Monitoring report form for CDM project activity
(Version 08.0)

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

MONITORING REPORT			
Title of the project activity	EOLO Wind Power Project		
UNFCCC reference number of the project activity	6143		
Version number of the PDD applicable to this monitoring report	3		
Version number of this monitoring report	1		
Completion date of this monitoring report	10/09/2021		
Monitoring period number	Third monitoring period		
Duration of this monitoring period	01/01/2016 – 31/12/2019		
Monitoring report number for this monitoring period	N/A		
Project participants	• Eolo de Nicaragua S.A. • Allcot AG		
Host Party	Nicaragua		
Applied methodologies and standardized baselines	"ACM0002: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 12.3.0 – 2 March 2012)"		
Sectoral scopes	Sectoral scope: 1 – Energy industries (renewable/non-renewable sources). Project type: Renewable Energy		
Amount of GHG emission reductions or net anthropogenic GHG removals achieved by the project activity in this monitoring period	Amount achieved before 1 January 2013	Amount achieved from 1 January 2013 until 31 December 2020	Amount achieved from 1 January 2021
	0	498,460 tCO_2 (4 years)	0
Amount of GHG emission reductions or net anthropogenic GHG removals estimated ex ante for this monitoring period in the PDD	440,216 tCO_2 (4 years) – (110,054 tCO_2 per year)		

SECTION A. Description of project activity

A.1. General description of project activity

The Eolo Wind Power Project (hereafter, the "Project") involves using renewable wind power to provide affordable electrical energy to Nicaragua´s grid. The wind farm is located on the southwest coast of Lake Nicaragua, in the Department of Rivas, Republic of Nicaragua.

The main purpose of the Project is to provide electricity to the growing requirement in Nicaragua, using a sustainable and competitive resource: the wind. For this purpose, the Project makes use of 22 GAMESA G90 – 2MW wind turbines for a total capacity of 44 MW. The estimated net power production established in the PDD was 162.32 GWh per year.

Eolo de Nicaragua S.A. ("EOLO"), a special purpose vehicle established in Nicaragua is the original company formed to develop the Project. EOLO is a subsidiary of Globeleq Mesoamerica Energy (Wind) Limited ("GME") a company dedicated to the development, construction and operation of renewable energy projects in Central America and adjacent region[1].

An EPC Agreement was signed with GAMESA on 31/12/2011. Construction works began in January of 2012.

The following table summarizes the Project's main milestones:

Milestones	Date
EPC Agreement signing	**December 2011**
Construction Works start date	**January 2012**
Commercial operations start date	**December 2012**

The total amount of emission reductions achieved in this monitoring period is summarized in the table below:

Monitoring period	Net electricity production	Total emission reductions
01/01/2016 – 31/12/2019	**735,195 MWh**	**498,460 tCO_{2eq}**

A.2. Location of project activity

Nicaragua
City of Rivas
Province of Rivas

The Project is located at approximately kilometer 123 along the Pan-American Highway. The site is located on the south west coast of the Lake of Nicaragua.

The geographical coordinates of the Project area are the following:

Table 1: Project Coordinates (UTM)

Longitude	Latitude
0636020 E	1256863 N

[1] See www.globeleqmesoamericaenergy.com

Figure 1. Project Location

A.3. Parties and project participants

Parties involved	Project participants	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
Nicaragua (Host Party)	Eolo de Nicaragua S.A. (Private Entity)	No
Switzerland	ALLCOT AG	No

A.4. References to applied methodologies and standardized baselines

1. The baseline and monitoring methodology applied is ACM0002: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 12.3.0 – 2 March 2012)
2. Tool for demonstration and assessment of additionality used is: "Tool for the demonstration and assessment of additionality" (Version 06.0)
3. Tool for calculation the emission factor for an electricity system used is: "Tool to calculate the emission factor for an electricity system" (Version 2.2.1)
4. "Guidelines on the assessment of investment analysis" (Version 5)

Reference to the UNFCCC CDM web site:
http://cdm.unfccc.int/methodologies/DB/UB3431UT9I5KN2MUL2FGZXZ6CV71LT

A.5. Crediting period type and duration

Type: 7 years renewable crediting period.
The crediting period of the project activity is from 01/01/2013 to 31/12/2019

Current monitoring period: 01/01/2016 - 31/12/2019

SECTION B. Implementation of project activity

B.1. Description of implemented project activity

EOLO signed a PPA with DISNORTE and DISSUR on June 2nd 2011. On December 31st, 2011, an EPC agreement was signed with GAMESA. Later on, construction works began in January of 2012 and the Project started commercial operations in December 1st, 2012. The Project Activity was registered as a CDM Project on 18/06/2012 under reference number 6143.

