Validation report form for CDM programme of activities

(version 01.0)

Complete this form in accordance with the attachment: "Instructions for filling out the validation report form for CDM programme of activities" at the end of this form.

VALIDATION REPORT	
Title of the programme of activities (PoA)	Queiroz Galvão Energias Renováveis Wind Power Programme
Version number of the validation report	Version 06.1
Completion date of the validation report	08/11/2016
Version number of PoA-DD applicable to this validation report	Version 10
Date when PoA-DD was uploaded for global stakeholder consultation	14/12/2013
Coordinating/managing entity (CME)	Éolos Energias Renováveis S.A
Host Party(ies)	Brazil
Sectoral scope(s)	Sectoral Scope is "1 - Energy industries (renewable/non-renewable sources)" and the category is "Renewable electricity generation for a grid"
Selected methodology(ies)	ACM0002 "Grid-connected electricity generation from renewable sources" Version 16.0.
Selected standardized baseline(s)	N/A
Name of DOE	Lloyd's Register Quality Assurance Ltd. (LRQA)
Name, position and signature of the approver of the validation report	 Ketan Deshmukh CDM Quality Manager

SECTION I. Executive summary

Lloyd's Register Quality Assurance Limited (LRQA) has been contracted by Éolos Energias Renováveis S.A., representing the project participants (PP) and the Coordinating and Managing Entity (CME) to undertake validation of the proposed Programme of Activities (PoA), "Queiroz Galvão Energias Renováveis Wind Power Programme", as well as the specific-case CPA, "Ilha Grande Wind Farm project". The validation has been performed through process of document review based on the PoA design document including the generic Component Programme Activity (CPA), Version 01 of the PoA-DD posted for the GSP on 14/12/2013 and the Specific-case CPA Version 01 posted for the GSP on 14/12/2013, initially submitted for validation and the subsequent revisions, follow-up interviews with the stakeholders, resolution of outstanding issues and issuance of the validation report.

The PoA is construction of new Wind Power Plants (WPPs) connected to Brazilian National Interconnected grid, displacing fossil fuel consumption at thermal plants that would be running in the absence of the PoA and thus reducing the Greenhouse Gas (GHG) emissions. The geographical boundary for the PoA is the Federative Republic of Brazil.

The fulfilment of requirements as set forth in Article 12 of the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC), the modalities and procedures for a CDM (CDM M&P) and relevant decisions of the Conference of the Parties, serving as meeting of the Parties to the Kyoto Protocol (COP/MOP) and the Executive Board of the CDM (CDM-EB) have been evaluated and conformance to the validation requirements were confirmed based on the given information. A risk based approach was taken to conduct the validation and corrective action requests (CARs) and clarifications (CLs) were raised for relevant actions by the PP.

The validation team has found through the validation process 11 CARs and 5 CLs. The PP has taken actions and submitted to LRQA the revised PoA-DD, CPA-DD, emission reduction sheet and other evidences. The validation team is of the opinion that the proposed PoA as described in the PoA design document Version 10 dated 03/08/2016, and the specific CPA applied to a real case as described in the CPA design document Version 10 dated 03/08/2016, complies with all the eligibility criteria specified in the PoA-DD and meets all the relevant UNFCCC requirements for the CDM, as well as the host country's national requirements and is likely to achieve the emission reductions and contribute to the sustainable development of the host country. LRQA therefore requests to the CDM Executive Board the registration of "Queiroz Galvão Energias Renováveis Wind Power Programme" as a CDM project activity.

The validation report was updated (Version 06.1) to reflect the receipt of the letter of approval and that is the only change that has been made compared to the version (Version 06, dated 17/08/2016) listed in the Brazilian DNA letter of approval, dated 28/09/2016.

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SECTION II. Validation team, technical reviewer and approver

II.1. Validation team members

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader (since 01/08/2014)	EI	San Valero	Vicente	LRQA Brazil Ltd.	✓	✓	✓	✓
2.	Team leader until 01/08/2014	EI	Dias	Cintia	LRQA Brazil Ltd.	✓		✓	✓
3	Team member	EI	Kehle	Natalie	LRQA Brazil Ltd.	✓	✓	✓	✓
4	Team Member until 04/08/2014	IR	Mendes	Mara	LRQA Brazil Ltd.	✓	✓	✓	✓

II.2. Technical reviewer and approver of the validation report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical Reviewer / Sector Expert	IR	Pattanaik	Archak	LRQA India
2	Technical Reviewer / Sector Expert	IR	Jain	Ankush	LRQA India
3	Decision Maker	IR	Deshmukh	Ketan	LRQA Ltd

SECTION III. Means of validation

III.1. Desk review

The validation is performed primarily based on the review of the PoA design document (PoA-DD) and the other supporting documentation. The PoA-DD Version 01 dated 20/08/2013 posted for the GSP, and the specific CPA- DD Version 01 dated 20/08/2013 posted for the GSP were initially reviewed. LRQA requested the PP to present supporting information and documents relating to the project design and such additional information and documents were also reviewed by LRQA. Through the process of the validation, the PoA-DD including the generic CPA, the specific CPA-DD and the supporting documents of the same were evaluated to confirm the actions taken by the PP to the CARs and CLs issued by LRQA. The documents reviewed by LRQA are listed in Appendix 3. LRQA reviewed the final Version of the PoA-DD Version 10 dated 03/08/2016 and the final Version of the specific CPA-DD Version 10 dated 03/08/2016, to confirm that all changes agreed have been incorporated.

III.2. On-site inspection

Duration of on-site inspection: 18/02/2014 and 12/03/2014				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	1. Visit to the plant site(s) 2. Project boundaries and co-ordinates as per the DD 3. Site layout 4. Project implementation status 5. Performance of the wind project Metering provisions, procedures for monitoring & reporting	Amontada, Ceara Brazil (Project site)	18/02/2014	Natalie Kehle Vicente Valero
2	1. Methodology applicability issues/discussions 2. Baseline Issues & Grid Emission factor 3. Discussion on Algorithms and formulae used to determine emission reductions 4. Environmental issues 5. Stakeholders consultation process 6. Discussion on land ownership, land transaction 7. Overview of similar projects in the locality 8. Addressing outstanding AIRs (additional information requests)	Fortaleza, Ceara Brazil (QGER operations office)	18/02/2014	Natalie Kehle Vicente Valero
	1. Authority and responsibility of project management 2. Discussion on CPA eligibility criteria 3. Review of CME records 4. MoC 5. Decisiveness of CDM funding to 6. Investment decision 7. / start date / timeline 8. Funding for project activity 9. Basis of selection of financial indicator to the Project and Selection of Project Bench Mark 10. Input values for investment analysis 11. Review of documents (offer documents, purchase orders/agreements, insurance documents, Plant Load factor, O&M cost, Project cost, commissioning report, contracts) . Discussion on the conditions of the energy commercialization (firm energy, payment conditions, energy prices, etc.)	Sao Paulo, Brazil (Head Office of Queiroz Galvão Energias)	12/03/2014	Natalie Kehle Mara Mendes

III.3. Interviews

No.	**Interviewee**			**Date**	**Subject**	**Team member**
	Last name	**First name**	**Affiliation**			
1.	Elia	Marcos	QGER Sustainability	18/02/2014	1. Project boundaries and co-ordinates as per the DD 2. Site layout 3. Project implementation status 4. Performance of the wind	Natalie Kehle Vicente San Valero
2	Kopp	Luis Filipe	WAYCARBON			

					project 5. Metering provisions, procedures for monitoring & reporting	Natalie Kehle Vicente San Valero
3	André	Carlos	Systems Operator			
4	Piato	Maykel Bruno	Operations Coordinator			
5	Celso	Martin	Planning Manager	12/03/2014	1. Authority and responsibility of project management 2. Discussion on CPA eligibility criteria 3. Review of CME records 4. MoC 5. Decisiveness of CDM funding to Investment decision 6. / start date / timeline 7. Funding for project activity 8. Basis of selection of financial indicator to the Project and Selection of Project Bench Mark 9. Input values for investment analysis 10. Review of documents (offer documents, purchase orders/agreements, insurance documents, Plant Load factor, O&M cost, Project cost, commissioning report, contracts) 11. Discussion on the conditions of the energy commercialization (firm energy, payment conditions, energy prices, etc.	Natalie Kehle Mara Mendes
6	Elia	Marcos	QGER Sustainability			
7	Kopp	Luis Filipe	WAYCARBON)			

III.4. Sampling approach

Not applicable

III.5. Clarification requests, corrective action requests and forward action requests raised

Areas of validation of compliance	No. of CL	No. of CAR	No. of FAR
Part I			
General description of the PoA			
• PoA design document			
• Purpose and general description of the PoA			
o Generic CPA(s)			
o Specific-case CPA(s) submitted with the PoA			
Demonstration of additionality and development of eligibility criteria	1	2	
• Demonstration of additionality of the PoA			
• Eligibility criteria for inclusion of CPA(s) in the PoA			
Management system		1	
Duration of the PoA		1	
Environmental impacts		1	
Local stakeholder consultation	1		
Approval and authorization		1	
Global stakeholder consultation			
Contribution to sustainable development		1	

Modalities of communication		1	
Part II			
General description of generic CPA		2	
Application of a baseline and monitoring methodology and standardized baseline			
• Applicability of selected methodology(ies) and/or standardized baseline		1	
o Deviation from methodology			
o Clarification on applicability of methodology, tool and/or standardized baseline			
• Sources and GHGs			
• Description of baseline scenario		1	
• Demonstration of eligibility for a generic CPA	1	3	
• Estimation of emission reduction or net GHG removals by sings of the generic CPA			
o Explanation of methodological choices		1	
o Data and parameters fixed ex ante			
o Ex ante calculation of emission reductions or net GHG removals by sinks			
• Application of the monitoring methodology and description of the monitoring plan		1	
o Data and parameters to be monitored by the generic CPA			
o Description of the monitoring plan for the generic CPA	2	1	
Total	**5**	**11**	**0**

Note: *The total of CARs, CLs and FARs (findings) might be different from the sum of each of their columns because one finding might be addressing different issues, related to more than one "Area of validation of compliance".*

Section I. Internal quality control

A technical review by a qualified person independent from the validation team and a review by an authorised decision maker were conducted before the submission of the validation report to the PP and before requesting the registration of the PoA.

Section II. Validation opinion

LRQA has undertaken validation of the proposed PoA, “Queiroz Galvão Energias Renováveis Wind Power Programme” based on the requirements of CDM as set out in Article 12 of the Kyoto Protocol, CDM M&P, present annex, subsequent decisions made by the COP/MOP and CDM-EB, and the other rules applicable to the proposed PoA including the host country’s legislation and its specific requirements for sustainable development.

The PoA will comprise of new Wind Power Plants (WPPs) connected to the Brazilian National Interconnected Grid system, displacing fossil fuel consumption at thermal plants that would be running in the absence of the PoA and thus reducing the Greenhouse Gas (GHG) emissions. The geographical boundary for the PoA is the Federative Republic of Brazil. The specific CPA included in this submission, “Ilha Grande Wind Farm Project”, was validated during the site visit as being within the PoA boundaries, the state of Ceará (a Brazilian state).

To arrive at the final validation conclusions and opinion, LRQA carried out desk review, visit to location of the future project´s premises, interview with the staff involved and independent research of alternative information sources in order to cross check and validate the information, assumptions, calculations and statements presented in the PoA-DD and CPA-DD.

The assessment team concluded that the description of the project activity in the project documents are accurate and complete and that all applicability criteria of the methodology ACM0002 Version 16.0 are met; the baseline scenario has been correctly identified and the assumptions adopted are sound; the monitoring plan complies with the applicable methodology, with feasible arrangements and sufficient means of implementation to ensure that the emission reductions resulting from the proposed project activity can be reported *ex-post* and verified.

The CPA-DD is additional as demonstrated by the prior consideration and the financial and common practice analysis; all parameters used in the emission reduction calculations had their sources verified, were correctly interpreted and are conservative choices.

There was no project component or issues excluded from the validation.

Through the validation process, the validation team identified 11 CARs and 5 CLs. The PP has taken action on the raised issues and submitted to LRQA the revised PoA-DD, CPA-DD and other supporting evidence; ER calculation spreadsheet, financial analysis, PoA management system manual.

The validation team is of the opinion that the proposed PoA conforms to all the relevant UNFCCC requirements for the CDM, as well as the host country’s national requirements and is likely to achieve the emission reductions and contribute to the sustainable development of the host country. If implemented as designed, the CPA is likely to achieve the validated total emission reductions of 324,751 tCO_2.

Decision Maker

Ketan Deshmukh
CDM Quality Manager
02 December 2016

Section III. Validation findings

Significant changes made to the original PoA-DD and CPA-DD published for Global Stakeholder Consultation Process are summarised below. The PoA-DD Version 01 dated 20/08/2013 and CPA DD Version 01 were modified and several changes occurred due to the result of the validation process. The PoA-DD Version 10 dated 03/08/2016 and CPA-DD Version 10 dated 03/08/2016 include all these changes.

For details about the results of the responses to CARs and CLs, discussions on revisions to project documentation and the detailed changes to the PoA-DD and the CPA-DD coming from the validation process, please refer to the LRQA Validation Protocol Version 06.

Item	Description	Value in PoA-DD or CPA-DD GSP	Value in PoA-DD or CPA-DD RfR	CAR/CL
1	PoA start date- A CAR was raised since the start date of the CPA was stated being before that of the PoA start date, which is not in accordance with the PS paragraph 216. The PP changed the PoA start date from the date of GSC 13/12/2013 to the date of prior consideration of the project activity (being option (a) in paragraph 213 of the Project Standard, "(a) The date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA").	PoA-DD 13/12/2013	PoA-DD 21/10/2011	~~CAR02~~
2	CPA-DD financial analysis uses 20 years as the project lifetime while the PoA-DD explains that 25 years is being applied to all CPAs.	PoA-DD 25	PoA-DD 20	~~CAR04~~
3	CPA-DD Section D.7.1. parameter $EF_{grid,CM,y}$ states that the latest available data from the Brazilian DNA for $EF_{grid, BM,y}$ and $EF_{grid, OM,y}$ is from 2011 but is actually 2012. Values were updated.	$EF_{grid,CM,y}$ = 0.25 tCO_2/ MWh ER_y = 25,963 tCO_2	$EF_{grid,CM,y}$ = 0.4385 tCO_2/ MWh ER_y = 46,393 tCO_2	~~CAR09~~

PART I. Programme of activities

SECTION A. General description of the PoA

A.1. PoA design document

Means of validation	The PoA-DD used the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM Website, PoA-DD template Version 06.0 and under compliance as per Instructions for filling out the programme design document form

	for CDM programmes of activities and the Component Project Activity Design Document Form Version 05.0. For details please refer to the LRQA Validation Protocol Version 06.
Findings	NA
Conclusion	Validation team confirms that PoA-DD and CPA-DD are prepared using the latest forms and correctly filled using the instructions included therein.

A.2. Purpose and general description of the PoA

Means of validation	The project description was validated by document review including operation licenses, environmental impact analysis, wind study, financial documents, interviews, and the on-site visit. For details please refer to the LRQA Validation Protocol Version 06.
Findings	NA
Conclusion	LRQA confirms that the project description included in the PoA-DD and in the CPA-DD are accurate and complete. This description provides the reader with a clear understanding of the precise nature of the project activity and the technical aspects of its implementation.

A.2.1. Generic CPA(s)

Title, identification/reference number and/or version number	Sectoral scope(s)	Selected methodology(ies) and/or standardized baseline(s)
Iha Grande Wind Farm project Version 10 (03/08/2016)	Sectoral scope-1	ACM0002 - Grid-connected electricity generation from renewable sources - Version 16.0

A.2.2. Specific-case CPA(s) submitted with the PoA

Specific-case CPA(s) reference number(s)	Generic CPA title, identification/ reference number and version number	Host Party	Crediting period dates of the specific-case CPA
Unique identification: QGER CPA 0001	Iha Grande Wind Farm project Version 10 (03/08/2016)	Brazil	01/12/2016 or the registration date, whichever is later

SECTION B. Demonstration of additionality and development of eligibility criteria

B.1. Demonstration of additionality of the PoA

Means of validation	For assessing additionality of this PoA, LRQA has complied with the latest Version (06.6) of the Methodological Tool “Investment Analysis” as provided by the CDM Executive Board and with other relevant guidance including the latest guidelines on plant load factors “Guidelines for the reporting and validation of plant load factors” Version 1. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR4: CPA-DD financial analysis uses 20 years as the project lifetime while the PoA-DD explains that 25years is being applied to all CPAs. CL3: regarding how depreciation is considered in the financial analysis. CAR3: some input parameters missing in the financial analysis.
Conclusion	CAR4 CLOSED as the PP has applied the financial analysis as 20 years and corrected the financial cash flow. CL3 CLOSED as the PP clarified the use of depreciation and the arguments and estimations presented by PPs were regarded reasonable by the validation team. CAR3 CLOSED as description of all input parameters and steps taken for assessing additionality is now provided in the PoA-DD. The PoA additionality was demonstrated using Tool for the demonstration and assessment of additionality Version 7.0, by establishing that in absence of CDM, none of the implemented CPAs would occur. Investment analysis option has been used to demonstrate additionality of the proposed PoA. Additionality was carried out at CPA level and LRQA confirms that, through a sensitivity analysis (project IRR lower than the benchmark in all analyzed

	scenarios), the individual CPAs would not be economically or financially feasible, without the revenue from the sale of CERs.

B.2. Eligibility criteria for inclusion of CPA(s) in the PoA

No.	Eligibility criteria as set out in the PoA-DD	Means of validation/Findings/Conclusion
1	The CPA must be within territorial boundaries of the Federative Republic of Brazil. Additionally, the CPA shall comply with the guidelines for inclusion as defined by the Brazilian DNA. The criteria shall be validated by providing information such as GPS coordinates, address, environmental license, site visit or any information that can prove that the CPA is developed in Brazil. Additionally, the receipt of the Host Country Approval / LoA shall be sufficient to demonstrate that the PoA fulfils the guidelines as defined by the host country. All CPAs included under the PoA and issued with a 'unique identification number' shall be considered compliant with the guidelines of the host country.	The PoA is considering any Greenfield WPP connected to the SIN established in the geographical boundary of the host country Brazil, connected to the SIN. The validation team confirms the criteria to be appropriate based on host country expertise.
2	Data provided to the CME prior to inclusion in the PoA: • Name of the CPA • Installed capacity in MW • Location of the CPA - Address - GPS coordinates • Name of the wind farm developer • Contact information, namely: - Contact person, - Postal address, - Telephone number - Email address Data included in CPA-DD: • Unique Identification Number provided by the CME. The CME shall be responsible for cross checking the data provided by the potential CPA owner/developer with publicly available online databases of wind projects and emission reduction projects in Brazil. Upon satisfactory conclusion of the "uniqueness" of the proposed project, a Unique Identification Number shall be issued by the CME (e.g. QGER-CPA-xxxx) which shall be considered sufficient to avoid against double counting of emission reductions. The staff will check on the UNFCCC website if the proposed CPA has already requested for registration a CDM project or a CPA inclusion. In case of registration of an already registered CDM component the PP will communicate immediately the UNFCCC and DOE.	Greenfield WPP connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. This will be further checked during CPA inclusion.
3	Only projects that involve generation of electricity using wind turbine generator based technology are eligible for inclusion under the PoA. The electricity generated by the WPPs	Greenfield WPP connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. This will be further checked during CPA inclusion.

<table>
<tr><td></td><td>should be dispatched to the Brazilian National Interconnected Grid (SIN). The WPPs shall employ standard technology and specifications of the manufacturer and/or best practices of the market but the WPP must not over 30MW of installed capacity The wind average speed must be over 2 m/s, and plant load factor between 20% and 85%. The energy price will be defined by free-market or energy auctions. The tower will be at least 40m height and the rotor blade at least 20m of diameter.</td><td></td></tr>
<tr><td>4</td><td>The start date of each CPA should be the earliest date at which either the implementation or construction or real action of a CPA begins. There should be a documental evidence for this date, such as engineering contract, equipment purchase, or any document that defines the real date. If the actual start date is not available, an indicative start date can be provided. Evidence of the actual start date shall be made available at the time of verification. The start date of any proposed CPA is on or after the start date of the PoA.</td><td>This will be confirmed during CPA inclusion and checking evidences such as power purchase agreements.</td></tr>
<tr><td>5</td><td>Each CPA must be applicable to and needs to apply the UNFCCC approved large scale methodology ACM0002 and necessary tools/guidelines/standards as indicated by this methodology.
<table>
<tr><th>Applicability condition (ACM0002)</th><th>Justification</th></tr>
<tr><td>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).</td><td>A CPA will involve the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.</td></tr>
<tr><td>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</td><td>A CPA will involve the installation of a wind power plant (WPP).</td></tr>
</table></td><td>Greenfield WPP connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. Capacity additions will not be considered. This will be further checked during CPA inclusion.
For a more detailed validation of the applicability conditions, see refer to Section 7of this report.</td></tr>
</table>

reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit	
Specific applicability conditions for capacity addition, replacements and/or retrofits.	A CPA will not involve capacity addition, replacements or retrofits, the conditions are not applicable.
Specific applicability conditions for hydroelectric plants	A CPA will not involve hydroelectric plants, the conditions are 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 results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.	A CPA will not involve fuel switch, biomass power plants and/or hydro power plants.

Applicability condition (GEF Tool)	**Justification**
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided	A CPA will provide electricity to a grid.

by the grid (e.g. demand-side energy efficiency projects).		
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered.	
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	A CPA will be located totally in a non-Annex I country.	

Applicability condition (Additionality Tool)	**Justification**
The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.
Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	A CPA will follow the tool.

6	Additionality shall be demonstrated at CPA level by means of a financial analysis comparing the scenario of each individual CPA with a benchmark scenario. This comparison should clearly and reliably demonstrate that the CPA scenario is not financially attractive and the CPA would not have been implemented without the incentives of CDM and, in the absence of CDM PoA,	This PoA consists large scale projects only, and has used an eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies, ACM0002 Version 16.0. The investment analysis for all future CPA will apply option III "Benchmark" from the Additionality tool, thus each CPA will perform a step by step approach for assessing additionality using the "Tool for the demonstration and assessment of

	none of the implemented CPAs would occur. Every CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario.	additionality", Version 7.0.
7	Local stakeholder consultation (LSC) under PoA Level is carried out as required by the Brazilian DNA as part of the LoA process. Environmental Impact Assessment (EIA) – as one of the steps of the Environmental Licensing process in Brazil, if applicable – is carried out as required by the Brazilian applicable legislation and according to rules and requirements of the applicable environmental authority.	Resolution no. 9 from the Brazilian DNA set rules for LSC for CDM project activities, see Appendix 3 document [B 7], as follows: *Art. 1 – Project activities that refer to local/regional/national policy or standard under a Programme of Activities can be registered as a single Clean Development Mechanism project activity provided that approved baseline and monitoring methodologies are used that, inter alia, define the appropriate boundary, avoid double counting and account for leakage, and ensure that the emission reductions are real, measurable and verifiable and additional to any that would occur in the absence of the project activity.* *(…)* *Art. 4 – Aimed at obtaining approval of the Clean Development Mechanism Programme of Activities, the Programme's coordinating entity shall present the Executive Secretariat of the Interministerial Commission on Global Climate Change, on electronic media and in hard copy, copies of the invitations for comments as well as the respective acknowledgments of receipt sent at least to the following addresses:* *I – the Executive Secretariat of the Interministerial Commission on Global Climate Change;* *II - Brazilian NGO Forum and Social Movements for the Environment and Development – http://www.fboms.org.br;* *III - National entities whose purposes are directly or indirectly related to the Programme of Activities;* *IV - Federal Attorney General.* *Single paragraph: The invitations for comments mentioned in the caption to this article shall be sent 15 days in advance of the start of the validation process in order to guarantee that any comments shall be incorporated in the documentation to be submitted to this Commission aimed at obtaining approval of the Programme of Activities by the Designated Operational Entity.* The LSC is performed at the PoA level, as set in the Brazilian legislation, see Appendix 3 document [B 7]. The PP performed the LSC in accordance with the local legislation by posting the project documents online, see Appendix 3 documents [A 27] for public viewing and inviting comments from the list of required stakeholders, see Appendix 3 documents [A 4]. No comments were received. The LSC for this project is deemed satisfactory. The following compares the list of required stakeholders that require to be contacted on the left and the list of stakeholders the PP contacted with evidences in the form of Receipt Acknowledgement on the right see mail Receipt Acknowledgement in Appendix 3 documents [A 4]:

		<table><tr><td>Brazilian NGO Forum and Social Movements for the Environment and Development</td><td>Fórum Brasileiro de ONGs e Movimentos Sociais - FBOMS</td></tr><tr><td>National entities whose purposes are directly or indirectly related to the Programme of Activities</td><td>Eletrobrás ANEEL</td></tr><tr><td>Federal Attorney / Public Ministry</td><td>Ministério Público Federal</td></tr><tr><td>the Executive Secretariat of the Interministerial Commission on Global Climate Change</td><td>Brazilian DNA - Secretaria Executiva da Comissão Interministerial de Mudança Global do Clima</td></tr></table> In addition to the stakeholders outlined by the Brazilian DNA, the PP also contacted local stakeholders from the region of the first CPA: state environmental agency (SEMACE) and the state public attorney (MP-CE), see mail Receipt Acknowledgement in Appendix 3 documents [A 4]. It is confirmed through the desk review and during interviews on the site visit that the project participants have taken due account of all comments received and have described this process in the PDD. No comments were received during the LSC.
8	A sign letter for each CPA declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance will be provided.	CME has confirmed that written confirmation will be taken from individual CPA implementer regarding Annex I parties funding, or if any, does not result in a diversion of official development assistance will be provided.
9	There is no specific target group for the energy consumption, since the power plants will be grid-connected to the national system (SIN). The energy can be sold to buyers in free-marked base or energy auctions.	Greenfield WPP grid-connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. Capacity additions will not be considered. This will be further checked during CPA inclusion.
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.	Data will be 100% monitored. It will be confirmed before including CPAs in this PoA.
11	Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or micro scale threshold criteria and remains within those thresholds throughout the crediting period of the CPA.	A large scale methodology is being applied. It will be confirmed before including CPAs in this PoA.
12	Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or micro scale project categories.	A large scale methodology is being applied. It will be confirmed before including CPAs in this PoA.
13	• Formal application for inclusion of CPA in the PoA. • Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-	It will be confirmed before including CPAs in this PoA.

	receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date. Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.	

For details please refer to the LRQA Validation Protocol Version 06.

SECTION C. Management system

Means of validation	The CME, ÉOLOS ENERGIAS RENOVÁVEIS S.A, will be supported by Waycarbon, a CDM consultancy. The contract between WAYCARBON and ÉOLOS ENERGIAS RENOVÁVEIS S.A. is in Appendix 3 document [A 33]. As presented above the overall responsibility for managing the process of inclusion of a CPA into PoA is given to WAYCARBON. During the interview with WAYCARBON, they showed understanding of the applicable CDM requirements and in particular with the requirements of methodology ACM0002. They showed understanding of company management system and records generated in the company that have relation to the project activity. A flow chart was presented and discussed showing the steps of the process related to inclusion of the CPA into the PoA and detailed, see Appendix 3 document [B 3]. The process was confirmed during interviews at the site visit. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR1 regarding CME competencies and responsibilities to ensure CME to check the features of potential CPAs to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA.
Conclusion	CAR1 CLOSED as PP clearly defined the roles and responsibilities for the PoA in both the PoA-DD and CPA-DD. LRQA has confirmed that the CME has developed and implemented a management system that includes the following: (a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies; (b) Records of arrangements for training and capacity development for personnel; (c) Procedures for technical review of inclusion of CPAs (d) Records and documentation control process for each CPA under the PoA; (e) Measures for continuous improvements of the PoA management system; (f) Any other relevant elements. Roles and responsibilities are outlined in the training and monitoring manuals by CDM consultancy and in the project PoA-DD and CPA-DD under the monitoring plan.

SECTION D. Duration of the PoA

Means of validation	The start date of the PoA was validated through the prior consideration form sent to UNFCCC and DNA, dated 21/10/2011. Validation team confirmed that the duration of the PoA is 28 years and 0 months For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR2: regarding CPA start date being before that of the PoA start date. Also, GSC is incorrectly stated.
Conclusion	CAR2 CLOSED as PP corrected all start dates.

	The start date and duration of the PoA are in line with PS Section 11.6 “Duration and Crediting Period”.

SECTION E. Environmental impacts

Means of validation	Analysis of environmental impacts of PoA is in line with paragraph 37 (c) of the CDM modalities and procedures and as per Environmental Licensing Process in Brazil. Therefore it will be performed at CPA level when required. The Preliminary License (LP) is the first phase of the environmental licensing process and should be applied for with the IBAMA (or any environmental oversight authority) during the implementation, improvement and expansion stages. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR6: The environmental license is invalid since the installation license had expired.
Conclusion	CAR6 CLOSED as License Protocol and Environmental Operational License from SEMACE were provided to the DOE. It was concluded that no significant environmental impacts are likely to occur due to the project activity.

SECTION F. Local stakeholder consultation

Means of validation	The requirement for LSC was validated from the requirement of Brazilian DNA. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CL4 - The LSC was chosen to be performed at the PoA level and evidences provided. However, the CPA Section D.5 page 21, states that in addition to the PoA level LSC “The Local stakeholder consultation (LSC), as required by the Brazilian DNA, was performed at PoA level. However, in addition to this LSC, the local communities and associations, as well as local government were consulted and a summary of the CPA was made available/sent by mail. No comments were received so far. No documents were provided for the LSC.
Conclusion	CL4 CLOSED - All LSC evidences were provided to the DOE team and deemed satisfactory, see Appendix 3 documents [A 4]. PP clarified in the PoA-DD Section B.2 (g) and also in Section F.1 that the LSC is being performed at the PoA level. LRQA confirms that the stakeholder consultation process targeted stakeholders and was appropriate for identifying stakeholders’ opinions about the project and collecting their views. **NOTE**: According to Version 09.0 of the CDM Project Standard, paragraph 78, "Project participants or the coordinating/managing entity shall complete the local stakeholder consultation process before the start date of the project activity, PoA or CPA, as defined in the 'Glossary of CDM terms' and submitting the PDD or PoA-DD of the proposed CDM project activity or PoA to a DOE for validation". However, in consideration to the communication submitted by EKI Energy Services Limited in 9 June 2015 (INQ-03214) and as reflected in the CDM Executive Board 85th Meeting Report, the Board agreed to reconsider that rule and to allow project participants and coordinating/managing entities to request an exemption until the next revision of the Project Standard. As both the PoA-DD and the CPA-DD, which had been developed according to version 07.0 of the Project Standard, were already under validation when the aforementioned rule entered into force, the local stakeholder consultation process was carried out before the PoA-DD was published for global stakeholder consultation (PS version 07.0) and not before the PoA start date (PS version 09.0), Based in the CDM Executive Board 85th Meeting Report decision, PP sent a communication to the CDM-EB requesting for an exemption of the rule on timing of Local Stakeholders Consultation. The communication was considered by the CDM-EB and an exemption from the requirement in paragraph 78 of the PS version 09.0 (INQ-04325, dated 20/01/2016 – [B 36]) was granted, therefore allowing LRQA to confirm that the proposed project activity complies with paragraph 77 of PS version 07.0 as its LSC process was carried out before submitting the proposed CDM project activity to LRQA for validation.

SECTION G. Approval and authorization

Means of validation	The host Party of the proposed PoA is Brazil. Brazil ratified the Kyoto Protocol on 23/08/2002. The Designated National Authority (DNA) is the Interministerial

	Commission Global Climate Change (CIMGC). A letter from approval from the host Party is to confirm the contribution of the PoA, "Queiroz Galvão Energias Renováveis Wind Power Programme" to the sustainable development of Brazil. It shall be validated as per paragraphs 39-53 of VVS version 9.0. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR 11 has been issued since the letter of approval from the host country has not been received. Brazilian DNA requires Validation Report from DOE of the proposed CDM activity before it issues LoA for a proposed project.
Conclusion	CAR 11 CLOSED - According to the Brazilian DNA's rules, the issuance of the Letter of Approval is conditioned to the presentation of the DOE's validation report by PP to the DNA (Resolution No. 1 of 11th September 2003). LRQA has received the letter from the PP. Validation team verified the issuing authority from the list of DNAs available at UNFCCC website. The LoA confirms: (a) The host country Party ratified the Kyoto Protocol (including the ratification date). (b) The participation is voluntary. (c) The proposed project activity will assist the host country in achieving sustainable development. (d) The LoA indicates the precise title of the proposed project activity as indicated in the PDD. The LoA is unconditional with respect to above points (a) to (d). Participation in the project activity of the PP has been authorized, as confirmed in the LoA issued by the DNA of the Host Country. The team confirmed that no entities other than the authorized entity are indicated as project participants in the PDD. The validation report was updated (Version 06.1) to reflect the receipt of the letter of approval and that is the only change that has been made compared to the version (Version 06, dated 17/08/2016) listed in the Brazilian DNA letter of approval, dated 28/09/2016 A 26.

SECTION H. Global stakeholder consultation

Means of validation	In line with the requirement of the Procedures for Processing and Reporting on Validation of CDM project activities, the PoA-DD and the CPA-DD are to be made publicly available for 30 days subject to confidentiality provisions agreed with the PP, to enable comments to be received from Parties, stakeholders, and UNFCCC accredited NGOs on the validation and registration requirements. For details please refer to the LRQA Validation Protocol Version 06.
Findings	The PoA-DD and the CPA-DD were made publicly available in line with the requirements of the procedure for the period of 14/12/2013 to 12/01/2014 as per http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/CKG0XTVO5BVBIDTH2KED37JDTD1WOR/view.html
Conclusion	No comments received and no findings were issued.

SECTION I. Contribution to sustainable development

Means of validation	This letter of approval is to confirm the contribution of the PoA "Queiroz Galvão Energias Renováveis Wind Power Programme" to the sustainable development of Brazil. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR 11 has been issued since the letter of approval from the host country has not been received.
Conclusion	CAR 11 CLOSED - According to the Brazilian DNA's rules, the issuance of the Letter of Approval is conditioned to the presentation of the DOE's validation report by PP to the DNA (Resolution No. 1 of 11th September 2003). LRQA has received the letter from the PP. Validation team verified the issuing authority from the list of DNAs available at UNFCCC website. The LoA confirms: (a) The host country Party ratified the Kyoto Protocol (including the ratification date). (b) The participation is voluntary. (c) The proposed project activity will assist the host country in achieving sustainable development. (d) The LoA indicates the precise title of the proposed project activity as indicated

	in the PDD. The LoA is unconditional with respect to above points (a) to (d). Participation in the project activity of the PP has been authorized, as confirmed in the LoA issued by the DNA of the Host Country. The team confirmed that no entities other than the authorized entity are indicated as project participants in the PDD. The validation report was updated (Version 06.1) to reflect the receipt of the letter of approval and that is the only change that has been made compared to the version (Version 06, dated 17/08/2016) listed in the Brazilian DNA letter of approval, dated 28/09/2016.

SECTION J. Modalities of communication

Means of validation	Check evidences of corporate and personal identities, other relevant documentation and notarized documentation. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR7: No signed MoC and all evidences needed to validate the MoC were provided to the DOE.
Conclusion	CAR7 CLOSED - Signed MoC and accompanying evidence to validate MoC signatures were provided to the DOE. LRQA confirms that it has performed due diligence on the MoC statement as described in the LRQA Validation Protocol Version 06.

PART II. Generic component project activity(ies)

SECTION A. General description of generic CPA

Means of validation	This description was cross-checked with the detailed project report, project planning and interviews. Capacities of generators, basic infrastructure were confirmed during the site visit. Validation Team confirms based on the review of generic CPA that the boundary covers all the CPAs implemented under this PoA. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR 5– there is conflicting names for the title of the first CPA in Section A.2 “Ilha Grande Wind Farm project” and section A.3 “ÉOLOS CPA Ilha Grande Wind Farm Project”. CAR 9 – regarding using a more precise PLF value from the GL Garrad Hassan Wind evaluation study when applying it to the emission reduction calculation.
Conclusion	CAR5 CLOSED, as PP corrected the CPA-DD to “Ilha Grande Wind Farm project. CAR9 CLOSED, as PP corrected the calculation with a more precise PLF value The validation team confirms that the description in the CPA-DD includes a description of the technology to be used.

SECTION B. Application of a baseline and monitoring methodology and standardized baseline

B.1. Applicability of selected methodology(ies) and/or standardized baseline

Means of validation	The PP has applied methodology ACM0002, “Grid-connected electricity generation from renewable sources Version 16.0. This methodology also refers to the latest approved Version of the following tools: “Tool for the demonstration and assessment of additionality”, Version 7.0 “Tool to calculate the emission factor for an electricity system” Version 5.0 For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR10: There is no description of the applicability conditions (for the ACM0002, GEF tool and additionality tool) for the PoA under Section B.2 part I (e). PP provided a table under PoA-DD part II generic-CPA, but did not outline the applicability conditions firstly in part I.
Conclusion	CAR10 CLOSED - PP revised the PoA-DD part I to include the applicability conditions for the PoA. In Section 7 of LRQA Validation Protocol Version 06, a detailed analysis

	of the applicability conditions for this PoA has been included.

B.1.1. Deviation from methodology

Means of validation	The PP has applied methodology ACM0002, "Grid-connected electricity generation from renewable sources Version 16.0. It is confirmed that the baseline and monitoring methodologies selected by the project participants have been approved for application to both CDM PoA and CPAs by the CDM Executive Board appears on the methodologies page of the UNFCCC website. For details please refer to the LRQA Validation Protocol Version 06.
Findings	Not applicable
Conclusion	The PP has applied only ACM0002. The PoA does not apply combination of methodologies or any deviation to the methodology

B.1.2. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	The PP has applied methodology ACM0002, "Grid-connected electricity generation from renewable sources Version 16.0. This methodology also refers to the latest approved Version of the following tools: • "Tool for the demonstration and assessment of additionality", Version 7.0; • "Tool to calculate the emission factor for an electricity system" Version 5.0. It is confirmed that the baseline and monitoring methodologies selected by the project participants have been approved for application to both CDM PoA and CPAs by the CDM Executive Board appears on the methodologies page of the UNFCCC website. For details please refer to the LRQA Validation Protocol Version 06.
Findings	Not applicable
Conclusion	LRQA confirms that the selected methodology is applicable to both CDM PoA and CPAs. The project applicability was confirmed against each condition in the approved methodology selected. LRQA Validation Protocol Version 06 includes the list of each applicability condition, the steps taken to validate each one and the conclusions about its applicability to the proposed project activity.

B.2. Sources and GHGs

Means of validation	Validation team confirmed from the methodology that all sources and GHGs as required by the methodology have been included in the project boundary. There is no emission source that is affected and not considered by the project activity and not addressed by the methodology. For details please refer to the LRQA Validation Protocol Version 06.
Findings	Not applicable
Conclusion	Validation team confirmed from the methodology that all sources and GHGs as required by the methodology have been included

B.3. Description of baseline scenario

Means of validation	The baseline scenario identified in the Generic CPA included in the PoA-DD has been assessed against the requirements in the approved methodology ACM0002 "Grid-connected electricity generation from renewable sources" Version 16.0. LRQA can confirm that the procedure included in this methodology to identify the most reasonable baseline scenario, has been correctly applied. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR10 – regarding PP to provide the applicability conditions in the PoA-DD part I, in additional to that already provided to the PoA-DD part II and CPA-DD
Conclusion	CAR 10 CLOSED as PP described all applicability conditions for the PoA. According to the approved methodology ACM0002, selected for the present project activity, the baseline scenario is: "*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 generating sources, as reflected in the combined margin (CM) from 'Tool to calculate the emission factor for an electricity system*".

