (JUN1164), Colombia
16. Validation Doña Teresa Small hydro power plant, Colombia
17. Validation Biogas recovery and heat generation from Palm Oil Mill Effluent (POME), Coopeagropal. Costa Rica.
18. Validation Panuco Bagasse Cogeneration Project. México.

Lead auditor on verification MDL:

19. Verification of Biogas energy plant from palm oil mill effluent, Guatemala 2
20. Verification of Doña Juana Landfill gas-to-energy project, Colombia
21. Verification of Tres Valles Cogeneration Project, Honduras
22. Verification of Landfill Gas to Energy Facility at the Nejapa Landfill Site, El Salvador, El Salvador
23. Verification of La Venta II, México
24. Verification of Jepirachi Wind Power Project, Colombia
25. Verification of Santa Ana Hydroelectric Project, Colombia
26. Verification of BRASCARBON Methane Recovery Project BCA-BRA-01, Brazil
27. Verification of BRASCARBON Methane Recovery Project BCA-BRA-02, Brazil
28. Verification of BRASCARBON Methane Recovery Project BCA-BRA-03, Brazil
29. Verification of Ciudad Juarez Landfill gas-to-energy Project, México.

Lead auditor renewal crediting period:

30. Monte Rosa Bagasse Cogeneration Project (MRBCP)

Lead auditor on other schemes:

31. Validation VCS de Reforestación de áreas de pastura en la Sociedad Agrícola de Interés Social "José Carlos Mariátegui" – Proyecto Joven Forestal, Perú.
32. Validation Gold Standard Energy Efficiency at Ladrillera Alcarraza, Colombia.
33. Validation Gold Standard de Paramonga Bagasse Boiler Project, Perú.
34. Validation and Verification VCS of BRASCARBON Methane Recovery Project BCA-BRA-02, Brazil
35. Validation and Verification VCS of BRASCARBON Methane Recovery Project BCA-BRA-03, Brazil
36. Validation and Verification VCS of BRASCARBON Methane Recovery Project BCA-BRA-05, Brazil
37. Validation and Verification VCS of BRASCARBON Methane Recovery Project BCA-BRA-07, Brazil
38. Validation and Verification VCS of BRASCARBON Methane Recovery Project BCA-BRA-08, Brazil

Technical expert:

39. Validation of ECC methane capture and combustion from AWMS at dairy farms in Mexico – I, México

40. La Calera Biodigesters Project, Perú

Technical Review:

41. Validation of Fuel Switching through change of furnaces at Imusa S.A., Colombia
42. Validation of Cervecería Hondureña Methane Capture Project, Honduras
43. Validation of Paysandú Clean Energy, Uruguay
44. Validation of Securitization and Carbon Sinks Project, Chile
45. Validation of METALDOM Fossil fuel switch from reheat furnace, República Dominicana
46. Validation of Reforestation of degraded/degrading land in the Caribbean Savannah of Colombia, Colombia
47. Validation of Co-composting of organic residues in ORO ROJO's Palm Oil Mill at Sabana de Torres, Colombia
48. Validation of EMGEA Small Hydropower (SHP) Run-of-the-River CDM Project Bundle, Colombia
49. Validation of Energy efficiency at Malvinas Gas Plant, Perú
50. Validation of Marañón Hydroelectric Project, Perú
51. Validation of Santa Rita Hydroelectric Plant, Guatemala
52. Verification of Bio energy in General Deheza –Electric power generation from peanut hull and sunflower husk-, Argentina
53. Validation of Biogas project, Olmeca I, Santa Rosa, Guatemala
54. Validation of CTR Rosario Landfill Gas Project, Brazil
55. Validation of SHP Itaguacu CDM Project (JUN 1146), Brazil
56. Validation of Taurichuco Hydropower Project, Perú
57. Validation of Feira de Santana Landfill Gas Project, Brazil
58. Validation of Doña Juana Landfill gas-to-energy Project, Colombia
59. Renovación Inversiones Hondurenas Cogeneration Project
60. Validación SHPs Tambaú, das Pedras and Rio do Sapo CDM Project (JUN1132), Brazil
61. Validación SHPs Poço Fundo and Providência CDM Project (JUN1133), Brazil
62. Validación Santa Rita Hydroelectric Plant, Colombia
63. Validation Conservation and reforestation of degraded areas in Barbosa, Colombia
64. Verification Doña Juana Landfill gas-to-energy Project, Bogotá, Colombia.
65. Verificación Monomeros nitrous oxide abatement project. Barranquilla, Colombia.
66. Verification BRT Bogotá, Colombia: TransMilenio Phase II to IV
67. Verification BRT Macrobus Guadalajara, Mexico
68. Verification Inversiones Hondurenas Cogeneration Project, Honduras.
69. Verification Incauca S. A. Fuel Switch from Coal to Green Harvest Residues CDM Project. Colombia.
70. Verification Brascarbon 14, -Brazil.
71. RCP BRASCARBON Methane Recovery Project BCA-BRA-04, 09 and 15
72. Verification BRASCARBON Methane Recovery Project BCA-BRA-05, 08, 13 and 15.

FERNANDO GÓMEZ GÓMEZ
Technical expert Scope 1

Electrical Engineer. Universidad Nacional (1967)
 Master of Power Systems - Instituto Tecnológico de Monterrey (1970)
 EAFIT Financial Specialist (1984)

PROFESSIONAL EXPERIENCE

- ENVISERVICES SAS (2014)

Technical and Energy Advisory in registering hydro power generation projects into the UPME (Mining and Energy Planning Unit) catalog of projects for long term Colombian national expansion plan.

