



VALIDATION REPORT INGENIERÍA SEAWIND SUDAMÉRICA LTDA

VALIDATION OF THE WIND PROGRAMME OF ACTIVITIES IN CHILE

REPORT No. CHILE-VAL/0523/2011
REVISION No. 03

BUREAU VERITAS CERTIFICATION

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VALIDATION REPORT

Date of first issue: 19/09/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Ingeniería Seawind Sudamérica Ltda	Client ref.: Marcelo Christen Banto
<p>Summary:</p> <p>Bureau Veritas Certification has made the validation of the Wind Programme of Activities in Chile located in the regions of Arica and Parinacota, Tarapacá, Antofagasta, Atacama, Coquimbo, Valparaíso, Metropolitana, Libertador General Bernardo O'Higgins, Maule, Bio Bio, Araucanía, Los Ríos, Los Lagos, in Chile, on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.</p> <p>The validation scope is defined as an independent and objective review of the PoA-DD, generic CPA-DD, the baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the PoA design and the baseline and monitoring plan; ii) follow-up interviews with stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.</p> <p>The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the Coordinating/Managing Entity revised its PoA design documents.</p> <p>In summary, it is Bureau Veritas Certification's opinion that the PoA correctly applies the baseline and monitoring methodology ACM0002 version 12.3.0 and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.</p>	

Report No.: CHILE-val/0523/2011	Subject Group: CDM
Project title: Wind Programme of Activities in Chile	
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Date of this revision: 09/10/2012	Rev. No.: 03
Number of pages: 126	

Indexing terms

Work approved by:

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Table of Contents	Page
1 INTRODUCTION	4
1.1 Objective.....	4
1.2 Scope.....	4
1.3 Validation Team.....	4
2 METHODOLOGY	5
2.1 Review of Documents.....	5
2.2 Follow-up Interviews.....	6
2.3 Resolution of Clarification and Corrective Action Requests	6
2.4 Internal Technical Review.....	7
3 VALIDATION CONCLUSIONS	7
3.1 Approval (49-50).....	8
3.2 Participation (54)	8
3.3 Project design document (57).....	8
3.4 Changes in the Programme of Activity (18).....	9
3.5 PoA description (64)	9
3.6 Operational and management arrangements (166).....	10
3.7 Eligibility criteria for inclusion a CPA in the PoA (167)	11
3.8 Baseline and monitoring methodology.....	12
3.8.1 Applicability of the selected baseline and monitoring methodology (76-77).....	12
3.8.2 PoA boundary	15
3.8.3 Baseline identification (87-88)	15
3.8.4 Algorithms and/or formulae used to determine emission reductions (92-93)	16
3.9 Additionality of PoA.....	24
3.9.1 Start date of the PoA/CPA	24
3.9.2 Demonstration of additionality of the PoA as a whole.....	25
3.10 Monitoring plan (124).....	26
3.11 Environmental impacts (133).....	27
3.12 Local stakeholder consultation (130).....	27
4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS	27
5 VALIDATION OPINION	27
6 REFERENCES	29



7	CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS	31
	APPENDIX A: CDM PROGRAMME OF ACTIVITIES VALIDATION PROTOCOL	32



1 INTRODUCTION

Ingeniería Seawind Sudamérica Ltda has commissioned Bureau Veritas Certification to validate its CDM project Wind Programme of Activities in Chile (hereafter called “the PoA”) in the regions of Arica and Parinacota, Tarapacá, Antofagasta, Atacama, Coquimbo, Valparaíso, Metropolitana, Libertador General Bernardo O'Higgins, Maule, Bio Bio, Araucanía, Los Ríos, Los Lagos, in Chile.

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

1.1 Objective

The validation serves as programme design verification and is a requirement of all programme project activities. The validation is an independent third party assessment of the programme design. In particular, the PoA's baseline, the monitoring plan (MP), and the programme compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Validation is a requirement for all CDM programme and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

1.2 Scope

The validation scope is defined as an independent and objective review of the programme design documents, the baseline study and monitoring plan and other relevant documents at POA level. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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

1.3 Validation Team

The validation team consists of the following personnel:

FUNCTION	NAME	TA 1.2	TASK PERFORMED*
Team Leader	Marcelo Porto	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input checked="" type="checkbox"/> RI



Team Member	Karina Polido	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Chilean Environmental Specialist	Sylvia Bustos	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI
Financial Specialist	Antonio Vinicius Gomes	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI
Internal Technical Reviewer (ITR)	Guilherme Lefèvre	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI
Specialist supporting ITR	N.A.	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI

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

2 METHODOLOGY

The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the programme, according to the Clean Development Mechanism Validation and Verification Manual (version1.2)., Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities (Version04.1) issued by the Executive Board at its 55th meeting on 30/06/2010. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The completed validation protocol is enclosed in Appendix A to this report.

2.1 Review of Documents

The PoA-DD and generic CPA-DD submitted by Ingeniería Seawind Sudamérica Ltda and additional background documents related to the project design and baseline, i.e. country Law, PoA-DD form, CPA-DD form, Approved methodology, Kyoto Protocol, Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Ingeniería Seawind Sudamérica Ltda revised the PoA-DD and generic CPA-DD and resubmitted it on 27/08/2012.

The validation conclusions presented in this report relate to the project as described in the PoA-DD version 6 and generic CPA-DD version 4.

2.2 Follow-up Interviews

On 20-23/02/2012 Bureau Veritas Certification performed interviews with stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Ingeniería Seawind Sudamérica Ltda and Trie Projects were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Ingeniería Seawind Sudamérica Ltda (CME)	<ul style="list-style-type: none"> ➤ PoA-DD and generic CPA-DD ➤ Technology description ➤ Additionality assessment ➤ Environmental assessment ➤ Monitoring plan ➤ Monitoring methodology ➤ Baseline emissions estimation ➤ Project emissions estimation ➤ Emission reductions estimation ➤ Stakeholder consultation process ➤ Record keeping system of the PoA
Trie Projects (consultant)	<ul style="list-style-type: none"> ➤ PoA-DD and generic CPA-DD ➤ Technology description ➤ Monitoring plan ➤ Monitoring methodology ➤ Baseline emissions estimation ➤ Project emissions estimation ➤ Emission reductions estimation ➤ Environmental requirements compliance ➤ Stakeholder consultation process

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the programme design.

Corrective Action Requests (CAR) is issued, where:

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



The validation team may also use the term Clarification Request (CL), if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

The validation team may also raise a forward action request (FAR) during validation to identify issues related to programme implementation that require review during the first verification of the CPA under the PoA.

To guarantee the transparency of the validation process, the concerns raised are documented in more detail in the validation protocol in Appendix A.

2.4 Internal Technical Review

The validation report underwent an Internal Technical Review (ITR) before requesting registration of the programme.

The ITR is an independent process performed to examine thoroughly that the process of validation has been carried out in conformance with the requirements of the validation scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader provides a copy of the validation report to the reviewer, including any necessary validation documentation. The reviewer reviews the submitted documentation for conformance with the validation scheme. This will be a comprehensive review of all documentation generated during the validation process.

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

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

The reviewer compiles clarification questions for the Team Leader and Validation Team and discusses these matters with Team Leader.

After the agreement of the responses on the 'Clarification Request' from the Team Leader as well as the PP(s) the finalized validation report is accepted for further processing such as uploading on the UNFCCC webpage.

3 VALIDATION CONCLUSIONS

In the following sections, the conclusions of the validation are stated.



The findings from the desk review of the original programme design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A.

The validation of the Project resulted in 54 Corrective Action Requests (CARs) and 33 Clarification Requests (CLs).

The CARs and CLs were closed based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section corresponds to the VVM paragraph.

3.1 Approval (49-50)

A letter of approval has been received:

- Chilean DNA #121441, dated 10/05/2012 **/Ref-15/**.

Bureau Veritas Certification received this letter from the CME/project participant and does not doubt its authenticity.

The title and contents of the letter of approval refer to the precise proposed CDM programme activity title in the PoA-DD being submitted for registration.

The Host Party confirm that the Wind Programme of Activities in Chile contributes to sustainable development in Chile and has been presented voluntarily to the Chilean DNA.

Bureau Veritas Certification considers that the letter of approval from the Chilean DNA is in accordance with paragraphs 45 - 48 of the VVM version 01.2.

3.2 Participation (54)

The participation of the CME/project participant has been approved together with the letter of approval of the project activity from the Chilean DNA.

Please, refer to section 3.1 of this Validation Report.

3.3 Project design document (57)

The validation team hereby confirms that the PoA-DD complies with the latest PoA-DD form and the Generic CPA-DD complies with latest CPA-DD form.



Besides, the content between PoA-DD and Generic CPA-DD is consistent.

3.4 Changes in the Programme of Activity (18)

During the site visit, no changes were observed in the project as compared to details mentioned in webhosted PoA-DD version 1 **/Ref-1/** and Generic CPA-DD version 1 **/Ref-5/**. These documents were webhosted on 09/01/2012 and they were considering the utilization of methodology ACM0002 version 12.2.0 - "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" **/Ref-A/**.

All the changes that have been made to the different versions of the PoA-DD and Generic CPA-DD during the Validation Process, from the webhosted PoA-DD version 1 **/Ref-1/** and Generic CPA-DD version 1 **/Ref-5/** to the final PoA-DD version 6 **/Ref-19/** and Generic CPA-DD version 4 **/Ref-8/**, have been supported by CARs and CLs opened by the DOE and have already been discussed in the Validation Protocol.

3.5 PoA description (64)

The Wind Programme of Activities in Chile will develop grid connected wind projects located in Chile.

The PoA will improve the Chilean conditions to develop wind projects connected to the Central Interconnected System (*Sistema Interconectado Central* - SIC) or the Great North Interconnected System (*Sistema Interconectado del Norte Grande* - SING). CPAs will be new facilities (Greenfield).

This PoA is a voluntary action being coordinated and managed by Ingeniería Seawind Sudamérica Ltda (Seawind). There are no mandatory laws or regulations in place in the host country that require wind project to seek CDM services. Likewise, no mandatory laws or regulations exist requiring the coordinating/managing entity (CME) to develop a PoA for wind projects in the host country.

In Chile, the total electric market is developed by the private sector, and then the decision to invest in wind power plants is from a private company. In this context the economic attractiveness of the projects is a very important criterion for the decision making. So far in Chile, wind energy generation is only a minor part of the total installed capacity and the projects in operation are developed by the help of incentive regulations and the additional incomes of CDM. As reflected in the following table, at 2011 the wind energy capacity only represented 1.2 % of the total country installed capacity (198.68 MW over 16,480.3 MW).

Installed Capacity in Chile, 2011 (MW)

SYSTEM	Thermal	Hydro	Wind	Total
SING	3,948.8	14.9	0.0	3,963.8
SIC	6,309.6	5,858.8	196.7	12,365.2
AYSEN/ LOS LAGOS	29.3	20.4	1.98	51.7



MAGALLANES	99.6	0.0	0.0	99.6
TOTAL	10,387.3	5,894.1	198.68	16,480.3

Source: Comisión Nacional de Energía (CNE)^{*}

During the last years the government has impulse regulatory modifications intended to diversify the electricity matrix, diversify the companies participating in the electricity system and to promote the use of renewable energy sources[†].

The main objective of the PoA is to contribute to the development and promotion of grid connected wind farms, by building a framework to secure carbon revenue for those projects that need additional income from CERs for its implementation because they are economically or financially unattractive or because they face institutional, financial and/or structural barriers.

By means of additional incomes, the PoA aims to increase the feasibility of such wind energy projects which otherwise would not be feasible. The PoA will also help to ensure a more efficient monitoring, report and verification process for project developers. All CPAs within the PoA will consist of wind energy facilities. By replacing electricity from fossil fuel based power plants, this project will directly contribute to reduce greenhouse gas (GHG) emissions. The proposed PoA will improve the energy use in Chile avoiding the use of fossil fuels and hence, promoting the sustainable development.

The length of the PoA is 28 years.

The process undertaken to validate the accuracy and completeness of the PoA description includes a document review of the PoA-DD version 6 **/Ref-19/** and Generic CPA-DD version 4 **/Ref-8/**, interviews with the project participant Ingeniería Seawind Sudamérica Ltda and a site visit on 20-23/02/2012.

The validation team hereby confirms that the programme description in PoA-DD version 6 **/Ref-19/** is accurate and complete in all respects.

3.6 Operational and management arrangements (166)

A clear and transparent operational and management arrangement has been established by the management/coordinating entity. Complying with paragraph 166/VVM, the Validation team is able to conclude that the operational and management arrangements have been established by the coordinating/managing entity and are suitable for the PoA being validated. Bureau Veritas Certification considers that the arrangements are sufficient to ensure that the coordinating/managing entity will have control of all records and information related to the implementation of individual CPAs.

By documents review **/Ref-19/**, **/Ref-8/** and **/Ref-16/**, interviewing with CME during on site visit, the validation team confirms that the CME has the competencies to check the

^{*} <http://www.cne.cl/estadisticas/energia/electricidad>

[†] Law 20.257 (NCRE Law), enacted in April 1, 2008 that also introduced modifications to General Law of Electricity Services (LGSE) regarding the generation of electricity using Non Conventional Renewable Energy (NCRE)



features of potential CPAs and ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA. For details of management system, please refer to Section 6.4.5 of Table 1 in Appendix A.

3.7 Eligibility criteria for inclusion a CPA in the PoA (167)

The Validation team has assessed the eligibility criteria for inclusion a CPA in the PoA in accordance with paragraph 167/VVM and “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” **/Ref-M/** and confirms that:

- The eligibility criteria are verifiable.
- The eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.
- The specified eligibility criteria in the PoA-DD are sufficient to ensure that all CPAs would comply with the CDM requirement applicable to the PoA, for details of eligibility criteria are:
 1. Be located inside the Geographical Boundary of the PoA, as defined in section A.4.1.2 of the PoA-DD.
 2. Be a Greenfield on shore or off shore wind power plant (new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity).
 3. Not: (i) have been registered as a CDM project activity, or (ii) be included as a CPA under another PoA.
 4. No energy generating equipment is transferred from another activity, located in a non-annex I party and no existing equipment is transferred from the project to another activity.
 5. Confirm with a writing statement that the CPA will not:
 - a. Be registered as a CDM project activity;
 - b. Be included as a CPA under another PoA.
 6. During the operation phase, be connected to the Central Interconnected System (SIC) or to the Great North Interconnected System (SING) of Chile.
 7. To avoid double counting of emission reductions each CPA will be uniquely identified and defined in an unambiguous manner by providing geographic information (e.g. coordinates).
 8. Have a project starting date after the date on which the PoA-DD is uploaded for Global Stakeholder Consultation.
 9. Demonstrate the compliance with the additionality requirements stated on section E.5 of the present PoA-DD.
 10. Comply with the conditions of the methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” version 12.3.0 as listed in section E.2 of the present PoA – DD.
 11. Have the Environmental Approval (Resolución de Calificación Ambiental, RCA), if the project is required to assess their environmental impacts by going through the SEIA (“Sistema de Evaluación de Impacto Ambiental” or Environmental Impact Assessment System) by the Law 19300 (See section C.3 of the PoA-DD).



12. Have conducted a stakeholder consultation process as described in section D of the PoA-DD.
13. The CPA implementer must provide a notarized statement confirming that funding from Annex I parties, if any, does not result in a diversion of official development assistance.

There is no applicability conditions related to sampling because the monitoring plan considers direct measurement for all CPAs.

There is no applicability conditions related to “conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA” because the PoA-DD uses a large scale methodology.

There is no applicability conditions related to debundling because the PoA-DD uses a large scale methodology.

3.8 Baseline and monitoring methodology

3.8.1 Applicability of the selected baseline and monitoring methodology (76-77)

The steps taken to assess the relevant information contained in the PoA-DD against each applicability condition are described below.

According to the PoA-DD, the CPAs under the PoA will apply the consolidated baseline and monitoring methodology ACM0002, version 12.3.0.

This methodology is applicable to grid-connected renewable power generation project activities that (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).

The methodology ACM0002 is applicable to the Wind Programme of Activities in Chile because the plants considered in each CPA must all be grid connected renewable power generation (i.e. wind power plants) and shall correspond to option (a) provided in the above paragraph.

This methodology also provides the following conditions:

- The project activity is the installation, capacity addition, retrofit or replacement of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit.



The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants.

- In the case of capacity additions, retrofits or replacements (except for capacity addition projects for which the electricity generation of the existing power plant(s) or unit(s) is not affected): the existing plant 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 addition or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.

The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants. Therefore, this applicability condition is not applicable.

- In case of hydro power plants

- *At least one of the following conditions must apply:*
 - *The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or*
 - *The project activity is implemented in an existing single or multiple reservoirs, where the volume of any of reservoirs is increased and the power density of each reservoirs, as per definitions given in the Project Emissions section, is greater than 4 W/m^2 after the implementation of the project activity; or*
 - *The project activity results in new single or multiple reservoirs and the power density of each reservoir, as per definitions given in the Project Emissions section, is greater than 4 W/m^2 .*

The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants. Therefore, this applicability condition is not applicable.

- In case of hydro power plants using multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m^2 after the implementation of the project activity all of the following conditions must apply:

- *The power density calculated for the entire project activity using equation 5 is greater than 4 W/m^2 ;*
- *All reservoirs and hydro power plants are located at the same river and where are designed together to function as an integrated project that collectively constitutes the generation capacity of the combined power plant;*
- *The water flow between the multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity;*
- *The total installed capacity of the power units, which are driven using water from the reservoirs with a power density lower than 4 W/m^2 , is lower than 15MW;*
- *The total installed capacity of the power units, which are driven using water from reservoirs with a power density lower than 4 W/m^2 , is less than 10% of the total installed capacity of the project activity from multiple reservoirs.*



The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants. Therefore, this applicability condition is not applicable.

- *The methodology is not applicable to the following:*

- *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;*
- *Biomass fired power plants;*
- *A hydro power plant that result in new single reservoir or in the increase in existing single reservoir where the power density of the reservoir is less than $4W/m^2$.*

The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants. Therefore, the CPA is still eligible to the use of ACM0002 since it does not correspond to any of the restrictions listed above.

- *In the case of retrofits, replacements, or capacity additions, the methodology is only applicable if the most plausible baseline scenario is P2: "The continuation of the current situation, i.e. to use all power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance."*

The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants. Therefore, this applicability condition is not applicable.

Applicability conditions included in the "Tool to calculate the emission factor for an electricity system" version 02.2.1 and "Tool for the demonstration and assessment of additionality" version 06.0.0 apply:

- *The Tool to calculate the emission factor for an electricity system is applicable to projects that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects)".*

The CPAs to be added to the proposed PoA will consist in the installation of new wind power plants that will supply electricity to a grid (SIC or SING).

- *The Tool for the demonstration and assessment of additionality states "Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory" As the methodology ACM0002 states that the additionality of the project activity shall be demonstrated and assessed using the latest version of this tool than its use is mandatory.*

As is stated in Section E.5 of the PoA-DD all CPA will demonstrate the additionality using latest approved version of the "Tool for the demonstration and assessment of additionality".



The “Tool to calculate project or leakage CO2 emissions from fossil fuel combustion” version 02 is not applicable since all the CPAs are new wind power plants.

The eligibility criteria of the applicability of the selected baseline and monitoring methodology is set as: *Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs.*

Each CPA to be included in the PoA must fulfil the requirements of ACM0002 as discussed in section E.2 of the PoA-DD.

The DOE hereby confirms that, as a result of the implementation of the proposed PoA project activity, there are no greenhouse gas emissions occurring within the proposed PoA boundary, which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology. The DOE also confirms that the selected baseline and monitoring methodology ACM0002 version 12.3.0, “Tool to calculate the emission factor for an electricity system” version 02.2.1 and “Tool for the demonstration and assessment of additionality” version 06.0.0, are applicable to CPAs to be included in the PoA, which complies with all the applicability conditions therein.

3.8.2 PoA boundary

Boundary for the PoA in terms of geographical area is defined as those regions of Chile that are covered by the Central Interconnected System (*Sistema Interconectado Central* - SIC) and by the Great North Interconnected System (*Sistema Interconectado del Norte Grande* - SING). These regions are: Arica and Parinacota, Tarapacá, Antofagasta, Atacama, Coquimbo, Valparaíso, Metropolitana, Libertador General Bernardo O'Higgins, Maule, Bio Bio, Araucanía, Los Ríos, Los Lagos.

The eligibility criteria of the CPA boundary are set as only CPAs corresponding to grid-connected wind power plants located within the geographical area defined above are eligible.

Bureau Veritas Certification confirms that in establishing the boundary of the PoA, the project participant have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary.

3.8.3 Baseline identification (87-88)

The steps taken to assess the requirement given in paragraph 87 and 88 of the VVM are described below.

According to the PoA-DD, the CPAs to be included in the proposed PoA will correspond to the installation of new grid-connected wind power plants. Therefore, according to ACM0002 version 12.3.0, the baseline scenario for this option is the following:

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new



generation sources, as reflected in the combined margin (CM) calculations as described in the “Tool to calculate the emission factor for an electricity system”.

Given that, the PoA is limited to Greenfield projects and the baseline scenario described shall be applied for all the CPAs.

The DOE has verified the baseline identification by crosschecking the PoA-DD version 6 /**Ref-19**/, against the methodology ACM0002, version 12.3.0.

Based on the above assessment, the validation team hereby confirms that:

- (a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD;
- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
- (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD;
- (e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of PoA.

3.8.4 Algorithms and/or formulae used to determine emission reductions (92-93)

The steps taken to assess the requirement outlined in paragraph 89/VVM are described below.

For all the CPAs included in the Wind Programme of Activities in Chile, the emissions reductions are calculated according to the version 12.3.0 of the approved methodology ACM0002 and its recommended tools.

Emission Reductions

Emission Reductions are calculated as per equation 11 of ACM0002 version 12.3.0:

$$ER_y = BE_y - PE_y$$

Where:

- ER_y = Emission reductions in year y (tCO₂e)
- BE_y = Baseline emissions in year y (tCO₂)
- PE_y = Project emissions in year y (tCO₂e)

Baseline Emissions

Baseline Emissions are calculated as per equation 6 of ACM0002 version 12.3.0:

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

Where:

- BE_y = Baseline emissions in year y (tCO₂)
 $EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)
 $EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO₂/MWh)

$EG_{PJ,y}$ is calculated as per equation 7 of ACM0002 version 12.3.0:

$$EG_{PJ,y} = EG_{facility,y}$$

Where:

- $EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)
 $EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)

The grid emission factor will be calculated on an *ex ante* basis according the latest version of the "Tool to calculate the emission factor for an electricity system" version 02.2.1. The methodological choices for the six steps included in this tool are as follows:

STEP 1 - Identify the relevant electricity systems

The project electricity system can be:

- The Central Interconnected System (SIC), or
- The North Interconnected System (SING).

STEP 2 – Choose whether to include off-grid power plants in the project electricity system (optional)

For the calculation of the emission factor of the grid for all CPAs under the PoA, only grid-connected power plants will be considered (Option I).

STEP 3 - Select a method to determine the operating margin (OM)

The calculation of the operating margin emission factor ($EF_{grid,OM,y}$) is based on one of the following methods:

- (a) Simple OM, or
- (b) Simple adjusted OM, or
- (c) Dispatch data analysis OM, or
- (d) Average OM.

- For SIC connected projects:

The OM emission factor method selected is (b) Simple Adjusted OM because in the SIC low-cost/must-run resources typically constitutes more than 50% of the total generation of the SIC.

SIC Low Cost and No Low Cost generation 2006-2010 (GWh)

	2006	2007	2008	2009	2010	Average	%
Low cost/must run	28,574	22,932	24,430	25,534	22,428	24,780	59%
No low cost/must run	11,765	19,111	17,444	16,256	21,652	17,246	41%

Source: based on the files "Operación Real Anual" (Real Annual Operation), available at CDEC-SIC website (https://www.cdec-sic.cl/est_operativa_privada.php). Low cost/must run includes all hydro, biomass and wind power plants. No low cost/must run includes all the fossil fuel power plants.

The Simple Adjusted OM will be determined applying *ex ante* option, using a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CPA to the DOE.

Power plants registered as CDM project activities will be included in the sample group that is used to calculate the operating margin.

- For SING connected projects:

The OM emission factor method selected is (a) Simple OM because in the SING low-cost/must-run resources typically constitute less than 50% of the total generation of the SING.

SING Low Cost and No Low Cost generation 2006-2010 (GWh)

	2006	2007	2008	2009	2010	Average	%
No low cost/must run	13,166	13,878	14,434	14,845	15,047	14,274	99.55%
Low cost/must run	70	68	68	62	57	65	0.45%

Source: CDEC-SING yearbook 2010, page 43-44 (http://www.cdec-sing.cl/html_docs/anuario2010/pdf/SING2010ES.pdf). Low cost/must run includes the 3 existing hydro power plants: Chapiquiña, Cavancho 1 ("CAVA 1") and Cavancho 2 ("CAVA 2"); all other power plants are fossil fuel fired, and considered no low cost/must run.

The Simple OM will be determined applying *ex ante* option, using a 3-year generation-weighted average, based on the most recent data available at the time of submission of the CPA to the DOE.