B.4. Demonstration of eligibility for a generic CPA

No.	Eligibility criteria for the generic CPA	Means for assessment of inclusion of CPA	Means of validation/Findings/Conclusion
1	The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The CPA must be within territorial boundaries of the Federative Republic of Brazil. Additionally, the CPA shall comply with the guidelines for inclusion as defined by the Brazilian DNA. The criteria shall be validated by providing information such as GPS coordinates, address, environmental license, site visit or any information that can prove that the CPA is developed in Brazil. Additionally, the receipt of the Host Country Approval / LoA shall be sufficient to demonstrate that the PoA fulfils the guidelines as defined by the host country. All CPAs included under the PoA and issued with a 'unique identification number' shall be considered compliant with the guidelines of the host country.	The PoA is considering any Greenfield WPP connected to the SIN established in the geographical boundary of the host country Brazil, connected to the SIN. The validation team confirms the criteria to be appropriate based on host country expertise.
2	Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	Data provided to the CME prior to inclusion in the PoA: • Name of the CPA • Installed capacity in MW • Location of the CPA - Address - GPS coordinates • Name of the wind farm developer • Contact information, namely: - Contact person, - Postal address, - Telephone number - Email address Data included in CPA-DD: • Unique Identification Number provided by the CME. The CME shall be responsible for cross checking the data provided by the potential CPA owner/developer with publicly available online databases of wind projects and emission reduction projects in Brazil. Upon satisfactory conclusion of the "uniqueness" of the proposed project, a Unique Identification Number shall be issued by the CME (e.g. QGER-CPA-xxxx) which shall be considered sufficient to avoid against double counting of emission reductions. The staff will check on the UNFCCC website if the proposed CPA has already requested for registration a CDM project or a CPA inclusion. In case of registration of an already registered CDM component the PP will communicate immediately the UNFCCC and DOE.	Greenfield WPP connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. This will be further checked during CPA inclusion.
3	The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	Only projects that involve generation of electricity using wind turbine generator based technology are eligible for inclusion under the PoA. The electricity generated by the WPPs should be dispatched to the Brazilian National Interconnected Grid (SIN). The WPPs shall employ standard technology and specifications of the manufacturer and/or best practices of the market but the WPP must not over 30MW of installed capacity The wind average speed must be over 2 m/s, and plant load factor between 20% and 85%. The energy price will be defined by free-market or energy auctions. The tower will be at least 40m height and the rotor blade at least 20m of diameter.	Greenfield WPP connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. This will be further checked during CPA inclusion. CAR8 -PP shall provide the technology specifications as per Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 3.0, paragraph 16 (c). CLOSED as PP amended the criteria.

<table>
<tr><td>4</td><td>Conditions to check the start date of the CPA through documentary evidence</td><td>The start date of each CPA should be the earliest date at which either the implementation or construction or real action of a CPA begins. There should be a documental evidence for this date, such as engineering contract, equipment purchase, or any document that defines the real date. If the actual start date is not available, an indicative start date can be provided. Evidence of the actual start date shall be made available at the time of verification. The start date of any proposed CPA is on or after the start date of the PoA.</td><td>This will be confirmed during CPA inclusion and checking evidences such as power purchase agreements.
CAR2– regarding the requirement that CPA start date cannot be before that of the PoA start date. CLOSED as PP amended the PoA start date.</td></tr>
<tr><td>5</td><td>Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;</td><td>Each CPA must be applicable to and needs to apply the UNFCCC approved large scale methodology ACM002 and necessary tools/guidelines/standards as indicated by this methodology.
<table>
<tr><th>Applicability condition (ACM0002)</th><th>Justification</th></tr>
<tr><td>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).</td><td>A CPA will involve the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.</td></tr>
<tr><td>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</td><td>A CPA will involve the installation of a wind power plant (WPP).</td></tr>
<tr><td>Specific applicability conditions for capacity addition, replacements and/or retrofits.</td><td>A CPA will not involve capacity addition, replacements or retrofits, the conditions are not applicable.</td></tr>
</table></td><td>It is confirmed that the PoA-DD (part I) correctly outlines the applicability conditions for ACM0002 Version 16.0, the GEF tool and the additionality tool correctly. It is also confirmed that both the generic CPA (PoA-DD part II) and the specific CPA both need the applicability conditions set out in the PoA-DD part I. The specific CPA meets the eligibility criteria for Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs.</td></tr>
</table>

Specific applicability conditions for hydroelectric plants	A CPA will not involve hydroelectric plants, the conditions are 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 results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.	A CPA will not involve fuel switch, biomass power plants and/or hydro power plants.

Applicability condition (GEF Tool)	**Justification**
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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).	A CPA will provide electricity to a grid.
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered.
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in	A CPA will be located totally in a non-Annex I country.

		an Annex I country. **Applicability condition (Additionality Tool)** / **Justification** The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool. — No new methodology is being submitted Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory. — A CPA will follow the tool.	
6	The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as follows: - PoAs that consist of one or more micro scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of the "Guidelines for demonstrating additionality of micro scale project activities". - PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the "Simplified modalities and	Additionality shall be demonstrated at CPA level by means of a financial analysis comparing the scenario of each individual CPA with a benchmark scenario. This comparison should clearly and reliably demonstrate that the CPA scenario is not financially attractive and the CPA would not have been implemented without the incentives of CDM and, in the absence of CDM PoA, none of the implemented CPAs would occur. Every CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario.	This PoA consists large scale projects only, and has used an eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies, ACM0002 Version 16.0. The investment analysis for all future CPA will apply option III "Benchmark" from the Additionality tool, thus each CPA will perform a step by step approach for assessing additionality using the "Tool for the demonstration and assessment of additionality", Version 7.0 CAR4 - Financial assumptions/ inputs shall be described and listed here. CLOSED as PP amended the criteria to include financial input values and sources into the PoA-DD Part II (generic CPA).

	procedures for small-scale CDM project activities". - 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.		
7	The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;	Local stakeholder consultation (LSC) under PoA Level is carried out as required by the Brazilian DNA as part of the LoA process. Environmental Impact Assessment (EIA) – as one of the steps of the Environmental Licensing process in Brazil, if applicable – is carried out as required by the Brazilian applicable legislation and according to rules and requirements of the applicable environmental authority.	Resolution no. 9 from the Brazilian DNA set rules for LSC for CDM project activities, see Appendix 3 document [B 7], as follows: *Art. 1 – Project activities that refer to local/regional/national policy or standard under a Programme of Activities can be registered as a single Clean Development Mechanism project activity provided that approved baseline and monitoring methodologies are used that, inter alia, define the appropriate boundary, avoid double counting and account for leakage, and ensure that the emission reductions are real, measurable and verifiable and additional to any that would occur in the absence of the project activity.* *(…)* *Art. 4 – Aimed at obtaining approval of the Clean Development Mechanism Programme of Activities, the Programme's coordinating entity shall present the Executive Secretariat of the Interministerial Commission on Global Climate Change, on electronic media and in hard copy, copies of the invitations for comments as well as the respective acknowledgments of receipt sent at least to the following addresses:* *I – the Executive Secretariat of the Interministerial Commission on Global Climate Change;* *II - Brazilian NGO Forum and Social Movements for the Environment and Development – http://www.fboms.org.br;* *III - National entities whose purposes are directly or indirectly related to the Programme of Activities;* *IV - Federal Attorney General.* *Single paragraph: The invitations for comments mentioned in the caption to this article shall be sent 15 days in advance of the start of the validation process in order to* *guarantee that any comments shall be incorporated in the documentation to be submitted to this Commission aimed at obtaining approval of the*

Programme of Activities by the Designated Operational Entity.

The LSC is performed at the PoA level, as set in the Brazilian legislation, see Appendix 3 document [B 7]. The PP performed the LSC in accordance with the local legislation by posting the project documents online, see Appendix 3 documents [A 1] for public viewing and inviting comments from the list of required stakeholders, see Appendix 3 documents [A 2]. No comments were received. The LSC for this project is deemed satisfactory.

The following compares the list of required stakeholders that require to be contacted on the left and the list of stakeholders the PP contacted with evidences in the form of Receipt Acknowledgement on the right see mail Receipt Acknowledgement in Appendix 3 documents [A 3]:

Brazilian NGO Forum and Social Movements for the Environment and Development	Fórum Brasileiro de ONGs e Movimentos Sociais - FBOMS
National entities whose purposes are directly or indirectly related to the Programme of Activities	Eletrobrás ANEEL
Federal Attorney / Public Ministry	Ministério Público Federal
the Executive Secretariat of the Interministerial Commission on Global Climate Change	Brazilian DNA - Secretaria Executiva da Comissão Interministerial de Mudança Global do Clima

In addition to the stakeholders outlined by the Brazilian DNA, the PP also contacted local stakeholders from the region of the first CPA: state environmental agency (SEMACE) and the state public attorney (MP-CE), see mail Receipt Acknowledgement in Appendix 3 documents [A 4].

It is confirmed through the desk review and during interviews on the

			site visit that the project participants have taken due account of all comments received and have described this process in the PDD. No comments were received during the LSC. CL4– it is not clear is a LSC is to be performed as a criteria to the CPA inclusions, or that the LSC is being performed at the PoA level. CLOSED as PP amended the PoA-DD to clearly state the LSC is done only at the PoA-level.
8	Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	A sign letter for each CPA declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance will be provided.	CME has confirmed that written confirmation will be taken from individual CPA implementer regarding Annex I parties funding, or if any, does not result in a diversion of official development assistance will be provided.
9	Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);	There is no specific target group for the energy consumption, since the power plants will be grid-connected to the national system (SIN). The energy can be sold to buyers in free-marked base or energy auctions.	Greenfield WPP grid-connected to the SIN in Brazil will be only considered in this PoA as confirmed by the CME during site visit. Capacity additions will not be considered. This will be further checked during CPA inclusion.
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	Not applicable. Data will be 100% monitored.	It will be confirmed before including CPAs in this PoA.
11	Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or micro scale project categories	Not applicable. A large scale methodology is being applied.	It will be confirmed before including CPAs in this PoA.
12	All new CPAs must provide an application letter in the name of the wind project developer including the following information:	• Formal application for inclusion of CPA in the PoA. • Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the	It will be confirmed before including CPAs in this PoA. CL5 – Unclear what criteria the list presented are part of. CLOSED as PP amended the PoA-DD by adding a new criteria (m).

		CPA crediting period shall not exceed the PoA end date. • Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.	

B.5. Estimation of emission reductions or net GHG removals by sinks of the generic CPA

B.5.1. Explanation of methodological choices

Means of validation	The PP has applied the methodology ACM0002 Version 16.0. The applied methodology has been correctly used for calculation of the baseline emissions, project emissions, leakage emissions and emission reduction. It is confirmed that adequate justification has been provided for selection between different options. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR9 – Several inaccuracies were found in the values used to determine the ER, including: rounding of values, using the 2011 data from the DNA for $EF_{grid,CM,y}$ and the discrepancies in the numbering system being used.
Conclusion	CAR9 CLOSED, as the PP revised the ER calculation.

B.5.2. Data and parameters fixed ex ante

Means of validation	Combined margin (CM) emission factor ($EF_{grid,CM,y}$) that is fixed ex-ante is based on (a) Weighted average CM. According to ACM0002 Version 16.0., the weighted average CM method (Option a) should be used as the preferred option. The calculation of $EF_{grid,CM,y}$ is from the Brazilian Designated National Authority (DNA). The Brazilian DNA makes available the information of Dispatch Data Analysis - Operating Margin Emission Factor and the Build Margin Emission Factor following stepwise approach of the Tool to calculate the emission factor for an electricity system: The Brazilian DNA Website confirms that the $EF_{grid,CM,y}$ is calculated using the CDM "Tool to calculate the emission factor for an electricity system", Version 4.0. For details please refer to the LRQA Validation Protocol Version 06.
Findings	Not applicable
Conclusion	Ex-ante parameters are fixed in accordance with ACM0002 Version 16.0 which is calculated and made available from Brazilian DNA Website

B.5.3. Ex ante calculation of emission reductions or net GHG removals by sinks

Means of validation	The PP has applied the methodology ACM0002 Version 16.0. The applied methodology has been correctly used in ex-ante calculation of baseline emissions, project emissions, leakage emissions and emission reduction. Emission reductions for the CPA will be calculated based on the methodology approach. For details please refer to the LRQA Validation Protocol Version 06.
Findings	Not applicable
Conclusion	Data sources and assumptions are appropriate and calculations are correct, applicable to the proposed CDM PoA and will result in a conservative estimate of the emission reductions.

B.6. Application of the monitoring methodology and description of the monitoring plan

Means of validation	Description of monitoring Plan is based on approved monitoring methodology ACM0002, "Grid-connected electricity generation from renewable sources" Version 16.0, and it is applied correctly in the specific CPA. LRQA confirms that the Monitoring Plan described in the generic CPA complies with the requirements in the Monitoring Methodology and that the entities/individuals responsible for each CPA and the CME will be able to apply this Monitoring Plan. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR10 – PP to provide all applicability conditions in the PoA-DD part I, in addition

	to that already provided in PoA-DD part II and CPA-DD.
Conclusion	CAR10 CLOSED as PP has described all applicability conditions for PoA.

B.6.1. Data and parameters to be monitored by the generic CPA

Means of validation	It is confirmed through desk review that data and parameters described in generic CPA-DD are in accordance with the applied methodology ACM0002 Version 16.0. For details please refer to the LRQA Validation Protocol Version 06.
Findings	Not applicable
Conclusion	It was confirmed that all data and parameters monitored by generic CPA are in accordance with applied monitoring methodology.

B.6.2. Description of the monitoring plan for the generic CPA

Means of validation	Description of monitoring Plan is based on approved monitoring methodology ACM0002, “Grid-connected electricity generation from renewable sources” Version 16.0 and it is applied correctly in the specific CPA. For details please refer to the LRQA Validation Protocol Version 06.
Findings	CAR10: PP to provide all applicability conditions in the PoA-DD part I, in addition to that already provided in PoA-DD part II and CPA-DD. CL1: The specific CPA-DD Section D.7.2. “Description of the monitoring plan”, does not state who exactly will be performing the ER calculations. CL2: expected lifetime of the wind turbine and related equipment not clearly evidenced.
Conclusion	CAR10 CLOSED as PP has described all applicability conditions for PoA. CL1 CLOSED as PoA-DD and CPA-DD were revised to include the responsible entity. CL2 CLOSED as the equipment manual file “AIR 25 - depreciation, page 7” contains the correct information, being a 20 year equipment expected operational lifetime of the wind turbine. LRQA confirms that the Monitoring Plan described in the generic CPA complies with the requirements in the Monitoring Methodology and that the entities/individuals responsible for each CPA and the CME will be able to apply this Monitoring Plan.

Appendix 1. Abbreviations

Abbreviations	Full texts
ANEEL	“Agência Nacional de Energia Elétrica” (Brazilian Electric Energy Agency)
BE	Baseline emissions
CAPEX	Capital expenditure
CARs	Corrective action requests
CDM	Clean development mechanism
CDM M&P	Modalities and procedures for a clean development mechanism
CDM VVS	CDM Validation and Verification Standard
CDM-EB	Executive board of clean development mechanism
CERs	Certified emission reductions
CIMGC	“Comissão Interministerial de Mudança Global do Clima” (Interministerial Commission Global Climate Change)
CLs	Clarification requests
CME	Coordinating and Managing Entity for a PoA
COFINS	“Contribuição para o Financiamento da Seguridade Social” (Contribution to Social Security Financing)
COP/MOP	Conference of the Parties serving as meeting of the Parties to the Kyoto Protocol
CPA-DD	Component project activity design document
CSLL	“Contribuição Social sobre o Lucro Líquido” (Social contribution on net income)
DNA	Designated national authority
DOE	Designated operational entity
EF	Emission factor
EIA	Environmental Impact assessment
EIA	Environmental impacts assessment
ER	Emission reduction
ERPA	Emissions reduction purchase agreement
FAR	Forward action requests
GHG	Greenhouse gas
GSP	Global stakeholders’ consultation process
IBAMA	Brazilian Environment Institute
IPCC	Intergovernmental panel on climate change
IR	Income tax
IRR	Internal rate of return
KP	Kyoto Protocol of the United Nations Framework Convention on Climate Change
kW / kWh	Kilowatt / Kilowatt hour
LE	Leakage emissions
LoA	Letter of approval
LR	Lloyd’s Register
LRQA	Lloyd’s Register Quality Assurance Limited
LSC	Local stakeholder consultation

Abbreviations	Full texts
MME	Ministry of Mines and Energy
MoC	Modalities of Communication
MW / MWh	Megawatt / Megawatt hour
NCV	Net calorific value
NGO	Non-governmental organization
NPV	Net present value
O&M	Operation and Maintenance
ODA	Official development aid
ONG	NGO
ONS	“Operador Nacional do Sistema” (National Grid Operator)
OPEX	Operational expenditure
PE	Project emissions
PIS	“Programa de Integração Social” (Social Integration Program)
PLF	Plant Load Factor
PoA-DD	Programme of activities design document
PP	Project participant
PROINFA	“Programa de Incentivo às Fontes Alternativas de Energia Elétrica” (Programme of Incentives to the Alternative Sources of Electric Energy)
QA/QC	Quality Assurance and Quality Control
RfR	Request for registration
SELIC	“Sistema Especial de Liquidação e de Custódia” - Special System for Settlement and Custody (Basic Discount Rate)
SEMACE	Environmental State Superintendence
SIN	“Sistema Interconectado Nacional” (Brazilian National Interconnected System / Grid)
tCO_2e	Tonnes of carbon dioxide equivalent
TFSEE	“Taxa de Fiscalização de Serviços de Energia Elétrica” (Supervisory fee/tariff of Electric Energy services)
TUST	“Tarifas de Uso do Sistema de Transmissão” (Transmission system use fee/tariff)
UNFCCC	United Nations Framework Convention on Climate Change
WPP	Wind Power Project
WTG	Wind Turbine Generators

Appendix 2. Competence of team members and technical reviewers

Project Title: Queiroz Galvão Energias Renováveis Wind Power Programme

We hereby certify that the following personnel have engaged in the verification process that has fully satisfied the competence requirements of the verification of the CDM project activity.

Name of Person	Assigned Roles
Vicente San Valero	Team leader and GHG Lead Validator) since 01/08/2014 and sector expert, team member
Cintia Dias	Team leader until 01/08/2014 and GHG Lead Validator
Natalie Kehle	Team member / (GHG Validator and Team Leader under training)
Mara Mendes	Team member until 04/08/2014
Archak Pattanaik	Technical reviewer, Sector Expert
Ankush Jain	Technical reviewer, Sector Expert
Ketan Deshmukh	Decision maker

Decision Maker

Ketan Deshmukh
CDM Quality Manager
02 December 2016

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
A 1	Luiz Antonio Santos	MoC Signed	* Copy of F-CDM-MOC dated 13/11/2014 signed by Luiz Antonio Santos from Éolos Energias Renováveis S.A., file “MoC Assinado”. * Copy of CDM-MOC-FORM dated 28/07/2016 signed by Luiz Antonio Santos from Éolos Energias Renováveis S.A. file “MoC_QGER.pdf”.	CME
A 2	Luiz Antonio Santos	Signed CPA declaration	Signed CPA Declaration for CPA “Ilha Grande Wind farm project”, Unique identification: QGER CPA 0001, dated 08/05/2014 by the PP Éolos Energias Renováveis S.A Mr. Luiz Santos	CME
A 3	CME	Monitoring and Training manuals	Monitoring manual that will be available for each wind farm describing procedures and responsibilities, file “manual de operações" e "anexo iii” dated 02/10/2013 Monitoring manual, file “QGER Manual Monitoramento”, Version 01 dated 05/01/2015	CME
A 4	--	Stakeholder meeting	1. Electrobrás, dated 04/10/2013; 2. ANEEL, dated 07/10/2013; 3. IBAMA, dated 07/10/2013; 4. Fórum Brasileiro de ONG’s e Movimentos Sociais para o Meio Ambiente e Desenvolvimento, dated 07/10/2013; 5. Secretaria Executiva da Comissão Interministerial de Mudança Global do Clima, dated 07/10/2013; 6. Ministério Público Federal, dated 11/10/2013; 7. SEMACE – Superintendência Estadual de Meio Ambiente, received on 04/10/2013; Ministério Público do Ceara, received on 04/10/2013.	CME
A 5	Construtora Queiroz Galvão S/A and Alstom Brasil	Start date of CPA	Start date of CPA evidence - refers to the signature of the main equipment purchase contract involved in the CPA Equipment purchase contract for Alstom ECO122 wind turbines for the Amontada Complex between Construtora Queiroz Galvão S/A and Alstom Brasil Energia e Transporte LTDA., dated 06/09/2012	CME
A 6	Geoconsult	EIA	Geoconsult Environmental impact assessment report at CPA level for Ilha Grande CPA, folder “Estudos Ambientais Ilha Grande”, dated October 2011	CME
A 7	SEMACE	Environmental Installation License & Operational License	* SEMACE Environmental Installation License for Central Eolica Ilha Grande LTDA. #488/2011 – DICOP –GECON, dated 20/12/2012 valid until 08/12/2013, file “Licença Ambiental Ilha Grande”. * SEMACE Request Protocol for Operational License for Central Eolica Ilha Grande LTDA #488/2011, Protocol # 7994001/2013 dated 04/12/2013, file” Prot.de req. LO Ilha Grande”.	CME

			* SEMACE Environmental Operational License for Central Eolica Ilha Grande LTDA. #168/2014 – DICOP –GECON, dated 28/08/2014 valid until 08/06/2018, file "Licença Ambiental Ilha Grande".	
A 8	Schneider Electric	Technical data sheets	Copies of the Technical data sheets of equipment to be installed, including monitoring equipment: 1. Schneider Electric ION8600 Energy and power quality meter data specification sheet, dated 2009, file "ION8600"; WTG operational lifetime: technical description of WTG ECO122, files "turbine-platform.pdf & turbine-platform2.pdf".	CME
A 9	WAYCARBON	Common practice	Common practice analysis Excel Version 1, file "common practice", dated 12/03/2014. The final revised common practice analysis is found within the spreadsheet in A 30.	CME
A 10	--	Public consultation	1. SEMACE – Superintendência Estadual de Meio Ambiente, received on 04/10/2013; Ministério Público do Ceara, received on 04/10/2013.	CME
A 11	CME	Prior consideration notifications	• UNFCCC Website – Prior Consideration for CPA "Ilha Grande Wind Farm project", "Queiroz Galvão Energias Renováveis Wind Power Programme" and "Central Geradora Eolica Ilha Grande Project Activity" site accessed on 05/05/2014 http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html. Email from PP to UNFCCC for notifications, files "Email - Prior consideration evidences", "Email- Prior consideration evidences_2" and "Email - Prior consideration evidences_3".	CME
A 12	--	Agreement	CAPEX: Signed agreement with the wind generator supplier, dated 06/09/2012, WTGs model ECO122, file "ALSTOM contract generators.pdf".	CME
A 13	Garrad Hassan	Study report	GL Garrad Hassan Wind Production Evaluation Studies for the Amontada Wind Complex: 1- document number 237580-BRPA-R-01 Version A, dated 21/08/2012; 2- document number 237580-BRPA-R-02 Version A, dated 27/00/2012; 3- document number 237580-BRPA-R-03 Version A, dated 31/01/2013, file "Wind study.pdf".	CME
A 14	--	PPA	Power purchase agreement dated 22/12/2010 and Additive to the contract, dated 24/02/2012 (Confidential agreements).	CME
A 15	--	Agreement	CAPEX: Civil works cost. Turn-key agreement with Cortez Engenharia, dated 22/01/2013, file "EPC contract.pdf".	CME
A 16	--	Agreement	CAPEX: Electrical works (substation, distribution and transmission lines). Signed agreement with Alstom, dated 08/02/2013 (turn-key), File "ALSTOM contract.pdf".	CME
A 17	--	Amendment	CAPEX: Environmental compensation. Amendment of the environmental compensation commitment term 51/2011, file "compensation costs.pdf".	CME
A 18	ANEEL	Resolution	Aneel Authoritative Resolution #3267 - authorizes the company to be created and explore wind power in this project, dated 20/12/2011 http://www.jusbrasil.com.br/diarios/37734206/dou-secao-1-11-06-2012-pg-75.	CME

A 19	--	Agreement	CAPEX: Environmental monitoring program: Signed agreement with consultancy company, # 213-25.10.12-CE, dated 08/01/2013, file "monitoring cost.pdf".	CME
A 20	Multiempre endimentos	Contract	CAPEX: Other engineering costs. Contract signed with Multiempreendimentos, MPE. ER. 01.159-12P_ REV.02, dated 24 January 2013, file "MPE. ER. 01.159-12P_ REV.02.pdf".	CME
A 21	CEMIG	Insurance policy	Signed Insurance policies by CEMIG Geração e Transmissão S/A to Eolos Energias Renováveis S/A, folder "Insurance" Insurance costs: surety. Insurance policies #06122201100010776000042 7, #06122201200010776000068 5, #06122201100010776000045 9, #06122201100010776000076 3	CME
A 22	--	Proposal	Proposal for the technical environmental services for the CGE Ilha Grande Project, part of the Amontada Wind Complex (environmental licensing costs) between Geoconsult Consultoria, Geologia e Meio Ambiente LTDA. and Central Eólica Ilha Grande LTDA and Queiroz Galvão Energia Renováveis. Proposal number 084-15.03.12-CE.REV02A.27.09.12, dated 24/09/2012, file "licensing cost.pdf".	CME
A 23	--	Agreement	OPEX: Signed agreement with turbine supplier, dated 06/09/2012 for provision of operation and maintenance services, file "Contrato Alstom O&M Amontada.pdf".	CME
A 24	ANEEL	Manual	ANEEL: Table XVI of Manual of Asset Control of the Electricity Sector (MCPSE - Manual de Controle Patrimonial do Setor Elétrico) - describing the depreciation and lifetime of wind generator used in the Brazilian power sector, not dated, see file "depreciation, page 7".	CME
A 25	--	Agreement	OPEX: Land-lease agreement between Central Eólica Ilha Grande and land owners signed in 28/01/2008, file "land usage.pdf".	CME
A 26	Brazilian DNA	Letter of Approval	Federative Republic of Brazil - Ministry of Science, Technology, Innovation and Communications: Letter of Approval dated 28/09/2016 (file: "PROGRAMA_DE_ENERGIA_EOLICA_QUEIROZ_ GALVAO.pdf").	CME
A 27	AMBIO - WAYCARBON	LSC	LSC - Documents sent to Stakeholders, folder "public consultation", posted at www.ambiopar.com/projetos/qger.zip (later replaced by **http://bit.ly/2ajQ3r6**): 1. Letter from AMBIO " Anexo III conforme Resolução n°.1 da CIMGC" regarding contribution to sustainable development from the QGER Wind Power Programme, dated 02/10/2013; 2. CPA-DD for QGER CPA Ilha Grande Wind Power Project Version 01 – 20/08/2013; 3. PoA-DD for QGER Wind Power Programme Version 01 – 20/08/2013.	CME
A 28	WAYCARBON	F-CDM-PoA-DD	• F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 01 dated 20/08/2013 . • F-CDM-PoA-DD Queiroz Galvão Energias	CME

			Renováveis Wind Power Programme Version 04 dated 21/05/2014, file " POA (track) 2014.05.21_2". • F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 05 dated 10/10/2014, file "QGER-POA 2014.10.09_clean (1).docx - FINAL (1) (1) ". • F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 06 dated 12/03/2015, file "QGER-POA 2015.03.13". • ".F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 7 dated 07/05/2015, file "QGER-POA 2015.05.07 ". • F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 08 dated 19/11/2015, file "QGER-POA_v08.pdf". • .F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 09 dated 04/12/2015, file "QGER-POA_v09.pdf". • F-CDM-PoA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 10 dated 03/08/2016, file "QGER_POA_V10_english.pdf ".	
A 29	WAYCARBON	F-CDM-CPA-DD	• F-CDM-CPA-DD Ilha Grande Wind Farm project Version 01 dated 20/08/2013. • F-CDM-CPA-DD Ilha Grande Wind Farm project Version 02 dated 20/03/2013. • F-CDM-CPA-DD Ilha Grande Wind Farm project Version 03 dated 28/04/2013. • F-CDM-CPA-DD Ilha Grande Wind Farm project Version 04 dated 21/05/2014 file "CPA (track) 2014.05.21". • F-CDM-CPA-DD Ilha Grande Wind Farm project Version 05 dated 10/10/2014 file "QGER-CPA0001 2015.02.04". • F-CDM-CPA-DD Ilha Grande Wind Farm project Version 06 dated 12/03/2015 file "QGER-CPA0001 2015.03.13". • F-CDM-CPA-DD Ilha Grande Wind Farm project Version 7 dated 07/05/2015 file "QGER-CPA0001 2015.05.07". • F-CDM-CPA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 08 dated 19/11/2015, file "QGER-CPA_v08.pdf". • F-CDM-CPA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 09 dated 04/12/2015, file "QGER-CPA_v09.pdf". • F-CDM-CPA-DD Queiroz Galvão Energias Renováveis Wind Power Programme Version 10 dated 03/08/2016, file "QGER_CPA_V10_english.pdf "	CME
A 30	WAYCARBON	CER emission calculation	• WAYCARBON: CER emission calculation/ Financial analysis worksheet, Version 01 dated 25/10/2013 , file "20131025 CPA Ilha Grande-Financial Analysis & ER.xls". • WAYCARBON: CER emission calculation/ Financial analysis and Common Practice worksheet, Version 02 dated 15/05/2014, file "QGER_FA_ER.xls". • WAYCARBON: CER emission calculation/	CME

			Financial analysis and Common Practice worksheet, Version 05 dated 10/10/2014, file "QGER_FA_ER_Client.xls".	
A 31	CME	Evidence	MoC evidences, folder "MOC": • Copy of Brazilian Drivers Licenses of Mr. Luiz Santos, file "Habilitacao Luiz - Valid 03.12.2014" • Copy of the power of attorney of Éolos Energias Renováveis S.A. granted towards Luiz Antonio Santos, 08/05/2014, file "eolos – procuracao"	CME
A 32	--	GSM	CDM33 Global Stakeholder Consultation- Queiroz Galvão Energias Renová34veis Wind Power Programme, from 14/12/2013 to 12/01/2014. No comment35s received. http://cdm.u36nfccc.int/ProgrammeOfActivities/Validation/DB/CKG0XTVO5BVBIDTH2KED37JDTD1WOR/view.html	CME
A 33	Waycarbon and ÉOLOS ENERGIAS RENOVÁVEIS S.A.	Contract	Contract between Waycarbon and ÉOLOS ENERGIAS RENOVÁVEIS S.A. in providing CDM consultancy services in the Queiroz Galvão Energias Renováveis Wind Power Programme dated 23/09/2014 file "Contrato Way Carbon".	CME
A 34	Luiz Antonio Santos	MoC	Modalities of Communication (MOC) (version 0.21), signed 13/11/2014 by Luiz Antonio Santos from ÉOLOS ENERGIAS RENOVÁVEIS S.A. file "MoC assinado.pdf - FINAL"	CME
A 35	Ambio Participações Ltda	Declaration	Signed Declaration of no objection by Ambio Participações Ltda to the CME change to Eolos Energias Renováveis SA, dated 05/05/2015, file "Declaração Ambio para Eólos (1)" Email to support the CME change, from Ambio Participacoes Ltda, dated 05/05/2015.	CME

No.	Author	Title	References to the document	Provider
B 1	Brazilian DNA	Emission Factors	Brazilian DNA publication of annual Emission Factors for the Brazilian electivity grid (2012), Website visited on 19/02/2014 http://www.mct.gov.br/index.php/content/view/338047.html#ancora	Others
B 2	CDM EB	Methodological Tool	CDM Executive Board: Methodological Tool "Common Practice" Version 03.1 dated 03/06/2015.	Others
B 3	CDM EB	Methodology	ACM0002 - "Grid-connected electricity generation from renewable sources", version 16.0 dated 28/11/2014. Validity: from 28 Nov 14 onwards.	Others
B 4	ANEEL	DATA	Common practice analysis validated using ANNEL Website with historical data: http://www.aneel.gov.br/aplicacoes/autorizacoes/default_aplicacao_acompanhamento.cfm?IDACOMPANHAMENTOTIPO=2	Others
B 5	CDM EB	Guidelines/Tool	CDM Executive Board: "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities" (CDM-EB65-A03-STAN) Version 3.0. CDM Executive Board: "Tool for the demonstration and assessment of additionality", version 07.0.0 (EB70 - Annex 8).	Others

			CDM Executive Board: Methodological Tool "Investment Analysis", version 06.0 (EB 85, Annex 12).	
B 6	ONS	Procedure	Brazilian ONS - Procedures for the Grid Maintenance: Module 12 of the ONS – http://www.ons.org.br/administracao_transmissao/implantacao_medicao.aspx	Others
B 7	Brazilian DNA	Resolution	Brazilian DNA Resolution No. 9, of March 20, 2009, which determines the Clean Development Mechanism Programme of Activities regarding Local Stakeholder Consultation for a PoA: http://www.mct.gov.br/upd_blob/0201/201428.pdf	Others
B 8	Brazilian Ministry of Environment	Resolution	Brazilian Ministry of Environment: CONAMA Resolutions No. 001 of 1986 http://www.mma.gov.br/port/conama/res/res86/res0186.html Article 1, Paragraph 1, CONAMA Resolution No. 237 of December 19, 1997 http://www.mma.gov.br/port/conama/res/res97/res23797.html	Others
B 9	Brazil Government	Law	Brazilian Federal Law 6.938/81 regarding environmental licensing: http://www.planalto.gov.br/ccivil_03/leis/L6938.htm	Others
B 10	--	Environmental study	Simplified Environmental Study and an Environmental Control Plan (Article 38 of Normative Instruction No. 184 of July 17, 2008)	Others
B 11	ANEEL		ANEEL Resolution No. 3,267 (dated 20/12/2011)	Others
B 12	CDM EB	Guidelines	CDM Executive Board: Guidelines for the Reporting and Validation of Plant Load Factors Version 01 http://cdm.unfccc.int/Reference/Guidclarif/meth/meth_guid35.pdf	Others
B 13	CDM EB	Forms	CDM Executive Board: Instructions for filling out the component project design document form for CDM component project activities Version 05.0 https://cdm.unfccc.int/filestorage/e/x/t/extfile-20160415152158155-PDD_Form13.pdf/PDD_Form13.pdf?t=Yll8b2M0aXYwfDDIVxN3n7mr5tTniCVhaFtA	Others
B 14	CDM EB	Forms	CDM Executive Board: Instructions for filling out the project design document form for CDM programme of activities Version 06.0 https://cdm.unfccc.int/filestorage/e/x/t/extfile-20160415152054009-PDD_Form09.pdf/PDD_Form09.pdf?t=Vmh8b2M0aXVpfDDE1pWSZqWeL3dJD0d0vhGK	Others
B 15	CDM EB	Prior consideration	UNFCCC Website – Prior Consideration for "Ilha Grande Wind Farm", site accessed on 05/05/2014 http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html	Others
B 16	UNFCCC	GSP	UNFCCC CDM Project Website for Queiroz Galvão Energias Renováveis Wind Power Programme, accessed on 05/05/2014 http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/CKG0XTVO5BVBIDTH2KED37JDTD1WOR/view.html	Others
B 17	ANEEL	Data	ANEEL - Supervisory oversight of Generation Services – SFG dated April 2014	Others

			http://www.aneel.gov.br/arquivos/pdf/EOL_Cronograma_Eventos_abril_2014.pdf ANEEL - Dispatch No 3,203, dated 19/08/2014 – authorizes plant operation from 20/08/2014 on (file "dsp20143203ti.pdf").	
B 18	ANEEL	Resolution	ANEEL Decision "Resolução Autorizativa Nº 4.297, dated 27/08/2013 http://www.aneel.gov.br/aplicacoes/noticias_area/arquivos/48500_002840_2013_25-_minuta.pdf http://www.aneel.gov.br/aplicacoes/noticias_area/arquivos/48500.002840.2013.25_e_outros.pdf	Others
B 19	CDM EB	Tool	"Tool to calculate the emission factor for an electricity system", version 05.0, dated 27/11/2015 (EB 87, Annex 9).	Others
B 20	Brazilian DNA	Resolution	Brazilian DNA published Resolution #8, dated 28/05/2008	Others
B 21	ONS	Electrical system	Electric System National Operator (ONS) – Brazilian electrical system description, accessed on 22/05/2014 http://www.ons.org.br/institucional/modelo_setorial.aspx?lang=en	Others
B 22	ANEEL	Monthly report	Monthly report from ANEEL on the SIN's power plants results, "Boletim_Eolica_out-2011.pdf", available on http://www.ons.org.br/download/resultados_operacao/boletim_mensal_geracao_eolica/Boletim_Eolica_out-2011.pdf	Others
B 23	BCB	SELIC data	BCB - Banco Central do Brasil: SELIC data. http://www.bcb.gov.br/?COPOMJUROS. Accessed on April, 2014.	Others
B 24	W. Gonçalves Jr., R. R. Rochman, W. Eid Jr., L. R. Chalela	Market Premium	W. Gonçalves Jr., R. R. Rochman, W. Eid Jr., L. R. Chalela (2011). Estimating the Brazilian Market Premium. Available at http://www.anpad.org.br/periodicos/arq_pdf/a_1237.pdf or http://www.scielo.br/pdf/rac/v15n5/a09v15n5.pdf. Last accessed on May 2014.	Others
B 25	Bloomberg	Guide	Bloomberg Instruction and Reference Guides. Available at http://guides.lib.byu.edu/content.php?pid=53518&sid=401576. Last accessed in April 2014.	Others
B 26	Santander	Financial assessment	External financial assessment, dated 12 June 2012, carried out by Santander (External financial assessment.pdf). It includes a comparison for insurance, land lease, maintenance, and capex per installed capacity for wind power plants.	Others
B 27	ANEEL	Resolution	ANEEL Resolution 1555 issued on 27/06/2013 http://www.aneel.gov.br/cedoc/reh20131555.pdf	Others
B 28	AN EEL	Resolution	ANEEL (2004). Normative Resolution n° 77, 18/08/2004. Available at: http://www.aneel.gov.br/cedoc/ren2004077.pdf. Last accessed: May 2014	Others
B 29	Federal Revenue	Tax regulation	Secretary of Federal Revenue of Brazil (*Receita Federal*), tax regulation: http://www.receita.fazenda.gov.br/principal/Ingles/SistemaTributarioBR/Taxes.htm	Others
B 30	Federal Revenue	Regulation	Secretary of Federal Revenue of Brazil (*Receita Federal*), tax regulation on PIS/COFINS: http://www.receita.fazenda.gov.br/pessoajuridica/pispasepcofins/RegIncidencia.htm	Others

B 31	ANEEL	Depreciation	ANEEL: Depreciation and lifetime of electrical equipment. Manual of Asset Control of the Electricity Sector (MCPSE - Manual de Controle Patrimonial do Setor Elétrico), Table XVI, dated 2009. Available at: http://www.aneel.gov.br/aplicacoes/leitura_arquivo/arquivos/Altera%C3%A7%C3%B5es_no%20MCPSE-v9.pdf	Others
B 32	Brazil	Law	Law 12783 dated 11/01/2013 (http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2013/lei/L12783.htm)	Others
B 33	ANEEL	Technical	ANEEL Technical Note 01/2013-SRE/ANEEL (14/01/2013) (http://www.aneel.gov.br/cedoc/ndsp2013101.pdf)	Others
B 34		Data	Wind Measurement International, http://www.windmeasurementinternational.com/wind-turbines/om-turbines.php	Others
B 35	ANEEL	Data	ANEEL Brazilian power generation data for 2014, accessed on 03/07/2014 http://www.aneel.gov.br/aplicacoes/capacidadebrasil/capacidadebrasil.cfm	Others
B 36	CDM-EB	Exemption letter	INQ-04325, dated 20/01/2016 - exemption from the requirement in paragraph 78 of the PS version 09.0 (INQ-04325, dated 20/01/2016) was granted	Others
B 37	CDM-EB	CDM STANDARDS	* CDM Validation and Verification Standard (CDM VVS), version 09.0 dated 20/02/2015. * CDM Project Cycle Procedure, version 09.0 dated 20/02/2015. * PS - CDM Project Standard (CDM PS) version 09.0 dated 20/02/2015.	Others

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

Table 1. CL from this validation

CL ID	~~CL 1~~	**Section no.**	Part II – B.6.2	**Date:** 16/12/2004
Description of CL				
Regarding the management system of the PoA: The specific CPA-DD Section D.7.2. "Description of the monitoring plan", does not state who exactly will be performing the ER calculations, stating only "by the person in charge". Please clarify the role and responsibility and the QA/QC practices to ensure accurate ERs.				
Project participant response				**Date:** 07/05/2015
The PoA-DD and CPA-DD were revised to include the responsible entity. As per the revised description WAYCARBON will be responsible for the ER calculation.				
Documentation provided by project participant				
PoA-DD Version 7 dated 07/05/2015 CPA-DD Version 7 dated 07/05/2015				
DOE assessment				**Date:** 12/05/2015
The PP has described in more detail the roles and responsibilities in the project activity under both the PoA-DD Section B.7.2 (part II) and the CPA-DD Section D.7.2. This CL is CLOSED.				

