VALIDATION REPORT
OMEGA ENERGIA RENOVÁVEL S.A.

VALIDATION OF THE DELTA DO PARNAÍBA WIND POWER PLANT COMPLEX CDM PROJECT ACTIVITY

REPORT NO. BRASIL-VAL/BR.1099482/2011

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BUREAU VERITAS CERTIFICATION

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Omega Energia Renovável S.A	Mr. João Antonio R. da Cunha

Summary:

Bureau Veritas Certification has made the validation of the Delta do Parnaíba Wind Power Plant Complex CDM Project Activity of Omega Energia Renovável S.A located in Brazil, Piauí, Municipality of Parnaíba, on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion. The overall validation, from Contract Review to Validation Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies the baseline and monitoring methodology ACM0002, Consolidated baseline methodology for grid-connected electricity generation from renewable sources (Ver. 12.3.0). and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

Report No.:	Subject Group:
BRAZIL-val/ BR.1099482/2011	CDM
Project title:	
DELTA DO PARNAÍBA WIND POWER PLANT COMPLEX CDM PROJECT ACTIVITY	
Work carried out by:	
Diego Serrano - Team leader Bernardo Aleksandravicious and Antonio Vinicius Pimpão Gomes - Financial specialists	
Internal Technical Review carried our by:	
Marco Prauchner	

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Work approved by:
Flavio Gomes - GPM

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List of Abbreviations:

- ANEEL: Brazilian National Agency for Electric Energy (from the Portuguese: Agência Nacional de Energia Elétrica)
- AR: Postal receipt notification (from the Portuguese: aviso de recebimento)
- BM: Build Margin
- BNDES: Brazilian National Development Bank (from the Portuguese: Banco Nacional de Desenvolvimento Econômico e Social).
- CCEE: Electric Power Commercialization Chamber (from the Portuguese: Câmara de Comercialização de Energia Elétrica.
- CER: Certified emission reductions
- CIMGC: Interministerial Commission on Global Climate Change
- CM: Combined Margin
- DNA: Designed National Authority
- DOE: Designated Operational Entity
- EPE: National Company of Energetic Planning (from portuguese Empresa de Planejamento Energetico)
- EIA: Environmental Impact Assessment
- FBOMS: Brazilian Forum of NGOs and social movements for environment and development (from the Portuguese: Fórum brasileiro de ONGs e movimentos sociais para o meio ambiente e desenvolvimento)
- GSP: Global Stakeholder Process
- IRR: Internal rate of return
- LP: First Environmental License – Preliminary License (from the Portuguese: Licença Prévia)
- LoA: Letter of Approval
- MME: Brazilian Ministry of Mines and Energy (from the Portuguese: Ministério de Minas e Energia).
- O&M: Operation and Maintenance

- OM: Operation Margin
- ONS: National System Operator (from the Portuguese: Operador Nacional do Sistema).
- PROINFA: Federal Government's Program that Incentives Alternative Sources of Electric Energy (from the Portuguese: Programa de Incentivo às Fontes Alternativas de Energia Elétrica)
- RAS: Simplified Environmental Report (from the Portuguese: Relatorio ambiental simplificado)
- SEMAR: Department of the environment and water resources of the state of Piauí (from the Portuguese: Secretaria do meio ambiente e recursos hídricos do estado do Piauí)
- SIN – Brazilian National Interconnected Electricity System (from the Portuguese: Sistema Interligado Nacional)
- TUST - Rates of Use of Transmission Systems (from the Portuguese: Tarifas de Uso dos Sistemas de Transmissão)
- TUSD - Rates of Use of Distribution Systems (from the Portuguese: Tarifas de Uso dos Sistemas de Distribuição)
- WPP: Wind Power Plants
- WRI: World Resources Institute.

1 INTRODUCTION

Omega Energia Renovável S.A has commissioned Bureau Veritas Certification to validate its CDM project Delta do Parnaíba Wind Power Plant Complex CDM Project Activity (hereafter called "the project") at Brazil, Piauí, Municipality of Parnaiba.

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

1.1 Objective

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

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

1.2 Scope

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

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

1.3 Validation team

The validation team consists of the following personnel:

FUNCTION	NAME	CODE HOLDER*	TASK PERFORMED
Lead Verifier	Diego Serrano	☒Yes ☐ No	☒DR ☒SV ☒RI
Verifier	N/A	☐Yes ☐ No	☐DR ☐SV ☐RI
Technical Specialist	N/A	☐Yes ☐ No	☐DR ☐SV ☐RI

Financial Specialist	Bernardo Aleksandravicious	☐**Yes** ☒ **No**	☒**DR** ☐**SV** ☒**RI**
Financial Specialist	Antonio Vinicius Pimpão Gomes	☐**Yes** ☒ **No**	☒**DR** ☐**SV** ☒**RI**
Internal Technical Reviewer (ITR)	Marco Prauchner	☒**Yes** ☐ **No**	☒**DR** ☐**SV** ☐**RI**
Specialist supporting ITR	N/A	☐**Yes** ☐ **No**	☐**DR** ☐**SV** ☐**RI**

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

2 METHODOLOGY

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

In order to ensure transparency, a validation protocol was customized for the project, according to the version 01.2 of the Clean Development Mechanism Validation and Verification Manual, issued by the Executive Board at its 55th meeting on 30/07/2010. The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

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

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

2.1 Review of Documents

The Project Design Document (PDD) submitted by Omega Energia Renovável S.A. and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for Completing the Project Design Document (CDM-PDD), Approved methodology, Kyoto Protocol, Clarifications on Validation Requirements to be Checked by a Designated Operational Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, Omega Energia Renovável S.A revised the PDD and resubmitted it on 04/04/2012.

The validation findings presented in this report relate to the project as described in the PDD version 05.

2.2 Follow-up Interviews

On 15 and 16/12/2011 Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Omega Energia Renovável S.A were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Omega Energia Renovável S.A (PP)	➢ Project background information, ➢ Project technology, operation, maintenance and monitoring capability, ➢ Project monitoring and management plan, ➢ Stakeholder consultation process and DNA LSC procedure attendance, ➢ Project status, ➢ Environmental aspects / impacts and licenses.
Ecopart Assessoria em Negócios Empresariais Ltda. (PP and CONSULTANT)	➢ Project description, ➢ Technology used, ➢ Project category, ➢ Baseline and Additionality, ➢ Monitoring Plan, ➢ Ex-ante Calculation (Emission Reduction, project emission, leakage and baseline emission) ➢ Environmental aspects / impacts and licenses. ➢ Stakeholder consultation process and DNA LSC procedure attendance.

2.3 Resolution of Clarification and Corrective Action Requests

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

Corrective Action Requests (CAR) is issued, where:

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

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

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

2.4 Internal Technical Review

The validation report underwent a Internal Technical Review (ITR) before requesting registration of the project activity.

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

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

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

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

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

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

3 VALIDATION CONCLUSIONS

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

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

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 18 Corrective Action Requests (CARs), 16 Clarification Requests (CLs) and 01 FAR.

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

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

3.1 Approval (49-50)

The participation for each project participant has not been approved yet by a Party of the Kyoto Protocol.

It is a Brazilian DNA determination that the letter of approval must be issued just after the DOE positive validation. In this case the Brazilian DNA states that the validation report must contain the following sentence[1], document /1/:

"Prior to the submission of the Project Design Document and the Validation Report to the CDM Executive Board, the Project will have to receive the written approval of voluntary participation from the DNA of Brazil, including the confirmation that the Project assists the country in achieving sustainable development".

3.2 Participation (54)

The participation for each project participant has not been approved yet by a Party of the Kyoto Protocol. Please, refer to section 3.1 of this Validation Report.

3.3 Project design document (57)

The validation team hereby confirms that the PDD complies with the latest forms of the guidance documents for completion of PDD.

3.4 Changes in the Project Activity

During the site visit following changes were observed in project as compared to details mentioned in webhosted PDD:

[1] http://homologa.ambiente.sp.gov.br/proclima/publicacoes/publicacoes_portugues/manual_mdl.pdf

As observed by the validation team through documentation analysis and the site visit held on 15 and 16/12/2011, the project is being implemented in accordance with the descriptions provided in the webhosted PDD.

During the validation process the only change observed between the PDD uploaded for the global stakeholder consultation process was the ACM0002 version, that was updated from version 12.1.0 to version 12.3.0.

Additionally, the project technical configuration (Installed Capacity, PLF, total annual energy generation, turbine location, turbine model and number of turbines) have been updated as detailed explained in the CL 03 discussion.

These updating were done because, from the date the PDD was first revised, until the end of the validation process, the technical configuration of the wind power plants was revised and optimized.[1] The preliminary study issued by the Garrad Hassan /63/, which was used in the financial analysis of the project, was the most up-dated information available when the project has started the GSP /70/. Regarding to this the GPS is supposed to be the milestone for the investment analysis, according to the UNFCCC communication /83/[2], however in order to guarantee the validity of the project additionality the DOE has also validated the investment analysis after the project optimization based in the updated parameters (please refer to section 3.7.3, below). It is important to state that the preliminary study issued by the Garrad Hassan /63/, was the information used during the auction, while the final project technical configuration, used in the updated investment analysis was defined in 13th march 2012, based in the most updated information issued by Garrad Hassan /15/, /16/, /62/, /72/, /87/.

Also the turbine location was updated after the project optimization, according to the most up dated project technical configuration issued in 13th march 2012, based in the document /16/ and /14/

All the other changes that have been made to the different versions of the PDD during the Validation Process, from the webhosted PDD, version 01 to the final PDD, version 05, have been supported by CARs and CLs opened by the DOE and have already been discussed in the Validation Protocol.

[1] This procedure is accepted by the ANEEL Auction rules as stated in the article 14.14 of the public announcement /71/

[2] According to the UNFCCC communication of 21st July 2010, send by Mr. Conor Barry, *"the investment analysis should be validated to be correct at the point of the investment decision or the commencement of validation if no clear investment decision has been made".*

3.5 Project description (64)

Delta do Parnaíba Wind Power Plant Complex CDM Project Activity is a Greenfield project and consists of a wind power complex comprising three Wind Power Plants summing 70MW of installed capacity, as follows: Delta do Parnaíba WPP (30MW), Porto das Barcas WPP (20MW) and Porto Salgado WPP (20MW). These three plants are expected to become operational in March 2013 and are all located in the Parnaíba municipality, Piauí state, northeast region of Brazil. The project expects a total annual output of 339,513MWh/year and an average plant load factor of 55.3% /15/, /16/, /62/, /72/, /87/.

The DOE validated the accuracy and completeness of the project description by:

- The analysis of official documents, as well as technical documentation, related to the project activity, and their respective crosscheck with the PDD information. Documents presented by the PP and used for crosscheck: /5/, /6/, /7/, /8/, /9/, /10/, /11/, /12/, /13/, /14/, /15/, /16/, /17/, /59/, /60/, /61/, /62/, /63/, /71/ /72/, /73/ and /87/.
- Interviews with PP and consultant held on 15 and 16/12/2011.

The DOE hereby confirms that the project description in PDD (version 5) is accurate and complete in all respects and that there are no changes to the project activity/design or boundary as compared to the webhosted PDD.

3.6 Baseline and monitoring methodology

3.6.1 General requirement (76-77)

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

According to the ACM0002 v. 12.3.0., the applicability conditions are the following:

Applicability condition (a):

"Install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s)".

The project activity consists in the installation of a new wind power complex comprising three Wind Power Plants.