Power plants registered as CDM project activities will be included in the sample group that is used to calculate the operating margin.

STEP 4 - Calculate the operating margin emission factor according to the selected method

Both Simple and Simple Adjusted emission factor will be calculated using Option (A): based on the net electricity generation and a CO₂ emission factor of each power unit.

The emission factor of each power unit will be determined following either of the options

A1, A2 or A3, depending on the availability of fuel consumption and/or efficiency data.

- For SING connected projects:

The Simple Method Operating Margin emission factor will be calculated using equation 1 of the Emission Factor Tool:

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

Where:

$EF_{grid,OMsim}$ = Simple operating margin CO₂ emission factor in year y (tCO₂/MWh)

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

$EF_{EL,m,y}$ = CO₂ emission factor of power unit m in year y (tCO₂/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

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

If for a power unit m data on fuel consumption and electricity generation is available, the emission factor ($EF_{EL,m,y}$) will be determined using Option A1 (equation 2 of the Emission Factor Tool):

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

Where:

$EF_{EL,m,y}$ = CO₂ emission factor of power unit m in year y (tCO₂/MWh)

$FC_{i,m,y}$ = Amount of fossil fuel type i consumed by power unit m in year y (mass or volume unit)

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

$EF_{CO_2,i,y}$ = CO₂ emission factor of fossil fuel type i in year y (tCO₂/GJ)

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

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

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

y = The relevant year as per the data vintage chosen in Step 3

If for a power unit m only data on electricity generation and the fuel types used is

available, the emission factor will be determined based on the CO₂ emission factor of the fuel type used and the efficiency of the power unit (Option A2), as follows (equation 3 of the Emission Factor Tool):

$$EF_{EL,m,y} = \frac{EF_{CO_2,m,i,y} \times 3.6}{\eta_{m,y}}$$

Where:

- $EF_{EL,m,y}$ = CO₂ emission factor of power unit m in year y (tCO₂/MWh)
 $EF_{CO_2,m,i,y}$ = Average CO₂ emission factor of fuel type i used in power unit m in year y (tCO₂/GJ)
 $\eta_{m,y}$ = Average net energy conversion efficiency of power unit m in year y (%)
 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

Where several fuel types are used in a power unit, the fuel type with the lowest CO₂ emission factor for $EF_{CO_2,m,i,y}$ will be used.

If for a power unit m only data on electricity generation is available, an emission factor of 0 tCO₂/MWh will be assumed as a simple and conservative approach (Option A3).

- For SIC connected projects:

The Simple Adjusted Operation Margin emission factor will be calculated using equation 7 of the Emission Factor Tool:

$$EF_{grid,OM-adj,y} = (1 - \lambda_y) \cdot \frac{\sum_m EG_{m,y} \times EF_{EL,m,y}}{\sum_m EG_{m,y}} + \lambda_y \cdot \frac{\sum_k EG_{k,y} \times EF_{EL,k,y}}{\sum_k EG_{k,y}}$$

Where:

- $EF_{grid,OM-adj,y}$ = Simple adjusted operating margin CO₂ emission factor in year y (tCO₂/MWh)
 λ_y = Factor expressing the percentage time (number of hours) for which low-cost/must-run sources are on the margin in year y
 $EF_{EL,k,y}$ = CO₂ emission factor of power unit k in year y (tCO₂/MWh)
 $EF_{EL,m,y}$ = CO₂ emission factor of power unit m in year y (tCO₂/MWh)
 k = All low-cost/must run grid power units serving the grid in year y
 m = All grid power units serving the grid in year y except low-cost/must-run power units
 $EG_{k,y}$ = Net electricity generated and delivered to the grid by power units k serving the system in year y (MWh)
 $EG_{m,y}$ = Net electricity generated and delivered to the grid by power units m serving the system, in year y (MWh)

y = The relevant year as per the data vintage chosen in Step 3

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

The CO₂ emission factor of power unit will be determined in the same way as described for SING connected projects.

Determination of λ_y

The parameter λ_y is defined as follows (equation 8 of the Emission Factor Tool):

$$\lambda_y (\%) = \frac{\text{Number of hours low - cost / must - run sources are on the margin in year } y}{8760 \text{ hours per year}}$$

And it will be calculated as per the following steps:

- Step (i) Plot a load duration curve. Collect chronological load data (typically in MW) for each hour of the year y , and sort the load data from the highest to the lowest MW level. Plot MW against 8760 hours in the year, in descending order.
- Step (ii) Collect power generation data from each power plant/unit. Calculate the total annual generation (in MWh) from low-cost/must-run power plants/units (i.e. $\sum_k EG_{k,y}$).
- Step (iii) Fill the load duration curve. Plot a horizontal line across the load duration curve such that the area under the curve (MW times hours) equals the total generation (in MWh) from low-cost/must-run power plants/units (i.e. $\sum_k EG_{k,y}$).
- Step (iv) Determine the “Number of hours for which low-cost/must-run sources are on the margin in year y ”. First, locate the intersection of the horizontal line plotted in Step (iii) and the load duration curve plotted in Step (i). The number of hours (out of the total of 8760 hours) to the right of the intersection is the number of hours for which low-cost/must-run sources are on the margin. If the lines do not intersect, then one may conclude that low-cost/must-run sources do not appear on the margin and λ_y is equal to zero.

STEP 5 - Calculate the build margin (BM) emission factor

In terms of data vintage, *ex ante* option will be applied, using the most recent information available on units already built for sample group m at the time of CPA submission to the DOE.

The sample group m will be determined as per the following procedure:

- (a) Identify the set of five power units, excluding power units registered as CDM project activities, that started to supply electricity to the grid most recently ($SET_{5-units}$) and determine their annual electricity generation ($AEG_{SET-5-units}$, in MWh);
- (b) Determine the annual electricity generation of the project electricity system, excluding power units registered as CDM project activities (AEG_{total} , in MWh). Identify the set of power units, excluding power units registered as CDM project activities, that started to supply electricity to the grid most recently and that comprise 20% of AEG_{total} (if 20% falls on part of the generation of a unit, the

generation of that unit is fully included in the calculation) ($SET_{\geq 20\%}$) and determine their annual electricity generation ($AEG_{SET_{\geq 20\%}}$, in MWh);

- (c) From $SET_{5\text{-units}}$ and $SET_{\geq 20\%}$ select the set of power units that comprises the larger annual electricity generation (SET_{sample});

Identify the date when the power units in SET_{sample} started to supply electricity to the grid.

If none of the power units in SET_{sample} started to supply electricity to the grid more than 10 years ago, then use SET_{sample} to calculate the build margin. Ignore steps (d), (e) and (f).

Otherwise:

- (d) Exclude from SET_{sample} the power units which started to supply electricity to the grid more than 10 years ago. Include in that set the power units registered as CDM project activity, starting with power units that started to supply electricity to the grid most recently, until the electricity generation of the new set comprises 20% of the annual electricity generation of the project electricity system (if 20% falls on part of the generation of a unit, the generation of that unit is fully included in the calculation) to the extent is possible. Determine for the resulting set ($SET_{\text{sample-CDM}}$) the annual electricity generation ($AEG_{SET_{\text{sample-CDM}}}$, in MWh); If the annual electricity generation of that set is comprises at least 20% of the annual electricity generation of the project electricity system (i.e. $AEG_{SET_{\text{sample-CDM}}} \geq 0.2 \times AEG_{\text{total}}$), then use the sample group $SET_{\text{sample-CDM}}$ to calculate the build margin. Ignore steps (e) and (f).

Otherwise:

- (e) Include in the sample group $SET_{\text{sample-CDM}}$ the power units that started to supply electricity to the grid more than 10 years ago until the electricity generation of the new set comprises 20% of the annual electricity generation of the project electricity system (if 20% falls on part of the generation of a unit, the generation of that unit is fully included in the calculation);
- (f) The sample group of power units m used to calculate the build margin is the resulting set ($SET_{\text{sample-CDM-}>10\text{yrs}}$).

The build margin emissions factor is the generation-weighted average emission factor (tCO_2/MWh) of all power units m during the most recent year y for which electricity generation data is available, calculated as follows (equation 12 of the Emission Factor Tool):

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

Where:

$EF_{\text{grid,BM},y}$ = Build margin CO_2 emission factor in year y (tCO_2/MWh)

- $EG_{m,y}$ = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh).
 $EF_{EL,m,y}$ = CO₂ emission factor of power unit m in year y (tCO₂/MWh).
 m = Power units included in the build margin.
 y = Most recent historical year for which electricity generation data is available.

The CO₂ emission factor of each power unit m ($EF_{EL,m,y}$) will be determined as per the guidance in Step 4, using options A1, A2 or A3, using for y the most recent historical year for which electricity generation data is available, and using for m the power units included in the build margin.

If the power units included in the build margin m correspond to the sample group SET_{sample-CDM->10yrs}, then, as a conservative approach, only option A2 from guidance in Step 4 can be used and the default values provided in Annex 1 of the EF tool will be used to determine the parameter $\eta_{m,y}$.

STEP 6 – Calculate the combined margin (CM) emissions factor

The calculation of the combined margin (CM) emission factor ($EF_{grid,CM,y}$) will be based on Option (a) Weighted Average CM method and calculated as follows (equation 13 of the Emission Factor Tool):

$$EF_{grid,CM,y} = EF_{grid,OM,y} \cdot w_{OM} + EF_{grid,BM,y} \cdot w_{BM}$$

Where:

- $EF_{grid,BM,y}$ = Build margin CO₂ emission factor in year y (tCO₂/MWh);
 $EF_{grid,OM,y}$ = Operating margin CO₂ emission factor in year y (tCO₂/MWh);
 w_{OM} = Weighting of operating margin emissions factor (%);
 w_{BM} = Weighting of build margin emissions factor (%).

According to the tool, for each CPA the default values for wind projects will be: $w_{OM} = 0.75$ and $w_{BM} = 0.25$, for the first and subsequent crediting periods.

Project Emissions

Project Emissions are calculated as follows:

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

Where:

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



$$PE_{HP,y} = \frac{y \text{ (tCO}_2\text{e)}}{\text{Project emissions from water reservoirs of hydro power plants in year } y \text{ (tCO}_2\text{e)}}$$

However, considering that all CPAs to be included in the present PoA will be wind power plants, no project emissions are considered.

Therefore, $PE_y = 0$.

Leakage

According to the methodology ACM0002 version 12.3.0, no leakage emissions are considered.

Therefore, leakage emissions related to the implementation of the proposed PoA are $LE_y = 0$.

Based on the above assessment, the validation team hereby confirms that:

- (a) All assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PoA-DD;
- (c) All values used in the PoA-DD are considered reasonable in the context of the proposed CDM project activity;
- (d) The baseline methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;
- (e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PoA-DD.

The DOE has verified the equations described in this Section, by crosschecking them against the PoA-DD version 6 **/Ref-19/**, the methodology ACM0002 version 12.3.0 **/Ref-A/** and the “Tool to calculate the emission factor for an electricity system” version 02.2.1 **/Ref-F/**.

3.9 Additionality of PoA

3.9.1 Start date of the PoA/CPA

The eligibility criteria of the start date for inclusion of CPA has been set as:

The start date of the PoA is 09/01/2012, which was the date when CDM-PoA-DD was first published for global stakeholder consultation (GSP), in accordance with the information crosschecked on the UNFCCC website (<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/XO06D7GKLCHEBCL3Y2UDNK9UN71TNN/view.html>).



Every CPA to be included in the present PoA shall have a project starting date after the date on which the PoA-DD was uploaded for Global Stakeholder Consultation.

Documented evidence of the CPA starting date has to be presented in each CPA. If the starting date of the CPA refers to a future date, documented evidence related to the future date shall be presented during the inclusion process of each CPA.

Bureau Veritas Certification confirms that the start date of any CPA is not prior to the commencement of the validation of the PoA, which is the date of the CDM-PoA-DD is first published for global stakeholder consultation.

3.9.2 Demonstration of additionality of the PoA as a whole

Validation team has assessed the additionality of a PoA in accordance with Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities **/Ref-M/**.

The DOE was able to validate the demonstration of additionality of the PoA as a whole by confirming that the PoA is additional as demonstrated in Section A.4.3 of the PoA-DD version 6:

(i) The proposed PoA is a voluntary coordinated action.

In Chile private electricity generators are free to choose the technology to be deployed in their projects as long as all required environmental, construction and operational permits are in place. Although there are three laws in Chile with the objective to foster the implementation of Non-Conventional Renewable Energy (NCRE) projects, the Law 19940 (known as “Short Law I”), Law 20018 (known as “Short Law II”) and Law 20257, neither of these laws constitutes an obligation to the managing entity to implement the measures laid out in section A.2 of the PoA-DD version 6 **/Ref-19/**. Nor do these laws constitute any obligation to the implementing entities of any of the CPAs under the PoA. Therefore, the PoA is a voluntary coordinated action.

(ii) If the PoA is implementing a voluntary coordinated action, it would not be implemented in the absence of the PoA.

Paragraph 6 of the Standard for Demonstration of Additionality of GHG Emission Reductions Achieved by a Programme of Activities, version 01.0, states that “additionality shall be demonstrated by establishing that in the absence of CDM, none of the implemented CDM Project Activity (CPA) would occur”. Then the additionality will be demonstrated at the CPA level, as reflected on the criteria for inclusion of a CPA in the PoA stated on Section A.4.2.2 of the PoA-DD version 6 **/Ref-19/**. Considering that the PoA will include one or more large-scale projects as CPA, eligibility criteria is derived from all the relevant requirements contained in the additionality section of the large-scale methodology as detailed in section E.5 of the PoA-DD version 6 **/Ref-19/**.

(iii) If the PoA is implementing a mandatory policy/regulation, this would/is not enforced.

Not applicable.



(iv) If mandatory a policy/regulation are enforced, the PoA will lead to a greater level of enforcement of the existing mandatory policy/regulation.

Not applicable.

For the CPAs to be included in the PoA as per the additionality tool, investment analysis was adopted to demonstrate the additionality.

The eligibility criteria of the additionality were set as *“The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A of the PoA-DD”*.

In accordance with paragraph 10 of Section A of Annex 3, EB 65, *“PoAs that consist of one or more large scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies”*. In this sense, a typical CPA to be included in the PoA must pass the additionality test following the requirements of the *“Tool for the demonstration and assessment of additionality”*. The result of each step of the tool must be presented in Section B.3 of the CPA-DD.

Bureau Veritas Certification confirms that none of the implemented CPA would occur in the absence of CDM.

3.10 Monitoring plan (124)

The validation team hereby confirms that the monitoring plan complies with the requirements of the methodology.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design are described below.

According to the PoA-DD version 6:

The method for verification does not consider sampling. Monitoring will be carried out individually for each CPA added to the proposed PoA, as described in Section E.7.2 of the PoA-DD. The monitoring reports will be prepared and submitted to the DOE for verification by the CME. The CPAs included in a monitoring report may have different or identical verification periods. Then, in order to avoid double accounting among the CPAs included in the PoA, the CME will have a control spreadsheet to register the verification period of each CPA covered by every monitoring report.

As described in Section E.7.1 of the PoA-DD, the only parameter that will be monitored by the CPA implementer is *“Quantity of net electricity generation supplied by the project plant/unit to the grid in year y - $EG_{\text{facility},y}$ ”*, according to the procedures established in Section E.7.2 of the PoA-DD and will be submitted monthly to the CME (Ingeniería Seawind Sudamérica Ltda). The CPA implementer as well as the CME will keep data for at least 2 years after the end of the crediting period of the CPA or the last issuance of CERs for the CPA, whatever occurs later.



Furthermore, the parameter $EF_{grid,CM,y}$ will be defined *ex ante* according each CPA to be included in the PoA, considering the applicable vintage and grid. It will be based on Option (a) Weighted Average CM from the Emission factor Tool. For more details, please, refer to Section 3.8.4 of this validation Report.

The DOE has verified the monitoring arrangements by crosschecking them against the PoA-DD version 6 and methodology ACM0002 version 12.3.0.

The validation team hereby confirms that the monitoring plan complies with the requirements of the methodology.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the programme design.

3.11 Environmental impacts (133)

The CME has undertaken an analysis of environmental impacts at CPA level.

3.12 Local stakeholder consultation (130)

The CME has undertaken the local stakeholder consultation at CPA level.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PoA-DD using methodology ACM0002 version 12.2.0 was webhosted on the UNFCCC for global stakeholder's comments as per CDM requirements. The programme was webhosted from 09 Jan 12 to 07 Feb 12.

No comments were received.

5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the Wind Programme of Activities in Chile in Chile. The validation was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

By reviewing VVM, Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities, Standard for demonstration of additionality, development of eligibility criteria



and application of multiple methodologies for programme of activities /Ref-M/, etc, Bureau Veritas Certification is of the opinion that management system of CME is robust and efficient to ensure eligibility and quality of CPAs. Eligibility criteria are sufficient so that the inclusion of CPAs could fulfill all requirements of EB rules. Emission reductions attributable to the CPA under the PoA are additional to any that would occur in the absence of the PoA, and hence are likely to be achieved.

The review of the PoA-DD version 6 and generic CPA-DD version 4 and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the PoA correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification concludes Wind Programme of Activities in Chile meets all stated criteria and thus requests registration of Wind Programme of Activities in Chile as PoA.

The project will use a renewable crediting period of 20 years.

The estimation of overall emission reductions for the first crediting period is described in the validation report of the specific CPA.

6 REFERENCES

Category 1 Documents:

Documents provided by Ingeniería Seawind Sudamérica Ltda that relate directly to the GHG components of the PoA.

- /1/ PoA-DD version 1, dated 15/12/2011.
- /2/ PoA-DD version 2, dated 30/05/2012.
- /3/ PoA-DD version 3, dated 13/08/2012.
- /4/ PoA-DD version 4, dated 27/08/2012.
- /5/ Generic CPA-DD version 1, dated January 2012.
- /6/ Generic CPA-DD version 2, dated May 2012.
- /7/ Generic CPA-DD version 3, dated August 2012.
- /8/ Generic CPA-DD version 4, dated August 2012.
- /9/ Financial Excel spreadsheet "Chome Wind Farm_IRR Project".
- /10/ Financial Excel spreadsheet "Chome Wind Farm_IRR Project_version 2".
- /11/ Emission Factor Excel spreadsheet "EF-SIC calculation 2010".
- /12/ Emission Factor Excel spreadsheet "EF-SIC calculation 2010_version 2".
- /13/ Emission Reduction Excel spreadsheet "ER CPA Chome-Wind PoA #1".
- /14/ Emission Reduction Excel spreadsheet "ER CPA Chome-Wind PoA #1_version 2".
- /15/ Letter of Approval from Chilean DNA #121441, dated 10/05/2012.
- /16/ Electronic database with information of each CPA to be included in the PoA.
- /17/ PoA-DD version 5, dated 04/10/2012.
- /18/ Emission Reduction Excel spreadsheet "ER CPA Chome-Wind PoA #1_version 3".
- /19/ PoA-DD version 6, dated 09/10/2012.

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /A/ Methodology ACM0002, version 12.3.0.
- /B/ Validation and Verification Manual, version 01.2.
- /C/ Programme design document form for CDM programmes of activities (F-CDM-PoA-DD), version 01.
- /D/ Component project activity design document form (F-CDM-CPA-DD), version 01.
- /E/ Tool for the demonstration and assessment of additionality, version 06.0.0.
- /F/ Tool to calculate the emission factor for an electricity system, version 02.2.1.
- /G/ Guidelines on the assessment of investment analysis, version 05.
- /H/ Guidelines on Common Practice, version 01.0.
- /I/ Procedure for registration of a Programme of Activities as a single CDM Project Activity and issuance of certified emission reduction for a Programme of Activities, version 04.1
- /J/ Clarifications regarding the "Procedures for registration of a Programme of



Activities as a single CDM Project Activity and issuance of Certified Emission Reductions for a Programme of Activities”, version 01.

/K/ Glossary of CDM Terms, version 06.0.

/L/ 2006 IPCC Guidelines for National Greenhouse Gases Inventories.

/M/ Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 01.0 - EB65, Annex 03.

Persons interviewed:

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

/1/ María Teresa Valenzuela - Development Manager and New Business (Seawind Sudamérica)

/2/ Roberto Posch - Consultant (Trie Projects)

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7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Bureau Veritas Certification – Team Leader

Marcelo Porto – He is graduated in Electrical Engineering, with a graduate specialization in Quality Engineering and a Master's degree in Industrial Engineering. Quality management expert and auditor – he worked in the electro-electronic, mechanical, medical devices, leather and shoes industries –, trained as a lead auditor in the fields of quality (ISO 9001), environment (ISO 14001), social responsibility (SA 8000), and organizational health and safety (OHSAS 18001). He is also qualified as Lead Verifier GHG – Green House Gases.

Bureau Veritas Certification – Team Member

Karina Polido – She is graduated in Civil Engineering with experience in management system audits. She is ISO 9001:2008 and ISO 14001:2004 Lead Auditor. Karina is also qualified as Lead Verifier GHG – Green House Gases.

Bureau Veritas Certification – Chilean Environmental Specialist

Sylvia Bustos - She is a Chemical Engineer with a Diploma in Systems Management - has worked in metallurgical companies, environmental projects associated with the bond market in coal and certification of management systems, among others. Has training and experience as Lead Auditor in Quality Management Systems (ISO 9001), Environment (ISO 14001), Occupational Health and Safety (OHSAS 18001) and Ethical Trading Protocol (SEDEX).

Bureau Veritas Certification – Financial Specialist

Antonio Vinicius Gomes - He is graduated in Industrial Engineering and holds a MBA from Coppead/UFRJ School of Business with previous experience in economic assessment of greenfield projects in electrical sector, as well as projects related to renewable energy and energy conservation.

Bureau Veritas Certification – Internal Technical Reviewer

Guilherme Lefèvre – He is graduated in Law with experience in GHG Programs, both compulsory and voluntary. Guilherme has vast experience in the development and analysis of CDM, VCS, Social Carbon and CCBS projects. He has an MSc degree in Environmental Science - São Paulo University. Guilherme trained as a lead auditor in the fields of environment (ISO 14001) and GHG – Green House Gas.