- PERSONAL CONTRACT (2014) for BID (Interamerican Development Bank)

As an Expert in Energy Economics to review the study “Vulnerabilidad al Cambio Climático de los sistemas de producción hidroeléctrica en Centroamérica y sus opciones de adaptación” (Vulnerability of the Central American hydroelectric systems to the Climate Change and adaptation options), commissioned by OLADE (Latin America Energy Organization) to the Incam Group.

- ICONTEC (from 2006 to present)

Specialist Scope 1. CDM Activities (Attached)

- GESTION Y AUDITORIAS ESPECIALIZADAS - GAE LTDA. Technical and Economic Advisory (November 2004 – May 2005)

Technical and Economic Advisory to Superintendencia de Servicios Públicos Domiciliarios (Superintendent of Public Services) in integral auditing to EPM (Medellín Public Services Utility) management of energy and gas services.

- ECONOMETRÍA S.S. - Technical Advisory (October 2002 - March 2003)

Technical Advisory to Unidad de Planeación Minero Energética to incorporate international electrical interconnections into the Colombian electrical planning carried by UPME, (including use of SUPEROLADE, MPODE, NEPLAN and REAL models).

- ECOENERGIA S.S. ESP - Founding Member and Manager

Management of private projects of generation, distribution and commercialization of power.

- UNIDAD DE PLANEACIÓN MINERO ENERGÉTICA – UPME (October 1996 - October 1997)

Elaboration of Catalog of Generation Projects for National Energy Plan,

- AUDITORES ENERGÉTICOS - AENE LTDA (October 1994 - March 1995)

Advisory to the company in the application of the new regulatory scheme of Colombian electrical sector to private and public entrepreneurial management through the following studies:

- CORELCA: Determination of marginal costs and development of innovative rate structures for power generation companies and big industrial customers, October 1994 - March 1995.
- CORELCA: Development and application of rate models to prepare proposal on power sale in the wholesale market, July 1995 - September 1995.
- Empresa de energía de Cundinamarca - EEC: Advisory in convoking and long-term power contracting, July 1995 - September 1995.

- Instituto Nacional de Ciencias Nucleares y Energías Alternativas - INEA: Development of tutorial model for financial assessment of energy projects in the industry, April 1995 - September 1995.
- Consorcio Nacional de Energía CNE : Consortium Management. Elaboration of studies on power commercialization in Colombia and competitive strategies. Interpretation and application of the Code of Commerce, Code of Networks and other power regulatory standards - commercial activity in Colombia, October 1995 - March 1996.
- EMPRESA DE ENERGIA DE BOGOTÁ – EEB (1978 – 1994)

Positions:

- Chief of the Department of generation planning, interconnection and sub-transmission, 1978 - 1979.
- Chief of Electric Planning Division, 1979 - 1986.
- Assistant for Technical Sub-management, 1986 - 1987
- Chief of Special Projects Division, 1987
- Chief of expansion and Development Division, 1987 - 1994
- Management Advisor, 1994
- INTERCONEXIÓN ELÉCTRICA S.A - ISA (1976 – 1978)

Engineer Specialist in electric planning Research and development of models for planning and operation of electric systems.

National Coordinator of Colombian electric system planning in the project "Study of Electric Power Sector (Estudio del Sector de Energía Eléctrica), ESEE" winner of the National Award of Engineering.

EXPERIENCE IN CDM ACTIVITIES

Participation in:

- Validation of Thuan Nhien Phong Wind Farm
- Validation of Phuong Mai 3 Wind Power Project
- Validation of Fossil Fuel replacement by Biomass in the Brick Manufacturing Industry (Group 1)
- Validation of CTR Rosario Landfill Gas Project
- Validation of SHP Itaguacu CDM Project (JUN 1146), Brazil
- Validation of Palmaceite Wastewater Treatment and Biogas Utilization Project
- Validation of Agua Fresca Multipurpose and Environmental Services
- Validation of CTR Feira de Santana Landfill Gas Project
- Validation of SHP Morro Azul CDM Project (JUN 1164)
- Validation of Biogas recovery and heat generation from Palm Oil Mill Effluent (POME), Coopeagropal.
- Validation of EPM Grouped Natural Gas Project
- Validation of Caruquia 9.76 MW hydroelectric project
- Validation of Cervecería Hondureña Methane Capture Project
- Validation of El Bote Small Hydroelectric Plant project
- Validation of Guanaquitas 9.74 MW hydroelectric project
- Validation of Rio Amoyá Run-of-River Hydro Project
- Validation of Fuel Switching through change of furnaces at Imusa S.A.

