




**Validation report form for  
CDM project activities  
(Version 04.0)**

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

**BASIC INFORMATION**

<b>Title of the project activity</b>	Expansion San Pedro Wind Farm
<b>Scale of the project activity</b>	<input checked="" type="checkbox"/> Large-scale <input type="checkbox"/> Small-scale
<b>Version number of the validation report</b>	3
<b>Completion date of the validation report</b>	02/02/2021
<b>Version number of the PDD to which this report applies</b>	4
<b>Date when PDD was uploaded for global stakeholder consultation</b>	19 Nov 15
<b>Project participants</b>	RIO ALTO SA ENERGIAS ABTAO SA
<b>Host Party</b>	Chile
<b>Applied methodologies and standardized baselines</b>	Selected methodology: ACM0002 v.20.0 "Grid-connected electricity generation from renewable sources"
<b>Mandatory sectoral scopes</b>	Sectoral scope 1: Energy industries (renewable - / non-renewable sources)
<b>Conditional sectoral scopes, if applicable</b>	NA
<b>Estimated amount of annual average GHG emission reductions or GHG removals by sinks</b>	119,235
<b>Name and UNFCCC reference number of the DOE</b>	AENOR INTERNACIONAL, S.A.U. Reference number: E-0021
<b>Name, position and signature of the approver of the validation report</b>	 José Luis Fuentes Climate Change Manager

## SECTION A. Executive summary

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AENOR INTERNACIONAL, S.A.U. (AENOR hereinafter) has been contracted by Rio Alto SA as a project participant, to undertake the validation of the CDM project activity "Expansion San Pedro Wind Farm". The validation has been performed through a process of document review based on the PDD, initially submitted for validation and the subsequent revisions, follow-up interviews with the stakeholders, resolution of outstanding issues and issuance of the validation report.

The CDM project activity "Expansion San Pedro Wind Farm" consists in the construction of a wind farm, with the purpose to generate renewable energy and supply electricity to the Chilean grid (SIC). The project consists in the installation of 13 wind turbines, with a total installed capacity of 65 MW. The wind farm will be located at the Chiloé Island, municipality of San Pedro, community of Dalcahue, in the 10th Region (Región de los Lagos), Chile. Placed near 1,174 km. south of Santiago de Chile. The coordinates of project substation are:

Latitude : -42.276716

Longitude : -73.88975

### Scope of the validation

The scope of the validation is to assess all aspects described in the CDM project standard, version 02.0 /1/ related to all aspects of GHG reduction involved in the project, including the project design, the baseline, the determination of the grid's emission factor and the procedures proposed for monitoring emissions reduction in the future.

The following documents were reviewed as part of the scope of the activity:

- PDD /2//3/, including baseline study and Monitoring Plan.
- Approved Methodology, ACM0002: Grid-connected electricity generation from renewable sources --- Version 20.0 /4/
- Decision 3/CMP.1 and relevant decisions and guidelines from the EB
- CDM validation and verification standard, version 02.0 /5/
- CDM project cycle procedure 02.0 /6/
- CDM project standard, version 02.0 /1/.
- Tool to calculate the emission factor for an electricity system, version 07.0 /7/
- Tool for demonstration and assessment of additionality, Version 07.0.0 /8/
- Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation, Version 03.0. /9/
- Methodological tool: Common practice, Version 03.1 /34/
- Tool to calculate project or leakage CO2 emissions from fossil fuel combustion. Version 03.0/11/
- Associated documentation (EF calculation, data and statistics from dispatch centre)

The validation scope is defined as an independent and objective review of the PDD, the project's baseline study and monitoring plan, and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. AENOR, based on the Specific Instruction for the Validation, verification and certification of clean development mechanism (CDM) project activities (IE/DTC/0039) /12/, has used a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation is not meant to provide any consultancy services to the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the PD

## Validation Process

The project validation assessment aims to be a risk-based approach and is based on the methodology developed in the CDM Validation and Verification Standard, an initiative of Designated and Applicant Entities, which aims to harmonise the approach and quality of all such assessments.

The project activity was submitted to GSC in November 2015 and the CDM validation process was interrupted in June 2018 due to internal reasons of the project participants, however, in 2019 the project participants started moving the CDM validation process again, as the project did not cease its implementation as information provided by PPs demonstrates.

In accordance with the implementation timeline of section A.1 of the PDD and the letter of commissioning of the National Electrical Coordinator /62/, the project participants have demonstrated that the project activity continued its implementation.

The validation was performed in the manner of an audit, where, a desk review of the PDD was undertaken against the latest version of the approved methodology and CDM and other relevant criteria applying to the project.

A request for review was received by email for the validation of Expansion San Pedro Wind Farm on 5 January 2021, the same three requests were received, regarding that the first crediting period of the proposed project activity starts after the end of the second commitment period on 31 December 2020. However, current CMP decisions prevent the issuance of CERs for emission reductions that occur after 31 December 2020.

In accordance with the EB 108, paragraph 7, (c) /63/, AENOR has included in the validation report a forward action request that requires the project participants to apply any global warming potential values that may be adopted by the CMP for that period in their monitoring reports for any emission reductions achieved on or after 1 January 2021; and update their project documents in accordance with any requirements of the CMP guidance.

Besides, AENOR has assessed that in accordance with EB 108, paragraph 7, (b) the project participants have evaluated that, in converting emission reductions achieved on or after 1 January 2021 to carbon dioxide equivalents in project design documents, they shall apply as global warming potential values the lowest value from the Intergovernmental Panel on Climate Change (IPCC) assessment reports for each greenhouse gas for a 100-year time horizon. Regarding this issue, since the project activity is a wind farm project and no GWP are used in the calculation of project emission reductions, there is no need to change the excel calculation nor the PDD.

As a final step of the validation, the validation report has to undergo internal quality control by means of a technical review following the procedures of AENOR. The technical reviewer is a competent person from AENOR, independent of the team that carried out the validation of the project activity.

The project participants were requested to address all validation findings and finally provided the validation team with sufficient evidence to determine that the applicable CDM requirements have been met. The project participant modified the initial updated PDD to resolve the validation team concerns and resubmitted a final version of the updated PDD. AENOR has prepared this report based on the final updated PDD.

All Corrective Action Requests (CAR) and Clarification Actions (CL) have been checked by the validation team and have been adequately resolved. Since the validation of this project activity was started in November 2015, there are some CARs and CLs that were opened in 2016 and other CARs and CLs were opened after 2019, once the validation process re-started again, because the final PDD was updated to the new CDM requirements and therefore the validation has been made against the current CDM rules.

All the validation findings are summarized in section C.5 below and documented in more detail in Appendix 4.

The ex-ante emission factor of the National Electricity System of Chile, SEN, and the ex-ante estimates of emissions reductions have been calculated correctly on the basis of the approved methodology ACM0002: Grid-connected electricity generation from renewable sources, Version 20.0, and the “Tool to calculate the emission factor for an electricity system, version 07.0.

In AENOR’s opinion, the GHG emissions reductions of the annual average over the crediting period and the total emissions reductions for the crediting period from January 2021 – December 2027, were calculated correctly and amount 834,645 tonnes of CO2 equivalent respectively

## SECTION B. Validation team, technical reviewer and approver

### B.1. Validation 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	Team Leader (up to September 2017)	IR	Garro	Freddy Alejandro	AENOR PERU	Yes	Yes	Yes	Yes
2	Team Leader (from September 2017 onwards)	IR	Llorente	Elena	AENOR	Yes	No	No	Yes
3	Validator	IR	Pellitero	Marcelino	AENOR	Yes	No	No	Yes

### B.2. Technical reviewer and approver of the validation 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	IR	Arribas	Javier	AENOR
2	Technical reviewer	IR	Fuentes	Jose Luis	AENOR
3	Approver	IR	Fuentes	Jose Luis	AENOR

## SECTION C. Means of validation

### C.1. Desk/document review

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The Project Design Document submitted by the PP was reviewed against the approved methodology and against CDM and other relevant criteria. Additional background documents

related to the project design, rules and regulations issued by the government and baseline were also validated.

To address the corrective actions and clarification requests that arose from the desk review and the on site visit, the consultants revised the initial project design document submitted and developed the final PDD.

## C.2. On-site inspection

Duration of on-site inspection: 26/01/2016 to 28/01/2016				
No.	Activity performed on-site	Site location	Date	Team member
1.	<b>DNA interview</b> <ul style="list-style-type: none"> <li>✓ Opinion about the project.</li> <li>✓ Approval Letter of the Project Activity and special requirements.</li> </ul>	CHILEAN DNA / MINISTRY OF ENVIRONMENT	26/01/2016	Garro Flores Freddy Alejandro
2.	<b>Environmental Impact Assessment</b> <ul style="list-style-type: none"> <li>✓ EIA approval.</li> <li>✓ Environmental Management Plan.</li> <li>✓ Comments and opinion about the project</li> <li>✓ Benefits for the local community</li> <li>✓ Environmental regulations: Authorizations.</li> <li>✓ Environmental requirements.</li> </ul>	GOVERNMENT ENVIRONMENTAL ASSESSMENT SERVICES (SEA)	27/01/2016	Garro Flores Freddy Alejandro
3.	<b>Stakeholders</b> <ul style="list-style-type: none"> <li>✓ Opinion about the project.</li> <li>✓ Benefits for the local community.</li> <li>✓ Local permits.</li> <li>✓ Interviews and comments in the past (ecological flow, reforest of lands, waste management program, taxes, sale of electricity to communities, etc.).</li> </ul>	RELEVANT STAKEHOLDERS (REPRESENTATIVES OF COMMUNITIES, LOCAL AUTHORITIES)	27/01/2016	Garro Flores Freddy Alejandro
4.	<b>Project's characteristics</b> <ul style="list-style-type: none"> <li>✓ Technology, capacity of the project, auxiliary power units, etc.</li> <li>✓ Location.</li> <li>✓ Methodology applicability conditions and confirmation of not being a de-bundled component (distances, authorization, etc.).</li> </ul>	PROJECT SITE	28/01/2016	Garro Flores Freddy Alejandro

## C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Cohelo	Paulo	CHILEAN DNA / MINISTRY OF ENVIRONMENT	26/01/2016	Opinion about the project. Approval Letter of the Project Activity Prior Consideration Local regulation	Garro Flores Freddy Alejandro

2.	Sanhueza	Mario	GOVERNMENT ENVIRONMENTAL ASSESSMENT SERVICES (SEA)	27/01/2016	EIA approval. Environmental Management Plan. Comments and opinion about the project Benefits for the local community Environmental regulations: Authorizations. Environmental requirements.	Garro Flores Freddy Alejandro
3.	Lemus	Pablo	Mayor of Dalcahue community	27/01/2016	Local Permits	Garro Flores Freddy Alejandro
4.	Mondragon	Luis	Project Activity Manager	28/01/2016	Technology, capacity of the project, auxiliary power units, etc. Location. Methodology applicability conditions and confirmation of not being a de-bundled component (distances, authorization, etc.).	Garro Flores Freddy Alejandro

#### C.4. Sampling approach

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Not applicable

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

Areas of validation findings	No. of CL	No. of CAR		No. of FAR
Demonstration of prior consideration of the CDM	CL 1 CL 2			
Identification of project type				
Description of project activity		CAR 4		
Application and selection of methodologies and standardized baselines				
- Application of methodologies and standardized baselines				
- Deviation from methodology and/or methodological tool				
- Clarification on applicability of methodology, tool and/or standardized baseline				
- Project boundary, sources and GHGs				
- Baseline scenario				

- Demonstration of additionality	CL 4	CAR 6 CAR 7 CAR 8		
- Estimation of emission reductions or net anthropogenic removals	CL 3	CAR 5 CAR 9		
- Monitoring plan				
Start date, crediting period type and duration				
Environmental impacts		CAR 10		
Local stakeholder consultation				
Sustainable development co-benefits				
Approval		CAR 1		
Authorization				
Modalities of communication		CAR 2 CAR 3		
Global stakeholder consultation				
Others (please specify) Specific requirements of EB 108, paragraph 7, (c)				FAR 1
<b>Total</b>	<b>4</b>	<b>10</b>		<b>1</b>