APPENDIX A: CDM PROGRAMME OF ACTIVITIES VALIDATION PROTOCOL

Table 1 General validation requirements of PoA based on Validation and Verification Manual (version 1.2)

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
1. Global Stakeholder Consultation						
1.1. Is there any comment on the PoA-DD of the proposed project activity received during Global Stakeholder Consultation process?	VVM	41	No. And verifying http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/XO06D7GKLCHEBCL3Y2UDNK9UN71TNN/view.html , it is stated that: "Compilation of submitted inputs: Not available yet".		OK	OK
1.2. If yes, have all comments been taken into account during the validation of the proposed project activity?	VVM	41	N/A		OK	OK
1.3. If comments indicate that the proposed project activity does not comply with the CDM requirements and are not substantiated, is there any further clarification from the entity providing the comment?	VVM	42	N/A		OK	OK
1.3.1. If yes, how comments received have been taken due account?	VVM	42	N/A		OK	OK
1.3.2. If no, are the comments as originally provided proceeded to assess?	VVM	42	N/A		OK	OK
2. Approval			Chile (host)	Other		
2.1. Have the letters of approval obtained from each host Party and Annex I Party which wishes to be involved in the PoA?	VVM EB55 Ann38	45 9	1. CL01: Please, clarify the status of the relevant letters of approval related to "Wind Programme of Activities in Chile".	N/A	CL01	OK
2.2. Are letters of approval issued in accordance with the guidance provided by the Board (EB 16 report, Annex 6)?	VVM EB55	45 9	2. See Item 2.1.	N/A	CL01	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
<ul style="list-style-type: none"> - The Party is a Party of the Kyoto Protocol - The participation is voluntary - In the case of the host Party, the proposed CDM programme contributes to the sustainable development of the country - Refers to the precise proposed CDM project activity title in the PoA-DD being submitted for registration 	Ann38 EB16 Ann6	1				
2.3. Is(are) the letter(s) of approval unconditional with respect to (b) above?	VVM	46	3. See Item 2.1.	N/A	CL01	OK
2.4. Has(ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA) and is valid for the CDM project activity under validation?	VVM	47	4. See Item 2.1.	N/A	CL01	OK
2.5. Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	5. See Item 2.1.	N/A	CL01	OK
2.6. If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	6. See Item 2.1.	N/A	CL01	OK
3. Authorization						
3.1. Is CDM project participation recorded only at the PoA level while the operators of individual CPAs are not considered as project participants?	EB55 Ann38	8	7. Yes. CDM project participant is only recorded at the PoA level while the operators of individual CPAs are not considered as project participants.		OK	OK
3.2. Has the coordinating/managing entity obtained letters of authorization of its coordination of the PoA from each host Party?	EB55 Ann38	10	8. CL02: Please, clarify the status of the relevant letters of authorization related to "Wind Programme of Activities in Chile".		CL02	OK
3.3. Has the approval of participation issued from the relevant DNA?	VVM	53	9. See Item 3.2.		CL02	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
3.4. Is there doubt with respect to (g) above?	VVM	53	10. See Item 3.2.	CL02	OK
3.5. If yes, was verified with the DNA that the approval of participation is valid for the proposed project participant?	VVM	53	11. See Item 3.2.	CL02	OK
4. Modalities of Communications (MoC)					
4.1. Is the CME the sole or a joint focal point for each scope of authority?	EB55 Ann38	11	Yes. Ingeniería Seawind Sudamerica Ltda.	OK	OK
4.2. Is the number of joint focal points limited to five, or equal to the number of host parties if greater than five?	EB55 Ann38	11	See Item 4.1.	OK	OK
5. PoA design					
5.1. Is the PoA-DD completed using latest version of the CDM PoA-DD form appropriate to the type of project activity?	VVM	55	Yes, Programme of Activities Design Document Form (CDM- PoA - DD) version 01 (EB33 Ann 41) was used.	OK	OK
6. General description of PoA (corresponding to section A of CDM PoA-DD s)					
6.1. In Section A.1 of CDM-PoA-DD, is a title for the PoA provided?	EB33	Ann41	Yes. "Wind Programme of Activities in Chile"	OK	OK
6.2. Description of programme of activities(Section A.2 of CDM-PoA-DD)	EB33	Ann41			
6.2.1. Is a framework developed for the implementation of the proposed CDM PoA and inclusion of CPAs under the PoA?	EB33 EB55 Ann38	Ann41 6	CL03: Please, inform the source of 1%, stated as the percentage of wind energy capacity installed in Chile in 2010, as well as the sources for SING, AYSÉN and MAGALLANES installed capacities, informed in table in Section A.2, of PoA-DD v01.	CL03	OK
6.2.2. Is Policy/measure or stated goal that the proposed PoA provided?	EB33 EB55 Ann38	Ann41 6(c)	Yes	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
6.2.3. Is it confirmed that the proposed PoA is a voluntary action by the coordinating/managing entity?	EB33 EB55 Ann38	Ann41 6(d)	Yes	OK	OK
6.3. Coordinating/managing entity and participants of PoA(Section A.3 of CDM-PoA-DD)	EB33	Ann41			
6.3.1. Coordinating or managing entity	EB33 EB55 Ann38	Ann41 6(a)	Ingeniería Seawind Sudamérica Ltda.	OK	OK
6.3.2. Host Party(ies)	EB33 EB55 Ann38	Ann41 6(a)	Chile	OK	OK
6.3.3. PoA participants	EB33 EB55 Ann38	Ann41 6(a)	Only Ingeniería Seawind Sudamérica Ltda., which is also the CPA implementer of "Chome Wind Farm CPA #1".	OK	OK
6.4. Technical description of the programme of activities(Section A.4 of CDM-PoA-DD)	EB33	Ann41			
6.4.1. In Section A.4.1 of CDM-PoA-DD, is location of the programme of activities defined?	EB33	Ann41	Yes. However, see CAR28.	CAR28	OK
6.4.1.1. Host Party(ies)	EB33	Ann41	Chile	OK	OK
6.4.1.2. Definition of the boundary for the PoA in terms of a geographical area(e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented, taking into consideration the requirement that all applicable national and/or sectoral policies and regulations of each host country within that chosen boundary.	EB33 EB55 Ann38	Ann41 6(b)	Yes. The physical/geographical boundary is defined as the region, in Chile, covered by two interconnected systems: SIC and SING. See CAR28.	CAR28	OK
6.4.2. In Section A.4.2.1 of CDM-PoA-DD, is(are) technology or measures to be employed by the CPA provided?	EB33 EB55 Ann38	Ann41 6(f)	Yes. However: CL04: Please, in Section A.4.2.1 of PoA-DD v01, add some more information – in a clear and simple way – on the technology to be employed by the CPA (e.g. foundation, tower, nacelle,	CL04	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			rotor blades, hub etc). The World Wind Energy Association, a well know reference, may be consulted for that purpose.		
6.4.3. In Section A.4.2.2 of CDM-PoA-DD, is eligibility criteria for inclusion of a CPA in the PoA provided?	EB33 EB55 Ann38	Ann41 6(g)	Yes. However, see "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD", for a discussion on them.	-	-
6.4.4. In Section A.4.3 of CDM-PoA-DD, is additionality assessed and demonstrated as following?	EB33	Ann41			
6.4.4.1. Is the proposed PoA a voluntary coordinated action?	EB33 EB55 Ann38	Ann41 6(e)	Yes	OK	OK
6.4.4.2. If the PoA is implementing a voluntary coordinated action, would it be implemented in the absence of the PoA?	EB33 EB55 Ann38	Ann41 6(e)	No	OK	OK
6.4.4.3. If the PoA is implementing a mandatory policy/regulation, is this enforced?	EB33 EB55 Ann38	Ann41 6(e)	N/A	OK	OK
6.4.4.4. If mandatory a policy/regulation is enforced, will the PoA lead to a greater level of enforcement of the existing mandatory?	EB33 EB55 Ann38	Ann41 6(e)	N/A	OK	OK
6.4.5. In Section A.4.4.1 of CDM-PoA-DD, is the following description of the operational and management arrangement established by the coordinating/managing entity for the implementation of the PoA included?	EB33	Ann41			
6.4.5.1. A record keeping system for each CPA under the PoA	EB33	Ann41	CL05: Please, for the recording system for each CPA, I Section A.4.4.1 of PoA-DD v01, clarify why an "Environmental Approval" may not be applicable.	CL05	OK
6.4.5.2. A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as a	EB33 EB65	Ann41 17	CL06: Please, replace "wither" by "either", in Section A.4.4.1 of PoA-DD v01, under Item (ii).	CL06	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
CDM project or as a CPA of another PoA	Ann3				
6.4.5.3. The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA	EB33	Ann41	Yes	OK	OK
6.4.5.4. A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies	EB65 Ann3	17	CAR01: It has not been presented to the DOE "a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including review of their competencies" (EB 65 Annex 3, §17(a)).	CAR01	OK
6.4.5.5. Records of arrangements for training and capacity development for personnel	EB65 Ann3	17	CAR02: It has not been presented to the DOE the "records of arrangements for training and capacity development for personnel" (EB 65 Annex 3, §17(b)).	CAR02	OK
6.4.5.6. Procedures for technical review of inclusion of CPAs	EB65 Ann3	17	CAR03: It has not been presented to the DOE the "procedures for technical review of inclusion of CPAs" (EB 65 Annex 3, §17(c)).	CAR03	OK
6.4.5.7. Records and documentation control process for each CPA under the PoA	EB65 Ann3	17	CAR04: It has not been presented to the DOE the "records and documentation control process for each CPA under the PoA" (EB 65 Annex 3, §17(e)).	CAR04	OK
6.4.5.8. Measures for continuous improvements of the PoA management system	EB65 Ann3	17	CAR05: It has not been presented to the DOE the "measures for continuous improvements of the PoA management system" (EB 65 Annex 3, §17(f)).	CAR05	OK
6.4.5.9. Any other relevant elements	EB65 Ann3	17	N/A	OK	OK
6.4.6. In Section A.4.4.2 of CDM-PoA-DD, is the following information regarding monitoring plan provided?	EB33	Ann41			
6.4.6.1. Description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the amount of reductions of anthropogenic emissions by sources or removals	EB33 EB55 Ann38	Ann41 6(k)	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
by sinks of greenhouse gases achieved by CPAs under the PoA					
6.4.6.2. In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA (whether in groups or not, with different or identical verification periods), a transparent system is to be defined and described that ensures that no double accounting occurs and that the status of verification can be determined anytime for each CPA	EB33 EB55 Ann38	Ann41 6(k)	CL07: Please, clarify whether the “control spreadsheet” mentioned in Section A.4.4.2 of PoA-DD v01 corresponds to the same “electronic database” mentioned in Section A.4.4.1, under Item (i). In case they are supposed to be the same document, the control spreadsheet should contain information (from a. to h.) as presented in Section A.4.4.1.	CL07	OK
6.5. In Section A.5 is information regarding public funding of the programme activities provided?	EB33 EB55 Ann38	Ann41 6(n)	Yes. The PoA does not receive public funding.	OK	OK
7. Duration of the programme of activities (Section B of CDM-PoA-DD)	EB33	Ann41			
7.1. In Section B.1 of CDM-PoA-DD, is starting date of the PoA defined?	EB33	Ann41	Yes. However: CAR06: PoA-DD v01, Section B.1, states 02/01/2012 as starting date, being the date the validation would have begun. However, PoA-DD and CPA-DDs were uploaded for global stakeholder consultation on 09/01/2012, as verified at http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/XO06D7GKLCHEBCL3Y2UDNK9UN71TNN/view.html .	CAR06	OK
7.2. In Section B.2 of CDM-PoA-DD, is length of the PoA defined with a maximum total length of 28 years?	EB33 EB55 Ann38	Ann41 6(h)	Yes	OK	OK
8. Environmental Analysis (Section C of CDM-PoA-DD)	EB33	Ann41			
8.1. In Section C.1 of CDM-PoA-DD, is environmental	EB33	Ann41	Environmental analysis is done at CPA level.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
analysis conducted at PoA level or CPA level?	EB55 Ann38	6(l)			
8.2. If environmental analysis is conducted at PoA level, is the documentation on the analysis of the environmental impacts, including transboundary impacts provided in Section C.2 of CDM-PoA-DD	EB33	Ann41	N/A	OK	OK
8.3. In Section C.3 of CDM-PoA-DD, is it stated whether in accordance with the host Party laws/regulations, an environmental impact assessment is required for a typical CPA included in the PoA?	EB33	Ann41	<p>CL08: Please, clarify the relevance of Category “Letter (a)”, in Section C.3, of PoA-DD v01, for a PoA of wind power plants.</p> <p>CL09: Please, inform the source of “over 23 kV”, in Category “Letter (b)”, in Section C.3, of PoA-DD v01, since it is not part of Law 19,300.</p> <p>CL10: Please, clarify, in the last paragraph of Section C.3, in PoA-DD v01, what “SEIA” stands for.</p>	CL08 CL09 CL10	OK OK OK
9. Stakeholders’ comments(Section D of CDM-PoA-DD)					
9.1. In Section D.1 of CDM-PoA-DD, is the local stakeholder consultation process done at PoA level or CPA level?	EB33 EB55 Ann38	Ann41 6(m)	<p>The local stakeholder consultation process is done at the CPA level.</p> <p>CL11: Please, clarify how exactly the “stakeholder consultation [...] defined in articles 49 to 53 of Law N° 19,300”, as mentioned in Section D.1 of PoA-DD v01, fulfils the requirement to be validated, as described in VVM’s §128, considering the definition of stakeholders, as per EB 66 Annex 63 (Glossary of CDM Terms v06.0). As part of the clarification, inform whether or not – including when and where – the relevant Specific CPA design document is made available to the</p>	CL11 CL12	OK OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			stakeholders to comment on. CL12: Please, adjust the last paragraph of Section D.1, of PoA-DD v01, i.e. replace “facilities” by “facilitates” and “made interviews” by “make interviews”.		
9.2. If local stakeholders comments were invited at the PoA level,					
9.2.1. In Section D.2 of CDM-PoA-DD, how these comments were invited and compiled?	EB33 EB55 Ann38	Ann41 6(m)	N/A	OK	OK
9.2.2. In Section D.3 of CDM-PoA-DD, is the summary of the comments received provided?	EB33 EB55 Ann38	Ann41 6(m)	N/A	OK	OK
9.2.3. In Section D.4 of CDM-PoA-DD, how due account was taken of all comments received?	EB33 EB55 Ann38	Ann41 6(m)	N/A	OK	OK
10. Application of a baseline and monitoring methodology (Section E of CDM-PoA-DD)					
10.1. In Section E.1 of CDM-PoA-DD, are title and reference of the approved methodology (including any other methodologies or tools) applied to each CPA included in the PoA provided?	EB33	Ann41	Yes. ACM0002 v12.2.0.	OK	OK
10.2. Justification of the choice of the methodology and why it is applicable to each CPA (E.2 of CDM-PoA-DD)					
10.2.1. Is choice of an approved baseline and monitoring methodology (or combination of approved methodologies) justified?	EB33 EB55 Ann38	Ann41 6(f)	Yes. However, see “Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)”, for a discussion on it.	-	-
10.2.1.1. For PoAs applying large scale CDM methodologies or combination of multiple large scale and small-scale CDM methodologies in a PoA, are combinations explicitly permitted in the	EB65 Ann3	32&33	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodologies?					
10.2.1.2. If not, has a clarification for the eligibility of the proposed combination sought by following the latest version of the "Procedure for the submission and consideration of queries regarding the application of approved methodologies and methodological tools by designated operational entities to the Meth Panel" ?	EB65 Ann3	32&33	N/A	OK	OK
10.2.2. Is each of the applicability conditions of the approved methodology or other methodology component referred to therein met?	EB33 EB55 Ann38	Ann41 6(f)	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-
10.3. Description of the sources and gases included in the CPA boundary(Section E.3 of CDM-PoA-DD)	EB33	Ann41			
10.3.1. Is the boundary of the PoA including the physical delineation of the project activity defined?	VVM	79	Yes	OK	OK
10.3.2. Are sources and GHGs included in CPA boundary in accordance with the selected methodology(ies)?	EB33 VVM	Ann41 79	CAR07: Table of sources and gases in Section E.3, of PoA-DD v01, is not in accordance with ACM0002 v12.2.0. Same occurs in Section B.4 of both CPA-DDs.	CAR07	OK
10.3.3. In cases where the selected methodology(ies) allows project participants to choose whether a source or gas is to be included in the project or CPA boundary, is the choice explained and justified?	VVM	79	N/A	OK	OK
10.4. Description of how the baseline scenario is identified and description of the identified baseline scenario(Section E.4 of CDM-PoA-DD)	EB33	Ann41			
10.4.1. Is description of how the baseline scenario is identified provided?	EB33	Ann41	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-
10.4.2. Does the selected methodology require use of tools (such as the "Tool for the demonstration and assessment of additionality" or the "Combined tool to identify the baseline scenario and demonstrate	VVM	82	No, in the case of greenfield renewable energy power plants.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
additionality”) to establish the baseline scenario?					
10.4.3. Do the project participants take into account national and/or sectoral policies and circumstances?	VVM	85	Not applicable, since ACM0002 v12.2.0 prescribes the baseline scenario for greenfield renewable energy power plants.	OK	OK
10.4.4. Is the description of the identified baseline scenario provided?	EB33 VVM	Ann41 86	Yes. See “Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)”.	-	-
10.5. Assessment and demonstration of additionality for a typical CPA (Section E.5 of CDM-PoA-DD)	EB33	Ann41			
10.5.1. In Section E.5.1 of CDM-PoA-DD, have the PPs demonstrated additionality of a typical CPA using the procedure provided in the baseline and monitoring methodology applied?	EB33	Ann41	See “Table 2-1 - Protocol based on the Methodological Tool “Demonstration and Assessment of Additionality” Ver. 6.0.0”.	-	-
10.5.2. In Section E.5.2 of CDM-PoA-DD, have the PPs provided the key criteria for assessing additionality of a CPA when proposed to be included in the registered PoA?	EB33	Ann41			
10.5.2.1. Have the PPs justified the choice of criteria based on the analysis in Section E.5.1 of CDM-PoA-DD?	EB33	Ann41	See “Table 2-1 - Protocol based on the Methodological Tool “Demonstration and Assessment of Additionality” Ver. 6.0.0”.	-	-
10.5.2.2. Is it demonstrated how these criteria would be applied to the additionality of a typical CPA at the time of inclusion.	EB33	Ann41	See “Table 2-1 - Protocol based on the Methodological Tool “Demonstration and Assessment of Additionality” Ver. 6.0.0”.	-	-
10.5.2.3. Are the eligibility criteria for inclusion of a CPA in the PoA in accordance with the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities?	EB65	Ann3			
10.5.2.3.1. Is eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies included?	EB65 Ann3	10	Yes	OK	OK
10.5.2.3.2. Has the CME demonstrated that compliance with the additionality-related eligibility	EB65 Ann3	11	See “Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD”.	-	-



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
criteria set in the PoA design document will ensure that all the relevant additionality-related guidelines, tools or any requirements embedded in the methodologies are met?					
10.5.2.3.3. For PoAs involving combinations of technologies/ measures and/ or methodologies, are the eligibility criteria relative to each of them proposed to demonstrate additionality.	EB65 Ann3	12	N/A	OK	OK
10.6. Estimation of Emission reductions of a CPA (Section E.6 of CDM-PoA-DD)					
10.6.1. In Section E.6.1 of CDM-PoA-DD, are methodological choices provided in the approved baseline and monitoring methodology applied, selected for a typical CPA explained and justified?	EB33 VVM	Ann41 90	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-
10.6.2. In Section E.6.2 of CDM-PoA-DD, are equations including fixed/default parametric values to be used for calculations of emission reductions of a CPA provided and justified?	EB33 VVM	Ann41 90	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-
10.6.3. In Section E.6.3 of CDM-PoA-DD, are data and parameters that are to be reported in CDM-CPA-DD provided?	EB33 VVM	Ann41 91	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-
10.6.4. In cases where the selected methodology(ies) allows the use of sampling for the determination of parameter values for calculating GHG emission reductions, do project participants develop and describe the sampling plan in accordance with "Standard for sampling and surveys for CDM project activities and programme of activities"?	EB65	Ann2	N/A	OK	OK
10.7. Application of the monitoring methodology and description of the monitoring plan					
10.7.1. In Section E.7.1 of CDM-PoA-DD, are data and parameters to be monitored by each CPA provided in	EB33	Ann41	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
accordance with the CDM-PoA-DD form?					
10.7.2. In Section E.7.2 of CDM-PoA-DD, is a detailed description of the monitoring plan provided?	EB33	Ann41	<p>CAR08: Section E.7.2, in PoA-DD v01, presents a monitoring plan description which is not clearly in line with EG_{facility,y} table, in Section D.7.1, i.e. "... crosscheck the results with the measurements from a secondary meter." and "... recorded hourly...". Besides, QA/QC procedures to be applied are not aligned when comparing with both CPA-DDs v01, in Section B.6.1.</p> <p>CAR09: Section E.7.2, in PoA-DD v01, under 2. Data Quality Control does not mention CDEC-SING.</p> <p>CL13: Please, adjust expression "will design a CDM project manager", in first paragraph of Section E.7.2, in PoA-DD v01, and of Section B.6.1, in both CPA-DDs v01.</p>	CAR08 CAR09 CL13	OK OK OK
10.7.3. Is the monitoring plan for a CPA in accordance with the approved monitoring methodology, including applicable tool(s)?	EB55 Ann38	6(j)	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)" and Item 10.7.2.	-	-
10.8. In Section E.8 of CDM-PoA-DD, is the following provided?	EB33	Ann41			
10.8.1. Date of completion of the application of the baseline study and monitoring methodology	EB33	Ann41	Yes. 26/12/2011.	OK	OK
10.8.2. The name of responsible person(s)/entity(ies)	EB33	Ann41	Yes. Roberto Posch	OK	OK
11. Other information (Annex of CDM-PoA-DD)					
11.1. In Annex 1 of CDM-PoA-DD, is contact information on coordinating /managing entity and participants in the Programme of Activities provided as following?	EB33	Ann41	Yes. All information relates to a single organization, Ingeniería Seawind Sudamérica Ltda., as it is the only PP as well as the CME.	OK	OK
11.1.1. Contact information on CME and participants in the	EB33	Ann41	Yes. All information relates to a single	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
PoA provided?			organization, Ingeniería Seawind Sudamérica Ltda., as it is the only PP as well as the CME.		
11.1.2. For each organization listed in section A.3, the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail	EB33	Ann41	Yes. All information relates to a single organization, Ingeniería Seawind Sudamérica Ltda., as it is the only PP as well as the CME.	OK	OK
11.2. In Annex 2 of CDM-PoA-DD, is the background information regarding public funding provided?	EB33	Ann41	No public funding is involved.	OK	OK
11.3. In Annex 3 of CDM-PoA-DD, is the background information used in the application of the baseline methodology provided	EB33	Ann41	See "Table 2 - Specific Requirement of methodology ACM0002 (Ver. 12.2.0)".	-	-
11.4. In Annex 4 of CDM-PoA-DD, is the background information used in the application of the monitoring methodology provided	EB33	Ann41	No further background information is provided in Annex 4.	OK	OK
12. Eligibility criteria for inclusion of a CPA in the PoA					
12.1. Do the eligibility criteria cover as a minimum the following?	EB65 Ann3	14	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.1. The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	EB65 Ann3	14(a)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.2. Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo)	EB65 Ann3	14(b)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.3. The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications	EB65 Ann3	14(c)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.4. Conditions to check the start date of the CPA through documentary evidence	EB65 Ann3	14(d)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.5. Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs	EB65 Ann3	14(e)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
12.1.6. The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in 10.5.2 in table 1 above.	EB65 Ann3	14(f)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.7. The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis	EB65 Ann3	14(g)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.8. Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	EB65 Ann3	14(h)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.9. Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid connected/ off-grid) and distribution mechanisms (e.g. direct installation);	EB65 Ann3	14(i)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.1.10. Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys	EB65 Ann3	14(j)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.2. Are the eligibility criteria verifiable?	EB65 Ann3	15	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
12.3. Are the eligibility criteria sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA?	EB65 Ann3	16	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-

VALIDATION REPORT

Table 2 Specific Requirement of methodology ACM0002 (version 12.2.0)

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
13. Applicability			
13.1. Is the CPA under the PoA a grid-connected renewable power generation project activities that: (a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s) (d) involve a replacement of (an) existing plant(s).	12. Yes. It has been defined in Section E.2 of PoA-DD v01 that each CPAs will consist in the installation of a wind power plant. 13.	OK	OK
13.2. Is CPA the installation, capacity addition, retrofit or replacement of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit	14. Yes. It has been defined in Section E.2 of PoA-DD v01 that each CPAs will consist in the installation of a wind power plant. 15.	OK	OK
13.3. In the case of capacity additions, retrofits or replacements: the existing plant 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 or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	16. N/A. However: 17. 18. CAR10: PoA-DD v01, Section E.2, in the second applicability condition, refers to page 10, whereas page 11 is the correct one. Besides, adjust EGPJ,y, to be seen as EG _{PJ,y} .	CAR10	OK
13.4. In case of hydro power plants, one of the following conditions must apply: - The CPA is implemented in an existing single or multiple reservoirs, with no change in the volume of reservoir; or - The CPA is implemented in an existing single or multiple reservoirs, where the volume of any of reservoirs is	19. N/A. However: 20. 21. CAR11: PoA-DD v01, Section E.2, presents a seventh applicability condition which is not mentioned in ACM0002. Please, remove it.	CAR11	OK



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
<p>increased and the power density of the each reservoir, as per definitions given in the Project Emissions section, is greater than 4 W/m²; or</p> <ul style="list-style-type: none"> - The CPA results in new single or multiple reservoirs and the power density of each reservoir, as per definitions given in the Project Emissions section, is greater than 4 W/m². 			
<p>13.5. In case of hydro power plants using multiple reservoirs where the power density of any of the reservoirs is lower than 4 W/m², all the following conditions must apply:</p> <ul style="list-style-type: none"> - The power density calculated for the entire project activity using equation 5 is greater than 4W/m²; - Multiple reservoirs and hydro power plants located at the same river and where are designed together to function as an integrated project¹ that collectively constitute the generation capacity of the combined power plant; - Water flow between multiple reservoirs is not used by any other hydropower unit which is not a part of the project activity; - Total installed capacity of the power units, which are driven using water from the reservoirs with power density lower than 4 W/m², is lower than 15MW; - Total installed capacity of the power units, which are driven using water from reservoirs with power density lower than 4 W/m², is less than 10% of the total installed capacity of the project activity from multiple reservoirs. 	<p>22. N/A. However:</p> <p>23.</p> <p>24. CAR12: PoA-DD v01, Section E.2, in the fourth applicability condition, presents a sentence, after the fifth bullet, that needs to be removed: "In case of hydro power plants, one of the following conditions must apply:".</p>	CAR12	OK
<p>13.6. The methodology is not applicable to the following conditions. Please confirm</p> <ul style="list-style-type: none"> - Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity - Biomass fired power plants; 	<p>25. All the CPAs will be wind greenfield power plants. So there will be no fuel switching.</p>	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
- A hydro power plant that result in new single reservoirs or in the increase in existing single reservoir where the power density of the power plant is less than 4 W/m ² .			
13.7. In case of retrofits, 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, i.e. 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".	26. N/A	OK	OK
13.8. In addition, the applicability conditions included in the tools referred to above apply.	27. CAR13: PoA-DD v01, Section E.2, does not address the applicability conditions of the relevant tools.	CAR13	OK
14. Identification of the baseline scenario			
14.1. Is the CPA retrofit or replacement of existing grid-connected renewable power plant/unit(s) at the project site?	28. No	OK	OK
14.2. If not, are the baseline scenario identified is same as the one prescribed in the methodology?	<p>Yes. "Electricity delivered to the grid by the project activity <u>that</u> 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 <u>02.1.1</u>".</p> <p>CAR14: PoA-DD v01, Section E.4, mentions a non-existent version of the EF Tool. Besides, different versions are mentioned among PoA-DD v01, CPA-DDs v01 and EF-SIC Calc spreadsheets. Finally, remove the word "that" from "...project activity <u>that</u> would have otherwise...", to be exactly as described in the methodology.</p>	<p>CAR14</p> <p>CL14</p>	<p>OK</p> <p>OK</p>