- Validation of Installation of a high-pressure/high-efficiency bagasse boiler to cogenerate heat and power
- Validation of Macano Small Hydro Power Plant
- Validation of Cueva Maria Hydroelectric Expansion Project
- Validation of La Vegona Hydroelectric project
- Validation of Chamelecón 280 Hydroelectric project
- Validation of Pardos Small Hydro Plant and LOGICarbon CDM Project
- Validation of Cambará and Embaúba SHPs and LOGICarbon CDM Project
- Validation of Bonyic hydroelectric project
- Validation of Tunjita Diversion Hydroelectric Project
- Validation of METALDOM Fossil fuel switch from reheat furnace.
- Validation of Providencia Sugar Mill Cogeneration Project
- Validation of Toachi – Pilaton Hydroelectric Project
- Validation of El Toqui wind power project
- Validation of Paramonga Bagasse Boiler Project
- Validation of Ferreira Gomes Hydro Power Plant Cdm Project Activity
- Validation of Providencia I: 1.8MW Small Hydro Power Generation Plant
- Validation of Providencia III: 9.11MW Small Hydro Power Generation Plant
- Validation of Marañon Hydroelectric Project
- Validation of Ventana, Suba and Usaquén Hydroelectric CDM Bundled
- Validation of EMGEA Small Hydropower (SHP) Run-of-the-River CDM Project Bundle
- Validation of Inversiones Hondurenas Cogeneration Project
- Validation of Panuco Bagasse Cogeneration Project
- Validation of Pequi and Sucupira SHPs and LOGICarbon CDM Project
- Validation of Santa Rita Hydroelectric Plant
- Validation of Tres Valles Cogeneration Project
- Validation of La Calera Biodigesters Project
- Verification of Agua Fresca Multipurpose and Environmental Services
- Verification of La Cascada 2.3 MW Hydroelectric Project
- Verification of La Venta II
- Verification of RIMA Fuel Switch in Bocaiúva
- Verification of Agua Fresca Multipurpose and Environmental Services
- Verification of Biogas Project, Olmeca III, Tecun Uman
- Verification of Jepirachi Wind Power Project
- Verification of A joint venture project of cogeneration of electricity and hot water using natural gas and biogas produced from on-site wastewater biodigesters
- Verification of Santa Ana Hydroelectric Plant
- Verification of Los Algarrobos hydroelectric project
- Verification of La Joya Hidroelectric project
- Verification of Bio energy in General Deheza –Electric power generation from peanut hull and sunflower husk-
- Verification of Agua Fresca Multipurpose and Environmental Services
- Verification of La Joya Hidroelectric project
- Verification of Biogas energy plant from palm oil mill effluent
- Verification of Incauca S. A. Fuel Switch from Coal to Green Harvest Residues CDM Project
- Verification of Cervecería Hondureña Methane Capture Project
- Verification of Inversiones Hondurenas Cogeneration Project

- Verification of La Venta II
- Verification VCS Montañas Hydroelectric Project
- Renewal of crediting period Monte Rosa Bagasse Cogeneration Project
- Verification La venta II

Specialist

Verification Of The Venta II
 Verification La Vuelta and La Herradura Hydroelectric Project
 Renovation Bajo Tuluá Minor Hydroelectric Power Plant (3599)
 Renovation Alto Tuluá Minor Hydroelectric Power Plant (3570)
 Verification Jepirachi Wind Power Project
 Post Registration Change La Venta II
 Validation Agua Fresca Multipurpose and environmental services project
 Verification Sogamoso Hydroelectric Project
 Validation Dos Mares Hydroelectric Project

Technical Review

Verification CIUDAD JUAREZ 2016 2017
 Verification Sogamoso Hydroelectric Project
 Verification SOMBRILLA CENTRAL HIDROELECTRICAS SUBA Y USAUQEN

FRANCY MILENA RAMÍREZ TORRES

Technical reviewer CDM and sectoral scope 1.2.

Electrical Engineer.
 Universidad Los Andes, 2001

Post grade: Assessment of Social Projects.
 Universidad Los Andes, 2005

University of Oxford.
 Course: Applying Knowledge Management, Principle and Practices (December 1 de 2009).

University of Oxford.
 Course: Successful Change Management for Engineers, Scientists and Staff in Hi-tech Companies (December, 2009).

University of Oxford.
 Course: Essentials of Project Management for Engineers, Scientists and Staff in Hi-tech Companies (December, 2009).

University of Oxford.
 Course: Advanced Project Management for Engineers, Scientists and Staff in Hi-tech Companies (December 4, 2009).

Climate Change, Trade and Standardization - in a development perspective". Estocolmo, Suecia (23 and 25 November, 2009)

ISO global workshop on Greenhouse Gas Schemes Addressing Climate Change – How ISO Standards Help, Estocolmo, Suecia. (20 and 21 November, 2009)

Conference on Climate Change – Deforestation and Standardization. Bali, Indonesia (31 de May y 1 de June de 2010)

PROFESSIONAL EXPERIENCE

- ICONTEC. (2005 – Actually)

Professional of Standardization

Planning, coordinate, implement and ensure compliance with the program of national standardization in technical committees among which are electrical installations, electrical power quality, electrical transformers, substations and equipment for medium and high voltage, lighting, appliances and electrical accessories, protection against lightning strikes and electrical equipment. Develop technical standards. Develop and manage special projects assigned. Participate in programs of regional and international standardization.

- CODENSA (2002 – 2005)

Inspections and electrical works coordinator

Supervise field work and download the results in the central information system, evaluate the inspections performed, reconciled with contractors, addressing the results of inspections to different areas of the company, charging inspections and electrical work to clients of the firm , coordination and support group field sales engineers, technical training for technical staff, administrative support to department business processes and lost control, maintenance of the database for internal management inspections. Project Leader for the Optimization of Technical Processes and Regional Trade in Cundinamarca.