CL ID	~~CL 2~~	**Section no.**	Part II – B.6.2	**Date:** 16/12/2004
Description of CL				
Regarding the Start date of a PoA/CPA, duration of the crediting period and Prior Consideration: 1. The equipment manual file "AIR 09.2 - turbine-platform" does not contain the expected lifetime of the wind turbine and related equipment, as mentioned as the expected lifetime of the equipment according to the manufacturer in the CPA start date (20 years). 2. Please provide the previous UNFCCC notifications for the project as the only published one is for the Queiroz Galvao Wind Power Project dated 04/06/2013.				
Project participant response				**Date:** 07/05/2015
1. The equipment lifetime of 20 years was adopted. 2. The notifications below are related to the CPA Ilha Grande and to this Programme. The Prior consideration from was related to project activity until December 2012, when the form for PoA was launched. Considering this, the first 2 prior notifications were related to the Ilha Grande CPA.				
Project Title	**Entity Name**	**Host Party**	**Date Received**	
Central Geradora Eolica Ilha Grande Project Activity	EcoPart Assessoria Ltda.	Brazil	13/05/2009	
Ilha Grande Wind Farm	Central Eólica Ilha Grande LTDA	Brazil	21/10/2011	
Queiroz Galvão Energias Renováveis Wind Power Program	Ambio Participações Ltda	Brazil	04/06/2013	
Documentation provided by project participant				
PoA-DD Version 7 dated 07/05/2015				
DOE assessment				**Date:** 12/05/2015
1. The equipment manual file "AIR 25 - depreciation, page 7" contains the correct information, being a 20 year equipment expected operational lifetime of the wind turbine. See CAR4. CLOSED 2. The prior consideration evidence was found on the UNFCCC official Website under the title "Ilha Grande Wind Farm" dated 21/10/2011, see Appendix 3 document [B 15]. CLOSED.				

CL ID	~~CL 3~~	**Section no.**	Part I – B.1	**Date:** 16/12/2004
Description of CL				

Regarding the financial analysis: How depreciation, and other non-cash items related to the project activity are considered in the calculation of financial indicator (IRR).	
Project participant response	**Date:** 07/05/2015
The tax system adopted by the project developer is presumed profit, and the depreciation cannot reduce the IRPJ (tax over revenues) and CSLL (social contribution over profit) to be paid.	
Documentation provided by project participant	
ER Version 05 dated 10/10/2014	
DOE assessment	**Date:** 12/05/2015
Guidance 5 of the Guidelines on the Assessment of Investment Analysis (EB 62, Annex 5) requires depreciation to be added back to net profits for the purpose of calculating the financial indicator (e.g. IRR, NPV) in case it has been deducted in estimating gross profits on which tax is calculated. However, as the PP explains, depreciation was not discounted from profit in order to estimate the income taxes, so there is no need to include it back to the spreadsheet. Ilha Grande Wind Farm was confirmed as a company eligible for the presumed (assumed) profit tax system and, for companies registered in this fiscal regimen, the company cash-flow is not impacted by depreciation. The answer by PP is considered reasonable and this CL is CLOSED.	

CL ID	~~CL 4~~	**Section no.**	Part I - F	**Date:** 16/12/2004
Description of CL				
Regarding the Environmental impact assessment and stakeholder consultation: 1. The LSC was chosen to be performed at the PoA level and evidences provided. However, the CPA Section D.5 page 21, it states that in addition to the PoA level LSC "The Local stakeholder consultation (LSC), as required by the Brazilian DNA, was performed at PoA level. However, in addition to this LSC, the local communities and associations, as well as local government were consulted and a summary of the CPA was made available/sent by mail. No comments were received so far". Under PoA-DD Section B.2 (g) and also in Section F.1 - if the LSC is also being performed at the CPA –level as stated in the CPA-DD Section D.5.				
Project participant response				**Date:** 07/05/2015
LSC was performed at PoA Level, but the local public attorney and the local environmental agency were also invited to reinforce the transparency of the process. The Brazilian DNA requires the Federal MP to be invited for local stakeholder meeting. The local MP were also invited for the transparency of the process. Necessary evidence for local stakeholders' consultation process was submitted.				
Documentation provided by project participant				
PoA-DD Version 7 dated 07/05/2015 – LSC evidences				
DOE assessment				**Date:** 12/05/2015
All LSC evidences were provided to the DOE team and deemed satisfactory, see Appendix 3 documents [A 4]. CLOSED PP clarified in the PoA-DD Section B.2 (g) and also in Section F.1 that the LSC is being performed at the PoA level. CLOSED				

CL ID	~~CL 5~~	**Section no.**	Part II – B.4	**Date:** 16/12/2004
Description of CL				
Regarding the eligibility criteria set for the PoA: 1. It is not clear is a LSC is to be performed as a criteria to the CPA inclusions, or that the LSC is being performed at the PoA level, as per eligibility criteria (g). 2. In PoA- DD part I eligibility criteria (l), it is unclear if the list provided is a requirement of that eligibility criteria. Please clarify what criteria this list is for: All new CPAs must provide an application letter in the name of the wind project developer including the following information: • Formal application for inclusion of CPA in the PoA. • Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date.				

• Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA. In PoA-DD part I eligibility criteria (f), it is unclear which additionality standards are being applied in this condition. Please clarify.	
Project participant response	**Date:** 07/05/2015
1. The LSC was performed at PoA level, as required by the national authority. 2. The criteria (i) mentioned was rewritten to clarify this issue. The document CDM-EB74-A05 - Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities, on its paragraph 16 requires the PoA-DD part I eligibility criteria (f). The declaration from PP was sent to DOE, considering the required information/ declaration. The application letter requirement was included in item (m) in PoA-DD and CPA-DD. 3. CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario. Please see CDM-EB65-A03-STAN paragraph 3.2.1 item (f and paragraph 13 item (a i).	
Documentation provided by project participant	
PoA-DD Version 7 dated 07/05/2015 – LSC evidences – PP Signed declaration	
DOE assessment	**Date:** 12/05/2015
1. The LSC is being performed at the PoA level, as per eligibility criteria (g). See CL4. CLOSED In PoA- DD part I eligibility criteria (l) is regarding debunking, and a new criteria was added under (m) to clearly show a new criteria "(m) All new CPAs must provide an application letter in the name of the wind project developer including the following information". PP also provided a signed declaration for the "Ilha Grande Wind Farm project", Unique identification: QGER CPA 0001, satisfying the new eligibility criteria (m). CLOSED	

Table 2. CAR from this validation

CAR ID	~~CAR 1~~	**Section no.**	Part I – C	**Date:** 16/12/2014
Description of CAR				
Regarding the management system of the PoA: The manual for PoA operations and system management does not include: • A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, • Records of arrangements for training and capacity development for personnel; • Procedures for technical review of inclusion of CPAs; • A procedure to avoid double counting • Records and documentation control process for each CPA under the PoA; Measures for continuous improvements of the PoA management system				
Project participant response				**Date:** 07/05/2015
The PoA management manual now includes the roles of responsibilities of personnel involved; training requirements, records and capacity development of personnel involved; process of CPA inclusion, avoidance of double counting and technical review of the process was included. The records and documentation to be maintained for CPA inclusion is also described. Lastly, continuous development of the PoA management process is described. A summary of these processes is described in the CPA-DD Section D.7.2. and PoA-DD Part II Section B.7.2 .				
Documentation provided by project participant				
. PoA management manual - PoA-DD Version 7 dated 07/05/2015 - CPA-DD Version 7 dated 07/05/2015				
DOE assessment				**Date:** 12/05/2015

The PP has added a clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies (including the person that will be responsible to check the features of potential CPAs to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA);

a) Records of arrangements for training and capacity development for personnel;
b) Procedures for technical review of inclusion of CPAs;
c) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA);
d) Records and documentation control process for each CPA under the PoA;
e) Measures for continuous improvements of the PoA management system;
f) Any other relevant elements

In addition, Section B.7.2 of the PoA-DD (part II) also contains the above table.
The competencies of WAYCARBON on CDM knowledge was validated during interviews with WAYCARBON Consultant during the site visits. Please refer to Section 3.2 of this report for more details regarding topics covered during the on-site visit.
The descriptions provided in the project documents meet the requirements under "Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities" Version 3.0 paragraph 19 (a)-(g) and shall be verified during the verification process in the future once the project has been implemented.
This CAR is CLOSED.

CAR ID	~~**CAR 2**~~	**Section no.**	Part I – D / Part II – B.4	**Date:** 16/12/2014

Description of CAR

Regarding the Start date of a PoA/CPA, duration of the crediting period and Prior Consideration:

1. The PoA start date is stated as 13/12/2013 (being the date of GSC and publication of the PoA-DD on the UNFCCC Website) and the start date of the CPA was stated as 06/09/2012. PP to clarify CPA and PoA starting dates.
2. Though the PoA-DD was published (date for GSC) on UNFCCC Website in 14/12/2013, the PoA-DD describes it as 13/12/2013.
3. The specific CPA-DD states that the crediting period is to start on 01/06/2014 (which is not likely to occur after performing the on-site visit) but PPs did not provide a timeline (schedule) for the full implementation of the project within the CPA-DD. PP is to clarify the implementation dates of the project.
4. ANEEL Resolution No. 3,267 (dated 20/12/2011) mentions that Ilha Grande Wind Farm is to start the commercial operation of all units on 01/01/2014. The commercial operational start date is outdated as this date has already past and justifies the delay.

The table in the CPA-DD Section D.5 does not clearly state the CPA and PoA start dates and the justification for the chosen start date. Also, the notification to UNFCCC in the table does not state of if it was for CPA level or PoA level of the project.

Project participant response — **Date:** 07/05/2015

1. Start date of the PoA can be determined either of (a) date of notification made to the UNFCCC and DNA; or (b) date of publication of PoA-DD. The PP has notified the secretariat on 21/10/2011 and the DNA on 21/10/2011 for their intention to seek CDM status. The start date of the PoA was therefore revised in the PoA-DD. The start date of the CPA is now after the start date of the PoA. Considering this, the CPA start date is 06/09/2012 which is defined by the ALSTOM contract and the PoA starting date is 21/10/2011 which is defined by the prior consideration form sent to UNFCCC and DNA. Therefore, CPA meets the eligibility criteria of start date. The PoA-DD and CPA-DD were revised accordingly.
2. The date for the GSC was corrected and made consistent to 14/12/2013.
3. According to information available on ANEEL website, the expected operational starting date for Ilha Grande CPA is June/2014 (please see the link). The official communication was not available after this. The start date of crediting period for CPA was considered to be 01/04/2015.
4. The estimated commercial operation date was revised in the CPA-DD Section D.5 to 13/06/2014.
5. The sentence indicated was revised to "the start date of any proposed CPA is on or after the start date of the PoA."

Documentation provided by project participant

. PoA-DD Version 7 dated 07/05/2015 - CPA-DD Version 7 dated 07/05/2015

DOE assessment — **Date:** 12/05/2015

1. The PP has changed the PoA start date to 21/10/2011 , being option (a) in paragraph 213 of the Project Standard, "(a) The date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA". Team reviewed the email communication

with the secretariat dated: 21/10/2011 and with the DNA of Brazil dated: 21/10/2011. The prior consideration date was validated on the UNFCCC Website under prior consideration for "Ilha Grande Wind Farm", see Appendix 3 document [B 15]. The start date for the CPA remains the same, being after the start date of the PoA, on 06/09/2012. This is the signature date of the main expenditure involved in the CPA, contract between project owner and Alstom – purchase of the wind turbine generators, see Appendix 3 document A 12]. CLOSED

PP added the sentence "The start date of any proposed CPA is on or after the start date of the PoA" in the PoA-DD Section B.2 (d). This is in accordance with PS paragraph 213. CLOSED

2. Section D.5 of the CPA-DD under (d), the timeline was corrected to the correct GSC date of 14/12/2013, as per the CDM project site, see Appendix 3 document [B 16]. CLOSED
3. According to an updated ANEEL document, see Appendix 3 document [B 17], the wind project "Ilha Grande" has a status of "under construction" with a provision to be commercially operating on 20/08/2014. The PP changed the start of the crediting period for the CPA from "01/06/2014 or the registration date, whichever is later" to "01/04/2015 or the registration date, whichever is later" to compensate for this delay in the project implementation. The following is the timeline taken from this ANEEL update for the Ilha Grande project:

EVENTS	Date of Occurrence
Start of transmission system	01/06/2012
Start of Civil works/ structures	01/04/2013
Start of base concrete	01/05/2013
Start of tower assembly	20/03/2014
Operational Test runs http://qgenergia.com/br/destaques/ler/eolicas-iniciam-operacao-em-teste-no-ceara/MTU=	26/06/2014
Forecasted – Commercial Operation	20/08/2014

CLOSED

4. The timeline in the CPA-DD Section D.5 was corrected to include the estimated commercial start date of the project as 20/08/2014 (Dispatch No 3,203, dated 19/08/2014).
   This is the latest official evidence by ANEEL authorization to start commercial operation. The plant started operations but is not fully operational until the time of this Validation (2014 average of 8.4 mw for a 29.7 installed capacity) but there is no other official evidence for real commercial operation starting date.

CLOSED

The timeline was corrected to provide the start dates for the PoA and the CPA, being 21/10/2011 for the PoA start date (Second communication to UNFCCC) and 06/09/2012 (being the signature date for the contract between Alstom and Project Developer). All necessary evidences were provided to the validation team, see Appendix 3. CLOSED

CAR ID	~~CAR 3~~	Section no.	Part I – B.1	Date: 16/12/2014

Description of CAR

Regarding additionality of the project in the PoA and CPA:

To conduct an investment analysis to each CPA, the coordinating/managing entity shall describe and define the input parameters that will be used in the investment analysis in the PoA-DD, together with a description of how the values for these parameters will be obtained for each CPA. The additionality of each CPA shall then be assessed by using the actual values, applicable to the CPA at the time of inclusion, in the investment analysis conducted for the purpose of demonstrating the additionality of the CPA. Please provide these input values in the CPA-DD.

The PP did not explain why the PROINFRA program is not available for the proposed project, under the common practice analysis.

Project participant response **Date:** 07/05/2015

The information need to execute the financial analysis is presented in PoA-DD Part II Section B.5. (f) and the values for each CPA will be available at CPA-DD Section D.5. The input values include, investment cost, operational cost, revenues, and taxes. The investment analysis also includes the benchmark to compare with the IRR.

Further, a stepwise approach for additionality has been presented including the investment analysis, and common practice analysis. This approach was followed in the specific CPA.

The CPA-DD was revised under the common practice analysis, to describe the applicability conditions of the PROINFRA government incentive program, showing that the proposed project has a starting date (2012) which is past the PROINFRA deadline of (2010).

Documentation provided by project participant	
PoA-DD Version 7 dated 07/05/2015 - CPA-DD Version 7 dated 07/05/2015	
DOE assessment	**Date:** 12/05/2015
The description and steps taken for assessing additionality that is now provided in the PoA-DD. The Benchmark option (option III) from the Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities (CDM-EB65-A03-STAN) Version 3.0 is identified and described in the PoA. The PP added a description of how additionality will be assessed in future CPAs under Section B.5 (f) of the PoA-DD (part II). Option III Benchmark analysis was chosen to be applied to all new CPA under additionality analysis and a 20 year cash flow lifetime will be applied. The common practice analysis under the CPA-DD was revised to clearly explain why the PROINFRA incentive program is no longer available for the proposed project, detailed and validated from the Ministry of Energy and Mines Website http://www.mme.gov.br/programas/proinfa/. This CAR is CLOSED.	

CAR ID	~~CAR 4~~	Section no.	Part I – B.1 / Part II – B.4	Date: 16/12/2014
Description of CAR				
Regarding the Investment analysis: 1. There is a discrepancy in between the CPA-DD financial analysis using 20yrs as the project lifetime while the PoA-DD explains that 25years is being applied to all CPAs. 2. The PoA-DD does not specify which option of investment analysis it will apply to the CPAs, as per the Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities or PoA Standard. In the investment analysis spreadsheet, the investment total value in the two sensitivity-related worksheets (state the sensitivity values where inconsistency was found, e.g. +10% and -10%) is inconsistent.				
Project participant response				**Date:** 07/05/2015
The PoA-DD was revised, considering the 20 years period. 2. According to the PoA Standard, the option 13.A.1 was selected and an investment analysis will be conducted to each CPA. The parameters are presented in PoA Part II Item B.5 (f). Further, PoA-DD Part II, section B.5 item (f) describes how investment cost, revenues and operational costs will be obtained in CPA. The PoA-DD was revised to explain the origin of O&M and TUST cost. 3. The Excel spreadsheets were inconsistent as insurance cost was not included before. This has now been corrected and the values of the spreadsheet are consistent.				
Documentation provided by project participant				
. Excel spreadsheet Version 05 dated 10/10/2014 - PoA-DD Version 7 dated 07/05/2015- CPA-DD Version 7 dated 07/05/2015				
DOE assessment				**Date:** 12/05/2015
1. The CPA-DD and the PoA-DD were corrected with the value of 20 year lifespan of the project activity based on the depreciation document in Appendix 3 document [A 24]. CLOSED 2. As per the Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities: Option 13.A (i) states: i) One option is to conduct an investment analysis to each CPA. In this case, the coordinating/managing entity shall define the input parameters that will be used in the investment analysis in the PoA-DD, together with a description of how the values for these parameters will be obtained for each CPA. The additionality of each CPA shall then be assessed by using the actual values, applicable to the CPA at the time of inclusion, in the investment analysis conducted for the purpose of demonstrating the additionality of the CPA. The PP revised the PoA-DD to include a table that includes the sources of each financial input value for future CPAs. Sources were added on page 15 of the CPA-DD. CLOSED. 3. The investment analysis spreadsheet was corrected and investment total value is now consistent. CLOSED				

CAR ID	~~CAR 5~~	Section no.	Part II - A	Date: 16/12/2014
Description of CAR				

Regarding the name of the PoA / CPA: The PoA title is inconsistent: PoA-DD cover page describes title as “Queiroz Galvão Energias Renováveis Wind Power Programme” whereas part II of the same document states it as “ÉOLOS Wind Power Programme”. 1. CPA-DD Section A.3 names the PoA as “ÉOLOS”. PP to clarify on this inconsistency. 2. There is a discrepancy in the identification format of CPA in CPA-DD as “QGER CPA 0001”, which is different from the identification format as stipulated in the PoA-DD as “ÉOLOS-CPA-xxxx”. Contact details of the entity listed in section B.4 is not provided in Appendix 1.	
Project participant response	**Date:** 07/05/2015
The correct name of the PoA is “Queiroz Galvão Energias Renováveis Wind Power Programme” and the identification format is “QGER CPA XXXX”. All documents were revised accordingly. Contact details of the consultant ‘Waycarbon’ is now provided in Appendix 1 of the PoA-DD.	
Documentation provided by project participant	
PoA-DD Version 7 dated 07/05/2015 - CPA-DD Version 7 dated 07/05/2015	
DOE assessment	**Date:** 12/05/2015
1. In PoA-DD part II the name the PoA is corrected to “Queiroz Galvão Energias Renováveis Wind Power Programme”. CLOSED 2. CPA-DD Section A.3 was corrected to “Ilha Grande Wind Farm Project ”. CLOSED 3. The PoA-DD was corrected to “QGER-CPA-xxxx”. CLOSED The PoA-DD was revised to include the contact details of ‘Waycarbon’ in Appendix 1 of the PoA-DD. Name, contact person, email address and phone number are consistent with that in section B.4 of the PoA-DD. This CAR is CLOSED.	

CAR ID	~~**CAR 6**~~	**Section no.**	Part I - E	**Date:** 16/12/2014
Description of CAR				
Regarding the Environmental impact assessment: The environmental license in the CPA-DD Section B.1 is invalid.				
Project participant response				**Date:** 07/05/2015
Installation license has expired, but the protocol requesting operational license is made available and Environmental Operational License was provided.				
Documentation provided by project participant				
License Protocol and Environmental Operational License from SEMACE				
DOE assessment				**Date:** 12/05/2015
License Protocol and Environmental Operational License for Central Eolica Ilha Grande LTDA. #168/2014 – DICOP –GECON (dated 28/08/2014) from SEMACE were provided to the DOE, see Appendix 3 document A 7]. CLOSED				

CAR ID	~~**CAR 7**~~	**Section no.**	Part I - J	**Date:** 16/12/2014
Description of CAR				
Regarding the MoC: No signed MoC and all evidences needed to validate the MoC were provided to the DOE, as to satisfy Section 7.9 of the VVS Version 7.0.				
Project participant response				**Date:** 07/05/2015
Please see the file CAR7.zip, containing the signed MoC, identification documents and evidences of legal representation				
Documentation provided by project participant				
Modalities of communications				
DOE assessment				**Date:** 12/05/2015
Signed MoC and accompanying evidence to validate MoC signatures were provided to the DOE. See SECTION 3. Modalities of communications of the Validation Protocol for more details on the MoC analysis. This CAR is CLOSED.				

CAR ID	~~**CAR 8**~~	**Section no.**	Part II – B.2	**Date:** 16/12/2014
Description of CAR				
Regarding the eligibility criteria set for the PoA:				

1. The PoA-DD and CPA-DD do not demonstrate if the methodologies and tools are applicable to the project activity.
2. The PoA-DD does not transparently describe nor justify which CPAs are regarded to be of the same type. CPAs shall not be regarded to be of the same type if one of the conditions listed in ACM0002 Version 16.0. paragraph 61 are different: When defining eligibility criteria for CPA inclusion for a distinct type of CPAs, the CME shall consider relevant technical and economic parameters, such as:
   (a) Technical and economic parameters that are technology specific (e.g. ranges of load factors, sizes of installation, wind speed);
   (b) Parameters reflecting the investment climate:
   (i) Subsidies or other financial flows;
   (ii) Tariffs;
   (iii) Depreciation;
   (iv) Power purchase agreements;
   (v) Other parameters determining market circumstances;
   (c) Ranges of costs (capital investment, operating and maintenance costs, etc.) and revenues (income from electricity sale, subsidies/fiscal incentives, ODA).

the project is missing the specifications of the technology/measure which shall include the type, capacity and other key features of the design of the systems, as per Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 3.0, paragraph 16 (c).

3. The Financial assumptions/ inputs were not provided to the DOE - to be applied to the CPAs, describe and list them in eligibility section (f) The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality.
4. Eligibility criteria (d) does not specify the requirement that a CPA start date cannot be before that of the PoA start date , as per VVS paragraph 228.
5. PoA-DD part II is missing the requirements listed at the end of criteria (i).
6. PoA-DD part I - the PP to include robust procedure that ensures that no double counting occurs due to a prospective CPA already registered as a CDM project or as a CPA of another PoA.
7. Signed letter as per eligibility criteria (h), which declares that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance was not provided for the CPA.
8. The location of the table outlining the timeline in Section D.5 in the CPA-DD is placed under (l) which is regarding debundling. This is confusing.

CPA-DD Section D.5 (e) incorrectly refers to Section B.2 rather than D.2.

Project participant response	**Date:** 07/05/2015

1. The methodology applicability conditions and its compliance is included in Section B.3 of the PoA-DD and Section D.2 of CPA-DD.
2. The PoA-DD was revised to include technical and economic parameters. It includes the capacity should be less than 30MWm wind speed should be over 2m/s, plant load factor will be in between 20% and 85%, tower height will be at least 40m and rotor blade will be at least 20m in diameter. The electricity price will be defined by market or auctions.
3. All financial information is presented in CPA Section D.5 Step 2. The assumptions include investment cost, operational cost, and revenues.
4. The criteria (d) of PoA-DD Part I, is declaring that the CPA starting date cannot be after PoA starting date. The CPA-DD was revised to declare that the CPA starting date is after the PoA Starting date.
5. The criteria (i) was revised and included in the PoA-DD. Further, PoA-DD Part II and CPA-DD were revised to include the missing part in item (m). This was also reported in response to CL5.
6. The procedure to avoid double counting is presented in CPA monitoring plan, in section D.7.2. This will also be checked during CPA inclusion as per the procedures. Further, this will also be checked during the technical review. These procedures are described in PoA-DD part I section B.2
7. The CME has checked that the CPA case does not involve diversion of ODA. Further, the letter signed by CME on non-diversion of ODA was submitted to the DOE.
8. Timeline table was revised in the CPA-DD Section D.5 (d).
9. Reference in CPA-DD was corrected and it is now referring to section D.2.

Documentation provided by project participant

. PoA-DD Version 7 dated 07/05/2015 - CPA-DD Version 7 dated 07/05/2015

DOE assessment	**Date:** 12/05/2015

1. In Section B.3 of the PoA-DD, the following methodologies will be applied to any CPA:

ACM0002 - Grid-connected electricity generation from renewable sources	16.0.0
Tool for the demonstration and assessment of additionality	7.0
Tool to calculate the emission factor for an electricity system	4.0.0

CLOSED

2. The PP added under section B.2 (c) of the PoA-DD that the wind technology applied will not be over

30MW of installed capacity. The wind average speed must be over 2 m/s, and plant load factor between 20% and 85%. The energy price will be defined by free-market or energy auctions. The tower will be at least 40m height and the rotor blade at least 20m of diameter. According to PS Version 09.0 paragraph 209, "as part of the proposed CDM PoA, the coordinating/managing entity shall define a specific CPAs under the PoA as follows:" PP has chosen option (a) For PoAs applying the same technology/measure under the same methodology across all CPAs, at least one specific-case CPA-DD shall be provided." Thus only one specific-case CPA-DD is required. CLOSED

3. See CAR4 for details. CLOSED
4. Eligibility criteria (d) does now specifies that a CPA start date cannot be before that of the PoA start date , as per VVS paragraph 193. CLOSED
5. PP added a new eligibility criteria (m) being All new CPAs must provide an application letter in the name of the wind project developer including the following information:

- Formal application for inclusion of CPA in the PoA.
- Affirmation that the inclusion is a voluntary action.
- In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA.
- Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions.
- Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date.
- Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.

This new eligibility satisfies the criteria stipulated on the Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 3.0, paragraph 16. CLOSED

6. The PP has added a role and responsibility table under Section B.7.2 of the PoA-DD part II under the monitoring plan, with a description of who is responsible for avoiding double counting. Also, there is a description of the procedure to avoid double counting in the eligibility criteria in the PoA-DD part I Section B.2. This satisfies the Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities paragraph 19. CLOSED
7. Signed CPA declaration was provided to the Validation team, satisfying all the requirements under PoA-DD Section B.2. (m), see Appendix 3 document [A 2]. CLOSED
8. Timeline table was corrected in the CPA-DD Section D.5 (d). CLOSED

CPA-DD Section D.5 (e) was corrected. CLOSED.
This CAR is CLOSED.

CAR ID	~~**CAR 9**~~	**Section no.**	Part II – A / B.5.1	**Date:** 16/12/2014
Description of CAR				

Regarding the Emission reductions and monitoring plan:

1. The EF_{grid} is not in four decimal places and is causing issues of rounding (in the PoA-DD, CPA-DD and Excels).
2. In the CPA-DD Section D.7.1. parameter $EF_{grid,CM,y}$ states that the latest available data from the Brazilian DNA for $EF_{grid, BM,y}$ and $EF_{grid, OM,y}$ is from 2011 though the DNA Website has values for 2012.
3. PoA-DD part I B.3 states "Tool to calculate the emission factor for an electricity system" Version 4.0, whereas PoA-DD part II Section B.1 states Version 3.0.
4. PoA-DD Version 01 mentions that 2012 data was used for the ex-ante estimation of CERs while Specific CPA-DD Version 01 and ER spreadsheet (20131025) mention (use) 2011 data for the ex-ante estimation of CERs. Moreover PP uses two decimal for OM, BM and CM emission factors while current practice is to use four decimal. For the records, 2012 Brazilian DNA CO2 emission factors are: EFgrid,BM,y = 0.2010, EFgrid,OM-DD,y = 0.5176, EFgrid,CM,y = 0.4385.
5. The GL Garrad Hassan Wind evaluation study mentions a 40.6% PLF (Plant Load Factor) and an average net generation of 105.8 GWh/y. The Specific CPA-DD mentions a net generation of 105,800 MWh/y and a 40.6% PLF but to be more precise (as the GL Garrad Hassan Wind study more than likely rounded down its figures), the value would be 40.67% to reach the 105,800 MWh/y net generation (40.67% * 260,712 MWh/y). The PLF values being applied are not the most accurate.
6. As per published PoA-DD, monitoring procedures will be performed by the project owner (collection and archiving of complete and consistent data), under the supervision of the CDM consultant, and by the measuring agent (meters calibration) that for this project will be Chesf - Companhia Hidro Elétrica do São Francisco (São Francisco Hydroelectric Company). Nevertheless, PoA-DD and/or Specific CPA-DD shall be revised to clearly indicate/describe (or to mention in a proper robust procedural document that provides all

requested information):

a) how many meters will be installed and where (PP meters-Electricity produced and Measuring agent meters-Electricity to the grid/Base);
b) specification/number of site and Icaraí substation transformers;
c) the transmission lines (Plant-Icaraí-Sobral);
d) how is the operation of the integrated operations center (COI – Centro de Operações Integrado, located at Fortaleza Office), including emergency measures (for instance, Taíba mirror, no-breaks, transmission by satellite, radio and optical fiber…) and backup procedures (for instance, raw data storage in another floor).

7. PP is asked to provide a consistent numbering system throughout the CPA-DD and PoA-DD.

Project participant response	**Date:** 07/05/2015

1.The grid emission factor in PoA-DD and CPA-DD was revised, and presented to 4 digits.
2. The most recent available data is from 2012. This data was selected and CPA was corrected.
3. The Version of the tool was updated to 4.0.0. This is the most recent version and applicable for the PoA.
4. The data from 2012 was selected. This was corrected in the MS Excel spreadsheet for grid emission factor and ER calculation.
5. The Estimative of energy generation is correct, and it is used only for ER estimative. The PLF was corrected from 40.6% to 40.67%. For the purpose of CER emission, the value of energy will be directly monitored.
6. The energy meter is located at the local substation, and the reading is sent to the concessionaire online. The same information is sent to the project developer control center in Fortaleza, where the data is backed up, and kept in digital media in different location, to guarantee the security of the information. The meter in substation is duplicated and can be used in case of maintenance/ calibration stop of the first meter. The meters are sealed by the concessionaire to guarantee the quality of data. Further, Section D.7.2 of CPA-DD and Section B.7.2 of PoA-DD were revised.
7. The ',' and '.' at decimal places were corrected.

Documentation provided by project participant

. ER Version 05 dated 10/10/2014 - PoA-DD Version 7 dated 07/05/2015 - CPA-DD Version 7 dated 07/05/2015

DOE assessment	**Date:** 12/05/2015

1. The PoA-DD, CPA-DD and Excel spreadsheet were corrected. CLOSED
2. The PP updated the PoA-DD and CPA-DD including the Excel spreadsheet to the latest EF data from the Brazilian DNA which is from the year 2012, not 2011. The information was validated using the official DNA Website, see Appendix 3 document [B 1]. CLOSED
3. PoA-DD part II Section B.1 was corrected. CLOSED
4. PoA-DD Version 02 was corrected to 2012 data for the ex-ante estimation of CERs, as well as the CPA-DD Version 02 and the Excel spreadsheet containing the financial analysis and ERy calculation . CLOSED
5. CPA-DD Section D.5 (f) and the Excel containing the financial analysis “QGER_FA_ER” were corrected to 60.67%. CLOSED
6. The PP added under section B.7.2. of the PoA-DD an added description for future CPAs regarding technical features of the project:

“The CPA xxx connection to xxxxx substation is made through xxx km extension power line, with xxx kV, interconnecting the xxxx substation, property of xxxx., to xxxx substation. The official monitoring equipment are located at xxxx - xxx meters, xxxxx model xxxxx. The transformer present at xxxxx Substation is xxxx xxxxx MVA S/N xxxx manufacturer date xxxx.”

The PP added this information under Section D.7.2. of the CPA-DD as follows:

The CP Ilha Grande connection to Icaraí substation is made through 13.5 km extension power line, with 34.5kV, interconnecting the Ilha Grande substation, property of Central Eólica Ilha Grande Ltda., to Icaraí substation. The official monitoring equipment are located at Bay Sobral III - 2 meters, Schneider model ION 8600C. The transformer present at Icaraí Substation is WEG 75 MVA S/N 1016397214 manufacturer date 2012.” This information was reviewed during the site visit during interviews with the project participants, see Section 3.2 of this Validation Report for more details, and cross-checking it with ANEEL data, see Appendix 3 document [B 18]. CLOSED

PP corrected numbering system throughout all project documents. CLOSED

CAR ID	~~**CAR 10**~~	**Section no.**	Part I – B.1 / B.3 / B.6 / B.6.2	**Date:** 16/12/2014
Description of CAR				

Regarding the applicability conditions under the PoA: There is no description of the applicability conditions (for the ACM0002, GEF tool and additionality tool) for the PoA under Section B.2 part I (e). PP provided a table under PoA-DD part II generic-CPA, but did not outline the applicability conditions firstly in part I.	
Project participant response	**Date:** 07/05/2015
Applicability conditions for applied methodology, GEF tool and additionality tool were included in Part I of PoA-DD	
Documentation provided by project participant	
. PoA-DD Version 7 dated 07/05/2015	
DOE assessment	**Date:** 12/05/2015
PP revised the PoA-DD part I to include the applicability conditions for the PoA. See Section 7 of LRQA Validation Protocol Version 06 for a detailed analysis of the applicability conditions for this PoA. This CAR is CLOSED.	

CAR ID	~~**CAR 11**~~	**Section no.**	Part I – G / I	**Date:** 16/12/2014
Description of CAR				
Regarding the LoA from Brazil: The LoA from the Brazilian DNA has not yet been received or presented to the DOE.				
Project participant response				**Date:** 07/05/2015
The Brazilian DNA requires the Validation Report from a DOE of the proposed CDM activity before it submits the LoA for a proposed project. Thus, once the Validation report is completed, the LoA will be requested and sent to the DOE for validation, and report finalization.				
Documentation provided by project participant				
.				
DOE assessment				**Date:** 12/05/2015
According to the Brazilian DNA's rules, the issuance of the Letter of Approval is conditioned to the presentation of the DOE's validation report by PP to the DNA (Resolution No. 1 of 11th September 2003). A request for registration will not be submitted until the letter of approval from host country is received. Once the LoA is received by LRQA, the Validation team will validate its contents and confirm if the paragraphs 39-53 from the VVS version 9.0 have been met. The reporting will follow paragraph 45 option (b) of the VVS version 9.0 as such that: If a letter of approval refers to a specific version of the validation report and the DOE therefore is unable to submit this precise version of the validation report, the DOE shall select one of the following options: a) Insert a statement in the validation report to indicate that the final letter of approval has not been received and that a request for registration will not be submitted until it has been received; or (b) Update the validation report to reflect the receipt of the letter of approval. If this option is selected, the validation report major number shall remain unchanged and the minor number shall be increased. The DOE shall confirm in the validation report that this is the only change that has been made to the version referred to in the letter of approval. This CAR is CLOSED.				

Appendix 5. Validation Protocol – Version 06

	Validated situation	Conclusion
SECTION 1. Global stakeholder consultation		
1. Please provide the link and period of receiving global stakeholders comment?	The PoA-DD and the CPA-DD were made publicly available in accordance with the requirements of the Procedures for processing and reporting on validation of a CDM project activity for the period of 14/12/2013 to 12/01/2014 as per http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/CKG0XTVO5BVBIDTH2KED37JDTD1WOR/view.html. No comment was received during this period.	OK
2. If any comment has been removed owing to its authenticity of the comments, please justify so with reasons. A prior approval for such situations will be taken from CDM Quality Manager	Not applicable	NA
3. If any of the comment(s) is not clear, has any clarification sought and taken into consideration. For such cases only original comment with clarification shall be assessed and no new issue to be considered. In case of doubt seek clarification from CDM Quality Manager	Not applicable	NA
4. Has a request for forwarding complaints received, if any, from the host Party (ies) DNA about the project activity/programme? Please describe how those comments were been taken into consideration in the below table.	Not applicable	NA

Please use below table to respond to the comments. Please add rows for additional comments.

S. No.	Nature of comment	PPs response	Validated situation	Conclusion
	Not applicable since no comments received	Not applicable	NA	NA

Comments received by the DNA

S. No.	Nature of comment	PPs response	Validated situation	Conclusion
	Not applicable since no comments received	Not applicable	NA	NA

	Validated situation	Conclusion
5. Please summarise the major changes to the PDD/PoA-DD/CPA-DD after publication?	The PP has changed the PoA start date from the date of GSC 14/12/2013 to the date of prior consideration of the project activity CPA-DD financial analysis uses 20 years as the project lifetime while the PoA-DD explains 25 years is being applied to all CPAs. This has been revised to 20 years. CPA-DD Section D.7.1.Parameter $EF_{grid,CM,}$ latest available data from the Brazilian DNA for EF_{grid}, BM,y and EF_{grid}, OM,y is referred from 2012.	OK
6. State the name of the PP with whom LRQA has contractual relationship for validation. Confirm that the same entity is still the PP. If not, PDD/PoA, it has to be republished.	Lloyd's Register Quality Assurance Limited (LRQA) has been contracted by Éolos Energias Renováveis S.A., representing the project participants (PP) and the Coordinating and Managing Entity Éolos Energias Renováveis S.A. to undertake validation of the proposed Programme of Activities (PoA), "Queiroz Galvão Energias Renováveis Wind Power Programme", as well as the specific-case CPA, "Ilha Grande Wind Farm project". There is no change in the status of the PP.	OK
7. If there are significant changes made in the project or programme design. Significant change could mean changes in capacity, output, location etc. Please seek additional guidance from CDM-QM on significant changes.	No significant changes made in the project or programme design in respect of in capacity, output, location etc.	OK
8. If approved baseline and monitoring methodology, the approved standardised baseline or a combination was changed	Not applicable	NA

	Validated situation	Conclusion
SECTION 2. Approval and contribution to sustainable development		
Host Country Approval		
1. Has the Host country DNA provided a written approval?.	Yes ☒ No ☐ NA☐[1] ~~CAR 11~~ – this CAR was raised with regards to the missing LoA from the Brazilian DNA. Since Brazil DNA issues LoA when the proposed project has gone through the	OK ~~CAR 11~~

[1]For each section and question where a YES/NO/NA answer is required, explain your choice.