## SECTION D. Validation findings

### D.1. Demonstration of prior consideration of the CDM

<b>Means of validation</b>	<p>The start date of the project activity is 19/05/2015 (date of project participants signed turnkey EPC contract /35/) which is the earliest date at which either the implementation or construction or real action of a CDM project activity begins as per Glossary of CDM terms. In the opinion of the AENOR validation team, this date is the earliest date at which the real implementation of the project activity begins, since the EPC signature forces the PPs to carry out the project, under big penalties in case of breaches.</p> <p>The PP has provided to AENOR the timeline of the project activity and the evidence to support it. The main milestones of the project are shown below:</p> <table border="1" data-bbox="464 1240 1378 1720"> <thead> <tr> <th>Date</th><th>Milestone</th></tr> </thead> <tbody> <tr> <td>23 October 2013</td><td>Project activity announced its Prior CDM consideration to UNFCCC secretariat /36/</td></tr> <tr> <td>27 February 2014</td><td>Project activity announced its Prior CDM consideration to Chilean DNA /37/</td></tr> <tr> <td>19 May 2015</td><td>EPC signature (starting date)</td></tr> <tr> <td>21 September 2015</td><td>DOE is chosen, and Validation offer is signed</td></tr> <tr> <td>19 Nov 15 - 18 Dec 15</td><td>Public stakeholder consultation of PDD "Expansion San Pedro Wind Farm" /38/</td></tr> <tr> <td>08 April 2017</td><td>Commissioning of the project</td></tr> <tr> <td>01 March 2018</td><td>LoA of Chile /13/</td></tr> </tbody> </table> <p>Regarding the prior consideration of the CDM and taking into account the para 41 of the CDM VVS version 02.0 and Section 32 of the Project Standard version 02.0, as the project starting date is after 2 August 2008 and the PDD has been submitted for global stakeholder consultation on 19 November 2015, i.e., after the project starting date, the PPs have informed to the Host Party DNA (Chile) and UNFCCC in writing of the commencement of the project activity and of their intention to seek CDM status.</p> <p>Therefore, both Chilean DNA and UNFCCC notifications have been provided so the project activity is in compliance with CDM Project Standard version 02.0 ,CDM VVS version 02.0 and CDM Project Cycle Procedure version 02.0.</p>	Date	Milestone	23 October 2013	Project activity announced its Prior CDM consideration to UNFCCC secretariat /36/	27 February 2014	Project activity announced its Prior CDM consideration to Chilean DNA /37/	19 May 2015	EPC signature (starting date)	21 September 2015	DOE is chosen, and Validation offer is signed	19 Nov 15 - 18 Dec 15	Public stakeholder consultation of PDD "Expansion San Pedro Wind Farm" /38/	08 April 2017	Commissioning of the project	01 March 2018	LoA of Chile /13/
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<b>Findings</b>	CL 1- The PP is requested to provide the respective evidence of the project schedule related milestones stated in the PDD. CL 2- Evidence to back up the Start date has to be provided. Appendix 4 summarizes the findings found during the validation process and how they were closed.
<b>Conclusion</b>	All evidence provided to the validation team are credible and reliable, hence in the opinion of the AENOR validation team the project activity the prior consideration of the CDM was seriously considered in the decision to implement the project activity, in accordance with paragraph 41 of the VVS, version 02.0.

## D.2. Identification of project type

<b>Means of validation</b>	The total installed capacity of the wind farm is 65 MW. The project activity is a large-scale project activity, in accordance with paragraph 34 (a) of the CDM project standard.
<b>Findings</b>	No CARs/CLs/FARs raised in this section
<b>Conclusion</b>	AENOR is able to confirm that the project activity meets the requirements in the CDM project standard and in accordance with paragraph 47 of the VVS.

## D.3. Description of project activity

<b>Means of validation</b>	All the characteristics included in the PDD were checked against the technical documentation submitted project participant and during the on site visit. The validation team has checked against Wind Source study /19/, EIA approval /20/ and design conformity statement for wind turbines /21/
<b>Findings</b>	CAR 4- The PP is requested to include in the PDD the latitude and longitude of the aerogenerators (decimal points). Appendix 4 summarizes the findings found during the validation process and how they were closed.
<b>Conclusion</b>	AENOR states that the description of the proposed CDM project activity as contained in the PDD sufficiently covers all relevant elements, is accurate and provides the reader with a clear understanding of the nature of the proposed CDM project activity.  AENOR confirms that the final version of the PDD details the project's design in a precise manner, in accordance with the accuracy and completeness principles required for the CDM process, in accordance with paragraph 50 of the VVS.

## D.4. Application and selection of methodologies and standardized baselines

### D.4.1. Application of methodologies and standardized baselines

Means of validation	<p>Applicability of the selected methodology was confirmed against the on-site visit; interviews with relevant authorities, permits, licenses and technical documentation provided by the PP; during the validation process.</p> <p>The selected methodology for the proposed project activity is ACM0002: Grid-connected electricity generation from renewable sources --- Version 20.0 The final version of the PDD identifies, in section B.2, the applicability conditions of the approved methodology and describes how the project fulfils the conditions.</p> <p>The assessment of the relevant information contained in the revised PDD against each applicability condition is described below:</p>	
	Applicability conditions Project case	DOE Assessment
	1. This methodology is applicable to grid-connected renewable energy power generation project activities	The SPII is a grid-connected renewable power generation project



	<p>that:</p> <p>(a) Install a Greenfield power plant;</p> <p>(b) Involve a capacity addition to (an) existing plant(s);</p> <p>(c) Involve a retrofit of (an) existing operating plants/units;</p> <p>(d) Involve a rehabilitation of (an) existing plant(s)/unit(s);</p> <p>(e) Involve a replacement of (an) existing plant(s)/unit(s).</p>	<p>activity.</p> <p>The SPII activity consists in the installation of a wind power plant (Greenfield power plant) at a site where no renewable power plant was operated prior to the implementation of the project activity.</p> <p>Hence, project complies with this condition and methodology is applicable. AENOR could check this against the Environmental Impact Declaration (DIA) /14/.</p>
	<p>2. The methodology is applicable under the following conditions:</p> <p>(a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;</p> <p>(b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity</p>	<p>(a) The project activity involves the installation of a new wind power plant. Hence, project complies with this condition and methodology is applicable. AENOR could check this against the Environmental Impact Declaration (DIA).</p> <p>(b) Not applicable. It is not a capacity addition, retrofit or replacement of an existing power plant.</p>
	<p>In case of hydro power plants, one of the following conditions shall apply:</p> <p>(a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or</p> <p>(b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m<sup>2</sup>; or</p> <p>(c) The project activity results in new</p>	<p>The SPII is not an hydropower plant, so subsequent applicability conditions for hydropower plants, are not applicable to the project.</p>

	<p>single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m<sup>2</sup>; or</p> <p>(d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m<sup>2</sup>, all of the following conditions shall apply:</p> <p>(i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m<sup>2</sup>;</p> <p>(ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;</p> <p>(iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m<sup>2</sup> shall be:</p> <p>a. Lower than or equal to 15 MW; and</p> <p>b. Less than 10 per cent of the total installed capacity of integrated hydro power project.</p>	
	<p>4. In the case of integrated hydro power projects, project proponent shall:</p> <p>(a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or</p> <p>(b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.</p>	<p>Not applicable.</p> <p>Hence, project complies with this condition and methodology is applicable.</p>

	<p>5. The methodology is not applicable to:</p> <p>(a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site;</p> <p>(b) Biomass fired power plants/units.</p>	<p>Not Applicable.</p> <p>The project activity doesn't involve the use of fossil fuels or Biomass fired.</p>
	<p>In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".</p>	<p>Not Applicable.</p>
	<p>In addition, the applicability conditions included in the tools referred in the methodology.</p>	<p>The project activity meets the applicability conditions included in the tools referred in the methodology.</p> <p>Hence, project complies with this condition and methodology is applicable.</p>
<b>Findings</b>	No CARs/CLs/FARs raised in this section.	
<b>Conclusion</b>	<p>AENOR confirms the applicability conditions of the selected methodology to the project activity and it was correctly applied with respect to project boundary; baseline identification; formulae used to determine emission reductions; additionality and Monitoring methodology. Furthermore, AENOR states that all applied tools in the proposed CDM project activity meets each of the applicability conditions.</p> <p>Therefore, according to paragraph 404(b) of the VVS for project activities version 02.0, AENOR validation team confirms that the application of the baseline methodology is transparent and conservative, and that the chosen baseline and monitoring methodology i.e. ACM0002 version 20.0 is applicable to the project activity.</p>	

#### D.4.2. Deviation from methodology and/or methodological tool

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

#### D.4.3. Clarification on applicability of methodology, tool and/or standardized baseline

<b>Means of validation</b>	Not Applicable
<b>Findings</b>	Not Applicable
<b>Conclusion</b>	Not Applicable

**D.4.4. Project boundary, sources and GHGs**

<b>Means of validation</b>	<p>The project boundary was validated against applicable methodology, wind source study and EID approval</p> <p>According to the methodology, ACM0002, version 20.0 "The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to".</p> <p>The project activity will supply electricity to the SEN system. That means the project boundary must be considered as the entire electricity generation system in which SPII is going to introduce energy outputs.</p> <p>Hence, the project boundary is the area of the concession where the wind power plant and transmission lines are located. Given that the transmission line will reach the SEN, it also is included in the Project's boundary.</p> <p>In addition, all emission sources and gases related to the baseline scenario and project scenario are clearly identified and described in a complete manner. CO<sub>2</sub> is the main emission source and is included in the baseline, but CH<sub>4</sub> and N<sub>2</sub>O are not, in compliance with the methodology. Furthermore, CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> are not included in the project activity as an emission source.</p>
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	AENOR concludes that the project activity is not expected to result in emissions other than those allowed by the methodology, and there are no greenhouse gas emissions occurring within the proposed CDM project activity boundary as a result of the implementation of the proposed CDM project activity which are expected to contribute more than 1 per cent of the overall expected average annual emissions reductions, which are not addressed by the applied methodology, in accordance with paragraph 74 of the VVS.

**D.4.5. Baseline scenario**

<b>Means of validation</b>	<p>Since the project activity is the installation of a new grid-connected renewable power plant, the baseline scenario, as stated by the methodology, is the electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the Tool to calculate the emission factor for an electricity system. Then, the identified baseline scenario is in accordance with the applied methodology, ACM0002, version 20.0.</p> <p>Electricity delivered to the Chilean SEN grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system" (version 07.0).</p> <p>As mentioned before, "the grid", or the relevant electrical system to the SPII boundary corresponds to the SEN, being one of the three systems in the country, that are not interconnected between each other. The SEN comprises Chilean regions from Arica and Parinacota (XV) to Los Lagos (X) and there are no electricity imports or exports of the SEN grid to other national grid.</p>
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	It is AENOR conclusion that the identified baseline scenario for the proposed CDM project activity is reasonable and represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed CDM project activity. Furthermore, the assumptions and data used in the identification of the baseline scenario are appropriately justified, supported by evidence and can be deemed to be reasonable. In addition, relevant national and/or sectoral policies and circumstances are indicated in the final version of the PDD.