The total capacity of the project is 44 MW, which consists in twenty-two 2 megawatt (MW) Gamesa G90 wind turbines generators. The net power production delivered to the national grid is estimated to be 162.32 GWh per year. The specific Project data is shown in the following table:

Table 2: Project Data

Project Features	**Total Nominal Capacity**	**44 MW**
Turbine Features	**Brand**	**GAMESA**
	Model	**G90**
	Rotor Blade	**Eolica 44.0 m, Class IIA**
	Capacity	**2.0 MW**
Other Data	**Machinery Components**	**Class IIA 50/60 Hz**
	Tubular Steel Tower	**Hub Heights at 78 meters (Class IIA)**
	Electrical Installations and Lightning Protection	**50/60 Hz**
	Design Life	**20 years**

During this monitoring period (01/01/2016 - 31/12/2019), the net electricity supply by the Project to the utility was 735,195 MWh. The monitoring in the Project is carried out as established in the Monitoring Plan by continuous metering of the received and delivered energy.

Regarding events that may impact the GHG emission reductions during the monitoring period, the following are mentioned:

Table 3: Event Log Year 2016

YEAR 2016			
Date	**This month**	**Losses MW**	**Comments**
January 2016	1.00	48.44	On January 18, 2016, breakers A9015 and T9010 triggered due to the lack of energy feed to the protection relays of the 34.5 KV area. The protection relays were left without the energy feed due to a human error made during the programmed exchange of a faulty battery in the battery bank.
August 2016	1.00	1.07	On August 28th, we were affected by a Plant Trip due to voltage absence by a trip in transmission lines terminals in L9030 (Liberia) and L9080 (Masaya). This was due to a failure in the regional interconnection lines, causing oscillations in the 230 kV lines, which resulted in the opening of these lines. We were unavailable for 2 hours.
September 2016	1.00	241.54	**Scheduled Shutdown.** On September 4th, the annual Substation Preventive maintenance took place, all scheduled activities were conducted, starting at 5:00 and ending at 18:00 hours.
October 2016	3.00	52.01	On October 13th, 15th and 22th we were affected by a transferred trip, which triggers breakers of the collector circuits. CNDC explains about these events, and indicated

			that all wind power plants are integrated into this system Supplementary control scheme so when a failure is present in the lines L9080 or L9150, the trip will be transfer to the plants. This situation applies to all the wind farms located in Rivas an its objective is to avoid the line from disconnecting completely.
November 2016	2.00	9.97	On November 19 and 24, we were affected by a transferred trip, which open the switches of the collector circuits. CNDC explains that these events happen, indicates that all wind power plants are integrated into this System Supplementary Control Scheme so when a failure is present in the line L9080 or L9150, will be affected. This situation applies to all the farms located in Rivas.
December 2016	3.00	38.47	On December 17th and 31st, we were affected by a transferred trip, which activates the opening of the switches of the collector circuits. CNDC explains that these events, which indicate that all wind power plants are integrated into the System Supplementary Control Scheme so when a failure is present in the line L9080 or L9150, we will be affected. This situation applies to all the farms located in Rivas. On December 21th the Plant tripped due to a frequency fault in the transmission line, which caused the LIBERIA-MSY line to be triggered, leaving the 230 KV bus without tension causing the trip of the switches bar 34.5 KV.

Table 4: Event Log Year 2017

YEAR 2017			
Date	**Duration (Hrs)**	**Losses MW**	**Comments**
January 2017	5.00	378.79	On January 9, the plant was affected by four trip transferred, this was caused by an overload of the interconnect TCP-CAS L9150, the event caused a strong load generation imbalance. The frequency was degraded to the point where the north interconnections were triggered, leaving the Nicaragua system isolated and in voltage collapse. On January 16 we were affected by a trip transferred The Nicaragua system experiences degradation of frequency and voltage instability, before which it triggers firing of the main generation plants, the Nicaragua system is isolated and experiences voltage collapse.
June 27, 2017	0.5	Substation	National blackout due to failure in regional electrical system.
July 01, 2017	1.8	Substation	National blackout due to failure in regional electrical system.
September 03, 2017	0.7	Substation	L9200 transmission line standardization
September 9, 2017	14.3	Substation	Annual maintenance of the Eolo substation

Table 5: Event Log Year 2018

YEAR 2018			
Date	**Duration (Hrs)**	**Category**	**Comments**
13/3/2018	6	Substation	Plant clearance to eliminate thermal

			anomaly in the main transformer
10/8/2018	15.5	Collector circuit	Clearance of the Collector Circuit # 2 for Fire in AG T16
29/9/2018	13.7	Substation	Annual maintenance of the Eolo substation
7/10/2018	0.4	Substation	No voltage at the Eolo Plant due to failures in the Transmission lines
29/11/2018	28.2	Substation	No voltage at the Eolo Plant due to failures in the Transmission lines
6/11/2018	37.2	Collector circuit	Clearance of the Collector Circuit # 3 due to change of medium voltage cell AG T17 and AG T19