	Validated situation	Conclusion
	validation process with a DOE. A request for registration will not be submitted until the letter of approval from host country is received. According to the Brazilian DNA's rules, the issuance of the Letter of Approval is conditioned to the presentation of the DOE's validation report by PP to the DNA (Resolution No. 1 of 11th September 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26. The validation report was updated (Version 06.1) to reflect the receipt of the letter of approval and that is the only change that has been made compared to the version (Version 06, dated 17/08/2016) listed in the Brazilian DNA letter of approval, dated 28/09/2016.	
2. Confirm that the letter has been issued by the Party's DNA and is valid for the proposed CDM project activity/Programme under validation	Yes ☒ No ☐ NA☐ According to the Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.	OK ~~CAR 11~~
3. Mention the means of validation employed to assess the authenticity of the Letter of Approval. Indicate the source of the LoA (for example, PP or directly from the DNA)	According to the Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.	OK ~~CAR 11~~
4. Does the written Letter of Approval confirm the following: (a) The Party is a Party to the Kyoto Protocol (including ratification)? (b) Participation is voluntary? (c) The proposed CDM project activity contributes to the sustainable development of the country? (d) It refers to the precise proposed CDM project activity/Programme title in the PDD/PoA-DD being submitted for registration?	Yes ☒ No ☐ NA☐ According to the Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26. LRQA has received the letter from the PP. Validation team verified the issuing authority from the list of DNAs available at UNFCCC website. The LoA confirms: (a) The host country Party ratified the Kyoto Protocol (including the ratification date). (b) The participation is voluntary. (c) The proposed project activity will assist the host country in achieving sustainable development.	OK ~~CAR 11~~

	Validated situation	Conclusion
	(d) The LoA indicates the precise title of the proposed project activity as indicated in the PDD. The LoA is unconditional with respect to above points (a) to (d). Participation in the project activity of the PP has been authorized, as confirmed in the LoA issued by the DNA of the Host Country. The team confirmed that no entities other than the authorized entity are indicated as project participants in the PDD.	
5. Is the letter of approval unconditional with respect of (a) to (d) above?	Yes ☒ No ☐ NA☐ According to the Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.	OK ~~CAR 11~~
6. Does the LoA from the host party acknowledge the bundle activity (if applicable)?	Yes ☐ No ☐ NA☒ According to the Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.	OK
7. If PoA is covering several host parties, has CME submitted one specific case CPA for each host Party	Yes ☐ No ☐ NA☒ The PoA covers only one Host Party, Brazil. One specific case CPA has been submitted.	OK ~~CAR 11~~
8. Confirm that each CPA has only one host Party.	The Validation Team confirms that there is only one host Party for the “Ilha Grande Wind Farm Project” CPA, being that Brazil.	OK ~~CAR 11~~
Annex I Party Approval		
9. Has the Annex I country DNA provided a written approval?	Yes ☐ No ☒ NA☐ The project has currently been proposed as a unilateral CDM project and the Annex I Party has not yet been identified. In line with the provision of paragraph 57 of the 18th meeting of the CDM-EB, registration of a project activity can take place without an Annex I party being involved at the stage of registration.	OK
10. Confirm that the letter has been issued by the Party’s DNA and is valid for the proposed CDM project activity/PoA under validation/ specific case CPA-DD.	Yes ☐ No ☐ NA☒ As above	OK
11. For specific case CPA-DD, confirm that: approval is from only one host party.	Yes. Approval is from one host country. i.e. Brazil	

	Validated situation	Conclusion
12. Mention the means of validation employed to assess the authenticity of the Letter of Approval. Indicate the source of the LoA (for example, PP or directly from the DNA).	Yes ☐ No ☐ NA☒ As per the above comment	OK
13. Does the written Letter of Approval confirm the following: (e) The Party is a Party to the Kyoto Protocol (including ratification)? (f) Participation is voluntary? (g) It refers to the precise proposed CDM project activity title in the PDD/PoA-DD being submitted for registration?	Yes ☐ No ☐ NA☐ As per the above comments	NA
14. Is the letter of approval unconditional with respect of (a) to (c) above?	Yes ☐ No ☐ NA☒ See above comment.	NA
Host Country and Annex I Party Approval		
15. Do any of the Letters of Approval contain additional specification of the project activity? Like: - PDD/PoA-DD Version number? - Validation report version number? Make sure that the request for registration is made on the basis of the documents specified in any of the letters. If LRQA is unable to submit the precise version of the validation report as above, one of the following options shall be selected: (a) Insert a statement in the validation report to indicate that the final letter of approval has not been received and that a request for registration will not be submitted until it has been received; or (b) Update the validation report to reflect the receipt of the letter of approval. If this option is selected, the validation report major number shall remain unchanged and the minor number shall be increased. Confirm in the validation report that this is the only change that has been made to the version referred to in the letter of approval.	According to the Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26. ~~CAR 11~~ – this CAR was raised since LoA from the Brazilian DNA was not available. The Brazilian DNA provides LoA when the proposed project has gone through the validation process with a DOE. A request for registration will not be submitted until the letter of approval from host country is received.	OK ~~CAR 11~~

	Validated situation		Conclusion
SECTION 3. Authorisation			
1 Confirm that the PPs are listed in a tabular form in section A.4 of PDD (PoA-DD) and that this information is consistent with the contact details provided in Annex 1 of the PDD (PoA-DD) and with the contact details in the MoC.	Host Party PP name in PDD (PoA-DD)/ A.4	ÉOLOS ENERGIAS RENOVÁVEIS S.A. (private)	OK
	Host Party PP name in PDD(PoA-DD)/ Annex 1	ÉOLOS ENERGIAS RENOVÁVEIS S.A. (private)	
	Host Party PP name in MoC	ÉOLOS ENERGIAS RENOVÁVEIS S.A.	
	Annex 1 Party PP name in PDD(PoA-DD)/ A.4	NA	
	Annex 1 Party PP name in PDD(PoA-DD)/ Annex 1	NA	
	Annex 1 Party PP name in MoC	NA	
2 Confirm that each of the PPs has been approved by at least one Party involved.	Yes ☒ No ☐ NA☐To be evaluated upon the receipt of the LoA. ~~CAR 11 –~~ this CAR was raised since LoA from the Brazilian DNA was not available. The Brazilian DNA provides LoA when the proposed project has gone through the validation process with a DOE. A request for registration will not be submitted until the letter of approval from host country is received. According to the Brazilian DNA's rules, the issuance of the Letter of Approval is conditioned to the presentation of the DOE's validation report by PP to the DNA (Resolution No. 1 of 11th September 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.		OK ~~CAR 11~~
3 Confirm that no entities other than those approved as PPs are included in section A.4 of PDD (PoA-DD).	Yes ☒ No ☐ NA☐ According to Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.		OK
4 Ensure that the approval of participation has been issued from the relevant DNA. If in doubt verify this with the corresponding DNA.	According to Brazilian DNA´s rules, the issuance of the Letter of Approval is conditional to the presentation of the DOE´s validation report by PP to the DNA (Resolution No. 1 of September 11, 2003). The letter of approval was issued by Brazilian DNA on 28/09/2016 A 26.		OK

	Validated situation	Conclusion
5 Confirm that the name of the Coordinating/managing entity is identified in the PoA-DD section A.3	Yes. It states that Éolos Energias Renováveis S.A.. is the Coordinating/Managing Entity (CME) responsible in Section A.3 of the PoA-DD.	OK
6 Confirm the name of the CPA implementation agency is consistent	Host Party CME name in CPA-DD/A.6: ÉOLOS ENERGIAS RENOVÁVEIS S.A. Host Party CME name in CPA-DD/Appendix 1: ÉOLOS ENERGIAS RENOVÁVEIS S.A.	OK

	Validated situation	Conclusion
SECTION 4. Modalities of communications		
1 Validate the corporate identity of all the PPs and the focal point included in the MoC letter: - Validate the signatures - Validate the employment status. To validate this use any of the following options: a. Directly checking with evidence from PPs and the corresponding companies, for example, contracts, personal identity card or passport, HR records. b. Notarised documentation, for example, power of attorney for signing on behalf of the company and the other PPs. c. Written confirmation from the PP that all the personal details are valid and accurate.	~~CAR 7~~: The corporate identity for the project participants and focal points included in the Modalities of Communication (MoC) statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories were not provided for validation. Subsequently CLOSED, as PP provided all necessary documents, see Appendix 3. The signed MoC, see Appendix 3 document [A 34] and the documentation for the validation of the corporate identities have been provided to the DOE. The provided documents were validated by using option (a) from the list on the left (a) directly checking with evidence from PP and the corresponding companies, for example, contracts, personal identity card or passport, HR records, see the table below for details. The authority of the MoC signatories has been validated as shown below:	Ok ~~CAR 7~~

PPs	Sole Focal points	Statement of Agreement (CME only)	Contact person for each PP-Primary authorized signatory
ÉOLOS ENERGIAS RENOVÁVEIS S.A.	Yes- Luiz Antonio Santos (2)	Yes - Luiz Antonio Santos (2)	Luiz Antonio Santos (2)

2 If a written confirmation (option c) is chosen from the options above, the following issues shall be validated:	Not applicable	NA

- The PP sending the written confirmation and signing it shall be the one signing the contract with LRQA. - The person signing the written confirmation and the person signing the MoC (if they are different persons) are duly authorised to do so on behalf of all the PPs, that is, they have a signed authorisation from the other PPs and the identity and role of the person who has signed this authorisation has been checked.		
3 Has the MoC been completed as per the latest "Procedures for MoC between the project participants and the Executive Board"? - valid version of the form "Modalities of Communication statement" (F-CDM-MOC) has been used; - No modifications to the template/form should be made and each document should be clearly dated - Title of the project and names of project participants and focal points should be fully consistent with those indicated in all other project documentation - Focal point scopes should be clearly and correctly indicated - Contact details and specimen signatures of focal point entities including those of project participants in Annex 1 should be correctly entered. Only one telephone, fax, email contact should be entered per authorized signatory. In cases where additional contact details are included, only the first indicated information will be taken into account and only the official business address of the proposed entity should be provided on the F-CDM-MOC form. - The Statement of Agreement in Section 3 should be signed by one authorized signatory for each project participant; signatures made available in Section 3 should correspond to those indicated in the related Annex 1 document; focal point entities who are not designated as project participants should not sign Section 3.	Yes ☒ No ☐ NA☐ ~~CAR 7~~ – awaiting MoC evidences. CLOSED as PP provided all evidence, see above Section 3.1 for more details. The MoC has been completed as per the latest "Procedures for MoC between the project participants and the Executive Board". - No modifications to the template / form have been made and each document is be clearly dated - Title of the project and names of project participants and focal points are fully consistent with those indicated in all other project documentation - Focal point scopes are clearly and correctly indicated - Contact details and specimen signatures of focal point entities. Only one telephone, fax, email contact is entered per authorized signatory. The Statement of Agreement in Section 3 is signed by one authorized signatory for each project participant; focal point entities that are not designated as project participants have not sign Section 3.	OK ~~CAR 7~~

	Validated Situation	Conclusion

	Validated Situation	Conclusion
SECTION 5. Project design document		
1. Is the project activity Small Scale or Normal Scale? (when combination include a large scale methodology, then Project/Programme is large scale)	Normal Scale☒ Small Scale ☐ Bundled Small Scale[2]☐	OK
2. Is CPA to be included in the PoA Small Scale or Normal Scale? (when combination include a large scale methodology, then CPA is large scale)	Normal Scale ☒ Small Scale ☐ NA ☐	OK
3. Has the PDD/PoA-DD and CPA-DD used the latest template from the CDM Executive Board available on the UNFCCC CDM Website? Please justify here that valid version of form is applied during the validation Check if the instructions included in the form are correctly applied. Check outputs from the completeness check.	Yes☒ No ☐ It was confirmed that the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM Website has been used (PoA-DD template Version 06.0) and under compliance as per the Instructions for filling out the programme design document form for CDM programmes of activities and the Component Project Activity Design Document Form Version 06.0, please see https://cdm.unfccc.int/Reference/PDDs_Forms/index.html . It was confirmed that the specific CPA used the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM Website, CPA-DD template Version 05.0, and is under compliance as per the Instructions for filling out the component project design document form for CDM component project activities. Please see: https://cdm.unfccc.int/Reference/PDDs_Forms/index.html	OK

	Validated situation	Conclusion
SECTION 6. Description of Programme of activity		
1. For PoA, describe the process undertaken to validate that the description of the framework of proposed CDM programme of activities as contained in the PoA-DD sufficiently covers all relevant elements, is accurate, and that it provides the reader with a clear understanding of the nature of the proposed CDM	The validation Team confirms that the project description in Section A.2 of the PoA-DD accurately states the goal of the PoA, which seeks to create subsidies to invest in several WPPs and promote the renewable sources of energy, reducing the national grid emission factor in a developing country. The description includes a confirmation that the proposed PoA is a voluntary action by	OK

[2] Only for Project activities

	Validated situation	Conclusion
PoA. 2. Confirm that the description includes the policy/measure or stated goal that the CDM PoA seeks to promote. 3. Assessment that the CDM PoA is a voluntary action by the coordinating/ managing entity 4. Describe how generic CPA section(s) in the PoA conform to the programme framework. Do the PoA and generic CPAs describes various combinations of technologies/measures and/or approved methodologies that will be implemented. Please describe it for each technology/measure.	the coordinating/managing entity (CME). The validation team also confirms that the project contributes to sustainable development and is accurately described in the PoA-DD. The programme aims to reduce GHG emissions constructing new Wind Power Plants (WPPs) connected to the Brazilian National Interconnected Grid (SIN), which will displace fossil fuel consumption at thermal plants that would be running in the absence of the PoA and thus reducing the Greenhouse Gas (GHG) emissions. During the validation process, the validation team conducted review of documents and surveys to validation report, performed site visit to the proposed site, and the CME's office. Team interviewed the PP, and local stakeholders to confirm the description. Document review consisted of evidence provided in Appendix 3.	
5. Describe the process undertaken to validate that the description of the proposed CDM project activity as contained in the PDD/CPA-DD sufficiently covers all relevant elements, is accurate, and that it provides the reader with a clear understanding of the nature of the proposed CDM project activity. If there is any registered project or included CPA which could interfere with the project activity/CPA, please describe the reference number, and how it has been considered for the baseline determination, additionality assessment and emission reduction calculation.	The CPA includes 28 Wind Turbine Generators (WTGs) and will be installed over an area of 689.4 hectares constituting Amontada WPC. Only 11 of those WTGs will be installed in Ilha Grande WPP – only plant included in this CPA. During the onsite visit the validation team was able to interview person responsible for operation of CPA. The validation team confirms that description in the Specific CPA-DD includes a description of the technology to be used. This description was crosschecked with the detailed project report, project planning and interviews. Only one specific CPA is submitted and applies a single technology/measure and methodology and is located in one host country, as per the PoA eligibility criteria outlined under Section B.2. of the PoA-DD. There are no registered projects or CPA that would interfere with the specific CPA. The first CPA under this PoA "Ilha Grande Wind Farm project" which involves installation of new Wind Power Plant (WPP) in the state of Ceará, Northeast Brazil. The Ilha Grande WPP will have an installed capacity of the WPP is 29.7 MW, connected to Brazilian National Interconnected Grid. CPA-DD is a new Wind Power Plant (WPP). The Ilha Grande WPP is part of the Amontada Wind Power Complex (WPC). Therefore, the project displaces fossil fuel consumption at thermal power plants in the grid that would be running in the absence of the CPA and thus reducing the Greenhouse Gas (GHG) emissions. CAR 5– there is conflicting names for the title of the first CPA in Section A.2 "Ilha	OK

<table>
<tr><th></th><th>Validated situation</th><th>Conclusion</th></tr>
<tr><td></td><td>Grande Wind Farm project” and section A.3 “ÉOLOS CPA Ilha Grande Wind Farm Project”. CLOSED, as PP corrected the CPA-DD to “Ilha Grande Wind Farm project”.

During the site visit it was verified that all basic infrastructure (service roads, cabling) and tower platforms/foundations are implemented. Construction/implementation of the project Wind Turbine Generators (WTGs) did not start yet but all equipment (towers, nacelles, hub & rotor, gear boxes/generators, site transformers and blades) were delivered to the project site and it is properly stored/ packed.

During site visit it was confirmed that the capacity of generators as 2.7 MW each (Alstom ECO 122) and thus total installed capacity of “Ilha Grande Wind Farm project” will be equal to 29.7 MW with a maximum generation capacity of 260,712 MWh/y (= 2.7 *11 *8,760).
GL Garrad Hassan Wind evaluation study mentions PLF (Plant Load Factor) of 40.6% and an average net generation of 105.8 GWh/y. The Specific CPA-DD Version 01 mentions net generation of 105,800 MWh/y and 40.6% PLF but to be more precise (as GL Garrad Hassan Wind study more than likely rounded down its figures from a PLF of 40.67% which is the correct figure to reach net generation of 105,800 MWh/y (40.67% * 260,712 MWh/y).
CAR 9 – regarding using a more precise PLF value from the GL Garrad Hassan Wind evaluation study when applying it to the emission reduction calculation. CLOSED, as PP corrected the calculation with a more precise PLF value.</td><td></td></tr>
<tr><td>6. Confirm that the exact location is provided in the PDD/PoA-DD/CPA-DD with Geographical coordinates, check the accuracy of them and the format of the notation (Grades, minutes, seconds or decimal indicating latitude N or S and Longitude E or W)
Assess the boundary of the PoA. Confirm based on the review of generic CPA, if the boundary covers all the CPAs implemented under this PoA.

Please include here the Geographical coordinates:</td><td>The PoA-DD includes geographical area of entire host country, i.e. Brazil. Validation team confirmed the geographical area during the site visit.

The boundary of the PoA was assessed. The Validation Team confirms based on the review of generic CPA that the boundary covers all the CPAs implemented under this PoA. The Geographical coordinates are validated under the next point.</td><td>OK</td></tr>
<tr><td>7. Confirm that the physical site inspection reflects the description in the PDD/PoA-DD/CPA-DD of the proposed CDM project activity/Programme.

Describe briefly the physical site inspection: Travel details and installations, facilities and buildings visited.</td><td>The CPA is located in the city of Amontada, state of Ceará, Brazil. The geographic coordinates were provided for the Wind Turbine Generators as:

Coordinates of the Wind Turbine Generators
<table>
<tr><th>Turbine</th><th>Longitude</th><th>Latitude</th></tr>
<tr><td>IG-01</td><td>3°04'06,6"S</td><td>39°42'03,2"W</td></tr>
<tr><td>IG-02</td><td>3°04'19,9"S</td><td>39°42'04,6"W</td></tr>
<tr><td>IG-03</td><td>3°04'32,0"S</td><td>39°42'04,5"W</td></tr>
</table></td><td>OK</td></tr>
</table>

	Validated situation	Conclusion
	<table><tr><td>IG-04</td><td>3°04'09,6"S</td><td>39°41'36,1"W</td></tr><tr><td>IG-05</td><td>3°04'20,0"S</td><td>39°41'39,6"W</td></tr><tr><td>IG-06</td><td>3°04'33,1"S</td><td>39°41'43,6"W</td></tr><tr><td>IG-07</td><td>3°04'14,2"S</td><td>39°41'13,7"W</td></tr><tr><td>IG-08</td><td>3°04'28,1"S</td><td>39°41'19,8"W</td></tr><tr><td>IG-09</td><td>3°04'28,1"S</td><td>39°40'57,7"W</td></tr><tr><td>IG-10</td><td>3°04'25,3"S</td><td>39°40'59,9"W</td></tr><tr><td>IG-11</td><td>3°04'34,4"S</td><td>39°41'02,8"W</td></tr></table> This region lies within the geographical area marked in the PoA-DD. The team confirmed that the PP will assign unique identification number to each new CPA on its records. The geographic location was validated with GPS during the site visit and also using Google Maps. The validation team confirms accuracy of the project location. Coordinates were checked against GL Garrad Hassan study and confirmed during site visit (by means of a GPS) and found in accordance with the ones mentioned in the Specific CPA-DD Section A.7.	
8. If the team did not undertake a physical site inspection, describe the justification as approved by the CDM Quality Manager. (VVS 09.0: 72-73)	Not applicable	NA
9. Indicate whether a sampling approach in accordance with the Standards for sampling and surveys for project activities and PoAs applied: (i) by the PP or CME. Describe the sampling approach. (ii) verification team. Describe the sampling approach adopted	Not applicable	NA
10. If the proposed CDM project activity or CPA involves the alteration of an existing installation or process, ensure that the project description clearly states the differences resulting from the project activity compared to the pre-project situation.	Pre-project: The project is a Greenfield activity Project activity: The project is a Greenfield activity	OK
11. Confirm if the proposed CDM project or CPA is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of CPAs. (VVS 09.0: Para 76)	The CPA is new 28 Wind Turbine Generators (WTGs) and will be installed over an area of 689.4 hectares constituting the Amontada WPC. Only 11 of those WTGs will be installed in Ilha Grande WPP – the only plant included in this CPA. Only one specific CPA is submitted and applies single technology/measure and one	OK

	Validated situation	Conclusion
	methodology and is located in single host country, as per the PoA eligibility criteria outlined under Section B.2. of the PoA-DD. There are no registered projects or CPA that would interfere with the specific CPA.	
12. Confirm that the proposed specific case CPA-DD has not been registered as a CDM project activity nor included in another registered CDM PoA.	The CPA is new 28 Wind Turbine Generators (WTGs) and will be installed over an area of 689.4 hectares constituting the Amontada WPC. Only 11 of those WTGs will be installed in Ilha Grande WPP – the only plant included in this CPA. During onsite visit the validation team was able to interview the person directly responsible for the operation of the CPA. Only one specific CPA is submitted and applies only one technology/measure, applies only one methodology and is located in just one host country, as per the PoA eligibility criteria outlined under Section B.2. of the PoA-DD. There are no registered projects or CPA that would interfere with the specific CPA. The first CPA under this PoA the "Ilha Grande Wind Farm project" which involves the installation of a new Wind Power Plant (WPP) in the state of Ceará, Northeast Brazil. The Ilha Grande WPP will have an installed capacity of the WPP is 29.7 MW, connected to the Brazilian National Interconnected Grid. The CPA-DD is a new Wind Power Plant (WPP). The Ilha Grande WPP is part of the Amontada Wind Power Complex (WPC). Therefore, the project displaces fossil fuel consumption at thermal power plants in the grid that would be running in the absence of the CPA and thus reducing the Greenhouse Gas (GHG) emissions. ~~CAR 5~~ there is conflicting names for the title of the first CPA in Section A.2"Ilha Grande Wind Farm project" and section A.3 "ÉOLOS CPA Ilha Grande Wind Farm Project". CLOSED, as PP corrected the CPA-DD to "Ilha Grande Wind Farm project".	Ok ~~CAR 5~~ ~~CAR 9~~
13. Potential public funding for the project from Parties in Annex I shall not be a diversion of official development assistance (ODA).	Team confirmed that CPA does not involve diversion of ODA funds from the review of declaration provided by the PP and site visit interviews. The programme, so far, has not involved any Annex I Party. Further, during the validation nothing has come to the attention of the team which indicates that it involves diversion of ODA funding.	OK
14. The proposed specific case CPA-DD includes an identity of the CPA implementer, entities or individuals responsible for its implementation.	Yes. The proposed specific case CPA-DD includes identity of CPA implementer as EOLOS ENERGIAS RENOVAVEIS S.A.	OK
15. If the project activity is a small scale one, confirm that it is not a debundled component of a large scale project, in line with the Guidelines for assessment of de-bundling for SSC project activities.	Not applicable This is not a small-scale project.	NA

	Validated situation	Conclusion
Check if there is another registered small scale project activity or an application to register one. Take into account specific debundling requirements for Type I project activities. Describe how this has been validated.		

	Validated situation	Conclusion
SECTION 7. Application of the selected baseline and monitoring methodology applicability		
1. Have the baseline and monitoring methodologies selected by the project participants been previously approved by the CDM Executive Board, that is, does it appear on the methodologies page of the UNFCCC website? Confirm that the CME have listed in the PoA-DD and the generic CPA-DD the combinations of technologies/measures and/or approved methodologies implemented in the PoA.	Yes ☒ No ☐ NA☐ The PP has applied methodology ACM0002 “Grid-connected electricity generation from renewable sources Version 16.0. This methodology also refers to the latest approved Version of the following tools: • “Tool for the demonstration and assessment of additionality”, Version 7.0 “Tool to calculate the emission factor for an electricity system” Version 5.0 It is confirmed that the baseline and monitoring methodologies selected by the project participants have been approved for application to both CDM PoA and CPAs by the CDM Executive Board appears on the methodologies page of the UNFCCC website. The PP is not using combination of technologies/measures and/or approved methodologies in the implementation of the PoA.	OK
2. If the project activity is a Small Scale one; does it qualify within the threshold of the three possible types of small scale projects? Confirm information provided in the PDD/PoA-DD/CPA-DD.	Not applicable	NA
3. If the project activity is a Small Scale one; which approved small scale methodology does the project apply? Confirm that the SSC methodology is applied with the general guidelines to SSC CDM methodologies.	Not applicable	NA
4. For PoA, has the combination of methodologies been approved by the Board? If not, has the CME justified that it does not have any cross-effects in accordance with “Guidelines for the consideration of interactive effects for application of multiple CDM methodologies for a programme of activities”. In case it is not clearly demonstrated seek clarification	Not applicable No combination of methodologies is being applied under the PoA.	NA

	Validated situation	Conclusion
from the Board.		
5. For PoA, if the CME applies combinations of technologies/measures and/or methodologies for a SSC-PoA confirm that in the PoA-DD and the specific CPA-DD it is demonstrated that there are no cross effects between the technologies/measures applied. Combinations of approved methodologies contained in the General guidelines to SSC CDM methodologies may be applied without further assessment of cross effects Check if the situation for applying combinations of technologies/measures and/or methodologies is eligible in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities	Not applicable. The PP has applied only ACM0002. The PoA does not apply combination of methodologies	NA
6. For PoA, if the CME applies combinations of large scale methodologies for PoA or combination of large scale with SSC methodologies, confirm that only combinations explicitly permitted in the methodologies have been applied. Otherwise prior-approval from the EB is required. In other cases, the CME shall submit a request for clarification to the secretariat by following the latest applicable procedure for the eligibility of the proposed combination.	Not applicable. The PP has applied only ACM0002. The PoA does not apply combination of methodologies	NA
7. Determine whether the methodology selected is applicable to the project activity/Programme/CPA including that the used version is valid. Describe steps taken to assess the relevant information contained in the PDD in the table below.	The applicability conditions are outlined in the PoA-DD part II Section B.2. Application of methodology(ies) which matches the methodologies/Tools in Section B.1.	OK ~~CAR 10~~

No.	Applicability conditions in the ACM0002 - Consolidated baseline methodology for grid-connected electricity generation from	Information in the PoA-DD (Generic CPA-DD)	Steps taken to assess PoA-DD information (Generic CPA-DD)	Conclusion

	renewable sources Version 16.0			
1	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).	This CPA involves the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records, see Appendix 3. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants only.	Ok
2	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	This CPA involves the installation of a wind power plant (WPP).	The validation team confirmed the situation based on interviews with PPs, and can be validated for future CPA inclusion with a visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants.	Ok
3	Specific applicability conditions for capacity addition, replacements and/or retrofits.	Since this CPA does not involve capacity addition, replacements or retrofits, the conditions are not applicable.	The validation team confirmed the situation based on interviews with PPs, and can be validated for future CPA inclusion with a visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants, not capacity additions.	Ok
4	Specific applicability conditions for hydroelectric plants	Since this CPA does not involve hydroelectric plants, the conditions are not applicable.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants, not hydroelectric plants.	Ok
5	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;	This CPA does not involve fuel switch, biomass power plants and/or hydro power plants.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants, not fuel switch power plants or hydro power plants.	Ok

	• A hydro power plant that results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.			
No.	**Applicability conditions in the Tool to calculate the emission factor for an electricity system (GEF Tool) Version 5.0.**	**Information in the PoA-DD (Generic CPA-DD)**	**Steps taken to assess PoA-DD information (Generic CPA-DD)**	**Conclusion**
1	This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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).	This CPA provides electricity to a grid.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants only, and that the CPA provide electricity to the Brazilian national electrical grid (SIN). The Brazilian DNA provides the EFgrid, CM,y calculation and dispatch data, while following the steps outlined in the Tool to calculate the emission factor for an electricity system (GEF Tool) Version 5.0.	Ok
2	Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants. It is confirmed that the Brazilian DNA follows the Tool to calculate the emission factor for an electricity system (GEF Tool) Version 5.0. and only considered grid power plants.	Ok
3	In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	The CPA is located totally in a non-Annex I country.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants. It is confirmed that all the CPAs will be located within the Brazilian territory.	Ok
No.	**Applicability conditions in the Tool for the demonstration and assessment of**	**Information in the PoA-DD (Generic CPA-DD)**	**Steps taken to assess PoA-DD information (Generic CPA-DD)**	**Conclusion**

	additionality (Additionality Tool) Version 7.0.			
1	The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. The validation team confirms that the applicability of the tool for the demonstration and assessment of Additionality will be checked at CPA level.	Ok
2	Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	The CPA is following the tool.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the PoA is constructing Greenfield wind power plants. The validation team confirms that the applicability of the tool for the demonstration and assessment of Additionality will be checked at CPA level.	.OK

No.	Applicability conditions in the ACM0002 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources Version 16.0	Information in the CPA-DD	Steps taken to assess CPA-DD information	Conclusion
1	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).	This CPA involves the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants only.	OK
2	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	This CPA involves the installation of a wind power plant (WPP).	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention	OK

	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		of the CPA is constructing Greenfield wind power plants.	
3	Specific applicability conditions for capacity addition, replacements and/or retrofits.	Since this CPA does not involve capacity addition, replacements or retrofits, the conditions are not applicable.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants, not capacity additions.	OK
4	Specific applicability conditions for hydroelectric plants	Since this CPA does not involve hydroelectric plants, the conditions are not applicable.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants, not hydroelectric plants.	OK
5	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 results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.	This CPA does not involve fuel switch, biomass power plants and/or hydro power plants.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants, not fuel switch power plants or hydro power plants.	OK

No.	Applicability conditions in the Tool to calculate the emission factor for an electricity system (GEF Tool) Version 5.0.	Information in the CPA-DD	Steps taken to assess CPA-DD information	Conclusion
1	This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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-	This CPA provides electricity to a grid.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants only, and that the CPA provide electricity to the Brazilian national electrical grid	OK

	side energy efficiency projects).		(SIN). The Brazilian DNA provides the $EF_{grid, CM,y}$ calculation and dispatch data, while following the steps outlined in the Tool to calculate the emission factor for an electricity system (GEF Tool) Version 5.0.	
2	Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered..	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants. It is confirmed that the Brazilian DNA follows the Tool to calculate the emission factor for an electricity system (GEF Tool) Version 5.0. and only considered grid power plants.	OK
3	In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Only grid power plants were considered.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind power plants. It is confirmed that all the CPAs will be located within the Brazilian territory.	OK
No.	**Applicability conditions in the Tool for the demonstration and assessment of additionality (Additionality Tool) Version 7.0.**	**Information in the CPA-DD**	**Steps taken to assess CPA-DD information**	**Conclusion**
1	The use of the “Tool for the demonstration and assessment of additionality” is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. The validation team confirms that the applicability of the tool for the demonstration and assessment of Additionality is performed at the CPA level; see Section 6 of this report on additionality.	Ok
2	Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	The CPA is following the tool.	The validation team confirmed the situation based on interviews with PPs, visit to the project site location and review of documents and records. Thus, it was confirmed that the intention of the CPA is constructing Greenfield wind	OK

			power plants. The validation team confirms that the applicability of the tool for the demonstration and assessment of Additionality is performed at the CPA level.	

	Validated situation	Conclusion
8. Confirm that any specific guidance provided by the CDM Executive Board in respect to an approved methodology has been correctly applied.	The CDM-EB does not provide any specific guidance for the applied methodology.	
9. If a determination regarding the applicability of the selected methodology to the proposed CDM project activity/Programme/CPA cannot be made, request clarification of the methodology in line with the guidance provided by the CDM Executive Board. Describe the clarification request and response.	Not applicable	NA
10. If the Validation Team determines that the proposed CDM project activity/Programme/CPA does not comply with the applicability conditions of the methodology, the Team may proceed by means of requesting revision to or deviation from the methodology in line with the guidance provided by the CDM Executive Board. Describe the request for revision or deviation and approval by the CDM Executive Board.	Not applicable	NA

	Validated situation	Conclusion
SECTION 7a. Project boundary		
1. Does the project boundary include physical, geographical site of the industrial facility, processes, or equipment that is affected by the project activity/each CPA implemented under the Programme? In case of application of multiple technologies/measures and/or methodologies describe for each one as necessary.	Yes ☒ No ☐ NA☐ The project boundary in the generic CPA was validated through desk review and during site visit, as being GHG emissions from CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity, and is confirm to include the physical, geographical site of the industrial facility, processes, or equipment that are affected by each CPA implemented under the PoA. Only one technology/measure, methodology is being applied in the PoA. Project boundary of the Generic CPA included in the PoA is the physical/geographic	OK

	Validated situation	Conclusion
	boundary of the Brazilian SIN (Brazilian Interconnected Grid) and all power plants connected to it, corresponding to all Brazilian States. The present CPA boundary is covered under the PoA boundary. Only one technology/measure, methodology is being applied in the PoA.	
2. If the proposed project activity has both Afforestation/Reforestation (A/R) and non-A/R components, to avoid double counting of emission sources, LRQA shall confirm that the emissions associated with the A/R activity will be accounted for and documented by the A/R project activity.	Not applicable	NA
3. Determine whether in establishing the project boundary of the PoA, PPs have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary. Please describe it for each host country involved.	The validation team confirmed that there are no Host Country specific policies on implementation of wind power plants. The programme is legally compliant and is current practice. Only country of Brazil is involved.	OK
4. If there are any GHG emissions occurring within the proposed CDM project activity boundary, which are not addressed by the applied methodology and which are expected to contribute more than 1% of the overall expected average annual emissions reductions as a result of the implementation of the project, LRQA shall request clarification of, revision to, or deviation from the methodology as appropriate.	Not applicable	NA
5. Confirm that all sources and GHGs required by the methodology have been included within the project boundary. Describe here if any emission source that will be affected by the project activity and is not addressed by the approved methodology, has been identified. In such case request clarification of, revision to or deviation from the methodology in accordance with EB guidance. Use the table below for this purpose:	All sources and GHGs as required by the methodology have been included in the project boundary. There is no emission source that is affected and not considered by the project activity and not addressed by the methodology	

Gases and Sources Included In the generic CPA ACM0002 Version 16.0.

	Source	Gas	Inc./Exc. Pdd	Justification specific CPA-DD	Steps Taken To Assess CPA Justification	Conclusion
BASELINE	CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity	CO_2	Yes	Main emission source	The validation team confirms that CO_2 is a major emission source due to combustion of fuels by thermal-based power plants used in baseline scenario.	Ok
		CH_4	No	Minor emission source	The validation team confirms the situation that omitting the CH_4 is not a major source.	Ok
		N_2O	No	Minor emission source	The validation team confirms the situation that omitting the N_2O is not a major source.	Ok
PROJECT	Not Applicable	CO_2	No	No project emissions.	The validation team confirms that there are no project emissions for this type of project activity and is in accordance with ACM0002 Version 16.0.	Ok
		CH_4	No	No project emissions.	The validation team confirms that there are no project emissions for this type of project activity and is in accordance with ACM0002 Version 16.0.	Ok
		N_2O	No	No project emissions.	The validation team confirms that there are no project emissions for this type of project activity and is in accordance with ACM0002 Version 16.0.	Ok

	Validated situation	Conclusion
SECTION 7b. Baseline scenario identification and description.		
1. Determine whether the PDD/PoA-DD provides a verifiable description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed CDM project activity/Programme. Please describe it for each technologies/measures and/or combination of methodologies and/or host country.	The Baseline scenario is prescribed in the CDM Methodology ACM0002 Version 16.0. As per ACM0002 Version 16.0, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario 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 described in the "Tool to calculate the emission factor for an electricity system".* The Specific CPA in the PoA-DD describes the baseline scenario as above. Only one technology/measure, methodology is being applied under the PoA, no	OK

	Validated situation	Conclusion
	combinations.	
2. Confirm that any procedure contained in the methodology to identify the most reasonable baseline scenario, has been correctly applied.	Yes ☒ No ☐ NA☐ The baseline scenario has been prescribed by the applied methodology.	OK
3. Check each step in the procedure described in the PDD to identify the baseline scenario against the requirements of the methodology. (Note that if the methodology requires use of tools, that is, such as the tool for the demonstration and assessment of additionality and the combined tool to identify the baseline scenario and demonstrate additionality, the guidance in the methodology shall supersede it in the tool.)	The Baseline scenario is prescribed in the CDM Methodology ACM0002 Version 16.0. As per ACM0002 Version 16.0, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario 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 described in the "Tool to calculate the emission factor for an electricity system*"	OK
4. Based on financial expertise and local and sectoral knowledge, determine whether all scenarios that are considered by the project participants including those required by the methodology, are reasonable in the context of the proposed CDM project activity and that no reasonable alternative scenario has been excluded. Use the table below for this purpose. Use the same reference as in the methodology, when available. Please describe the below table for each technologies/measures and/or combination of methodologies and/or host country as applicable.	n/a The Baseline scenario is prescribed in the CDM Methodology ACM0002 Version 16.0. As per ACM0002 Version 16.0, if the project activity is the installation of a new grid-connected renewable power plant/unit. There is no combination of technology/measure or methodology being applied under the PoA.	OK

Alternative Scenario Ref.	Description in the PoA-DD	Cross-checked with	Validation Opinion
The baseline scenario is determined by the applied methodology ACM0002 and no further analysis is necessary.			