**D.4.6. Demonstration of additionality**

<b>Means of validation</b>	<p>By means of comparison of the PDD with the applied CDM methodology and “Tool for the demonstration and assessment of additionality” – version 07.0.0, the validation team has assessed the additionality of the project activity in accordance with applicable related validation requirements in the VVS version 2.0.</p> <p><b>Analysis of the additionality</b></p> <p>The additionality of the Expansion San Pedro Wind Farm project activity as required by ACM0002 version 20.0 is demonstrated by applying the “Methodological Tool: Tool for the demonstration and assessment of additionality,” version 07.0.0 /8/.</p> <p>As per the CDM VVS version 02.0, no analysis of baseline alternatives is required if the approved methodology that is selected by the proposed CDM project activity prescribes the baseline scenario. The project activity is a wind power project that provides electricity to the local grid network which is dominated by fossil fuel fired power plants, and the methodology prescribes the baseline emissions as the product of the electrical energy baseline, expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor. Although alternative has been defined in the PDD:” The proposed project activity undertaken without being registered as a CDM project activity” no assessment of alternative baseline scenarios is therefore to be conducted in the Validation Report.</p> <p><b>Application of Benchmark Analysis</b></p> <p>Concerning the step 2, the PPs have chosen the investment analysis. As the project activity generates financial and economic benefits other than CDM related income through the sales of electricity and the proposed baseline scenario does not involve an investment, the PPs. have used an IRR benchmark analysis in order to demonstrate the additionality of the Project activity.</p> <p>In order to reproduce and validate the financial calculations, the spreadsheets together with the evidence regarding the input values were requested to the PPs. In regard to this matter, the financial model /39/ has been provided.</p> <p>It has been demonstrated that the project IRR post-tax without CDM revenues is estimated to be 5.73%. The project IRR is lower than the IRR benchmark of 10% in real terms, adopted by the Project Participant. As per the “Methodological Tool: Tool for the demonstration and assessment of additionality” version 07.0.0, a relevant benchmark for a project IRR can be derived from Government/official approved benchmark where such benchmarks are used for investment decisions.</p> <p>In line with this, the Benchmark IRR of 10% in real terms, is the benchmark for power generation projects, which is used to determine node prices, transmission line and distribution investments in the power sector in Chile, according to “Law Decree nº 4, General Law of Electricity Services (LGSE), Article 174)” /40/.</p> <p>This benchmark has been widely accepted in newly constructed power plants in Chile, and has also been accepted as a suitable post-tax benchmark by the EB for the following registered electricity generation from renewable sources CDM projects: “Project 8932 : San Pedro Wind Farm Project” /41/; “Project 4449 : Monte Redondo Wind Farm Project” /42/; “Project 5831 : Providencia Hydroelectric Plant” /43/; “Project 7801 : Lican Hydroelectric Plant” /44/; “Project 8427 : Los Hierros Hydroelectric Power Plant” /45/.</p> <p>The post-tax benchmark IRR of 10% is validated to be suitable for the project activity by AENOR’s validation team in compliance with methodological tool for investment analysis (EB 105) and CDM VVS version 02.0.</p>
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The validation team verified that taxes and depreciation used in the investment analysis comply with the Chilean legal requirements i.e. 25% value of the income tax and a linear depreciation of 15 years for civil works and electromechanical equipment /46/47/.

Following methodological tool for investment analysis (EB 105), it has been validated that the project IRR calculation reflects the expected operation of the underlying project activity (a technical lifetime of 21 years), that the capital cost of the assets and their depreciation as an expense to the project were not both treated to constitute a double counting of this cost, and that the cost of financing expenditures (i.e., loan repayments and interest) was not included in the calculation of the project IRR in the final version of the PDD and the IRR calculation spreadsheet. AENOR validation team has confirmed that the project has no bank financing.

AENOR has verified and confirmed that the values used in the financial analysis are consistent with the value of the source and this information was available before the starting date of the project and was thus likely to be considered in the decision. References are included in the PDD and IRR calculation spreadsheet.

The financial spreadsheets have been evidenced and verified to be correct. The assumptions used, the base documents and the financial calculations have also been verified.

#### **Use of fixed values in the IRR calculation:**

As discussed above, the input values used for the investment analysis of the project were valid and applicable at the time of the investment decision. In addition, as per further explanation in methodological tool for investment analysis (EB 105), no information from a later point should be the basis for the investment decision. The application of fixed values is in line with this guidance, because at the time of investment decision, any information on the variation of the input values over the following 21 years was not available to the project owner.

In summary, given the information available at the time of the investment decision, the benchmark chosen and the applied standard and guideline, in AENOR's opinion the assumption of fixed input values throughout the 21 years period of assessment is plausible and appropriate.

#### **Total Project Investment costs**

The total project investment costs of 111,901,500 US\$ is taken from the EPC proposal signed with Gamesa . The PP has provided evidence of these investment costs and AENOR's validation team has checked that the total figure matches the amount stated in the financial model.

In addition, a comparison of investment cost per MW is done among the proposed project activity and similar wind power projects in Chile.

The comparison results show that the investment per MW used in the PDD for Expansion San Pedro Wind Farm project is within the range observed in similar projects registered as CDM in the same area (see below table).

#### **Comparison of investment per MW among similar registered CDM projects in Chile**

	Project	Capacity (MW)	Total static Investment 1,000 US\$	Investment per MW 1,000 US\$
	Project 7814: Llay Llay Wind Farm Project /48/	56.00	107,848	1,926
	Project 8932: San Pedro Wind Farm Project	36.00	80,550	2,237
	Project 7458 : Valle de los Vientos Wind Farm /49/	90.00	160,029	1,778
	Project 6635: Cuel Wind Farm Project /10/	33.00	54,090	1,639
	Project 5028: Canela II Wind Farm Project /51/	60.00	146,727	2,445
	Project 4449: Monte Redondo Wind Farm Project	48.00	119,047	2,480
	Project 3252 : Totoral Wind Farm Project /52/	46.00	132,500	2,880
	Project 1958 : Canela Wind Farm Project /53/	18.15	47,698	2,628
	<b>Expansion San Pedro Wind Farm</b>	<b>65.00</b>	<b>111,902</b>	<b>1,722</b>
	Source: PPs and UNFCCC			
<b>O&amp;M Costs</b>				
The applied annual O&M costs are estimated by the PPs based on their sectoral and local expertise in operating wind farm projects and from the O&M contract signed with Gamesa./54/				
In order to validate the suitability of the input values applied, the validation team of AENOR crosschecked the annual average O&M costs with data from IRENA “Renewable Energy Technologies. Cost Analysis Series” /55/ and with similar projects signed as CDM project in the same area (see table below).				
<b>Comparison of O&amp;M costs among similar registered CDM projects in Chile</b>				
Project	Capacity (MW)	Annual Generation (MW)	Annual Average O&M costs 1,000 US\$	O&M costs US\$/KWh
Project 7814:	56.00	140,	1,652	0.012

Llay Llay Wind Farm Project		800		
Project 8932: San Pedro Wind Farm Project	36.00	117,393	1,877	0.016
Project 7458 : Valle de los Vientos Wind Farm	90.00	219,330	2,534	0.012
Project 6635: Cuel Wind Farm Project	33.00	96,800	753	0.008
Project 5028: Canela II Wind Farm Project	60.00	137,181	3,020	0.022
Project 4449: Monte Redondo Wind Farm Project	48.00	101,463	976	0.010
Project 3252 : Totoral Wind Farm Project	46.00	103,000	1,120	0.011
<b>Expansion San Pedro Wind Farm</b>	<b>65.00</b>	<b>199,057</b>	<b>5,547</b>	<b>0.028</b>

Source: PP and UNFCCC

The applied average annual O&M costs of 0.028 US\$/KWh, were found to in line with similar projects signed as CDM project in the same area an also within the interval of 0.01 US\$/KWh to 0.043 US\$/KWh provided by IRENA, hence it deems appropriate and therefore accepted by the validation team of AENOR.

Based on above information, in AENOR's opinion the Annual O&M cost used in the PDD was reasonable, valid and applicable at the time of the investment decision.

#### **Annual Power Generation/ Plant Capacity Factor**

The wind farm plant capacity factor of 34.96% was found to be to be within the range of similar projects signed as CDM in the same area, and is, therefore, accepted by AENOR's validation team.

In addition, electricity generation was determined by a third party, Barlovento Recursos Naturales S.L with data from the wind resource measurement, taking into account the on-site topography, geomorphology, air density, wind turbine efficiency and other basic data.



Therefore, AENOR confirms that the above procedure for the annual power supply estimation is common practice for wind farm projects in Chile.

#### Comparison of Annual Power Generation among similar registered CDM projects in Chile

Project	Capacity (MW)	Annual Generation (MW)	Load Factor (%)
Project 7814: Llay Llay Wind Farm Project	56.00	140,800	28.7%
Project 8932: San Pedro Wind Farm Project	36.00	117,393	37.2%
Project 7458 : Valle de los Vientos Wind Farm	90.00	219,330	27.8%
Project 6635: Cuel Wind Farm Project	33.00	96,800	33.5%
Project 5028: Canela II Wind Farm Project	60.00	137,181	26.1%
Project 4449: Monte Redondo Wind Farm Project	48.00	101,463	24.1%
Project 3252 : Totoral Wind Farm Project	46.00	103,000	25.6%
Project 1958 : Canela Wind Farm Project	18.15	48,000	30.2%
<b>Expansion San Pedro Wind Farm</b>	<b>65.00</b>	<b>199,057</b>	<b>34.96%</b>

Source: PPs and UNFCCC

Therefore, according to the "Guidelines for the reporting and validation of plant load factors" /56/ and above cross-checking, AENOR considers that the annual grid-connected electricity generation is reasonable and appropriate.

#### Electricity price

The tariff estimation has been made by a third party, a consulting company (Systep) /57/ with extensive experience in the electrical market in Chile; references and basis of the study have been crosschecked during the on site visit in order to assess the reliability of its conclusions, and specifically the suitability of the tariff proposed. During on site visit, validation team hold a meeting with responsables of the SIC in order to verify whether the Tariff provided by the PP can be considered as a good reference for the lifetime of the project; this was confirmed by them. Furthermore, official forecasting from the Nation

Energy Commission, clearly states that the tariff proposed can be deemed as conservative (please refer section “sensitivity analysis”). The tariff stated in this document was US\$ 80 /MWh for a period of 20 years. AENOR has confirmed the veracity of this argument, so it was decided to accept the tariff as a correct present tariff. The financial spreadsheet applies the tariff during 21 years, but this assumption is deemed valid and reasonable.

In addition, AENOR checked the PDDs of wind farm projects in Chile and found the tariff used in the investment analysis and the final PDD, within the range of tariffs for registered CDM projects. The validation team also checked that even with the application of the highest tariff, the project IRR does not cross the benchmark.

#### Comparison of tariffs among similar registered CDM projects in Chile

Project	Capacity (MW)	Tariff (US\$/MWh)	Indexed (Y/N)
Project 7814: Llay Llay Wind Farm Project	56.00	87.56	No
Project 8932: San Pedro Wind Farm Project	36.00	80.00	No
Project 7458 : Valle de los Vientos Wind Farm	90.00	89.99	Yes
Project 6635: Cuel Wind Farm Project	33.00	72.87	No
Project 5028: Canela II Wind Farm Project	60.00	75.46	No
Project 4449: Monte Redondo Wind Farm Project	48.00	79.71	No
<b>Expansion San Pedro Wind Farm</b>	<b>65.00</b>	<b>80.00</b>	<b>No</b>

Source: PPs and UNFCCC

Therefore, AENOR considers that the value for the tariff used for the IRR calculation as has been done in the PDD is appropriate and was valid and applicable at the time of the investment decision

Thus, based on the above assessments, in AENOR's opinion the values used in the financial analysis are valid and applicable at the point of the investment decision. In addition, AENOR checked that project did not cease the

implementation after the commencement, then, the decision point was not change in compliance with investment tool (EB 105).

### Sensitivity Analysis

The PDD includes a sensitivity analysis to demonstrate that the conclusion regarding the financial/economic attractiveness withstands reasonable variations in the critical assumptions.

For this purpose, variations in the range of +/- 10% for the parameters of energy market price, total project investment costs, plant capacity factor and O&M costs have been considered, since that range is reasonable for the project context and these variables constitute more than 20% of either total project costs or total project revenues.