Table 6: Event Log Year 2019

YEAR 2019			
Date	**Duration (Hrs)**	**Category**	**Comments**
17/02/2019	5.6	Substation	Plant clearance to carry out electrical tests to the Main Transformer.
25/3/2019	33.2	Collector circuit	Trip collector circuit # 2 due to damage to the power cable section T11-SE EOLO
25/4/2019	2.2	Collector circuit	Clearance of collector circuit # 2 due to placement of register box in junctions' section T11-SE EOLO
21/5/2019	15.5	Collector circuit	Trigger of collector circuit # 1 due to damage to lightning rod in air passage
22/5/2019	3.9	Collector circuit	Trigger of collector circuit # 2 due to damage to lightning rod in overhead passage of circuit # 1
27/4/2019	7.2	Collector circuit	Clearance of collector circuit # 2 due to installation of terminals to cell MT T16
2/6/2019	2.9	Substation	Triggering of L9200 and L9080 lines.
8/6/2019	1.7	Substation	Trigger in Line L9170 EOL-AMY (Transient fault)
25/09/20	16.85	Substation	Maintenance of the Eolo substation
26/09/2019	12.80	Substation	Maintenance of the Eolo substation
16/09/2019	3.17	Substation	General trip of the SIN due to technical failures in the North interconnection line (with Honduras)
19/10/2019	14.5	Substation	Clearance programmed by Enatrel to modify line L9080 (EOLO- Masaya)
20/10/2019	4.4	Substation	SIN general trip due to technical failures on line L9170
23/10/2019*	4.6	Substation	SIN general trip due to technical failures on line L9170
26/10/2019	1.4	Substation	SIN general trip due to technical failures on line L9170
27/10/2019	1.1	Substation	SIN general trip due to technical failures on line L9170
02/11/2019	8.1	Substation	Main voltage dip 230 kV line L9170 15 km from SET Amayo; short to ground phases L1 and L3 (branch making contact with transmission lines)
05/11/2019	3.2	Substation	Trip of the L9080 line causing the opening of the L9170 and T9010 switches
08/12/2019	4.9	Substation	Main voltage dip 34.5 KV, event distance 521 km, line L9080 MSY-EOL

During this monitoring period there were no major events or situations that affected the applicability of the applied methodology.

B.2. Post-registration changes

B.2.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

Not applicable

B.2.2. Corrections

(a) Corrections that have been approved by the Board as applicable from the period prior to this monitoring period:

A Post Registration Change (PRC-6143-001), was made in order to correct the heights of the installed turbines. The PRC clarifies that only 78 m hub heights were installed. This request was approved on 07/10/2014.

Information on this request and related documents are available as of today on the UNFCCC CDM web site < http://cdm.unfccc.int/PRCContainer/DB/prcp379622289/view>

B.2.3. Changes to the start date of the crediting period

Not applicable

B.2.4. Inclusion of monitoring plan

Not applicable

B.2.5. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

(a) Changes that have been approved by the Board as applicable from the period prior to this monitoring period:

A Post Registration Change (PRC-6143-001) was made in order to correct the power accuracy of the main and back up meters. The PRC clarifies that the meters have an accuracy rating of at least +/- 0.2% (main) and +/- 0.5% (backup). This request was approved on 07/10/2014.

Information on this request and related documents are available as of today on the UNFCCC CDM web site < http://cdm.unfccc.int/PRCContainer/DB/prcp379622289/view>

B.2.6. Changes to project design

Not applicable

B.2.7. Changes specific to afforestation or reforestation project activity

Not applicable

SECTION C. Description of monitoring system

The Project delivers its output to a dedicated substation where two bi-directional meters required for determining the plant's net generation are installed. Figure 1 shows a metering scheme: electricity is determined at the 230 kV substation meters (both for energy delivered to and consumed from the grid). A main meter and a backup meter are in place.