5. Determine whether the baseline scenario identified is reasonable by validating the assumptions, calculations and rationales used, as described in the PDD. It shall be ensured that documents and sources referred to in the PDD are correctly quoted and interpreted. Cross check the information provided in the PDD with other verifiable and credible sources, such as local expert opinion. The table above may be used for this purpose.	The Baseline scenario is prescribed in the CDM Methodology ACM0002 Version 16.0. As per ACM0002 Version 16.0, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario 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 described in the "Tool to calculate the emission factor for an electricity system*".	OK
6. Is the identified baseline scenario in line with regulatory or legal requirements and does it take into account relevant national and/or sectoral policies?	Identified baseline scenario is in line with regulatory and legal requirement of the host country.	OK
7. If applicable, identify the type of national and/or sectoral policies: - E+: Those adopted after the adoption of the Kyoto Protocol (11 December 1997) shall not be taken into account in identifying the baseline scenario. Please describe how the baseline scenario refers to the hypothetical situation without these national and or sectoral policies. - E-: Those adopted after the adoption of the M&P for a CDM (11 November 2001) shall not be taken into account in identifying the baseline scenario. Please describe the hypothetical situation without these national and/or sectoral regulations being taken into account for the baseline identification.	Through Resolution #7, see Appendix 3 document [B 28], ANEEL (Brazilian Electricity Regulatory Agency, in Portuguese "Agência Nacional de Energia Elétrica", ANEEL) established a discount of 50% of the applicable distribution/transmission fee (TUST) for complementary renewable energy projects, such as wind power generation projects. This sectoral policy was established on 18/08/2004, and therefore after 11/11/2001. This discount gives a comparative advantage to less emission-intensive technologies over more emission-intensive technologies. The validation team agrees that the incentive can be classified as a Type E- policy.	OK
8. Is this identification supported by official and/or verifiable documents (for example, studies, web pages, certificates, etc)?	This compliance is validated with reference to official websites of the grid company and energy regulatory authorities. ONS (Operador Nacional do Sistema Eletrico). National Electric System Operator www.ons.org.br ANEEL (Agência Nacional de Energia Elétrica). Electric Regulatory Agency www.aneel.gov.br CCEE (Câmara de Comercialização de Energia Elétrica) Chamber of Electrical Energy Commercialization www.ccee.org.br According to ANEEL, the Brazilian interconnected grid installed capacity is composed of 63.64% large-scale hydropower and 30.14% thermal plant, therefore constituting the	OK

	majority of connected plant. There is no legislation preventing the continuation of these current power plants or the construction of new such power plants, see Document B [B 35].	
9. If there is any registered project or CPA which could interfere with the project activity, please describe the reference number, and how it has been considered for the baseline determination.	The baseline scenario is predetermined under the methodology ACM0002: if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario 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 described in the "Tool to calculate the emission factor for an electricity system*"	OK

	Validated situation	Conclusion
SECTION 7c. Algorithms and/or formulae used to determine emission reductions		
1. Compare the equations and parameters in the PDD to those in the selected approved methodology and determine if they have been correctly applied to calculate project emissions, baseline emissions, leakage, and emission reductions. Confirm that adequate justification has been provided for selection between different options. Please describe the equations for each of the technologies/measures or combination of methodologies selected.	The PP has applied the methodology ACM0002 Version 16.0. The applied methodology has been correctly used for calculation of the baseline emissions, project emissions, leakage emissions and emission reduction. It is confirmed that adequate justification has been provided for selection between different options. There is just one host party in the PoA – Brazil. There is only one technology/measure being applied under the PoA and no combination of methodologies. The summary of the validation is as below: ~~CAR 9~~ – Several inaccuracies were found in the values used to determine the ER, including: rounding of values, using the 2011 data from the DNA for $EF_{grid,CM,y}$ and the discrepancies in the numbering system being used. CLOSED, as the PP revised the ER calculation. **BASELINE EMISSIONS:** $BE_y = EG_{PJ,y} * EF_{grid,CM,y}$ Where: BE_y = Baseline emissions in year *y* (tCO_2/yr) $EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh/yr)	OK ~~CAR 9~~

	$EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the latest Version of the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh) For the calculation of $EG_{PJ,y}$, option (a), Greenfield plants was chosen by the PP, which is confirmed as accurate, since the CPAs involved in the project activity are "the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity". The calculation is as follows, confirmed as per ACM0002 Version 16.0.: $EG_{PJ,y} = EG_{facility,y}$ 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/yr) $EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh/yr) For the calculation of $EF_{grid,CM,y}$, it will be used data from the Brazilian Designated National Authority (DNA). The Brazilian DNA makes available the information of Dispatch Data Analysis - Operating Margin Emission Factor and the Build Margin Emission Factor following stepwise approach of the Tool to calculate the emission factor for an electricity system: The Brazilian DNA Website confirms that the $EF_{grid,CM,y}$ is calculated using the CDM "Tool to calculate the emission factor for an electricity system", Version 5.0, see document in Appendix 3 documents [B 1] and [B 19] as follows: **Step 1: Identify the relevant electricity systems** The Interconnected National System is defined as the relevant electric system of the Project Activity, as recommended by Brazilian DNA through the resolution #08, see Appendix 3 document [B 20] – that defined the Brazilian Interconnected Grid as a single system that covers all regions of the country (North, Northeast, South, Southeast and Midwest). **Step 2: Choose whether to include off-grid power plants in the project electricity systems** The Option I (only grid power plants are included in the calculation) was chosen by the PP, in which only grid power plants are included in the calculation. This is confirmed as	

	appropriate since these plants are included in the OM and BM emission factor that is calculated by the Brazilian DNA based in the data from power plants connected to the grid. **Step 3: Select a method to determine the operating margin (OM)** The PP chose the calculation of the operating margin emission factor ($EF_{grid,OM,y}$) based on option (c) Dispatch data analysis Operation Margin. Dispatch data analysis (Option c) cannot be used if off-grid power plants are included in the project electricity system as per Step 2 above. This is in accordance with the previous step, that only grid connected plants are included. **Step 4: Calculate the operating margin emission factor according to the selected method** The calculation of the operation margin emission factor follows the dispatch data analysis emission factor (EFgrid,OM-DD,y) and it is calculated and defined by the Brazilian Designated National Authority in accordance with the dispatch data of the Electric System National Operator, see Appendix 3 document [B 21]. The CO2 emission factors resulting from the power generation in the Brazilian National Interconnected System (SIN) are calculated based on the generation record of plants centrally dispatched by ONS. According to the “Tool to calculate the emission factor for an electricity system” for the dispatch data analysis (OM) it must be used the year in which the project activity displaces grid electricity and it must be updated the emission factor annually during monitoring. Dispatch data OM emission factors for year 2012 was used for an ex-ante estimation of CERs that will be generated as a result of project’s implementation. The Emissions Factor Operating Margin is calculated for the Brazilian National Interconnected System hourly from the value of energy exported from each plant, the cost of generation of each plant (scheduling priority), schedules of exchanges with the neighboring subsystems and emission factors of thermal power plants. The dispatch order for Brazilian Interconnected System is: hydroelectric power plants, wind, nuclear, imports from other systems in ascending order of cost, thermoelectric power plants in ascending order of generation cost **Step 5: Calculate the build margin (BM) emission factor** The Option 2 was selected by PP. For the first crediting period, the build margin emission factor will be updated annually, ex-post, including those units built up to the year of registration of the project activity or, if information up to the year of registration is	

not yet available, including those units built up to the latest year for which information is available.

The build margin emission factor is calculated by the Brazilian DNA. The procedure for calculation was elaborated in cooperation between ONS, MME and MCTI and follows the “Tool to calculate the emission factor for an electricity system”. Data of Build Margin emission factor for year 2012 was used for an ex-ante estimation of CERs generation, because they are the latest data available, see Appendix 3 document [B 1].

Step 6: Calculate the combined margin emissions factor

The calculation of the combined margin (CM) emission factor ($EF_{grid,CM,y}$) is based on (a) Weighted average CM. According to ACM0002 Version 16.0., the weighted average CM method (Option a) should be used as the preferred option. The combined margin emission factor is calculated as follows:

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

Where:

$EF_{grid,BM,y}$	=	Build margin CO_2 emission factor in year *y* (tCO_2/ MWh)
$EF_{grid,OM,y}$	=	Operating margin CO_2 emission in year *y* (tCO_2/ MWh)
W_{OM}	=	Weighting of operating margin emissions factor (%)
W_{BM}	=	Weighting of build margin emissions factor (%)

According to ACM0002 Version 16.0., the following default values are being applied by the PP for w_{OM} and w_{BM} for wind power project:

(a) Wind and solar power generation project activities: w_{OM} = 0.75 and w_{BM} = 0.25 (owing to their intermittent and non-dispatchable nature) for the first crediting period and for subsequent crediting periods;

PROJECT EMISSIONS

For ACM0002 Version 16.0., for a wind power generation project activities, PE_y = 0.

LEAKAGE

According to ACM0002 Version 16.0., no leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, and transport). These emissions sources are neglected.

EMISSION REDUCTIONS

Therefore, emission reductions is calculated as follows:

$$ER_y = BE_y - PE_y$$

Where:

ER_y	=	Emission reductions in year *y* (tCO_2e/yr)
BE_y	=	Baseline emissions in year *y* (tCO_2/yr)
PE_y	=	Project emissions in year *y* (tCO_2e/yr)

Due to specific CPA conditions, the emission reductions for this CPA will be calculated based on the methodology approach as follows:

$$ER_y = BE_y = EF_{grid,CM,y} * \mathrm{EG}_{\mathrm{facility,y}}$$

Where:

ER_y	=	Emission reductions in year *y* (tCO_2e/yr)
BE_y	=	Baseline emissions in year *y* (tCO_2/yr)
$EF_{grid,CM,y}$	=	Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the latest Version of the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh)
$\mathrm{EG}_{\mathrm{facility,y}}$	=	Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh/yr)

2. Verify the justification given in the PDD/PoA-DD for the choice of data and parameters that are fixed ex-ante and used in the equations to determine estimated emission reductions.

Assess that all data sources and assumptions are appropriate and calculations are correct, applicable to the proposed CDM project activity/programme and will result in a conservative estimate of the emission reductions.

If data and parameters will be monitored on implementation and hence become available only after validation of the project activity, confirm that the estimates provided in the PDD for these data and parameters are reasonable.

List all data and parameters provided in the PDD in the tables

Data/Parameter title: W_{BM} Weighting of build margin emissions factor	Comments
Value	25 (%)
Title in line with methodology?	Yes
Data unit correctly expressed?	Yes
Appropriate description of parameter?	Yes
Source clearly referenced?	Tool to calculate the emission factor for an electricity system
Value provided is considered reasonable and provide conservative estimate of emission reduction?	Yes
Has this value been verified?	Yes Default value recommended by the GEF tool for Wind and solar power generation project activities, for the first crediting period and for

OK

~~CAR 9~~

in next column.

	subsequent crediting periods
Choice of data correctly justified?	Yes
Measurement method correctly described?	Yes

Data/Parameter title: W_{OM} Weighting of operating margin emissions factor	Comments
Value	75 (%)
Title in line with methodology?	Yes
Data unit correctly expressed?	Yes
Appropriate description of parameter?	Yes
Source clearly referenced?	Tool to calculate the emission factor for an electricity system
Value provided is considered reasonable and provide conservative estimate of emission reduction?	Yes
Has this value been verified?	Yes Default value recommended by the GEF tool for Wind and solar power generation project activities, for the first crediting period and for subsequent crediting periods
Choice of data correctly justified?	Yes
Measurement method correctly described?	Yes

Only one generic CPA is submitted for with the PoA Validation.

The data and parameters will be monitored throughout the crediting period, and the data sources and assumptions are appropriate and calculations are correct, applicable to the proposed CDM PoA and will result in a conservative estimate of the emission reductions.

The data and parameters will be monitored on implementation and hence become available only after validation of the project activity, it is confirmed that the estimates provided in the PoA-DD and the specific CPA-DD for these data and parameters are reasonable.

3. Verify the justification given in the CPA-DD for the choice of data and parameters that are fixed ex-ante and used in the equations to determine estimated emission reductions.

Assess that all data sources and assumptions are appropriate and calculations are correct, applicable to the proposed CPA and will result in a conservative estimate of the emission reductions.

Please add row for each specific CPA

Only one specific CPA is submitted for with the PoA Validation.

Data/Parameter title: **$EG_{facility}$** Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y*	Comments
Value	105,800 MWh/yr
Title in line with methodology?	Yes
Data unit correctly expressed?	Yes
Appropriate description of parameter?	Yes
Source clearly referenced?	Yes
Value provided is considered reasonable and provide conservative estimate of emission reduction?	Yes Value was correctly calculated as: 2.7 MW * 11 units * 8,760 hours * 40.67% (generator capacity * number of generator units * year operating hours * PLF).
Has this value been verified?	Yes, based on the GL Garrad Hassan Wind Production Evaluation Study for the Amontada Wind Complex, see Appendix 3 document [A 13]
Choice of data correctly justified?	Yes
Measurement method correctly described?	Yes
Information in line with the PoA-DD?	Yes

Data/Parameter title: **$EF_{grid,CM,y}$** Combined margin CO_2 emission factor for grid connected power generation in year *y*	Comments
Value	0.4385 tCO_2/MWh
Title in line with methodology?	Yes
Data unit correctly expressed?	Yes
Appropriate description of parameter?	Yes
Source clearly referenced?	Yes
Value provided is considered reasonable and provide conservative estimate of emission reduction?	Yes Value was correctly calculated as: 0.1576 tCO2/MWh * 75% + (0.2010 tCO2/MWh * 25% ($EF_{grid,OM,y}$ * W_{OM} + $EF_{grid,BM,y}$ * W_{BM}).
Has this value been verified?	Yes, based on the official date (2012) from the Brazilian DNA Website, see

OK

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<tr><td></td><td>Appendix 3 document [B 1].</td></tr>
<tr><td>Choice of data correctly justified?</td><td>Yes</td></tr>
<tr><td>Measurement method correctly described?</td><td>Yes</td></tr>
<tr><td>Information in line with the PoA-DD?</td><td>Yes</td></tr>
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~~CAR 9~~ - regarding the accuracy of the PLF used in the GL Garrad Hassan Wind evaluation study. CLOSED as the PP corrected the value to be more accurate, using 40.67% rather than 40.6%.
</td>
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<tr>
<td>4. Verify the justification given in the PDD/PoA-DD/CPA-DD for the choice of data and parameters that are monitored and used in the equations to determine estimated emission reductions.

For data and parameters will be monitored on implementation and hence become available only after validation of the project activity, confirm that the estimates provided in the PDD/CPA-DD for these data and parameters are reasonable.

Please add row for each specific CPA</td>
<td>
<table>
<tr><th>Data/Parameter title:</th><th>Comments</th></tr>
<tr><td>Value</td><td></td></tr>
<tr><td>Title in line with methodology?</td><td></td></tr>
<tr><td>Data unit correctly expressed?</td><td></td></tr>
<tr><td>Appropriate description of parameter?</td><td></td></tr>
<tr><td>Source clearly referenced?</td><td></td></tr>
<tr><td>Value provided is considered reasonable?</td><td></td></tr>
<tr><td>Has this value been verified?</td><td></td></tr>
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<tr><td>Measurement method correctly described?</td><td></td></tr>
<tr><td>Information in line with the PoA-DD?</td><td></td></tr>
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Please refer to Section 12.Monitoring Plan.
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<td>OK</td>
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<td>5. Confirm that all assumptions and data used by PPs are listed in the PDD including their references and sources, and that the documentation used as the basis for these assumptions and source of data is correctly quoted and interpreted in the PDD.

If the project activity has both A/R and non A/R components, ensure that no emissions associated with the A/R activity are accounted for.

If there is any registered project or CPA which could interfere with the specific CPA, please describe the reference number, and how it has been considered for emission reduction calculation.</td>
<td>Based on the review of GL Garrad Hassan Wind Production Evaluation Study for the Amontada Wind Complex, the team confirms that it is in accordance with the methodology requirements. Detail of validation of methodology requirements is presented above.
The PP has correctly sourced the data in both the PoA-DD and the CPA-DD.

The PP has correctly sourced the grid emission factor data from the official Brazilian DNA Website.

Validation team confirmed from the site visit and its sectoral expertise that the specific CPA does not have any A/R component.</td>
<td>OK</td>
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6. Please confirm that all the parameters listed in the specific CPA are correctly referred and quoted from the corresponding generic CPA.	It is confirmed by the Validation Team that all the parameters listed in the specific CPA are correctly referred and quoted from the corresponding generic CPA. Also, there is no registered project or CPA which could interfere with the specific CPA.	OK
7. Confirm that all estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD/PoA-DD/CPA-DD.	The baseline emissions, project emissions and leakage emissions can be replicated using the data and parameter and could be confirmed from the emission reduction spreadsheet submitted by the PP.	OK
8. If any of the parameters used to calculate ERs have been obtained using sampling methods, please use the "Standard for sampling and surveys for CDM project activities and PoA" to determine whether the sampling plan proposed by the PPs will provide parameter value estimates in an unbiased and reliable manner.	Not available	OK
If the Standard for Sampling and surveys for CDM project activities and PoA was applied, confirm that the sampling efforts were undertaken in accordance with the Standard.	Not available	OK

	Validated situation	**Conclusion**
SECTION 8. Management system		
1. Describe the competencies of the CME to check the features of potential CPAs to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA.	The PoA participant and the Coordinating/Managing Entity (CME) responsible for the communication with the CDM Executive Board is ÉOLOS ENERGIAS RENOVÁVEIS S.A. The GSP PoA-DD specifies CME as AMBIO PARTICIPAÇÕES LTDA. but during the validation process, this entity has left the project and is no longer involved. They have provided a signed Declaration of No Objection that allows Eolos Energias Renovaveis SA to be the CME, see Appendix 3 documents [A 35]. ÉOLOS ENERGIAS RENOVÁVEIS S.A. is part of the Grupo Queiroz Galvão S.A., a group founded in 1953 and composed by more than 50 companies from several different but synergic areas**.** The Project Manager from WAYCARBON, a CDM consultancy contracted to support ÉOLOS ENERGIAS RENOVÁVEIS S.A. in CME activities, is appointed to be responsible for checking of the features of potential CPAs against CDM requirements	OK ~~CAR 1~~

	Validated situation	Conclusion
	and eligibility criteria for inclusion into PoA. The competencies of the Project Manager as discussed during interviews and as presented in the PoA DD involve understanding of CDM requirements; knowledge of applicable to the project methodology ACM0002; understanding the PoA system. The contract between WAYCARBON and ÉOLOS ENERGIAS RENOVÁVEIS S.A. is in Appendix 3 document [A 33]. ~~CAR 1~~ - regarding CME competencies and responsibilities to ensure CME to check the features of potential CPAs to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA CLOSED as PP clearly defined the roles and responsibilities for the PoA in both the PoA-DD and CPA-DD. Roles and responsibilities are outlined in the training and monitoring manuals by CDM consultancy and in the project PoA-DD and CPA-DD under the monitoring plan [B 3] [A 3].	
2. Confirm that the CME have developed and implemented a management system that includes the following: i) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies; ii) Records of arrangements for training and capacity development for personnel; iii) Procedures for technical review of inclusion of CPAs; iv) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA); v) Records and documentation control process for each CPA under the PoA; vi) Measures for continuous improvements of the PoA management system; vii) Any other relevant elements.	The CME, ÉOLOS ENERGIAS RENOVÁVEIS S.A, will be supported by Waycarbon, a CDM consultancy. The contract between WAYCARBON and ÉOLOS ENERGIAS RENOVÁVEIS S.A. is in Appendix 3 document [A 33]. As presented above the overall responsibility for managing the process of inclusion of a CPA into PoA is given to WAYCARBON. During the interview with WAYCARBON, they showed understanding of the applicable CDM requirements and in particular with the requirements of methodology ACM0002. They showed understanding of company management system and records generated in the company that have relation to the project activity. A flow chart was presented and discussed showing the steps of the process related to inclusion of the CPA into the PoA and detailed, see Appendix 3 document [B 3]. The process was confirmed during interviews at the site visit. ~~CAR 1~~ – regarding missing features in the management system that cover: Procedures for technical review of inclusion of CPAs and Measures for continuous improvements of the PoA management system. CLOSED as PP provided all necessary information regarding the following elements in the monitoring system of the PoA, see monitoring system manuals in Appendix 3 documents [A 3]: ii) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies; iii) Records of arrangements for training and capacity development for personnel; iv) Procedures for technical review of inclusion of CPAs;	OK ~~CAR 1~~

	Validated situation	Conclusion
	v) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA); vi) Records and documentation control process for each CPA under the PoA; vii) Measures for continuous improvements of the PoA management system; viii) Any other relevant elements. Before including a new CPA in the PoA, the CME analyses all information regarding the CPA: name, location, crediting period, equipment details, technical description, relevant environmental and energy agency permits, contact details and reference to the contract. This information is used to cross check against DNA(s) and UNFCCC databases, or any other applicable database, in order to avoid double counting. If the project is new, it will be included in the PoA. If not unique, it will be excluded. WAYCARBON is responsible for training for project monitoring, according to the CDM requirements and certificates will be delivered for each personnel responsible for monitoring of each CPA of this Programme. The WAYCARBON management system document, see Appendix 3 documents [A 3]: Section 3. B) outlines that: the Evaluation and inclusion of new CPAs will be performed by WAYCARBON staff with minimum experience proven by the participation and registration of at least 3 CDM projects in the UNFCCC. Monitoring information will be sent to the CME monthly by each CPA project manager by e-mail. The CPA project manager will keep a copy of the information sent and all references used in order to account for missing information at the end of any given monitoring period. The CME has a dedicated system to digitally store all CPA-related information and is able to provide digital copies of all documents involved. Every CPA has a spreadsheet called “Workbook – [name of WPP]”, containing monitored information and CER calculation, as well as document Version control. This document will be sent monthly by each CPA project manager to the CME by the email or any other indicated by the CME. At the end of monitoring period, or if any missing information is detected, a copy of all monitoring records will be requested and sent to CME, which will crosscheck all information available.	
3. Confirm the implementation of such system in inclusion of specific CPAs.	Section D.7.2. of the specific CPA clearly outlines how the CME has developed and how it will implement the management system of the CPA. .The specific CPA management system was validated during the desk review (see Appendix 3 for Management system	OK

	Validated situation	Conclusion
	documents, including training material), during the site visit through interviews with the CME. The first CPA inclusion, is the one being submitted with the PoA-DD, for Ilha Grande Wind Farm Project. The following elements from the specific CPA inclusion were validated in the real life project, during desk review, site visit and interviews: i) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies; ii) Records of arrangements for training and capacity development for personnel; iii) Procedures for technical review of inclusion of CPAs; iv) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA); v) Records and documentation control process for each CPA under the PoA; vi) Measures for continuous improvements of the PoA management system; vii) Any other relevant elements. Clear roles and responsibilities have been put forth for the specific CPA, as seen in the CPA-DD Section D.7.2. where all monitoring elements have been described and CPA inclusion tasks described. These were validated at the site visit with interview with the operational staff at the Ilha Grande Wind Farm project location, and the Queiroz Galvão office in Fortaleza, Ceara. Finally, the implementation of the PoA management system for this specific CPA inclusion were review and found to be implemented as designed, mainly through interviews with the WAYCARBON consultant, Luis Felipe Kopp. The following table was presented in Section D.7.2. of the CPA-DD that accurately and clearly describes the roles and responsibility of managing the PoA, in addition to the systems in place in the Management System Manual, see Appendix 3 document [A 3]: **Requirement** / **Responsible** / **Action plan/ procedure** **Emission reduction calculation** / Waycarbon Project Manager / The calculations of CO_2 emissions will be based solely on net value production. The calculations of avoided GHG emissions will be carried out on a periodic basis by the Project Manager, applying the methodologies and calculations detailed in the CPA-DD. **Review of** / Waycarbon / The Project Manager will be responsible to check	

	Validated situation			Conclusion
	CPA inclusion	Project Manager	the features of potential CPAs to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA. The staff has acknowledged experience in registered CDM projects.	
	Training and capacity development for personnel	Waycarbon Project Manager	Project Manager will be responsible for training the CPA operational staff, so as to execute the CER monitoring according to the monitoring plan and best practices.	
	Technical review of CPA	Waycarbon Project Manager	Project Manager will be responsible for cross checking the information from the project developer, collecting the necessary documentation to the CPA validation, such as equipment details, proposals/ contracts, etc.	
	Double counting	Waycarbon Project Manager	The Project Manager will check on the UNFCCC website if the proposed CPA has already requested for registration a CDM project or a CPA inclusion. In case of registration of an already registered CDM component the PP will communicate immediately the UNFCCC and DOE.	
	Records and documentation control	Waycarbon Project Manager	The server will contain all documentation related to each CPA and backed up annually. The monitoring of the WPP will be sent to COI through internet COI is a facility in Fortaleza, that will receive the same data as the CCEE. The backup of this information will be copied into physical disks and kept in different floor at the COI building.	
	Measures for continuous improvements of the PoA management system	Waycarbon Project Manager	The Project Manager will be responsible for checking the UNFCCC procedures and apply the QA/QC processes to improve the PoA management system.	
	The records arrangement were validated at the operational level at the Queiroz Galvão office in Fortaleza, Ceara, through site visit validation activities and interviews with Engineers and programmers on site. The training and capacity building for CPA inclusion activities were reviewed with WAYCARBON, and shown to be in place, though since it is the first CPA at PoA registration, those responsible for PoA-DD and CPA-DD building, i.e. Luis Felipe Kopp at WAYCARBON, are not part of those being trained since they were interviewed and proved their CDM competencies. The management system for the PoA in regards to records keeping and training capacity are confirmed to be in place.				

	Validated situation	Conclusion
	The procedures for technical review of CPA inclusion were discussed and confirmed by the Validation team as being robust, during presentation of the management system and interviews with WAYCARBON regarding the review process. The implementation of the system of avoiding double counting was validated during the site visit with interviews with the WAYCARBON on how this was implemented in the specific CPA project with support from the document in Appendix 3 [A 2], Signed CPA Declaration for CPA “Ilha Grande Wind farm project”, Unique identification: QGER CPA 0001, dated 08/05/2014 by the PP Éolos Energias Renováveis S.A Mr. Luiz Santos. The following data was validated during desk review and during site visit using environmental licenses, GPS and verifying the UNFCCC website for project information. The Validation team confirms that the following information is correct and is accordance with the eligibility criteria b) of the PoA-DD: • Name of the CPA - Ilha Grande Wind Farm Project • Installed capacity in MW – 29.7 MW • Location of the CPA - Address – Amontada/CE - GPS coordinates –	

Turbine	Longitude	Latitude
IG-01	3°04'06,6"S	39°42'03,2"W
IG-02	3°04'19,9"S	39°42'04,6"W
IG-03	3°04'32,0"S	39°42'04,5"W
IG-04	3°04'09,6"S	39°41'36,1"W
IG-05	3°04'20,0"S	39°41'39,6"W
IG-06	3°04'33,1"S	39°41'43,6"W
IG-07	3°04'14,2"S	39°41'13,7"W
IG-08	3°04'28,1"S	39°41'19,8"W
IG-09	3°04'28,1"S	39°40'57,7"W
IG-10	3°04'25,3"S	39°40'59,9"W
IG-11	3°04'34,4"S	39°41'02,8"W

Name of the wind farm developer - ÉOLOS ENERGIAS RENOVÁVEIS S.A.
• Contact information, namely:
- Contact person – Luiz Antonio Santos
- Postal address - Av. Dom Luis, 807 – 5 andar do Anexo – Aldeota CEP 60.160-230
- Telephone number - +55 85 3025-9130
- Email address - luiz.santos@qgrenovaveis.com

• Unique Identification Number provided by the CME - QGER-CPA-0001

	Validated situation	Conclusion

	Validated situation	Conclusion
SECTION 9. Start date of a PoA		
1. Does the PoA-DD clearly indicate the start date and length of the PoA in format: dd/mm/yyyy, and is it in line with the PS? Paragraphs under section 11.6 "Duration and Crediting Period"	Yes ☒ No ☐ Yes, the PoA start date is in the correct format and is dated as 21/10/2011. The length of the PoA is in correct format as 28 years and 0 months. The start date and length of PoA are in line with PS Section 11.6 "Duration and Crediting Period". PoA-PDD starting date is using option (a) in paragraph 213 of the Project Standard, "(a) The date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA". The prior consideration date was validated on the UNFCCC Website under prior consideration for "Ilha Grande Wind Farm", see Appendix 3 document [B 15]. The start date for the CPA is after the start date of the PoA, on 06/09/2012. This is the signature date of the main expenditure involved in the CPA, contract between project owner and Alstom – purchase of the wind turbine generators [A 16].	OK ~~CAR 2~~
2. Confirm that the start date of the PoA is either of the two dates below: (a) The date of notification of the intention to seek the CDM status to the Secretariat and the DNA; or (b) The date of publication of the PoA-DD for global stakeholder consultation	The start date used is option (a) The date of notification of the intention to seek the CDM status to the Secretariat and the DNA (21/10/2011) and was validated on the UNFCCC Website under prior consideration for "Ilha Grande Wind Farm" ("Ilha Grande Wind Farm" PROJECT) was originally conceived as a single project and then became part of a program of activities, as explained by PP in the notification email to UNFCCC/DNA), see Appendix 3 document [B 15]. The "Ilha Grande Wind Farm" project (currently the "Ilha Grande Wind Farm" CPA project) was originally conceived as a single project and then became part of a program of activities ("Queiroz Galvão Energias Renováveis Wind Power Programme'), and that was mentioned in the email sent by PP when submitting the POA to the UNFCCC/DNA (prior consideration form + progress report explaining the inclusion of Ilha Grande in a POA project activity), however, the UNFCCC only confirmed receipt of the notification, see Appendix 3 documents [A 11]. The Validation team considered this acceptable and it was validated on the UNFCCC Website.	OK

	Validated situation	Conclusion
3. Confirm that the start date for any CPA is on or after the start date of the PoA.	The start date for the CPA remains the same (06/09/2012), being after the start date of the PoA (21/10/2011). The start date for the CPA is the signature date of the main expenditure involved in the CPA, contract between project owner and Alstom – purchase of the wind turbine generators, see Appendix 3 document [A 16]. ~~CAR 2~~ – start date of PoA is after the start date of the CPA. CLOSED as PP decided to use option (a) in paragraph 213 of the Project Standard, "(a) The date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA". The prior consideration date was validated on the UNFCCC Website under prior consideration for "Ilha Grande Wind Farm", see Appendix 3 document [B 15].	OK ~~CAR 2~~
Proposed project activity or Specific CPA for Validation		
4. Does it provide a description of how the start date and expected operational lifetime of any proposed project activity/CPA has been determined? Assess this description in the PDD/CPA-DD (a) The Start date of the project activity/CPA shall be the earliest date at which either the implementation or construction or real action begins.	Yes, the CME provided a description of how the start date (06/09/2012) and expected operational lifetime of any proposed CPA has been determined. The Start date of the CPA is the earliest date at which either the implementation or construction or real action begins, which in the specific CPA is the signature date of the main expenditure involved in the CPA, contract between project owner and Alstom – purchase of the wind turbine generators, see Appendix 3 document [A 16]. All CPAs under this PoA will have an operational lifetime based on the expected operational lifetime of the equipment according to the manufacturer. In this CPA, the operational lifetime is 20 years 0 months (based on the wind turbine manufacturers, see Appendix 3 documents [A 5, A 8, A 24].	OK
5. Confirm that the selected the type (fixed or renewable) and duration of crediting period in the PDD/CPA-DD considering that: (a) Each renewable crediting period shall be at most seven years and may be renewed at most three times, for a maximum total length of 21 years; (b) A fixed crediting period shall be at most 10 years.	The PP has selected renewable crediting period for the CPA. It is confirmed that the renewal of crediting period is at most 2 times and a maximum of 21 years and will not go beyond the end date of the PoA life of 28 years. It is confirmed that these dates are in conformance with PS Section 11.6.	OK
6. Please describe how expected operational lifetime has been validated.	Yes, the CME provided a description of how the start date (06/09/2012) and expected operational lifetime of any proposed CPA has been determined. All CPAs under this PoA will have an operational lifetime based on the expected	OK

	Validated situation	Conclusion
	operational lifetime of the equipment according to the manufacturer. In this CPA, the operational lifetime is 20 years 0 months (based on the wind turbine manufacturers, see Appendix 3 documents [A 5, A 8, A 24].	
7. Confirm that the only one start date for the crediting period in the project activity/CPA has been determined, even in cases of phased implementation.	The project will not be implemented in phases. It is confirmed that the CME has determined only one start date for the crediting period in the CPA-DD: 01/12/2016 or the registration date, whichever is later.	OK
8. Confirm that the stated start date of the crediting period in the PDD/CPA-DD in the format dd/mm/yyyy, and has not used any qualifications to the start date, such as expected.	The start of the crediting period is “01/12/2016 or the registration date, whichever is later.”, which is in accordance with the start date of the crediting period of a CPA in the PS paragraph 219 option (a) being “The date of registration of the PoA, if the corresponding CPA DD is submitted together with the request for registration”.	OK

	Validated situation	Conclusion
SECTION 10. Additionality of a project activity		
1. Does the PDD/PoA-DD clearly describe how the proposed CDM project activity is additional? Describe briefly the approach taken for the demonstration of additionality.	Yes ☒ No ☐ The PoA-DD clearly describes that the proposed PoA is additional, under Section B.1 of the PoA-DD and is in accordance with the additionality requirements under VVS. Additionality is further evidenced under CDM-EB65-A03-STAN (Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 03.0), “*the CME shall develop eligibility criteria for inclusion of CPAs in the PoA and shall include these criteria in the PoA-DD and demonstrate their usability to assess the inclusion of CPAs in the generic CPA-DD*”. Additionality is described as under Section B.1 at the PoA-level as: This PoA is a voluntary coordinated action by ÉOLOS ENERGIAS RENOVÁVEIS S.A. There are no existing laws and regulations in Brazil that enforce the implementation of wind energy projects under a PoA scheme. The participation of WPPs in energy sector is low, in spite of many government programs to incentive this kind of renewable energy, such as PROINFA or Auctions for Alternative Energy. Only 3.32% of the total installed capacity in Brazil comes from wind powerand the participation of wind power in the installed capacity under construction is still low, representing 36.72% of the total capacity of under construction power plants (July 2016). It will be demonstrated at CPA level that the construction and operation of a WPP in	OK

	Validated situation	Conclusion
	Brazil is not financially attractive. This financial analysis will compare the revenues of investing in this type of project with the benchmark scenario. Incentives, such as CDM, are mandatory for the investments necessary. So, according to this and the "Tool for the demonstration and assessment of additionality (Additionality Tool) version 7.0", the WPPs would not be implemented in the absence of the PoA.	
2. List the documents and tools provided by the CDM Executive Board used to demonstrate the additionality	The project is using the following approved CDM tool to demonstrate additionality, all of which have been verified on the UNFCCC Website as valid: "Tool for the demonstration and assessment of additionality" Version 7.0	OK
3. If there is any registered project or CPA which could interfere with the specific CPA, please describe the reference number, and how it has been considered for additionality assessment.	Not applicable	NA
Additionality for small-scale project activities or PoA that include one or more small-scale CPA Determine whether the proposed project activity is additional in accordance with CDM requirements applicable for small-scale project activities: last version of the methodological tool "Demonstration of additionality of small-scale project activities" and "non-binding best practice examples to demonstrate additionality for SSC project activities"		
4. Describe and assess the relevant criteria for the automatic additionality of the CPAs in accordance with the Positive List of technologies and project activity types in the last version of the Guidelines on the demonstration of additionality of small-scale project activities. Confirm that the CPA size is up to and including the small-scale CDM thresholds (e.g. installed capacity up to 15 MW) and applies only small scale methodology.	Not applicable	NA
5. Documentation of barriers is not required for the positive list of technologies and project activity types that are defined as automatically additional for project sizes up to and including the small-scale CDM thresholds in accordance to the last version of the "Guidelines on the Demonstration of Additionality of Small-Scale Project Activities". Describe and assess the relevant criteria for considering the proposed Project activity automatically additional.	Not applicable	NA
6. In case microscale project activities describe and assess the relevant criteria for the automatic additionality in accordance with the last version of the	Not applicable	NA

	Validated situation	Conclusion
"Guidelines for demonstrating additionality of microscale project activities", of the following cases: a) Type I project activities up to 5 MW that employ renewable energy as their primary technology, b) Type II energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year, c) Type III project activities that aim to achieve emissions reductions at a scale of no more than 20 ktCO_2e per year.		
First-of-its-kind Project Activities Determine whether the proposed project activity is first-of-its-kind and therefore additional with no further analysis in accordance with the last version of the methodological tool: "Additionality of first-of-its-kind project activities".		
7. Describe and assess the relevant criteria to identify that the proposed project activity is the first of its kind in the applicable geographical area in accordance with the approach in methodological tool: "Additionality of first-of-its-kind project activities" Justify the geographical area chosen by the PP Justify how same output/capacity has been determined by the PP. Describe appropriateness of the data used to determine FOIK.	Not applicable	NA

	Validated situation	Conclusion
SECTION 10a. Prior consideration of the clean development mechanism (only for project activities)		
1. Does the PDD clearly indicate the start date of the project activity in format: dd/mm/yyyy, and is it in line with the Glossary of CDM Terms?	Yes ☒ No ☐ NA for PoA	NA
If the PDD was published for Global Stakeholder Consultation process after the start date, check that the CDM benefits were considered necessary in the decision to undertake the project activity as a CDM project, following the below queries.		
2. For a project activity with a start date on or after the 02 August 2008, confirm that the PPs have informed the host party DNA and the UNFCCC secretariat in	NA for PoA	NA

	Validated situation	Conclusion
writing of their intention to seek CDM Status. If such a notification has not been provided by the PPs within 180 days of the project activity start date, determine that the CDM was not seriously considered in the decision to implement the project activity.		
For a project activity with a start date before 02 August 2008		
3. Check the following requirements through document reviews to assess the PPs prior consideration of the CDM: (a) Evidence that must indicate that awareness of the CDM before the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project. (b) Reliable evidence from project participants that must indicate that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation.	Not applicable	NA
4. Describe the process for cross-checking the evidence. The assessment of real and continuing actions should focus on real documented evidence, including an assessment of the authenticity of the evidence, that is, letters, email exchanges and other documented communications. These shall be considered as evidence only after assessing the reliability and authenticity of them, inter alia through cross-checking (for example, interviews)	Not applicable	NA
5. The time gap between the documented evidence of prior CDM consideration and continuing and real actions shall be within the following period: a) Less than two years: continuing and real actions were taken to secure CDM status for the project activity; b) Greater than two years and less than three years: justify any positive or negative validation opinion based on the context of the evidence and information assessed; c) Greater than three years: continuing and real	Not applicable	NA

	Validated situation	Conclusion
actions were not taken.		
6. If authentic evidence to support the serious prior consideration of the CDM as indicated above is not available, determine that the CDM was not considered in the decision to implement the project activity	Not applicable	NA

	Validated situation	Conclusion
SECTION 10b. Identification of alternatives		
1. Does the PDD/PoA-DD identify credible alternatives to the project activity/CPA, to determine the most realistic baseline scenario? Assess this list of alternatives and ensure that: (a) The list of alternatives includes as one of the options that the project activity is undertaken without being registered as a proposed CDM project activity. (b) The list contains all plausible alternatives considered to be viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity. (c) The alternatives comply with all applicable and enforced legislation. If the Baseline scenario is prescribed in the approved methodology, no further analysis is required and this section is not applicable.	Not applicable The Baseline scenario is prescribed in the CDM Methodology ACM0002 Version 16.0. As per ACM0002 Version 16.0, if the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline scenario correctly identified as 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 described in the "Tool to calculate the emission factor for an electricity system*	NA

	Validated situation	Conclusion
SECTION 10c. Investment analysis		
1. How PoA demonstrates additionality investment analysis?	☐Defined technical and economic criteria only ☒Full investment analysis for each CPA	OK

	Validated situation	Conclusion
2. If the PoA has defined the economic and technical criteria for inclusion of the CPA, validation of range of values to be presented in the table below. Does the requirement to update the eligibility criteria for the economic and technical criteria was specified and following the methodology(ies). Justify this for each of the technologies/measures and/or combination of methodologies and/or host countries.	Yes ☐ No ☐ CME selected option (i) is to conduct an investment analysis to each CPA.	OK
3. If economic and technical criteria are defined for additionality of each CPA, justify how it meets these criteria based on actual values for that CPA. If there is any registered project or CPA which could interfere with the specific CPA, please describe the reference number, and how it has been considered for additionality assessment.	Not applicable	NA
4. If full investment analysis to be conducted in each CPA, has the input values used in the analysis been defined and how it will be obtained in each CPA. Justify this for each of the technologies/measures and/or combination of methodologies and/or host countries.	Yes ☒ No ☐ Full investment analysis is to be conducted in each CPA. All input parameters have been properly defined in the CDM-PoA-DD and sources were clearly identified. Please refer to Tables **Case 2** below.	OK
5. If full investment analysis to be conducted for each CPA, additionality of each CPA shall be assessed using the actual values, applicable to the CPA at the time of inclusion, in the investment analysis. Use the table below to justify how values are obtained If there is any registered project or CPA which could interfere with the specific CPA, please describe the reference number, and how it has been considered for additionality assessment.	Please refer to Table **Case 2** – Specific CPA below.	OK
6. Verify the accuracy of financial calculations carried out for the investment analysis: (b) Conduct a thorough assessment of all parameters and assumptions used in calculating the relevant financial indicator, and determine the accuracy and suitability of	The financial calculations and all references used in investment analysis worksheet and all variables were validated against the respective references as described below. The Financial Investment Analysis Spreadsheet has been developed by the PP and was assessed and audited by the validation team.	Ok ~~CAR 4~~ ~~CL 3~~

<table>
<tr><th></th><th>Validated situation</th><th>Conclusion</th></tr>
<tr><td>these parameters.
(c) Cross-check the parameters against third-party or publicly available sources, such as invoices or price indices.
(d) Review feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants.</td><td>~~CAR 4~~ – regarding the project lifetime and correction in the financial analysis spreadsheet, sensitivity analysis worksheet. CLOSED as the PP has applied the financial analysis as 20yrs and corrected the financial cash flow.