The sensitivity analysis shows that without the income from CERs sales the IRR of the proposed project is also lower than the benchmark, even when the possible variations of the main parameters are considered. It was confirmed that the conclusion obtained in the analysis mentioned above was robust to conclude that the project activity is unlikely to be financially attractive.

In addition, AENOR has validated that higher variations of these parameters, that would make the project IRR reach the benchmark, are not likely to occur due to the following facts:

- 25.1% increase in the energy market price. As told before, the chosen price is a conservative estimation of future trends. According to the Chilean NEC (National Energy Commission) forecast /58/, a reduction of the energy sale prices for the following years is also expected around 6%, therefore it is unlikely that the chosen electricity tariff could increase an additional 25.1% to make the project IRR reach the benchmark.
- 27.9% decrease in the total project investment costs. Prices including those for the main equipment and raw materials have been increasing in recent years /59/. In addition, the investment cost per MW of the project was found to be in line with similar registered projects in the area; therefore, it is unlikely that the total investment will decrease by 27.9%, such that the project IRR reaches the benchmark.
- 71.0% decrease in the total O&M costs. As told above, prices have been increasing in recent years in Chile. In addition the O&M cost of the project was found to be within the range of similar registered projects in the area; therefore, it is unlikely that total O&M costs will decrease by 71.0%, such that the project IRR reaches the benchmark.
- 38.5% increase in plant capacity factor (electricity generation) .The annual electricity output is determined by a third party, electricity generation was determined by a third party, Barlovento Recursos Naturales S.L, an engineering firm specialised in the wind power sector resulting in a plant capacity factor of 34.96%. In addition, the average load factor of similar CDM registered projects in the area is 29.80% i.e. 15% lower than the proposed project activity; thus, it is unlikely that the load factor of the project will increase an additional 38.5%, such that the project IRR reaches the benchmark.

AENOR reviewed and confirmed all related documents. The assessments show clearly that investment is unlikely to be 27.9% lower, energy market price 25.1% higher and electricity generation 38.5% higher and O&M costs 71.0% lower.

	<p>In summary, it is AENOR's opinion that the additionality of the project is sufficiently demonstrated based on the investment analysis and thus it is sufficiently demonstrated that the project is not a likely baseline scenario and those emission reductions are therefore additional.</p> <p><b>Barrier analysis</b></p> <p>The barrier analysis has not been selected to demonstrate the additionality.</p> <p><b>Common Practice</b></p> <p>According to the "Methodological Tool: Common practice" version 03.1 /34/, a common practice analysis is carried out.</p> <p>The relevant geographical area chosen by the PP, was the influenced by the SIC due to the fact that on one hand, as Chile has four electric systems, they vary in their renewable-non renewable generation mix because of the different presence of renewable sources and on the other hand, and as a consequence of their generation matrix, the energy prices which are determined from long term supply contracts and marginal costs differ from one to another making a project implemented in the SIC not comparable to the ones implemented in the Big North (SING), Aysen or Magallanes Electric Systems.. In addition, AENOR checked the PDDs of registered wind farm projects in Chile and this geographical area have been selected by other Chilean projects /60/, thus accepted by AENOR.</p> <p>Step 1: The proposed project is of 65 MW installed capacity, thus the projects with <math>\pm 50\%</math> design capacity of the proposed project activity (32.50~97.50 MW) are considered as of similar size.</p> <p>Step 2: 3 similar projects located in Chile with an installed capacity within the range of 32.50~97.50 MW and that started commercial operation before the start date of the project, have been correctly identified in this step. Information used has been carefully verified and the determination of similar projects is assessed as reasonable and it has been crosschecked with the webpage of the National Energy Commission (CNE) of Chile /61/, and found to be accurate by the validation team of AENOR.</p> <p>Step 3: 0 plants have been correctly identified. According to the National Energy Commission of Chile, there are no similar projects which fulfil all the conditions. Hence, <math>N_{all}</math> is determined as 0.</p> <p>Information used has been carefully verified and the determination of <math>N_{all}</math> is assessed as reasonable.</p> <p>Step 4: There are no similar plants projects applying different technologies that the proposed project activity. Hence, <math>N_{diff}</math> is determined as 0.</p> <p>Information used is carefully verified and the determination of <math>N_{diff}</math> is assessed as reasonable. Step 5: calculate factor <math>F = 1 - N_{diff}/N_{all}</math></p> $F = 1 - N_{diff}/N_{all} = 1 -$ $0/0 = \text{undefined}$ $N_{all} - N_{diff} = 0.$ <p>Therefore as <math>N_{all} - N_{diff}</math> is smaller than 3, irrespective of F value; therefore, the proposed project clearly cannot be taken as common practice in Chile.</p>
Findings	<p>CL 4- Evidence should be provided that the project implementation has not ceased after the commencement of the CDM process, In accordance with paragraph 11, of the investment tool (EB 105).</p> <p>CAR 6- Evidence to back up the time for investment decision has to be provided.</p> <p>CAR 7- Evidence to back up financial calculations have to be provided: EG: Total Investment Cost, OM cost, evidence to prove that the price of electricity is valid at the time of investment decision.</p>

	CAR 8- Common practice analysis has not been undertaken as per Methodological tool Common practice Version 03.1. Appendix 4 summarizes the findings found during the validation process and how they were closed.
<b>Conclusion</b>	In summary, based on our local and sectoral expertise it is AENOR's opinion that the additionality of the project is sufficiently demonstrated based on the investment analysis, that the project is not a likely baseline scenario, and that those emission reductions are, therefore, additional

#### D.4.7. Estimation of emission reductions or net anthropogenic removals

<b>Means of validation</b>	<p>AENOR checked the estimated GHG emission reductions in the updated PDD, EF grid calculation spreadsheet /14/ and ER calculation spreadsheet /13/ against the applicable requirements in the Project Standard, methodology ACM0002 Version 20.0 and applicable methodological tools.</p> <p>The validation team of AENOR checked that the estimated GHG emission reductions in the updated PDD and ER calculation spreadsheet comply with the applicable requirements in the Project standard, and the valid version of the methodologies and tools that are applicable to the registered CDM project activity as follows:</p> <p><b><u>Emission Reduction (ER<sub>y</sub>)</u></b></p> <p>The emission reduction (ER<sub>y</sub>) of the project activity are calculated as the difference between the baseline emissions (BE<sub>y</sub>), project emissions (PE<sub>y</sub>) and emissions due to leakage (LE<sub>y</sub>).</p> $ER_y = BE_y - PE_y - LE_y$ <p><b>ER<sub>y</sub> = 119,235 tCO<sub>2e</sub>/year</b></p> <p><b><u>Determine the emission factor for the grid</u></b></p> <p>The baseline emission factor for the grid (EF<sub>grid,y</sub>) has been calculated as a combined margin emission factor, using the "Tool to calculate the emission factor for an electricity system" version 07.0.</p> <p>The determination of the relevant electricity system was made following the Option 2, considering the dispatch area covered by the responsible dispatch centre for each year of the ex-ante emission factor calculation requirements. In this case, since in November 2017, the SIC grid was connected to the SING grid, creating a new electricity system called SEN, which considers a single dispatch area coordinated by the National Electricity Coordinator (CEN); thus, the relevant electricity system is the SEN .</p> <p>As the "Tool to calculate the emission factor for an electricity system" requires an annual based emission factor calculation, and the interconnection occurred during 2017, therefore the relevant electricity system is SEN for 2017, 2018 and 2019. The Project participant has chosen to calculate the operating margin and build margin emission factor the option I and only grid power plants are included in the calculation.</p> <p>In terms of vintage of data, the period considered for the calculation is 2017-2019.</p> <p>As data for Option A is actually available, this option will be used for the calculation; under this option, the simple OM emission factor is calculated based on the net electricity generation and an emission factor for each power unit, as follows:</p> <p>The operating margin emission factor is calculated as follows:</p> $EF_{grid,OMsimple,y} = \frac{\sum_m EG_{m,y} \times EF_{EL,m,y}}{\sum_m EG_{m,y}}$ <p>EF<sub>grid,OMsimple,y</sub> = Simple operating margin CO2 emission factor in year y</p>
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(tCO<sub>2</sub>/MWh).

$EG_{m,y}$  = Net quantity of electricity generated and delivered to the grid by power unit  $m$  in year  $y$  (MWh)

$EF_{EL,m,y}$  = CO<sub>2</sub> emission factor of power unit  $m$  in year  $y$  (tCO<sub>2</sub>/MWh).

$m$  = All power units serving the grid in year  $y$  except low-cost/must-run power units.

$y$  = The relevant year as per the data vintage chosen in Step 3 (2017 to 2019).

#### Determination of $EF_{EL,m,y}$

The emission factor of each power unit  $m$  is determined, option A1 of the tool is applied as follow:

• **Option A1** - If for a power unit  $m$  data on fuel consumption and electricity generation is available, the emission factor ( $EF_{EL,m,y}$ ) is determined as follows:

#### Equation 1. Emission factor per power unit calculation

$$EF_{EL,m,y} = \frac{\sum_i FC_{i,m,y} \times NCV_{i,y} \times EF_{CO_2,i,y}}{EG_{m,y}}$$

Where:

$EF_{EL,m,y}$  = CO<sub>2</sub> emission factor of power unit  $m$  in year  $y$  (tCO<sub>2</sub>/MWh).

$FC_{i,m,y}$  = Amount of fuel type  $i$  consumed by power unit  $m$  in year  $y$  (mass or volume unit). /25/26/27/28

$NCV_{i,y}$  = Net calorific value (energy content) of fuel type  $i$  in year  $y$  (GJ/mass or volume unit).

$EF_{CO_2,i,y}$  = CO<sub>2</sub> emission factor of fuel type  $i$  in year  $y$  (tCO<sub>2</sub>/GJ).

$EG_{m,y}$  = Net quantity of electricity generated and delivered to the grid by power unit  $m$  in year  $y$  (MWh) /22/23/.

$m$  = All power units serving the grid in year  $y$  except low-cost/must-run power units.

$i$  = All fuel types combusted in power unit  $m$  in year  $y$ .

$y$  = The relevant year as per the data vintage chosen in Step 3 (2017 to 2019).

Where several fuel types are used in the power unit, the fuel type with the lowest CO<sub>2</sub> emission factor for  $EF_{CO_2,m,i,y}$  is used.

#### Calculate the build margin (BM) emission factor

The BM emission factor is determined in accordance to Option 1 of the “Tool to calculate the emission factor of an electricity system” version 07.0.

This option sets that for the first crediting period, the build margin emission factor has to be based on the most recent information available on units already built for a sample group named  $m$  at the time of CDM-PDD submission to the DOE for validation (it is expected that the BM will not have a substantial range of variation during the first crediting period).

According to the specifications of the methodology, the data record chosen is 2019.

**Equation 2. BM emission factor calculation**

$$EF_{grid,BM,y} = \frac{\sum_m EG_{m,y} \times EF_{EL,m,y}}{\sum_m EG_{m,y}}$$

Where:

$EF_{grid,BM,y}$  = Build margin CO<sub>2</sub> emission factor in year y (tCO<sub>2</sub>/MWh).

$EG_{m,y}$  = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh).

$EF_{EL,m,y}$  = CO<sub>2</sub> emission factor of power unit m in year y (tCO<sub>2</sub>/MWh).

m = Power units included in the build margin.

y = Most recent historical year for which electricity generation data is available.

The CO<sub>2</sub> emission factor of each power unit m ( $EF_{EL,m,y}$ ) is determined as per guidance in Step 4, using options A1 or A2 (represented by Equations 4 and 5 in Step 4), using for y the most recent historical year (2019) for which power generation data is available, and using as m the power units included in the build margin.