EXPERIENCE IN CDM ACTIVITIES:

Lead Auditor

- Validation of Guanaquitas 9.74 MW hydroelectric project, Colombia
- Validation of Fuel Switching through change of furnaces at Imusa S.A., Colombia
- Validation of Installation of a high-pressure/high-efficiency bagasse boiler to cogenerate heat and power, Argentina
- Validation of Cueva Maria Hydroelectric Expansion Project, Guatemala
- Validation of Paysandú Clean Energy, Uruguay
- Validation of La Vegona Hydroelectric project, Honduras
- Validation of Chamelecón 280 Hydroelectric project, Honduras
- Validation of Pardos SHPs and LOGICarbon CDM Project, Brazil
- Validation of Pequí and Sucupira SHPs and LOGICarbon CDM Project, Brazil
- Validation of Cambará and Embaúba SHPs and LOGICarbon CDM Project, Brazil
- Validation of Bonyic hydroelectric project, Panamá
- Validation of METALDOM Fossil fuel switch from reheat furnace, República Dominicana
- Validation of Toachi – Pilaton Hydroelectric Project, Ecuador
- Validation of EMGEA Small Hydropower (SHP) Run-of-the-River CDM Project Bundle, Colombia

- Validation of Energy efficiency at Malvinas Gas Plant, Perú
- Validation of Marañón Hydroelectric Project, Perú
- Validation of Santa Rita Hydroelectric Plant, Guatemala
- Validation of Taurichuco Hydropower Project, Perú
- Validation of Aguafresca Multipurpose and Environmental Service Project, Colombia
- Validation of Ventana, Suba and Usaquén Hydroelectric CDM Bundled, Colombia
- Validation Post Registration Changes BK Energia Itacoatiara LTDA. (Precious woods Energia)
- Validation “Consortio Relleno Sanitario Nuevo Mondoñedo”
- Validation VCS “Mulatos II”
- Validation Gold Standard: Cururos win farm project
- Validation Gold Standard Amayo Phase II Wind Power Project
- Verification of Los Algarrobos hydroelectric project, Panamá
- Verification of Bio energy in General Deheza –Electric power generation from peanut hull and sunflower husk-, Argentina
- Verification of Agua Fresca Multipurpose and Environmental Service Project, Colombia
- Verification of La Joya Hidroelectric project, Costa Rica
- Verification of Amaime Minor Hydroelectric Power Plant, Colombia
- Verification La Vuelta and la Herradura hydroelectric project
- Verification VCS ECOFROTAS Fleet Fuel Substitution
- Verification Doña Juana Landfill Gas-To-Energy Project
- Renewal of Crediting Period Poechos II hydroelectric plant project
- Renewal of Crediting Period Xacbal Hydroelectric Project
- Renewal of Crediting Period Queluz Renewable Energy Project
- Verification Orosí
- Verification La Vuelta and La Herradura Hydroelectric Project
- Verification DOÑA JUANA LANDFILL GAS-TO-ENERGY PROJECT
- Verification Sogamoso Hydroelectric Project
- Validation VCS Larimar Wind Farm Project
- Validation VCS PUBLIC LIGHTING SERVICE IN THE MUNICIPALITY OF SAN SALVADOR delta
- Validation VCS ESCUELA DE MINAS
- Verification CIUDAD JUAREZ
- Verification CIUDAD JUAREZ
- Post Registration Change Fedepalma
- Verification Fedepalma
- Verification Sogamoso Hydroelectric Project
- Renovation Bajo Tuluá Minor Hydroelectric Power Plant (3599)
- Renovation Alto Tuluá Minor Hydroelectric Power Plant (3570)
- Verification SOMBRILLA CENTRAL HIDROELECTRICAS SUBA Y USAUQEN

Specialist

- Validation of Rio Bonito and Baitaca SHPs and LOGICarbon CDM Project, Brazil
- Validation VCS of Pequi and Sucupira SHPs and LOGICarbon CDM Project, Brazil
- Verification of three crediting periods of La Vuelta and la Herradura hydroelectric project, Colombia
- Renewal of Crediting Period Poechos II hydroelectric plant project
- Renewal of Crediting Period Renewal of Crediting Period
- Renewal of Crediting Period Queluz Renewable Energy Project
- Verification Orosí
- Verification La Vuelta and La Herradura Hydroelectric Project
- Verification Sogamoso Hydroelectric Project
- Verification La venta II

- Verification Sogamoso Hydroelectric Project
- Verification SOMBRILLA CENTRAL HIDROELECTRICAS SUBA Y USAUQEN

CDM Technical Reviewer






































- Validation of Improving energy efficiency in a new Gas Plant in Gibraltar - Colombia
- Validation of Tres Valles Cogeneration Project, Honduras
- Validation of Tunjita Diversion Hydroelectric Project, Colombia
- Validation of Ferreira Gomes Hydro Power Plant CDM Project, Brazil
- Verification of two crediting periods of La Venta II, México
- Verification of two crediting periods of La Joya Hidroelectric Project, Costa Rica
- Verification of Bio energy in General Deheza –Electric power generation from peanut hull and sunflower husk-, Argentina
- Verification of Tres Valles Cogeneration Project, Honduras
- Verification of Agua Fresca Multipurpose and Environmental Services, Colombia
- Verification of La Venta II, México
- Verification of two crediting periods of Fertinal Nitrous Oxide Abatement Project, México
- Verification of Co-composting of EFB and POME project, Guatemala
- Verification of Biogas Project, Olmeca III, Tecun Uman, Guatemala
- Verification of Jepirachi Wind Power Project, Colombia
- Verification of Biogas energy plant from palm oil mill effluent, Guatemala
- Verification of Santa Ana Hydroelectric Project, Colombia
- Validation of SHP Morro Azul CDM Project (JUN1164), Colombia
- Verification of Biogas Project, Olmeca III, Tecun Uman, Guatemala
- Verification VCS Montañitas Hydroelectric Project
- Renewal of crediting period of the Amayo 40 MW Wind Power Project – Nicaragua
- Renewal of crediting period of the Monte Rosa Bagasse Cogeneration Project
- Validation GS Cururos Wind Farm Project
- Verification DOÑA JUANA LANDFILL GAS-TO-ENERGY PROJECT
- Verification La Venta II
- Verification Amaime Minor Hydroelectric Power Plant (2600)
- Verification “Cucuana Hydroelectric Power Plant”
- Validation Agua Fresca Multipurpose and environmental services project
- Verification Sogamoso Hydroelectric Project
- Validation Dos Mares Hydroelectric Project







