The DOE has validated this applicability condition through interviews with the project participants and by assessing the official project documentation: /2/, /3/, /4/, /5/, /6/, /7/, /8/, /9/, /10/, /11/, /12/, /13/, /14/ and /16/.

Applicability condition (b):

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

The project activity consists in the installation of a new wind power complex comprising three Wind Power Plants. The DOE has validated this applicability condition through interviews with the project participants as well as assessing the official project documentation: /2/, /3/, /4/, /5/, /6/, /7/, /8/, /9/, /10/, /11/, /12/, /13/, /14/ and /16/.

Applicability condition (c):

"In the case of capacity additions, retrofits or replacements (except for capacity addition projects for which the electricity generation of existing power plant(s) or unit(s) is not affected): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity addition or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity"

This condition is not applicable, since the project activity is a greenfield.

The DOE has validated this applicability condition through interviews with the project participants and by assessing the official project documentation: /2/, /3/, /4/, /5/, /6/, /7/, /8/, /9/, /10/, /11/, /12/, /13/, /14/ and /16/.
Also the hydro power plants applicability conditions, as stated in the ACM0002 v. 12.3.0., do not apply once the project activity refers to a wind farm power project.

In addition, according to the ACM0002 v.12.3.0.., 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 or multiple reservoirs or in the increase in an existing single or multiple reservoirs where the power density of the power plant is less than 4W/m_2".

As mentioned above in this section, the project activity consists in the installation of a new wind power complex comprising three Wind Power Plants, thus this non-applicability conditions does not apply to the project activity.

The DOE has validated this applicability condition through interviews with the project participants and by assessing the official project documentation: /2/, /3/, /4/, /5/, /6/, /7/, /8/, /9/, /10/, /11/, /12/, /13/, /14/ and /16/.

The above mentioned conditions were assessed and are in accordance to the ACM0002 v. 12.3.0. The DOE could confirm this information during the site visit to the PP´s office, interviews and by the official project documentation assessment, as mentioned above.

Applicability conditions of the Tool to calculate the emission factor for an electricity system version 02.2.1.

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, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).

The DOE has validated this applicability condition, by the documents: /9/ and /10/

The DOE hereby confirms that the selected baseline and monitoring methodology (ACM0002 v. 12.3.0.), tools (Tool to calculate the emission factor for an electricity system - ver. 02.2.1 and the Tool for the demonstration and assessment of additionality - ver. 06.0.0; used to develop the PDD are previously approved by the CDM Executive Board, and is applicable to the project activity, which, complies with all the applicability conditions therein.

The DOE hereby confirms that, as a result of the implementation of the proposed CDM project activity, there are no greenhouse gas emissions occurring within the proposed CDM project activity boundary, which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology

3.6.2 Project boundary (80)

The DOE validated the project boundary by:

a) The DOE was able to validate that the delineation of the project boundary is correct and meets the requirements of the selected baseline methodology, based on the following documents: /9/, /10/, /11/, /12/, /13/, /14/ and /17/.

b) The PDD v.5 has followed the Brazilian DNA Resolution (number 08 of 26/05/2008) /18/ that adopts for purposes of CDM project activity a single system as definition of a project electric system in the National Interconnected System.

c) The site visit was conducted in the PP´s office (São Paulo State), once the project site had not started the construction phase by the time of the site visit scheduling. The meeting between the PP and the DOE took place in the 15 and 16/12/2011. During this meeting the DOE had access to the official project documentation and was able to interview the project participants and consultants. This allowed the DOE to confirm that the project boundary is in accordance with the relevant methodology.

Based on the above assessment, the DOE hereby confirms that the identified boundary and the selected sources and gases are justified for the project activity.

3.6.3 Baseline identification (87-88)

The steps taken to assess the requirement given in paragraph 81 and 82 of the VVM are described below:

The proposed project activity is the installation of a new grid-connected renewable power plant/unit, and according to methodology ACM0002 version 12.3.0 the baseline scenario is the following:

"Electricity delivered to the grid[1] by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system." Version 02.2.1."

[1] In this case the grid is the National Interconnected System (Sistema Interligado Nacional)

The DOE has confirmed that the project activity is a Greenfield power plant and the baseline scenario was defined in accordance to the ACM0002 v.12.3.0.

The PDD v.5 also defines the relevant grid (where the electricity will be dispatch) as the Brazilian National Interconnected Electricity System (SIN), what is in accordance to the relevant methodology, the Tool to calculate the emission factor for an electricity system v.02.2.1 (Step 1) and to the 8th Resolution of the Brazilian DNA /18/.

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

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

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

Project emissions:

According to the ACM0002 12.3.0, the project emissions must be calculated as follow:

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

Where:
PE_y Project emissions in year y (tCO_2e/yr)
$PE_{FF,y}$ Project emissions from fossil fuel consumption in year y (tCO_2/yr)
$PE_{GP,y}$ Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year y (tCO_2e/yr)
$PE_{HP,y}$ Project emissions from water reservoirs of hydro power plants in year y (tCO_2e/yr)

However, the referred methodology states that: "*For most renewable power generation project activities, $PE_y = 0$*". The exceptions are:

- the geothermal and solar thermal projects, which also use fossil fuels for electricity generation and then the emissions from the combustion of fossil fuels shall be accounted for as project emissions ($PE_{FF,y}$),
- Emissions of non-condensable gases from the operation of geothermal power plants ($PE_{GP,y}$)
- Emissions from water reservoirs of hydro power plants ($PE_{HP,y}$), when the project refers to hydro power plants.

Considering that the Delta do Parnaíba Wind Power Plant Complex CDM Project Activity is not related with the development of a geothermic plant, hydro power plant, neither solar thermal project, the PDD v.5 correctly defines the project emission as zero (PE_y=0). The DOE confirms that this approach is in accordance with the applicable methodology.

Baseline emissions

According to the ACM0002 v.12.3.0: *"Baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:"*

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

Where:

BE_y	Baseline emissions in year y (tCO_2/yr)
$EG_{PJ,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr).
$EF_{grid,CM,y}$	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)

Also according to the methodology, in the case where the project activity is being developed in a site where no renewable power plant was operated prior to the implementation (Greenfield), then:

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

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)

The Delta do Parnaíba Wind Power Plant Complex CDM Project Activity suits exactly in the above mentioned situation, thus according to the document Delta do Parnaiba_CERs_2012 04 02_v 4 /76/ and the PDD v.5, the baseline was calculated based in the annual quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity (339,512 MWh), multiplied per Combined margin CO_2 emission factor for grid (0.3941 tCO_2/MWh). The combined margin CO_2 emission factor for grid was calculated based in the 2010 monthly average of the Operating Margin emission factor (0.4787 tCO_2/MWh) and the 2010[1] Building Margin emission factor (0.1404 tCO_2/MWh), both issued by the Brazilian DNA (Interministerial Commission on Global Climate Change- CIMGC). In the case of wind power projects, the applicable methodology states the default weights as being: W_{OM} = 0.75 and W_{BM} = 0.25.

The Interministerial Commission on Global Climate Change (Brazilian DNA) has used the Dispatch data analysis OM method, for operation margin calculation, so option (c) of the Tool to calculate the emission factor for an electricity system (Version 02.2.1), was used, what is in accordance with the applicable tool and also the methodology.

The DOE confirms that values and approaches used to calculate the grid emission factor and the annual project energy generation have been adequately justified and were presented in accordance with the Tool to calculate the emission factor for an electricity system (version 02.1.0), as well as ACM0002 v.12.3.0. The references used to support the statement were the Brazilian DNA official database[2] and the project official wind study certificate /15/, /16/, respectively.

Leakage:

For the calculations of leakage, the methodology ACM0002 ver.12.3.0 states:

"No leakage emissions are considered. The main emission potentially giving rise to leakage in the context of electric sector projects are

[1] 2010 refers to the latest values made available by the Brazilian DNA, by the time of project submission to the DOE.

[2] http://www.mct.gov.br/index.php/content/view/327118.html#ancora

emissions arising due to activities such as power plant construction and upstream emission from fossil fuel use (e.g. extraction, procession, transport). These emissions sources are neglected"

The PDD v.5 states that the calculation of leakage emissions is not required by the methodology, and thus are considered zero. The DOE confirms that this approach is in accordance with the applicable methodology.

Emission reductions:

According to the applied methodology, the Emission reductions are calculated as follows:

"$ER_y = BE_y - PE_y$

Where:
ER_y = *Emission reductions in year y (t CO_2e/yr)*
BE_y = *Baseline emissions in year y (t CO_2/yr)*
PE_y = *Project emissions in year y (t CO_2e/yr)*

Considering that there are no project emission and no emission due to leakage, the emission reductions of the Delta do Parnaíba Wind Power Plant Complex CDM Project Activity is the baseline emission, as it was stated in the PDD v.5 /75/ and the CER spreadsheet calculation v.4 /76/. For more details regarding the validation of the baseline emission, please refer to item "Baseline emissions" presented above in this section.

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

The DOE confirms that data and parameters used in the equations are reliable and were supported by documented evidences, as official documentation and national database. All the applicable references /9/, /10/, /15/, /16/ were assessed and validated by the DOE.

3.7 Additionality of a project activity (97)

The steps taken and sources of information used, to cross-check the information contained in the PDD on this matter are described below:

To demonstrate the additionality of the project, the PDD v.5 has correctly applied the "Tool for demonstration and assessment of additionality ver. 06.0.0"

According to the PDD v.5 and the financial analysis elaborated by the time of the global stakeholder process /25/, the project is additional once the IRR of the project activity (5.37%)[1], is below the chosen financial benchmark (9.38%), what is an evidence that project activity is not financially attractive to investor.

The project IRR was achieved considering the project configuration defined in the preliminary study conducted by Garrad Hassan, which was available at the time the GSP started. However, the Wind Power Plants' technical configuration was optimized. Therefore, another simulation was conducted considering the final project configuration, based in the final wind certification, issued in March 2012. The influence of this optimization in the investment analysis was assessed by the PP and validated by the DOE. In this new simulation the project IRR raised to 6.13%, as presented in the second financial analysis /26/, still below the benchmark.

Despite of the UNFCCC communication[2] has defined the commencement of validation process as the date for the investment analysis, in cases where no clear investment decision has been made, the DOE has opted to validate also the investment analysis of the optimized project.

The DOE has analyzed the evidenced provided by PP during the validation process, and the sources of information used by the DOE to cross-check the information contained in the PDD v.5 and the financial analisys v.1 /25/ and v.2 /26/, were the following: /16/, /31/, /32/, /51/, /88/, /89/, /90/, /91/, /92/, /93/, /94/, /95/, /96/, /97/, /98/, /99/, /100/, /101/, /102/

The assessment of additionality was carried out by interviews and by following the steps of the "Tool for demonstration and assessment of additionality ver. 06.0.0"; the validator also made use of the above

[1] The project IRR was achieved considering the plant load factor of the preliminary study conducted by Garrag Hassan, which was available at the time the GSP started. However, the Wind Power Plants' technical configuration was optimized. The influence of this optimization was also assessed in the financial analysis Therefore, another simulation was conducted considering the final plant load factor based on the final wind certification issued in March 2012. In this new simulation the project IRR raised to 6,13%,, as presented in the document /26/, still below the benchmark.

[2] According to the UNFCCC communication of 21st July 2010, send by Mr. Conor Barry, "the investment analysis should be validated to be correct at the point of the investment decision or the commencement of validation if no clear investment decision has been made.

mentioned documents and references to assess, crosscheck and analyse the authenticity of the information provided by the PP in the additionality analysis.