The combined margin emissions factor is calculated as follows:

$$EF_{OM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$$

Where:

$EF_{BM,y}$  = Build margin CO<sub>2</sub> emission factor in year y (tCO<sub>2</sub>/MWh)

$EF_{OM,y}$  = Operating margin CO<sub>2</sub> emission factor in year y (tCO<sub>2</sub>/MWh)

$W_{OM}$  = Weighting of operating margin emissions factor (%)

$W_{BM}$  = Weighting of build margin emissions factor (%)

**$EF_{OM}$ : 0.6926 tCO<sub>2e</sub>/MWh**

**$EF_{BM}$  = 0.3181 tCO<sub>2e</sub>/MWh**

**$EF_{CM}$  = (0.6926 x 0.75) + (0.3181 x 0.25) = 0.5990 tCO<sub>2e</sub>/MWh**

**$BE_y$  = 119,235 tCO<sub>2e</sub>/year**

**Leakage**

According to ACM0002 version 20.0, no leakage needs to be considered for the proposed project.

**Findings**

CL 3- The PP shall clearly justify in the PDD in accordance to the applied methodology and tool, also provide adequate evidence to the audit team of the following approaches:

- Biogas power plants are considered as low-cost/must-run for the selection of simple OM method.
- The option B is used to calculate the simple OM, but, net electricity generation and CO<sub>2</sub> emission factors of each power unit is available for the calculation of

	<p>BM factor.</p> <p>CAR 5- The ex-ante estimation of the annual emission reductions stated in the PDD is not consistent in all sections. The PP is requested to revise the value of the annual emission reductions stated in the entire PDD considering that the annual emission reduction calculation shall be conservative.</p> <p>CAR 9- Excel file "EF calculation spreadsheets version 01" include the following wrong information:</p> <ol style="list-style-type: none"> <li>1. Information of other years 2008-2014 in the sheet of "LCMR" is included although it is not used to calculate the OM simple method.</li> <li>2. Information provided in the sheet "Base" is not in English.</li> <li>3. Please clarify the reference sources in the excel were the Generation, fuel consumption and start-up date values are taken in the sheets "OM" and "BM".</li> <li>4. Some CDM projects have been included in the BM 19 but there are not registered in the UNFCCC website, such as "PMGD CALAMA_Solar, Río Mulchén, Luz del Norte, Lautaro-Comasa 2, Las Flores, PAS3_Solar, Louisiana Pacific, San Isidro , Nehuenco TG 9B-. And some CDM registered project have not been identified. Some electricity generation plants does not have the correct electricity generation, for instance Calfuco and Río Azul in the BM 19 sheet.</li> </ol> <p>Appendix 4 summarizes the findings found during the validation process and how they were closed.</p>
<b>Conclusion</b>	<p>In accordance with paragraph 113 of the VVS for project activities version 02.0, AENOR validation team confirms that:</p> <ul style="list-style-type: none"> <li>• All assumptions and data used by the project participants are listed in the PDD and/or supporting documents, including their references and sources;</li> <li>• All documentation used by the project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PDD;</li> <li>• All values used in the PDD are considered reasonable in the context of the proposed CDM project activity;</li> <li>• The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, and leakage emissions;</li> </ul> <p>All estimates of the baseline, project and leakage emissions can be replicated using the data and parameter values provided in the PDD.</p>

#### D.4.8. Monitoring plan

<b>Means of validation</b>	<p>The project applies methodology ACM0002 - Version 20.0.</p> <p>Based on the document review and follow-up actions, the validation team confirms that the parameter required to be monitored for the project will be:</p> <table border="1"> <tr> <td>Data/Parameter</td><td>EG<sub>facility,y</sub></td></tr> <tr> <td>Data unit</td><td>MWh/year</td></tr> <tr> <td>Description</td><td>Electricity meter of the project installed in the interconnection point (San Pedro Substation)</td></tr> <tr> <td>Value applied</td><td>199,057</td></tr> </table>	Data/Parameter	EG <sub>facility,y</sub>	Data unit	MWh/year	Description	Electricity meter of the project installed in the interconnection point (San Pedro Substation)	Value applied	199,057
Data/Parameter	EG <sub>facility,y</sub>								
Data unit	MWh/year								
Description	Electricity meter of the project installed in the interconnection point (San Pedro Substation)								
Value applied	199,057								



	Measurement methods and procedures	Net electricity supplied by the project activity to the grid. The metering equipment complies with laws and regulations and will be properly calibrated by independent provider. Calculated from energy exported by the project to the grid and energy imported by the project from the grid, directly obtained from the metering equipment. Double check by receipt of sales.
	Monitoring frequency	Continuous measurements and monthly recording.
	QA/QC procedures	Readings of electricity meters, located at substation, will be continuously measured and monthly recorded by SPlI technical staff. Data recorded will be archived for 2 years following the end of the last crediting period, by means of electronic and paper backup.  The metering equipment consists of two meters (1 main, 1 backup, both 0.2s accuracy) located on the onsite substation,  To guarantee QA/QC, it will be double checked by receipts of electricity sales.
	Purpose of data	Calculation of baseline emissions
	Additional comment	N/A
<b>Findings</b>	No CARs/CLs/FARs raised in this section.	
<b>Conclusion</b>	According to paragraph 412 of VVS for project activities version 02.0, AENOR validation team confirms that the information of the PPs has been correctly indicated in the PDD.	

#### D.5. Start date, crediting period type and duration

<b>Means of validation</b>	<p>Design life of wind turbines is 20 years; however, expected operational lifetime of project activity considered for the project is 21 years, due to favourable weather conditions in Chile and is also considered as a valid and consistent hypothesis by the manufacturer.</p> <p>PP has selected a crediting period of 7 years with a renewable crediting period of two times and considered starting date is dated on 01/01/2021.</p> <p>The starting date of the wind farm is 19/05/2015, The initial date of the project activity is the date in which the project participant sign turnkey EPC contract.</p>
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	<p>In AENOR's Opinion the starting date is clearly defined, and the operational lifetime is clear and considers reasonable the lifetime of 21 years based on the lifetime of a wind turbine.</p> <p>According to paragraphs 124,125 of VVS for project activities version 02.0, AENOR validation team confirms that the start date and crediting period type and duration information of the PPs has been correctly indicated in the PDD.</p>

#### D.6. Environmental impacts

<b>Means of validation</b>	According to Chilean regulation, General environmental law N° 19300 project included in the article 10 may only be implemented or modified following the
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	<p>assessment of their environmental impact. Environmental Impact Assessment System Regulation (Supreme Decree 95-01/MINSEGPRES), state that “Power Stations Generating Energy exceeding 3 MW”, must be the subject of an environmental impact assessment. Therefore, project proponent developed the environmental impact declaration /14/ for Expansion San Pedro Wind Farm. The EID was approved by SEIA (Environmental Assessment Impact Service) and emits resolution of Environmental Qualification for project acidity on 16 December 2013.</p> <p>The final version of the PDD states, in section D, further information about the main environmental impacts gathered in the EID. Moreover, environmental impacts that are considered significant by the project participants or the host Party are properly described in the PDD and they were checked against the EID and approval resolution.</p>
<b>Findings</b>	<p>CAR 10- The environmental license does not have the total installed capacity of the project activity.</p> <p>Appendix 4 summarizes the findings found during the validation process and how they were closed.</p>
<b>Conclusion</b>	<p>In AENOR’s opinion all of the impact would be within an acceptable limit by carrying out corresponding mitigation measures as per the statement of the EID. Moreover, AENOR confirms that environmental information in PDD is consistent with the resolution of Environmental Assessment Impact Service and that the PP has followed a correct analysis of environmental impacts in accordance to host party host party regulation.</p> <p>AENOR concludes that the Project Participant has followed a correct analysis of environmental impacts in accordance with procedures as required by the host Party</p> <p>According to paragraphs 126,127 of VVS for project activities version 02.0, AENOR validation team confirms that the analysis of the environmental impacts of the proposed CDM project activity has been correctly indicated in the PDD.</p>

#### D.7. Local stakeholder consultation

<b>Means of validation</b>	<p>The local stakeholder consultation process, developed by project participant, consisted of several meetings with local authorities and residents. Local stakeholders were invited by the PP through individual invitations /34/ to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC website.</p> <p>The PP provided the summary of the consultation process in the PDD, which was validated against Community Development Programs /35/ submitted to the ministry of environment, list of participants /36/ and surveys conducted by PP to the DOE team. AENOR checked all the related documents and confirms that the consultation was appropriate. A brief summary of the comments from the local stakeholders and the agreements achieved between the local communities and the PP have been stated in the PDD.</p> <p>A meeting with stakeholder took place on 17 April 2015 at San Pedro public school in the community of Dalcahue. To this consultation assisted local population and their representatives. The objective of the aforementioned consultation was to to inform stakeholders about the main characteristics of the project and to let them participate through comments, propositions, questions, etc. The commune of Dalcahue and the Municipal Educational Corporation, helped and collaborated in the event organization, reporting to several stakeholders about the celebration of the meeting. In addition, as requested by local regulation, PP</p>
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	<p>has developed in the frame of environmental assessment a regional and community development plans and programs to ensure sustainable development of the region.</p> <p>All these matters were verified during the on-site visit and they are according the CDM requirement and Chilean regulation. Moreover, no negative feedback was received, which also was verified during the on-site visit in the interviews with local inhabitants and local authorities.</p>
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	<p>In AENOR's opinion, local stakeholder consultation process was suitability performed in accordance with the CMD requirements and local applicable host Party rules.</p> <p>AENOR confirms that no changes to the project design in the PDD are made after the local stakeholder consultation. Therefore, in accordance with paragraphs 135 of VVS for project activities version 02.0, the scope of the local stakeholders engaged is still valid.</p>

#### D.8. Sustainable development co-benefits

<b>Means of validation</b>	The project will contribute to sustainable development by electric generation from renewable resources and the subsequent reduction of GHG emissions, but also to the social benefits that will be introduced in the area. The PPs have also submitted the letter of approval (LoA) from the DNA of the host country, Chile (Letter No. 180814) which demonstrates the contribution of the project activity to sustainable development.
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	AENOR confirms that a document describing how the project participants intend to monitor sustainable development co-benefits of the proposed CDM project activity was developed by the project participants separately from the monitoring plan in accordance with paragraph 138 of the VVS version 02.

#### D.9. Approval

<b>Means of validation</b>	<p>The project participants for Expansion San Pedro Wind Farm are Rio Alto SA and Energias Abtao SA both from Chile. The Project participants provided the validation team the Letter of Approval /14/ Letter from Chile. The LoA was issued on 01/03/2018 (Letter No. 180814) by the Ministry of the Environment. The host country Chile, meets all relevant participation requirements detailed in the following:</p> <ul style="list-style-type: none"> <li>a) Chile has confirmed that is a Party to the Kyoto Protocol;</li> <li>b) Chile has confirmed its voluntary participation and the project's contribution to sustainable development through national approval of the project.</li> <li>c) he project's contribution to the sustainable development of Chile was confirmed by the DNA of the host country</li> <li>d) The title of the project activity is "Expansion San Pedro Wind Farm". It refers to the precise title of the CDM project activity in the PDD being submitted for registration.</li> </ul> <p>The LoAs do not refer to a specific version of the PDD or validation report. The corresponding references included in the LoAs, PDD and validation report are consistent.</p>
<b>Findings</b>	<p>CAR 1- The PP shall provide the Letter of Approval of the project activity.</p> <p>Appendix 4 summarizes the findings found during the validation process and how</p>

	they were closed.
<b>Conclusion</b>	<p>AENOR ensures that the LoAs have been issued by the Party and designated national authorities and does not doubt the authenticity of the letters of approval received from the PPs.</p> <p>Hence, AENOR confirms that the LoAs is in compliance with paragraph 140 of the VVS version 02 and determines that the letter of approval is unconditional with respect to paragraph 140(a)–(d) of the VVS.</p>