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
	CL14: Please, replace “plant” by “plant/unit”, in the first paragraph of Section E.4, in PoA-DD v01, in order to align it to the methodology.		
14.3. If yes, are following step applied to identify the baseline scenario:	N/A	OK	OK
14.3.1. Step 1: Identify realistic and credible alternative baseline scenarios for power generation	N/A	OK	OK
14.3.2. Step 2: barrier analysis	N/A	OK	OK
14.3.3. Step 3: investment analysis	N/A	OK	OK
15. Additionality			
15.1. Is the additionality of the project demonstrated using the latest version of the “Tool for the demonstration and assessment of additionality”?	Yes. See “Table 2-1 - Protocol based on the Methodological Tool “Demonstration and Assessment of Additionality” Ver. 6.0.0”.	-	-
16. Emission reductions calculation			
16.1. Project emissions:	-	-	-
16.1.1. For most renewable power generation project activities except the type of project activities listed in below 3.1.2 to 3.1.4, is the project emission considered as zero?	Yes. PoA-DD v01, Section E.6.1, under <u>Project emissions</u> , states that: “Considering that all CPAs to be included in the present PoA will be wind power plants, no project emissions are considered.” and “For CPAs will not result in project emissions according to the methodology, P _{Ey} = 0”.	OK	OK
16.1.2. For geothermal and solar thermal projects, which also use fossil fuels for electricity generation, are CO ₂ emissions from the combustion of fossil fuels accounted for as project emissions and calculated as per latest version of the “Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion”?	N/A	OK	OK
16.1.3. For geothermal project activities, are fugitive emissions of carbon dioxide and methane due to release of non-condensable gases from produced steam accounted?	N/A	OK	OK
16.1.4. For hydro power plants with water reservoirs, if the power	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
density of the single or multiple existing reservoirs is greater than 4W/m2 and less than or equal to 10W/m2, is the project emission calculated as per equation provided in the methodology?			
16.2. Baseline emissions:	-	-	-
16.2.1. Is the quantity of net electricity generation that is produced and fed into the grid calculated differently for:	-	-	-
16.2.1.1. Green field plants,	CAR15: In PoA-DD v01, Section E.6.2, under Calculation of EG_{PJ,y} , adjust methodology's version number (12.2.0.0). Besides, adjust data unit (MWh/y) of EG _{PJ,y} .	CAR15	OK
16.2.1.2. Retrofits and replacements	N/A	OK	OK
16.2.1.3. Capacity additions	N/A	OK	OK
16.2.2. Are the latest version of the "Tool to calculate the emission factor for an electricity system" used to calculate combined emission factor for the proposed project activity?	See CAR14. CAR16: PoA-DD v01, in sections E.6.1 and E.6.2, does not name Step 1 of the EF Tool exactly as in appears in EB 63 Annex 19. CAR17: PoA-DD v01, Section E.6.1, in Step 3, mentions twice total generation of the "national" grid, whereas in the first case it refers to SIC and in the second one, to SING. CAR18: In PoA-DD v01, Section E.6.1, in Step 3, replace "low-cost" resources by "low-cost/must-run" resources, as per EF Tool. CAR19: In PoA-DD v01, Section E.6.2, in Step 3, the following sentence is not correct: "In both cases <i>ex ante</i> option will be applied, so it will be updated annually during monitoring". CAR20: In PoA-DD v01, Section E.6.1, in Step 3, under <u>For SING connected projects</u> , replace "Simple Adjusted OM" by "Simple OM".	CAR14 CAR16 CAR17 CAR18 CAR19 CAR20 CAR21 CAR22 CAR23 CAR24	OK OK OK OK OK OK OK OK OK



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
	<p>CAR21: In PoA-DD v01, Section E.6.2, in Step 4, after Equation [5], it is missing the description of “m”.</p> <p>CAR22: In PoA-DD v01, Section E.6.2, in Step 4, first paragraph under <u>For SIC connected projects</u> refers to equation 8 of EF Tool, whereas correct equation number is 7. Reference numbers to equations 9, 13 and 14 also need correction. The correct EF Tool numbers are 8, 12 and 13.</p> <p>CAR23: In PoA-DD v01, Section E.6.2, in Step 4, after Equation [6], adjust descriptions of “k” and “m”, to be in line with EF Tool.</p> <p>CAR24: In PoA-DD v01, Section E.6.2, in Step 5, replace “power generation” by “electricity generation”.</p> <p>CAR25: In PoA-DD v01, Section E.6.3, 1) incorrect data unit is presented for $FC_{i,m,y}$; and 2) incomplete description for $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$.</p> <p>CAR26: Some sheets of EF-SIC Calc spreadsheets present the fuel names in Spanish.</p> <p>CL15: Please, inform sources of both SIC and SING tables, presenting 2006-2010 low cost and no low cost generation data. Besides, clarify how has <i>Carbomet</i> data, from EF-SIC Calc Spreadsheet, been used in the calculation of low cost/must run SIC generation. Adjust data accordingly.</p> <p>CL16: Please, clarify why have IPCC default values been preferred over “values provided by the fuel suppliers” or “regional or national average default values”, for $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$.</p>	<p>CAR25</p> <p>CAR26</p> <p>CL15</p> <p>CL16</p> <p>CL17</p> <p>CL18</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p> <p>OK</p>



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
	<p>CL17: Please, clarify why have Annex 1 default values been preferred over “documented manufacturer’s specifications” or “data from the utilities, the dispatch center or official records”, for $\eta_{m,y}$.</p> <p>CL18: Please, provide an outline of the application of the steps of the Tool to calculate the emission factor for an electricity system, making reference to each of the 17 sheets of the EF-SIC Calc spreadsheets. The idea is to clear and easily understand the sequence that has been followed – from one sheet to another, and from one table to another -, and the specific weblinks of the sources used in each sheet. Refer to the following 17 sheets: from <EF SIC 2010> to <Lamb 08>.</p>		
16.3. Leakage: are leakage emissions sources neglected as per methodology?	<p>Yes. PoA-DD v01, Section E.6.1, under <u>Emission Reductions</u>, states “As per ACM0002 version 12.2.0 no leakage emission are considered”. However:</p> <p>CL19: It is recommended that, in Section E.6.1, of PoA-DD v01, <u>Leakage</u> be presented at the same level of <u>Project emissions</u>, <u>Baseline emission</u> and <u>Emission Reductions</u>, just the same way it has been presented in Section E.6.2.</p>	CL19	OK
16.4. Emission reductions: are the emission reduction calculated as per formula provided in the methodology?	Yes	OK	OK
17. Data and parameters monitored			
17.1. Are all data monitored as per monitoring methodology?	<p>CAR27: Section D.7.1, in PoA-DD v01, and Section B.6.1, in both CPA-DDs v01, do not list $EF_{grid,CM,y}$ as a parameter to be monitored, opposed to what is required by ACM0002 v12.2.0.</p> <p>CL20: Please, specify which “official information” may be used for cross-checking purposes, as mentioned in Section D.7.1,</p>	<p>CAR27</p> <p>CL20</p> <p>CL21</p>	<p>OK</p> <p>OK</p> <p>OK</p>



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
	in PoA-DD v01, for EG _{facility,y} , under QA/QC procedures to be applied. CL21: Please, inform which Chilean regulation(s) is(are) applicable to the calibration of the electricity meters.		
17.2. Does the monitoring frequency of all monitoring parameters complying with the monitoring methodology?	See CAR27.	CAR27	OK



VALIDATION REPORT

Table 2-1 Protocol based on the Methodological Tool "Demonstration and Assessment of Additionality" (version 6.0.0)

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
1. Does the CDM-PDD/ PoA DD/CPA DD use the latest version of the Methodological tool " Demonstration and Assessment of Additionality" being used?	Yes. Version 06.0.0.	OK	OK
2. Is the entire host country selected as the applicable geographical area as a default?	No	OK	OK
3. If the technology applied in the project is not country specific, is the applicable geographical area extened to other countries?	No	OK	OK
4. If the applicable geographical area is smaller than the host country, has the project participants provided justification that technologies that vary considerably from location to location depending on local conditions?	PPs have chosen the applicable geographical area which is smaller than the host country. CAR28: PoA-DD v01, Section A.4.1.2, does not provide a justification for the applicable geographical area being smaller than the host country. See paragraph 5 of the Tool for the demonstration and assessment of additionality v06.0.0.	CAR28	OK
5. Has the measure of proposed project activity falls in: (a) Fuel and feedstock switch; (b) Switch of technology with or without change of energy source (including energy efficiency improvement as well as use of renewable energies); (c) Methane destruction; (d) Methane formation avoidance.	Yes. It corresponds to Type (b) measures.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
6. Step 1, Identification of alternatives to the project activity			
6.1. Have the following alternatives been included while defining alternatives as per sub-step 1a?	-	-	-
6.1.1. The proposed project activity undertaken without being registered as a CDM project activity;	<p>The PP has not identified credible alternatives to the project activity in order to determine the most realistic baseline scenario, because ACM0002, the applicable methodology, prescribes the baseline scenario and no further analysis is required.</p> <p>The PP has stated it clearly in the PoA-DD v01, Section E.5.2, and in the CPA-DDs v01, Section B.3.</p>	OK	OK
6.1.2. Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;	See Item 6.1.1.	OK	OK
6.1.3. If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	See Item 6.1.1.	OK	OK
6.1.4. Has the project participant included the technologies or practices that provide outputs or services with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region?	See Item 6.1.1.	OK	OK
6.1.5. Has the outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project activity done correctly? Please briefly mention	See Item 6.1.1.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
the outcome.			
6.2. Sub-step 1b: Consistency with mandatory laws and regulations	-	-	-
6.2.1. Is the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution.?	See Item 6.1.1.	OK	OK
6.2.2. If an alternative does not comply with all mandatory applicable legislation and regulations, has it been shown that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that noncompliance with those requirements is widespread in the country?	See Item 6.1.1.	OK	OK
6.2.3. Has the outcome of Step 1b: Identified realistic and credible alternative scenario(s) to the project activity that are in compliance with mandatory legislation and regulations taking into account the enforcement in the region or country and EB decisions on national and/or sectoral policies and regulations done correctly? Please state the outcome.	See Item 6.1.1.	OK	OK
7. Has PP selected Step 2 (Investment analysis) or Step 3 (Barrier analysis) or both Steps 2 and 3?	The PoA-DD v01, Section A.2, states either step may be chosen, to be determined at CPA level. See first paragraph of Item 2. See also Step 3 of PoA-DD v01, Section E.5.2.	-	-
8. Step 2, Investment analysis			
8.1. Have the latest approved version of the ".Guidelines on the assessment of investment analysis." been taken into account when applying this step?	The last approved version - Version 5 of the Guidelines on the assessment of investment analysis has been taken in account when applying this step	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
8.2. In sub-step 2a, has the determination of appropriate method of analysis done as per the guidance as below?	-	-	-
8.2.1. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income (Option I).	Not applicable	NA	NA
8.2.2. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III). Specify option used with justification.	The additionality analysis is based on the benchmark analysis (Option III), through the assessment of the attractiveness of the project, using a government rate of return as a benchmark	OK	OK
8.3. In sub-step 2b, are the below guidelines followed:	-	-	-
8.3.1. For Option I - Apply simple cost analysis: Document the costs associated with the CDM project activity and the alternatives identified in Step 1 and demonstrate that there is at least one alternative which is less costly than the project activity.	Not applicable	NA	NA
8.3.2. For Option II - Apply investment comparison analysis: Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service most suitable for the project type and decision-making context. Please specify	Not applicable	NA	NA
8.3.3. For Option III- Apply benchmark analysis: Identify the financial/economic indicator, such as IRR, most suitable for the project type and decision context.	The project IRR was used to assess the attractiveness of the project, through its comparison with the rate of return published by the project country government for generation projects	OK	OK
8.3.4. When applying Option II or Option III, is financial/economic analysis based on parameters that are standard in the market, considering the	Please refer to CL APG 01	CL APG 01	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
specific characteristics of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer? Only in the particular case where the project activity can be implemented by the project participant, the specific financial/economic situation of the company undertaking the project activity can be considered.			
<p>8.3.5. Is the discount rate and benchmark derived from the following options:</p> <p>(a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data;</p> <p>(b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds' required return on comparable projects;</p> <p>(c) A company internal benchmark (weighted average capital cost of the company), only in the particular case referred to above in 2. The project developers shall demonstrate that this benchmark has been consistently used in the past, i.e. that project activities under similar conditions developed by the same company used the same benchmark;</p> <p>(d) Government/official approved benchmark where such benchmarks are used for investment decisions;</p> <p>(e) Any other indicators, if the project participants can demonstrate that the above Options are not applicable and their indicator is appropriately justified. Please specify benchmark and justify.</p>	The benchmark is derived from an official and public benchmark, determined by the government of the project country for the assessment of generation projects (option d)	OK	OK
8.4. Has the below guideline followed for Sub-step 2c: Calculation and	-	-	-



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
comparison of financial indicators (only applicable to Options II and III)?			
8.4.1. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA, etc, where applicable), and, as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.	CAR APG 02: The economic assessment of the project must not consider the revenues which come from CERs. Besides adjusting IRR project calculations, remove CERs Price from sheet "Investment". All the other calculations are correct and appropriate	CAR APG 02	OK
8.4.2. Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CDM- CDM-PDD/ PoA DD/CPA DD, or in separate annexes to the CDM-PDD/ PoA DD/CPA DD.	The investment analysis was presented in a transparent manner, through an open spreadsheet for the calculations	OK	OK
8.4.3. Justify and/or cite assumptions.	Please refer to CL APG 01	CL APG 01	OK
8.4.4. In calculating the financial/economic indicator, the project's risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions.	Not applicable. The DOE has not cited any specific risks that could be treated through the cash flow pattern	NA	NA
8.4.5. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.	Please refer to CL APG 01	CL APG 01	OK
8.4.6. Present in the CDM-PDD/ PoA DD/CPA DD a clear comparison of the financial indicator for the proposed CDM activity. Please specify details for above.	The comparison between the financial indicator and the appropriate benchmark has been made clear by the DOE	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
8.4.7. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.	Please refer to 8.4.4	NA	NA
8.4.8. Present in the CDM-PDD/ PoA DD/CPA DD a clear comparison of the financial indicator for the proposed CDM activity. Please specify details for above.	Please refer to 8.4.4	NA	NA
8.5. Has the below guideline followed for Sub-step 2d: Sensitivity analysis (only applicable to Options II and III)?	-	-	-
8.5.1. Include a sensitivity analysis that shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions.	The sensitivity analysis has been conducted appropriately	OK	OK
8.6. Has the outcome of Step 2 clearly mentioned with justification?	Yes, the outcome has been clearly mentioned with justification	OK	OK
9. step 3: Barrier analysis			
9.1. Have the latest approved version of the "Guidelines for objective demonstration and assessment of barriers" been taken into account when applying this step?	<p>CAR29: It is not clear whether or not investment analysis will always be applied for the demonstration and assessment of additionality of each CPA to be included in the PoA.</p> <p>- In PoA-DD v01, Section A.2, Item 2, first paragraph states "... those projects that need additional income from CERs for its implementation because they are economically or financially unattractive or because they face institutional, financial and/or structural barriers. This leaves room to interpreting that it is either investment analysis or barrier</p>	CAR29	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
	<p>analysis.</p> <ul style="list-style-type: none"> - In PoA-DD v01, Section E.5.2, Step 3, it is stated that "Alternatively additionality can be demonstrated using a Barrier Analysis...". Once again, it leaves room to interpreting that it is either investment analysis or barrier analysis. - CPA-DD v01, Section B.3, Step 3, makes it clear barrier analysis may be applied or not. However, on top of that, the framework (PoA-DD and CPA-DD) presents the sub-steps of the investment analysis and has not done the same for barrier analysis. This leaves room to another interpretation: that additionality will either be demonstrated and assessed through investment analysis or investment and barrier analysis. 		
9.2. For barriers other than barriers due to project being "first of its kind" as defined in 9.3.3, has the project participant demonstrated that the CDM would alleviate the identified barriers that prevent the proposed project activity from occurring?	See CAR29.	CAR29	OK
9.3. Has the below guideline followed for Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project?	-	-	-
9.3.1. Investment barriers: (a) For alternatives undertaken and operated by private entities: Similar activities have only been implemented with grants or other non-commercial finance terms. (b) No private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed CDM project activity is to be implemented, as demonstrated by the credit rating of the country or other country investments reports	See CAR29.	CAR29	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
of reputed origin.			
9.3.2. Technological barriers: (a) Skilled and/or properly trained labour to operate and maintain the technology is not available in the relevant country/region, which leads to an unacceptably high risk of equipment disrepair and malfunctioning or other underperformance; (b) Lack of infrastructure for implementation and logistics for maintenance of the technology, (c) Risk of technological failure: the process/technology failure risk in the local circumstances is significantly greater than for other technologies that provide services or outputs comparable to those of the proposed CDM project activity, as demonstrated by relevant scientific literature or technology manufacturer information, (d) The particular technology used in the proposed project activity is not available in the relevant region	See CAR29.	CAR29	OK
9.3.3. Barriers due to prevailing practice: Barriers due to prevailing practice: The project activity is the "first of its kind": (a) For the measures identified under 5, a proposed project activity is the First-of-its-kind in the applicable geographical area if : (i) The project is the first in the applicable geographical area that applies a technology that is different from any other technologies able to deliver the same output and that have started commercial operation in the applicable geographical area before the start date of the project; and (ii) Project participants selected a crediting period for the project activity that is .a maximum of 10 years with no option of renewal; (b) For the measures identified under 5, a proposed project activity that was identified as the First-of-its-kind project activity is additional and Sub-step 3b does not apply. (c) For other measures, the project proponents shall propose approach for demonstrating that a project is a first-of-its-kind and	See CAR29.	CAR29	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
Sub-step 3b applies..			
9.3.4. Other barriers, preferably specified in the underlying methodology as examples.	See CAR29.	CAR29	OK
9.3.5. Has the outcome from Step 3a clearly mentioned in CDM-PDD/ PoA DD/CPA DD?	See CAR29.	CAR29	OK
9.4. Has the below guideline followed for Sub-step 3b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)?	-	-	-
9.4.1. If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity. In other words, demonstrate that the identified barriers do not prevent the implementation of at least one of the alternatives. Any alternative that would be prevented by the barriers identified in Sub-step 3a is not a viable alternative, and shall be eliminated from consideration.	See CAR29.	CAR29	OK
9.4.2. Provide transparent and documented evidence, and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers and whether alternatives are prevented by these barriers.	See CAR29.	CAR29	OK
9.4.3. The type of evidence to be provided should include at least one of the following: (a) Relevant legislation, regulatory information or industry norms; (b) Relevant (sectoral) studies or surveys (e.g. market surveys, technology studies, etc) undertaken by universities, research institutions, industry associations, companies, bilateral/multilateral institutions, etc; (c) Relevant statistical data from national or	See CAR29.	CAR29	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
international statistics; (d) Documentation of relevant market data (e.g. market prices, tariffs, rules); (e) Written documentation of independent expert judgments from industry, educational institutions (e.g. universities, technical schools, training centres), industry associations and others. Please specify.			
9.4.4. Has the outcome from Step 3 clearly mentioned in CDM-PDD/ PoA DD/CPA DD?	See CAR29.	CAR29	OK
10. Step 4: Common practise analysis			
10.1. Has the proposed project been demonstrated to be first of its kind (according to sub-step 3a)?	No	OK	OK
10.2. If not, for measures different from those listed in 5, have all the sub-steps as below followed?	N/A	OK	OK
10.3. In sub-step 4a: Analyze other activities similar to the proposed project activity? Provide an analysis of any other activities that are operational and that are similar to the proposed project activity. Other CDM project activities are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.	N/A	OK	OK
10.4. Sub-step 4b: Discuss any similar Options that are occurring? If similar activities are identified, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential	N/A	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially/economically attractive (e.g., subsidies or other financial flows) and which the proposed project activity cannot use or did not face the barriers to which the proposed project activity is subject. In case similar projects are not accessible, the CDM-PDD/ PoA DD/CPA DD should include justification about non-accessibility of data/information.			
10.5. For measures that are listed in 5, have all the sub-steps as below followed:	-	-	-
10.5.1. Step 1: Calculate applicable output range as +/-50% of the design output or capacity of the proposed project activity.	CAR30: PoA-DD v01 and CPA-DDs v01 do not follow the steps prescribed in paragraph 47 of the Tool for the demonstration and assessment of additionality v06.0.0.	CAR30	OK
10.5.2. Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the proposed project activity and have started commercial operation before the start date of the project. Note their number Nall. Registered CDM project activities shall not be included in this step	See CAR30.	CAR30	OK
10.5.3. Step 3: Within plants identified in Step 2, identify those that apply technologies different that the technology applied in the proposed project activity. Note their number Ndiff.	See CAR30.	CAR30	OK
10.5.4. Step 4: Calculate factor $F=1-N_{diff}/N_{all}$ representing the share of plants using technology similar to the technology used in the proposed project activity in all plants that deliver the same output or capacity as the proposed project activity.	See CAR30.	CAR30	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
10.5.5. Are the following conditions are fulfilled: (a) the factor F is greater than 0.2, and (b) Nall-Ndiff is greater than 3	See CAR30.	CAR30	OK
10.6. Has the outcome from Step 4 clearly mentioned in CDM-PDD/ PoA DD/CPA DD?	See CAR30.	CAR30	OK
11. Has it been proved that the porject is additional?	See CAR30.	CAR30	OK

VALIDATION REPORT

Table 2-2 Protocol based on the Guidelines on the Assessment of Investment Analysis (EB62 Annex05)

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
12. Does the PoA DD state the latest version of the "Guidelines on the Assessment of Investment Analysis" being used?	Yes, the PoA DD uses the version 5 of the "Guidelines on the Assessment of Investment Analysis"	OK	OK
13. Is the period of assessment limited to the proposed crediting period of the CDM project activity?	No, the period of assessment is not limited to the crediting period of the CDM activity	OK	OK
14. Does the IRR calculation include the cost of major maintenance and/or rehabilitation if these are expected to be incurred during the period of assessment?	Yes, the maintenance costs are included in the IRR calculation	OK	OK
15. Does the cash flow in the final year include a fair value of the project activity assets at the end of the assessment period?	No. the cash flow projection does not include the fair value of the project activity at the end of the assessment period, since the expected life time of the project is fully covered by the cash flow projections	OK	OK
16. Is the depreciation, and other non-cash items related to the project activity, which have been deducted in estimating gross profits on which tax is calculated, added back to net profits for the purpose of calculating the financial indicator?	No, neither depreciation or other non-cash expenses were included in the economic assessment	OK	OK
17. Is pre-tax benchmark or post tax benchmark applied in the investment analysis? ➤ If a post tax benchmark is applied, is the actual interest payable taken into account in the calculation of income tax? ➤ If yes, is the interest calculated according to the prevailing commercial interest rate in the region, preferably by assessing the cost of other debt recently acquired by the project developer and by applying a debt-equity ratio used by the project developer	A pre tax benchmark has been applied, so the considerations are not applicable.	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl				
for investments taken in the previous three years.							
18. Has the fair value been calculated in accordance with local accounting regulations where available, or international best practice?	No. Since the cash flow covers the entire lifetime of the project, there is no need for the fair value.	OK	OK				
19. Was a thorough assessment of all parameters and assumptions used in calculating the relevant financial indicator, and determine the accuracy and suitability of these parameters using the available evidence and expertise in relevant accounting practices conducted?	<div><div>CL APG 01: Please provide the following clarifications related to the input values used in the economic assessment:</div><table><tr><td>Load Factor</td><td>The value informed in "GL Garrad Hassan (2011). Report from "Analysis of energy production of wind power plant Chome (Chile) from 02/11/2011, number 105413-CHSA-R-01.pdf", p.11 is 33.4%. Please add the decimal number in the CPA DD (page8).</td></tr><tr><td>Total Investment</td><td>Transmission System: The value stated in the financial spreadsheet is 3,820,007 USD. However, the document "CGE (2011). Proposal from CGE Distribution for modifications in the transmission system for</td></tr></table></div>	Load Factor	The value informed in "GL Garrad Hassan (2011). Report from "Analysis of energy production of wind power plant Chome (Chile) from 02/11/2011, number 105413-CHSA-R-01.pdf", p.11 is 33.4%. Please add the decimal number in the CPA DD (page8).	Total Investment	Transmission System: The value stated in the financial spreadsheet is 3,820,007 USD. However, the document "CGE (2011). Proposal from CGE Distribution for modifications in the transmission system for	CL APG 01	OK
Load Factor	The value informed in "GL Garrad Hassan (2011). Report from "Analysis of energy production of wind power plant Chome (Chile) from 02/11/2011, number 105413-CHSA-R-01.pdf", p.11 is 33.4%. Please add the decimal number in the CPA DD (page8).						
Total Investment	Transmission System: The value stated in the financial spreadsheet is 3,820,007 USD. However, the document "CGE (2011). Proposal from CGE Distribution for modifications in the transmission system for						



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
	<p>the wind project Chome, October 6th, 2011. Formal document GC -271/2011", p.2, states that the value is 75,760 UF + IVA (19%). Using the value for UF of 22,213.43 (11/30/2011) and the exchange rate of 508,44 (CH/USD), we get 3,938,790.13 USD. Please clarify if the calculation is correct</p> <p>Project Management and Engineering: Please provide evidence for the the values of Project Management and Client Engineering, totaling 614,940 USD. Besides, document "Términos de referencia: 'Especificaciones Técnicas Generales y Particulares, del Sistema de Telecomunicaciones para Conectar al SIC el Parque Eólico Punta Chome'", dated 02/11/2011, from Electrónica del Pacífico S.A., informs value of UF 3,300. However, value of</p>		



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
	<p>22,200 does not correspond to the one on 02/11/2011, verified at http://www.sii.cl/pagina/valores/uf/uf2011.htm (Servicio de Impuestos Internos). Also clarify the reason why it's used 18 months for the calculations</p> <p>Provision: Please specify the source of the value informed (500,000 USD) and the date of reference</p> <p>Payments Done: Please inform the date of reference for the document "Informe de Gastos Proyecto Pta Chome.PDF".</p>		
	<p>Energy Price</p> <p>Please clarify how was calculated the price of 90.5 USD/MWh, based on the document Synex (2011). "Marginal cost projection in the SIC". Preliminary report, average of energy prices of table No 9, p.12. The average of values of the referred table is 91.15 USD/MWh. Also, in the</p>		



VALIDATION REPORT

CHECKLIST QUESTION	comments		Draft Concl	Final Concl
		Ley General de Servicios Eléctricos (Electricity Services General Law), Article 165, letter (d), it's stated that energy prices can be adjusted, regarding the return pre-tax of 10% p.y., among other factors. Please specify if the price informed can be adjusted in the future, and, if yes, how it would be done.		
	O&M Costs	In document "INV_PCH_204_Turnkey_Supply_& Maintenance_V 100-1.8MW_Vestas.pdf", page 9, the value for O&M costs for years 1-4 is 29,300 USD, instead of 29,500 USD as stated in the spreadsheet. Please clarify the difference.		
	SG&A costs	Please provide evidences for the value of 2.5% of energy sales.		
	Variable Costs	Please provide evidences for the value of 2.0% of energy sales.		