3.7.1 Prior consideration of the clean development mechanism (104)

The DOE validated the project activity start date provided in the PDD by crosschecking this date against the documented evidences and the CDM glossary start date definition, as follows:

The project activity start date will happen after the PDD been webhosted for the global stakeholders consultation and also after the starting of the validation process.

As presented in the PDD v.5, the starting date of the proposed project activity is forecasted to be on 02/05/2012, and refers to the Power Purchase Agreement, that was not signed by the time of the validation, but in accordance with the ANEEL auction schedule /30/, is supposed to happen on May 2nd, 2012.

The DOE has validated the future project activity starting date presented in the PDD, by analysing the ANEEL official document /5/, /10/, /17/, /84/, /85/ and /86/ the ANEEL auction timetable /30/ and crosschecking this information with the CDM glossary start date definition.

The evidences for prior consideration of the CDM that were assessed are listed below:

a) The reception of the project prior consideration form in 16 Aug 2011 by the UNFCCC. This communication was confirmed by accessing the UNFCCC website[1] and the documents /77/, /78/ and /79/

b) The reception of the project prior consideration form by the Brazilian DNA was confirmed by accessing the documents /80/, /81/, /82/

c) The Delta do Parnaíba Wind Power Plant Complex CDM Project won the National Auction n° 02/2011 conducted by the ANEEL in 17/08/2011. Evidence: /09/

d) According to the PDD v.5 the investment decision has not been made yet, and it is supposed to happen together with the project starting date, by the time of the signature of the Power Purchase Agreement (02nd may 2012), The PPA is supposed to happened before the equipment supply agreement signature[2], thus the signature of the Power Purchase

[1] http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html

[2] the equipment supply agreement signature has to wait until the final technical configuration of the plant is set.

Agreement will be the first event that indicates the project developer commitment toward the implementation of the project.

Considering that the Starting Date Project activity is after 2nd August 08, The DOE has also assessed the UNFCCC website to confirm the prior consideration notification that can be retrieved in the:

http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html

Despite of the UNFCCC prior consideration notification is not necessary, seeing that project design document (PDD) has been published for global stakeholder consultation before the project activity start date[1], it was notified about the intention to seek CDM status for the project activity.

The assessment of the Prior Consideration of the project activity "Delta do Parnaíba Wind Power Plant Complex CDM Project" is conducted by consulting the UNFCCC website, and the DOE hereby confirms that the Period for Comments related to this project activity is from 15 Nov 11 - 14 Dec 11 and that the CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity.

Based on the above assessment, the DOE hereby confirms that the proposed CDM project activity complies with the requirements of the latest version of the Guidance on prior consideration of CDM.

3.7.1.1 Historical information on project timeline

The main historical information of the project is:

- PDD uploading on the UNFCCC website for global stakeholders comments: from 15 Nov 11 - 14 Dec 11
- Site visit carried out by the DOE: 15 and 16 of December 11,
- Project Starting Date: 02 of May 2012.

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3.7.2 Identification of alternatives (107)

The DOE considers the listed alternatives to be credible and complete.

3.7.3 Investment analysis (114)

The project proponent decided to use the Tool for the demonstration and assessment of additionality, version 06.0.0. /**Ref-3 category 2**/, which refers to the Guidelines on the assessment of investment analysis, version 05.0, /**Ref-7 category 2**/ and, therefore, these guidelines were used in the following analysis.

[1] Please refer to "Guidelines on the demonstration and assessment of prior consideration of the CDM v.4" - http://cdm.unfccc.int/filestorage/P/U/2/PU2ARNBM3KFXS9HZ6OELGTICJ81VYD/eb62_repan13.pdf?t=aEh8bTF4YjRkfDCOWHFurqQL9kfvX5j-vofm

Validation Team adopted a five steps strategy to confirm the veracity of the conclusion drawn by the project developer:

a) Evaluating the appropriateness of the benchmark applied for the type of financial indicator presented;
b) Conducting an assessment of parameters and assumptions used in calculating the financial indicator and determining the accuracy and suitability of parameters and cross-checking the parameters against third-party or publicly available sources;
c) Review feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants;
d) Assessing the correctness of computations carried out and documented; and
e) Subjecting the critical assumptions of the project activity to reasonable variations to determine under what conditions variations in the result would occur, and the likelihood of these conditions.

a) Appropriateness of the financial indicator and benchmark:

Financial indicator: The project participant has chosen project IRR to demonstrate the additionality of the project. The Additionality Tool (Ver. 06.0.0) permits the use of financial indicator, project IRR, for demonstrating the additionality using benchmark analysis. The tool permits the use of either project IRR or equity IRR. Since the project developer is demonstrating the financial unattractiveness of the project, project IRR is appropriate, as it is often used by the project developers to make a decision on investing in the project. As such, the selection of project IRR as financial indicator to demonstrate the additionality of the project is appropriate according to the Additionality Tool.

Benchmark: The additionality tool states that the discount rates and benchmarks shall be derived from “Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds’ required return on comparable projects;”, among others. The paragraph 29 states “When applying Option II or Option III, the financial/economic analysis shall be based on parameters that are standard in the market, considering the specific characteristics of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer. Only in the particular case where the project activity can be implemented by the project participant, the specific financial/economic situation of the company undertaking the project activity can be considered.”

The project participant has chosen the weighted cost of capital methodology (WACC), based on estimates of the cost of financing and required return on capital, regarding the project financing structure. Also, the PP used the CAPM methodology to calculate de required return on capital

BVC has accepted the benchmark based on the following:

The PP used the WACC to calculate the benchmark. The WACC (Weighted Average Cost of Capital) consists on a valid methodology used to determine the rate of return for the project, as stated in paragraph 12 of Annex5, EB62. WACC considers the project financing structure and determine the required project return based on a weighted average of the required returns for each financing source (basically, debt and equity financing).

Basically, the WACC combines the equity required return of 14.05% (real), estimated by the CAPM methodology (see below) over a 50.0% of equity in the capital structure and the debt estimated cost of 4.71% over a 50.0% of debt in the capital structure, resulting in a WACC of 9.38% (real rate), in accordance to calculations provided in /**Ref-88**/.

The Capital Asset Pricing Model (CAPM) is one of the most widely accepted models used to determine the required rate of return on equity. As per option b) provided in the paragraph 15 of Annex5, EB62, it was estimated using the best financial practices. The CAPM calculates a newly introduced asset's non-diversifiable risk. CAPM takes into account the asset's sensitivity to non-diversifiable risk, better referred to as Beta (β). Embedded in the model is also the market premium which can be tracked using historical data from the local or relevant equity market.

Basically, CAPM consists into a government bond rate increased by a suitable risk premium. It was used a risk-free government bond rate (30-year US Treasury bond rate of 2.22% in real terms) increased by a risk premium rate of 11.83% /**Ref-88**/.

The cost of debt was calculated used the information provided by BNDES, the Brazilian development bank, following the best practices in the market.

Benchmark calculation was considered suitable because it followed the best practices in the market.

BVC agrees with all the data used in benchmark calculations (/**Ref-88**/) and would like to point out that they were clearly presented, available to consult and correct.

b) Description of the parameters and assumptions used in the investment analysis, description of the means of validation and the procedures to cross-check the parameters against third-party or publicly available sources.

Input Values/Assumptions	Value	Means of validation
Total Investment	BRL 253,460,500.55	The PP provided a spreadsheet /ref 25 – spreadsheet Capex/, which breaks down the total investment value, and also /ref 95/, /ref 96/ and /ref 63/. All the calculations seem correct. According to this document, the total investment cost equals 4,224.341,68 BRL/MW installed, considering a plant capacity of 60MW and that the data applied at the projection is backed by audited balance sheet by a third party. This value can be crosschecked with the total investment cost (BRL/MW) other Brazilian wind farms, according to /ref 89/, which refers to BNDES approval for financing part of their investment cost, whose total value is estimated as 801.8 millions BRL, or 4.26 millions BRL/MW.
O&M costs	BRL 115.000/tower/year	PP has provided a document containing the estimates for O&M costs for the referred wind farm /ref 90/. We assumed that the data applied at the projection is backed by audited balance sheet by a third party. The value was crosschecked by the DOE with a third party available /ref 91/ that establishes that the O&M costs for a wind farm stands between 2% and 5% of the investment costs per year, with an average of 3.5%. Thus, for the Delta Wind Farm, we would have: 3.5%x253,460,500/35= 253,460.5 BRL/tower/year. So the number used by the PP is far more conservative
Sales price for energy	BRL 104.76/MWh + PDL	Based on two market reports /ref 92/ and /ref 93/ the value was crosschecked with the price of the auction of 2011for renewable sources /ref 94/. According to this document, the final price for wind farms was 105.12 BRL/MWh, a more conservative in comparison with the price informed by the PP.
Transmission costs	BRL 3.13/kW/month	In accordance with ANEEL resolution # 1.127 / 2011/ref 32/ and /ref 31/
ANEEL Fee	BRL1.92/kW/year	In accordance with ANEEL document # 360 / 2011/ref 97/

Taxes	PIS: 0.65% COFINS: 3% Income Taxes: 2% Social Taxes: 1.08% **Total: 924,338 BRL/year**	PIS: Law nr. 10,637, December 31st, 2002/ref 98/ COFINS: Law nr. 10,833, December 29th, 2003/ref 99/ Income Taxes: Law nr. 9,430, December 27th, 1996/ref 100/ Social Taxes: Law nr. 8,981, January 20th, 1995/ref 101/
Other costs	Land Lease: 1,80% of revenues Insurance: 0.27%of investment	Those are minor costs, which accounts for 3.92% of revenues. The PP necessary evidence for the land lease is present on /ref 51/. For the insure costs, the PP has provided an estimation based on other project estimates, which was crosschecked with the data present in /ref 91/ (page 8), which poses the insurance costs as 0,4% of investment.
Plant Load Factor	55.8%	The PP provided evidence in /ref 25 - spreadsheet GH-CASO 09/ and /ref 63/ for the plant load factor. The DOE considered that the data applied is backed by a third party. The value was crosschecked with the average load factor of the wind projects which won the A-5 auction of 2011, which equals 50.5%.
Energy Output (MWh)	293,284.80	According to (i) the plant load factor of 55.8%, (ii) the installed capacity of 60 MW and (iii) the number of hours in the year (8760)
Investment Decision date	November,2011	Since the project would start in a future date, it is appropriate to use the submission date of GPS[1]

Regarding the input values above and according to the spreadsheet containing the financial analysis, /ref 25/ the project IRR is **5.37%**, real. However, the input values listed above refer to the project's situation on the submission date of GPS, since the investment decision has not occurred yet, estimated to take place in 2nd May,2012. Since then, the project configuration has changed due to an optimization process, which has altered significantly the input values. Despite of the UNFCCC communication has defined the commencement of validation process as the date for the investment analysis, in cases where no clear investment

[1] According to the UNFCCC communication of 21st July 2010, send by Mr. Conor Barry, "the investment analysis should be validated to be correct at the point of the investment decision or the commencement of validation if no clear investment decision has been made.

decision has been made[1], the DOE has opted to validate also the investment analysis of the optimized project. In order to assess the project IRR in the new conditions for the project, the PP provide the evidences for new total investment cost, energy output and plant load factor, as listed in the table below. The other input values do not change, since they are defined over the wind farm capacity/output.