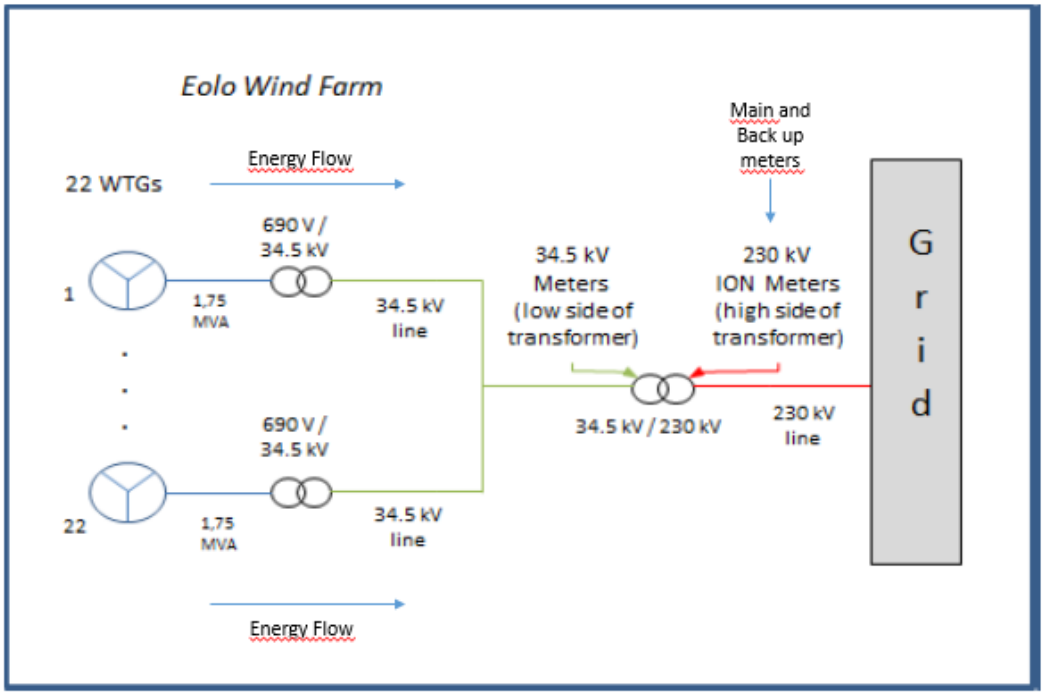


Figure 2. Metering Scheme, dedicated Substation

The main meter used during the period 01/01/2016 - 31/12/2019 was the ZYY01205024300000 (Model ION 8650) and the backup meter used was ZYY01205023900000 (Model ION 8650). The latter explanation is described in the table below:

Table 7: Meters (main and back-up)

PERIOD	MAIN METER *(MMED1)*	BACKUP METER *(MMED2)*
01/01/2016 - 31/12/2019	**ZYY01205024300000 Serial Number: MW 1205A243-01 Model: ION 8650**	**ZYY01205023900000 Serial Number: MW 150A239-01 Model: ION 8650**

The energy produced by the Project is sold to "Distribuidora de Electricidad del Norte" (DISNORTE) and to "Distribuidora de Electricidad del Sur" (DISSUR) (hereinafter the Distributors). Each Distributor receives 50% of the energy delivered by the Project, as per the PPA signed with both of them.

Personnel of EOLO take remotely readings every 15 minutes, via the ION ENTERPRAY SCADA system. The net energy in the first day of the month is subtracted from the net energy of the last day of the month, the difference obtained.

The operator elaborates a record based on the monthly net energy, and it's signed by the Plant's management and the Department of Coordination of Operations.

A record and an invoice are developed by EOLO and sent directly to the Distributors. This record contains the readings of the main and backup meters at the first and last day of the billing month as well as the net energy produced by the Project. The record also includes the meters from which the readings are taken and the price, in USD, of the net energy. This record is signed by the operations coordinator and the plant manager.

Onsite meters are located at the 34.5 kV side of the substation (of at least +/- 0.5 accuracy level) in case both 230 kV meters at the substation are out. In this case, historical records will be used to account for transmission losses between the 34.5 kV and the 230 kV metering points, if any. The average difference between the readings from the 34.5 kV and the 230 kV meters of the last 3 months will be deducted from the readings obtained from the 34.5 kV meters.

The CNDC (Centro Nacional de Despacho de Carga) takes the energy readings remotely. This data is compared with the invoice and record, prepared by personnel of EOLO. Once the values on the invoice issued by the Project Participant are confirmed by the CNDC, the invoice is deemed official and its payment is due.

As the 230 kV meters are the official ones used for billing purposes, any events affecting the latter should be reflected in audit reports prepared by the CNDC. If a different method for determining net electricity is used in these audit reports, the most conservative values will be chosen.