Specialist Technical Reviewer










































- Validation of Biogas project, Olmeca I, Santa Rosa, Guatemala
- Validation of CGR Catanduva Landfill Gas Project, Brazil
- Validation of Macaubas Landfill Gas Project, Brazil
- Verification Doña Juana landfill gas-to-energy project

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
/1/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	PDD Orosí wind power project registered	Version 4, dated on 15/09/2014	Other
		PDD Orosí wind power project revised	Version 5, dated on 25/01/2021	PP
/2/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	Monitoring report for third monitoring period (01/01/2017 to 31/12/2019)	Version 1.0, dated on 04/12/2020 Version 2.0, dated on 27/01/2021 Version 3.0, Dated on 09/02/2021	PP
/3/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	Spreadsheet emission reduction calculation file CDM_MR_OROSI.xlsx	Version N.1, dated 13/11/2020 Version 2.0, dated on 27/01/2021 Version 3.0, Dated on 09/02/2021	PP
/4/	TÜV NORD CERT GmbH	Validation Report issued by TÜV NORD CERT GmbH.	Report N°: 8621 – 12/028, dated on 10/10/2012	Other
/5/	ICONTEC	Verification and certification report Orosí Wind power project, second monitoring period (07/09/2015 to 31/12/2016)	Version 3.0, dated 30/08/2017	Other
/6/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	Previous monitoring report Orosí wind power project. Second monitoring period (07/09/2015 to 31/12/2016).	Version 1.0, dated 06/04/2017	Other
/7/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	Power purchase contract No. 2013000037 signed between Instituto Costarricense de Electricidad – ICE (On English Costa Rican Electricity Institute – ICE) and Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	August 1 st , 2013	PP

		File: OROSI - PPA-ICE CONTRATO NO.2013000037 - CON...003636-PROV.pdf		
/8/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	Addendum No.4 contract No. 2013000037 signed between Instituto Costarricense de Electricidad – ICE (On English Costa Rican Electricity Institute – ICE) and Inversiones Eólicas de Orosí Dos, S.A. (IEDO) File: 4.1.7.5 PPA - ICE - ADDENDA NO.4 - 30SET15 (1).pdf	September 30 th , 2015	PP
/9/	ICONTEC	Validation report for post-registration changes for CDM project activities Orosí Wind Power Project.	Version 02 11/02/2021	Other
/10/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	<p>Receipts monthly of sales issued by IEDO to ICE:</p> <p>Folder 2017:</p> <ul style="list-style-type: none">  ORO_ICE_FACT 0040_Periodo Enero 2017_Presentada  ORO_ICE_FACT 0041_Periodo Febrero 2017_Presentada  ORO_ICE_FACT 0043_Periodo Marzo 2017_Presentada  ORO_ICE_FACT 0046_Periodo Abril 2017_Presentada  ORO_ICE_FACT 0049_Periodo Mayo2017_Presentada  ORO_ICE_FACT 0050Periodo Junio 2017_Presentada  ORO_ICE_FACT 0054 Periodo Julio 2017_Presentada  ORO_ICE_FACT 0056 Periodo Agosto 2017_Presentada  ORO_ICE_FACT 0057 Periodo Set 2017_Presentada  ORO_ICE_FACT 0058 Periodo Oct 2017_Presentada  ORO_ICE_FACT 0059 Periodo Nov 2017_Presentada  ORO_ICE_FACT 0060 Periodo Dic 2017_Presentada <p>Folder 2018:</p> <ul style="list-style-type: none">  01. ORO_ICE_FACT 0065 Periodo Ene 2018  2. ORO_ICE_FACT 0070 Periodo Feb 2018_Presentada  03. ORO_ICE_FACT 0072 Periodo Marzo 2018_Presentada  04. Abril - Factura_PDF_3101548540_4000042139_00100001010000000003  05. Mayo - Factura_PDF_3101548540_4000042139_00100001010000000004  06. Junio - Factura_PDF_3101548540_4000042139_00100001010000000008  07. Julio - Factura_PDF_3101548540_4000042139_00100001010000000010  08. Agosto - 00100001010000000013 Agosto  09. Septiembre - Factura_PDF_3101548540_4000042139_00100001010000000018  10. Octubre - Factura_PDF_3101548540_4000042139_00100001010000000020  11. Noviembre - Factura_PDF_3101548540_4000042139_00100001010000000022  12. Diciembre - Factura_PDF_3101548540_4000042139_00100001010000000024 <p>Folder 2019:</p> <ul style="list-style-type: none">  01. Enero - Factura_PDF_3101548540_4000042139_00100001010000000026  02. Febrero - Factura_PDF_3101548540_4000042139_00100001010000000040  03. Factura_PDF_3101548540_4000042139_00100001010000000045  04. Factura_PDF_3101548540_4000042139_00100001010000000052  05. Factura_PDF_3101548540_4000042139_00100001010000000061  06. Factura_PDF_3101548540_4000042139_00100001010000000066  07. Factura_PDF_3101548540_4000042139_00100001010000000073  08. Factura_PDF_3101548540_4000042139_00100001010000000087  09. Factura_PDF_3101548540_4000042139_00100001010000000095  10. Factura_PDF_3101548540_4000042139_00100001010000000105  11. Factura_PDF_3101548540_4000042139_00100001010000000109  12. Factura_PDF_3101548540_4000042139_00100001010000000118  Informe - Evento Software ION - Medición Comercial 	2017 2018 2019	PP