Input Values/Assumptions	Value	Means of validation
Total Investment	BRL 281,075,500.65	The PP provided a spreadsheet /ref 26 – spreadsheet Capex/, which breaks down the total investment value, and also /ref 95/, /ref 96/ and /ref 102/. All the calculations seem correct. According to this document, the total investment cost equals 4,015,364.30 BRL/MW installed, considering that the data applied at the projection is backed by audited balance sheet by a third party. This value can be crosschecked with the total investment cost (BRL/MW) other Brazilian wind farms, according to /ref 89/, which refers to BNDES approval for financing part of their investment cost, whose total value is estimated as 801.8 millions BRL, or 4.26 millions BRL/MW.
Plant Load Factor	55.3%	The PP provided evidence in /ref 26 - spreadsheet spreadsheet GH- CASO 09/, /ref 15/, /ref 16/ and /ref 21/ for the plant load factor. The DOE considered that the data applied is backed by audited balance sheet by a third party. The value was crosschecked with the average load factor of the wind projects which won the A_5 auction of 2011, which equals 50.5%.
Energy Output (MWh)	339,513.09	According to (i) the plant load factor of 55.3%, (ii) the installed capacity of 70 MW and (iii) the number of hours in the year (8760)

Regarding the new project configuration and according to the spreadsheet containing the financial analysis, /ref 26/ the project IRR is **6.13%**, real. Even after the optimization, the project remains additional.

Depreciation and other non-cash items related to the project activity were not included on IRR calculation. The PP included the standard taxes for electric ventures in Brazil.

Input values used in all investment analysis were valid and applicable at the time of the investment decision taken by the project participant. The

validation team validated the timing of the investment decision[1] and the consistency and appropriateness of the input values with this timing. Also it were validated that the listed input values had been consistently applied in all calculations. Project participants supplied spreadsheets versions of all investment analysis. All formulas used in this analysis were readable and all relevant cells were viewable and unprotected.

c) Review feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants: since the project has not started operating, there are no financial reports. Moreover, there's no public announcement or review feasibility reports related to the project.

d) Assessment of correctness of computation: BVC checked all formulas in all spreadsheets presented by the project proponent /ref 26/. The assessment involves checking the data input taken from quotation/documents, adoption of correct accounting principle and arithmetical accuracy. BVC checked the quotation/ documents and ensured that right input has been taken in the project cost and projections. The accounting principles adopted for computing depreciation, tax, costs are found to be in order. The arithmetical accuracy is also found to be correct. The principle adopted by the project participant for computing IRR is in conformity with the "Guidance on the Assessment of Investment Analysis" issued by EB. Based on the above, the IRRs of the projects were lower in contrast to the benchmarks. However, the conclusion was checked by subjecting the critical assumptions to reasonable variations.

e) Sensitivity analysis: The Guidance on Assessment of Investment Analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation (± 10%, in order to build up scenarios in which the project IRR is increased). To confirm how solid the investment analysis is, project participants presented a sensitivity analysis varying the most important parameters: (i) energy price (tariff increase: +10%), (ii) project output (energy output increase: +10%), and (iii) Investment reduction (-10%).

The sensitivity analysis confirmed that the project activity is not financially attractive once the project internal rate of return is lower than the benchmark in all scenarios analysed. Sensitivity analysis is available in table 9 of PDD. The same sensitivity analysis was conducted with the optimized project and, as it can be confirmed in the financial spreadsheet

[1] According to the UNFCCC communication of 21st July 2010, send by Mr. Conor Barry, "the investment analysis should be validated to be correct at the point of the investment decision or the commencement of validation if no clear investment decision has been made.

/ref 26/. Again, the IRR project stands below the benchmark in all scenarios.

Based on the foregoing, BVC has concluded that the project activity´s IRR is less than the benchmark and will remain additional even under most optimistic conditions (based on sensitivity analysis), and thus the validation team has arrived at the conclusion that the project activity is additional.

CLs BQA 1 to 2 and CARs BQA 1 were issued and they have been satisfactorily solved and closed. Refer to Appendix A.

The DOE, based on the assessment result by the financial expert engaged, hereby confirms that the underlying assumptions are appropriate and the financial calculations are correct.

3.7.4 Barrier analysis (118)

The barrier Analysis has not been used in this project activity.

3.7.5 Common practice analysis (121)

The PDD v.5 has used the paragraph 47 of the “Tool for demonstration and assessment of additionality ver. 06.0.0”, as follows:

Guideline: Step 1: Calculate applicable output range as +/-50% of the design output or capacity of the proposed project activity.

PDD v.5: The three wind power plants considered in this CDM Project Activity sum 70 MW of installed capacity. Taking into account the above range, the common practice analysis will be conducted considering projects possessing an installed capacity between 35MW and 105MW.

Guideline: Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the proposed project activity and have started commercial operation before the start date of the project. Note their number N_{all}. Registered CDM project activities shall not be included in this step.

PDD v.5: the applicable geographical area identified in the PDD v.5 is the Piauí State, due to the different climate conditions, specific environmental regulatory framework, the energy price subdivision per markets and different values of TUSD/TUST, compared to other Brazilian states.

The DOE has validated the applicability of the geographical area by crosschecking the argument presented in the section B.5 of the PDD v.5 (step 2 of the Guidelines on Common Practice version 01), against the documents /31/, /32/, /33/, /34/, /35/, /64/, /65/, /66/, /67/, /68/ and /69/.

The result of N_{all} for each range identified above in step 1 (35MW – 105MW), is that there is no operational wind power plant with an installed capacity between the identified range. Therefore, $N_{all} = 0$.

Guideline: Step 3: Within plants identified in Step 2, identify those that apply technologies different that the technology applied in the proposed project activity. Note their number N_{diff}.

PDD v.5: no similar wind power plant located in Piauí was identified. Hence, Ndiff = 0.

Guideline: Step 4: Calculate factor $F=1-N_{diff}/N_{all}$ representing the share of plants using technology similar to the technology used in the proposed project activity in all plants that deliver the same output or capacity as the proposed project activity.

PDD v.5:

$F = 1- N_{diff} /N_{all} = 0$

Thus, according to the Guidelines on Common Practice version 01.0, *"The proposed project activity is a common practice within a sector in the applicable geographical area if both the following conditions are fulfilled:*

(a) the factor F is greater than 0.2, and

(b) $N_{all}-N_{diff}$ is greater than 3."

Since the F factor is 0, the project activity is not a common practice.

The assessment of the existence of similar projects was done through a deep research through the web, and relevant documentation, in order to crosscheck the information and assumptions presented in the section B.5 of PDD version 5, against different and independent sources (e.g. **ANEEL**, ONS, CCEE, EPE, WRI, PROINFA and MME), as well as the documents: /33/, /34/, /35/.

The only wind power plant identified by the DOE in the project geographical area (state of Piauí) is the Pedra do Sal wind farm with an installed capacity of 18MW.

It was not necessary to do any analysis of distinctions between the proposed CDM project activity and other similar project, since no similar project was identified in the same geographical area of the project activity.

All the information used to support the common practice analysis was crosschecked against official data and documented evidences. The documentation analysed were: /31/, /32/, /33/, /34/, /35/, /64/, /65/, /66/, /67/, /68/ and /69/. The DOE hereby confirms that the proposed CDM project activity is not common practice.

3.8 Monitoring plan (124)

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

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

Considering that the Delta do Parnaíba Wind Power Plant Complex CDM Project Activity refers to a greenfield wind power project, the only two parameters to be monitored, according to the ACM0002 v.12.3.0, are: "$EG_{facility,y}$" (Quantity of net electricity supplied by the project to the grid in year y) and "$EF_{grid,CM,y}$" (Combined Margin CO_2 emission factor for grid connected power generation in year y).

The last parameter ("$EF_{grid,CM,y}$") is calculated ex-post based in the values issued periodically by the Brazilian DNA and following the "*Tool to calculate the emission factor for an electricity system*", while the "$EG_{facility,y}$" (Quantity of net electricity supplied by the project to the grid in year y), will be measured as follows:

The total electricity exported to the grid will be monitored following the procedures and requirements established by ONS which defines the technical characteristics and precision class[1] of the electricity meters to be used[2] and the electricity meter calibration requirements[3].

There will be two energy meters (principal and backup) for each wind power plant located at the substation that they are going to be connected

[1] 0.2% of maximum permissible error

[2] ONS – Operador Nacional do Sistema. **Procedimentos de Rede – Módulo 12: medição para faturamento / Submódulo 12.2: Instalação do sistema de medição para faturamento.** Available at http://www.ons.org.br/procedimentos/modulo_12.aspx.

[3] Calibration every two years: ONS – Operador Nacional do Sistema. **Procedimentos de Rede – Módulo 12: medição para faturamento / Submódulo 12.3: Manutenção do sistema de medição para faturamento.** Available at http://www.ons.org.br/procedimentos/modulo_12.aspx. /

to, as specified by CCEE[1] and will be controlled in real time by this entity[2]. These meters are individually registered within their system and calibrated by an entity with Rede Brasileira de Calibração (RBC) credential.

The final results of electricity generation are published at CCEE's website. Once the CCEE's information is an official and public available source, this will be used for crosschecking the information monitored by the project participant.

The company that owns the wind farms - Omega Energia Renovável S.A. - will be the responsible for data collection and archiving as well as the calibration and maintenance of the monitoring equipment.

Finally, all data used to monitor the emission reductions by the proposed project activity will be kept for at least 2 years after the end of the last crediting period.

The DOE has assessed the feasibility of the monitoring plan by comparing the monitoring structure against the methodology ACM0002 12.3.0, the "*Tool to calculate the emission factor for an electricity system*", the CCEE and the ONS requirements, as well as the common practices for energy monitoring, observed in other wind farm projects in Brazil. The documents used for this assessment are: ACM0002 Version 12.3.0, /10/, /17/, /27/, /36/ and /37/.

For more information regarding the monitoring plan assessment, please refer to section 7, table 1, in appendix A.
The DOE hereby confirms that the project participants are able to implement the monitoring plan.

3.9 Sustainable development (127)

The Brazilian DNA has not assessed the project by the time of the Validation Report issuance, once it is a Brazilian DNA determination that the letter of approval must be issued just after the DOE positive validation. Please refer to section 3.1 of this report.

3.10 Local stakeholder consultation (130)

The steps taken to assess the adequacy of the local stakeholder consultation are described below.

[1] Meters requirements are available at ONS' website:
<http://www.ons.org.br/download/procedimentos/modulos/Modulo_12/Submodulo%2012.2_Rev_1.0.pdf>.
Models of meters that have the technical characteristics as required by ONS, available at CCEE's website:
<http://www.ccee.org.br/cceeinterdsm/v/index.jsp?vgnextoid=ca4da5c1de88a010VgnVCM100000aa01a8c0RCRD>.

[2] SCDE (System of Energy Data collection)

The adequacy of the local stakeholder consultation was done by crosschecking the Brazilian DNA requirements (Manual for Submission of Project Activities under the CDM)[1], the DNA resolution 7 against the PP stakeholder consultation procedures.

According to the Brazilian DNA, the letters of invitation must be clearly addressed to each one of the agents listed in the section 2.4 of the Manual for Submission of Project Activities under the CDM and be sent by mail with acknowledgment of receipt, or in person at least 15 (fifteen) days before the validation process begins.

The procedure undertaken for the local stakeholder consultation was done in accordance to the paragraph above, as evidenced in documents: /38/, /39/, /40/, /41/, /42/, /43/, /44/, /45/, /46/, /47/, /103/, /104/, /105/, /106/, /107/, /108, /109/, /110/, /111/ and /112/.

For more information regarding the local stakeholder consultation assessment, please refer to section 9, table 1, in appendix A.

The DOE hereby confirms that the process of local stakeholder consultation is observed to be adequate.