The flowchart of the billing process for the Project is found below:

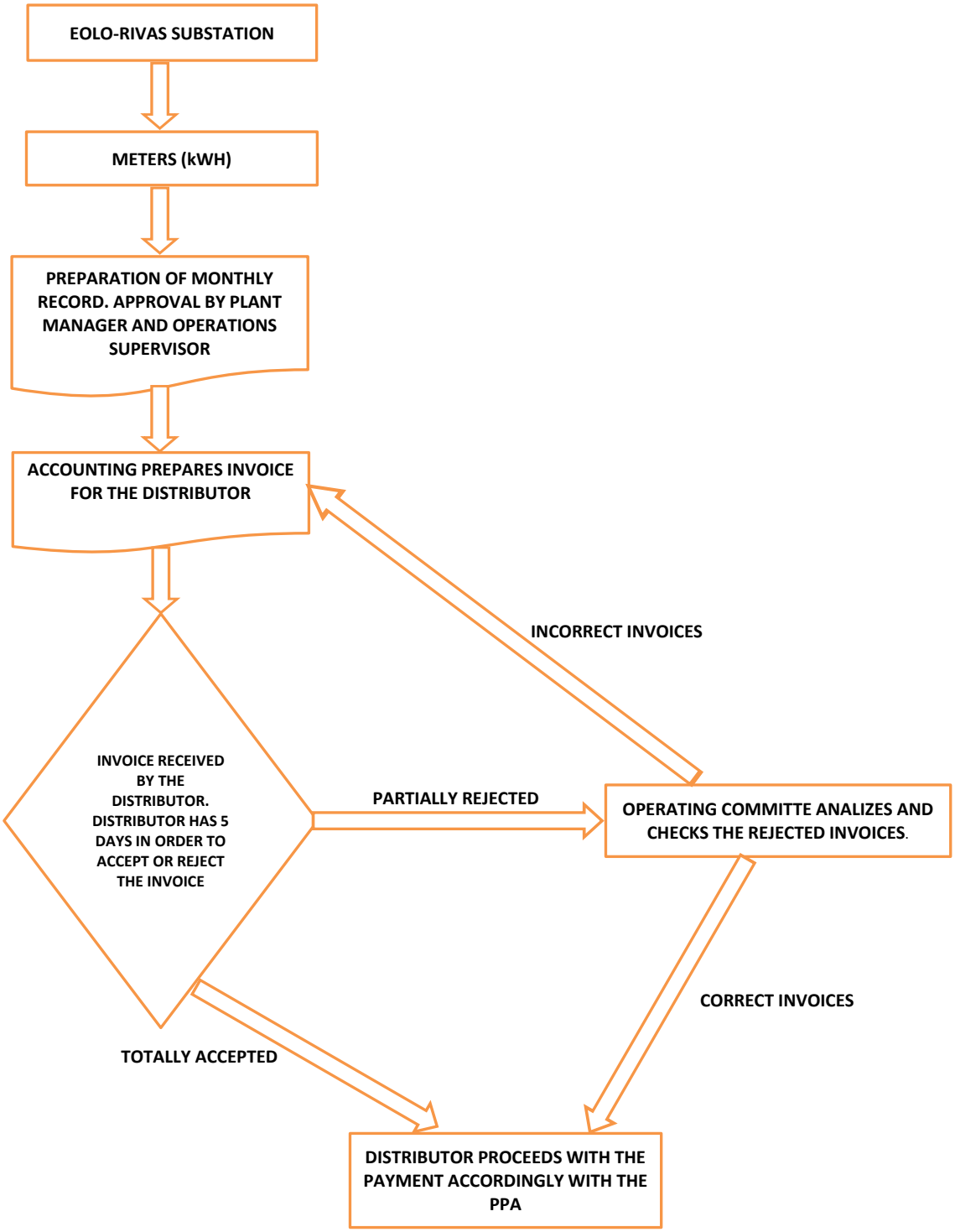


Figure 3. Information Flow

The Operations Department is responsible for ERs monitoring, record keeping and the implementation of proper QA procedures. All the information from this department is consistent and easily verifiable with all the relevant data from other departments in case an external audit should require it.

All Operation and Maintenance procedures will be adapted to include the carbon monitoring component and the adequate accounting of the emission reductions.