~~CL 3~~ – regarding how depreciation is considered in the financial analysis. CLOSED as the PP clarified the use of depreciation and their arguments and estimations presented by PPs were regarded reasonable by the validation team.

The validation team has checked the accuracy of financial calculations in the investment analysis.
The table below (Case 2 – Specific CPA) shows the thorough assessment of all the inputs to the investment analysis, with an explanation on how each parameter has been validated.</td><td></td></tr>
<tr><td>7. Assess the correctness of computations carried out and documented by the project participants</td><td>The financial assumptions, parameters and calculations for the CPA investment analysis, see Appendix 3 document [A 30] was assessed during the desk review and the site visit and was considered reasonable and accurate</td><td>OK</td></tr>
<tr><td>8. Assess the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions.</td><td>The choice of the parameters considered in the sensitivity analysis, the calculations and the reasoning presented in the CPA-DD were assessed. The arguments presented were considered reasonable.
Parameter variation necessary to IRR (post tax) to reach the benchmark (12.26%):

<table>
<tr><th>CPA Ilha Grande</th><th>Parameter variation needed to reach benchmark</th></tr>
<tr><td>CAPEX (Investment)</td><td>28.35%</td></tr>
<tr><td>OPEX (O&M Cost)</td><td>to zero</td></tr>
<tr><td>Gross Revenue</td><td>28.70%</td></tr>
</table>

CAPEX (Investment):
<table>
<tr><th>Item</th><th>Value</th><th>Unit</th></tr>
<tr><td>WTGs</td><td>79.756.910</td><td>R$</td></tr>
<tr><td>Civil works (Turn Key)</td><td>17.032.722</td><td>R$</td></tr>
<tr><td>Electrical works (Turn Key)</td><td>7.902.720</td><td>R$</td></tr>
<tr><td>Environmental costs</td><td>853.66</td><td>R$</td></tr>
<tr><td>Insurance</td><td>418.601</td><td>R$</td></tr>
</table>
</td><td>OK</td></tr>
</table>

Validated situation	Conclusion

Other costs	745.995	R$
Total	**106.710.609**	**R$**

The sensitivity analysis indicates that a CAPEX reduction of 28.35% below the estimated value would be necessary for the IRR to achieve the benchmark. CAPEX is composed of WTGs, civil works, environmental costs, engineering services and insurance. For details on the validation of the parameter "Capital Expenditures (CAPEX)", please refer to the table below. The WTG and electrical work agreements are turn-key agreements that were already signed. The validation team confirms that more than 98% of CAPEX has been already contracted or paid as shown below:

The validation team confirms that the CAPEX cannot decrease to reach the benchmark because more than 98% of the cost has been already contracted.

OPEX:

Item	Value	Unit
First 2 years O&M	25	R$/WTG/yr
Following years O&M	120	R$/WTG/yr
Transmission fee -TUST	5,146	R$/KW.month
PIS - Social contribution program	0,65%	% of revenues
COFINS - Social security financing transfers	3,00%	% of revenues
IR - Income tax	15%	% over profit
Additional IR	10%	% over profit
CSLL - Social contribution on net profit	9%	% over profit
Depreciation	5%	% per year
CSLL base profit (used for taxation)	12%	% of revenues
IR base profit (used for taxation)	8%	% of revenues
Fiscalization fee - TFSEE	1,94	R$/KW.year
Annual typical unitary economic benefit	484,21	R$
Land lease	1,5%	R$ or % of revenues

The CPA cash flow shows that the variations on O&M, TUST and other costs have little effect on the IRR. Even an extreme and completely hypothetical situation of zero O&M

	Validated situation	Conclusion
	costs would not elevate the IRR to the required benchmark. Therefore, the validation team concludes that a variation in the OPEX for reaching the benchmark is very unlikely. **Gross Revenue:** **Item** / **Value** / **Unit** Energy price / 135,33 / R$/MWh Expected annual energy generation / 105.8 / MWh/year The sensitivity analysis indicates that a mean revenue increase of 28.70% above the estimated scenarios would be necessary, all through the project's operational lifetime, to achieve the benchmark. The likelihood of such increase on each of the two parameters that compose the revenue, the amount of Energy Sold and the Energy Price, has been assessed: i) Energy price: No variation on the energy price is expected, once the value is fixed throughout 20 years of project operational lifetime (except for the inflation adjustments) by the power purchase agreement, see Appendix 3 document [A 14]. So, an increase of over 28.70% in the energy tariff is not possible. (1) Consideration on uncertainties in the wind studies: the wind study indicated uncertainties of 15.5 GWh/yr in the yearly electricity production (P50) (for details, refer to the table below, parameter "Energy delivered to the grid"), see Appendix 3 document [A 13]. 15.5GWh is equivalent to 14.65% of the P50 (105.8 GWh/yr). So, considering a 14.65% higher net energy production due to the studies' uncertainties, an increase of 13.75% should still occur all through the CPA's lifetime for the benchmark to be achieved. The validation team considers this unlikely to occur. Furthermore, the unlikelihood that the amount of energy produced reaches the breakeven point is even greater if we consider the historical underperformance of the wind power plants in the region, as confirmed by the monthly report from ANEEL on the SIN's power plants results, see Appendix 3 document [B 22] pg. 5 Table 2. Please refer to graph #2: "Geração Verificada de Usinas Eólicas - REGIÃO NORDESTE - Ceará" and table 2, "Geração Média (MW) no período de 12 meses" (report from October 2011) An extract is shown below for the plants located near to the proposed CPA:	

	Validated situation			Conclusion
	Wind Power Plant	Estimated capacity factor (%)	Actual capacity factor (%)	
	Rio do Fogo	34	28.17	
	Praia Formosa	39	17.65	
	Icaraizinho	43	32.57	
	Canoa Quebrada	43.5	26.88	
	Bons Ventos	43.84	25.20	
	Therefore, the validation team concludes that reaching the benchmark is very unlikely.			

Case 2: conducting full investment analysis at each CPA:

PoA: Every CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario (Please refer to Table Specific CPA below for detailed benchmark assessment).

Investment costs (for generic CPAs)

Parameter/input	Symbol/Unit	Value(s)/ Range	Source	Means of validation	Conclusion
WTGs	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK
Civil works (Turn Key)	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK
Electrical works (Turn Key)	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK
Environmental costs	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK
Insurance	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK
Other costs	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK
WTGs	R$	xxx	contracts and/or proposals	Please refer to Table Specific CPA below.	OK

Operational costs (for generic CPAs)

Parameter/input	Symbol/Unit	Value(s)/ Range	Source	Means of validation	Conclusion
First 2 years O&M	R$/WTG/yr	xxx	Estimative from PP	Please refer to Table Specific CPA below.	OK
Following years O&M	R$/WTG/yr	xxx	Estimative from PP	Please refer to Table Specific CPA below.	OK
Transmission fee -TUST	R$/KW.month	xxx	Estimative from PP	Please refer to Table Specific CPA below.	OK
PIS - Social contribution program	% of revenues	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
COFINS - Social security financing transfers	% of revenues	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
IR - Income tax	% over profit	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
Additional IR	% over profit	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK

CSLL - Social contribution on net profit	% over profit	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
Depreciation	% per year	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
CSLL base profit	% of revenues	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
IR base profit	% of revenues	xxx	applicable legislation	Please refer to Table Specific CPA below.	OK
Fiscalization fee - TFSEE	R$/KW.year	xxx	Estimative from PP	Please refer to Table Specific CPA below.	OK
Annual typical unitary economic benefit	R$	xxx	Estimative from PP	Please refer to Table Specific CPA below.	OK
Land lease	R$ or % of revenues	xxx	Estimative from PP	Please refer to Table Specific CPA below.	OK

Operational revenues (for generic CPAs)

Parameter/input	**Symbol/Unit**	**Value(s)/ Range**	**Source**	**Means of validation**	**Conclusion**
Energy price	R$/MWh	xxx	Contracts, PPAs, last public auction price	Please refer to Table Specific CPA below.	OK
Expected annual energy generation	MWh/year	xxx	= Installed capacity * load factor * working hours, or Information from wind study	Please refer to Table Specific CPA below.	OK

Parameter/input	**Symbol/ Unit**	**Value(s)/ Range**	**Source as defined in PoA**	**Means of validation**	**Conclusion**
Benchmark					
Treasury bounds risk free rate	%	10.16	SELIC (September 2009 to August 2012)	The Brazilian Government Interest rate (treasury bonds risk free rate), secured by / based on federal public debt securities, in the form of repo operations – nominal terms), from Portuguese “taxa SELIC”, is part of the selected benchmark. Around three years (period from 01/09/2009 to 31/08/2012 - prior to the start date of the CPA (06/09/2012)- of SELIC historical values [B 23] were considered for the benchmark definition, resulting in an average value of 10.16%, and this period is deemed conservative (temporal consistency and country short-time volatility effects reduction) and representative for the proposed project activity.	Ok

				The validation team checked the values through direct verification of data on the website of the Brazilian Central Bank [B 24]. No additional source was considered necessary once it is an official data.	
Market premium risk	%	2.10	W. Gonçalves Jr., R. R. Rochman, W. Eid Jr., L. R. Chalela (2011). Estimating the Brazilian Market Premium	Direct verification of article on the site, see Appendix 3 document [B 24] page 943. The article presents the Brazilian market premium risk for Bovespa, IBrX, and FGV-100. The market risk for Bovespa, applied by the PPs, is the smaller and therefore more conservative. The validation team also compared the value with the Country Premium Risk calculated by the Brazilian Institute of Applied Economic Research (IPEA), a public foundation bound to the Federal Secretariat for Strategic Affairs of the Presidency. The country premium risk in the period between January 2008 and 30 September 2011 (compatible with the Starting Date) was found to be 2.52%. Therefore, the validation team considers the 2.10% value applied conservative and adequate.	Ok
Benchmark	%	12.26	Calculation: Benchmark = risk-free rate + market-risk= 10.16% + 2.10% = 12.26%	Contrarily to other countries, in Brazil there is not a specific IRR that works as a benchmark for Wind projects, which is the same to say that the Brazilian government does not require a minimum profitability in projects of this kind nor there is a widely accepted benchmark applied by several different players in the Brazilian Wind power generation business. The attractiveness of any project in this area depends exclusively on the minimum rate of return required by project participants. To be economically attractive, the IRR of any investment project implemented in Brazil should exceed the SELIC ((“Sistema Especial de Liquidação e de Custódia” - Special System for Settlement and Custody - *Basic Discount Rate*) rate as projects carry risks (i.e. execution risks, financial risks, environment risks etc) and therefore should include a premium over the risk-free rate. For that reason, the selected benchmark was defined as: average SELIC risk-free rate + BOVESPA market-risk = 10.16% + 2.10% = 12.26%. A 20 year operation period was considered in the financial analysis with no residual value, which is in accordance with the 20 year project’s operational lifetime [A 8] [A 24].	Ok

				The calculations were verified and found to be correct and the assumptions used in the calculations were deemed by LRQA to be consistent and applicable at the time of investment decision.	
IRR Analysis					
CAPEX (Investment costs) Validation team has received and checked the signed Version of the proposals and agreements mentioned below. The documents are deemed authentic. The CAPEX has also been validated through the comparison with similar CDM registered projects in the region. The investment cost per output in the current CPA (3,592 kBRL/MW) is smaller than other project activities.					
WTGs	BRL	79,756,910	Spreadsheet, see Appendix 3 document [A 30]. Contract with Alstom see Appendix 3 document [A 12].	The validation team has cross-checked the values with the signed agreement between Alstom and Construtora Queiroz Galvão for the provision of wind generators ECO122, see Appendix 3 document [A 12]. No cross-checking with other sources was deemed necessary since the validation team checked the final signed agreement.	Ok
Civil works (Turn Key)	BRL	17,032,722	Spreadsheet, see Appendix 3 document [A 30]. Contract with Alstom see Appendix 3 document [A 15].	The validation team has cross-checked the values with the signed agreement with the construction company, Cortez Engenharia see Appendix 3 document [A 15] for the civil construction work. No cross-checking with other sources was deemed necessary since the validation team checked the final signed agreement.	Ok
Electrical works (Turn Key)	BRL	7,902,720	Spreadsheet, see Appendix 3 document [A 30]. Contract with Alstom see Appendix 3 document [A 16].	The validation team has cross-checked the values with the signed agreement between Alstom and Central Eólica Ilha Grande, Central Eólica Palmas and Central Eólica Ribeirão, see Appendix 3 document [A 16] for the provision of a substation and all other needed work related (turn-key. No cross-checking with other sources was deemed necessary since the validation team checked the final signed agreement.	Ok
Environmental costs	BRL	853,660	Spreadsheet, see Appendix 3 document [A 30].	This cost is composed of the following: **Component** / **Value (kBRL)** / **Document cross-checked** Environmental compensation / 515.685 / Clause 2 of Amendment TCA 51/2011 [A 17] Environmental licensing / 31.154 / Signed proposal – insurance policies [A 22] Environmental / 306.821 / Signed agreement [A	Ok

				monitoring 19]	
Insurance	BRL	418,601	Spreadsheet, see Appendix 3 document [A 30].	The validation team checked the insurance policies (surety), see Appendix 3 document [A 21]. The value paid for insurance corresponds to 0.52% of the value of the wind generators and 0.39% of total CAPEX. The value was cross-checked with the financial assessment prepared by a third party. WPP insurance cost is in average 0.32% (0.13 to 0.80%) of the insured capital, see Appendix 3 document [B 26]. Therefore, the insurance value is considered adequate.	Ok
Other costs	BRL	745,995	Spreadsheet, see Appendix 3 document [A 30].	Other costs correspond to the owner's engineering services. The validation team cross-checked with the signed agreement, see Appendix 3 document [A 20]. No cross-checking with other sources was deemed necessary since the validation team checked the final signed agreement.	Ok
OPEX (Operational costs)					
First 2 years O&M	BRL/WTG /yr	25,000	Spreadsheet, see Appendix 3 document [A 30]. Contract with Alstom, see Appendix 3 document [A 23]	The validation team has cross-checked the values with the signed agreement between Alstom and Central Eólica Ilha Grande, Central Eólica Palmas and Central Eólica Ribeirão for the operation and maintenance of turbines, see Appendix 3 document [A 23]. Clause 5 of the agreement specifies the fees per WTG per year. No cross-checking with other sources was deemed necessary since the validation team checked the final signed agreement.	Ok
Following years O&M	BRL/WTG /yr	120,000			Ok
TUST (Transmission fee)	BRL/KW. month	5.146	Spreadsheet, see Appendix 3 document [A 30].	TUST is always defined by ANEEL, through its resolutions when a power plant is connected to a Shared Transmission Installation (*Instalação de Transmissão Compartilhada*). The validation team has checked the ANEEL Resolution 1555 (27/06/2013), Annex I, Ilha Grande, see Appendix 3 document [B 27]. Obs.: Through Resolution #77, see Appendix 3 document [B 28], ANEEL established a discount of 50% of the applicable distribution/transmission fee (TUST) for complementary renewable energy projects, such as wind power generation projects. This sectoral policy was established on 18/08/2004, and therefore after 11/11/2001. This discount gives a comparative advantage to less emission-intensive technologies over more emission-intensive technologies. The validation team agrees that the incentive can be classified	Ok

				as a Type E- policy. The PP has considered the full value of TUST (5.146 BRL/kW.month, without 50% discount) in the investment analysis calculation.	
PIS - Social contribution program	% of revenues	0.65	Budgeted as per applicable Brazilian law of presumed (assumed) profit	The value budgeted in the CPA-DD has been confirmed with information from the Secretary of Federal Revenue, see Appendix 3 document [B 29]. PIS: 3% COFINS: 0.65% Another official source has been consulted, see Appendix 3 document [B 30]: See "Regime de incidência cumulativa", first paragraph, that confirms above values.	Ok
COFINS - Social security financing transfers	% of revenues	3.00			
IR - Income tax	% over profit	15	Budgeted as per applicable Brazilian law of presumed profit	Cross-checked with information from the Internal Brazilian Revenue Service (*Receita Federal*), see Appendix 3 document [B 30]. Income tax (15%, calculated over 8% of operational profit): http://www.receita.fazenda.gov.br/pessoajuridica/dipj/2005/pergresp2005/pr517a555.htm, questions 520, 531 and 541. The value of the income tax is 15% (fifteen percent) on taxable income (8%of gross revenue), assumed or arbitrated, calculated by corporations in general. The portion of taxable income which exceeds 240,000.00 BRL per year (60,000 BRL per quarter) is subject to the impact of the additional tax at the rate of 10%. The calculation in the financial worksheet was validated and found to be correct. As the value of the parameter is defined by law, no further cross-check was deemed necessary by the validation team.	Ok
Additional IR	% over profit	10			
IR base profit	% of revenues	8			
CSLL - Social contribution on net profit	% over profit	9	Budgeted as per applicable Brazilian law of presumed profit	The value of CSLL was verified in the official site of Internal Brazilian Revenue Service (*Receita Federal*). According to the reference, the value is defined by the Law 11727 (2008), which has been in force since 01/05/ 2008. Cross-checked with information from the Revenue Service of Brazil as following: Social contribution (9% x 12% of revenues = 1.08% of Gross revenues): http://www.receita.fazenda.gov.br/pessoajuridica/dipj/2005/pergresp2005/pr617a633.htm, questions 619 and 632. As the value of the parameter is defined by law, no further cross-check was deemed necessary by the validation team.	Ok
CSLL base profit	% of revenues	12			
Depreciation	% per	5	Spreadsheet, see Appendix 3	As per ANEEL's recommendation, the depreciation is	Ok

	year		document [A 30]. ANEEL, see Appendix 3 document [B 31]	considered 5% per year, see Appendix 3 document [B 31]. As the tax regime chosen is presumed profit, it does not allow for discount of the depreciation. For more details, please refer to ~~CL 3~~. Therefore, depreciation is neither discounted nor added back in the financial spreadsheet. As the value of depreciation is defined by an official body (ANEEL), and therefore a primary source, no other cross-check was deemed necessary by the validation team.	
TFSEE (ANEEL Supervision taxes)	BRL/KW. year	1.94	Spreadsheet, see Appendix 3 document [A 30]. Budgeted according to Law 12783 (11/01/2013), see Appendix 3 document [B 32] and Technical Note ANEEL 001/2013 (14/01/2013), see Appendix 3 document [B 33].	The validation team has confirmed that as per Law 12,783 dated 11/01/2013, see Appendix 3 document [B 32] and per Technical Note SRE/ANEEL 001/2013 (14/01/2013) , see Appendix 3 document [B 33], the TFSEE is calculated as follows: $TF_g = P \times G_u = P \times 0.4/100 \times Bg$ where: TF_g = annual TFSEE (BRL) P = nominal installed capacity (kW) G_u = 0.4% of the annual Typical Unitary Economic Benefit B_g = annual Typical Unitary Economic Benefit (BRL/kW) The validation team has confirmed that as per ANEEL Technical Note SRE/ANEEL 001/2013, see Appendix 3 document [B 33] that the annual Typical Unitary Economic Benefit for 2013 is 484.21 BRL per installed kW. The value presented in the PDD was confirmed as following: 0.004 x 484.21 BRL/kW = 1.94 BRL/kW As the value of TFSEE is defined by an official body, and therefore a primary source, no other cross-check was deemed necessary by the validation team.	Ok
Annual typical unitary economic benefit	BRL	484.21	Spreadsheet, see Appendix 3 document [A 30]. ANEEL Technical Note, see Appendix 3 document [B 33]	The validation team has confirmed that as per ANEEL Technical Note SRE/ANEEL 001/2013, see Appendix 3 document [B 33] that the annual Typical Unitary Economic Benefit for 2013 is 484.21 BRL per installed kW. As the value of typical unitary economic benefit is defined by an official body, and therefore a primary source, no other cross-check was deemed necessary by the validation team.	Ok
Land lease	% of revenues	1.5	Spreadsheet, see Appendix 3 document [A 30].	The validation team has assessed the land-lease agreement signed between PP and land owners. Clause 4 of the agreement confirms the payment of 1.5% of monthly gross revenue, see Appendix 3 document [A 15].The agreement was signed in January 2008, before the project start date, in order	Ok

				to assure the project location for the wind certification studies. Payments to land owners will be done when the project starts operation as per the project revenue. The value was compared with the financial assessment prepared by a third party. Land lease for wind power plants costs in average 1.25% (0.21 to 1.90%) of the net revenue, see Appendix 3 document [B 26].	
Revenues					
Nominal capacity	MW	29.7	Spreadsheet, see Appendix 3 document [A 30]. Wind study, see Appendix 3 document [A 13], prepared by *GL Garrad Hassan*	The validation team has checked the preliminary wind study prepared by *GL Garrad Hassan*, see Appendix 3 document [A 13]. The value in the wind study was cross-checked against that in the financial analysis, see Appendix 3 document [A 30].	Ok
Energy delivered to the grid	MWh/yr	105,800	Spreadsheet, see Appendix 3 document A 30]. Wind study, see Appendix 3 document [A 13], prepared by *GL Garrad Hassan*	The validation team has checked the preliminary wind study prepared by *GL Garrad Hassan*, see Appendix 3 document [A 13]. The value in the wind study was cross-checked against that in the financial analysis, see Appendix 3 document [A 30].	Ok
Electricity price	BRL/MWh	135.33	Spreadsheet, see Appendix 3 document [A 30].	The validation team has cross-checked with the Power Purchase Agreement (22/12/2010) and Amendment (24/02/2012), see Appendix 3 document [A 14]. Validation team confirms that as per the PPA and Additive, see Appendix 3 document [A 14], the electricity price will not change during the project lifetime, except for possible inflation corrections. As determined in the PPA, if a higher amount of energy is generated than the amount contracted, the buyer has preference to buy the additional amount at a fixed price. The validation team understands that the buyer would only do not use its right to purchase at same price in case the electricity price in the free market is lower than the value contracted.	Ok
Other parameters					
Operational Lifetime	years	20	Spreadsheet, see Appendix 3 document [A 30].	The data was sourced from WTG manufacturer, see Appendix 3 document/s [A 8]; therefore it is in line with option (a) of the Tool to determine the remaining lifetime of equipment. The 20 year WTG operational lifetime considered by the PP was validated (cross-checked) by the sector expert and is in accordance with the external source Wind Measurement International, see Appendix 3 document [B 34]. The sector expert of the validation team has concluded that no residual value of assets can be reasonably expected from the investor's	Ok

				standpoint after the project's lifetime. A 20 year operation period has been considered in the financial analysis' cash flow, in line with expected project's operational lifetime.	
Plant Load Factor	%	40.67	Wind study, see Appendix 3 document [A 13]	The data in the wind studies, see Appendix 3 document [A 13] has been assessed to confirm the overall value of 40.67% stated in the CPA-DD. No additional source was considered necessary, once the wind studies were carried out by a third party, an engineering company contracted by the PP, and fully comply with the CDM "Guidelines for the Reporting and Validation of Plant Load Factors", paragraph 3 option (b).	Ok

	Validated situation	Conclusion
9. Confirm the suitability of any benchmark applied in the investment analysis: (a) Determine whether the type of benchmark applied is suitable for the type of financial indicator presented. (b) Ensure that any risk premiums applied in determining the benchmark reflect the risks associated with the project type or activity. (c) Determine whether it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark by, for example, assessing previous investment decisions by the project participants involved and determining whether the same benchmark has been applied or if there are verifiable circumstances that have led to a change in the benchmark. (d) Confirm the suitability of the benchmark (WACC) by checking that its components are calculated using reasonable vintage years that are consistent with the investment horizon and the period for risk free rate.	The project developer has chosen to apply the benchmark analysis method (Option III - "Tool for the demonstration and assessment of additionality") and has identified Project IRR as the most suitable financial indicator. Since wind farms generate benefits from the sale of electricity amongst the three options mentioned in the "Tool for the demonstration and assessment of additionality", Option I (Simple Cost Analysis) does not apply. Option II (investment comparison analysis) also does not apply since no investment alternatives exist, just the supply of electricity from a grid. In addition, the Methodological Tool "Investment Analysis" states that: "if the alternative to the project activity is the supply of electricity from a grid this is not to be considered an investment and a benchmark approach is considered appropriate". Thus, PP has selected the investment analysis to demonstrate additionality and a benchmark approach has been chosen for the specific CPA. According to the "Tool for the demonstration and assessment of additionality", the benchmark approach can be applied to evaluate if the proposed project activity is economically or financially attractive without the CER revenues. The Internal Rate of Return (IRR) is used in capital budgeting to measure and to compare the profitability of investments (cash flow rate of return). Thus, the selected benchmark approach is considered suitable for the chosen financial indicator (IRR). Since the project activity involves a simple cash flow, the chosen financial indicator (IRR) is considered relevant for the project. Thus, the project IRR can be considered to be a suitable indicator as the project will also generate revenues from the sale of electricity and for this the simple cost analysis is not suitable. The suitability of the benchmark applied in the investment analysis was assessed: - The model applied for Treasury bounds risk free rate the value of the SELIC rate	OK

	Validated situation	Conclusion
	for three previous years before the start of the CPA (period from 01/09/2009 to 31/08/2012) , see Appendix 3 document [B 23]. The choice of historical data and its period is deemed adequate. - The risk premium applied, 2.10%, in the calculation of benchmark was deemed adequate, as it considers the expected return on a risky asset as in BOVESPA – Brazilian Stock Market data, see Appendix 3 document [B 24]. The risk premium applied is general for Brazilian market and therefore can be applied also for the electricity sector. The value chosen is considered conservative, since Bovespa premium market is lower than IBrX, and FGV-100. - The benchmark value adopted by the PP (12.26%) is in accordance with the Methodological Tool "Common Practice" Version 03.1, and is suitable for the type of financial indicator. - Details of how the data was validated are presented in the table above.	
10. If the project participants rely on values from a Feasibility Study Report (FSR) approved by any national authority, the team is required to ensure that: (a) The FSR has been the basis of the decision to proceed with the investment in the project, that is, 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. (b) The values used in the PDD and associated annexes are fully consistent with the FSR and, where inconsistencies occur, the DOE should validate the appropriateness of the values. (c) On the basis of its specific local and sectoral expertise, confirmation is 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. Use the table below to cross-check input values and describe here the results of the comparison.	Not applicable	NA

Comparison to similar registered projects/PoAs in the region:

CDM Ref	Investment cost	Tariff	O&M cost	Capacity	Output	Investment	Load factor	O&M relative	O&M per output

	(kBRL)		(kBRL/yr)		(GWh/yr)	cost per output (kBRL/MW)	(%)	to investment (%)	
The current CPA	106,710	135.33	4,209	29.7	105.800	3,592	40.67	3.95	40
7017	134,204	130	4,122	30.0	116.408	4,473	44.29	3.07	35
7026	127,815	130	4,099	30.0	104.255	4,261	39.67	3.21	39
7023	110,900	130	3,485	25.4	97.211	4,368	43.71	3.14	36
7021	128,400	130	4,145	30.0	128.637	4,280	48.94	3.23	32
7027	139,817	130	5,083	30.0	134.494	4,661	51.17	3.64	38
6609	207,941	125 ~146	7,963	42.0	148.206	4,951	39.8 - 40.3 - 41.2	3.83	54

	Validated situation	Conclusion
SECTION 10d. Barrier analysis		
1. Does the PDD/PoA-DD demonstrate that the proposed project activity/programme faces barriers that prevent its implementation and do not prevent at least the implementation of one of the alternatives? Provide here an overall determination of the credibility of the barrier analysis. Use the below table to list each barrier considered in the PDD and to describe how the team undertake their validation.	Not applicable	NA

Barriers are issues in project implementation that could prevent a potential investor from pursuing the implementation of the proposed project activity. The identified barriers are only sufficient grounds for demonstration of additionality if they would prevent potential project proponents from carrying out the proposed project activity undertaken without being registered as a CDM project activity.

Type of Barrier	Description in the PDD/PoA-DD	Determination			Conclusion
		Barriers are real	Prevent implementation of PA/CPA	Do not prevent implementation of BL	
Access to finance	NA	NA	NA	NA	NA
Risks related barriers	NA	NA	NA	NA	NA
Technological	NA	NA	NA	NA	NA
Due to prevailing practice	NA	NA	NA	NA	NA

Other	NA	NA	NA	NA	NA
First of its kind	NA	NA	NA	NA	NA

	Validated situation	Conclusion
SECTION 10e. Common practice analysis In accordance with the last version of the methodological tool: "Common practice" (referred in this section as the tool)		
1. In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test, then it takes precedence over tool and below steps is not required. Instead approach defined in the methodology should be followed.	Common practice analysis is in accordance with the last version of the methodological tool is followed.	OK
2. Identify if the proposed project activity/programme applies any of the measures listed in the definitions section of the tool.	It is confirmed that the geographical scope of the common practice analysis is appropriate for the assessment of common practice related to the technology or industry type of the PoA's. Based on the "Tool for the demonstration and assessment of additionality" Version 7.0, the applicable geographical area covers the host country as default. The validation team has reviewed the geographical scope of the common practice and was able to confirm that the project activity has used the entire host country for the applicable geographical area.	OK
3. In case the project activity applies any of these measures follow the stepwise approach described in the tool. Describe and assess the 5 steps process followed and the results.	The following is the step-wise approach and validation based in the version 03.1 of the Methodological Tool "Common Practice". The list of wind power plants operating in the country was validated by reviewing the power plants from the ANEEL Website. **STEP 1**: The installed capacity of the plant in this CPA is 29.7 MW the plants included in this analysis are between 14.8 MW and a maximum of 44.5 MW. **STEP 2**: Only power plants under the conditions applied under the CPA-DD step 2 table, were applied, and validated from the ANEEL website: The table listed in the CPA-DD lists all the power plants that fit the above 2 steps: **STEP 3**: from step 2, the following value is confirmed as Nall: N_{all} = 16	OK

	Validated situation	Conclusion
	STEP 4: within similar projects identified in Step 3, the PP identified those that apply technologies that are different to the technology applied in the proposed project activity. Result of this Step: Ndiff = 15 **STEP 5**: calculate factor F=1-Ndiff/Nall F = 1-Ndiff/Nall = 1-15/16 = 0.0625 Nall – Ndiff = 16-15 = 1 According to the Methodological Tool "Common Practice", a project activity is a common practice within a sector in the applicable geographical area if the factor F is greater than 0.2 and N_{all}-N_{diff} is greater than 3. It was determined to what extent similar and operational projects, other than CDM projects; have been undertaken in the defined region and it was concluded that this project is NOT a common practice. Detailed analysis is also presented in the below sections.	
Stepwise approach on common practice analysis		
4. Describe how the capacity or output range as +/- of total designed capacity/output has been calculated. Confirm how it has been validated.	The installed capacity of the plant in this CPA is 29.7 MW the plants included in this analysis are between 14.8 MW and a maximum of 44.5 MW. Only power plants under the conditions applied under the CPA-DD step 2 table, were applied, and validated from the ANEEL website: The table listed in the CPA-DD lists all the power plants that fit the above 2 steps:	OK
5. Describe how the geographical scope of the common practice analysis has been validated. Assess whether the geographical scope (for example, the defined region) of the common practice analysis is appropriate for the assessment of common practice related to the project activity's technology or industry type.	It is confirmed that the geographical scope of the common practice analysis is appropriate for the assessment of common practice related to the PoA's technology or industry type. Based on the "Tool for the demonstration and assessment of additionality" Version 7.0, the applicable geographical area covers the host country as default. The validation team has reviewed the geographical scope of the common practice and was able to confirm that the project activity has used the entire host country for the applicable geographical area.	OK

	Validated situation	Conclusion
6. Determine to what extent similar and operational projects (for example, using similar technology or practice), other than CDM project activities[3]; have been undertaken in the defined region.	The identification for similar projects in the common practice are applied to the project that is located in the applicable geographical area with capacity of +/- 50% of the total design capacity of the project activity, applying the same measure as the project activity, using similar technology, i.e. wind power technology, in which same energy source is used, and started commercial operation before the PoA-DD of the project activity is published for global stakeholders. PP has provided list of wind power plants in the applicable geographical area, see WAYCARBON: CER emission calculation/ Financial analysis and Common Practice worksheet Appendix 3 document [A 30] and described step-wise in the CPA-DD. The following is the step-wise approach and validation based in the version 03.1 of the Methodological Tool “Common Practice”. The list of wind power plants operating in the country was validated by reviewing the power plants from the ANEEL Website. **STEP 1**: The installed capacity of the plant in this CPA is 29.7 MW, the plants included in this analysis are between 14.8 MW and a maximum of 44.5 MW. **STEP 2**: Only power plants under the conditions applied under the CPA-DD step 2 table, were applied, and validated from the ANEEL website: The table listed in the CPA-DD lists all the power plants that fit the above 2 steps: **STEP 3**: from step 2, the following value is confirmed as Nall: Nall = 16 **STEP 4**: within similar projects identified in Step 3, the PP identified those that apply technologies that are different to the technology applied in the proposed project activity. In the analysis were considered the project activities that are similar to the plant in this CPA and have or not financial incentives. This is related to the investment climate in the date of the investment decision: Subsidies or other financial flows, Promotional Policies and Legal regulations. The PROINFA is a governmental program of incentives which was implemented to increase the participation of renewable energy in the SIN. PROINFA (from Portuguese - Programa de Incentivo às Fontes Alternativas de Energia Elétrica) provides a higher	OK

[3] Registered CDM project activities and CDM project activities that have been published on the UNFCCC website for global stakeholder consultation as part of the validation processes

	Validated situation	Conclusion
	energy contract to foment renewable energy, http://www.mme.gov.br/programas/proinfa. Projects qualified by the PROINFA are eligible to participate in the CDM, agreeing to the decision of the UNFCCC regarding eligibility of project derived from public policies. The link provided by the PP referring to the PROINFRA Website, from the Brazilian Ministry of Mines and Energy (http://www.mme.gov.br/programas/proinfa), was validated and is confirmed that the proposed project has a project start date (2012) that is passed the PROINFRA deadline (2010), stating that "The Proinfa, as described in Decree No. 5,025, 2004, was established in order to increase the share of electricity produced by designed projects based on wind, biomass and small hydro hydropower (SHP) in the National Interconnected System (SIN). According to Law No. 11,943, of May 28, 2009, the deadline for the start of operation of these projects ends on December 30, 2010". Therefore, it has been confirmed that the participation in PROINFA was not available to the project activity on the project's starting date. A research was made by the validation team on the site of the Brazilian Ministry of Mines and Energy (http://www.mme.gov.br/programas/proinfa/) regarding the current availability of PROINFA. No evidence of a second phase of the program has been found. In Brazil regulatory environments, all the projects of generation, transmission, distribution and commercialization of electric energy are supervised and regulated by ANEEL in compliance with the law 9.427 of 26 of December of 1996, guaranteeing, then, the same regulatory requirements to the similar activities of the plant included in this CPA. Others project activities registered in CDM were not included in the common practice analysis. Among the WPPs listed in Step 2 and 3, that have become operational in this period, 15 of them were implemented with PROINFA incentives. The only exception is the plant "Mel 02", in the city of Areia Branca (RN), with installed capacity of 20MW, which a reference was found neither for CDM nor for PROINFA. ~~CAR 3~~ – the PROINFRA program is a government incentive program for renewable energy development in Brazil, but it is unknown why the proposed project will not benefit from this program. The CAR was closed as the PP revised the PoA-DD and CPA-DD to include the reason why the proposed project will not benefit from the program (project start date deadline was before the proposed project), since the project start date	

	Validated situation	Conclusion
	deadline was in 2010. **Result of this Step:** Ndiff = 15 **<u>STEP 5</u>**: calculate factor F=1-Ndiff/Nall F = 1-Ndiff/Nall = 1-15/16 = 0.0625 Nall – Ndiff = 16-15 = 1 According to the Methodological Tool “Common Practice”, a project activity is a common practice within a sector in the applicable geographical area if the factor F is greater than 0.2 and N_{all}-N_{diff} is greater than 3. It was determined to what extent similar and operational projects, other than CDM projects; have been undertaken in the defined region and it was concluded that this project is NOT a common practice.	
7. If similar and operational projects, other than CDM project activities, are already widely observed and commonly carried out in the defined region, assess whether there are essential distinctions between the proposed CDM project activity and the other similar activities.	The CPA-DD has elaborated that the CDM project activity has essential distinction compared to the other projects listed in the common practice analysis for the nature of investment. Among the WPPs listed in the Common Practice Excel, see Appendix 3 document [A 30], that have become operational, 15 of them were implemented with PROINFA incentives (government subsidy). The only exception is the plant “Mel 02”, in the city of Areia Branca (RN), with installed capacity of 20MW, which a reference was found neither for CDM nor for PROINFA. All others are registered as CDM projects. WPPs listed in the Common practice excel were validated using ANNEL`s official Website, reviewing all WPP from 1998 to 2012, see Appendix document [A 30] and [B 4]. The Nall was validated using ANNEL`s official Website, reviewing all WPP from 1998 to 2012, see Appendix document [A 30] and [B 4] and determined to be 15. Ndiff is 15. F = 1-Ndiff/Nall = 1-15/16 = 0.0625 Nall – Ndiff = 16-15 = 1 According to the latest “Common Practice” methodological tool Version 03.1 - the proposed project activity is a “common practice” within a sector in the applicable geographical area if the factor F is greater than 0.2 and Nall-Ndiff is greater than 3. Thus it is concluded that similar and operational projects, other than CDM projects that	OK

	Validated situation	Conclusion
	are widely observed and commonly carried out in the defined region were assessed to have essential distinctions between the proposed CPA of the CDM PoA and other similar activities.	