3.11 Environmental impacts (133)

The project participants have undertaken an analysis of environmental impacts and have elaborated the Simplified Environmental Report (RAS), as required by the host country regulation for wind farm projects.

The DOE has validated the environmental impacts of the project activity by crosscheking the information provided in the PDD v.5 against the information contained in the following official documents: /6/, /7/, /8/, /11/, /12/, /13/, /28/ and /29/.

Based the document review, the DOE confirms that the project already has the environmental license (No. D000365/11, D000363/11, D000476/11), issued by the applicable agency (SEMAR), /07/, /28/ and /29/ and that the following PDD v.5 statement: *"The environmental impact of Wind Power Plants as the ones considered in the proposed project activity is considered small given the other sources of electricity generation… given the project already possesses the preliminary environmental license, it can be concluded that it does not indicate in significant negative transboundary environmental impacts",* is reliable.

[1] From the Portuguese: "Manual para Submissão de Atividades de Projeto no Âmbito do MDL"

Include here a detailed explanation of how validation team has validated the environmental impacts of the project activity.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

The PDD using methodology ACM0002 v. 12.1.0was webhosted on the UNFCCC for global stakeholders comments as per CDM requirements. The project was webhosted from 15 Nov 11 to 14 Dec 11

According to the UNFCCC website, no comments were received for this project during the global stakeholders' consultation procedure.

Also no comments were received during the local stakeholders consultation process.

5 VALIDATION OPINION

Bureau Veritas Certification has performed a validation of the Delta do Parnaíba Wind Power Plant Complex CDM Project Project in Brazil. The validation was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

Project participant/s used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides analysis of investment, to determine that the project activity itself is not the baseline scenario.

By the installation of 3 new wind power plants (Delta do Parnaíba 30MW, Porto Salgado 20MW and Porto das Barcas 20MW) the Delta do Parnaíba Wind Power Plant Complex has total installed capacity of 70 MW and an expected annual energy output of 339,513MWh/year the project is likely to result in reductions of GHG emissions partially. An analysis of the investment demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the DOE hereby confirms that the estimated amount of 936,600 tCO2e emission reductions, during the 1st crediting period, is correct.

The review of the project design documentation (version 5) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to

determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests registration of Delta do Parnaíba Wind Power Plant Complex CDM Project Activity as CDM project activity.

6 REFERENCES

Category 1 Documents:
Documents provided by Omega Energia Renovável S.A. that relate directly to the GHG components of the project.

/1/ Submission CDM Manual of Brazilian DNA - Manual para Submissão de Atividades de Projeto no âmbito do MDL - Comissão Interministerial de Mudança Global do Clima, Brasília, julho de 2008.
/2/ Delta do Parnaíba Dados_Delta.Parnaíba_Certificado. Anemométrico_20110328.pdf - Delta do Parnaiba wind and energy Report (Camargo Schubert)
/3/ SEAWEST - PB - Anexo 6_Certificado.pdf - Porto das Barcas wind and energy Report (Camargo Schubert)
/4/ ZETA - PS - Anexo 6_Certificado.pdf - Porto Salgado wind and energy Report (Camargo Schubert)
/5/ Cronograma ANEEL.xls - Project construction Timeline
/6/ SEAWEST - DP - Anexo 3_Licenca SEMAR (renovacao).pdf - Delta do Parnaíba First Environmental licence extension
/7/ SEAWEST - PB - Anexo 3_Licenca SEMAR (renovacao).pdf - Porto das Barcas First Environmental licence extension
/8/ ZETA - PS - Anexo 3_Licenca SEMAR.pdf - Porto Salgado First Environmental licence
/9/ 2_Resultado_Vendedor_12LEN_A3.pdf - Aneel Auction result summary (LEILÃO 002/2011)
/10/ v.11-Edital A-3 (18-07-2011)_final.PDF - ANEEL announcement of the auction - Process nº. 48500.000589/2011-01 (auction A-3, Nº. 02/2011)
/11/ RAS CGE PORTO SALGADO.pdf - Porto Salgado Simplified Environmental Report
/12/ RAS - CGE Porto das Barcas.doc - Porto das Barcas Simplified Environmental Report
/13/ RAS - CGE Delta Parnaíba - Delta do Parnaiba Simplified Environmental Report
/14/ 02.03.12 - Layout 24.KMZ - Project location georeferenced
/15/ 02.03.12 - 237502 Resultados Delta Caso 24 Vestas V100 2.0MW hh 95m.xls - Most updated Project configuration (Consolided data)
/16/ 237502-BRPA-L-02 Delta do Parnaíba_resumo de produção.PDF - Summary of the most updated project energy production and project configuration issued in 13th March 2012, by the third part (Garrad Hassan) contracted by the PP.
/17/ ANEEL_Regras de comercialização de energia.pdf - Rules of merchantability

accounting module 2 - determination of generation and energy consumption (Version 2010
ANEEL Resolution No. 385/2009\)
/18/ DNA resolution n.8 - Brazilian DNA Resolution number 08 of 26/05/2008,
/19/ Delta do Parnaíba CERs_2011.10.14_v.01.xls - CER spreadsheet calculation v.1
/20/ Delta do Parnaiba _CERs_2012.02.03_v.2.xls - CER spreadsheet calculation v.2
/21/ Delta do Parnaiba_CERs_2012 03 13_v 3.xls - CER spreadsheet calculation v.3
/22/ Delta do Parnaiba_PDD-GSP.pdf - PDD v.1 of 26/10/2011
/23/ Delta do Parnaiba_PDD_2012.02.03_v.2.doc - PDD v.2 of 03/02/2012
/24/ Delta do Parnaiba_PDD_2012 03 13_v 3.doc - PDD v.3 of 13/03/2012
/25/ FCF_Complexo Delta_ 2011.10.18.xls - Financial analysis spreadsheet v.1
/26/ FCF_Complexo Delta _2012.03.13.xls - Financial analysis spreadsheet v.2
/27/ CL11 - Submodulo 12.1_Rev_1.1.pdf - "Submódulo 12.6 Configurações de medição para Faturamento" (ONS procedures for the energy measurement configuration)
/28/ EOL_SWB_Delta_Parnaiba_SEMAR_LI_(14.03.09).pdf - Delta do Parnaíba First Environmental licence
/29/ EOL_SWB_Porto_Barcas_SEMAR_LI_(14.03.09).pdf - Porto das Barcas First Environmental licence
/30/ 01-Cronograma (para publicação em 27-07-11)_A-3.pdf - Expected timetable of events auction N. 02/2011 (AUCTION "A-3 ') (Published 07/27/2011)
/31/ TUSD COSERN_reh20111139.pdf - ANEEL: RESOLUÇÃO HOMOLOGATÓRIA Nº 1.139, DE 19 DE ABRIL DE 2011.
/32/ TUSD CEPISA_reh20111195.pdf - ANEEL: RESOLUÇÃO HOMOLOGATÓRIA Nº 1.195, DE 23 DE AGOSTO DE 2011
/33/ Big - Banco de Informação de Geração. 1.pdf - Brazilian Grid total Capacity installed
/34/ Big - Banco de Informação de Geração. 2.pdf - Brazilian Grid total Wind Farms in operation
/35/ Poinfa - Eolica Aproveitamentos Habilitados.pdf - Listo of PROINFA projects
/36/ Submodulo12[1].2_v8.0.pdf - Grid Procedures - Module 12: Measuring billing / submodule 12.2: Installation of the measuring system for billing
/37/ Submodulo 12.3_Rev_1.0.pdf - Grid Procedures - Module 12: Measuring billing / submodule 12.3: Maintenance of the measurement system for billing.
/38/ Delta do Parnaíba_SETUDES.pdf - invitation letter sent to department of tourism and sustainable development

/39/ Delta do Parnaíba_Associação Comunitária.pdf - invitation letter sent to Parnaíba rural workers union
/40/ Delta do Parnaíba_Câmara.pdf - Invitation letter sent to Municipality assembly of Parnaíba
/41/ Delta do Parnaíba_FBOMS.pdf - Invitation letter sent to Brazilian forum of NGOs and social movements for environment and development
/42/ Delta do Parnaíba_MPF.pdf - Invitation letter sent to federal public ministry
/43/ Delta do Parnaíba_MPPI.pdf - Invitation letter sent to Piauí state public ministry
/44/ Delta do Parnaíba_Prefeitura.pdf - Invitation letter sent to Municipality of Parnaíba
/45/ Delta do Parnaíba_SEMAR.pdf - Invitation letter sent to department of the environment and water resources of the state of Piauí - SEMAR
/46/ Projeto Delta do Parnaíba - Cartas Convite-Comentário (230 KB).msg - Clarification letter sent to the host country DNA regarding local stakeholder consultation
/47/ ARs_Delta do Parnaíba.pdf - Invitation letters postal receipt notifications
/48/ CL BQA 01 - 01-Cronograma (para publicação em 27-07-11)_LER.pdf - EXPECTED TIMETABLE OF EVENTS AUCTION N. 03/2011 (POWER RESERVE AUCTION)
/49/ CL 02 - Ecopart_ARCA_20101031_Transferência.Ativos.pdf - Project participants contract, (used as evidence for CL 02)
/50/ ANEEL-BIG_Common Practice PI.pdf - WPP in the State of PI
/51/ CAR BQA 1 - Contrato_PI_Ecopart BomJesus_Locação Porto Salgado.pdf - Lease land contract
/52/ Cronograma_Eventos_EOL_janeiro_2012.pdf - ANEEL monitoring of wind power plants
/53/ Segundo Aditamento ao Consórcio Delta - Final.pdf - Second Amendment to Delta Consortium - final (used as evidence for CL 02)
/54/ Primeiro Aditamento ao Consórcio Porto Salgado - Final.pdf - First Amendment to the Port Consortium Salgado - Final (used as evidence for CL 02)
/55/ Consórcio Cadastramento Leilão_Porto Salgado.pdf - Consortium Registration Leilão_Porto Salgado (used as evidence for CL 02)
/56/ Consórcio Cadastramento Leilão_Complexo Delta.pdf - Consortium Registration _Complexo Delta auction (used as evidence for CL 02)
/57/ Aditamento ao Consórcio Delta - Final.pdf - Addition to Delta Consortium - Final (used as evidence for CL 02)
/58/ prt2011113mme.pdf - ANEEL Ordinance #113, dated February 1st, 2011
/59/ "*SEAWEST - DP - Anexo 5_Ficha de Dados ER_v7",* - EPE data sheets used for project registration
/60/ "*ZETA - PS - Anexo 5_Ficha de Dados ER_v6*" - EPE data sheets used for project registration
/61/ "*SEAWEST - PB - Anexo 5_Ficha de Dados ER_v7*" - EPE data sheets used for project registration