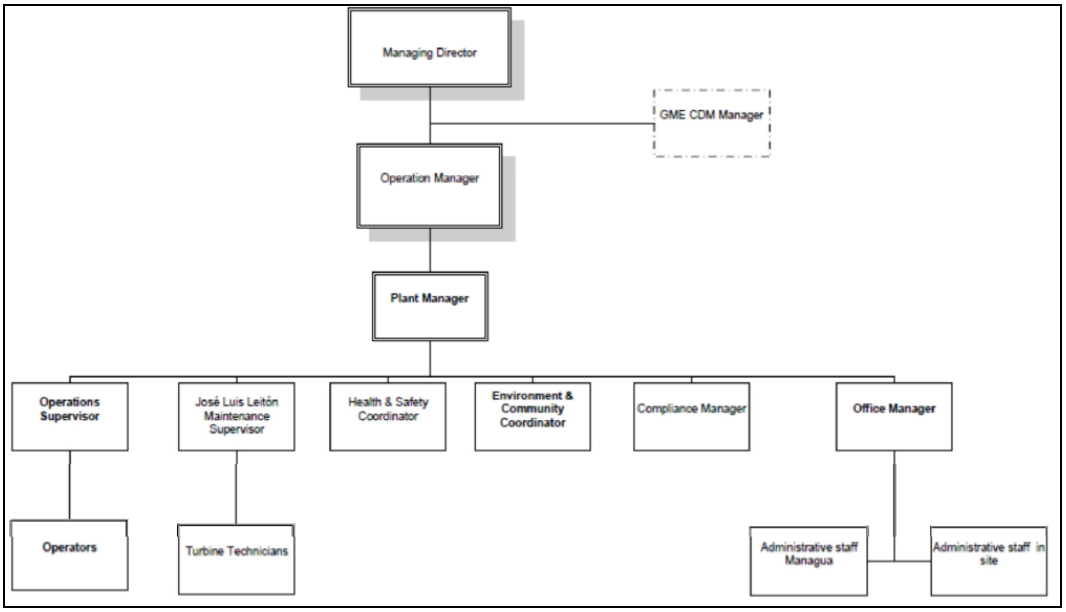


Figure 4. Organizational structure of the Project

The department of Coordination of Operations is represented in the figure 3 as “Operations Supervisor”.

	Plant Manager	Environmental Coordinator	Operations Manager
Collect data			
Power delivered to grid	R	E	
Ensure calibrations and data quality	R	I	E
Process data			
Input of raw data in spreadsheet		R	E
Cross check data and correct		R	E
Calculate emission reductions		R	E
Quality check calculated emission reductions	R/E	I	R/E
Reporting and archiving			
Report data gaps and errors	I	R	E
Report emission reductions to date	R/E	I	R/E
Archiving of procedures and certificates		R	E
Archiving of data	R	E	E

E = Execute
R = Responsible
I = To be informed

Figure 5. Responsibilities of personnel

Procedures for handling internal auditing and non-conformities

The following table sets out the data collection procedures in case of extraordinary faults and events:

Table 8: Data collection procedures in case of extraordinary faults and events

Periodicity	Activity	Responsible
Failure in any of the meters (main and backup)	Communicate immediately to the operations management, the dispatch center and the distributors.[2] Register the event in the log. Any replacement or reparation must have its work record. The personnel must ensure the meter's replacement and the installation of the new meter, as well as the correct calibration of the device by a qualified company, as soon as possible.[3].	Coordination of Operations & EOLO's Shift Operator.
In case the turbines need to be stopped, or, the project goes through an interruption of its operations.	Record the hours of the turbine(s)/Project's inactivity as well as the reason(s) of the shutdown and the moment of reactivation.	Coordination of Operations & EOLO's Shift Operator.
Unforeseeable cases	Any event preventing wind project operation should be promptly reported to Plant Management.	Coordination of Operations & EOLO's Shift Operator.

Calibration of Meters and Metering

Meters must be calibrated at least once every two years as per the Commercial ANNEXES of the Operations Normative of Nicaragua. The cost of the calibration/verification must be assumed by EOLO. During this monitoring period there were no delayed calibrations.

The CNDC could ask for a meter checking. If any anomaly is detected, the cost of the auditing will be assumed by the Project.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante

Data/Parameter	EF_{grid}, CM, 2007, 2008, 2009
Unit	tCO_2/MWh
Description	Combined Margin Emission Factor of the Grid Calculated with the latest published official statistical data, using the default weights for wind projects w_{OM} = 0.75 and w_{BM} = 0.25
Source of data	Determined in the registered PDD
Value(s) applied	0.6780
Choice of data or measurement methods and procedures	
Purpose of data/parameter	Calculation of baseline emissions
Additional comments	This parameter is fixed for the whole crediting period

[2] The Operations Coordination Office is in charge of this process and it's resolution

[3] All notification of installation and certificates calibration will be kept on file.