	Validated situation	Conclusion
SECTION 11. Eligibility criteria for inclusion of a CPA in the PoA		
1. Has CME developed the eligibility criteria for inclusion of a CPA under the PoA and has included these criteria in the CDM-PoA-DD (Section I of the PoA-DD) and has demonstrated their usability to assess the inclusion of CPAs in the generic CPA-DD (Section II of the PoA-DD)?	Yes, the PP has applied the eligibility criteria set in the PoA-DD and demonstrated it usability in the generic CPA-DD, as per CDM-EB65-A03-STAN (Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities), see Appendix document [B 5]. See the below table for a validation of each eligibility criteria set out in the PoA-DD part I.	OK
2. Confirm that the eligibility criteria defined by the CME cover as a minimum the below table items and that additional criteria specified by the Validating DOE and/or the EB have also been included, in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for PoA. Assess the eligibility criteria in the table below and determine whether the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.	The validation team confirms that the eligibility criteria defined by the CME covers as a minimum the below table items and that additional criteria specified by the Validating DOE and/or the EB have also been included, in accordance with the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for PoA, see below table for further analysis.	OK
3. Check and assess that for PoAs involving combinations of technologies/measures and/or methodologies, the eligibility criteria relative to each of them have been proposed to demonstrate additionality.	n/a The PoA does not include the combination of technologies/measures or methodologies.	NA

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA	The CPA must be within territorial boundaries of the Federative Republic of Brazil. Additionally, the CPA shall comply with the guidelines for inclusion as defined by the Brazilian DNA.	The PoA is considering any Greenfield WPP connected to the SIN established in the geographical boundary of the host country Brazil, connected to the SIN. The validation team confirms the criteria to be appropriate based on host country	Ok

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
	The criteria shall be validated by providing information such as GPS coordinates, address, environmental license, site visit or any information that can prove that the CPA is developed in Brazil. Additionally, the receipt of the Host Country Approval / LoA shall be sufficient to demonstrate that the PoA fulfils the guidelines as defined by the host country. All CPAs included under the PoA and issued with a 'unique identification number' shall be considered compliant with the guidelines of the host country.	expertise.	
Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);	Data provided to the CME prior to inclusion in the PoA: • Name of the CPA • Installed capacity in MW • Location of the CPA - Address - GPS coordinates • Name of the wind farm developer • Contact information, namely: - Contact person, - Postal address, - Telephone number - Email address Data included in CPA-DD: • Unique Identification Number provided by the CME. The CME shall be responsible for cross checking the data provided by the potential CPA owner/developer with publicly available online databases of wind projects and emission reduction projects in Brazil. Upon satisfactory conclusion of the "uniqueness" of the proposed project, a Unique Identification Number shall be issued by the CME (e.g. QGER-CPA-xxxx) which shall be considered sufficient to	Greenfield WPP connected to the SIN in Brazil is only considered in this PoA as confirmed by the CME during site visit.	Ok

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
	avoid against double counting of emission reductions. The staff will check on the UNFCCC website if the proposed CPA has already requested for registration a CDM project or a CPA inclusion. In case of registration of an already registered CDM component the PP will communicate immediately the UNFCCC and DOE.		
The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;	Only projects that involve generation of electricity using wind turbine generator based technology are eligible for inclusion under the PoA. The electricity generated by the WPPs should be dispatched to the Brazilian National Interconnected Grid (SIN). The WPPs shall employ standard technology and specifications of the manufacturer and/or best practices of the market but the WPP must not over 30MW of installed capacity The wind average speed must be over 2 m/s, and plant load factor between 20% and 85%. The energy price will be defined by free-market or energy auctions. The tower will be at least 40m height and the rotor blade at least 20m of diameter.	Greenfield WPP connected to the SIN in Brazil is only considered in this PoA as confirmed by the CME during site visit. ~~CAR 8~~ -PP shall provide the technology specifications as per Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities Version 3.0, paragraph 16 (c). CLOSED as PP amended the criteria.	OK ~~CAR 8~~
Conditions to check the start date of the CPA through documentary evidence	The start date of each CPA should be the earliest date at which either the implementation or construction or real action of a CPA begins. There should be a documental evidence for this date, such as engineering contract, equipment purchase, or any document that defines the real date. If the actual start date is not available, an indicative start date can be provided. Evidence of the actual start date shall be made available at the time of verification. The start date of any proposed CPA is on or after the start date of the PoA.	This will be confirmed during CPA inclusion and checking evidences such as power purchase agreements. ~~CAR 2~~ – regarding the requirement that CPA start date cannot be before that of the PoA start date. CLOSED as PP amended the PoA start date.	OK ~~CAR 2~~

<table>
<tr><th>Eligibility criteria in the Standard</th><th>Eligibility criteria in the PoA-DD</th><th>Validated situation</th><th>Conclusion</th></tr>
<tr><td>Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;</td><td>Each CPA must be applicable to and needs to apply the UNFCCC approved large scale methodology ACM002 and necessary tools/guidelines/standards as indicated by this methodology.
<table>
<tr><th>Applicability condition (ACM0002)</th><th>Justification</th></tr>
<tr><td>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).</td><td>A CPA will involve the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.</td></tr>
<tr><td>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</td><td>A CPA will involve the installation of a wind power plant (WPP).</td></tr>
</table></td><td>Greenfield WPP connected to the SIN in Brazil is only considered in this PoA as confirmed by the CME during site visit. Capacity additions will not be considered. For a more detailed validation of the applicability conditions, see refer to Section 7of this report.</td><td>OK</td></tr>
</table>

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD		Validated situation	Conclusion
	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			
	Specific applicability conditions for capacity addition, replacements and/or retrofits.	A CPA will not involve capacity addition, replacements or retrofits, the conditions are not applicable.		
	Specific applicability conditions for hydroelectric plants	A CPA will not involve hydroelectric plants, the conditions are 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	A CPA will not involve fuel switch, biomass power plants and/or hydro power plants.		

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
	site; • Biomass fired power plants; • A hydro power plant that results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.		
	Applicability condition (GEF Tool) / **Justification** This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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). — A CPA will provide electricity to a grid. Under this tool, the emission factor for the project electricity — Only grid power plants were considered.		

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD		Validated situation	Conclusion
	system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.			
	In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	A CPA will be located totally in an non-Annex I country.		
	Applicability condition (Additionality Tool)	**Justification**		
	The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.		
	Once the additionally	A CPA will follow		

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
	tool is included in an approved methodology, its application by project participants using this methodology is mandatory. the tool.		
The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as follows: - PoAs that consist of one or more micro scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of the "Guidelines for demonstrating additionality of micro scale project activities". - PoAs that consist of one or more small-scale projects as CPAs shall include eligibility criteria derived from all the relevant requirements of attachment A of Appendix B of the "Simplified modalities and procedures for small-scale CDM project activities". - 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.	Additionality shall be demonstrated at CPA level by means of a financial analysis comparing the scenario of each individual CPA with a benchmark scenario. This comparison should clearly and reliably demonstrate that the CPA scenario is not financially attractive and the CPA would not have been implemented without the incentives of CDM and, in the absence of CDM PoA, none of the implemented CPAs would occur. Every CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario.	This PoA consists of large scale projects only, and has used an eligibility criteria derived from all the relevant requirements contained in the additionality section of the large scale methodologies, ACM0002 Version 16.0. The investment analysis for all future CPA will apply option III "Benchmark" from the Additionality tool, thus each CPA will perform a step by step approach for assessing additionality using the "Tool for the demonstration and assessment of additionality", Version 7.0 ~~CAR 4~~ - Financial assumptions/ inputs shall be described and listed here. CLOSED as PP amended the criteria to include financial input values and sources into the PoA-DD Part II (generic CPA).	Ok ~~CAR 4~~
The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;	Local stakeholder consultation (LSC) under PoA Level is carried out as required by the Brazilian DNA as part of the LoA process. Environmental Impact Assessment (EIA) – as one of the steps of the Environmental Licensing process in Brazil, if applicable – is carried out as required by the Brazilian applicable legislation and according to rules and requirements of the applicable environmental authority.	Resolution no. 9 from the Brazilian DNA set rules for LSC for CDM project activities, see Appendix 3 document [B 7], as follows: *Art. 1 – Project activities that refer to local/regional/national policy or standard under a Programme of Activities can be registered as a single Clean Development Mechanism project activity provided that approved baseline and monitoring methodologies are used that, inter alia, define the appropriate boundary, avoid double counting and account for leakage, and ensure that*	OK ~~CL 4~~

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
		the emission reductions are real, measurable and verifiable and additional to any that would occur in the absence of the project activity. *(…)* *Art. 4 – Aimed at obtaining approval of the Clean Development Mechanism Programme of Activities, the Programme's coordinating entity shall present the Executive Secretariat of the Interministerial Commission on Global Climate Change, on electronic media and in hard copy, copies of the invitations for comments as well as the respective acknowledgments of receipt sent at least to the following addresses:* *I – the Executive Secretariat of the Interministerial Commission on Global Climate Change;* *II - Brazilian NGO Forum and Social Movements for the Environment and Development – http://www.fboms.org.br;* *III - National entities whose purposes are directly or indirectly related to the Programme of Activities;* *IV - Federal Attorney General.* *Single paragraph: The invitations for comments mentioned in the caption to this article shall be sent 15 days in advance of the start of the validation process in order to guarantee that any comments shall be incorporated in the documentation to be submitted to this Commission aimed at obtaining approval of the Programme of Activities by the Designated Operational Entity.* The LSC is performed at the PoA level, as set in the Brazilian legislation, see Appendix 3 document [B 7]. The PP performed the LSC in accordance with the local legislation by posting the project documents online, see Appendix 3 documents [A 27] for public viewing and inviting comments from the list of required stakeholders, see Appendix 3 documents [A 4]. No comments were received. The LSC for this project is deemed satisfactory.	

<table>
<tr><th>Eligibility criteria in the Standard</th><th>Eligibility criteria in the PoA-DD</th><th>Validated situation</th><th>Conclusion</th></tr>
<tr><td></td><td></td><td>The following compares the list of required stakeholders that require to be contacted on the left and the list of stakeholders the PP contacted with evidences in the form of Receipt Acknowledgement on the right see mail Receipt Acknowledgement in Appendix 3 documents [A 4]:
<table>
<tr><td>Brazilian NGO Forum and Social Movements for the Environment and Development</td><td>Fórum Brasileiro de ONGs e Movimentos Sociais - FBOMS</td></tr>
<tr><td>National entities whose purposes are directly or indirectly related to the Programme of Activities</td><td>Eletrobrás

ANEEL</td></tr>
<tr><td>Federal Attorney / Public Ministry</td><td>Ministério Público Federal</td></tr>
<tr><td>the Executive Secretariat of the Interministerial Commission on Global Climate Change</td><td>Brazilian DNA - Secretaria Executiva da Comissão Interministerial de Mudança Global do Clima</td></tr>
</table>
In addition to the stakeholders outlined by the Brazilian DNA, the PP also contacted local stakeholders from the region of the first CPA: state environmental agency (SEMACE) and the state public attorney (MP-CE), see mail Receipt Acknowledgement in Appendix 3 documents [A 4].
It is confirmed through the desk review and during interviews on the site visit that the project participants have taken due account of all comments received and have described this process in the PDD. No comments were received during the LSC.</td><td></td></tr>
</table>

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
		~~CL 4~~ – it is not clear is a LSC is to be performed as a criteria to the CPA inclusions, or that the LSC is being performed at the PoA level. CLOSED as PP amended the PoA-DD to clearly state the LSC is done only at the PoA-level.	
Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance	A sign letter for each CPA declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance will be provided.	CME has confirmed that written confirmation will be taken from individual CPA implementer regarding Annex I parties funding, or if any, does not result in a diversion of official development assistance will be provided.	OK
Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);	There is no specific target group for the energy consumption, since the power plants will be grid-connected to the national system (SIN). The energy can be sold to buyers in free-marked base or energy auctions.	Greenfield WPP grid-connected to the SIN in Brazil is only considered in this PoA as confirmed by the CME during site visit. Capacity additions will not be considered.	OK
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	Not applicable. Data will be 100% monitored.	It will be confirmed before including CPAs in this PoA.	OK
Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or micro scale threshold criteria and remains within those thresholds throughout the crediting period of the CPA	Not applicable. A large scale methodology is being applied.	It will be confirmed before including CPAs in this PoA.	OK
Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or micro scale project categories	Not applicable. A large scale methodology is being applied.	It will be confirmed before including CPAs in this PoA.	OK
All new CPAs must provide an application letter in the name of the wind project developer including the following information:	• Formal application for inclusion of CPA in the PoA. • Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant	It will be confirmed before including CPAs in this PoA. ~~CL 5~~ – Unclear what criteria the list presented are part of. CLOSED as PP amended the PoA-DD by adding a new criteria (m).	Ok ~~CL 5~~

Eligibility criteria in the Standard	Eligibility criteria in the PoA-DD	Validated situation	Conclusion
	authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date. • Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.		

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	Validated situation	Conclusion
SECTION 12. Monitoring plan		
1. *If the monitoring plan has been included in the PDD/PoA-DD/CPA-DD* *If the PP/CME has chosen to delay the submission of monitoring plan in the PDD/PoA-DD/CPA-DD, below section in the monitoring plan is not applicable*.	Included ☒ Delayed ☐	OK

2. *Compliance of the monitoring plan with the approved methodology and the applicable tools.* Confirm that the MP contains all the necessary parameters and that they are monitored in accordance to the approve Methodology and the applicable tools using the following table:

Parameter	Monitoring Methodology/Tools description	PDD/PoA-DD description	Validated situation	Conclusion
$EG_{facility,y}$	**Data / Parameter:** EGfacility,y **Data unit:** MWh/yr **Description:** Quantity of net electricity generation supplied by the project plant/unit to the grid in year	**Data / Parameter:** $EG_{facility,y}$ **Data unit:** MWh/yr **Description:** Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y*	Data units and description are described correctly. Measured continuously and recorded at each hour, is in accordance with the requirements under ACM0002 Version 16.0. or as established by the electricity sector requirements in Brazil. □ Cross check measurement results with records for sold electricity will be performed. Meter(s) calibrated and/or maintained according to the Normative from the National System Operator	OK

	y **Source of data:** Electricity meter(s) **Measurement procedures (if any):** This parameter should be either monitored using bi-directional energy meter or calculated as difference between (a) the quantity of electricity supplied by the project plant/unit to the grid; and (b) the quantity of electricity the project plant/unit from the grid. In case it is calculated then the following parameters shall be measured: (a) The quantity of electricity supplied by the project plant/unit to the grid; and (b) The quantity of electricity delivered to the project plant/unit from the grid **Monitoring frequency:** Continuous measurement and at least monthly recording **QA/QC procedures:** Cross check measurement results with records for sold electricity **Any comment:**	**Source of data**: Electricity meter(s) **Value(s) applied:** **Measurement methods and procedures:** The monitoring involves both the quantity of electricity supplied by the project plant/unit to the grid and the quantity of electricity delivered to the project plant/unit from the grid. **Monitoring frequency:** Continuous measurement and monthly recording. **QA/QC procedures:** Cross check measurement results with records for sold electricity. Meter(s) calibrated and/or maintained according to the Normative from the National System Operator (ONS). Purpose of data Calculation of baseline emissions **Additional comment:** -	(ONS).	
$EF_{grid,CM,y}$	**Data / Parameter:** EFgrid,CM,y **Data unit:** t CO2/MWh **Description:** Combined margin CO2 emission factor for grid connected power generation in year y	**Data / Parameter:** $EF_{grid,CM,y}$ **Data unit:** tCO_2/MWh **Description:** Combined margin CO_2 emission factor for grid connected power generation in year *y*	Data units and description are described correctly. Calculated based on $EF_{grid,OM\ DD,y}$ and $EF_{grid,BM,y}$ as per the “Tool to calculate the emission factor for an electricity system”. Data for $EF_{grid,OM\ DD,y}$ and $EF_{grid,BM,y}$ is provided from the Brazilian DNA on monthly values, see Appendix document [B 1].	Ok

	calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" Source of data: As per the "Tool to calculate the emission factor for an electricity system" **Measurement procedures (if any):** As per the "Tool to calculate the emission factor for an electricity system" **Monitoring frequency:** As per the "Tool to calculate the emission factor for an electricity system" **QA/QC procedures:** As per the "Tool to calculate the emission factor for an electricity system" **Any comment: -**	calculated using the "Tool to calculate the emission factor for an electricity system" **Source of data:** Brazilian DNA **Value(s) applied:** **Measurement methods and procedures:** The monitoring consists on checking the Brazilian DNA website for $EF_{grid, BM,y}$ and $EF_{grid, OM,y}$ most recent data available. Monitoring frequency: Each verification event the website will be checked and the most updated data available will be used. **QA/QC procedures:** Monthly values will be used whenever possible for verifications, since it will reflect the most reliable data. The Brazilian DNA is responsible for the calculations of $EF_{grid, BM,y}$ and $EF_{grid, OM,y}$, done as described in section B.6.1. **Purpose of data:** Calculation of baseline emissions **Additional comment:** Ex-ante value calculated as described in section B.6.3.	$\mathbf{EF_{grid,CM,y}}$ is in conformance with the monitoring plan set out in ACM0002 Version 16.0 and "Tool to calculate the emission factor for an electricity system".	
		.		
3. *Implementation of the plan:* confirm that the monitoring arrangements described in the monitoring plan are feasible within the project design/CPA.		It is confirmed through desk review of PP documentation, see Appendix 3, and interviews during the site visit that, the monitoring arrangements described in the monitoring plan are feasible within the CPAs.		OK

Described the steps undertaken to assess this.	The metering procedures and QA/QC described in the PoA-DD part II, and the specific CPA-DD, are in accordance with the applied methodology ACM0002 Version 16.0, and in accordance with Brazilian metering and calibrating standards, see Appendix 3 documents [B 6, B 17, B 21]	
4. *Implementation of the Plan:* confirm that the means of implementation of the MP, including the data management and quality assurance and quality control procedures, are sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity/programme can be reported ex post and verified	The management plan, quality control/ quality assurance procedures planned were confirmed to allow determination of emission reductions resulting from the implementation of the CPAs and can be verified, see Appendix documents [A 3]. It was confirmed that data and parameters to be monitored and the description of the monitoring plan in the proposed specific CPA correspond to the requirements in the Generic CPA in PoA-DD part II. No sampling is being proposed, all parameters are monitored continuously. Each parameter required by the monitoring plan will be documented in a quality control program, including internal audits every 6 months, which will monitor the conditions and procedures that ensure consistency of all/data procedures. Calibration and maintenance of equipment: All equipment used for monitoring purposes will be calibrated and maintained according to the manufacture's specifications and Module 12 of the ONS by the Metering Operator, at least every 2 years, see Appendix document [B 6]. $\mathbf{EG_{facility,y}}$ – The net electricity supplied to the grid will be continuously measured in the wind power plant by the Metering Operator through electricity meters with 0.2% of accuracy. Since the value from the invoice will be used for emission reduction calculation, it will also be cross checked with the gross energy generation metered internally to account eventually loses. Only energy generated by the wind power plants included in this project activity will be considered for ER calculations. $EF_{grid,\ CM,y}$ – The grid emission factor will be provided by the Brazilian DNA, which is made public available each year, and calculated by the latest Version of the *Tool to calculate the emission factor for an electricity system,* see Appendix document [B 1]. The roles and responsibilities were checked during the on-site visit and during document review, see Appendix document [A 3] and interviews (see Section 3.2 of this report) and were confirmed as the following: Operation and Management Structure- Project Developer's Management: Represents de board of the company responsible for manage the wind power plant, in charge of the company's management and responsible for the CDM project development. Engineering Sector: Is responsible to centralize all monitoring information provided by the Metering Operator. All data collected as part of the monitoring should be archived	Ok ~~CL 1~~ ~~CAR 1~~

electronically and be kept at least for two years after the end of the last crediting period

Metering Operator: Represents the agent responsible to conduct the entire invoice metering, and the maintenance and calibration of the energy metering equipment.

Internal Data Collection Procedures-
Each parameter required by the monitoring plan will be documented in a quality control program, including internal audits every 6 months, which shall monitor the conditions and procedures that ensure consistency of all/data procedures, especially the following:

Calibration and maintenance of equipment: All equipment used for monitoring purposes will be calibrated and maintained according to the manufacture's specifications and Module 12 of the ONS by the Metering Operator, at least every 2 years.

$EG_{facility,y}$ – The net electricity supplied to the grid will be continuously measured in the wind power plant by the Metering Operator through electricity meters with 0.2% of accuracy. This is within Brazilian energy sector regulations, see Appendix 3 document [B 6].

Since the value from the invoice will be used for emission reduction calculation, it will also be cross checked with the gross energy generation metered internally to account eventually loses. Only energy generated by the wind power plants included in this project activity will be considered for ER calculations.

$EF_{grid,\ CM,y}$ – The grid emission factor will be provided by the Brazilian DNA, which usually is made public available each year, and calculated by the latest Version of the *Tool to calculate the emission factor for an electricity system*.

Roles and responsibilities for the PoA were checked during the onsite visit through interviews with the WAYCARBON Project Manager. His qualifications and competences were evaluated and confirmed to be adequate for the below responsibilities.

Requirement	Responsible	Action plan/ procedure
Emission reduction calculation	WAYCARBON Project Manager	The calculations of CO_2 emissions will be based solely on net value production. The calculations of avoided GHG emissions will be carried out on a periodic basis by WAYCARBON, applying the methodologies and calculations detailed in the CPA-DD.

Review of CPA inclusion	WAYCARBON Project Manager	The WAYCARBON staff will be responsible to check the features of potential CPAs to ensure that each CPA meets all requirements and eligibility criteria before inclusion in the registered PoA. The staff has acknowledged experience in registered CDM projects.
Training and capacity development for personnel	WAYCARBON Project Manager	WAYCARBON will be responsible for training the CPA operational staff, so as to execute the CER monitoring according to the monitoring plan and best practices.
Technical review of CPA	WAYCARBON Project Manager	WAYCARBON staff will be responsible for cross checking the information from the project developer, collecting the necessary documentation to the CPA validation, such as equipment details, proposals/ contracts, etc.
Double counting	WAYCARBON Project Manager	The WAYCARBON staff will check on the UNFCCC website if the proposed CPA has already requested for registration a CDM project or a CPA inclusion. In case of registration of an already registered CDM component the PP will communicate immediately the UNFCCC and DOE.
Records and documentation control	WAYCARBON Project Manager	The WAYCARBON´s server will contain all documentation related to each CPA and backed up annually. A copy of the documents may also be kept online or at the CPA system.
Measures for continuous improvements of the PoA management system	WAYCARBON Project Manager	The WAYCARBON staff will be responsible for checking the UNFCCC procedures and apply the QA/QC processes to improve the PoA management system.

~~CL 1~~ – the specific CPA-DD section D.7.2. Description of the monitoring plan, does not state who exactly will be performing the ER calculations, stating only “by the person in charge”. CLOSED as PP provided a detailed roles and responsibility table in the PoA-

	DD. ~~CAR 1~~ – regarding the lack of information in the management system of the PoA. CLOSED ass PP provided a more detail description of the management system of the PoA in its training and management manual, see Appendix 3 documents [A 3].	

	Validated situation	Conclusion
SECTION 13. Environmental Impacts		
1. Indicate whether the analysis of environmental impacts is performed at the PoA and/or the CPA level. Is justification provided for the choice of level at which the analysis is undertaken?	The Environmental Impact Assessment is a requirement from the Environmental Licensing Process in Brazil. Therefore it will be performed at CPA level, see Appendix 3 document [B 7].	Ok
2. Is an EIA required by the environmental legislation of the host country? Describe the legislation applicable.	The Environmental Impact Assessment is a requirement from the Environmental Licensing Process in Brazil. Therefore it will be performed at CPA level when required. The Preliminary License (LP) is the first phase of the environmental licensing process and should be applied for with the IBAMA (or any environmental oversight authority) during the implementation, improvement and expansion stages. The main purpose of the Preliminary License is to authorize the location and design of the project, attest to its environmental viability and set forth the basic requirements and standards to be met in the following phases of the licensing process, taking into account the different project alternatives and proposals submitted by applicants. During the Preliminary License phase, the proposal for the Term of Reference (ToR) should be forwarded to the licensing body for preparation of environmental studies. Once the ToR is completed and approved, the applicant should then prepare the Environmental Impact Study (EIA) and the Environmental Impact Report (RIMA) is required. Following submission of the EIA/RIMA to the environmental body, with the corresponding authorization for the enterprise and holding of a public hearing, the applicant may obtain a Preliminary License. For enterprises and activities without significant environmental impact, the environmental body may cancel the Previous License phase, and require instead a Simplified Environmental Study and an Environmental Control Plan (Article 38 of Normative Instruction No. 184 of July 17, 2008), see Appendix [B 10].	Ok
3. Confirm whether the project participants have undertaken an analysis of environmental impacts and, if required by the host Party, an environmental impact assessment. For PoA, if it was done at CPA level, confirm if it meets the requirements specified in the PoA.	The specific CPA-DD performed the EIA, see Appendix documents [A 6]. While the CPA was in the construction phase the environmental authority (SEMACE) granted the project owner the Environmental Installation License and later on the Environmental Operational License #168/2014 – DICOP –GECON (dated 28/08/2014), see Appendix document [A 7].	Ok

	Validated situation	Conclusion
4. Confirm that environmental impacts considered significant by the PPs or the Host country are described in the PDD, including mitigation measures.	It was concluded that no significant environmental impacts are likely to occur due to the project activity, see the EIA Report in the Appendix document [A 6]. Minor impacts that are likely to occur have been described in detail in the specific CPA-DD Section B.1 and B.2.	Ok

	Validated situation	Conclusion
SECTION 14. Local stakeholder consultation		
1. For PoA, indicate if the local stakeholder consultation process was carried out for the whole PoA or at the CPA level.	The PoA-DD describes that local stakeholder consultation will be carried out at PoA level. ~~CL 4~~ - The LSC was chosen to be performed at the PoA level and evidences provided. However, the CPA Section D.5 page 21, states that in addition to the PoA level LSC "The Local stakeholder consultation (LSC), as required by the Brazilian DNA, was performed at PoA level. However, in addition to this LSC, the local communities and associations, as well as local government were consulted and a summary of the CPA was made available/sent by mail. No comments were received so far. PP is requested to provide the evidences for this additional LSC. CLOSED as PP provided all necessary evidence of the LSC, see Appendix 3 documents [A 4].	Ok ~~CL 4~~
2. Determine whether comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity/programme/CPA, have been invited. If local stakeholder consultation process is conducted at CPA level, confirm that the process is in accordance with the level of consultation specified by the coordinating/managing entity in the PoA.	Not applicable	NA
3. Confirm that the summary of the comments received as provided in the PDD/PoA-DD/CPA-DD is complete.	No comments were received from the LSC discussed above.	Ok
4. Confirm that the project participants have taken due account of any comments received and have described this process in the PDD/PoA-DD/CPA-DD.	No comments were received from the LSC discussed above.	Ok

	Validated situation	Conclusion
5. Is local legislation in the host country requires stakeholder consultation? Describe the legislation applicable.	As per Brazilian rules, the LSC is defined by the Brazilian DNA. For PoAs, the DNA issued specific rules as stated in the Resolution no. dated 20/03/2009, as follows, see Appendix document [B 7]: *Art. 1 – Project activities that refer to local/regional/national policy or standard under a Programme of Activities can be registered as a single Clean Development Mechanism project activity provided that approved baseline and monitoring methodologies are used that, inter alia, define the appropriate boundary, avoid double counting and account for leakage, and ensure that the emission reductions are real, measurable and verifiable and additional to any that would occur in the absence of the project activity.* *(…)* *Art. 4 – Aimed at obtaining approval of the Clean Development Mechanism Programme of Activities, the Programme's coordinating entity shall present the Executive Secretariat of the Interministerial Commission on Global Climate Change, on electronic media and in hard copy, copies of the invitations for comments as well as the respective acknowledgments of receipt sent at least to the following addresses:* *I – the Executive Secretariat of the Interministerial Commission on Global Climate Change;* *II - Brazilian NGO Forum and Social Movements for the Environment and Development – http://www.fboms.org.br;* *III - National entities whose purposes are directly or indirectly related to the Programme of Activities;* *IV - Federal Attorney General.* *Single paragraph: The invitations for comments mentioned in the caption to this article shall be sent 15 days in advance of the start of the validation process in order to guarantee that any comments shall be incorporated in the documentation to be submitted to this Commission aimed at obtaining approval of the Programme of Activities by the Designated Operational Entity.* The LSC for the project activity is in line with the Brazilian DNA rules as stated above. The PoA-DD and CPA were made public available in English and Portuguese. The link to the project documentation has been online at www.ambiopar.com/projetos/qger.zip (later replaced by **http://bit.ly/2ajQ3r6**) with the most recent Version of the project documentation. The invitation letters were sent on 02/10/2013 and the receipt provided to the DOE, see Appendix documents [A 4, A 10] and mail package consisting of documents in Appendix documents [A 27]. Local stakeholders were invited to raise their concerns and provide comments on the project activity for a period of 30 days after receiving the letter of invitation. AR receipts	OK

	Validated situation	Conclusion
	for Letter of Invitation for the Public Consultation for the CDM Program of Activities QGER Energia Eólica Program, sent by the CDM consultancy to:	

Stakeholder	Institution	Date of Receiving letters
Brazilian Forum of NGOs	Fórum Brasileiro de ONGs e Movimentos Sociais - FBOMS	07/10/2013
Governmental agencies	Eletrobrás	04/10/2013
	ANEEL	07/10/2013
	IBAMA	07/10/2013
	SEMACE – Superintendência Estadual de Meio Ambiente	04/10/2013
	Ministério Público do Ceara	04/10/2013
Federal Attorney / Public Ministry	Ministério Público Federal	11/10/2013
Brazilian DNA	Secretaria Executiva da Comissão Interministerial de Mudança Global do Clima	07/10/2013

NOTE: According to Version 09.0 of the CDM Project Standard, paragraph 78, "Project participants or the coordinating/managing entity shall complete the local stakeholder consultation process before the start date of the project activity, PoA or CPA, as defined in the 'Glossary of CDM terms' and submitting the PDD or PoA-DD of the proposed CDM project activity or PoA to a DOE for validation". However, in consideration to the communication submitted by EKI Energy Services Limited in 9 June 2015 (INQ-03214) and as reflected in the CDM Executive Board 85th Meeting Report, the Board agreed to reconsider that rule and to allow project participants and coordinating/managing entities to request an exemption until the next revision of the Project Standard.

As both the PoA-DD and the CPA-DD, which had been developed according to version 07.0 of the Project Standard, were already under validation when the aforementioned rule entered into force, the local stakeholder consultation process was carried out before the PoA-DD was published for global stakeholder consultation (PS version 07.0) and not before the PoA start date (PS version 09.0),

Based in the CDM Executive Board 85th Meeting Report decision, PP sent a communication to the CDM-EB requesting for an exemption of the rule on timing of Local Stakeholders Consultation. The communication was considered by the CDM-EB and an exemption from the requirement in paragraph 78 of the PS version 09.0 (INQ-

	Validated situation	Conclusion
	04325, dated 20/01/2016 – [B 36]) was granted, therefore allowing LRQA to confirm that the proposed project activity complies with paragraph 77 of PS version 07.0 as its LSC process was carried out before submitting the proposed CDM project activity to LRQA for validation.	
6. Has any complaints received by the DNA from the local stakeholders	No complaints received by the DNA from the local stakeholders	OK

	Validated situation	Conclusion
SECTION 15. Eligibility of the Specific CPA		
1. Assess how each generic CPA meets the eligibility criteria of the PoA including confirmation of additionality of the CPA for its inclusion into the PoA. Check the demonstration of eligibility for a Generic CPA in the PoA-DD section II and how it is applied to the specific CPA. Use the table below for each Eligibility criteria in the PoA-DD listed in section 9 above. Add further tables as necessary.	The eligibility criteria listed in the PoA-DD have been applied specifically for the proposed CPAs in the generic CPA and an example on how they will be assessed for each CPA is provided in the specific CPA. Below is the result of the validation of the application of each one for the specific CPA for its inclusion in the proposed PoA. See below assessment.	OK

Ref. number	1
Eligibility Criteria in the PoA-DD	(a) The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA. The CPA must be within territorial boundaries of the Federative Republic of Brazil. Additionally, the CPA shall comply with the guidelines for inclusion as defined by the Brazilian DNA. The criteria shall be validated by providing information such as GPS coordinates, address, environmental license, site visit or any information that can prove that the CPA is developed in Brazil. Additionally, the receipt of the Host Country Approval / LoA shall be sufficient to demonstrate that the PoA fulfils the guidelines as defined by the host country. All CPAs included under the PoA and issued with a 'unique identification number' shall be considered compliant with the guidelines of the host country.
Information on how it is met in the Generic CPA	CPA must be inside the Brazilian territory.
Information on how it is met in the Specific CPA	As described in section A7 from this CPA, the project is located in the state of Ceará, Brazil. This is consistent with the boundary of the PoA, defined as the entire territory of Brazil.
Validated situation	The geographical coordinates provided in the CPA-DD falls under the political boundary of the host country Brazil, while the geographic coordinates in the specific CPA-DD were validated during the site

visit.

Coordinates of the Wind Turbine Generators

Turbine	Longitude	Latitude
IG-01	3°04'06,6"S	39°42'03,2"W
IG-02	3°04'19,9"S	39°42'04,6"W
IG-03	3°04'32,0"S	39°42'04,5"W
IG-04	3°04'09,6"S	39°41'36,1"W
IG-05	3°04'20,0"S	39°41'39,6"W
IG-06	3°04'33,1"S	39°41'43,6"W
IG-07	3°04'14,2"S	39°41'13,7"W
IG-08	3°04'28,1"S	39°41'19,8"W
IG-09	3°04'28,1"S	39°40'57,7"W
IG-10	3°04'25,3"S	39°40'59,9"W
IG-11	3°04'34,4"S	39°41'02,8"W

Conclusion	OK

Ref. number	2
Eligibility Criteria in the PoA-DD	(a) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo). Data provided to the CME prior to inclusion in the PoA: • Name of the CPA • Installed capacity in MW • Location of the CPA - Address - GPS coordinates • Name of the wind farm developer • Contact information, namely: - Contact person, - Postal address, - Telephone number - Email address Data included in CPA-DD: • Unique Identification Number provided by the CME. The CME shall be responsible for cross checking the data provided by the potential CPA owner/developer with publicly available online databases of wind projects and emission reduction projects in Brazil. Upon satisfactory conclusion of the “uniqueness” of the proposed project, a Unique

	Identification Number shall be issued by the CME (e.g. QGER-CPA-xxxx) which shall be considered sufficient to avoid against double counting of emission reductions. The staff will check on the UNFCCC website if the proposed CPA has already requested for registration a CDM project or a CPA inclusion. In case of registration of an already registered CDM component the PP will communicate immediately the UNFCCC and DOE.
Information on how it is met in the Generic CPA	CPA must provide necessary identification and all information to state its unique nature. The search for similar projects should be detailed to prevent double-counting of emission reductions.
Information on how it is met in the Specific CPA	The unique nature of this CPA can be proven by the geographic coordinates as stated in section A7. This WPP is completely unique, being managed by an independent company specifically created for this purpose. The WPP included in this CPA does not participate in any other GHG program.
Validated situation	The uniqueness number given to the specific CPA-DD is stated in Section A.2 of the DD as Unique identification: QGER CPA 0001, titled Ilha Grande Wind Farm project. Further, the geographic coordinates are unique to the specific CPA, as stated in Section A.7 of the specific CPA-DD. Coordinates were checked against GL Garrad Hassan study and confirmed during site visit (by means of a GPS) and found in accordance with the ones mentioned in the Specific CPA-DD Version 10 section A.7, see GL Garrad Hassan study Appendix document [A 13]. Data listed above are included throughout the CPA-DD document and validated throughout this report. ~~CAR 5~~ – identification format of CPA in CPA-DD is QGER CPA 0001 while the identification format as stipulated in the PoA-DD is ÉOLOS-CPA-xxxx. CLOSED as PP corrected the CPA-DD to "QGER-CPA-xxxx".
Conclusion	Ok

Ref. number	3
Eligibility Criteria in the PoA-DD	(a) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications. Only projects that involve generation of electricity using wind turbine generator based technology are eligible for inclusion under the PoA. The electricity generated by the WPPs should be dispatched to the Brazilian National Interconnected Grid (SIN). The WPPs shall employ standard technology and specifications of the manufacturer and/or best practices of the market but the WPP must not over 30MW of installed capacity The wind average speed must be over 2 m/s, and plant load factor between 20% and 85%. The energy price will be defined by free-market or energy auctions. The tower will be at least 40m height and the rotor blade at least 20m of diameter.
Information on how it is met in the Generic CPA	CPA must be an installation of a Wind Power Plant (WPP) connected to the grid and following manufacturer specifications and/or best practices.
Information on how it is met in the Specific CPA	This CPA consists of generation of electricity using wind turbine generator based technology. The electricity generated by the WPP is expected to be dispatched to the Brazilian National Interconnected Grid (SIN). The WPP employs standard technology and specifications of the manufacturer and/or best

	practices of the market. More information regarding technology employed can be found in section A5 of this CPA.
Validated situation	During site visit it was confirmed the capacity of generators as 2.7 MW each (Alstom ECO 122) and thus the total installed capacity of the "Ilha Grande Wind Farm project" will be equal to 29.7 MW with a maximum generation capacity of 260,712 MWh/y, validated through the wind study and official ANEEL documentation, see Appendix 3 documents [A 13] and [B 18]. From The Guidelines for the Reporting and Validation of Plant Load Factors (Version 01), the PP choose to define the plant load factor ex-ante in the CDM-PDD according option (b) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company), using the third party engineering company GL Garrad Hassan. The validation team deems the information provided by GL Garrad Hassan veracious. The GL Garrad Hassan Wind evaluation study mentions a 40.6% PLF (Plant Load Factor) and an average net generation of 105.8 GWh/y. The Specific CPA-DD Version 10 mentions a net generation of 105,800 MWh/y and a 40.6% PLF but to be more precise (as the GL Garrad Hassan Wind study more than likely rounded down its figures) it is advisable to mention a PLF of 40.67% which is the correct figure to reach the 105,800 MWh/y net generation (40.67% * 260,712 MWh/y). ~~CAR 9~~ – PP is requested to state the PLF in more than one decimal point to be more accurate, since it can affect the outcome of the electricity generation. CLOSED, as PP corrected the PLF value. ~~CAR 9~~ – PoA-PDD and/or Specific CPA-DD shall be revised to clearly indicate/describe further details of the project design. CLOSED as PP amended the CPA-DD with a more detailed description of the project design under Section D.7.2. and will be required under all future CPAs under the PoA as described under PoA-DD B.7.2.
Conclusion	Ok

Ref. number	4
Eligibility Criteria in the PoA-DD	(b) Conditions to check the start date of the CPA through documentary evidence. The start date of each CPA should be the earliest date at which either the implementation or construction or real action of a CPA begins. There should be a documental evidence for this date, such as engineering contract, equipment purchase, or any document that defines the real date. If the actual start date is not available, an indicative start date can be provided. Evidence of the actual start date shall be made available at the time of verification. The start date of any proposed CPA is on or after the start date of the PoA.
Information on how it is met in the Generic CPA	CPA start date cannot be before that of the PoA start date.
Information on how it is met in the Specific CPA	The start date of the CPA is 06/09/2012. This date was chosen in accordance with the CDM Glossary of Terms, where is stated that the start date should be "the earliest date at which either the implementation or construction or real action (…) begins". The date chosen refers to the signature of the main equipment purchase contract involved in the CPA. It was considered the point of no return and the earliest date which the implementation of the project started. The CPA starting date is after the PoA starting date. To demonstrate that project start date is in line with UNFCCC requirements, a CPA implementation

timeline is presented below:

Date	Event	Comments
28/01/2008	Land lease	Contract between project developer and land owner signed, where the project developer rents the land
13/05/2009	First communication to UNFCCC	No comments.
October 2011	Environmental Impact Assessment	EIA report developed by Geoconsult (third party company)
21/10/2011	Second communication to UNFCCC	PoA Starting Date
20/12/2011	Aneel Authoritative Resolution #3267	Aneel authorizes the company to be created and explore wind power in this project
06/09/2012	WTGs Purchase	Contract between Alstom and Project Developer - Starting date of the CPA
20/12/2012	Environmental Installation Licence	Issuance of the installation license, allowing the plant to be installed.
22/01/2013	Civil work contracted	Turn Key Lump Sum (EPC Contracts). Contracted individually for each WPP
31/01/2013	Wind Study	Wind Study developed by Garrard Hassan
08/02/2013	Electrical work contracted	Turn Key Contract. All three WPPs in one contract
20/08/2013	Third communication to UNFCCC	E-mail submitted on this date to UNFCCC and to the Brazilian DNA. UNFCCC answered there was no need.
28/11/2013	Estimated commissioning date	Date defined in the ANEEL resolution #3267 as expected date for test operation of the first WTG of the plant
14/12/2013	Global Stakeholder Consultation processes	PoA-DD publication (date for GSC) on UNFCCC Website
20/08/2014	Expected operation date	Date defined in the ANEEL dispatch with the expected date for commercial operation of the plant

Validated situation

During site visit it was verified that all basic infrastructure (service roads, cabling) and tower platforms/foundations are implemented. Construction/implementation of the project Wind Turbine Generators (WTGs) did not start yet but all equipment (towers, nacelles, hub & rotor, gear boxes/generators, site transformers and blades) was delivered to the project site and it is properly stored/packed.