/62/ *ENC 237502 Produções individuais Casos 05 06 e 08*".msg - Email sent by Garrad Hassan third party consult
/63/ 20110816-Resultados-Casos09_10 - Preliminary optimized project layout used for the Auction and for the financial analysis (Garrad Hassan 16th August 2011)
/64/ Jorge Brito_FNE2010.pdf - Presentation made by a Ministry of Environment representative in the National Wind Forum in 2010
/65/ PESQUISA SOBRE LICENCIAMENTO AMBIENTAL DE PARQUES EÓLICOS.pdf - study conducted by the government detailed presenting the different procedures amongst the environmental agencies of the Brazilian states
/66/ Atlas do Potencial Eolico Brasileiro.pdf - Brazilian Wind Energy Atlas
/67/ ATLAS_EOLICO_AL_cap1,2,3,4 and 5.pdf - Alagoas Wind Energy Atlas
/68/ mapa_eolico_rn.pdf - Rio Grande do Norte Wind Energy Atlas
/69/ AtlasBA_Rev_1.pdf - Bahia Wind Energy Atlas
/70/ Histórico Delta.docx - Project timeline
/71/ v.11-Edital A-3 (18-07-2011)_final - Auction announcement (LEILÃO Nº. 02/2011 (Leilão A-3 - Processo nº. 48500.000589/2011-01)
/72/ Delta-Dados Certificado_2012.03.13.xls - Summary of the most updated project energy
/73/ http://www.vestas.com/en/wind-power-plants/procurement/turbine-overview/v100-2.0-mw-gridstreamer™-(iec-iia).aspx#/vestas-univers - (Vestas Turbines Manual).
/74/ Delta do Parnaiba_PDD_2012 03 15_v 4 - PDD v.5 of 15/03/2012
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/76/ Delta do Parnaiba_CERs_2012.04.02_v.4.xls - CER spreadsheet calculation v.4
/77/ Notification about the intention to register Delta do Parnaíba Wind Po... (351 KB).msg - UNFCCC Notification about the intention to register "Delta do Parnaíba Wind Power Plant CDM Project Activity" as a CDM project activity
/78/ Notification about the intention to register Porto das Barcas Wind Pow... (339 KB).msg - UNFCCC Notification about the intention to register "Porto das Barcas Wind Power Plant CDM Project Activity" as a CDM project activity
/79/ Notification about the intention to register Porto Salgado Wind Power ... (338 KB).msg - UNFCCC Notification about the intention to register "Porto Salgado Wind Power Plant CDM Project Activity" as a CDM project activity
/80/ Notificação sobre a intenção de registrar a Atividade do projeto de MD... (219 KB).msg - DNA Notification about the intention to register "Delta do Parnaíba Wind Power Plant CDM Project Activity" as a CDM project activity
/81/ Notificação sobre a intenção de registrar a Atividade do projeto de MD... (219 KB).msg - DNA Notification about the intention to register "Porto das Barcas Wind Power Plant CDM Project Activity" as a CDM project activity
/82/ Notificação sobre a intenção de registrar a Atividade do projeto de MD... (219 KB).msg - DNA Notification about the intention to register "Porto Salgado Wind Power Plant CDM Project Activity" as a CDM project activity
/83/ ENC_ VVM Clarifications_Bureau Veritas.msg - UNFCCC clarification regarding the moment of the investment analysis in cases where no

clear investment decision has been made.

/84/ Acompanhamento Sondagens - field report with the currently project status in 04/04/2012 (probing phase for all the three wind farms)

/85/ DP_Cronograma retificado_2012.04.04.jpg - requirement for schedule rectification of the Delta do Parnaiba wind farm (project construction delayed to 15th may 2012)

/86/ PB_Cronograma retificado_2012.04.04.jpg - requirement for schedule rectification of the Porto da Barca wind farm (project construction delayed to 15th may 2012)

/87/ Delta-Dados Certificado_2012.04.04.xls - Summary of the most updated project energy (similar to the document /72/, but adjusted with additional decimals)

/88/ WACC ElectricGen_2011 01 v2.xls - WACC calculation spreadsheet

/89/ http://www.ambienteenergia.com.br/index.php/2010/09/eolica-bndes-aprova-credito-para-parques-da-cpfl/6394 - evidence used in financial analysis

/90/ WTG - Vestas / 25211-PR-OME-V100-2.0-95m REV0 25072011, (page 11)- evidence used in financial analysis

/91/ Facts_Volume_2.pdf (page 3) - evidence used in financial analysis

/92/ PLD - Estudo PSR.pdf - evidence used in financial analysis

/93/ 20110817_1.pdf - evidence used in financial analysis

/94/ 20111220_1.pdf - evidence used in financial analysis

/95/ Carta Proposta Delta do Parnaiba Rev03 - evidence used in financial analysis

/96/ Planilha de Preços Complexo Eólico Parnaiba - Rev.2 OPÇÃO VESTAS.pdf - evidence used in financial analysis

/97/ DESPACHO Nº 360.pdf - evidence used in financial analysis

/98/ Law nr. 10,637, December 31st, 2002 - http://www.receita.fazenda.gov.br/legislacao/leis/2002/lei10637.htm - evidence used in financial analysis

/99/ Law nr. 10,833, December 29th, 2003 - http://www.receita.fazenda.gov.br/legislacao/leis/2003/lei10833.htm - evidence used in financial analysis

/100/ Law nr. 9,430, December 27th, 1996 - http://www.receita.fazenda.gov.br/legislacao/leis/ant2001/lei943096.htm - evidence used in financial analysis

/101/ Law nr. 8,981, January 20th, 1995 - http://www81.dataprev.gov.br/sislex/paginas/42/1995/8981.htm - evidence used in financial analysis

/102/ Engecorps_ PP-01-10098-OER-R1.pdf - evidence used in financial analysis

/103/ Recibo_CCC - Delta.pdf - Recipe of the amended invitation letters sent to the local stakeholders in 27th march 2012

/104/ Delta do Parnaíba_Associação Comunitária - amended invitation letter sent to

/105/ Delta do Parnaíba_Câmara - amended invitation letter sent to Municipality assembly of Parnaíba

/106/ Delta do Parnaíba_SETUDES - amended invitation letter sent to department of tourism and sustainable development

/107/ Delta do Parnaíba_SEMAR- amended invitation letter sent to

department of the environment and water resources of the state of Piauí - SEMAR.

/108/ Delta do Parnaíba_Prefeitura - amended invitation letter sent to Municipality of Parnaíba

/109/ Delta do Parnaíba_MPPI - amended invitation letter sent to Piauí state public ministry

/110/ Delta do Parnaíba_MPF - amended invitation letter sent to federal public ministry

/111/ Delta do Parnaíba_FBOMS - amended invitation letter sent to Brazilian forum of NGOs and social movements for environment and development

/112/ ARs - Delta do Parnaíba_3a Consulta- amended invitation letters postal receipt notifications

Category 2 Documents:

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

/1/ ACM0002, Consolidated baseline methodology for grid-connected electricity generation from renewable sources (Ver. 12.3.0).

/2/ Tool to calculate the emission factor for an electricity system (ver. 02.2.1);

/3/ Tool for the demonstration and assessment of additionality (ver. 06.0.0);

/4/ Combined tool to identify the baseline scenario and demonstrate additionality (ver. 3.0.1);

/5/ Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion (ver. 2).

/6/ Guidelines for completing the project design document (CDM-PDD) and the proposed new baseline and monitoring methodologies (CDM-PDD) - (ver 07).

/7/ Guidelines on the Assessment of Investment Analysis (ver. 5),

/8/ "Guidelines for the reporting and validation of plant load factors" (ver. 01)

/9/ Guidelines on Common Practice (Ver. 01.0)

/10/ Guidelines on the Demonstration and Assessment of Prior Consideration of the CDM (Ver. 04)

/11/ Glossary of CDM terms, (V 06.0.0).

/12/ Clean Development Mechanism Validation and Verification Manual (Ver 01.2)

Persons interviewed:

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

/1/ Edmilson Bezerra -Senior Project Analyst (Omega Energia Renovável S.A)
/2/ Edemar de Proença Filho - New business (Zeta Energia S.A.)
/3/ Ana Paula B. Veiga - Consultant (EQAO)

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7 CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Bureau Veritas Certification – Internal Technical Reviewer
Marco F. Prauchner – is graduated in Mechanical Engineering with experience in Quality and Environmental management in mechanical, plastic and chemical industries. He is ISO 9001:2008 and ISO 14001:2004 Lead Auditor and has also experience in the implementation of Environmental Management Systems. Marco is qualified as Lead Verifier GHG – Greenhouse Gases.

Bureau Veritas Certification – Team Leader
Diego Serrano - Is forest engineer graduated by the ESALQ / USP Superior School of Agriculture "Luiz de Queiroz." University of São Paulo, Diego has master degree in Energetic System Planning with forest residues in the State University of Campinas (UNICAMP). His abilities include coordination and elaboration of PDD's in the scopes 1, 4, 13 and 14.

Bureau Veritas Certification – Financial Specialist
Bernardo Aleksandravicius - is graduated in Business Administration with a very expressive experience in valuation of new projects in the electrical and technology sectors; Equity analyst with focus on the consumer staples, consumer discretionary, technology and telecommunications sectors for many companies in Brazil.

Bureau Veritas Certification – Financial Specialist
Antonio Vinicius - is graduated in Industrial Engineering and holds a MBA from Coppead/UFRJ School of Businees with previous experience in economic assessment of greenfield projects in electrical sector, as well as projects related to renewable energy and energy conservation.

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APPENDIX A: COMPANY CDM PROJECT VALIDATION PROTOCOL

VALIDATION PROTOCOL

Table 1 Validation requirements based on the Clean Development Mechanism Validation and Verification Manual (Version 01.2) and methodology ACM0002 (Version 12.1) – "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
1. Approval			*COUNTRY A (Brazil)*		
a. Have all Parties involved approved the project activity?	VVM	44	**CAR 01**: The PP didn't present to the DOE the letter of approval from the party (Brazil) obtained for this CDM project, according to the VVM, §44 requirements.	**CAR 01**	OK
b. Has the DNA of each Party indicated as being involved in the proposed CDM project activity in section A.3 of the PDD provided a writTen letter of approval? (If yes, provide the reference of the letter of approval, any supporting documentation, and specify if the letter was received from the project participatn or directly from the DNA)	VVM	45	No. the party is not a project participant		OK
c. Does the letter of approval from DNA of each Party involved:	VVM	45	Please refer to **CAR 01**, above	**CAR 01**	OK
i. confirm that the Party is a Party of the Kyoto Protocol?	VVM	45.a	Please refer to **CAR 01**, above	**CAR 01**	OK
ii. confirm that participation is voluntary?	VVM	45.b	Please refer to **CAR 01**, above	**CAR 01**	OK
iii. confirm that, in the case of the host Party, the proposed CDM project activity contributes to the sustainable development of the country?	VVM	45.c	Please refer to **CAR 01**, above	**CAR 01**	OK
iv. Refers to the precise proposed CDM project activity title in the PDD being submitted for registration?	VVM	45.d	Please refer to **CAR 01**, above	**CAR 01**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
d. Is(are) the letter(s) of approval unconditional with respect to (i) to (iv) above?	VVM	46	Please refer to **CAR 01**, above		**CAR 01**	OK
e. Has(ve) the letter(s) of approval been issued by the respective Party's designated national authority (DNA) and is valid for the CDM project activity under validation?	VVM	47	Please refer to **CAR 01**, above		**CAR 01**	OK
f. Is there doubt with respect to the authenticity of the letter of approval?	VVM	48	Please refer to **CAR 01**, above		**CAR 01**	OK
g. If yes, was verified with the DNA that the letter of approval is authentic?	VVM	48	Please refer to **CAR 01**, above		**CAR 01**	OK
2. Participation			PP1 (Omega Energia Renovável S.A.)	PP2 (Ecopart Assessoria em Negócios Empresariais Ltda.)		
a. Have all project participants been listed in a consistent manner in the project documentation?	VVM	51	Yes.	Yes		OK
b. Has the participation of the project participants in the project activity been approved by a Party to the Kyoto Protocol?	VVM	51	Please refer to **CAR 01**, above	Please refer to **CAR 01**, above	**CAR 01**	
c. Are the project participants listed in tabular form in section A.3 of the PDD?	VVM	52	Yes.	Yes		OK
d. Is the information in section A.3 consistent with the contact details provided in annex 1 of the PDD?	VVM	52	Yes	Yes		OK
e. Has the participation of each of the project participants been approved by at least one Party	VVM	52	Please refer to **CAR 01**, above	Please refer to **CAR 01**, above	**CAR 01**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS		Draft Concl	Final Concl
involved, either in a letter of approval or in a separate letter specifically to approve participation? (Provide reference of the approval document for each of the project participants)						
f. Are any entities other than those approved as project participants included in these sections of the PDD?	VVM	52	Please refer to **CAR 01**, above	Please refer to **CAR 01**, above	**CAR 01**	OK
g. Has the approval of participation issued from the relevant DNA?	VVM	53	Please refer to **CAR 01**, above	Please refer to **CAR 01**, above	**CAR 01**	OK
h. Is there doubt with respect to (g) above?	VVM	53	Please refer to **CAR 01**, above	Please refer to **CAR 01**, above	**CAR 01**	OK
i. If yes, was verified with the DNA that the approval of participation is valid for the proposed CDM project participant?	VVM	53	Please refer to **CAR 01**, above	Please refer to **CAR 01**, above	**CAR 01**	OK
3. Project design document						
a. Is the PDD used as a basis for validation prepared in accordance with the latest template and guidance from the CDM Executive Board available on the UNFCCC CDM website?	VVM	55	Yes. PROJECT DESIGN DOCUMENT FORM (CDM-PDD) Version 03 - in effect as of: 28 July 2006.			OK
b. Is the PDD in accordance with the applicable CDM requirements for completing the PDD?	VVM	56	Please refer to CAR 02 to CAR 10 and CL 01 to CL 06, below.		**CAR 02 to CAR 10 and CL 01 to CL**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
				06	