D.2. Data and parameters monitored

Data/parameter:	$EG_{facility,y}$
Unit	MWh/yr
Description	Quantity of net electricity generation supplied by the Project plant/unit to the grid in year *y*
Measured/calculated/default	Measured
Source of data	Electricity meter reading
Value(s) of monitored parameter	735,195 MWh/yr
Monitoring equipment	The energy is continuously metered at the Delivery Point by two electronic line meters. The ZYY01205024300000 (ION 8650) meter served as the main meter and the ZYY01205023900000 (ION 8650) as the backup meter Period from 01/01/2016 - 31/12/2019 - Main (MMED1) ZYY01205024300000 - Series: MW 1205A243-01 - Brand: ION, Model: 8650 - Calibration date: 23/05/2012, valid until 22/05/2014. - Verification date: 19/05/2014, valid until 18/05/2016. - Verification date: 09/05/2016, valid until 08/05/2018. - Verification date: 24/04/2018, valid until 23/04/2020. - Power Accuracy: 0.2% - Date of meter installation to the plant: 12/11/2012 - Back Up (MMED2) ZYY01205023900000 - Series: MW 1250A239-01 - Brand: ION, Model: 8650 - Calibration date: 23/05/2012, valid until 22/05/2014. - Verification date: 19/05/2014, valid until 18/05/2016. - Verification date: 09/05/2016, valid until 08/05/2018. - Verification date: 24/04/2018, valid until 23/04/2020. - Power Accuracy: 0.2% - Date of meter installation to the plant: 12/11/2012 Calibration frequency of the meters: at least once every 2 years as per the Commercial ANNEXES of the Operations Normative of Nicaragua.
Measuring/reading/recording frequency:	Two bidirectional meters are installed at the Metering Point in the EOLO's dedicated substation, a main meter and a back-up meter. The bidirectional meters measures both electricity generated that is being delivered to the grid and discount electricity that is consumed by the Project. The data (net electricity supplied to the grid) will be calculated from the readings from the main meter at the Project site (recording both imports and exports that will be deducted to obtain the net electricity). Energy readings are taken every 15 minutes.
Calculation method (if applicable):	N/A

QA/QC procedures:	The CNDC (Centro Nacional de Despacho de Carga) takes the energy readings remotely through a SCADA system. These energy readings taken by the CNDC, are compared with the invoice and record prepared by EOLO`s personnel. Once the values on the invoice issued by the project participant are confirmed by the CNDC, the invoice is deemed official and the payment may proceed. Meters will be calibrated according to the Operation´s Normative.
Purpose of data/parameter:	Calculation of baseline emissions.
Additional comments:	Data will be archived by means of electronic and paper backup for the full crediting period, plus two years after the end of the crediting period or the last issuance of CERs, whichever occurs later.

D.3. Implementation of sampling plan

Not applicable.

SECTION E. Calculation of emission reductions or net anthropogenic removals

E.1. Calculation of baseline emissions or baseline net removals

According to ACM0002, the baseline emissions of the project are equal to:

$$BE_y = EG_{PJ,y} \cdot EF_{grid,CM,y}$$

Where:

BE_y Baseline emissions in year y (tCO_2/yr)

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM Project Activity in year y (MWh/yr) ($EG_{facibility}$)

$EF_{grid,CM,y}$ Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh).

Year	*$EG_{PJ,y}$* (MWh)	*$EF_{grid,CM,y}$* (tCO2 / MWh)	*BE_y* (tCO_2e)
2016	189,923	0.6780	128,767
2017	171,156	0.6780	116,043
2018	200,092	0.6780	135,662
2019	174,025	0.6780	117,988
Total	**735,025**		**498,460**

E.2. Calculation of project emissions or actual net removals

There are no project emissions attributable to wind projects. Consequently $PE_y = 0$

E.3. Calculation of leakage emissions

There is no leakage attributable to wind projects. Consequently $L_y = 0$.

E.4. Calculation of emission reductions or net anthropogenic removals

	Baseline GHG emissions or baseline net GHG removals (t CO_2e)	Project GHG emissions or actual net GHG removals (t CO_2e)	Leakage GHG emissions (t CO_2e)	GHG emission reductions or net anthropogenic GHG removals (t CO_2e)			
				Before 01/01/ 2013	From 01/01/ 2013 until 31/12/ 2020	From 01/01/ 2021	Total amount
Total	**498,460**	0	0	0	**498,460**	0	**498,460**

E.5. Comparison of emission reductions or net anthropogenic removals achieved with estimates in the registered PDD

Amount achieved during this monitoring period (t CO_2e)	Amount estimated ex ante for this monitoring period in the PDD (t CO_2e)
498,460 tCO2 (4 years)	110,054 tCO2 per year 440,216 tCO2 (4 years)

E.5.1. Explanation of calculation of "amount estimated ex ante for this monitoring period in the PDD"

The calculation of "amount estimated ex ante for this monitoring period in the PDD" was made as per formula below:

$ER_y = BE_y$

The baseline emissions were calculated as follows:

$BE_y = EG_{PJ,\,y} * EF_{grid,\,CM,\,y}$

The emission reduction for the first crediting period was calculated as follows:

$ER_y = EG_{PJ,\,y} * 0.6780\ tCO_2/MWh$

$EG_{PJ,\,y}$ = 162,322 MWh (projected (P75) average generation in the registered PDD)

ER_y= 110,054 tCO_{2e}

E.6. Remarks on increase in achieved emission reductions

The actual values of emission reductions achieved during this monitoring period are 498,460 tCO2e; 13% higher than the values estimated ex ante in the registered PDD for an equivalent amount of time (440,216 tCO2e). This is a direct consequence of an equally higher electricity generation, as compared to the estimate used in the PDD (i.e. 649,288 MWh versus 735,195 MWh for an equivalent amount of time).