/11/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	<p>Records called reports of closed, issued daily:</p> <p>Folder 2017: Since Reporte cierre 01. Enero 2017.xls until 04. Abril 2017.</p> <p>After May 1st, 2017, Folder 2017:</p> <ul style="list-style-type: none">  05. Medicion Parque Orosi Mayo 2017  06. Medicion Parque Orosi Junio 2017  07. Medicion ParqueOrosi Julio 2017  08. MedicionParque Orosi agosto 2017  09. MedicionParqueOrosi setiembre 2017 para Orosi  10. Medicion Parques Orosi Octubre 2017  11. MedicionParqueOrosi NOV 2017 PARA IEDO  12. Medicion Parque Orosi Diciembre 2017v1 <p>Folder 2018:</p> <ul style="list-style-type: none">  01. Medicion Parque Orosi Ene 2018v1  02. MedicionParqueOrosi FEB 2018  03. Medicion Parque Orosi Marzo 2018  04. Medicion Parque Orosi Abril 2018  05. Medicion Parque Orosi Mayo 2018  06. Medicion Parque Orosi Junio 2018  07. Medicion Parque Orosi Julio 2018  08. Medicion Parque Orosi Agosto 2018  09. Medicion Parque Orosi Septiembre 2018  10. Medicion Parque Orosi Octubre 2018  11. Medicion Parque Orosi Noviembre 2018  12. Medicion Parque Orosi Diciembre 2018  Fact Total Orosi y Total Pailas 2018  Medicion Parque Orosi (Mo) 2018 <p>Folder 2019:</p> <ul style="list-style-type: none">  01. Energia Generada Clúster Liberia Enero 2019  02. Energia Generada Clúster Liberia Febrero 2019  03. Energia Generada Clúster Liberia Marzo 2019  04. Energia Generada Clúster Liberia Abril 2019  05. Energia Generada Clúster Liberia Mayo 2019 VF  06. Energia Generada Clúster Liberia Junio 2019  07. Energia Generada Clúster Liberia Julio 2019  08. Energia Generada Clúster Liberia Agosto 2019  09. Energia Generada Clúster Liberia Septiembre 2019 Final  10. Energia Generada Clúster Liberia Octubre 2019 VF  11. Energia Generada Clúster Liberia Noviembre 2019  12. Energia Generada Clúster Liberia Diciembre 2019  Copy of Planta Orosi total 2019  DL a Orosi Setiembre 2019  FactParqueOrosiOct2019  FactParqueOrosiSet2019 <p>*Liberia is the name of the municipality where the project is located.</p>	2017 2018 2019	PP
/12/	Inversiones Eólicas de	<p>Receipts monthly of buy issued by ICE to IEDO:</p>	2017 2018	PP

	Orosí Dos, S.A. (IEDO)	<p>Folder 2017:</p> <ul style="list-style-type: none">  01. FacturaDigital  02. FacturaDigital  03. FacturaDigital  04. FacturaDigital  05. FacturaDigital  06. FacturaDigital  07. FacturaDigital  08. FacturaDigital  09. FacturaDigital  10. FacturaDigital  11. FacturaDigital  12. FacturaDigital <p>Folder 2018:</p> <ul style="list-style-type: none">  01. FacturaDigital  02. FacturaDigital  05. Factura Digital #18059258300 Electricidad Maxima Demanda Nise 2147587 mayo  06. Factura Digital #18069264825 Electricidad Maxima Demanda nise 2147587 junio  07. Factura Digital #18079271924 Electricidad Maxima Demanda Nise 2147587 Julio  08. Factura Digital #18089278318 Electricidad Maxima Demanda Nise 2147587 agosto  09. Factura Digital #18099287080 Electricidad Maxima Demanda Nise 2147587 setiembre  10. Factura Digital #18109292795 Electricidad Maxima Demanda Nise 2147587 octubre  11. Factura Digital #18119299777 Electricidad Maxima Demanda nise 2147587 noviembre  12. Factura Digital #18129305028 Electricidad Maxima Demanda Nise 2147587 diciembre <p>Folder 2019:</p> <ul style="list-style-type: none">  1- IEDO Nise 2147587 enero  2- IEDO Nise 2147587 febrero  3- IEDO Nise 2147587 marzo  4- IEDO Nise 2147587 abril  5- IEDO Nise 2147587 mayo  6- IEDO Nise 2147587 Junio  7- IEDO Nise 2147587 Julio  8- IEDO Nise 2147587 Agosto  9- IEDO Nise 2147587 Septiembre  10- IEDO Nise 2147587 Octubre  11- IEDO Nise 2147587 Noviembre 	2019	
/13/	Inversiones Eólicas de Orosí Dos, S.A. (IEDO)	<p>Videos of installations and wind turbines</p> <ul style="list-style-type: none">  Aerogenerador 14 Archivo MP4  Aerogenerador 14 Archivo MP4  Bodega Archivo MP4  Edificio Archivo MP4  Edificio de Control Archivo MP4  Edificio-Parqueo Archivo MP4  Subestación Archivo MP4  Subestación 2 Archivo MP4 	13 and 14/01/2021	PP
/14/	CMI Energia and CROMSA	Informe de Evento de Software ION Medición Comercial Set y Oct 2019. (Report ION Commercial Measurement Software Event Set and Oct 2019).	Dated 05/11/2019	PP
/15/	ICE	Verification Report ICE-UVE-2016-0183	17/05/2016	PP