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
c. In CDM-PDD section A.1 are the following provided?	EB 41	Ann 12	-	-	-
i. Title of project	EB 41	Ann 12	Yes. *"Delta do Parnaíba Wind Power Plant Complex CDM Project Activity".*		OK
ii. Current version number and date of document	EB 41	Ann 12	Yes. Version 1.0, Date: 26/10/2011		OK
d. In CDM-PDD section A.2 are following provided (max. one page)?	EB 41	Ann 12	-	-	-
i. A brief description ot the project activity covering purpose which includes the scenario existing prior to the start or project, present scenario and baseline scenario	EB 41	Ann 12	**CL 01:** It is not clear in section A.2 fo the PDD v.1, what are the scenario existing prior to the start of the project, present scenario and baseline scenario, as required by EB41, annex 12.	**CL 01**	OK
ii. Explanation on how the GHG emission reductions are effected	EB 41	Ann 12	Yes, as folow: *"The project activity reduces emissions of greenhouse gases (GHG) by avoiding electricity generation from fossil fuel sources, which would be generated (and emitted) in the absence of the project"*		OK
iii. The PP's vies on the contribution of project activity to sustainable development	EB 41	Ann 12	Yes, according to the PDD v.1: *" the proposed project activity will contribute to the sustainable development in the following aspects:* *Reducing air pollutants that are emitted from fossil fuel electricity generation from power plants*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			connected to the Brazilian grid; *Creating job opportunities during the project construction, operation and maintenance, improving capacities related to wind farms in Brazil through advanced technology transferred from developed countries;* *Efficiently generating electricity, for which there is a growing demand in the country;* *Contributing towards national economic development, adding an Independent Power Producer, leading to energy diversification and creation of additional renewable energy sources"*		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iv. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	No.		OK
e. In CDM-PDD section A.3 are following provided in the tabular format?	EB 41	Ann 12	-	-	-
i. List of project participants and parties	EB 41	Ann 12	**CL 02**: The section A.3 of the PDD v.1 refers to "*Omega Energia Renovável S.A*." as the Project participant, however during site visit a different structure was presented, that was composed for different companies (Zeta, Ecopart, Seawest, etc…). It´s is not clear what is the role of each company and who should be in charge of the CDM project	**CL 02**	OK
ii. Identification of Host Party			Yes. “Brazil”		OK
iii. Indication whethre the Party wishes to be considered as project participant	EB 41	Ann 12	Yes. the host party is not a project participant		OK
f. In CDM-PDD section A.4.1 are following provided?	EB 41	Ann 12	-	-	-
i. Technical description, location, host party(ies) and address as required	EB 41	Ann 12	Yes, as follow: *"Brazil, Piauí, Parnaíba"*		OK
ii. Detailed physical location with unique identification of the project activity (eg. Longitude/latitude) – not to exceed one page	EB 41	Ann 12	Yes, through geographic coordinates.		OK
iii. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	No.		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
g. In CDM-PDD section A.4.2 is the list of categoreis of project activities provided?	EB 41	Ann 12	Yes, as follow: *"Sectoral Scope: 1 - Energy industries (renewable - / non-renewable sources). Category: Renewable electricity generation for a grid".*		OK
h. In CDM-PDD section A.4.3 are following provided?	EB 41	Ann 12	**-**	**-**	**-**
i. A description of how environmentally safe and sound technology, and know-hoe, is transferred to the Host Party(ies)	EB 41	Ann 12	**CAR 02:** In the section A.4.3 of the PDD v.1, the PP did not address information regarding environmentally safety and technology/know-how transference, as required by EB 41, annex 12.	**CAR 02**	OK
ii. Explanation of purpose of project activity with scenario existing prior to the start of project, scope or present activities and the baseline scenario	EB 41	Ann 12	**CAR 03:** No explanation regarding the purpose of project activity with scenario existing prior to the start of project, scope or present activities and the baseline scenario was provided in section A.4.3 of the PDD v.1, as required by EB41, annex 12.	**CAR 03**	OK
iii. List and arrangement of the main manufacturing/production technologies, systems and equipments involved	EB 41	Ann 12	Yes, as follow:		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl

Wind Power Plant	*Delta do Parnaíba*	*Porto das Barcas*	*Porto Salgado*
Turbines			
Model	V90	V90	V100
Quantity	16	16	9
Nominal Power (MW)	1.8	1.8	2.0
Installed capacity (MW)	28.8	28.8	18
Manufacturer	VESTAS	VESTAS	VESTAS
Diameter (m)	90	90	100
Cut-in wind speed (m/s)	4	4	3
Cut-out wind speed (m/s)	25	25	20
Generators			
Nominal output (kW)	1,800	1,800	2,000
Quantity	16	16	9
Frequency (Hz)	60	60	60

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iv. The emissions sources and GHGs involved	EB 41	Ann 12	**CAR 04**: No information regarding emissions sources or GHGs involved was found in the section A.4.3 of the PDD v.1, as required by EB 41, annex 12.	**CAR 04**	OK
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	**CL 03**: Some technical parameters of the Garrad Hassan and Camargo Schubert documents, are different between them (e.g.: plant load factor), thus it is not clear which one refers to the real project situation and then supposed to be applicable to the PDD and investment analysis.	**CL 03**	OK
i. In CDM-PDD section A.4.4 is the estimation of emission reductions provided as requested in a tabular format?	EB 41	Ann 12	Yes.		OK
j. In CDM-PDD section A.4.5 is Information regarding Public funding provided?	EB 41	Ann 12	Yes, as follow: *"This project does not receive any public funding and it is not a diversion of ODA"*		OK
k. In CDM-PDD section B.1 are following provided?	EB 41	Ann 12	-	-	-
i. The approved methodology and version number	EB 41	Ann 12	Yes: *"ACM0002 - "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" (Version 12.1.0)."*		OK
ii. Any methodologies or tools which the above approved methodology draws upon and their version noumber	EB 41	Ann 12	Yes, as follow: • *"Tool to calculate the emission factor for*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			an electricity system (version 2.2.1); • *Tool for the demonstration and assessment of additionality (version 5.2);* • *Tool to calculate project or leakage CO2 emissions from fossil fuel combustion (version 2);* • *Combined tool to identify the baseline scenario and demonstrate additionality (version 3.0.0). "*		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
l. In CDM-PDD section B.2 are following provided?	EB 41	Ann 12	-	-	-
i. Justification ot the choice of methodology that the project activity meets each of the applicability conditions	EB 41	Ann 12	Yes, the project activity is applicable under ACM0002 v. 12.1.0, once: *"The proposed project activity consists of the implementation of a wind energy complex comprising three greenfield wind power plants corresponding to option a)".* Also, the restrictions listed in the ACM0002 v. 12.1.0 (switching from fossil fuels, Biomass fired power plants, hydro power plants) are not applicable to this project activity.		OK
ii. Documentations with references that had been used. This can be provided in Annex 3 instead	EB 41	Ann 12	N/A		OK
m. In CDM-PDD section B.3 are following provided?	EB 41	Ann 12	-	-	-
i. Description of all sources and gases included in the project boundary in the table	EB 41	Ann 12	Yes.		OK
ii. A flow diagram of the project boundary physically delineating the project activity	EB 41	Ann 12	Yes.		OK
iii. The flow diagram with all equipments, systems and flows of mass and energy etc	EB 41	Ann 12	**CAR 05**: The flow diagram presented in section B.3, PDD v.1 did not consider the flow of energy, as required by EB 41, annex 12.	**CAR 05**	