Production at wind farms varies greatly from year to year due to changes in weather patterns and frequency distribution of wind speeds. Furthermore, is important to stress that as stablished in Eolo

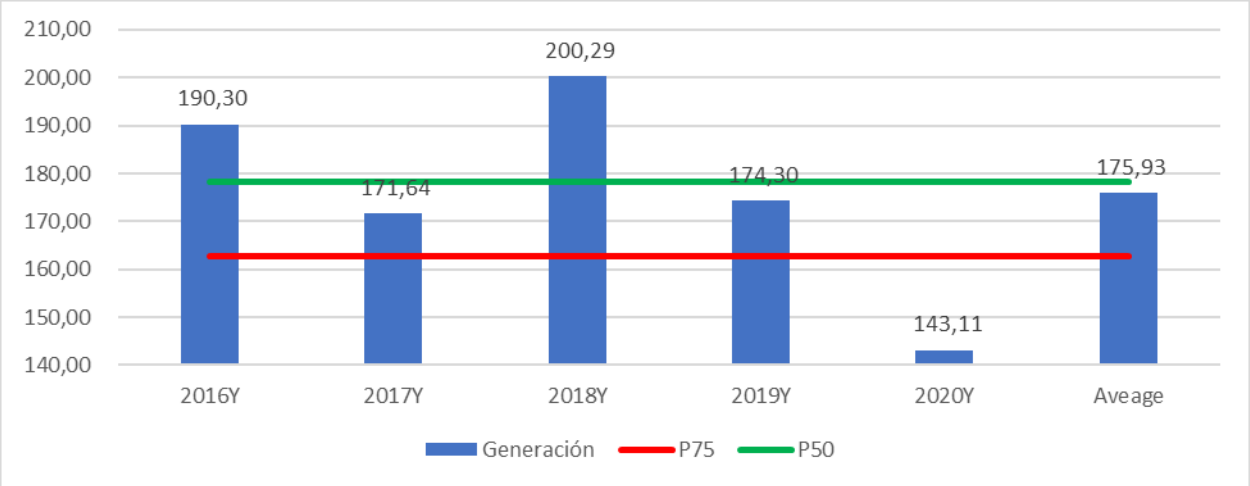
wind project PDD report “PDD A.3. Technologies and/or measures Page. 4”, the power curve utilized was P75 which was a very conservative approach.

> The power curve used for the calculation of the annual production of energy corresponds with the power curve furnished in the Garrad Hassan wind study for the Eolo project. Garrad Hassan has reviewed power curves of the potential WTG for the site and forecasted the P75 Net Capacity Factor to be 42.11% for Gamesa; this translates into a net generation estimate of 162,322 MWh/year.

Here we have the data from the Garrad Hassan estimated generation results (Garrad Hassan energy assessment of the proposed Eolo wind farm P114. Conclusions and recommendations:

Probability of exceedance [%]	Net energy output [GWh/annum]		Capacity Factor [%]	
	1 year average	10 year average	1 year average	10 year average
90	149.0	154.9	38.6	40.2
75	162.8	166.0	42.2	43.0
50	178.2	178.2	46.2	46.2

As we can see in the chart below the generation as expected with this type of technology varies from year to year, but we can also conclude that the average generation for the period (2016-2020) complies whit the result of GH study (175.93 GWH) result between de P50 and P75.



E.7. Remarks on scale of small-scale project activity

Not applicable

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Document information

Version	*Date*	*Description*
08.0	6 April 2021	Revision to: • Reflect the “Clarification: Regulatory requirements under temporary measures for post-2020 cases” (CDM-EB109-A01-CLAR).
07.0	31 May 2019	Revision to: • Ensure consistency with version 02.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN); • Add a section on remarks on the observance of the scale limit of small-scale project activity during the crediting period; • Add "changes specific to afforestation or reforestation project activity" as a possible post-registration changes; • Clarify the reporting of net anthropogenic GHG removals for A/R project activities between two commitment periods; • Make editorial improvements.
06.0	7 June 2017	Revision to: • Ensure consistency with version 01.0 of the “CDM project standard for project activities” (CDM-EB93-A04-STAN); • Make editorial improvements.
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from *F-CDM-MR* to *CDM-MR-FORM*; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.

Version	*Date*	*Description*
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB 70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01.0	28 May 2010	EB 54, Annex 34. Initial adoption.

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