**D.10. Authorization**

<b>Means of validation</b>	<p>By reviewing the proved letter of approval AENOR confirm that each project participant of the proposed CDM project activity has been authorized to participate in the project activity by Chilean Ministry of Environment and it is in accordance with paragraphs 151 of VVS, version 02.0.</p> <p>All project participants have been listed in a consistent manner in the project documentation, and their participation in the project activity has been approved by a Party to the Kyoto Protocol. The project participants listed in tabular form in section A.4 of the PDD, are consistent with the contact details provided in appendix 1 of the PDD. No entities other than those approved as project participants are included in these sections of the PDD. This situation has been checked against the letter of approval from the Chilean DNA.</p>
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	<p>AENOR confirms that the project participants are authorized by Chilean DNA to participate in the Project activity; parties listed in the approval letter are correctly referred in the las version of the PDD and the information is consistent with the ones provided in the section of contact information of project participants.</p> <p>AENOR, also, confirms that no entities other than those authorized as the project participants of the proposed CDM project activity are included in the PDD, in accordance with paragraph 149 of the VVS version 02.</p>

**D.11. Modalities of communication**

<b>Means of validation</b>	PPs have provided the Modalities of Communication statement /15/ and a Written confirmation from the project participant of corporate and personal details, including specimen signatures /16/. Validation team assessed the statement including personal identities, specimen signatures and employment status, of their authorized signatories; these issues were validated against CDM-MoC-form and a written confirmation from the project participant , which was sent by project participant that has a contractual relationship whit AENOR.
<b>Findings</b>	<p>CAR 2-The PP is requested to provide evidence of the corporate identity of all project participants included in the MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories.</p> <p>CAR 3- The MoC has been provided but the project participants shall submit to the DOE at the time of validation of the proposed CDM project activity an MoC statement using the valid version of the “Modalities of communication statement form” (CDM-MOC-FORM).</p> <p>Appendix 4 summarizes the findings found during the validation process and how they were closed.</p>

<b>Conclusion</b>	<p>In accordance with paragraph 159 of the VVS, AENOR confirms that:</p> <p>(a) The valid version of the form “Modalities of Communication statement” (CDM-MOC-FORM) has been used;</p> <p>(b) The information required as per the CDM-MOC-FORM, including its annex 1, is correctly completed;</p> <p>(c) The project participants’ authorized signatories signing the CDM-MOC-FORM correspond to the project participants’ authorized signatories included in the CDM-MOC-FORM, annex 1.</p> <p>AENOR deems that the MoC statement was completed and duly authorized in accordance with the valid version of the form and the information required therein.</p>
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#### D.12. Global stakeholder consultation

<b>Means of validation</b>	The PDD was submitted to public information on 19 Nov 15 to 18 Dec 15. No comments were submitted to the DOE in the UNFCCC platform for global stakeholder consultation.
<b>Findings</b>	No CARs/CLs/FARs raised in this section.
<b>Conclusion</b>	<p>In accordance with paragraph 262 of the VVS version 02, AENOR confirms that:</p> <p>(a) The project participants that have a contractual relationship with the DOE have not been replaced, the PPs are the same as the ones in the PDD submitted for the global stakeholder consultation.</p> <p>(b) No significant changes have been made to the project design; The installed capacity and the electricity generation is the same as the PDD submitted for GSC.</p> <p>(c) The selected methodologies, the selected standardized baselines and/or the combination thereof have not been changed by the project participants.</p> <p>Therefore, AENOR deems that in accordance with the VVS version 02, there is no need to resubmit the PDD to GSC.</p>

### SECTION E. Internal quality control

Following the completion of the assessment process by the validation team, all documentation undergoes an internal quality control through a technical review before submission to the CDM-EB. The Technical reviewer is a qualified member of AENOR, independent from the team that carried out the validation of the project activity. The technical reviewer or the team appointed for the technical review are qualified in the technical area(s) and sectoral scope(s) of the project activity.

### SECTION F. Validation opinion

AENOR has performed the validation of the “Expansion San Pedro Wind Farm” in Chile. The validation process was performed on the basis of all UNFCCC issues and criteria for CDM projects, the host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting. The conclusions of this report show that the project, as it was described in the project documentation, is in line with all criteria applicable for the validation.

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

course of the validation process, 10 corrective actions and 04 clarifications were raised; all have been successfully closed.

The project participant used the latest “Tool for demonstration and assessment of additionality”, version 07.0.0 to demonstrate the additionality of the project. In line with this tool, the PDD provides an investment analysis to determine that the project activity itself is not the baseline scenario. The “Tool to calculate the emission factor for an electricity system” version 07.0 and the methodology ACM0002, version 20.0 have also been applied to determine the emission factor of the Chilean Grid.

The investment analysis demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the project activity.

The review of the project design documentation and additional documents related to baseline and monitoring methodology, and the subsequent background investigation, follow-up interviews and review of comments by parties and stakeholders have provided AENOR with sufficient evidence to validate the fulfilment of the stated criteria.

The conclusions can be summarised in detail as follows:

- i. The project is in line with all relevant host country criteria of Chilean DNA and with all relevant UNFCCC requirements for CDM. The LoA from Chile is dated on 01/03/2018.
- ii. The project additionality is sufficiently justified in the PDD.
- iii. The monitoring plan is transparent and adequate.
- iv. The calculation of project emission reductions has been carried out in a transparent and conservative manner, so that the calculated emission reductions per year of 119,235 tCO<sub>2</sub>e are most likely to be achieved within the renewable crediting period.

In AENOR’s opinion the project correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

The validation has been performed using a risk-based approach, as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, AENOR cannot be held liable by any party for decisions made or not made based on the validation opinion, which would go beyond the purpose.

Madrid, 02/02/2021



Elena Llorente Pérez  
Team leader



Jose Luis Fuentes  
Authorized person

## Appendix 1. Abbreviations

Abbreviations	Full texts
ACM0002	Consolidated baseline methodology for grid-connected electricity generation from renewable sources - Version 20.0
BM	Build margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM-EB	CDM Executive Board
CEN	National Electricity Coordinator
CER	Certified Emission Reductions
CNE	National Energy Commission
CL	Clarification Action
CM	Combined margin
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DOE	Designated operational entity
DR	Desk review
ER	Emission reduction
EF	Emission factor
FAR	Forward action request
GHG	Greenhouse Gases
GSC	Global stakeholder consultation
GWh	Electrical Giga Watt hour
IPPC	Intergovernmental Panel on Climate Change
kW	Kilowatt
LC/MR	Low cost/Must run
MP	Monitoring plan
MW	Megawatt

Abbreviations	Full texts
OM	Operating margin
PDD	Project Design Document
PP	Project participant
PS	CDM project standard for programmes of activities version 02.0
SEN	National Electricity System (Chilean grid after interconnection of SIC and SING by the end of year 2017)
tCO <sub>2e</sub>	Carbon dioxide equivalent tonnes
UNFCCC	United Nations Framework Convention on Climate Change
VVS	CDM validation and verification standard for programmes of activities version 02.0



## Appendix 2. Competence of team members and technical reviewers

### CERTIFICATE OF QUALIFICATION

**Subject:** Validation and technical review team for “Expansion San Pedro Wind Farm”

Madrid, 01/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction “Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities” IE-DTC-039, with regard to the validation process of the above mentioned project activity during the interval time that Freddy Garro undertook his role as Team leader and validator

Name: Freddy Alejandro GARRO FLORES

CDM team leader: YES

CDM validator: YES

CDM verifier: N.A.

External technical expert: N.A.

Technical areas related with the project activity: TA1.2: Renewables



Jose Luis Fuentes Pérez  
Climate Change Manager

## CERTIFICATE OF QUALIFICATION

**Subject:** Validation and technical review team for “Expansion San Pedro Wind Farm”

Madrid, 1/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction “Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities” IE-DTC-039, and with regard to the validation process of the above mentioned project activity:

Name: Elena Llorente Pérez

CDM team leader: YES

CDM validator: YES

CDM verifier: N.A.

External technical expert: N.A.

Technical areas related with the project activity: TA1.2: Renewables

A handwritten signature in blue ink, consisting of a stylized 'J' and 'F' intertwined.

Jose Luis Fuentes  
Climate Change Manager

**CERTIFICATE OF QUALIFICATION**

**Subject:** Validation and technical review team for “Expansion San Pedro Wind Farm”

Madrid, 1/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction “Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities” IE-DTC-039, with regard to the validation process of the above mentioned project activity during the interval time that Marcelino Pellitero undertook his role as validator.

Name: Marcelino Pellitero

CDM team leader: NO

CDM validator: YES

CDM verifier: N.A.

External technical expert: N.A.

Technical areas related with the project activity: TA1.2: Renewables

A handwritten signature in blue ink, consisting of a stylized 'J' and 'F' intertwined.

Jose Luis Fuentes  
Climate Change Manager

## CERTIFICATE OF QUALIFICATION

**Subject:** Validation and technical review team for “Expansion San Pedro Wind Farm”

Madrid, 01/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction “Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities” IE-DTC-039, and with regard to the validation process of the above mentioned project activity:

Name: Luis Javier Arribas

CDM team leader: NO

CDM Technical reviewer: YES

CDM verifier: N.A.

External technical expert: N.A.

Technical areas related with the project activity: TA1.2: Renewables

A handwritten signature in blue ink, consisting of a stylized 'J' and 'F' intertwined.

José Luis Fuentes  
Climate Change Manager

**CERTIFICATE OF QUALIFICATION**

**Subject:** Validation and technical review team for “Expansion San Pedro Wind Farm”

Madrid, 01/05/2020

Hereby I confirm the following records of qualification, according with AENOR internal instruction “Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities” IE-DTC-039, and with regard to the validation process of the above mentioned project activity:

Name: Jose Luis Fuentes

CDM team leader: NO

CDM Technical reviewer: YES

CDM verifier: N.A.

External technical expert: N.A.

Technical areas related with the project activity: TA1.2: Renewables



Jose Luis Fuentes Perez  
Climate Change Manager

## Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	CDM-EB	CDM project standard version 2.0		UNFCCC Website
2	PPs	Initial Version of the PDD –		PPs
3	PPs	Final Version of the PDD – Version 4		PPs
4	CDM-EB	Approved Methodology, ACM0002: Grid-connected electricity generation from renewable sources --- Version 20.0		UNFCCC Website
5	CDM-EB	CDM validation and verification standard for project activities version 02.0		UNFCCC Website
6	CDM-EB	CDM project cycle procedure for project activities version 02.0.		UNFCCC Website
7	CDM-EB	Tool to calculate the emission factor for an electricity system, version 07.0		UNFCCC Website
8	CDM-EB	Tool for demonstration and assessment of additionality, Version 07.0.0		UNFCCC Website
9	CDM-EB	Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation, Version 03.0		UNFCCC Website
10	CDM-EB	Project 6635: Cuel Wind Farm Project		UNFCCC Website
11	CDM-EB	Tool to calculate project or leakage CO2 emissions from fossil fuel combustion. Version 03.0		UNFCCC Website
12	AENOR	Specific Instruction for the Validation, verification and certification of clean development mechanism (CDM) project activities (IE/DTC/0039)		AENOR
13	Chilean DNA	Letter of Approval (LoA)	1/03/2018	PPs
14	PPs	Environmental Impact Declaration - EID		PPs
15	PPs	Modalities of Communication statement (MoC)	V02	PPs
16	PPs	Written confirmation from the project participant of corporate and personal details, including specimen signatures		PPs
17	CDM-EB	CDM-MOC-FORM Modalities of Communication statement, version 3		UNFCCC Website
18	CDM-EB	CDM-PDD-FORM Project design document form,		UNFCCC Website
19	Barlovento Recursos Naturales S.L	Wind Source study		PP