Timeline dates were validated using the reference list in the table below.

Date	Event	Comments	Validated by Referencing
28/01/2008	Land lease	Contract between project developer and land owner signed, where the project developer rents the land	[A 25]
13/05/2009	First communication to UNFCCC	No comments.	[A 11]
October 2011	Environmental Impact Assessment	EIA report developed by Geoconsult (third party company)	[A 6]
21/10/2011	Second communication to UNFCCC	PoA Starting Date	[A 11]
20/12/2011	Aneel Authoritative Resolution #3267	Aneel authorizes the company to be created and explore wind power in this project	[A 18]
06/09/2012	WTGs Purchase	Contract between Alstom and Project Developer - Starting date of the CPA	[A 5]
20/12/2012	Environmental Installation Licence	Issuance of the installation license, allowing the plant to be installed.	[A 7]
22/01/2013	Civil work contracted	Turn Key Lump Sum (EPC Contracts). Contracted individually for each WPP	[A 15]
31/01/2013	Wind Study	Wind Study developed by Garrard Hassan	[A 13]
08/02/2013	Electrical work contracted	Turn Key Contract. All three WPPs in one contract	[A 16]
20/08/2013	Third communication to UNFCCC	E-mail submitted on this date to UNFCCC and to the Brazilian DNA. UNFCCC answered there was no need.	[A 11]
28/11/2013	Estimated commissioning date	Date defined in the ANEEL resolution #3267 as expected date for test operation of the first WTG of the plant	[A 18]
14/12/2013	Global Stakeholder Consultation processes	PoA-DD publication (date for GSC) on UNFCCC Website	[A 32]
20/08/2014	Expected operation date	Date defined in the ANEEL dispatch with the expected date for commercial operation of the plant	[B 17]

~~CAR 2~~ – regarding the confusing placement of timeline table at the end of Section D.5 in the CPA.

	CLOSED as the PP moved the timeline table to evidence to under eligibility criteria (d) which outlines the start date conditions. ~~CAR 2~~ – regarding the start date of the CPA being before that of the PoA, which is not in accordance with the PS paragraph 213 and 216. CLOSED as PP changed the PoA start date from the date of GSC 14/12/2013 to the date of prior consideration of the project activity (being option (a) in paragraph 213 of the Project Standard, "(a) The date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA").
Conclusion	Ok

Ref. number	5
Eligibility Criteria in the PoA-DD	(a) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs. Each CPA must be applicable to and needs to apply the UNFCCC approved large scale methodology ACM002 and necessary tools/guidelines/standards as indicated by this methodology.

Applicability condition (ACM0002)	Justification
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).	A CPA will involve the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.
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	A CPA will involve the installation of a wind power plant (WPP).
Specific applicability conditions for capacity addition, replacements and/or retrofits.	A CPA will not involve capacity addition, replacements or retrofits, the conditions are not applicable.
Specific applicability conditions for hydroelectric plants	A CPA will not involve hydroelectric plants, the conditions are not applicable.
The methodology is not applicable to the following: • Project activities that involve switching from fossil	A CPA will not involve fuel switch, biomass power plants and/or hydro

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 results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.	power plants.

Applicability condition (GEF Tool)	Justification
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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).	A CPA will provide electricity to a grid.
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered.
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	A CPA will be located totally in an non-Annex I country.

Applicability condition (Additionality Tool)	Justification
The use of the “Tool for the demonstration and assessment of additionality” is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.
Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	A CPA will follow the tool.

Information on how it is met in the Generic CPA	As can be seen in section B.2, all applicability conditions are met.

From Section B.2.:

According to the PoA-DD item B.2, in order to be eligible to the PoA, each CPA must ensure compliance with applicability and other requirements of the methodologies and tools applied. Therefore, the applicability conditions are as follows.

Applicability condition (ACM0002)	Justification
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).	This CPA involves the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.
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	This CPA involves the installation of a wind power plant (WPP).
Specific applicability conditions for capacity addition, replacements and/or retrofits.	Since this CPA does not involve capacity addition, replacements or retrofits, the conditions are not applicable.
Specific applicability conditions for hydroelectric plants	Since this CPA does not involve hydroelectric plants, the conditions are 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 results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.	This CPA does not involve fuel switch, biomass power plants and/or hydro power plants.

Applicability condition (GEF Tool)	Justification

This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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).	This CPA provides electricity to a grid.
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered.
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	The CPA is located totally in an non-Annex I country.

Applicability condition (Additionality Tool)	**Justification**
The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.
Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	The CPA is following the tool.

Information on how it is met in the Specific CPA

As can be seen in section D.2, all applicability conditions are met.
From Section D.2.:
According to the PoA-DD item B.2, in order to be eligible to the PoA, each CPA must ensure compliance with applicability and other requirements of the methodologies and tools applied. Therefore, the applicability conditions are as follows.

Applicability condition (ACM0002)	**Justification**
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)	This CPA involves the installation of a new power plant at a site where no renewable power plant was operated prior to the implementation of the CPA (Greenfield plant) – option a.

involve a replacement of (an) existing plant(s).	
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	This CPA involves the installation of a wind power plant (WPP).
Specific applicability conditions for capacity addition, replacements and/or retrofits.	Since this CPA does not involve capacity addition, replacements or retrofits, the conditions are not applicable.
Specific applicability conditions for hydroelectric plants	Since this CPA does not involve hydroelectric plants, the conditions are 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 results in the creation of a new single reservoir or in the increase in an existing single reservoir where the power density of the power plant is less than 4 W/m2.	This CPA does not involve fuel switch, biomass power plants and/or hydro power plants.

Applicability condition (GEF Tool)	**Justification**
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is 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).	This CPA provides electricity to a grid.
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	Only grid power plants were considered.

In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	The CPA is located totally in an non-Annex I country.

Applicability condition (Additionality Tool)	Justification
The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	No new methodology is being submitted.
Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	The CPA is following the tool.

Validated situation	Section D.2 Application of methodology of the specific CPA demonstrates its applicability to the applied methodologies ACM0002 and CDM tools. In Section D.1, it states that the CPA must fulfil the approved consolidated methodology ACM0002. Section D.5 (f) demonstrates additionality using the "Tool for the demonstration and assessment of additionality", as required in ACM0002. See Ref. number 6 below for a further analysis of the demonstration of additionality. It is confirmed that the PoA-DD (part I) correctly outlines the applicability conditions for ACM0002 Version 16.0, the GEF tool and the additionality tool correctly. It is also confirmed that both the generic CPA (PoA-DD part II) and the specific CPA both need the applicability conditions set out in the PoA-DD part I. The specific CPA meets the eligibility criteria for Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs. For a detailed validation analysis of the applicability conditions of the PoA-DD and CPA-DD, please refer to Section 7 of this validation protocol. ~~CAR 8~~ – CPA-DD Section D.5 (e) incorrectly refers to Section B.2 rather than D.2. CLOSED as PP corrected the typo.
Conclusion	Ok

Ref. number	6
Eligibility Criteria in the PoA-DD	(c) The conditions that ensure that the CPA meets the requirements pertaining to the demonstration of additionality. Additionality shall be demonstrated at CPA level by means of a financial analysis comparing the scenario of each individual CPA with a benchmark scenario. This comparison should clearly and reliably demonstrate that the CPA scenario is not financially attractive and the CPA would not have been implemented without the incentives of CDM and, in the absence of CDM PoA, none of the implemented CPAs would occur. Every CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario.
Information on how it is met in the Generic CPA	CPA applies the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario. The Option III – Benchmark analysis under the Step 2 – financial analysis is selected. The Benchmark is the SELIC rate simple average of the last 3 years, obtained from Brazilian central bank website, prior to the CPA starting date plus 2.10% as premium risk. The financial cash flow of the CPA project considers the 20 years' timeframe, and includes the revenues, operation cost and investment cost, detailed below. The cash flow is used to determine the project IRR, which is compared to the benchmark. If the IRR is lower, thus the CPA component is additional. The information regarding investment cost was obtained from contracts and/or proposals to demonstrate the costs related to equipment, engineering, civil work, environmental action and studies, land cost, etc. **Investment costs** **Item** | **Value** | **Unit** | **Source** WTGs | | R$ | contracts and/or proposals Civil works (Turn Key) | | R$ | contracts and/or proposals Electrical works (Turn Key) | | R$ | contracts and/or proposals Environmental costs | | R$ | contracts and/or proposals Insurance | | R$ | contracts and/or proposals Other costs | | R$ | contracts and/or proposals **Total** | | **R$** \| **Operational cost** **Item** \| **Value** \| **Unit** \| **Source** First 2 years O&M \| \| R$/WTG/yr | Estimative from PP Following years O&M | | R$/WTG/yr \| Estimative from PP TUST \| \| R$/KW.month | Estimative from PP

PIS - Social contribution program		% of revenues	applicable legislation
COFINS - Social security financing transfers		% of revenues	applicable legislation
IR - Income tax		% over profit	applicable legislation
Additional IR		% over profit	applicable legislation
CSLL - Social contribution on net profit		% over profit	applicable legislation
Depreciation		% per year	applicable legislation
CSLL base profit		% of revenues	applicable legislation
IR base profit		% of revenues	applicable legislation
TFSEE		R$/KW.year	Estimative from PP
Annual typical unitary economic benefit		R$	Estimative from PP
Land lease		R$ or % of revenues	Estimative from PP
Depreciation		%	applicable legislation

Operational revenues

Item	Value	Unit	Source
Energy price		R$/MWh	Contracts, PPAs, last public auction price
Expected annual energy generation		MWh/year	Installed capacity times load factor and working hours, or wind study

The information regarding operational cost/revenues was obtained from applicable legislation, mainly related to the taxes, the revenue is the estimated energy generation, based on wind studies or official entities documents, times the energy price obtained from energy price contract and/or auction prices. The operation and maintenance cost was obtained from maintenance proposal and/ or contract.

Financial result

Financial Result (20-y)	Value / unit	Source
IRR without carbon	**xxx**	calculated

	The financial indicator identified for this CPA is the Internal Rate of Return (IRR). The project IRR is compared to the appropriate benchmark of the present context, which is the Brazilian governmental bound rate, from Portuguese “taxa SELIC” plus a premium risk of 2.10% calculated based on BOVESPA – Brazilian Stock Market data (RAC 2011 page 943), thus the formula applied is benchmark = risk-free rate + market-risk = 10.16% + 2.10% = 12.26%. The SELIC rate has lower risk compared to investing on a new WPP, thus it is clearly demonstrated that the project developer would look for better opportunities at the financial market, such as fixed interest rates. The SELIC rate is used as reference in the Host country as treasury bounds risk free rate and its value is 10.16%. This SELIC value used is the average from the 3 previous full years (period from 01/09/2009 to 31/08/2012) of the starting date of the CPA. The choice of a historical value is justified through the need to evaluate the scenario for the decision making not by analysing only the spot value, but instead basing the decision on historic data to determine a trend of the SELIC rate variation and this period is deemed conservative (temporal consistency and country short-time volatility effects reduction) and representative for the proposed project activity. Considering the premium risk of 2.10%, the benchmark is 12.26%. The project IRR for the CPA without carbon revenues is lower than the benchmark. All conditions are satisfied, thus the CPA can be considered additional.
Information on how it is met in the Specific CPA	CPA must apply the steps of the Additionality tool, using a financial analysis to compare the scenario of the CPA with a benchmark scenario. This item was elaborated based on the latest Versions of "*ACM0002 - Consolidated baseline methodology for grid connected electricity generation from renewable sources*" and of "*Tool for the demonstration and assessment of additionality*”. **Step 0: Demonstration whether the proposed project activity is the first-of its-kind** This step is optional, thus not considered. **Step 1: Identification of alternatives to the project activity consistent with current laws and Regulations** ***Sub-step 1a: Define alternatives to the project activity:*** According to the approved methodology, ACM0002, selected for the present project activity, the baseline scenario is: “*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 generating sources, as reflected in the combined margin (CM) from ‘Tool to calculate the emission factor for an electricity system*”. Based on information provided above, the approved methodology, ACM0002 prescribes the baseline scenario, so no further analysis is required; the credible and realistic alternatives are not needed to be identified. Only in the cases which "*the project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit(s) at the project site*”, the same methodology determinates that a step-

	wise procedure to identify baseline scenario shall be used to identify alternative baseline scenarios for power generation. Therefore, considering that the power plants of project activity are new plants, no alternative scenarios shall be used in the present project activity. ***Sub-step 1b: Consistency with mandatory laws and regulations:*** This CPA is in compliance with all applicable regulations, according to the following entities: • National Electric System Operator – ONS (from Portuguese Operador Nacional do Sistema Elétrico); • Electricity Regulatory Agency – ANEEL (from Portuguese Agência Nacional de Energia Elétrica); • Environmental State Superintendence – SEMACE (from Portuguese Superintendência Estadual de Meio Ambiente); **ONS** – Responsible agency for coordination and control of the Operation of the electrical energy Generation and Transmission in the SIN (National Interconnected System). **ANEEL** – It is a Regulating Agency, tied with the Ministry of the Mines and Energy, with headquarters and forum in the Federal District, with the purpose of regulating and fiscalizing the generation, transmission and commercialization of electrical energy, in compliance with the Politics of the Federal Government. **SEMACE –** It is the environmental agency from the state of Ceará, created to protect, conserve and recoup the environment to promote the sustainable development. **Step 2: Investment analysis** The investment analysis shall be performed in order to determine whether the proposed project activity is not: (a) The most economically or financially attractive; or (b) Economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs). For the present project activity, the investment analysis determinates if the present project activity is not economically/financially feasible without the revenues from the Certified Emission Reductions (CERs). ***Sub-step 2a: Determine appropriate analysis method*** In order to determine the appropriate analysis method, the following options are available to be used in the additionality analysis: • Option I - Apply simple cost analysis, • Option II - Apply investment comparison analysis, • Option III - Apply benchmark analysis. According to the Tool, if the CDM project activity and the alternatives identified in Step 1 generate financial or economic benefits other than CDM related income, then the investment comparison analysis (Option II) or the benchmark analysis (Option III) shall be used. The benchmark analysis will

be applied, because it is the most appropriated for this type of activity in Brazil. Moreover, the Option II shall be applied when there are credible alternative scenarios existed to the project activity. As there are no alternative to compare with the project's indicator (Internal Rate of Return) the Option III shall be applied.

Therefore, the Option III was chosen.

Sub-step 2b: Option III. Apply benchmark analysis

Benchmark – SELIC rate

The financial indicator identified for this CPA is the Internal Rate of Return (IRR). The project IRR is compared to the appropriate benchmark of the present context, which is the Brazilian governmental bound rate, from Portuguese "taxa SELIC" plus a premium risk of 2.10% calculated based on BOVESPA – Brazilian Stock Market data (RAC 2011 page 943), thus the formula applied is benchmark = risk-free rate + market-risk = 10.16% + 2.10% = 12.26%. The SELIC rate has lower risk compared to investing on a new WPP, thus it is clearly demonstrated that the project developer would look for better opportunities at the financial market, such as fixed interest rates.

The SELIC rate is used as reference in the Host country as treasury bounds risk free rate and its value is 10.16%. This SELIC (http://www.bcb.gov.br/?COPOMJUROS) value used is the average from the 3 previous full years (period from 01/09/2009 to 31/08/2012) of the starting date of the CPA. The choice of a historical value is justified through the need to evaluate the scenario for the decision making not by analysing only the spot value, but instead basing the decision on historic data to determine a trend of the SELIC rate variation and this period is deemed conservative (temporal consistency and country short-time volatility effects reduction) and representative for the proposed project activity. Considering the premium risk of 2.10%, the benchmark is 12.26%. The project IRR for the CPA without carbon revenues is lower than the benchmark.

Please see below all assumptions taken during financial analysis:

Investment costs

Item	Cost	Unit
WTGs	79,756,910	R$
Civil works (Turn Key)	17,032,722	R$
Electrical works (Turn Key)	7,902,720	R$
Environmental costs	853,660	R$
Insurance	418,601	R$
Other costs	745,995	R$
Total	**106,710,609**	**R$**

Operational costs

Item	Cost	Unit
First 2 years O&M	25,000	R$/WTG/yr
Following years O&M	120,000	R$/WTG/yr
TUST	5.146	R$/KW.month
PIS - Social contribution program	0.65%	% of revenues
COFINS - Social security financing transfers	3.00%	% of revenues
IR - Income tax	15%	% over profit
Additional IR	10%	% over profit
CSLL - Social contribution on net profit	9%	% over profit
Depreciation	5%	% per year
CSLL base profit	12%	% of revenues
IR base profit	8%	% of revenues
TFSEE	1.94	R$/KW.year
Annual typical unitary economic benefit	484.21	R$
Land lease	1.5%	% of revenues

Sub-step 2c. Calculation and comparison of financial indicators

The CPA cash flow demonstrates that the project IRR is lower than the Benchmark rate. This means that the project activity is not financially attractive to the investor:

Financial result

Financial Result (20-y)	Value / unit	Source
IRR without carbon	**7.07%**	calculated

As a conservative approach, the expected return on project used as benchmark is the average SELIC rate for the previous 3 years from the starting date of the project plus a risk premium. The value is 12.26%. For the cash flow analysis, the analysis period is 20 years.

As demonstrated, considering the investment costs and the net profit for a 20-year cash flow period frame, the Project IRR is lower than the benchmark and NPV is negative.

Sub-step 2d. Sensitivity analysis

A sensitivity analysis was conducted by varying the following parameters:

- Increase in the energy price and energy production;
- Reduction in project investments;
- Reduction in O&M cost

The results of the sensitivity analysis are shown in the following table. As it can be seen, the project IRR remains below the benchmark even in the case when the parameters change in favor of the economic feasibility of the project.

Information	Variation	IRR	to IRR = Benchmark
Investment reduction	10%	8.79%	**28.35%**
Gross revenue increase	10%	9.13%	**28.70%**
O&M Cost decrease	10%	7.50%	to zero

The sensitivity analysis is discussed below. To show the "gross revenue increase", the items energy price and electricity production are used.

(a) Increase in the energy price

Energy price is unlikely to increase significantly in the decision making scenario. In comparison with energy tenders performed by the Brazilian government, the electricity prices for wind energy have always been very low, as can be seen in the table below. Additionally, the energy prices involved in this CPA is fixed by contract and will not change.

Electrical Energy Tender	When	Average Price (R$/MWh)	Reference
Alternate sources (A-3 and Reserve) 2010	Aug/10	130.86	http://www.epe.gov.br/imprensa/PressReleases/20100826_1.pdf
A-5/2011	Dec/11	105.12	http://www.epe.gov.br/imprensa/PressReleases/20111220_1.pdf
A-5/2012	Dec/12	87.94	http://www.epe.gov.br/imprensa/PressReleases/20121214_1.pdf
Reserve Energy 2013	Aug/13	110.51	http://www.epe.gov.br/imprensa/PressReleases/20130823_1.pdf

As can be seen in the table above, it is very unlikely, in the decision making scenario, the increase of electricity prices above the actual value used for this project activity due to historical behavior of wind electricity prices from the market.

Even considering that the PPA contracts includes an energy price correction due the inflation, it is important to note that the same projected increase will also occur for the project costs during the years, thus such correction in the energy price would not have significant impact in the project's IRR.

It is worth mentioning that energy auctions promoted by the government are an official reference for the energy prices analysis by energy players in Brazil. Official information regarding electric energy auctions are publicly available and can be obtained at the Chamber of Electric Energy Commercialization's website: <http://www.ccee.org.br/>.

Therefore, considering the information above, an increase in the market energy price to values significantly above the price used in the financial analysis in this CPA is not foreseen.

(b) Increase in the project plant load factor (PLF)/energy production

	The effective energy generation has seasonal variations resulting in lower and higher production levels. Meanwhile, an increase in energy production is unlikely to occur because the WPP inserted in this CPA already have a high load factor of 40.67% (according to the wind study), which is higher than a typical Brazilian WPP (around 30% load factor[4]). The wind study (by Garrard Hassan) states clearly that the amount of electricity expected for this CPA is around 105,800 MWh/yr, resulting in a PLF of around 40.67%. This reality is not expected to change when compared to the average performance of wind plants in Brazil. Therefore, considering the information above, an increase in the amount of electricity generated to values significantly above the ones used in the financial analysis in this CPA is not foreseen. Thus, it is very unlikely that the gross revenues increase to the amount needed for the IRR to cross the benchmark. ***(c) Reduction in operation and maintenance (O&M) costs*** Even with the O&M costs reaching zero, the IRR does not crosses the benchmark. Since it is very unlikely such reduction to happen to O&M costs, this scenario is very unlikely to happen. ***(d) Reduction in project investments*** The benchmark could only be achieved if the investment costs drops 28.35%. The investment rate is less than R$ 4,000,000.00/MW, and it is unlikely to be reduced until achieve the benchmark levels because the investment rate is already low, especially when compared to another Brazilian WPPs which has an average investment rate of around R$ 19,000,000.00/MW[5]. Besides that, considering that the great majority of the financial project costs are already contracted, it is unlikely that the financial project costs could be reduced significantly to achieve the benchmark level. The sensitivity analysis demonstrates that the plant included in this CPA is not financially attractive because the project IRR is lower than the benchmark in all analyzed scenarios. **Step 3: Barrier analysis** Not necessary. As concluded in the sensitivity analysis the project activity is not financially attractive. **Step 4: Common practice analysis** This analysis is based in the Version 03.1 of the methodological tool "*Common Practice*", and has the purpose of complement the investment analysis, discussing the existing common practice of the sector and region relevant to project activity. The following stepwise approach clearly demonstrates the project activity do not represent common practice. The list of wind power plants operating in the country is made available by ANEEL.

[4] http://www.cleantechinvestor.com/portal/wind-energy/5374-building-brazils-wind-business.html
[5] http://diariodonordeste.globo.com/materia.asp?codigo=662042

STEP 1: Calculate applicable capacity or output range as +/-50% of the total design capacity of the proposed project activity.
Since the installed capacity of the plant in this CPA is 29.7 MW, the plants included in this analysis should have a minimum of 14.8 MW and a maximum of 44.5 MW.

STEP 2: identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

(a) The projects are located in the applicable geographical area	In a conservative approach, the entire host country was considered as a default.
(b) The projects apply the same measure as the proposed project activity	Only wind power plants were selected.
(c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;	Only wind power plants were selected.
(d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;	Only wind power plants were selected. The electricity energy is produced.
(e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1;	The output range is present in the previous step.
(f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.	Only wind power plants that started operation before 2013 were selected.

Result of this step:

Wind Power Plant	City - State	Incentive
Praia do Morgado	Acaraú - CE	CDM
Volta do Rio	Acaraú - CE	PROINFA
Amparo	Água Doce - SC	PROINFA
Aquibatã	Água Doce - SC	PROINFA
Cruz Alta	Água Doce - SC	CDM
Salto	Água Doce - SC	PROINFA

		Quixaba	Aracati - CE		
		Parque Eólico Enacel	Aracati - CE	PROINFA	
		Mel 02	Areia Branca - RN		
		Barra dos Coqueiros	Barra dos Coqueiros - SE	PROINFA	
		Foz do Rio Choró	Beberibe - CE	PROINFA	
		Parque Eólico de Beberibe	Beberibe - CE	PROINFA	
		Eólica Praias de Parajuru	Beberibe - CE	CDM	
		Bom Jardim	Bom Jardim da Serra - SC	PROINFA	
		Púlpito	Bom Jardim da Serra - SC	PROINFA	
		Rio do Ouro	Bom Jardim da Serra - SC	PROINFA	
		Novo Horizonte	Brotas de Macaúbas - BA	CDM	
		Seabra	Brotas de Macaúbas - BA	CDM	
		Macaúbas	Brotas de Macaúbas - BA	CDM	
		Mangue Seco 1	Guamaré - RN	CDM	
		Mangue Seco 2	Guamaré - RN	CDM	
		Mangue Seco 3	Guamaré - RN	CDM	
		Mangue Seco 5	Guamaré - RN	CDM	
		Parque Eólico Cabeço Preto	João Câmara - RN	CDM	
		Parque Eólico Cabeço Preto IV	João Câmara - RN	CDM	
		Sangradouro 3	Osório - RS	CDM	
		Osório 2	Osório - RS	CDM	
		Sangradouro 2	Osório - RS	CDM	
		Osório 3	Osório - RS	CDM	
		Fazenda Rosário 2	Palmares do Sul - RS	CDM	
		Eólica Paracuru	Paracuru - CE	PROINFA	
		Dunas de Paracuru	Paracuru - CE	CDM	
		Pedra do Sal	Parnaíba - PI	PROINFA	
		Arizona 1	Rio do Fogo - RN		
		Cerro Chato I (Antiga Coxilha Negra V)	Santana do Livramento - RS	CDM	
		Cerro Chato II (Antiga Coxilha Negra VI)	Santana do Livramento - RS	CDM	
		Cerro Chato III (Antiga Coxilha Negra VII)	Santana do Livramento - RS	CDM	
		Gargaú	São Francisco de Itabapoana - RJ	PROINFA	
		Taíba Albatroz	São Gonçalo do Amarante - CE	PROINFA	

Pedra Branca	Sento Sé - BA	
São Pedro do Lago	Sento Sé - BA	
Sete Gameleiras	Sento Sé - BA	
Pedra do Reino III	Sobradinho - BA	
Pedra do Reino	Sobradinho - BA	

STEP 3: within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number Nall.
Nall = 16

STEP 4: within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number Ndiff.

To the common practice analysis, a survey was conducted including wind power plants which became operational between July 2004 (when the New Model of Brazilian Electric Sector started to operate) and 2013 (project activity starting date), in order to establish a range of projects that can be considered similar to the project activity, like the definition of item 4, in the "Common Practice" methodological tool, Version 03.1.

Based on the above premises, were selected renewable energy generation projects, through wind power plants with installed capacity between +/- 50% of this CPA.

In the analysis were considered the project activities that are similar to the plant in this CPA and have or not financial incentives. This is related to the investment climate in the date of the investment decision: Subsidies or other financial flows, Promotional Policies and Legal regulations.

Legal Regulations

History of the Brazilian Electric Sector

In recent decades, the Brazilian Electric Sector has undergone several changes until the current model. The energy sector was composed almost exclusively of government-owned companies, but since 1995, due to an increase in international interest rates and the incapacity of investment, the government was forced to seek for alternatives. The recommended solution was to begin a privatization process and deregulation of the market.

During the years 2003 and 2004 the Federal Government has issued the foundations for a new model of Brazilian Electric Sector, supported by Laws No 10,84714 (which creates the Energetic Research Company – EPE that is responsible for the long term planning of the electrical sector) and No 10,84815, of 15 March 2004 (which establishes the ways of energy commercialization in free regulated ambiences, among other issues), and the Decree No 5,163, of 30 July 2004 (that rules the energy commercialization and concession procedures to the electricity generation).

The table below shows the summary of the main changes between the pre-existing models and the current model, which resulted in changes in the activities of some agents of the sector. As can be

seen in the table, the current energy model was implemented in 2004, having as legal milestone the Decree number 5,163 issued on 30 July 2004. Before the issuance of this Decree, the investment environment was different from the current, so no similar to the proposed project activity.

Table - Summary of the several changes in the Brazilian Electric Sector

Former model (until 1995)	Free market model (1995 to 2003)	New model (2004)
Financing using public funds	Financing using public and private funds	Financing using public and private funds
Verticalized companies	Companies classified by activity: generation, transmission, distribution and commercialization	Companies classified by activity: generation, transmission, distribution, commercialization, imports and exports
Predominantly State-controlled companies	Opening up of the market and emphasis on the privatization of the companies	Coexistence between State-controlled and Private Companies
Monopolies – No competition	Competition on generation and commercialization	Competition on generation and commercialization
Captive consumers	Both free and captive consumers	Both free and captive consumers
Tariffs regulated to all sectors	Prices are free negotiated for the generation and commercialization	In a free environment: prices are freely negotiated for the generation and commercialization. In a regulated environment: auctions and bids for the least tariffs
Regulated market	Free market	Coexistence between regulated and free market
Determinative Planning-Coordinator Group for the Planning of Eclectic Systems (GCPS)	Indicative Planning accomplished by the National Council for Energy Policy (CNPE)	Planning accomplished by the Energy Research Company (EPE)

Subsidies or other financial flows and promotional policies it is important to consider that, in the incentive and investment matters, Brazil has two main foment lines to renewable energy projects: the Clean Development Mechanism (CDM), established by the Kyoto Protocol, and the Alternative Electrical Energy Sources Incentive Program (PROINFA), established for the Decree 5,025/2004.

The PROINFA is a governmental program of incentives which was implemented to increase the participation of renewable energy in the SIN. Its target is to diversify the Brazilian Electrical Matrix,

	creating alternatives to improve the security in the electrical energy supply e to allow the appreciation of local and regional characteristics and potentialities. The Ministry of Mines and Energy (MME) is the responsible to define the rules, elaborates the Program planning and defines the economic value of each source. The Eletrobrás (Electrical Brazilian Centrals - from Portuguese Centrais Elétricas Brasileiras S.A.) is the executor agent, with the mission to do the Contracts of Purchase and Sale of Energy (from Portuguese Contratos de Compra e Venda de Energia – CCVE) or, in English, Power Purchase Agreement – PPA. In PROINFA, the financial incentives provided by the Federal Government are based on differentiated lines of finance, guarantees of minimal revenues through of the PPAs to be firmed with entrepreneur and Eletrobrás, which assures to the entrepreneur minimal revenue through the purchase of 70% of the generated energy during the financing period. The PROINFA gives also protection against the risks of exposure in the short-term market besides other benefits of adhesion in the program. Projects qualified by the PROINFA are eligible to participate in the CDM, agreeing to the decision of the UNFCCC regarding eligibility of project derived from public policies. The legislation that created the PROINFA considered the possible CDM revenues to implement the program. In Brazil regulatory environments, all the projects of generation, transmission, distribution and commercialization of electric energy are supervised and regulated by ANEEL in compliance with the law 9,427 of 26 of December of 1996, guaranteeing, then, the same regulatory requirements to the similar activities of the plant included in this CPA. Others project activities registered in CDM were not included in the common practice analysis. Considering the explanation above and the Tool “Common Practice” which states that CDM project activities are not be included in this analysis. Among the WPPs listed above that have become operational in this period, 15 of them were implemented with PROINFA incentives. The only exception is the plant “Mel 02”, in the city of Areia Branca (RN), with installed capacity of 20MW, which a reference was found neither for CDM nor for PROINFA. **Result of this Step:** Ndiff = 15 **STEP 5**: calculate factor F=1-Ndiff/Nall representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity. The proposed project activity is a common practice within a sector in the applicable geographical area if the factor F is greater than 0.2 and N_{all}-N_{diff} is greater than 3. According the requirements of the Version 031. of the “C*ommon Practice*” methodological tool, the factor F that represents “*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*” must be calculated as follows: F = 1-Ndiff/Nall = 1-15/16 = 0.0625 Nall – Ndiff = 16-15 = 1

	Final Result of the common practice analysis: The Nall was validated using ANNEL`s official Website, reviewing all WPP from 1998 to 2012, see Appendix document [A 30] and [B 4] and determined to be 15. Ndiff is 15. F = 1-Ndiff/Nall = 1-15/16 = 0.0625 Nall – Ndiff = 16-15 = 1 According to the latest "Common Practice" methodological tool Version 03.1 - the proposed project activity is a "common practice" within a sector in the applicable geographical area if the factor F is greater than 0.2 and Nall-Ndiff is greater than 3. Thus it is concluded that the implantation of wind power projects similar to the project activity is not a common practice in Brazil, being therefore eligible to CDM according its additionality requirements.
Validated situation	The eligibility criteria set out in the PoA-DD part I is in accordance with the Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities (CDM-EB65-A03-STAN) Version 3.0. The generic CPA (PoA-DD part II) and the specific CPA-DD have correctly applied the criteria set out for additionality criteria in the PoA-DD. For a detailed analysis of the validation of additionality, please refer to Section 9 of this report.
Conclusion	Ok

Ref. number	7
Eligibility Criteria in the PoA-DD	(a) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis. Local stakeholder consultation (LSC) under PoA Level is carried out as required by the Brazilian DNA as part of the LoA process. Environmental Impact Assessment (EIA) – as one of the steps of the Environmental Licensing process in Brazil, if applicable – is carried out as required by the Brazilian applicable legislation and according to rules and requirements of the applicable environmental authority.
Information on how it is met in the Generic CPA	The Local stakeholder consultation (LSC), as required by the Brazilian DNA, was performed at PoA level. However, in addition to this LSC, the local communities and associations, as well as local government were consulted and a summary of the CPA was made available/sent by mail. No comments were received so far. The CPA is in accordance with all environmental legislation applicable in the host country as evidenced by the Environmental License provided.
Information on how it is met in the Specific CPA	The Local stakeholder consultation (LSC), as required by the Brazilian DNA, was performed at PoA level. However, in addition to this LSC, the state environmental agency (SEMACE) and the state public attorney (MP-CE) were also invited by letter. No comments were received so far. The CPA is in accordance with all environmental legislation applicable in the host country as evidenced by the Environmental License provided.
Validated situation	The validation team confirms that the local stakeholder's consultation has been carried out at the

	PoA-level, see Section 12 of this report for a deeper validation analysis of the local stakeholder consultation at the PoA-level. The team checked all evidences related to local stakeholder consultation and confirms its appropriateness.
Conclusion	Ok

Ref. number	8
Eligibility Criteria in the PoA-DD	(a) Conditions to provide an affirmation that funding from Annex I Parties, if any, does not result in a diversion of official development assistance. A sign letter for each CPA declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance will be provided.
Information on how it is met in the Generic CPA	A sign letter for each CPA declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance will be provided.
Information on how it is met in the Specific CPA	A sign letter for each CPA declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance will be provided.
Validated situation	The PP presented a signed letter declaring that no Annex I parties are funding the project and does not divert official development assistance, see Appendix 3 document [A 2]. ~~CAR 8~~ – missing letter sign letter from CME declaring that there is no Annex I parties funding, or if any, it does not result in a diversion of official development assistance was not provided, according to eligibility criteria (h). CLOSED as PP provided the signed declaration.
Conclusion	Ok

Ref. number	9
Eligibility Criteria in the PoA-DD	(a) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation). There is no specific target group for the energy consumption, since the power plants will be grid-connected to the national system (SIN). The energy can be sold to buyers in free-marked base or energy auctions.
Information on how it is met in the Generic CPA	The CPA involves WPP(s) with no specific target group and the distribution will occur by the connection to the national system (SIN).
Information on how it is met in the Specific CPA	The CPA involves WPP(s) with no specific target group and the distribution will occur by the connection to the national system (SIN).
Validated situation	The target group has been defined in Section A.5 of the PoA-DD part I as WPP connected to the Brazilian SIN. In Section B.2 eligibility criteria (e) states that projects must comply with CDM Large scale - Consolidated methodology ACM0002. The CPA-DD is described and validated as this target group, in Section A.5, being a WPP using 28 Wind Turbine Generators (WTGs) to be installed in

	total over an area of 689.4 hectares for the Amontada WPC, being 11 WTGs for the Ilha Grande WPP – the only plant included in this CPA. During site visit it was confirmed the capacity of generators as 2.7 MW each (Alstom ECO 122) and thus the total installed capacity of the "Ilha Grande Wind Farm project" will be equal to 29.7 MW with a maximum generation capacity of 260,712 MWh/y. The GL Garrad Hassan Wind evaluation study, see Appendix document [A 13], mentions a 40.6% PLF (Plant Load Factor) and an average net generation of 105.8 GWh/y. The Specific CPA-DD mentions a net generation of 105,800 MWh/y and a 40.6% PLF. PLF value was updated/revised (not rounded) to 40.67% (~~CAR 9~~).
Conclusion	Ok

Ref. number	10
Eligibility Criteria in the PoA-DD	(a) Where applicable, the conditions related to sampling requirements for the PoA in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities". Not applicable. Data will be 100% monitored.
Information on how it is met in the Generic CPA	No sampling method will be applied in this PoA. All CPAs will be monitored.
Information on how it is met in the Specific CPA	No sampling method will be applied in this PoA. All CPAs will be monitored.
Validated situation	n/a no sampling will be used in any CPA.
Conclusion	Ok

Ref. number	11
Eligibility Criteria in the PoA-DD	(a) Where applicable, the conditions that ensure that every CPA (in aggregate if it comprises of independent sub units) meets the small-scale or micro scale threshold and remains within those thresholds throughout the crediting period of the CPA; Not applicable. A large scale methodology is being applied.
Information on how it is met in the Generic CPA	Not applicable, this is a large scale programme, using ACM0002.
Information on how it is met in the Specific CPA	Not applicable, this is a large scale programme, using ACM0002.
Validated situation	n/a The PoA only applies to large-scale projects, under ACM0002 Version 16.0.
Conclusion	Ok

Ref. number	12

Eligibility Criteria in the PoA-DD	(a) Where applicable, the requirements for the debundling check, in case the CPAs belongs to small-scale or micro scale project categories. Not applicable. A large scale methodology is being applied.
Information on how it is met in the Generic CPA	Not applicable, this is a large scale programme, using ACM0002.
Information on how it is met in the Specific CPA	Not applicable, this is a large scale programme, using ACM0002.
Validated situation	n/a The PoA only applies to large-scale projects, under ACM0002 Version 16.0.
Conclusion	Ok

Ref. number	13
Eligibility Criteria in the PoA-DD	(d) All new CPAs must provide an application letter in the name of the wind project developer including the following information: • Formal application for inclusion of CPA in the PoA. • Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date. • Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.
Information on how it is met in the Generic CPA	• Formal application for inclusion of CPA in the PoA. • Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date. • Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.
Information on how it is met in the Specific CPA	• Formal application for inclusion of CPA in the PoA.

	• Affirmation that the inclusion is a voluntary action. • In case the project receives no 3rd party financial aid, then an affirmation of non-receipt of ODA shall be provided by the CPA implementer. In case the project receives any financial aid from an Annex 1 country, then a statement from the relevant authority of the Annex 1 country shall be submitted stating the financial aid does not result in diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date. • Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.
Validated situation	The CME provided a signed declaration with the following elements, see Appendix 3 document [A 2]: • Formal application for inclusion of “Ilha Grande wind farm” into the PoA. • Affirmation that the inclusion is a voluntary action. • There is no Annex I parties funding the project, and no diversion of ODA. • Affirmation that all equipment purchased will be new so as to avoid any potential leakage emissions. • Affirmation to understanding that the CPA crediting period shall not exceed the PoA end date. • Acceptance that the project developers are aware of terms and conditions of the PoA and agree that their project be subscribed to the PoA.
Conclusion	Ok

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