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
	<div>Land Rent</div> <div>The document "INV_PCH_202_Promesa_Arriendo_&_First_Option_to_Purchase_Macaya.pdf", page 4, states that the land for the wind farm construction will be rented instead of acquired as stated in the Financial spreadsheet and in the Chome DD. Please clarify if the land was acquired or will be rented.</div> <div>Investment Decision Date</div> <div>Please inform which date is being considered as the investment decision date of the project.</div>		
20. Were the parameters cross-checked against third-party or publicly available sources, such as invoices or price indices?	Please refer to CL APG 01.	CL APG 01	OK
21. Were feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants reviewed?	CL APG 02: Please inform if there is any public announcements, annual financial reports or feasibility reports related to the project or to the project participants.	CL APG 02	OK
22. Was the correctness of computations carried out and documented by the project participants assessed?	CAR APG 01: In the financial spreadsheet, please verify the correctness of cell "E13" in sheet "IRR Project". Also, clarify that the values in cells "D4" to "D10" in sheet "Investment" are expressed in USD.	CAR APG 01	OK
23. To determine whether it is reasonable to assume that no investment	NA	NA	NA



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
would be made at a rate of return lower than the benchmark by:			
23.1. Assessing previous investment decisions by the project participants involved?	NA	NA	NA
23.2. Determining whether the same benchmark has been applied?	The benchmark used is a well known indicator, publicly available and valid for all generation projects based on the same country	OK	OK
23.3. Determining if there are verifiable circumstances that have led to a change in the benchmark?	NA	NA	NA
24. Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed project activities?	Please refer to CL APG 02	CL APG 02	OK
25. has the FSR been the basis of the decision to proceed with the investment in the project, i.e. that the period of time between the finalization of the FSR and the investment decision is sufficiently short for the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed?	Please refer to CL APG 02	CL APG 02	OK
26. Are the values used in the CDM-PDD/PoA-DD/CPA-DD and associated annexes fully consistent with the FSR? If not, was the appropriateness of the values validated?	Please refer to CL APG 02	CL APG 02	OK
27. On the basis of its specific local and sectoral expertise, is confirmation provided, by cross-checking or other appropriate manner, that the input values from the FSR are valid and applicable at the time of the investment decision?	Please refer to CL APG02	CL APG 02	OK



VALIDATION REPORT

CHECKLIST QUESTION	comments	Draft Concl	Final Concl
28. Have variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues been subjected to reasonable variation (positive and negative) and the results of this variation been presented in the PDD and be reproducible in the associated spreadsheets?	Yes. The relevant variables have been subjected to reasonable variation. The results of the sensitivity analysis related to the variation have been presented in the CPA DD and can be reproduced in the spreadsheet.	OK	OK
29. Have a corrective action been raised for a variable to be included in the sensitivity analysis which constitute less than 20% and have a material impact on the analysis ?	No. None of the remaining variables have significant impact in the project IRR	OK	OK
30. Is the range of variations selected is reasonable in the project context?	Yes. The range of variations seems reasonable for the project context	OK	OK
31. Does the variations in the sensitivity analysis at least cover a range of +10% and -10%, unless this is not deemed appropriate in the context of the specific project circumstances?	Yes, the range of variations covers a range of +10% and -10% for the input values. Also, this range seems appropriate	OK	OK
32. In cases where a scenario will result in the project activity passing the benchmark or becoming the most financially attractive alternative, is an assessment done of the probability of the occurrence of this scenario in comparison to the likelihood of the assumptions in the presented investment analysis, taking into consideration correlations between the variables as well as the specific socio-economic and policy context of the project activity?	In no cases the result of the sensitivity analysis has surpassed the benchmark	OK	OK

VALIDATION REPORT

Table 1a General validation requirements based on the Validation and Verification Manual (version 1.2)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
18. Generic CPA-DD					
18.1. Does a generic CPA-DD specify the generic information relevant to all CPAs that may be included in the PoA?	EB55 Ann38	13	Yes	OK	OK
18.2. Does the completed specific CPA-DD meet the generic CPA-DD	EB55 Ann38	13	<p>CAR31: The following issues have been found, comparing both CPA-DDs v01 (Generic and Specific):</p> <ul style="list-style-type: none"> - Identification of tables; - Text in sections A.2, B.2, B.3 (Sub-step 4a), B.5.2, C.2 and D.2; - Table name in Section A.4.1.2; - Tables in sections B.3 (sub-steps 2c and 4a), B.4 ("No" x "Yes/No") and B.5.3 (years have been specified in the Generic CPA-DD; also "0" x "[number]" for PE_y), and in Annex 3 ("Power plants with option A1"); - "[Conclusion]", before last paragraph of Sub-step 2c (Section B.3); - In Section B.6.1 of the Generic CPA-DD, under 2. Data Quality Control, "CDEC-SIC or CDEC SING" is written as if were fixed; - Footnote 3, in Generic CPA-DD, Section B.6.1, presents a generic weblink for SING and a dated one (2010) for SIC; - Footnotes 4 and 5, in Generic CPA-DD, Section C.2, are not present in the Specific CPA-DD; - In Annex 1, of the Generic CPA-DD, "Represented by:" is blank, as if it were not to 	CAR31	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			be filled out; - In Annex 3, "Operating Margin [year]" x "Operating Margin" and the sentence before table "Power plants with option A1"; - In Annex 3, Generic CPA-DD does not present three years for lambda; - In Annex 3, Specific CPA-DD, for lambda 2009 and 2008, does not present "No Low Cost Generation" in the tables after the lambda curves. -		
19. CPA design					
19.1. Is the CPA-DD completed using latest version of the CDM-CPA-DD form appropriate to the type of project activity?	VVM	57	Yes	OK	OK
19.2. Has the DOE assessed the proposed CPA via following means?					
19.2.1. A desk review of the documentation	VVM	168	Yes	OK	OK
19.2.2. Follow up interviews	VVM	168	Yes. With M. Teresa Valenzuela, from Seawind (PoA PP and Chome CPA implementer), and Roberto Posch, consultant, who helped with the application of ACM0002 v12.2.0.	OK	OK
19.2.3. Site visit	VVM	168	Yes. On 20-23/02/2012	OK	OK
19.2.3.1. If yes, is sampling approach applied and in accordance with the Standard for sampling and surveys for CDM project activities and programme of activities.	VVM	60	No sampling has been applied.	OK	OK
19.2.3.2. If not, please justify.	VVM	60	N/A	OK	OK
20. General description of CPA(Section A of CDM-CPA-DD)					
20.1. In Section A.1 of CDM-CPA-DD, is a title for the CPA	EB33	Ann42	Yes. "Chome Wind Farm CPA #1"	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
provided?					
20.2. In CDM-CPA-DD section A.2, is description of the CPA provided?	EB33	Ann 44	<p>CAR32: Incorrect class of Vestas turbines (ISC S) stated in Section A.2 of Specific CPA-DD v01.</p> <p>CL22: Please, inform which legal authorizations exist for the implementation of Chome Wind Farm (excluding environmental ones, as they are covered in Section C of the Specific CPA-DD). Besides, inform whether contract with the distribution company, CGE, has already been signed. Provide evidences of all information.</p>	CAR32 CL22	OK OK
20.3. Entity/individual responsible for CPA(Section A.3 of CDM-CPA-DD)	EB33	Ann42			
20.3.1. Is the entity/individual responsible of the CPA identified?	EB33	Ann42	Yes. Ingeniería Seawind Sudamérica Ltda.	OK	OK
20.3.2. Is the CPA implemeter project participant of the PoA?	EB33	Ann42	Yes	OK	OK
20.3.3. If yes, is the name included in the registered PoA?	EB33	Ann42	Yes	OK	OK
20.4. Technical description of the CPA (Section A.4 of CDM-CPA-DD)	EB33	Ann42			
20.4.1. In Section A.4.1 of CDM-CPA-DD, is the identification of CPA provided?	EB33	Ann42	Yes, in sections A.4.1.1 and A.4.1.2.	OK	OK
20.4.1.1. Host Party	EB33 EB55 Ann38	Ann42 7(b)	Yes. Chile	OK	OK
20.4.1.2. Geographic reference or other means of identification of CPA ,Name/contact details of the entity/individual responsible for the CPA , e.g. in case of stationary CPA geographic reference, in case of mobile CPAs means such as registration number, GPS devices	EB33 EB55 Ann38	Ann42 7(a)	<p>CAR33: In Section A.4.1.2, of Specific CPA-DD v01, Footnote 5 refers to incorrect source for the geographic coordinates. Besides, coordinates are shown in km ("K" should be in lower case), whereas Garrad Hassan's document 105413-CHSA-R-01 version A, in Table 5.2, shows in meters (m).</p>	CAR33 CAR34	OK OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CAR34: Section A.4.1.2, of Specific CPA-DD v01, does not inform name/contact details of the entity/individual responsible for the CPA.		
20.4.2. In Section A.4.2.1 of CDM-CPA-DD, is starting date of the CPA provided?	EB33	Ann42			
20.4.2.1. Is starting date of the CPA correctly defined?	EB33	Ann42	CL23: Please, update starting date of the CPA and provide evidence to confirm it.	CL23	OK
20.4.2.2. Is the start date of the CPA prior to the commencement of the validation of the PoA?	EB55 Ann38	7(d)	No	OK	OK
20.4.3. In Section A.4.2.2 of CDM-CPA-DD, is expected operational lifetime of the CPA provided?	EB33	Ann42	Yes. 20 years	OK	OK
20.4.4. In Section A.4.3 of CDM-CPA-DD, is choice of the crediting period and related information given?	EB33	Ann42	Yes. Renewable crediting period	OK	OK
20.4.4.1. Starting date of the crediting period	EB33	Ann42	Yes. 01/12/2012 CL24: Please, provide implementation schedule of Chome Wind Farm CPA, in order to confirm estimated starting date of the crediting period. Besides, inform to which event 01/12/2012 corresponds.	CL24	OK
20.4.4.2. Length of the crediting period	EB33	Ann42	Yes. 7 years	OK	OK
20.4.4.3. Is the start date of the crediting period determined as the date of inclusion of the CPA in the registered PoA or any date later?	EB55 Ann38	7(c)	See CL24.	CL24	OK
20.4.4.4. Does the crediting period exceed the end date of the registered PoA?	EB55 Ann38	7(c)	No	OK	OK
20.4.5. In Section A.4.4 of CDM-CPA-DD, is the estimated amount of emission reductions over the chosen crediting period provided?	EB33	Ann42	Yes. However: CAR35: In Section A.4.4 of Specific CPA-DD v01, the crediting period is presented as beginning in 2013, whereas in Section A.4.3.1,	CAR35	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			the starting date of the crediting period is stated as 01/12/2012.		
20.4.6. In Section A.4.5 of CDM-CPA-DD, is information regarding public funding of the CPA provided?	EB33	Ann42	Yes. Chome Wind Farm CPA does not receive public funding.	OK	OK
20.4.7. In Section A.4.6 of CDM-CPA-DD, is it confirmed that CPA is neither registered as individual CDM project activity nor is part of another registered PoA	EB33 EB55 Ann38	Ann42 7(h)	Yes	OK	OK
21. Eligibility of CPA and estimation of emission reductions (Section B of CDM-CPA-DD)	EB33	Ann42			
21.1. In Section B.1 of CDM-CPA-DD, are title and reference of the registered PoA to which CPA is added provided?	EB33	Ann42	Yes. "Wind Programme of Activities in Chile"	OK	OK
21.2. In Section B.2 of CDM-CPA-DD, is it justified why the CPA is eligible to be included in the registered PoA	EB33	Ann42	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD".	-	-
21.3. In Section B.3 of CDM-CPA-DD, is additionality of the CPA assessed and demonstrated as per eligibility criteria listed in the registered PoA?	EB33 EB55 Ann38	Ann42 7(e)	See "Table 2a - Validation requirements based on the eligibility criteria set in the PoA DD" and "Table 2-1 - Protocol based on the Methodological Tool "Demonstration and Assessment of Additionality" Ver. 6.0.0".	-	-
21.4. In Section B.4 of CDM-CPA-DD, are sources and gases included in the project boundary described and in accordance with the methodology?	EB33 EB55 Ann38	Ann42 7(e)	See CAR07.	CAR07	OK
21.5. Is it demonstrated that the CPA is located within the geographical boundary of the registered PoA	EB33	Ann42	CL25: Please, adjust sentence after table, in Section B.4 of Specific CPA-DD v01, and provide detailed information on the proof that the CPA is located within the geographical boundary of the registered PoA, as defined in Section A.4.1.2 of PoA-DD v01.	CL25	OK
21.6. Emission reductions(Section B.5 of CDM-CPA-DD)	EB33	Ann42			
21.6.1. In Section B.5.1 of CDM-CPA-DD, are data and parameters available at validation provided?	EB33	Ann42	CAR36: In Section B.5.1 of Specific CPA-DD v01, the source of data used for $FC_{i,m,y}$, $EG_{m,y}$ and $EG_{k,y}$ refers to CDEC-SIC and CDEC-SING, whereas Chome Wind Farm CPA will be	CAR36 CAR37	OK OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			connected to the SIC. CAR37: In Section B.5.1 of Specific CPA-DD v01, the web address informed in the source of data used for $NCV_{i,y}$ returns an error message. CAR38: Specific CPA-DD v01, Section B.5.1, does not list value of $\eta_{m,y}$ applied for "Coal (subcritical, new)". Besides, adjust spelling of "CSBF". It should read as CFBS. CL26: Please, specify, in Section B.5.1 of Specific CPA-DD v01, the "mass or volume unit" in the data unit for $NCV_{i,y}$, for which the values applied correspond.	CAR38 CL26	OK OK
21.6.2. In Section B.5.2 of CDM-CPA-DD, are emission reductions for each year of the crediting period ex ante calculated in accordance with the applied methodology?	EB33	Ann42			
21.6.2.1. Baseline emissions	VVM	89	CAR39: In ER Calc spreadsheets, <ER calculation Chome>, lines 2, 4 and 41 present parameters which are not identified as per PoA-DD v01 and CPA-DDs v01. Besides, data unit is missing for value in Line 2.	CAR39	OK
21.6.2.2. Project emissions	VVM	89	CL27: Please, in Section B.5.2 of both CPA-DDs v01, under Project emissions (PE_y) , let it clear that water reservoirs are from hydropower plants. Besides, adjust last sentence of the paragraph on project emissions.	CL27	OK
21.6.2.3. Leakage	VVM	89	Yes. There is no leakage to be considered.	OK	OK
21.6.2.4. Emission reductions	VVM	89	Yes	OK	OK
21.6.3. In Section B.5.3 of CDM-CPA-DD, are the results of	EB33	Ann42	Yes	OK	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the ex ante estimation of emission reductions for all years of the crediting period, provided in a tabular format?					
21.7. Application of the monitoring methodology and description of the monitoring plan	EB33	Ann42			
21.7.1. Are listed parameters required by the selected approved methodology(ies) including applicable tool(s)?	VVM	123	Yes	OK	OK
21.7.2. Does the monitoring plan contain all necessary parameters based on the approved monitoring methodology(ies) including applicable tool(s)?	VVM	123	See CAR27. CAR40: Both CPA-DDs, in Section B.6.1, under 4. Emission factor calculation , state EFgrid,CM,y will be annually updated by the CME. However, according to Section E.6.2 of PoA-DD v01, ex ante option has been chosen.	CAR40 CAR27	OK OK
21.7.3. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	VVM	123	See CAR08.	CAR08	OK
21.7.4. Are the means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by/resulting from the proposed CPA can be reported ex post and verified?	VVM	123	See CAR08.	CAR08	OK
22. Environmental analysis(Section C of CDM-CPA-DD)					
22.1. Is environmental analysis provided as PoA level?	EB33	Ann42	No. It is done at the CPA level. The official environmental licensing process is available to consult at http://seia.sea.gob.cl/expediente/expedientesEvaluacion.php?modo=ficha&id_expediente=3034359 .	OK	OK
22.2. If not, is documentation on the analysis of the environmental impacts, including transboundary impacts provided?	EB33 EB55 Ann38	Ann42 7(f)	Yes	OK	OK
22.3. If not, is it in accordance with the host Party	EB33	Ann42	Yes	CL28	OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
laws/regulations?			CL28: Please, make it clear, in the text of Section C.2, of Specific CPA-DD v01, that RCA stands for “Resolución de Calificación Ambiental”.		
23. Stakeholders' comments(Section D of CDM-CPA-DD)					
23.1. Are stakeholders' comments conducted at PoA level?	EB33	Ann42	No	OK	OK
23.2. If not, how were these comments invited and compiled?	EB33 EB55 Ann38	Ann42 7(g)	<p>CAR41: Specific CPA-DD v01, Section D.2, states 29/12/11 a publication date in El Sur journal, whereas correct date is 18/12/2011.</p> <p>CL29: Please, clarify how exactly the “stakeholder consultation [...] defined in articles 49 to 53 of Law N° 19,300”, as well as the mechanisms mentioned in Section D.2 of the Specific CPA-DD v01, fulfil the requirement to be validated, as described in VVM's §128, considering the definition of stakeholders, as per EB 66 Annex 63 (Glossary of CDM Terms v06.0). As part of the clarification, inform whether or not – including when and where – the relevant Specific CPA design document was made available to the stakeholders to comment on.</p> <p>CL30: Please, adjust page numbers of CONAMA's references in the footnotes of the Specific CPA-DD v01. Besides, it has not been possible to find information related to Footnote 28.</p> <p>See CL11.</p>	CAR41 CL29 CL30 CL11	OK OK OK OK



VALIDATION REPORT

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
23.3. If not, is the summary of the comments received complete?	EB33 EB55 Ann38	Ann42 7(g)	CAR42: Specific CPA-DD v01, Section D.3, does not list a 3 rd comment, from Juan Carlos Jorquera Silva. Besides, clarify the mechanisms that resulted in the comments (i.e. meetings, newspapers, workshop etc).	CAR42	OK
23.4. If not, how due account was taken of all comments received?	EB33 EB55 Ann38	Ann42 7(g)	CL31: Please, clarify, in Section D.4 of Specific CPA-DD v01, how due account was taken of the specific comments received. See CAR42.	CAR42 CL31	OK OK
24. Other information (Annex of CDM-CPA-DD)	EB33	Ann42			
24.1. Is contact information on entity/individual responsible for the CPA?	EB33	Ann42	Yes	OK	OK
24.2. Is information regarding public fundings provided?	EB33	Ann42	Yes	OK	OK
24.3. Is baseline information provided?	EB33	Ann42	CAR43: Annex 3, of Specific CPA-DD v01, presents 1,848,568.60 MWh as total 2010 generation of power units registered as CDM project activities, whereas sheets <OM2010> and <BM 2010>, in EF-SIC Calc Spreadsheets, indicate 1,848,568.53 MWh.	CAR43	OK
24.4. Is monitoring information provided?	EB33	Ann42	No further background information on monitoring is provided.	OK	OK

VALIDATION REPORT

Table 2a Validation requirements based on the eligibility criteria set in the PoA DD

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
1. Does the CPA comply with the eligibility criteria specified in the PoA-DD?			
1.1. Be a greenfield on shore or off shore wind power plant (new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity).	CAR44: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: "Be a greenfield on shore or off shore wind power plant (new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity).", that is related to EB 65 Annex 3, §14(c).	CAR44	OK
1.2. Not: (i) have been registered as a CDM project activity, or (ii) be included as a CPA under another PoA.	Same description in both CPA-DDs v01. It relates to EB 65 Annex 3, §14(b).	OK	OK
1.3. No energy generating equipment is transferred from another activity, located in a non-annex I party and no existing equipment is transferred from the project to another activity.	CAR45: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: "No energy generating equipment is transferred from another activity, located in a non-annex I party and no existing equipment is transferred from the project to another activity". No clear relation to EB 65 Annex 3, §14.	CAR45	OK
1.4. Confirm with a writing statement that the CPA will not: a. Be registered as a CDM project activity. b. Be included as a CPA under another PoA.	Same description in both CPA-DDs v01. It relates to EB 65 Annex 3, §14(b).	OK	OK
1.5. During the operation phase, be connected to the Central Interconnected System (SIC) or to the Great North Interconnected System (SING) of Chile.	CAR46: Generic CPA-DD v01, in Section B.2, presents a different text, " <i>Be connected to the Central Interconnected System (SIC) and or Great North Interconnected System (SING)</i> ", for the eligibility criterion which appears in PoA-DD v01 and Specific CPA-DD v01 as "During the operation phase, be connected to the Central Interconnected System (SIC) or to the Great North Interconnected System (SING) of Chile.", that is related to EB 65 Annex 3, §14(i).	CAR46	OK



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
1.6. To avoid double counting of emission reductions each CPA will be uniquely identified and defined in an unambiguous manner by providing geographic information (e.g. coordinates).	CAR47: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: "To avoid double counting of emission reductions each CPA will be uniquely identified and defined in an unambiguous manner by providing geographic information (e.g. coordinates).", that is related to EB 65 Annex 3, §14(b).	CAR47	OK
1.7. Have a project starting date after the date on which the PoA-DD is uploaded for Global Stakeholder Consultation.	CAR48: Generic CPA-DD v01, in Section B.2, presents a different text, "Have a project starting date after December 2011 (projected date for uploading the PoA-DD for Global Stakeholder Consultation)", for the eligibility criterion which appears in PoA-DD v01 and Specific CPA-DD v01 as "Have a project starting date after the date on which the PoA-DD is uploaded for Global Stakeholder Consultation.", that is related to EB 65 Annex 3, §14(d).	CAR48	OK
1.8. Demonstrate the compliance with the additionality requirements stated on section E.5 of the present PoA-DD.	Same description in Chome CPA-DD v01 and Generic CPA-DD v01. It relates to EB 65 Annex 3, §14(f).	OK	OK
1.9. Comply with the conditions of the methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 12.2.0 as listed in section E.2 of the present PoA – DD.	CAR49: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: "Comply with the conditions of the methodology ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 12.2.0 as listed in section E.2 of the present PoA – DD.", that is related to EB 65 Annex 3, §14(e).	CAR49	OK
1.10. Have the Environmental Approval (Resolución de Calificación Ambiental, RCA).	CAR50: PoA-DD v01, Section A.4.2.2, states, as eligibility criterion, to "Have the Environmental Approval (Resolución de Calificación Ambiental, RCA)" and the Specific CPA-DD v01, Section B.2, "The Environmental Approval (Resolución de Calificación Ambiental, RCA)". However, see CL05, since, PoA-DD v01, Section A.4.4.1, Item (i) h leads to the understanding an environmental approval may not be applicable. Besides, Generic CPA-DD v01, Section B.2, presents "Comply with the national environmental legislation", as eligibility criterion. These are related to EB 65 Annex 3, §14(g).	CAR50	OK



VALIDATION REPORT

CHECKLIST QUESTION	COMMENTS	Draft Concl	Final Concl
1.11. Have conducted a stakeholder consultation process as described in section D of the PoA-DD.	Same description in both CPA-DDs v01. It relates to EB 65 Annex 3, §14(g).	OK	OK
OTHERS	<p>CAR51: There is no eligibility criteria in PoA-DD v01, Section A.4.2.2, neither in the Specific CPA-DD v01, Section B.2, covering “The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA”, as required by EB 65 Annex 3, §14(a). Generic CPA-DD v01 presents the following criterion: “Be located inside the Geographical Boundary of the PoA, as defined in section A.4.1.2”.</p> <p>CAR52: Poa-DD v01 and both CPA-DDs v01 do not cover the following under the eligibility criteria, as required by EB 65 Annex 3, §14:</p> <ul style="list-style-type: none"> - “(h) Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance”; - “(j) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys”; - “(k) Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA”; and - “(l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories”. 	CAR51 CAR52	OK OK



VALIDATION REPORT

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist	Summary of project owner response	Validation team conclusion
CAR01: It has not been presented to the DOE “a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including review of their competencies” (EB 65 Annex 3, §17(a)).	EB65 Ann3(17)	The definition of roles and responsibilities is presented in the file “MANUAL DE OPERACIÓN DE LA CME”.	The operation manual of the CME, version 1.0, dated 28/05/2012, has been presented. CAR01 is closed.
CAR02: It has not been presented to the DOE the “records of arrangements for training and capacity development for personnel” (EB 65 Annex 3, §17(b)).	EB65 Ann3(17)	The “records of arrangements for training and capacity development for personnel” is presented in the file “MANUAL DE OPERACIÓN DE LA CME”.	The arrangements for training and capacity building have been made clear. CAR02 is closed.
CAR03: It has not been presented to the DOE the “procedures for technical review of inclusion of CPAs” (EB 65 Annex 3, §17(c)).	EB65 Ann3(17)	The definition of “procedures for technical review of inclusion of CPAs” is presented in the file “MANUAL DE OPERACIÓN DE LA CME”.	The procedures for technical review of inclusion of CPAs have been presented. CAR03 is closed.