		File: OI-2016-141-PAI-ORO-M.pdf		
/16/	ICE	Official verification report of calibration of meters Orosí plant. File: 0810-427-2017.pdf File: OI-2017-010 PAI-ORO-M.pdf	12/06/2017 02/05/2017	PP
/17/	ICE	Intervention Report ICE-OI-2018-080 File: OI-2018-080-0AI-ORO.pdf	17/05/2018	PP
/18/	ICE	Intervention Report ICE-OI-2019-057 File: OI-2019-057 PAI-LT-ORO.pdf	22/05/2019	PP
/19/	ICE	Intervention Report ICE-OI-2018-078 File: OI-2018-078-ORO-ORO (Mo).pdf	16/05/2018	PP
/20/	Siemens	Record of installation meters and certificate of compliance and calibration. MAIN MJ-1604A324-05 BACK-UP MJ-1604A323-05 MAIN MJ-1604A326-05 BACK-UP MJ-1604A325-05 File: MM1 Mo y MoT.pdf	14/04/2016	PP
/21/	ICE	Intervention Report ICE-OI-2019-055 File: OI-2019-055-ORO-PE ORO (Mo).pdf	10/05/2019	PP
/22/	ICE	Intervention Report ICE-OI-2019-056 File: OI-2019-056-ORO-LT-PAI (MoT).pdf	09/05/2019	PP
/23/	ICE	Intervention Report ICE-OI-2018-079 File: OI-2018-079-ORO-PAI (MoT).pdf	15/05/2018	PP
/24/	SIEMENS	One-line diagram. File: SE Orosi Rev 04 Diagrama Unifilar.pdf	31/08/2016	PP
/25/	ECA	Accreditation Certificate LC-036/125 of energy metrological laboratory under ISO 17025:2017. Validity for an indefinite period subject to surveillance evaluations by ECA. File: Lab. Eficiencia Energética Alcance Acreditación LC-124.pdf	13/11/2006	PP
/UN1/	UNFCCC	Consolidated baseline methodology for grid-connected electricity generation from renewable sources ACM0002.	Version 12.3.0	Other
/UN2/	UNFCCC	Tool to calculate the emission factor for an electricity system.	Version 07.0	Other
/UN3/	UNFCCC	CDM validation and verification standard for project activities.	Version 02.0	Other
/UN4/	UNFCCC	CDM project standard for project activities.	Version 02.0	Other
/UN5/	UNFCCC	CDM project cycle procedure for project activities.	Version 02.0	Other
/UN6/	UNFCCC	Monitoring report form for CDM project activity	Version 07.0	Other
/UN7/	UNFCCC	Guideline Application of materiality in verifications	Version 02.0	Other

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verifications

FAR ID	xx	Section no.	E.2	Date: DD/MM/YYYY
Description of FAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				

DOE assessment	Date: DD/MM/YYYY
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Table 2. CL from this verification

CL ID	01	Section no.	E.7.	Date: 18/12/2020
Description of CL				
<p>The meter main and backup of Mo – Orosi gross energy indicated on table 5 of MR, have not support of calibration between period 11/04/2018 to 15/05/2018.</p> <p>The meter main and backup of Mp Net Energy on table 6 of MR, have not support of calibration of May 1st,2017. Also, clarify the date of calibration validity of main meter, third calibration.</p> <p>VVS versión 02.0 Paragraph 366.</p>				
Project participant response				Date: 14/01/2021
<ol style="list-style-type: none"> In the MR , it was explained below table 5, that the meter Mo became part of the procedure for calculating the energy generation of the Project since May 2017, when the installation of Las Perlas and Miramar Wind Power Projects were interconnected to Orosi's substation and transmission line "OROSI-PERLAS". It was mentioned that since the verification was done on May 15th 2018, an adjustment in the electricity generation readings has been applied to the entire month May 2018 for simplicity. Regarding the Mp Net Energy, on table 6, it is mentioned that the calibration was done on May 2nd 2017. You may see the Intervention Report from ICE "ICE-UVE-2017-0040" (OI-2017-010 PAI-ORO-M.pdf) dated May 2nd 2017. Calibration validity is 1 year afterwards (01/05/2018), but it was done on 17/05/2018, so the error was applied in May 2018 and afterwards, the verification was performed on 22/05/2019, so the error was also applied in May 2019. 				
Documentation provided by project participant				
Monitoring report version 2.0, dated 27/01/2021				
DOE assessment				Date: 02/02/2021
On section C, table 5 of Monitoring report, were clarified the date of the calibration and ICONTEC verified that was applied the maximum permissible error of the meters of $\pm 0.2\%$ for the monitoring period on the calculations on the spreadsheet CDM_MR_OROSI.xlsx. The finding is closed.				

CL ID	02	Section no.	E.1.	Date: 18/12/2020
Description of CL				
According to Instructions for completing this form CDM-MR, all form should be completed on english. The source of data of parameter $NCV_{i,y}$ is in spanish.				
Project participant response				Date: 14/01/2021
<i>The original name of the source was stated, but it is immediately translated to English, the exact translation was added.</i>				
Documentation provided by project participant				
Monitoring report version 2.0, dated 27/01/2021				

DOE assessment	Date: 02/02/2021
The translate was corrected. The finding is closed.	