20	Chilean Ministry of environment	Environmental Impact Declaration Approval		Chilean Government
21	Det Noske Veritas	Design Evaluation Conformity Statement		PP
22	CNE	Annual Electricity generation of the project electricity system 2019	<a href="http://www.cne.cl/estadisticas/electricidad/">http://www.cne.cl/estadisticas/electricidad/</a>	CNE
23	CNE	Chile National Energy Balance 2018	<a href="http://energiaabierta.cl/visualizaciones/balance-de-energia/">http://energiaabierta.cl/visualizaciones/balance-de-energia/</a>	CNE
24	IPPC	Guidelines on National GHG Inventories, Vol. 2 (Energy), Chapter 1, Table 1.4, Pages 1.23 and 1.24	<a href="http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf">http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf</a>	IPPC
25	CEN	SIC electricity generation and fuels consumption per power unit, 2017	<a href="https://sic.coordinador.cl/informes-y-documentos/fichas/operacion-real/">https://sic.coordinador.cl/informes-y-documentos/fichas/operacion-real/</a>	CEN
26	CEN	SING electricity generation and fuels consumption per power unit, 2017	<a href="http://cdec2.cdec-sing.cl/pls/portal/cdec.pck_web_coord_elec.sp_pagina?p_id=5169">http://cdec2.cdec-sing.cl/pls/portal/cdec.pck_web_coord_elec.sp_pagina?p_id=5169</a>	CEN
27	CNE	SEN electricity generation and fuels consumption per power unit, 2018	<a href="http://datos.energiaabierta.cl/dataviews/252286/cons umo-de-combustibles-en-el-sen/">http://datos.energiaabierta.cl/dataviews/252286/cons umo-de-combustibles-en-el-sen/</a>	CNE
28	CNE	SEN electricity generation and fuels consumption per power unit, 2019	<a href="http://datos.energiaabierta.cl/dataviews/252286/cons umo-de-combustibles-en-el-sen/">http://datos.energiaabierta.cl/dataviews/252286/cons umo-de-combustibles-en-el-sen/</a>	CNE
29	PP	EF calculation spreadsheets	Version 03	PP
30	PP	SAN PEDRO II_ER Calculation_v02		PP
31	PPs	Stakeholder consultation community invitation		PPs
32	PPs	Community Development Programs		PPs
33	PPs	Local stake holder Participation Assistance list		PPs
34	CDM-EB	Methodological Tool: Common practice" version 03.1		UNFCCC Website
35	GAMESA	EPC contract, start date	19/05/2015	PPs
36	PPs	Prior CDM consideration of the CDM to UNFCCC secretariat	23/10/ 2013	UNFCCC Website
37	PPs	Prior CDM consideration of the CDM to Chilean DNA	27/02/2014	PPs
38	PPs	Public stakeholder consultation of PDD Expansion San Pedro Wind Farm		UNFCCC Website
39	PPs	Financial Model spreadsheet	Versión 03	PPs
40	MINISTRY OF ECONOMY, DEVELOPMENT AND RECONSTRUCTIO	Government/ Official approved benchmark (Article 174 of Law Decree nº 4, General Law of Electricity Services (LGSE))	9	PPs

	N OF CHILE			
41	CDM-EB	Project 8932: San Pedro Wind Farm Project		UNFCCC Website
42	CDM-EB	Project 4449: Monte Redondo Wind Farm Project		UNFCCC Website
43	CDM-EB	Project 5831 : Providencia Hydroelectric Plant		UNFCCC Website
44	CDM-EB	Project 7801 : Lican Hydroelectric Plant		UNFCCC Website
45	CDM-EB	Project 8427 : Los Hierros Hydroelectric Power Plant		UNFCCC Website
46	INTERNAL TAX SERVICE OF CHILE (SII)	Income Tax	<a href="http://www.sii.cl/aprenda_sobre_impuestos/impuestos/imp_directos.htm">http://www.sii.cl/aprenda_sobre_impuestos/impuestos/imp_directos.htm</a>	PPs
47	INTERNAL TAX SERVICE OF CHILE (SII)	Depreciation periods	<a href="http://www.sii.cl/pagina_valores/bienes/tabla_vida_enero.htm">http://www.sii.cl/pagina_valores/bienes/tabla_vida_enero.htm</a>	PPs
48	CDM-EB	Project 7814: Llay Llay Wind Farm Project		UNFCCC Website
49	CDM-EB	Project 7458 : Valle de los Vientos Wind Farm		UNFCCC Website
50	CDM-EB	Project 6985: El Arrayán Wind Farm Project		UNFCCC Website
51	CDM-EB	Project 5028: Canela II Wind Farm Project		UNFCCC Website
52	CDM-EB	Project 3252 : Totoral Wind Farm Project		UNFCCC Website
53	CDM-EB	Project 1958 : Canela Wind Farm Project		UNFCCC Website
54	GAMESA	O&M Contract		PPs
55	INTERNATIONAL RENEWABLE ENERGY AGENCY (IRENA)	Renewable Energy Technologies: Cost Analysis Series 2012		IRENA
56	CDM-EB	Guidelines for the reporting and validation of plant load factors.	V01.0	UNFCCC Website
57	SYSTEP	Tariff estimation		PPs
58	Chilean NEC	Node pricing, April 2012, Interconnected System Central (SIC). Final Technical Report	<a href="https://www.cne.cl/tarificacion/electrica/precio-nudo-corto-plazo/abril-2012/">https://www.cne.cl/tarificacion/electrica/precio-nudo-corto-plazo/abril-2012/</a>	PPs
59	CHILEAN STATISTICAL INSTITUTE (INE)	Price Indexes	<a href="http://www.ine.cl/canales/chile_estadistico/estadisticas_precios/ipm/series_estadisticas/series_estadisticas.php">http://www.ine.cl/canales/chile_estadistico/estadisticas_precios/ipm/series_estadisticas/series_estadisticas.php</a>	CHILEAN STATISTICAL INSTITUTE (INE)
60	CDM-EB	Project 1958 : Canela Wind Farm Project		UNFCCC Website
61	Chilean NEC	Installed plans in Chile	<a href="https://www.cne.cl/estadisticas/electricidad/">https://www.cne.cl/estadisticas/electricidad/</a>	Chilean NEC
62	Chilean NEC	Commissioning Stamped Letter of the National Electrical Coordinator	08/04/2017	PP
63	CDM-EB	Meeting report: CDM Executive Board 108th meeting	<a href="https://cdm.unfccc.int/filestorage/X/B/L/XBL3H024J87AVRZP19YUO6IGEDSMQT/eb108%20meeting">https://cdm.unfccc.int/filestorage/X/B/L/XBL3H024J87AVRZP19YUO6IGEDSMQT/eb108%20meeting</a>	UNFCCC Website



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

Table 1. CLs from this validation

CL ID	01	Section no.	D.1	Date: 10/02/2016
<b>Description of CAR</b>				
The PP is requested to provide the respective evidence of the project schedule related milestones stated in the PDD.				
<b>Project participant response</b>				<b>Date: 22/06/2017</b>
In response to this CL, several documents have been attached to backup the project schedule stated of the PDD.				
<b>Documentation provided by project participant</b>				
<i>Evidence for Constitution of exploitation society (RIO ALTO):</i> Document: "Copia de inscripción con vigencia 11.06.15" <i>Evidence for Constitution of exploitation society (ENERGIAS DE ABTAO):</i> Document: "C° Energías de Abtao S.A. EP 1A. JEA Bosques de Metalqui" <i>Evidence for the Technical Due Diligence, Legal and market:</i> Document: "230829-ESZA-R-01 G" <i>Evidence for the Date in which Project Developers activate EPC contract with GAMESA:</i> Document: "Activación firmada" <i>Evidence for the Start date of activity of SPII</i> Document: "Activación firmada" <i>Evidence for the milestones related with construction works</i> Document: "20150304 Planning San Pedro II WF 13 G128 95m_rev28 2 teams NTPmay15" Evidence for the Starting Date of Crediting Period Document: "20150304 Planning San Pedro II WF 13 G128 95m_rev28 2 teams NTPmay15"				
<b>DOE assessment</b>				<b>Date: 15/06/2018</b>
PP has modified properly de start date of the crediting period, and it is in accordance with the documents provided. CL is closed.				

<b>CL ID</b>	02	<b>Section no.</b>	D.1	<b>Date:</b> 10/02/2016
<b>Description of CL</b>				
Evidence to back up the Start date has to be provided.				
<b>Project participant response</b>				<b>Date:</b> 20/02/2017
<p>In response to this CL, activation of the EPC Contract with GAMESA has been attached to backup the starting date stated in the PDD.</p> <p>Additionally, the starting date has changed, due to the date in which the document has been finally signed. Original date stated in the first version of the PDD sent for validation was estimation, because the PDD was prepared before the activation of the EPC contract.</p>				
<b>Documentation provided by project participant</b>				
<p>Evidence for the Start date of activity of SPII (see in CL01 folder, subfolder EPC &amp; Start Date Of Project Activity):</p> <ul style="list-style-type: none"> <li>- Document: "Activación firmada"</li> </ul>				
<b>DOE assessment</b>				<b>Date:</b> 28/04/2017
Evidence provided is correct. CL is closed.				

<b>CL ID</b>	03	<b>Section no.</b>	D.4.7.	<b>Date:</b> 10/02/2016
<b>Description of CL</b>				
<p>The PP shall clearly justify in the PDD in accordance to the applied methodology and tool, also provide adequate evidence to the audit team of the following approaches:</p> <ul style="list-style-type: none"> <li>• Biogas power plants are considered as low-cost/must-run for the selection of simple OM method.</li> <li>• The option B is used to calculate the simple OM, but, net electricity generation and CO2 emission factors of each power unit is available for the calculation of BM factor.</li> </ul>				
<b>Project participant response</b>				<b>Date:</b> 28/05/2020
<p>In accordance with the reference sources the power units, individually, should be considered to calculate Simple OM with Option A. This situation does not affect BM factor calculations, because it does not happen with power units considered into the groups SET5 units or SET<math>\geq</math>20 per cent. Only two power plants use two types of fuel (Santa Fe and LAJA CMPC). Considering available information (presented by the CNE (Energy National Commission from Chile) in "capacidad_instalada_de_generacion"</p>				
<b>Documentation provided by project participant</b>				
<p>Related to the approach of considering Biogas as LC/MR power plants, validation team can find attached the document: "EF-SEN (SPII) "</p> <p>Related to the use of the Option to calculate the simple OM:</p> <ul style="list-style-type: none"> <li>- "EF-SEN (SPII)</li> <li>- Project Design Document</li> <li>- PDD attachment from footnote "Capacidad Instalada de Generación" (which can be found at PDD attachments folder)</li> </ul>				
<b>DOE assessment</b>				<b>Date:</b> 22/09/2020

Spread sheet for emission reduction calculation, was properly calculated, in accordance with tool to calculate the grid emission factor, then CL is closed

<b>CL ID</b>	04	<b>Section no.</b>	D.4.6.	<b>Date:</b> 16/06/2020
<b>Description of CL</b>				
Evidence should be provided that the project implementation has not ceased after the commencement of the CDM process, In accordance with paragraph 11, of the investment tool (EB 105).				
<b>Project participant response</b>				<b>Date:</b> 22/06/2020
The following evidence has been provided to demonstrate that the project activity has not ceased the implementation: Commissioning date evidence.				
<b>Documentation provided by project participant</b>				
Commissioning Stamped Letter of the National Electrical Coordinator, 08/04/2017				
<b>DOE assessment</b>				<b>Date:</b> 22/09/2020
In accordance with the implementation timeline of section A.1 of the PDD and the letter of commissioning of the National Electrical Coordinator, the project participants have demonstrated that the project not ceased its implementation despite the validation process was interrupted in 2018.				
Therefore, the project activity has continued its implementation; and the investment date is still valid taking into account the provisions from CDM rules. AENOR deems proved that project activity has continued its implementation although the CDM validation process was interrupted in 2018, this is based on the above evidence and interviews with PPs during this validation process once validation re-started.				