VALIDATION REPORT

<p>CAR04: It has not been presented to the DOE the “records and documentation control process for each CPA under the PoA” (EB 65 Annex 3, §17(e)).</p>	<p>EB65 Ann3(17)</p>	<p><u>First response:</u> The definition of “records and documentation control process for each CPA under the PoA” is presented in the file “MANUAL DE OPERACIÓN DE LA CME”.</p> <p><u>Second response:</u> The numbering of each procedure has been corrected and added the name of the missing procedure in the table of contents. Attached file CAR_04 with the following documents:</p> <ul style="list-style-type: none"> • MANUAL DE OPERACION DE LA CME_version2 in pdf. • MANUAL DE OPERACION DE LA CME_version2 in format word. • MANUAL DE OPERACION DE LA CME_version2_with track changes. 	<p><u>First analysis:</u> The control process of records and documentation for each CPA has been presented. Nevertheless, the operation manual of the CME presents two “PROCEDIMIENTO 06”. One of them missing in the table of contents.</p> <p>CAR04 is not closed.</p> <p><u>Second analysis:</u> The Operation Manual of the CME has been corrected.</p> <p>CAR04 is closed.</p>
<p>CAR05: It has not been presented to the DOE the “measures for continuous improvements of the PoA management system” (EB 65 Annex 3, §17(f)).</p>	<p>EB65 Ann3(17)</p>	<p>The definition of “measures for continuous improvements of the PoA management system” is presented in the file “MANUAL DE OPERACIÓN DE LA CME”.</p>	<p>The measures for continuous improvements of the PoA management system have been presented.</p> <p>CAR05 is closed.</p>
<p>CAR06: PoA-DD v01, Section B.1, states 02/01/2012 as starting date, being the date the validation would have begun. However, PoA-DD and CPA-DDs were uploaded for global stakeholder consultation on 09/01/2012, as verified at http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/XO06D7GKLCHEBCL3Y2UDNK9UN71TNN/view.html.</p>	<p>EB33 Ann41</p>	<p>The starting date of the Programme of Activities was corrected in the new version of the PDD.</p>	<p>Starting date has been revised in PoA-DD v2, Section B.1.</p> <p>CAR06 is closed.</p>



VALIDATION REPORT

CAR07: Table of sources and gases in Section E.3, of PoA-DD v01, is not in accordance with ACM0002 v12.2.0. Same occurs in Section B.4 of both CPA-DDs.	EB33 Ann41 VVM79	Tables of sources and gases were corrected in Section E.3 and B.4 of the PoA-DD and CPA-DDs respectively.	Table of sources and gases has been adjusted in PoA-DD v2 and in v02 of both CPA-DDs. CAR07 is closed.
CAR08: Section E.7.2, in PoA-DD v01, presents a monitoring plan description which is not clearly in line with EG _{facility,y} table, in Section D.7.1, i.e. "... crosscheck the results with the measurements from a secondary meter." and "... recorded hourly...". Besides, QA/QC procedures to be applied are not aligned when comparing with both CPA-DDs v01, in Section B.6.1.	EB33 Ann41	The monitoring plan in Section E.7.2 was corrected to be in accordance with EG _{facility,y} table. QA/QC procedures were corrected in section B.6.1 of the new version of the CPA-DDs.	PoA-DD v2 and both CPAs v02 have been revised to align with Section D.7.1, PoA-DD v2. CAR08 is closed.
CAR09: Section E.7.2, in PoA-DD v01, under 2. Data Quality Control does not mention CDEC-SING.	EB33 Ann41	Both CDEC-SIC and CDEC-SING are included in Quality Control in sections E.7.1 and E.7.2 of the PoA-DD. Both CPA-DDs were accordingly adjusted in section B.6.1.	All documents have been revised to include reference to CDEC-SING. CAR09 is closed.
CAR10: PoA-DD v01, Section E.2, in the second applicability condition, refers to page 10, whereas page 11 is the correct one. Besides, adjust EGPJ,y, to be seen as EG _{PJ,y} .	ACM0002 v12.2.0	The applicability condition was corrected in the new version of the PoA-DD	Second applicability condition has been adjusted in Section E.2, PoA-DD v2. CAR10 is closed.
CAR11: PoA-DD v01, Section E.2, presents a seventh applicability condition which is not mentioned in ACM0002. Please, remove it.	ACM0002 v12.2.0	The applicability condition was removed in the new version of the PoA.	Non-applicable condition has been removed from Section E.2, PoA-DD v2. CAR11 is closed.
CAR12: PoA-DD v01, Section E.2, in the fourth applicability condition, presents a sentence, after the fifth bullet, that needs to be removed: "In case of hydro power plants, one of the following conditions must apply:".	ACM0002 v12.2.0	The sentence was deleted in the new version of the PoA-DD	Incorrect sentence has been removed from Section E.2, PoA-DD v2. CAR12 is closed.



VALIDATION REPORT

<p>CAR13: PoA-DD v01, Section E.2, does not address the applicability conditions of the relevant tools.</p>	<p>ACM0002 v12.2.0</p>	<p><u>First response:</u> The applicability conditions of the relevant tools were included in the new version of the PoA.</p> <p><u>Second response:</u> The applicability conditions have been presented in PoA-DD version 3, Section E.2.</p> <p><u>Third response:</u> The new version of the PoA DD and CPA DDs have been updated to be in accordance with ACM0002 version 12.3.0.</p> <p>Section E.2 has also been properly updated.</p>	<p><u>First analysis:</u> The applicability conditions of the relevant tools have not yet been presented.</p> <p>CAR13 is not closed.</p> <p><u>Second analysis:</u> The applicability conditions of the relevant tools have been presented.</p> <p>However, the second condition described in Section E.2 is in accordance with ACM0002 version 13.0.0 in spite of the PoA-DD mentioned ACM0002 version 12.2.0. Furthermore, the mentioned Option 2 is on page 10, not 11.</p> <p>CAR13 is not closed.</p> <p><u>Third analysis:</u> The new versions of PoA-DD and CPA-DDs have been properly updated to ACM0002 version 12.3.0.</p> <p>CAR13 is closed.</p>
<p>CAR14: PoA-DD v01, Section E.4, mentions a non-existent version of the EF Tool. Besides, different versions are mentioned among PoA-DD v01, CPA-DDs v01 and EF-SIC Calc spreadsheets. Finally, remove the word “that” from “...project activity <u>that</u> would have otherwise...”, to be exactly as described in the methodology.</p>	<p>ACM0002 v12.2.0</p>	<p>The version of the EF Tool has been corrected in the new versions of the PoA-DD, CPAs and EF calculation spreadsheet.</p> <p>The word “that” was removed to be exactly as described in the methodology.</p>	<p>EF Tool version number has been adjusted in all documents. Besides, “that” has been removed, as requested.</p> <p>CAR14 is closed.</p>



VALIDATION REPORT

<p>CAR15: In PoA-DD v01, Section E.6.2, under Calculation of $EG_{PJ,y}$, adjust methodology's version number (12.2.0.0). Besides, adjust data unit (MWh/y) of $EG_{PJ,y}$.</p>	<p>ACM0002 v12.2.0</p>	<p><u>First response:</u> The version number was corrected. The data unit for $EG_{PJ,y}$ (and also $EG_{facility,y}$) was corrected along the new versions of the PoA-DD and CPAs.</p> <p><u>Second response:</u> Data units $EG_{PJ,y}$ and $EG_{facility,y}$ have been corrected (MWh/yr), according to the methodology in: PoA-DD version 3 Specific CPA-DD version 3 Generic CPA-DD version 3</p>	<p><u>First analysis:</u> Methodology version number has been corrected. However, data unit of $EG_{PJ,y}$ and $EG_{facility,y}$ should be MWh/yr, according to methodology.</p> <p>CAR15 is not closed.</p> <p><u>Second analysis:</u> Data unit of $EG_{PJ,y}$ and $EG_{facility,y}$ has been corrected.</p> <p>CAR15 is closed.</p>
<p>CAR16: PoA-DD v01, in sections E.6.1 and E.6.2, does not name Step 1 of the EF Tool exactly as it appears in EB 63 Annex 19.</p>	<p>ACM0002 v12.2.0</p>	<p>The name of Step 1 was corrected in sections E.6.1 and E.6.2 of the new version of the PoA-DD</p>	<p>Name of Step 1 of EF Tool has been adjusted in sections E.6.1 and E.6.2 of PoA-DD v2.</p> <p>CAR16 is closed.</p>
<p>CAR17: PoA-DD v01, Section E.6.1, in Step 3, mentions twice total generation of the "national" grid, whereas in the first case it refers to SIC and in the second one, to SING.</p>	<p>ACM0002 v12.2.0</p>	<p>The reference to "national grid" was corrected in both cases.</p>	<p>"national grid" has been replaced by "SIC" and "SING", in Step 3, Section E.6.1, PoA-DD v2.</p> <p>CAR17 is closed.</p>
<p>CAR18: In PoA-DD v01, Section E.6.1, in Step 3, replace "low-cost" resources by "low-cost/must-run" resources, as per EF Tool.</p>	<p>ACM0002 v12.2.0</p>	<p>The reference to "low-cost" was changed to "low-cost/must-run" in the new version of the PoA-DD</p>	<p>"low-cost" has been replaced by "low-cost/must-run", in Step 3, Section E.6.1, PoA-DD v2.</p> <p>CAR18 is closed.</p>
<p>CAR19: In PoA-DD v01, Section E.6.2, in Step 3, the following sentence is not correct: "In both cases <i>ex ante</i> option will be applied, so it will be updated annually during monitoring".</p>	<p>ACM0002 v12.2.0</p>	<p>The sentence was replaced by the applicable condition for ex-ante calculation.</p>	<p>Sentence has been adjusted in Step 3, Section E.6.2, PoA-DD v2.</p> <p>CAR19 is closed.</p>



VALIDATION REPORT

CAR20: In PoA-DD v01, Section E.6.1, in Step 3, under <u>For SING connected projects</u> , replace “Simple Adjusted OM” by “Simple OM”.	ACM0002 v12.2.0	In section E.6.1 of the new version of the PoA-DD “Simple Adjusted OM” was replaced by “Simple OM” for SING connected projects.	For SING connected projects, in Step 3, Section E.6.1, PoA-DD v2, “Simple Adjusted OM” has been replaced by “Simple OM”. CAR20 is closed.
CAR21: In PoA-DD v01, Section E.6.2, in Step 4, after Equation [5], it is missing the description of “m”.	ACM0002 v12.2.0	The description of “m” was included after Equation [5] in Step 4, Section E.6.2 of the new version of the PoA-DD.	Missing description has been added in Step 4, Section E.6.2, PoA-DD v2. CAR21 is closed.
CAR22: In PoA-DD v01, Section E.6.2, in Step 4, first paragraph under <u>For SIC connected projects</u> refers to equation 8 of EF Tool, whereas correct equation number is 7. Reference numbers to equations 9, 13 and 14 also need correction. The correct EF Tool numbers are 8, 12 and 13.	ACM0002 v12.2.0	The equation numbers were corrected in section E.6.2, Step 4, of the new version of the PoA-DD.	Reference to equations numbers, as per the EF Tool, has been corrected in Section E.6.2, PoA-DD v2. CAR22 is closed.
CAR23: In PoA-DD v01, Section E.6.2, in Step 4, after Equation [6], adjust descriptions of “k” and “m”, to be in line with EF Tool.	ACM0002 v12.2.0	The description of “k” and “m” were corrected in the new version of the PoA-DD.	Descriptions of “k” and “m”, in Step 4, Section E.6.2, PoA-DD v2, have been adjusted. CAR23 is closed.
CAR24: In PoA-DD v01, Section E.6.2, in Step 5, replace “power generation” by “electricity generation”.	ACM0002 v12.2.0	“power generation” was replaced by “electricity generation” in Section E.6.2, Step 5, of the new version of the PoA-DD	“power generation” has been replaced by “electricity generation”, in Step 5, Section E.6.2, PoA-DD v2. CAR24 is closed.
CAR25: In PoA-DD v01, Section E.6.3, 1) incorrect data unit is presented for $FC_{i,m,y}$; and 2) incomplete description for $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$.	ACM0002 v12.2.0	The data unit for $FC_{i,m}$ was corrected in the new version of the PoA-DD and in new version of the CPA-DDs. The description for $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$ was completed in new version of the PoA-DD and in the new version of the CPA-DDs.	In all documents, data unit for $FC_{i,m,y}$ and descriptions of $FC_{i,m,y}$, $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$ have been adjusted. CAR25 is closed.



VALIDATION REPORT

CAR26: Some sheets of EF-SIC Calc spreadsheets present the fuel names in Spanish.	ACM0002 v12.2.0	The fuel names were translated in the EF-SIC Calc spreadsheets	Fuel names have been translated to English, in EF-SIC Calc spreadsheets v2. CAR26 is closed.
CAR27: Section D.7.1, in PoA-DD v01, and Section B.6.1, in both CPA-DDs v01, do not list $EF_{grid,CM,y}$ as a parameter to be monitored, opposed to what is required by ACM0002 v12.2.0.	ACM0002 v12.2.0	ACM0002 states that “the monitoring provisions in the tools referred to in this methodology apply”. The Tool to calculate the emission factor for an electricity system allows the ex-ante and ex-post options for the OM and for the BM. In the case of the proposed PoA every CPA will apply ex-ante option for both the OM and BM, so the grid emission factor will be fixed. Then $EF_{grid,CM,y}$ is not included as a parameter to be monitored.	Explanation has been accepted. CAR27 is closed.
CAR28: PoA-DD v01, Section A.4.1.2, does not provide a justification for the applicable geographical area being smaller than the host country. See paragraph 5 of the Tool for the demonstration and assessment of additionality v06.0.0.	Additionality Tool v06.0.0	Section A.4.1.2 of the PoA-DD requires a “Definition of the boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries) within which all CDM programme activities (CPAs) included in the PoA will be implemented (...)” then the provisions stated on paragraph 5 of the Tool for the demonstration and assessment of additionality are not applicable. Nevertheless the geographical area for the Common Practice Analysis in the demonstration of the additionality has been changed to include the entire host country in the PoA-DD and CPA-DDs .	Explanation has been accepted. CAR28 is closed.



VALIDATION REPORT

<p>CAR29: It is not clear whether or not investment analysis will always be applied for the demonstration and assessment of additionality of each CPA to be included in the PoA.</p> <ul style="list-style-type: none"> - In PoA-DD v01, Section A.2, Item 2, first paragraph states "... those projects that need additional income from CERs for its implementation because they are economically or financially unattractive or because they face institutional, financial and/or structural barriers. This leaves room to interpreting that it is either investment analysis or barrier analysis. - In PoA-DD v01, Section E.5.2, Step 3, it is stated that "Alternatively additionality can be demonstrated using a Barrier Analysis...". Once again, it leaves room to interpreting that it is either investment analysis or barrier analysis. - CPA-DD v01, Section B.3, Step 3, makes it clear barrier analysis may be applied or not. However, on top of that, the framework (PoA-DD and CPA-DD) presents the sub-steps of the investment analysis and has not done the same for barrier analysis. This leaves room to another interpretation: that additionality will either be demonstrated and assessed through investment analysis or investment and barrier analysis. 	<p>Additionality Tool v06.0.0</p>	<p>The additionality of a CPA under the PoA can be demonstrated using either investment analysis or barrier analysis. The new version of the PoA-DD and Generic CPA-DD includes the missing sub-steps for the Barrier Analysis.</p>	<p>PoA-DD v2 and CPA-DD v02 have been revised to present sub-steps for barrier analysis.</p> <p>CAR29 is closed.</p>
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VALIDATION REPORT

<p>CAR30: PoA-DD v01 and CPA-DDs v01 do not follow the steps prescribed in paragraph 47 of the Tool for the demonstration and assessment of additionality v06.0.0.</p>	<p>Additionality Tool v06.0.0</p>	<p><u>First response:</u> The Common Practice Analysis has been modified applying paragraph 47 of the Tool for the demonstration and assessment of additionality.</p> <p><u>Second response:</u> 1) Position (N_{all} and N_{diff}) has been corrected in both CPA-DDs version 3. 2) Central Hidroeléctrica Aysén has been removed from table 5 and adjusted the value of (N_{all} and N_{diff}) in "Specific CPA version 3".</p>	<p><u>First analysis:</u> PoA-DD v2 and both CPA-DDs v02 have revised to include the steps of paragraph 47 of the additionality tool. Nevertheless: 1) in Step 4 of the CPA-DDs, N_{diff} and N_{all} are inverted in "N_{diff} – N_{all}"; 2) Table 5, in CPA-DD Specific, presents a power plant, Hidroeléctrica Aysén, which is out of the +/-50% range. Adjust N_{all} and N_{diff}, accordingly.</p> <p>CAR30 is not closed.</p> <p><u>Second analysis:</u> 1) The equation "N_{all} – N_{diff}" has been corrected. 2) The power plant Hidroeléctrica Aysén has been deleted from Table 5 and N_{all} and N_{diff} has been adjusted accordingly.</p> <p>CAR30 is closed.</p>
<p>CAR31: The following issues have been found, comparing both CPA-DDs v01 (Generic and Specific):</p> <ul style="list-style-type: none"> - Identification of tables; - Text in sections A.2, B.2, B.3 (Sub-step 4a), B.5.2, C.2 and D.2; - Table name in Section A.4.1.2; - Tables in sections B.3 (sub-steps 2c and 4a), B.4 ("No" x "Yes/No") and B.5.3 (years have been specified in the Generic CPA-DD; also "0" x "[number]" for PE_y), and in Annex 3 ("Power plants with option A1"); - "[Conclusion]", before last paragraph of Sub-step 2c (Section B.3); 	<p>EB55 Ann38(13)</p>	<p><u>First response:</u></p> <ul style="list-style-type: none"> - The identifications of the tables has been corrected. - Text in sections A.2, B.2, B.5.2, C.2 and D.2 were corrected. In section B.3 the Sub-step 4a has been replaced by paragraph 47 of the additionality tool. - The table name in section A.4.1.2 was corrected. - Tables in B.3: As the table in sub-step 2c contains parameters included in the investment analysis and considering that the nature of the projects or funding can 	<p><u>First analysis:</u></p> <ul style="list-style-type: none"> - In first table of CPA-DD Generic v02, the distances should either be in meters (m) or left as a field to be informed in each CPA; - In A.2, compare "[Project Name] project" vs. "Chome wind farm"; in B.2, 3rd eligibility criteria, replace "or" by "neither"; regarding B.3, see Item 1, in CAR30; B.5.2 still needs some alignments; in D.2, compare "project" vs. "project and its participation in the carbon market",



VALIDATION REPORT

<ul style="list-style-type: none"> - In Section B.6.1 of the Generic CPA-DD, under 2. Data Quality Control, "CDEC-SIC or CDEC SING" is written as if were fixed; - Footnote 3, in Generic CPA-DD, Section B.6.1, presents a generic weblink for SING and a dated one (2010) for SIC; - Footnotes 4 and 5, in Generic CPA-DD, Section C.2, are not present in the Specific CPA-DD; - In Annex 1, of the Generic CPA-DD, "Represented by:" is blank, as if it were not to be filled out; - In Annex 3, "Operating Margin [year]" x "Operating Margin" and the sentence before table "Power plants with option A1"; - In Annex 3, Generic CPA-DD does not present three years for lambda; - In Annex 3, Specific CPA-DD, for lambda 2009 and 2008, does not present "No Low Cost Generation" in the tables after the lambda curves. 		<p>vary in the different projects it has been clarified that rows may be added or deleted if appropriate. Sub-step 4a has been replaced by paragraph 47 of the additionality tool. Table in B.4: it has been corrected in both documents to be consistent with the methodology. Table in B.5.3: the specific years have been replaced by "[year]"; "0" has been set as a fixed value for PEy and Leakage since it is fixed for any project under the PoA. Annex 3: it was clarified that columns can be added or deleted based on the fuels used.</p> <ul style="list-style-type: none"> - "[Conclusion]" was deleted before last paragraph of Sub-step 2c (Section B.3) - In Section B.6.1 of the Generic CPA-DD CDEC-SIC and CDEC-SING are marked as options. - Footnote 3 was deleted from the generic CPA-DD - Footnotes 3 and 4 of the generic CPA-DD are included in the new version of the Specific CPA-DD. - In "Represented by:" was added "[name]" - In both the generic and specific CPA-DD, Annex 3, the Operating Margin includes "[year-year]" format to reflect the 3-years period for an ex-ante calculation. - Under the headline "Operating Margin" the sentence "(repeat for every year of the OM calculation)" has been added to indicate that the complete process (including Lambda) shall be presented for the 3 years comprised in the calculations. <p>"No Low Cost Generation" has been included</p>	<p>in last paragraph;</p> <ul style="list-style-type: none"> - See headers of table under B.3, Sub-step 2c; in Annex 3 of CPA-DD Generic v02, there are two tables referring to year 2010; - See all instances where "operating margin" appears, in Annex 3; <p>CAR31 is not closed.</p> <p><u>Second analysis:</u></p> <ul style="list-style-type: none"> - The unit of distances in the first table of CPA-DD generic has been corrected. - The required corrections in Sections A.2, B.2, B.3, B.5.2 and D.2 of CPA-DD (generic and specific) have been made. - The required corrections in Sections B.3 and Annex 3 of CPA-DD (generic and specific) have been made. <p>However, in Annex 3, Operating Margin:</p> <ul style="list-style-type: none"> - Adjust the sentence "The Simple Method calculations for [year] are as follows" in the generic CPA-DD x "The Simple Adjusted Method calculations for [year] are as follows" in the specific CPA-DD for 2010 and 2009. - Correct the sentence "To display how the operating margin is calculated, the Simple Adjusted Method calculations for year 2008 are described" to be the same as presented in generic CPA-DD. - Adjust the sentence "Power plants
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VALIDATION REPORT

		<p>in the tables after the lambda curves.</p> <p><u>Second response:</u></p> <ul style="list-style-type: none"> - The unit ("Km" by "m") has been replaced in the first table of "Generic CPA-DD version 3." - Word "project" has been removed in section A.2 of "Generic CPA-DD version 3". In "Project Name" of "Specific CPA-DD version 3" is replaced "Chome wind farm" with "Chome Wind Farm CPA #1". "Or" is replaced by "neither" in Section B.2 of Generic CPA-DD version 3". <p>Requested adjustments have been made in Section B..5.2 of "Generic CPA-DD version 3" and Section D.2 of "Specific CPA-DD version 3"</p> <ul style="list-style-type: none"> - It is corrected table header in section B.3 (Sub-step 2c) on "Specific version 3 CPA-DD." It removes reference to the year 2010 in Annex 3 of "CPA-DD Generic Version 3". <p><u>Third response:</u></p> <ul style="list-style-type: none"> - The specific and generic CPA are correct, stating the Simple Method for SING projects and the Simple Adjusted Method for the ones in the SIC. - The sentence has been updated in the specific CPA-DD. - The sentence has been updated in the generic CPA-DD. - The table has been updated in the specific CPA-DD. 	<p>(option A1) in the generic CPA-DD x "Power plants with option A1" in the specific CPA-DD for 2010, 2009 and 2008.</p> <ul style="list-style-type: none"> - On 2009, table of option A2, is mentioned "Gen (MWh)" x "EG_{m,y} (MWh)". <p>CAR31 is not closed.</p> <p><u>Third analysis:</u></p> <p>The required corrections in Annex 3 of generic and specific CPA-DDs have been done.</p> <p>CAR31 is closed.</p>
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VALIDATION REPORT

CAR32: Incorrect class of Vestas turbines (ISC S) stated in Section A.2 of Specific CPA-DD v01.	EB33 Ann44	The Vestas turbine class was corrected in the new version of the specific CPA-DD.	CPA-DD v02, Section A.2, presents correct class of Vestas turbines. CAR32 is closed.
CAR33: In Section A.4.1.2, of Specific CPA-DD v01, Footnote 5 refers to incorrect source for the geographic coordinates. Besides, coordinates are shown in km ("K" should be in lower case), whereas Garrad Hassan's document 105413-CHSA-R-01 version A, in Table 5.2, shows in meters (m).	EB33 Ann42 EB55 Ann38(7a)	<u>First response:</u> Footnote 5 as well as the unit of the coordinates have been corrected in the new version of the Specific CPA-DD. <u>Second response:</u> It replaces "2th" by "2nd" in footnote 5 of "Specific CPA-DD version 3"	<u>First analysis:</u> Footnote 5 and geographic coordinates unit have been corrected in CPA-DD Specific v02. However, replace "2 th " by "2 nd ", in Footnote 5. CAR33 is not closed. <u>Second analysis:</u> The footnote 5 has been corrected. CAR33 is closed.
CAR34: Section A.4.1.2, of Specific CPA-DD v01, does not inform name/contact details of the entity/individual responsible for the CPA.	EB33 Ann42 EB55 Ann38(7a)	<u>First response:</u> The contact information has been included in the new version of the Specific CPA-DD. <u>Second response:</u> The information in Annex 1 and section A.4.1.2 has been corrected in "Specific CPA-DD version 3"	<u>First analysis:</u> Part of the information provided in Section A.4.1.2, CPA-DD Specific v02, is not in accordance with Annex 1. CAR34 is not closed. <u>Second analysis:</u> The information provided in Section A.4.1.2 is in accordance with Annex 1. CAR34 is closed.
CAR35: In Section A.4.4 of Specific CPA-DD v01, the crediting period is presented as beginning in 2013, whereas in Section A.4.3.1, the starting date of the crediting period is stated as 01/12/2012.	EB33 Ann42	To be consistent with the new chronogram of the project (See file "Chome schedule_Update 16-5-2012") the starting date has been changed in both section (also in section B.5.3)	Adjustments have been made in CPA-DD Specific v02 and ER Calc spreadsheets v2, in order to consider 01/05/2013 as the starting date of the crediting period. CAR35 is closed.