CL ID	03	Section no.	E.6.2.	Date: 14/01/2021
Description of CL				
<p>Explain on section D.2. of MR, the percentage differences identified on the Crosscheck with Invoices/Sales Receipts (Exported electricity) of the spreadsheet CDM_MR_OROSI.xlsx for september and october, 2019. If apply, correct the spreadsheet CDM_MR_OROSI.xlsx.</p> <p>VVS versión 02.0 Paragraph 364.</p>				
Project participant response				Date: 25/01/2021
<p>The differences occurred because in September and October 2019, there was a damage in the hard drive of the computer where the SCADA is located and where the commercial meter readings are obtained. Hence the data from the plant was not exactly accurate and ICE's meter readings had a difference from Orosi's values, and hence the invoices were made as per ICE's raw data.</p> <p>Regarding the data from September 2019, remained as was established in the spreadsheet CDM_MR_OROSI.xlsx., in order to be conservative. As ICE's value is greater than Orosi's raw data and will contribute in more ER.</p> <p>Regarding the data from October 2019, it was corrected in the spreadsheet CDM_MR_OROSI.xlsx., using the data from ICE, in order to be conservative as the value from ICE is lower and contributes in less ER.</p> <p>This was added in section D.2 of the MR.</p>				
Documentation provided by project participant				
Monitoring report version 2.0, dated 27/01/2021 and CDM_MR_OROSI v2.xlsx				
DOE assessment				Date: 02/02/2021
ICONTEC verified the correction of the figures on the CDM_MR_OROSI v2.xlsx and complete the explanation on the information on Monitoring report version 2.0. The finding is closed.				

CL ID	04	Section no.	E.6.2.	Date: 14/01/2021
Description of CL				
<p>Explain on MR, how the energy consumption data for the period January to December 2019 were calculated for MT (gross total imports of all plants at Orosi substation) and MSTP (net electricity imports, las Pailas) because the raw data is not available to made crosscheck.</p> <p>VVS versión 02.0 Paragraph 322.</p>				
Project participant response				Date: 21/01/2021

MT and MSTP correspond to the total of the 3 plants connected to the substation. The consumption data for Orosi was available and stated in the spreadsheet (column I). Hence, we estimated the consumption data for MT and MSTP making an apportionment using the 2018 data, as per shown in columns J41 to J52 and K41 to K52. February and March were estimated using the apportionment of January 2018, as those months the consumption in 2018 was zero.

Regarding October 2019, as the information was obtained by ICE; the ICE's values for consumption was also used, as they are the real values.

Documentation provided by project participant

CDM_MR_OROSI v2.xlsx

DOE assessment

Date: 02/02/2021

Icontec verified on the spreadsheet CDM_MR_OROSI v2.xlsx, the way in which Orosi's energy consumption was proportionally calculated for the year 2019. The finding is closed.

CL ID	05	Section no.	E.6.2	Date:	14/01/2021
Description of CL					
<p>Clarify the difference of the value of MT (gross total generation of all plants at Orosi substation) for January and September, 2019, because there are differences on the figure reported on CDM_MR_OROSI.xlsx and raw data.</p> <p>VVS versión 02.0 Paragraph 322.</p>					
Project participant response					Date: 14/01/2021
<p>There was a mistake when copying the data in the spreadsheet, the error was corrected in MT for January and September 2019.</p>					
Documentation provided by project participant					
CDM_MR_OROSI v2.xlsx					
DOE assessment					Date: 02/02/2021
<p>Icontec verified on the spreadsheet CDM_MR_OROSI v2.xlsx, the correction of the data and confirm that now the spreadsheet has figures traceable. The finding is closed.</p>					

CL ID	06	Section no.	E.7.	Date:	14/01/2021
Description of CL					
<p>Clarify on the MR the date of calibration of Mp with serials MJ 1402A922-04 and MJ 1402A920-04 for 2018 and 2019, because that date does not correspond with the calibration certificate 2018 and 2019. If correspond, apply the error of the equipment for the delay on the calibration.</p> <p>VVS versión 02.0 Paragraph 365 -366</p>					
Project participant response					Date: 14/01/2021
<p>The dates were corrected in Table 6 as per the calibration certificates for 2018 and 2019. Also in section D.2 Data/Parameter: $M_{p,y}$</p> <p>The error for the delay in the calibration was also applied in year 2019.</p>					
Documentation provided by project participant					

Monitoring report version 2.0, dated 27/01/2021 and CDM_MR_OROSI v2.xlsx	
DOE assessment	Date: 02/02/2021
On section D2 and table 6 of Monitoring report, were corrected the date of the calibration and ICONTEC verified that was applied the maximum permissible error of the meters of $\pm 0.2\%$ for the monitoring period on the calculations on the spreadsheet CDM_MR_OROSI.xlsx. The finding is closed.	

Table 3. CAR from this verification

CAR ID	01	Section no.	E.6.2.	Date: 18/12/2020
Description of CAR				
There are inconsistencies between the figures indicated on the parameter EG _{facility,y} of the period 01/05/2017 – 31/12/2019 section D.2 data and parameters monitored of MR and the spreadsheet CDM_MR_OROSI, sheet Orosi, column R.				
VVS versión 02.0 Paragraph 373				
Project participant response				Date: 14/01/2021
Table regarding the period 01/05/2017 – 31/12/2019 (Section D2), for the Data/Parameter (EG _{facility,y}), must be compared with Sheet "ER OROSI" column H, where the EG _{facility,y} (Net electricity supplied to the grid) is calculated.				
Documentation provided by project participant				
Monitoring report version 2.0, dated 27/01/2021 and CDM_MR_OROSI v2.xlsx				
DOE assessment				Date: 02/02/2021
Icontec verified that the data between the Monitoring report and the spreadsheet CDM_MR_OROSI v2.xlsx, is traceable. The finding is closed.				

Table 4. FAR from this verification

FAR ID	xx	Section No.		Date: DD/MM/YYYY
Description of FAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none">• Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN);• Make structural and editorial improvements.
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: project activities, verifying and certifying		