**Table 2. CARs from this validation**

<b>CAR ID</b>	01	<b>Section no.</b>	D.9	<b>Date:</b> 10/02/2016
<b>Description of CAR</b>				
The PP shall provide the Letter of Approval of the project activity.				
<b>Project participant response</b>				<b>Date:</b> 20/02/2017
The Letter of Approval is pending request until the submitting of the latest version of the PDD. Once obtained will be provided to the validation team.				
<b>Documentation provided by project participant</b>				
Letter No. 180814.pdf				
<b>DOE assessment</b>				<b>Date:</b> 22/03/2018
The LoA has been provided and it is in accordance with the CDM requirements. CAR is closed				

<b>CAR ID</b>	02	<b>Section no.</b>	D.11.	<b>Date:</b> 16/06/2020
<b>Description of CAR</b>				
The PP is requested to provide evidence of the corporate identity of all project participants included in the MoC statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories.				
<b>Project participant response</b>				<b>Date:</b> 22/06/2020

<p>Evidences of the corporate identity of all project participants included in the MoC statement are provided to the validation team attached to this findings response.</p> <p>The MoC has been modified to include a different person as alternate authorised signatory.</p>	
<b>Documentation provided by project participant</b>	
<p>Letters to evidence corporate identity.</p> <p>MoC statement</p>	
<b>DOE assessment</b>	<b>Date:</b> 22/09/2020
Evidence of the corporate identity has been provided. CAR is closed.	

<b>CAR ID</b>	03	<b>Section no.</b>	D.11.	<b>Date:</b> 16/06/2020
<b>Description of CAR</b>				
<p>The MoC has been provided but the project participants shall submit to the DOE at the time of validation of the proposed CDM project activity an MoC statement using the valid version of the "Modalities of communication statement form" (CDM-MOC-FORM).</p>				
<b>Project participant response</b>				<b>Date:</b> 22/06/2020
<p><i>The MoC was provided to the DOE ("(200710) CDM-MOC-FORM_San Pedro_II", in the folder 3. PDD and CDM documentation\3.2 MoC)</i></p>				
<b>Documentation provided by project participant</b>				
<p><i>("(200710) CDM-MOC-FORM_San Pedro_II", in the folder 3. PDD and CDM documentation\3.2 MoC)</i></p>				
<b>DOE assessment</b>				<b>Date:</b> 22/09/2020
MoC is correctly completed, The correct updated MoC has been provided. CAR is closed.				

<b>CAR ID</b>	04	<b>Section no.</b>	D.3.	<b>Date:</b> 10/02/2016
<b>Description of CAR</b>				
The PP is requested to include in the PDD the latitude and longitude of the aerogenerators (decimal points).				
<b>Project participant response</b>				<b>Date:</b> 20/02/2017
Latitude and Longitude of the aerogenerators are now included at the Project Design Document into the table A5.2 Coordinates of Project AEGs.				
<b>Documentation provided by project participant</b>				
Project Design Document				
<b>DOE assessment</b>				<b>Date:</b> 28/04/2017
Please provide the evidence of the coordinates of the aerogenerators. According to coordinates indicated in the Wind Resource Study "Estudio de Viento - PE San Pedro2 G128-5.0MW", this data is not correct. CAR is not closed.				
<b>Project participant response</b>				<b>Date:</b> 01/06/2017
AEGs coordinates have been modified to show the final coordinates. There are positions that are not coincident with the document: "Estudio de Viento - PE San Pedro2 G128-5.0MW" because of technical decisions made after this study. Extract of technical report on which it is detailed the reasons to change AEGs positions has been provided to the validation team.				
<b>Documentation provided by project participant</b>				
GD145534 R4_AE_JEALSA_CHILE_SAN PEDRO II				
<b>DOE assessment</b>				<b>Date:</b> 28/08/2017
Properly evidence regarding location of wind turbines has been provided. The, CAR is closed				

<b>CAR ID</b>	05	<b>Section no.</b>	D.4.7.	<b>Date:</b> 10/06/2020
<b>Description of CAR</b>				
The ex-ante estimation of the annual emission reductions stated in the PDD is not consistent in all sections. The PP is requested to revise the value of the annual emission reductions stated in the entire PDD considering that the annual emission reduction calculation shall be conservative.				
<b>Project participant response</b>				<b>Date:</b> 20/06/2020

At the Emission Reductions sheet, the annual emission reduction has been corrected.	
<b>Documentation provided by project participant</b>	
See the Project Design Document.	
<b>DOE assessment</b>	<b>Date:</b> 22/09/2020
The estimation of the annual emission reductions are consistent in the entire PDD. CAR is closed.	

<b>CAR ID</b>	06	<b>Section no.</b>	D.4.6.	<b>Date:</b> 10/02/2016
<b>Description of CAR</b>				
Evidence to back up the time for investment decision has to be provided.				
<b>Project participant response</b>				<b>Date:</b> 20/02/2017
<p>Evidences to support the time for investment decision are provided to the validation team.</p> <p>Those evidences are EPC contracts signed:</p> <ul style="list-style-type: none"> <li>- "53018_Contrato de compraventa de AEG y transporte"</li> <li>- "53018_Contrato de servicios inland e instalación y ejecución obra civil eléctrica"</li> </ul> <p>These contracts have been signed in July 2014, prepared some time before they were signed, which supports the input values taken into account when developing the investment analysis and the base case.</p>				
<b>Documentation provided by project participant</b>				
<p>Several documents are presented:</p> <ul style="list-style-type: none"> <li>- "53018_Contrato de compraventa de AEG y transporte"</li> <li>- "53018_Contrato de servicios inland e instalación y ejecución obra civil eléctrica"</li> </ul>				
<b>DOE assessment</b>				<b>Date:</b> 28/04/2017
Appropriate evidence have been provided, thus CAR is closed.				

<b>CAR ID</b>	07	<b>Section no.</b>	D.4.6.	<b>Date:</b> 10/02/2016
<b>Description of CAR</b>				
Evidence to back up financial calculations have to be provided: EG: Total Investment Cost, OM cost, evidence to prove that the price of electricity is valid at the time of investment decision.				
<b>Project participant response</b>				<b>Date:</b> 20/02/2017
In response to this CAR, several documents have been attached to backup financial calculations stated in the PDD.				
<b>Documentation provided by project participant</b>				

Evidence for Total Investment Cost:	
-Documents: "53018_Contrato de compraventa de AEG y transporte"; "53018_Contrato de servicios inland e instalación y ejecución obra civil eléctrica"	
Evidence for OM cost:	
-Document: "53018_Contrato operación y mantenimiento"	
Evidence for Price of electricity:	
-Document: "Copia de Corpbanca-Santander-Jealsa - Resultados Sensibilidad WTI 50 US\$"	
<b>DOE assessment</b>	<b>Date:</b> 28/04/2017
Appropriate evidence have been provided, thus CAR is closed.	

<b>CAR ID</b>	08	<b>Section no.</b>	D.4.6.	<b>Date:</b> 10/02/2016
<b>Description of CAR</b>				
Common practice analysis has not been undertaken as per Methodological tool Common practice Version 03.1.				
<b>Project participant response</b>				<b>Date:</b> 20/02/2017
<p>The common practice analysis is now presented in the PDD.</p> <p>The results of the applications of the Methodological Tool Common Practice v.03.1 indicates that the proposed project is not a common practice (<math>N_{all}</math> and <math>N_{diff} = 0</math>).</p>				
<b>Documentation provided by project participant</b>				
<p>See the Project Design Document.</p> <p>Several documents are presented:</p> <ul style="list-style-type: none"> <li>- "Catastro-ERNC".</li> <li>- "<math>N_{all}</math>-<math>N_{diff}</math> #0" Excel for calculation of the common practice formula.</li> </ul>				
<b>DOE assessment</b>				<b>Date:</b> 28/04/2017
Appropriate evidence have been provided, thus CAR is closed.				

<b>CAR ID</b>	09	<b>Section no.</b>	D.4.7	<b>Date:</b> 16/06/2020
<b>Description of CAR</b>				
<p>Excel file "EF calculation spreadsheets version 01" include the following wrong information:</p> <ul style="list-style-type: none"> <li>- Information of other years 2008-2014 in the sheet of "LCMR" is included although it is not used to calculate the OM simple method.</li> <li>- Information provided in the sheet "Base" is not in English.</li> <li>- Please clarify the reference sources in the excel were the Generation, fuel consumption and start-up date values are taken in the sheets "OM" and "BM".</li> <li>- Some CDM projects have been included in the BM 19 but there are not registered in the UNFCCC website, such as "PMGD CALAMA_Solar, Río Mulchén, Luz del Norte, Lautaro-Comasa 2, Las Flores, PAS3_Solar, Louisiana Pacific, San Isidro , Nehuenco TG 9B-. And some CDM registered project have not been identified.</li> <li>- Some electricity generation plants does not have the correct electricity generation, for instance Calfuco and Río Azul in the BM 19 sheet.</li> </ul>				
<b>Project participant response</b>				<b>Date:</b> 22/06/2020
<p><i>The EF calculation spreadsheets version 01 was updated to version 02 to include all recommendations made the DOE.</i></p>				
<b>Documentation provided by project participant</b>				
<p><i>EF calculation spreadsheets</i></p>				
<b>DOE assessment</b>				<b>Date:</b> 22/09/2020
<p>The calculation spreadsheet has been provided and the calculation are considered correct. CAR is closed.</p>				

<b>CAR ID</b>	10	<b>Section no.</b>	D. 6	<b>Date:</b> 16/06/2020
<b>Description of CAR</b>				
<p>The environmental license does not have the total installed capacity of the project activity.</p>				
<b>Project participant response</b>				<b>Date:</b> 22/06/2020
<p><i>The environmental license gave permission for the installation of a wind farm with an installed capacity of 216 MW. Nevertheless, the wind is being developed in different steps. The first step considers the installation of 65 MW.</i></p> <p><i>In addition, in the first EIA a wind farm of 45 MW was announced ("RCA-Ampliación parque eólico San Pedro" in 1. Legal situation\1.5. Environmental License) as the first stage. However, the document "2.1.7.2 aprueba resolución ampl Plataforma" modifies the chronogram and updates from 45 MW to 65 MW the first stage.</i></p> <p>ii) Modificar el cronograma para la primera etapa indicada en la DIA, subiendo la instalación de 10 a 13 aerogeneradores.</p> <p>Para la primera etapa de la Ampliación del Parque Eólico San Pedro, se montarán equipos de 5 MW y no de 4,5 como indica la RCA; esta modificación fue consultada por carta pertinencia y resuelta según resolución N° 149 del 11 de marzo de 2014.</p> <p>De acuerdo a lo anterior, la potencia a instalar será de 65 MW y no de 45 MW como se indica en "cronograma del proyecto" aprobado en la RCA</p>				
<b>Documentation provided by project participant</b>				



2.1.7.2 aprueba resolución ampl plataforma.pdf RCA-Ampliación parque eólico San Pedro	
<b>DOE assessment</b>	<b>Date:</b> 22/09/2020
The correct explanation has been provided. CAR is closed.	

**Table 3. FARs from this validation**

<b>FAR ID</b>	01	<b>Section no.</b>	N/A, Specific requirements of EB 108, paragraph 7, (c)	<b>Date:</b> 02/02/2021
<b>Description of FAR</b>				
<p>The project participant shall apply in accordance with the EB meeting report 108, paragraph 7, the following issues:</p> <ul style="list-style-type: none"> <li>-Apply any global warming potential values that may be adopted by the CMP for that period in their monitoring reports for any emission reductions achieved on or after 1 January 2021; and</li> <li>-Update their project design documents in accordance with any requirements of the CMP guidance.</li> </ul>				
<b>Project participant response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by project participant</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

## Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
04.0	31 May 2019	Revision to: <ul style="list-style-type: none"> <li>• Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN);</li> <li>• Make editorial improvements.</li> </ul>
03.1	11 January 2018	Editorial revision to remove an erroneously included instruction paragraph in section D.2 (Identification of project type).
03.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
02.0	22 July 2016	EB 90, Annex 3 Revision to include provisions related to automatically additional project activities.
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Registration Keywords: project activities, validation report		