VALIDATION REPORT

CAR36: In Section B.5.1 of Specific CPA-DD v01, the source of data used for $FC_{i,m,y}$, $EG_{m,y}$ and $EG_{k,y}$ refers to CDEC-SIC and CDEC-SING, whereas Chome Wind Farm CPA will be connected to the SIC.	EB33 Ann42	<p><u>First response:</u> The reference to CDEC-SING was deleted in the new version of the Specific CPA-DD.</p> <p><u>Second response:</u> The reference to "CDEC-SING" was deleted in Section B.6.1. See the "Specific CPA-DD version 03."</p>	<p><u>First analysis:</u> Please, remove reference to CDEC-SING in Section B.6.1, CPA-DD Specific v02.</p> <p>CAR36 is not closed.</p> <p><u>Second analysis:</u> Reference to CDEC-SING in Section B.6.1 of specific CPA-DD has been removed.</p> <p>CAR36 is closed.</p>
CAR37: In Section B.5.1 of Specific CPA-DD v01, the web address informed in the source of data used for $NCV_{i,y}$ returns an error message.	EB33 Ann42	The web address was updated in the new version of the Specific CPA-DD.	<p>Web address for $NCV_{i,y}$ has been adjusted, in Section B.5.1, CPA-DD Specific v02.</p> <p>CAR37 is closed.</p>
CAR38: Specific CPA-DD v01, Section B.5.1, does not list value of $\eta_{m,y}$ applied for "Coal (subcritical, new)". Besides, adjust spelling of "CSBF". It should read as CFBS.	EB33 Ann42	In the new version of the Specific CPA-DD the value of $\eta_{m,y}$ applied for "Coal(subcritical, new)" was included. Also the spelling was adjusted to "CFBS"	<p>Value of $\eta_{m,y}$ applied for "Coal (subcritical, new)" has been listed in Section B.5.1, CPA-DD Specific v02.</p> <p>CAR38 is closed.</p>
CAR39: In ER Calc spreadsheets, <ER calculation Chome>, lines 2, 4 and 41 present parameters which are not identified as per PoA-DD v01 and CPA-DDs v01. Besides, data unit is missing for value in Line 2.	VVM89	The spreadsheet was corrected (ER CPA Chome- Wind PoA #1_version 2)	<p>Data unit and parameters identification have been adjusted in ER Calc spreadsheets v2.</p> <p>CAR39 is closed.</p>
CAR40: Both CPA-DDs, in Section B.6.1, under 4. Emission factor calculation , state $EF_{grid,CM,y}$ will be annually updated by the CME. However, according to Section E.6.2 of PoA-DD v01, ex ante option has been chosen.	VVM123	Both CPA-DDs were corrected to be consistent with the ex ante option defined in the PoA-DD.	<p>Both CPA-DDs, v02, Section B.6.1, have been corrected to reflect the <i>ex-ante</i> option for $EF_{grid,CM,y}$.</p> <p>CAR40 is closed.</p>



VALIDATION REPORT

CAR41: Specific CPA-DD v01, Section D.2, states 29/12/11 a publication date in El Sur journal, whereas correct date is 18/12/2011.	EB33 Ann42 EB55 Ann38(7g)	The date has been corrected in the new version of the Specific CPA-DD.	Incorrect date has been revised in Section D.2, CPA-DD Specific v02. CAR41 is closed.
CAR42: Specific CPA-DD v01, Section D.3, does not list a 3 rd comment, from Juan Carlos Jorquera Silva. Besides, clarify the mechanisms that resulted in the comments (i.e. meetings, newspapers, workshop etc).	EB33 Ann42 EB55 Ann38(7g)	The 3 rd comment, from Juan Carlos Jorquera Silva has been included. The summary of the comments received during the workshops were also included. It was also clarified that the comments made by the neighborhood council No 47 and Juan Carlos Jorquera Silva were directly submitted to the Conama Bio Bio office.	Additional comment from Juan Carlos Jorquera has been included in Section D.3, PoA-DD v2, and the mechanisms clarified. CAR42 is closed.
CAR43: Annex 3, of Specific CPA-DD v01, presents 1,848,568.60 MWh as total 2010 generation of power units registered as CDM project activities, whereas sheets <OM2010> and <BM 2010>, in EF-SIC Calc Spreadsheets, indicate 1,848,568.53 MWh.	EB33 Ann42	The value was corrected in the new version of the Specific CPA-DD.	Total 2010 generation value has been corrected in Annex 3, CPA-DD Specific v02. CAR43 is closed.
CAR44: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: "Be a greenfield on shore or off shore wind power plant (new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity).", that is related to EB 65 Annex 3, §14(c).	EB65 Ann3	The eligibility criterion has been included in Section B.2 of the generic CPA-DD Version 2.	Missing eligibility criterion has been added to Section B.2, CPA-DD Generic v02. CAR44 is closed.
CAR45: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: "No energy generating equipment is transferred from another activity, located in a non-annex I party and no existing equipment is transferred from the project to another activity". No clear relation to EB 65 Annex 3, §14.	EB65 Ann3	The eligibility criterion has been included in Section B.2 of the generic CPA-DD Version 2.	Missing eligibility criterion has been added to Section B.2, CPA-DD Generic v02. CAR45 is closed.



VALIDATION REPORT

CAR46: Generic CPA-DD v01, in Section B.2, presents a different text, <i>“Be connected to the Central Interconnected System (SIC) and or Great North Interconnected System (SING)”</i> , for the eligibility criterion which appears in PoA-DD v01 and Specific CPA-DD v01 as “During the operation phase, be connected to the Central Interconnected System (SIC) or to the Great North Interconnected System (SING) of Chile.”, that is related to EB 65 Annex 3, §14(i).	EB65 Ann3	The eligibility criterion has been corrected in Section B.2 of the generic CPA-DD Version 2	Eligibility criterion text has been revised, in Section B.2, CPA-DD Generic v02, to align with PoA-DD v2 and CPA-DD Specific v02. CAR46 is closed.
CAR47: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: “To avoid double counting of emission reductions each CPA will be uniquely identified and defined in an unambiguous manner by providing geographic information (e.g. coordinates).”, that is related to EB 65 Annex 3, §14(b).	EB65 Ann3	The eligibility criterion has been included in Section B.2 of the generic CPA-DD Version 2.	Missing eligibility criterion has been added to Section B.2, CPA-DD Generic v02. CAR47 is closed.
CAR48: Generic CPA-DD v01, in Section B.2, presents a different text, <i>“Have a project starting date after December 2011 (projected date for uploading the PoA-DD for Global Stakeholder Consultation)”</i> , for the eligibility criterion which appears in PoA-DD v01 and Specific CPA-DD v01 as “Have a project starting date after the date on which the PoA-DD is uploaded for Global Stakeholder Consultation.”, that is related to EB 65 Annex 3, §14(d).	EB65 Ann3	The eligibility criterion has been corrected in Section B.2 of the generic CPA-DD Version 2	Eligibility criterion text has been revised, in Section B.2, CPA-DD Generic v02, to align with PoA-DD v2 and CPA-DD Specific v02. CAR48 is closed.
CAR49: Generic CPA-DD v01, in Section B.2, does not mention the following eligibility criterion, which appears in PoA-DD v01 and Specific CPA-DD v01: “Comply with the conditions of the methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” version 12.2.0 as listed in section E.2 of the present PoA – DD.”, that is related to EB 65 Annex 3, §14(e).	EB65 Ann3	The eligibility criterion has been corrected in Section B.2 of the generic CPA-DD Version 2	Missing eligibility criterion has been added to Section B.2, CPA-DD Generic v02. CAR49 is closed.



VALIDATION REPORT

<p>CAR50: PoA-DD v01, Section A.4.2.2, states, as eligibility criterion, to “Have the Environmental Approval (Resolución de Calificación Ambiental, RCA)” and the Specific CPA-DD v01, Section B.2, “The Environmental Approval (Resolución de Calificación Ambiental, RCA)”. However, see CL05, since, PoA-DD v01, Section A.4.4.1, Item (i) h leads to the understanding an environmental approval may not be applicable. Besides, Generic CPA-DD v01, Section B.2, presents “Comply with the national environmental legislation”, as eligibility criterion. These are related to EB 65 Annex 3, §14(g).</p>	EB65 Ann3	The eligibility criterion has been adjusted in the PoA-DD version 2 and CPA-DDs version 2, clarifying that the RCA is applicable if the project is required to assess their environmental impacts by going through the SEIA (“Sistema de Evaluación de Impacto Ambiental” or Environmental Impact Assessment System) by the Law 19,300, as further explained in section C.3 of the PoA-DD.	Eligibility criterion related to environmental approval has been adjusted in PoA-DD v2 and in both CPA-DDs v02. CAR50 is closed.
<p>CAR51: There is no eligibility criteria in PoA-DD v01, Section A.4.2.2, neither in the Specific CPA-DD v01, Section B.2, covering “The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA”, as required by EB 65 Annex 3, §14(a). Generic CPA-DD v01 presents the following criterion: “Be located inside the Geographical Boundary of the PoA, as defined in section A.4.1.2”.</p>	EB65 Ann3	The eligibility criterion has been included in Section B.2 of the Specific CPA-DD Version 2 and in Section A.4.2.2 of the PoA-DD version 2.	Missing eligibility criterion has been added to Section B.2, CPA-DD Specific v02, and Section A.4.2.2, PoA-DD v2. CAR51 is closed.



VALIDATION REPORT

<p>CAR52: Poa-DD v01 and both CPA-DDs v01 do not cover the following under the eligibility criteria, as required by EB 65 Annex 3, §14:</p> <ul style="list-style-type: none"> - “(h) Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance”; - “(j) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys”; - “(k) Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA”; and - “(l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories”. 	EB65 Ann3	<p><u>First response:</u> The eligibility criterion “(h)” has been included in the PoA-DD version 2 and CPA-DDs version 2, see document “DECLARACION JURADA.pdf”</p> <p>The eligibility criterion “(j)” is not applicable because de PoA does not consider sampling The eligibility criterion “(k)” is not applicable because the PoA does not apply specific provisions for small-scale or microscale projects categories. The eligibility criterion “(l)” is not applicable because the PoA does not use methodologies or specific provisions for small-scale or microscale project categories.</p> <p><u>Second response:</u> The reasons for not applying the criteria (j) (k) and (l) are included in "PoA-DD version 3".</p>	<p><u>First analysis:</u> Missing eligibility criterion has been added to Section B.2, in both CPA-DDs v02, and to Section A.4.2.2, in PoA-DD v2. Nevertheless, PoA-DD v2, Section A.4.2.2, does not document the reason for the non-applicability of criteria (j), (k) and (l).</p> <p>CAR52 is not closed.</p> <p><u>Second analysis:</u> Section A.4.2.2 of PoA-DD has been documented the reason for the non-applicability of criteria (j), (k) and (l).</p> <p>CAR52 is closed.</p>
<p>CAR APG 01: In the financial spreadsheet, please verify the correctness of cell “E13” in sheet “IRR Project”. Also, clarify that the values in cells “D4” to “D10” in sheet “Investment” are expressed in USD.</p>	EB62 Ann5	<p>The value presented in the cell “E13” is correct; this value differs from the other annual SG&A Cost because it includes the second payment for the land purchase. For clarity the second payment for the land purchase has been shown in a separate cell in sheet “Investment” (cell “F54”) and a note included in sheet “IRR Project”.</p>	<p>DOE checked the modifications and accepts the response.</p> <p>CAR APG 01 is closed.</p>
<p>CAR APG 02: The economic assessment of the project must not consider the revenues which come from CERs. Besides adjusting IRR project calculations, remove CERs Price from sheet “Investment”.</p>	Additionali ty Tool v06.0.0	<p>The version 2 of the IRR calculation (see file “Chome Wind Farm_ IRR Project_version 2”) does not includes any reference to the CDM income.</p>	<p>DOE checked the modifications and accepts the response.</p> <p>CAR APG 02 is closed.</p>



VALIDATION REPORT

CL01: Please, clarify the status of the relevant letters of approval related to "Wind Programme of Activities in Chile".	VVM45 EB55 Ann38(9)	The Letter of Approval was issued on 10/05/2012 (See file "Letter of Approval_LoA.pdf").	Relevant letter of approval has been issued by Chilean DNA on 10/05/2012. CL01 is closed.
CL02: Please, clarify the status of the relevant letters of authorization related to "Wind Programme of Activities in Chile".	EB55 Ann38(10)	In Chile a PoA does not require any specific authorization. The only related document is the Letter of Approval, which was issued on 10/05/2012 (See file "Letter of Approval_LoA.pdf").	Relevant letter of approval has been issued by Chilean DNA on 10/05/2012. CL02 is closed.



VALIDATION REPORT

<p>CL03: Please, inform the source of 1%, stated as the percentage of wind energy capacity installed in Chile in 2010, as well as the sources for SING, AYSEN and MAGALLANES installed capacities, informed in table in Section A.2, of PoA-DD v01.</p>	<p>EB33 Ann41</p> <p>EB55 Ann38(6)</p>	<p><u>First response:</u> The values in section A.2 were updated to 2011. All the values presented are sourced from CNE (Comisión Nacional de Energía). In the second paragraph it has been clarified that the percentage (updated to 1.2%) is based on the data presented in the table.</p> <p><u>Second response:</u> In Section A.2, PoA-DD, the total wind installed capacity has been corrected (of 167.8 MW to 198.68 MW), and the total installed capacity in Chile has been corrected (of 15,984.8MW to 16,480.3 MW). Therefore, 198.68 divided by 16,480.3 is 1.2 %.</p> <p>The AYSEN values include LOS LAGOS.</p> <p><u>Third response:</u> - The new version of the PoA-DD, has been updated from 167.8 MW to 198.68 MW. - The values have been corrected for the cases of Thermal and Hydro installed capacity.</p>	<p><u>First analysis:</u> In Section A.2, PoA-DD v2, 167.8 divided by 15,984.8 does not result in 1.2 %. Besides, total SIC value should be 12,365.1. Finally, please, confirm whether AYSEN values include LOS LAGOS.</p> <p>CL03 is not closed.</p> <p><u>Second analysis:</u> The values have been corrected and the information about LOS LAGOS has been included.</p> <p>However, Section A.2 of PoA-DD: - In second paragraph before the table "Installed Capacity in Chile, 2011 (MW)" the value 167.8 is still mentioned. - In the table "Installed Capacity in Chile, 2011 (MW)", the total of Thermal and Hydro does not result in 10,431.0 and 5,386.0 using the values presented for each system.</p> <p>CL03 is not closed.</p> <p><u>Third analysis:</u> The required corrections in Section A.2 of PoA-DD have been done.</p> <p>CL03 is closed.</p>
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VALIDATION REPORT

CL04: Please, in Section A.4.2.1 of PoA-DD v01, add some more information – in a clear and simple way – on the technology to be employed by the CPA (e.g. foundation, tower, nacelle, rotor blades, hub etc). The World Wind Energy Association, a well know reference, may be consulted for that purpose.	EB33 Ann41 EB55 Ann38(6f)	Information on the technology to be employed was included in the new version of the PoA-DD	Additional information has been provided in Section A.4.2.1, PoA-DD v2, on the technology to be employed by the CPA. CL04 is closed.
CL05: Please, for the recording system for each CPA, I Section A.4.4.1 of PoA-DD v01, clarify why an “Environmental Approval” may not be applicable.	EB33 Ann41	Environmental Approval (“Resolución de Calificación Ambiental”, RCA) is only applicable for those projects which must formally assess their environmental impacts by going through the Environmental Impact Assessment System (“Sistema de Evaluación de Impacto Ambiental”, SEIA), as described in section C.3 of the PoA-DD. A clarification sentence was included in the new version of the PoA-DD.	Clarification has been added to Item (i) h, in Section A.4.4.1, PoA-DD v2. CL05 is closed.
CL06: Please, replace “wither” by “either”, in Section A.4.4.1 of PoA-DD v01, under Item (ii).	EB33 Ann41 EB65 Ann3(17)	The word was corrected in the new version of the PoA-DD.	In PoA-DD v2, Section A.4.4.1, “wither” has been replaced by “either”. CL06 is closed.
CL07: Please, clarify whether the “control spreadsheet” mentioned in Section A.4.4.2 of PoA-DD v01 corresponds to the same “electronic database” mentioned in Section A.4.4.1, under Item (i). In case they are supposed to be the same document, the control spreadsheet should contain information (from a. to h.) as presented in Section A.4.4.1.	EB33 Ann41 EB55 Ann38(6k)	The control spreadsheet (Section A.4.4.2) and the electronic database (Section A.4.4.1) are not the same: The first one intends to avoid double accounting during the monitoring periods by registering the verification period of each CPA that is part of every monitoring report, whereas the electronic database intends to control what projects are included as CPAs under the PoA.	Clarification provided. CL07 is closed.
CL08: Please, clarify the relevance of Category “Letter (a)”, in Section C.3, of PoA-DD v01, for a PoA of wind power plants.	EB33 Ann41	Category “Letter (a)” was removed from section C.3 in the new version of the PoA-DD.	Non-applicable category has been removed from C.3, PoA-DD v2. CL08 is closed.



VALIDATION REPORT

<p>CL09: Please, inform the source of “over 23 kV”, in Category “Letter (b)”, in Section C.3, of PoA-DD v01, since it is not part of Law 19,300.</p>	<p>EB33 Ann41</p>	<p><u>First response:</u> Law 19,300 made reference to “high voltage transmission lines”. The definition of 23 kV is made in the “Reglamento del Sistema de Evaluación de Impacto Ambiental”, Supreme Decree N° 95/01, Article 3 letter (b) The Supreme Decree is available at http://www.leychile.cl/Navegar?idNorma=205385</p> <p><u>Second response:</u> The web address has been included in “PoA-DD version 3”</p>	<p><u>First analysis:</u> Source of information has been provided and confirmed. Please, include web link address in PoA-DD v2.</p> <p>CL09 is not closed.</p> <p><u>Second analysis:</u> The web link address has been included.</p> <p>CL09 is closed.</p>
<p>CL10: Please, clarify, in the last paragraph of Section C.3, in PoA-DD v01, what “SEIA” stands for.</p>	<p>EB33 Ann41</p>	<p>The “SEIA” meaning was clarified in section C.3 of the new version of the PoA-DD.</p>	<p>Extended name for SEIA has been included in Section C.3, PoA-DD v2.</p> <p>CL10 is closed.</p>
<p>CL11: Please, clarify how exactly the “stakeholder consultation [...] defined in articles 49 to 53 of Law N° 19,300”, as mentioned in Section D.1 of PoA-DD v01, fulfils the requirement to be validated, as described in VVM’s §128, considering the definition of stakeholders, as per EB 66 Annex 63 (Glossary of CDM Terms v06.0). As part of the clarification, inform whether or not – including when and where – the relevant Specific CPA design document is made available to the stakeholders to comment on.</p>	<p>EB33 Ann41</p> <p>EB55 Ann38 (6m)</p>	<p><u>First response:</u> The reference was corrected in the new version of the PoA-DD since the articles regulating the stakeholder consultation are not in Law 19,300 but in the Environmental Impact Assessment System Regulation.</p> <p>It is not considered to make available the specific CPA to the stakeholders before its inclusion in the PoA.</p> <p><u>Second response:</u> Attached document “Decreto 95_Reglamento del Sistema de Evaluación de Impacto Ambiental” (“Decree 95_Environmental Impact Assessment System Regulation”) http://www.leychile.cl/Navegar?idNorma=205385</p>	<p><u>First analysis:</u> Please, provide copy of the Environmental Impact Assessment System Regulation, especially the part which is relevant to stakeholder consultation.</p> <p>CL11 is not closed.</p> <p><u>Second analysis:</u> A copy of the Environmental Impact Assessment System Regulation has been provided and it has been accepted by the DOE.</p> <p>CL11 is closed.</p>



VALIDATION REPORT

CL12: Please, adjust the last paragraph of Section D.1, of PoA-DD v01, i.e. replace “facilities” by “facilitates” and “made interviews” by “make interviews”.	EB33 Ann41 EB55 Ann38 (6m)	The words were corrected in the new version of the PoA-DD.	Editorial corrections have been made in Section D.1, PoA-DD v2. CL12 is closed.
CL13: Please, adjust expression “will <u>design</u> a CDM project manager”, in first paragraph of Section E.7.2, in PoA-DD v01, and of Section B.6.1, in both CPA-DDs v01.	EB33 Ann41	The expression was corrected in the PoA-DD and CPA-DDs	Expression “will <u>design</u> a CDM project manager” has been adjusted in Section E.7.2, PoA-DD v2, and in Section B.6.1, in both CPA-DDs v02. CL13 is closed.
CL14: Please, replace “plant” by “plant/unit”, in the first paragraph of Section E.4, in PoA-DD v01, in order to align it to the methodology.	ACM0002 v12.2.0	The word was changed in Section E.4 of the new version of the PoA-DD.	“plant” has been replaced by “plant/unit”, in Section E.4, PoA-DD v2. CL14 is closed.
CL15: Please, inform sources of both SIC and SING tables, presenting 2006-2010 low cost and no low cost generation data. Besides, clarify how has <i>Carbomet</i> data, from EF-SIC Calc Spreadsheet, been used in the calculation of low cost/must run SIC generation. Adjust data accordingly.	ACM0002 v12.2.0	The sources are included in the new version of the PoA-DD. Carbomet was included among low cost generation (hydropower), based on the information in page 29 of CDEC-SIC yearbook 2011 (available at http://www.cdec-sic.cl/datos/anuario2011/espanol/xlsesp/cdec_sic_espanol_2011.pdf)	Clarification has been provided on <i>Carbomet</i> and sources have been included in Section E.6.1, PoA-DD v2. CL15 is closed.
CL16: Please, clarify why have IPCC default values been preferred over “values provided by the fuel suppliers” or “regional or national average default values”, for $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$.	ACM0002 v12.2.0	The clarification has been included in the new version of the PoA-DD and new version of the CPA-DDs.	A justification for the choice of data for $EF_{CO2,i,y}$ and $EF_{CO2,m,i,y}$ has been provided in Section E.6.3, PoA-DD v2, and in Section B.5.1, in both CPA-DDs v02. CL16 is closed.



VALIDATION REPORT

CL17: Please, clarify why have Annex 1 default values been preferred over “documented manufacturer’s specifications” or “data from the utilities, the dispatch center or official records”, for $\eta_{m,y}$.	ACM0002 v12.2.0	The clarification has been included in the new version of the PoA-DD and new version of the CPA-DDs.	A justification for the choice of data for $\eta_{m,y}$ has been provided in Section E.6.3, PoA-DD v2, and in Section B.5.1, in both CPA-DDs v02. CL17 is closed.
CL18: Please, provide an outline of the application of the steps of the Tool to calculate the emission factor for an electricity system, making reference to each of the 17 sheets of the EF-SIC Calc spreadsheets. The idea is to clear and easily understand the sequence that has been followed – from one sheet to another, and from one table to another -, and the specific weblinks of the sources used in each sheet. Refer to the following 17 sheets: from <EF SIC 2010> to <Lamb 08>.	ACM0002 v12.2.0	The details to the emission factor calculation were included in the file “EMISSION FACTOR CALCULATION”	An outline of the application of the steps of the Tool to calculate the emission factor for an electricity system has been provided. CL18 is closed.
CL19: It is recommended that, in Section E.6.1, of PoA-DD v01, <u>Leakage</u> be presented at the same level of <u>Project emissions</u> , <u>Baseline emission</u> and <u>Emission Reductions</u> , just the same way it has been presented in Section E.6.2.	ACM0002 v12.2.0	Leakage is presented at the same level of project emissions, baseline emissions and emission reductions in the new version of the PoA-DD.	Text adjustment has been made when referring to leakage, in Section E.6.1, PoA-DD v2. CL19 is closed.
CL20: Please, specify which “official information” may be used for cross-checking purposes, as mentioned in Section D.7.1, in PoA-DD v01, for $EG_{facility,y}$, under QA/QC procedures to be applied.	ACM0002 v12.2.0	It has been clarified in the new version of the PoA-DD and in the new version of the CPA-DDs that the cross-check will be made against the monthly statistics of the CDEC (SIC or SING as applicable) and/or invoices.	“Official information” has been specified in Section D.7.1, PoA-DD v2, and in Section B.6.1, in both CPA-DDs v02. CL20 is closed.



VALIDATION REPORT

<p>CL21: Please, inform which Chilean regulation(s) is(are) applicable to the calibration of the electricity meters.</p>	<p>ACM0002 v12.2.0</p>	<p>The requirements and procedures for the calibrations of the electricity meters should be defined by each CDEC (CDEC-SIC and CDEC-SING) and approved by the National Energy Commission (CNE).</p> <p>In the case of the CDEC-SING, the “PROCEDIMIENTO DP SISTEMAS DE MEDIDA DE ENERGÍA PARA TRANSFERENCIA ECONÓMICAS” (see file “RESOLUCION_EXENTA_N_108_1_”) was approved by the CNE on February 28th 2012, and states in Article 11 that the electricity meters shall be verified at least once every 3 years.</p> <p>http://cdec2.cdec-sing.cl/pls/portal/cdec.pck_proc_dodp_pub.proced_hist_dodp_item?p_id=17&p_clasif_direcc=2&p_tipo_proc=DP&p_de_donde=W</p> <p>In the case of CDEC-SIC at the moment there is no specific procedure or requirement defining calibration or verification intervals.</p> <p>Considering the absence of applicable regulations for one of the electricity systems, in the monitoring tables of the new version of the PoA-DD and new version of the CPA-DDs the alternative “or in absence of applicable regulation, following the manufacturer specifications”</p>	<p>A regulation exists for the calibration of energy meters under CDEC-SING. On the other hand, there is no regulation under CDEC-SIC. PoA-DD v2 and both CPA-DDs v02 have been adjusted.</p> <p>CL21 is closed.</p>
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VALIDATION REPORT

<p>CL22: Please, inform which legal authorizations exist for the implementation of Chome Wind Farm (excluding environmental ones, as they are covered in Section C of the Specific CPA-DD). Besides, inform whether contract with the distribution company, CGE, has already been signed. Provide evidences of all information.</p>	<p>EB33 Ann44</p>	<p><u>First response:</u> A summary of the authorizations required and their status is presented in the document "PERMITS REQUIRED FOR CHOME WIND FARM.pdf" provided to the Audit Team.</p> <p>Whether contract with the distribution company, CGE, has still not been signed. It is expected to be signed by the end of June 2012.</p> <p><u>Second response:</u> The contract with CGE distribution company for the construction of the transmission line has not been yet signed; it is in final stages of legal, administrative and commercial procedures. Contract signature is expected in October 2012.</p>	<p><u>First analysis:</u> Please, provide copy of the contract with the distribution company, CGE, since it was expected to be signed by the end of June 2012.</p> <p>CL22 is not closed.</p> <p><u>Second analysis:</u> The date of signature has been updated to October 2012 in the specific CPA-DD.</p> <p>CL22 is closed.</p>
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VALIDATION REPORT

<p>CL23: Please, update starting date of the CPA and provide evidence to confirm it.</p>	<p>EB33 Ann42</p>	<p><u>First response:</u> As the purchase of the turbines (starting date) has been delayed the starting date has been updated in the CPA, corresponding to the sign of the EPC contract, which is expected to be on June 29th 2012. A new schedule is provided to the Audit Team (see file "Chome schedule_Update 16-5-2012.pdf").</p> <p><u>Second response:</u> The EPC contract has not yet been signed, is in the final stage of "Due Diligence" process. Contract signature is expected in October 2012. Updated schedule of Punta Chome project attached.</p>	<p><u>First analysis:</u> Please, provide copy of the EPC contract, since it was expected to be signed by the end of June 2012.</p> <p>CL23 is not closed.</p> <p><u>Second analysis:</u> The date of signature has been updated to October 2012 in the specific CPA-DD.</p> <p>CL23 is closed.</p>
<p>CL24: Please, provide implementation schedule of Chome Wind Farm CPA, in order to confirm estimated starting date of the crediting period. Besides, inform to which event 01/12/2012 corresponds.</p>	<p>EB33 Ann42</p>	<p>The starting date of the crediting period will correspond to the end of the start-up of the wind farm. A new schedule is provided to the Audit Team (see file "Chome schedule_Update 16-5-2012.pdf". The starting date of the crediting period has been updated in the CPA, as well as the related ER calculations (see file "ER CPA Chome- Wind PoA #1_version 2.xlsx".</p>	<p>CPA's implementation schedule has been provided and relevant event informed.</p> <p>CL24 is closed.</p>



VALIDATION REPORT

CL25: Please, adjust sentence after table, in Section B.4 of Specific CPA-DD v01, and provide detailed information on the proof that the CPA is located within the geographical boundary of the registered PoA, as defined in Section A.4.1.2 of PoA-DD v01.	EB33 Ann42	The sentence was adjusted. As a proof that the project is within the geographical boundary, page 4 of the Resolución de Calificación Ambiental (RCA) and pages 10, 13 and 22 of the Environmental Impact Assessment can be checked (see files "RCA_EIA_Parque_Eolico_Chome" and "SW3P_PCH_107_Environmental Impact Studies Punta Chome").	Sentence has been adjusted, in Section B.4, PoA-DD v2, and documented evidence has been provided on CPA location. CL25 is closed.
CL26: Please, specify, in Section B.5.1 of Specific CPA-DD v01, the "mass or volume unit" in the data unit for $NCV_{i,y}$, for which the values applied correspond.	EB33 Ann42	In has been clarified in section B.5.1 of the new version of the PoA-DD that unit corresponds to Tons.	Data unit for $NCV_{i,y}$ has been specified, in Section B.5.1, CPA-DD Specific v02. CL26 is closed.
CL27: Please, in Section B.5.2 of both CPA-DDs v01, under Project emissions (PE_y) , let it clear that water reservoirs are from hydropower plants. Besides, adjust last sentence of the paragraph on project emissions.	VVM89	The clarification has been made in section B.5.2 of the new version of the CPA-DDs The last sentence has been adjusted.	First paragraph of Section B.5.2, in both CPA-DDs v02, has been adjusted. CL27 is closed.
CL28: Please, make it clear, in the text of Section C.2, of Specific CPA-DD v01, that RCA stands for "Resolución de Calificación Ambiental".	EB33 Ann42	The reference to "RCA" has been deleted in section C.2.	The text in Section C.2 of Specific CPA-DD has been cleared. CL28 is closed.



VALIDATION REPORT

<p>CL29: Please, clarify how exactly the "stakeholder consultation [...] defined in articles 49 to 53 of Law N° 19,300", as well as the mechanisms mentioned in Section D.2 of the Specific CPA-DD v01, fulfil the requirement to be validated, as described in VVM's §128, considering the definition of stakeholders, as per EB 66 Annex 63 (Glossary of CDM Terms v06.0). As part of the clarification, inform whether or not – including when and where – the relevant Specific CPA design document was made available to the stakeholders to comment on.</p>	<p>EB33 Ann42</p> <p>EB55 Ann38(7g)</p>	<p><u>First response:</u> The reference was corrected in the new version of the CPA-DDs since the articles regulating the stakeholder consultation are not in Law 19,300 but in the Environmental Impact Assessment System Regulation.</p> <p>The specific CPA was not made public to the stakeholders before its inclusion in the PoA.</p> <p><u>Second response:</u> Attached document "Decreto 95_Reglamento del Sistema de Evaluación de Impacto Ambiental" ("Decree 95_Environmental Impact Assessment System Regulation") http://www.leychile.cl/Navegar?idNorma=205385</p>	<p><u>First analysis:</u> Please, provide copy of the Environmental Impact Assessment System Regulation, especially the part which is relevant to stakeholder consultation.</p> <p>CL29 is not closed.</p> <p><u>Second analysis:</u> A copy of the Environmental Impact Assessment System Regulation has been provided and it has been accepted by the DOE.</p> <p>CL29 is closed.</p>
<p>CL30: Please, adjust page numbers of CONAMA's references in the footnotes of the Specific CPA-DD v01. Besides, it has not been possible to find information related to Footnote 28.</p>	<p>EB33 Ann42</p> <p>EB55 Ann38(7g)</p>	<p>The page numbers of the CONAMA's references was adjusted in the new version of the CPA-DD</p> <p>The link to footnote 30 was included in the new version of the CPA-DD</p>	<p>Page numbers of CONAMA's references have been adjusted in the footnotes of CPA-DD Specific v02. Besides, a web link address has been added to Footnote 30 (former Footnote 28).</p> <p>CL30 is closed.</p>



VALIDATION REPORT

CL31: Please, clarify, in Section D.4 of Specific CPA-DD v01, how due account was taken of the specific comments received.		EB33 Ann42 EB55 Ann38(7g)	<u>First response:</u> In section D.4 of the new version of the Specific CPA-DD it has been clarified how due account was taken of the specific comments received. <u>Second response:</u> The word "wing" has been replaced by "wind" in "Specific CPA-DD version 3".	<u>First analysis:</u> It has been clarified, in Section D.4 of CPA-DD Specific v02, how due account was taken of the specific comments received. Nevertheless, replace “wing” by “wind”. CL31 is not closed. <u>Second analysis:</u> The word “wing” has been replaced by “wind”. CL31 is closed.
CL APG 01: Please provide the following clarifications related to the input values used in the economic assessment:		EB62 Ann5	<u>First response:</u> LOAD FACTOR The decimal number was included in the CPA. TOTAL INVESTMENT Transmission System: the value has been corrected in the new version of the IRR spreadsheet. Project Management and Engineering: The value is an estimation made by the PP based on the Study for communications and conection to the CDEC (document "Términos de referencia: 'Especificaciones Técnicas Generales y Particulares, del Sistema de Telecomunicaciones para Conectar al SIC el Parque Eólico Punta Chome'), the cost of two professionals and administrative expenditures as detailed in the spreadsheet “Project Management and Client Engineering	<u>First analysis:</u> - Load Factor: DOE The correction has been made - Transmission System: DOE checked the values and accepts the response - PME: DOE could not find the file 'Especificaciones Técnicas Generales y Particulares, del Sistema de Telecomunicaciones para Conectar al SIC el Parque Eólico Punta Chome'. Also, provide evidences for the spreadsheet “Project Management and Client Engineering (PMCE).xlsx” Provision: please clarify why the percentage of 2% was adopted. Payments done: DOE checked the document and accepts the response Energy price: DOE checked the average calculation and accepts the response
Load Factor	The value informed in "GL Garrad Hassan (2011). Report from “Analysis of energy production of wind power plant Chome (Chile) from 02/11/2011, number 105413-CHSA-R-01.pdf", p.11 is 33.4%. Please add the decimal number in the CPA DD (page8).			



VALIDATION REPORT

Total Investment	<p>Transmission System: The value stated in the financial spreadsheet is 3,820,007 USD. However, the document "CGE (2011). Proposal from CGE Distribution for modifications in the transmission system for the wind project Chome, October 6th, 2011. Formal document GC -271/2011", p.2, states that the value is 75,760 UF + IVA (19%). Using the value for UF of 22,213.43 (11/30/2011) and the exchange rate of 508,44 (CH/USD), we get 3,938,790.13 USD. Please clarify if the calculation is correct</p>	<p>(PMCE).xlsx" provided to the audit team.</p> <p>The value of the UF was corrected to the value on 02/11/2011</p> <p>The 18 month period was an initial estimation of the time required, considering 3 months before the starting of construction (required for the installation tasks, construction permits and logistics) plus 12 months of construction plus 3 months for the commissioning and connection to the SIC.</p>	<p>O&M costs: DOE checked the value in the spreadsheet and accepts the response</p> <p>SG&A and Variable Costs: DOE accepts the response</p> <p>Land Rent: DOE accepts the response</p> <p>Investment Decision Date: DOE has checked the document and accepts the response</p> <p>CL APG 01 is not closed.</p>
	<p>Project Management and Engineering: Please provide evidence for the values of Project Management and Client Engineering, totaling 614,940 USD. Besides, document "Términos de referencia: 'Especificaciones Técnicas Generales y Particulares, del Sistema de Telecomunicaciones para Conectar al SIC el Parque Eólico Punta Chome", dated 02/11/2011, from Electrónica del Pacífico S.A., informs value of UF 3,300. However, value of 22,200 does not correspond to the one on 02/11/2011, verified at http://www.sii.cl/pagina/valores/uf/uf2011.htm (Servicio de Impuestos Internos). Also clarify the reason why it's used</p>	<p>Provision: The item "Provision" was estimated by Seawind as a cost to cover any unforeseen event or contingencies. This estimation corresponds to a 2% of the investment (including EPC price, Transmission Line, Land Cost, Project Management and Engineering and Payment Done) resulting in USD 475.903, which was rounded off to USD 500,000.</p> <p>Payments Done: The investment analysis was performed with a preliminary "Informe de Gastos Proyecto Pta Chome" dated 30-12-2011. The PDF file originally presented to the DOE was the definitive version dated 30-01-2012 (note that there is no variations in the values between both documents). The file "Payments Done_Documento de Pagos Realizados.pdf" presents both documents.</p> <p>As a consequence of the changes</p>	<p><u>Second analysis:</u> DOE checked all documents and agrees with PP's evidences.</p> <p>However, please consider the fact that documents "Costo arriendo de oficina " and "Factura pasaje aéreo " cannot be used as an evidence, since its date is after the investment decision date (Jan/12).</p> <p>CL APG 01 is not closed.</p> <p><u>Third analysis:</u> Since PP has decided to eliminate the referred office and transportation costs, which is conservative in the view of validation process, DOE accepts the response.</p> <p>CL APG 01 is closed.</p>



VALIDATION REPORT

	18 months for the calculations		<p>mentioned before the Total Investment was corrected in the CPA.</p> <p>ENERGY PRICE Effectively the average energy price for the period 2012-2030 is 91.15 USD/MWh. Nevertheless it is expected that the project will start operations in 2013 so the average price should be for the period 2013-2030: 90.5 USD/MWh, which is the value used for the IRR calculations. The price estimation is made for long term and corresponds to Marginal Costs. The value used in the IRR calculations is the average value for the period 2013-2030 so it is not adjusted for the future.</p> <p>O&M COSTS The value was corrected from 29,500 USD to 29,300 USD in the spreadsheet, so the project IRR changes.</p> <p>SG&A COSTS / VARIABLE COSTS The values used (2.5% and 2.0% of the energy sales) are a conservative estimation of the costs made by the project participant based on the registered CDM project "Monte Redondo Wind Farm Project". This Project uses SG&A costs and Variable Costs of 6.7% y 1.75% respectively, giving a total of 8.45% of the energy sales. In the case of the Specific CPA the sum of SG&A costs and Variable Costs gives a total of 4,5% of the energy Sales. SG&A costs (2.5% of the energy sales)</p>	
	Provision: Please specify the source of the value informed (500,000 USD) and the date of reference			
	Payments Done: Please inform the date of reference for the document "Informe de Gastos Proyecto Pta Chome.PDF".			
	<p>Energy Price</p> <p>Please clarify how was calculated the price of 90.5 USD/MWh, based on the document Synex (2011). "Marginal cost projection in the SIC". Preliminary report, average of energy prices of table No 9, p.12. The average of values of the referred table is 91.15 USD/MWh. Also, in the Ley General de Servicios Eléctricos (Electricity Services General Law), Article 165, letter (d), it's stated that energy prices can be adjusted, regarding the return pre-tax of 10% p.y., among other factors. Please specify if the price informed can be adjusted in the future, and, if yes, how it would be done.</p>			



VALIDATION REPORT

O&M Costs	In document "INV_PCH_204_Turnkey_Supply_& Maintenance_V100-1.8MW_Vestas.pdf", page 9, the value for O&M costs for years 1-4 is 29,300 USD, instead of 29,500 USD as stated in the spreadsheet. Please clarify the difference.	correspond to USD 59,730 per year (USD 4,595 per month) which barely covers the salary of an Administrator.
SG&A costs	Please provide evidences for the value of 2.5% of energy sales.	Variable Costs (2.0% of the energy sales) correspond to USD 47,784 per year (USD 3,676 per month) which barely covers the salary of a Technical Supervisor and the transportation cost.
Variable Costs	Please provide evidences for the value of 2.0% of energy sales.	LAND RENT The land will be purchased. The contract (see file "Contrato de promesa de venta e hipoteca.pdf") states two payments: 50% at the sign of the contract and 50% at the second year. For the IRR calculation the first payment was included in among the Investment Parameters (cell "D6"), and the second one was included under SG&A (see CAR APG 01)
Land Rent	The document "INV_PCH_202_Promesa_Arriendo_& First Option to Purchase Macaya.pdf", page 4, states that the land for the wind farm construction will be rented instead of acquired as stated in the Financial spreadsheet and in the Chome DD. Please clarify if the land was acquired or will be rented.	INVESTMENT DECISION: The investment decision is 16/01/2012
Investment Decision Date	Please inform which date is being considered as the investment decision date of the project.	Ingeniería Seawind Sudamérica Ltda. made the final project analysis on December 2011 considering the information available at the date, as reflected in the Investment Report (see document "REPORTE INVERSION_PUNTA CHOME WIND FARM_DIC 2011.pdf") As Ingeniería Seawind Sudamérica Ltda. does not have a Board because it is part of the holding SeaWind Group (from UK), the investment decision was formalized on



VALIDATION REPORT

		<p>January 16th 2012 by SeaWind Group through a memo sent by Mr. Pieter D'haen (one of the Directors of the group) and signed by Tim Adams (Managing Director of SeaWind Group)</p> <p><u>Second response:</u> Attached document "Términos de Referencia Ingeniería Punta Chome_Nov2011", (General and Particular Technical Specifications, Telecommunications System for connecting to the SIC Punta Chome Wind Park).</p> <p>The values used in the form "Project Management and Client Engineering (PMCE). Xlsx" are an estimate of the Project Developer for the experience gained in the implementation and management of other wind farm in Chile. As evidence the following documents are attached:</p> <ul style="list-style-type: none"> • Costo Ingeniero Civil Senior Parque Eólico Minera El Toqui ("Cost Civil Engineer Senior Wind Park El Toqui Mining") which corresponds to the monthly remuneration paid to Senior Civil Engineer in charge of construction of the Wind Farm El Toqui Mining performed by Seawind in year 2010". • Cotización Gerente de Proyecto Punta Chome (Quote Manager of Punta Chome Project), belonging to the company ASENER, September 2011. • "Cotización especialistas Eléctrico y 	
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VALIDATION REPORT

		<p>Montaje". Quote of the company COMIN with the monthly value for the professional services of Electrical and Installation Specialists for wind project in 2010.</p> <p>2 senior engineerings: Estimation of the developer of the Project on the basis of available quotes. Corresponds to the cost of compensation of 2 Professionals for the installation and commissioning of the Chome Wind Park, 1 Electrical specialist + Specialist for assembly, during 18 months. Quotes available show monthly values of \$4,000,000, \$3,556,994, \$4,266,194, \$3,963,800. The evaluation of the Chome project uses a monthly value of \$4,000,000.</p> <p>Officeransport, food and hotels: This refers to an estimate of the Project developer experience gained in the implementation of other Wind Farm in Chile. Office: This item corresponds to the lease of offices in the city of Concepción for a period of 18 months. Offices lease market values can be found in a range between \$400,000-\$600,000 per month, depending on the Sqm (m²). In the evaluation the Project Developer used a value of \$500,000 (estimated value). As evidence of the offices rent price range document is attached "Costo arriendo de oficina " ("Quote rental Office") NURIA company for the lease of office in the city of</p>	
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VALIDATION REPORT

		<p>Concepción, with a value of \$410,000 per month and which corresponds to the lease of office of 45 sqm. Which includes 1 parking.</p> <p>Ticket (bus, airplane): The evaluation of the Project Chome, the project developer used a value of \$100,000 (estimated value) as the value of the roundtrip airfare. The evaluation considered a total of 4 trips per each specialist (Electrical and Assembly) during the implementation of the Chome farm work. As evidence of the price of the airfare displays document "Factura pasaje aéreo" ("airfare invoice") which shows a value of round trip airfare Santiago-Concepción of \$103,504.</p> <p>hotels and lodging: Corresponds to the cost of the monthly rental of 2 apartments, one for each specialist (Electrical and Assembly) at a cost of \$200,000 (estimated value, based on the experience of the Project developer).</p> <p>Food: Feeding costs for the 2 specialists during the implementation of the Chorme Park. The evaluation considered a total of \$15,000 per day (based on the experience of the Project developer) for each specialists, this is, \$15,000 x 2 specialists x 5 days a week x 4 weeks per month.</p> <p>Surveyor and related costs: Corresponds to the monthly cost of hiring a professional topography during the works of</p>	
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VALIDATION REPORT

		<p>the Chome Farm implementation (18 months). As evidence, the document "Cotizacion Topografo Parque Eólico Minera El Toqui" ("Quotation Topographer Minera El Toqui Wind Farm") is attached". This quote shows a monthly cost of \$3,500,000 which includes professional services of a Topographer + two assistants". In the Chome project assessment was considered only the cost of 01 Topographer for a monthly value of \$ 2,000,000 (estimated by the developer of project).</p> <p>Overhead: Corresponds to the "general expenses" project during implementation of the Wind Farm (18 months). The evaluation will consider a value of \$1,000,000/month (estimate project developer) corresponding to the payment of a secretary and other office expenses (electricity, telephone, internet, etc.). Estimated value, based on the experience of the Project developer.</p> <p>Provision: This value corresponds to the cost of "UNFORESEEN" throughout the period of construction and commissioning of the Chome Wind Farm. The international literature assigns different percentages to estimate the costs of "Unforeseen" of the construction of a Wind Farm. As evidence, are attached the following documents:</p> <ul style="list-style-type: none"> • "Evaluación Económica de un Parque 	
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VALIDATION REPORT

		<p>Eólico de 20 MW” (“Economic evaluation of a 20 MW Wind Farm”) that defines a cost of 5% of the value of “turnkey” (EPC value) for “Unforeseen” see pages 11 and 12.</p> <ul style="list-style-type: none"> • “Plan de desarrollo para las fuentes no convencionales de energia” (“Development plan for non-conventional sources of energy in Colombia”), displays on page 75 (Figure 3-1) a contingency value of 7% approximately, estimated according to graph. <p>The Project developer estimated a value <u>more conservative</u> to estimate the cost of “Unforeseen” for the implementation and commissioning of the Chome Wind Farm. The value used in the evaluation of the project corresponds to 2 % of the total investment in the project. This value, more efficient, corresponds to the developer of the project experience gained by the implementation of other Wind Farm in Chile.</p> <p><u>Third response:</u></p> <p>- The evidences submitted to the audit team were to confirm that the estimations made by the project developer were according to market prices (estimations were corroborated by real project specific costs). Since there is no documented evidence at the moment of the investment decision, the project owner chooses to eliminate these values as a conservative assumption. The Specific CPA-</p>	
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VALIDATION REPORT

		DD and related document has been updated (IRR calculation).	
CL APG 02: Please inform if there is any public announcements, annual financial reports or feasibility reports related to the project or to the project participants.	EB62 Ann5	There is no public announcement or annual financial reports related to the project. The only document is an internal report containing a summary of the financial assumptions and projections (see file "REPORTE INVERSION_PUNTA CHOME WIND FARM_DIC 2011.pdf").	DOE accepts the response. CL APG 02 is closed.