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
n. In CDM-PDD section B.4 are following provided?	EB 41	Ann 12	-	-	-
i. Explanation how the most plausible baseline scenario is identified in accordance with the selected baseline methodology	EB 41	Ann 12	Yes: *"The project activity is the installation of a new grid-connected renewable power plant/unit. Therefore, according to ACM0002, 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 as described in the "Tool to calculate the emission factor for an electricity system"*		OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Yes.		OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources, etc.)	EB 41	Ann 12	N/A once the baseline scenario is stated by the methodology, please refer to item 3.n.i, above		OK
iv. A transparent and detailed description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take	EB 41	Ann 12	N/A once the baseline scenario is stated by the methodology, please refer to item 3.n.i, above		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
place in the absence of the proposed project activity					
v. Are there any changes/modifications compared to the webhosted PDD?	EB 41	Ann 12	No.		OK
o. In CDM-PDD section B.5 are following provided?	EB 41	Ann 12	-	-	-
i. Explanation of how and why this project activity is additional and therefore not the baseline scenario in accordance with the selected baseline methodology	EB 41	Ann 12	Yes, through the Investment analysis of the additionality tool, as follow: "T*he IRR of the project activity without being registered as a CDM project is significantly below the sector benchmark, evidencing that project activity is not financially attractive to investor. Then, scenario 1 would be the most plausible alternative to the project activity, i.e. the continuation of the current situation with additional electricity supplied by the Brazilian Interconnected Grid. "*		OK
ii. Justification of key assumptions and rationales	EB 41	Ann 12	Please refer to section 6, below		OK
iii. Transparent illustration of all data used to determine the baseline scenario (variables, parameters, data sources etc)	EB 41	Ann 12	Yes.		OK
iv. Evidence that the incentive from the CDM was seriously considered in the decision to proceed	EB 41	Ann 12	N/A, once according to the PDD v.1 the validation process has began before the project starting		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
with the project activity, if the starting date of the project activity is before the date of validation			date.		
p. In CDM-PDD section B.6.1 are following provided?	EB 41	Ann 12	-	-	-
i. Explanation as to how the procedures, in the approved methodology to calculate project emissions, baseline emissions, leakage emissions and emission reductions are applied to the proposed project activity	EB 41	Ann 12	Yes, as follow: **Emissions reductions *(ERy)*:** $ER_y = BE_y - PE_y$ ***Baseline emissions (BEy):*** $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ **Project emissions:** $PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$ However, considering that this project does not refer to: geothermal, solar thermal or HPP, the *PEFF,y, PEGP,y* and *PEHP,y* = 0 tCO2/year, thus the project emission is zero, as stated in the PDD v.1		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Leakage: As stated in the PDD v.1: *"According to the methodology, "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". Therefore, leakage of the proposed project activity is 0 tCO2."*		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. Equations used in calculating emission redutions	EB 41	Ann 12	Yes, please refer to item 3.p.i, above		OK
iii. Explanation and justification for all relevant methodological choices, including different scenarios or cases, options and default values	EB 41	Ann 12	Yes, in the case of wind power projects the ACM0002 does not provide methodological choices, however the PP justified the choices made under the ACM0002 applicable tools. (eg.: step 2, 3, 4 and 5 of the tool for EF calculation v.2)		OK
q. In CDM-PDD section B.6.2 are following provided?	EB 41	Ann 12	-	-	-
i. A compilation of information on the data and parameters that are not monitored throughout the crediting period but that are determined only once and thus remains fixed throughout the crediting period AND that are available when validation is undertaken	EB 41	Ann 12	Yes, the parameter that are not monitored and are available at the validation are: ***EFCO2,m,i,y (***CO2 emission factor of fossil fuel type *i* used in power unit *m* in year *y)* ***EGm,y and EGk,y*** (Net electricity generated by power plant/unit *m* or *k* in year *y)* ***ηm,y*** (Average net energy conversion efficiency of power unit *m* in year *y)* ***EFgrid,OM-adj,y*** (Simple adjusted operating margin CO2 emission factor in year y)		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			EFBM,2010 (Build Margin CO2 emission factor in year *y)*		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. The actual value period	EB 41	Ann 12	**CAR 06**: Some of the parameter values (*EFCO2,m,i,y , EGm,y and EGk,y and ηm,y*) make reference to the "*emission factor calculation spreadsheet which is attached to the PDD*" however, this spreadsheet was not presented to the validation team.	**CAR 06**	OK
iii. Explanation and justification for the choice of the source of data	EB 41	Ann 12	Yes.		OK
iv. Clear and transparent references or additional documentation in Annex 3	EB 41	Ann 12	Please refer to CAR 06, above	**CAR 06**	
v. Where values have been measured, a description of the measurement methods and procedures (e.g. which standards have been used), indicated the responsible person/entity having undertaken the measurement, the date of measurement(s) and the measurement results	EB 41	Ann 12	N/A.		OK
r. In CDM-PDD section B.6.3 are following provided?	EB 41	Ann 12	-	-	-
i. A transparent *ex ante* calculation of project emissions, baseline emissions (or, where applicable, direct calculation of emission reductions) and leakage emissions expected during the crediting period, applying all relevant equations provided in the approved	EB 41	Ann 12	**CL 04**: The net electricity generation supplied to the grid, used for the baseline emission calculation purpose, the PDD v.1, section B.6.3, states: *"This technical configuration will be optimized and updated during the validation*" Thus, it is not clear whether the baseline emission	**CL 04**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodology			calculation presented in the PDD v.1 is valid.		
ii. Documentation how each equation is applied, in a manner that enables the reader to reproduce the calculation	EB 41	Ann 12	Yes.		OK
iii. Additional background information and or data in Annex 3, including relevant electronic files (i.e. spreadsheets)	EB 41	Ann 12	Please refer to CAR 06, above.	**CAR 06**	OK
s. In CDM-PDD section B.6.4 are the results of the *ex ante* estimation of emission reductions for all years of the crediting period, provided in a tabular format?	EB 41	Ann 12	Yes.		OK
t. In CDM-PDD section B.7.1 are following provided?	EB 41	Ann 12	-	-	-
i. Specific information on how the data and parameters that need to be monitored would actually be collected during monitoring for the project activity	EB 41	Ann 12	Yes. The only parameter monitored is the "$\mathbf{EG}_{\mathbf{facility,y}}$" (Quantity of net electricity supplied by the project to the grid in year *y)*. that according to the PDD v.1 will be monitored as follow: *"Documented evidence from the local power utility or CCEE – Câmara de Comercialização de Energia Elétrica, a Brazilian governmental entity which monitors the quantity of electricity in the national interconnected grid"*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			The "$EF_{grid, CM,y}$" (Combined Margin CO2 emission factor for grid connected power generation in year *y*) do not need to be monitored once was defined ex-ante following the Tool to calculate the emission factor for an electricity system (Version 02.2.0).		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. For each parameter the following below information, using the table provided:	EB 41	Ann 12	-	-	-
a. The source(s) of data that will be actually used for the proposed project activity (e.g. which exact national statistics). Where several sources may be used, explain and justify which data sources should be preferred.	EB 41	Ann 12	Yes, please refer to item 3.t.i, above		OK
b. Where data or parameters are supposed to be measured, specify the measurement methods and procedures, including a specification which accepted industry standards or national or international standards will be applied, which measurement equipment is used, how the measurement is undertaken, which calibration procedures are applied, what is the accuracy of the measurement method, who is the responsible person/entity that should undertake the measurements and what is the measurement interval; (i) A description of the QA/QC procedures (if any) that should be applied; (ii) Where relevant: any further comment. Provide any relevant further	EB 41	Ann 12	This information is applicable only to the "**$EG_{facility,y}$** " (Quantity of net electricity supplied by the project to the grid in year *y)*, That will be measured as follow: *"The quantity of electricity delivered to the grid by the project will be quantified through the energy meter located at the substation".*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
background documentation in Annex 4.					
u. In CDM-PDD section B.7.2 are following provided?	EB 41	Ann 12	-	-	-
i. A detailed description of the monitoring plan	EB 41	Ann 12	Yes, and according to the PDD v.1 this will be done as follow: *"The Project owner will proceed with the necessary monitoring measures as established in the procedures from the Electric System National Operator (ONS – from the Portuguese Operador Nacional do Sistema), Brazilian Electricity Regulatory Agency (ANEEL from the Portuguese Agência Nacional de Energia Elétrica) and the Electric Power Commercialization Chamber (CCEE form the Portuguese Câmara de Comercialização de Energia Elétrica)… The total electricity exported to the grid will be monitored following the procedures and requirements established by ONS which defines the technical characteristics and precision class (0.2% of maximum permissible error) of the electricity meters to be used36. In addition, ONS also rules about the electricity meter calibration requirements (every two years)37.* *There will be two energy meters (principal and backup) located at the substation, as specified by*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			CCEE38. Before the operation starts, CCEE demands that these meters are individually registered within their system and calibrated by an entity with Rede Brasileira de Calibração (RBC) credential. Beyond that, energy information will be controlled in real time by CCEE. Once the measurement points are physically defined and the invoice measurement system and the communication infrastructure are installed, the measurement points will be registered in the SCDE (System of Energy Data collection) managed by CCEE".		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. The operational and management structure that the project operator will implement in order to monitor emission reductions and any leakage effects generated by the project activity	EB 41	Ann 12	Yes, as follow: *"The company that owns the wind farms will be the responsible for data collection and archiving as well as the calibration and maintenance of the monitoring equipment, for dealing with possible monitoring data adjustments and uncertainties, review of reported results/data, internal audits of GHG project compliance with operational requirements and corrective actions. Also, it is responsible for project management, as well as for the organising and training of the staff in the appropriate monitoring, measurement and reporting techniques".*		OK
iii. The responsibilities for and institutional arrangements for data collection and archiving	EB 41	Ann 12	**CAR 07**: no information regarding responsibilities and institutional arrangements for data collection and archiving was provided in section B.7.2 of the PDD v.1, as required by EB41 annex 12.	**CAR 07**	OK
iv. Indication that the monitoring plan reflect good monitoring practice appropriate to the type of project activity	EB 41	Ann 12	Yes. Please refer to section 3.u.i, above		OK
v. Relevant further background information in Annex 4	EB 41	Ann 12	No.		OK
v. In CDM-PDD section B.8 are following provided?	EB 41	Ann 12	-	-	-
i. Date of completion of the application of the	EB	Ann	Yes: *"25/02/2011"*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
methodology to the project activity study in DD/MM/YYYY	41	12			
ii. Contact information of the person(s)/entity(ies) responsible for the application of the baseline and monitoring methodology to the project activity	EB 41	Ann 12	Yes: *" Ecopart Assessoria em Negócios Empresariais Ltda.* *Telephone number: +55 (11) 3063-9068* *Fax number: +55 (11) 3063-9069* *E-mail: focalpoint@eqao.com.br"*		OK
iii. Indication if the person/entity is also a project participant listed in Annex 1	EB 41	Ann 12	**CAR 08:** the section B.8 of the PDD v.1, does not indicate if the person/entity is also a project participant listed in Annex 1, as required by EB 41, annex 12.	**CAR 08**	OK
w. In CDM-PDD section C.1.1 are following provided?	EB 41	Ann 12	-	-	-
i. The starting date of a CDM project activity, which is the earliest of the date(s) on which the implementation or construction or real action of a project activity begins/has begun (EB33, Para 76/CDM Glossary of terms/EB41, Para 67)	EB 41	Ann 12	Yes: *30/11/2011.*		OK
ii. A description of how this start date has been determined, and a description of the evidence available to support this start date	EB 41	Ann 12	Yes, as follow: *"in order to determine project activity's starting date the forecasted date for the following events were considered:* ***financing agreement, Power Purchase Agreement, major equipment orders and start of construction****. None of these events*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			have yet taken place. However they are forecasted to happen as follows: ***Financing agreement:*** *Not signed yet. It is forecasted to be agreed by June 2012* ***Power Purchase Agreement:*** *Not signed yet. It is forecasted to be signed on May 2nd, 2012* ***Major equipment orders:*** *No agreement between the project sponsor and equipment suppliers has been made yet. The contract for equipment supply is planned to be signed on 30/11/2011.* ***Start of construction:*** *It is estimated that the construction of the wind power plants start approximately one year before the estimated date for the beginning of the plant's operations, in February 2012.* *From the above, the identified starting date of the proposed project activity is forecasted to be on 30/11/2011."*		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iii. If this starting date is earlier than the date of publication of the CDM-PDD for global stakeholder consultation by a DOE, description in Section B.5 contain a of how the benefits of the CDM were seriously considered prior to the starting date (EB41, Para 68).	EB 41	Ann 12	This is not the case, once the project activity is supposed to begin after the global stakeholder consultation period. Please refer to item 3.w.ii, above.		OK
x. In CDM-PDD section C.1.2 is the expected operational lifetime of the project activity in years and months provided?	EB 41	Ann 12	Yes: *"25 years, 0 months"*		OK
y. In CDM-PDD section C.2 is it stated whether the project activity will use a renewable or a fixed crediting period and is C.2.1 or C.2.2 completed accordingly?	EB 41	Ann 12	**CAR 09**: The PP did not state in section C.2 of the PDD v.1, if the project activity will use a renewable or a fixed crediting period, as required by EB 41, annex 12.	**CAR 09**	OK
z. In CDM-PDD section C.2.1 is it indicated that each crediting period shall be at most 7 years and may be renewed at most two times, provided that, for each renewal, a designated operational entity determines and informs the Executive Board that the original project baseline is still valid or has been updated taking account of new data where applicable?	EB 41	Ann 12	**CAR 10**: The section C.2.1 of the PDD v.1, does not make reference to the number of crediting period renewals, as required by EB 41, annex 12.	**CAR 10**	OK
aa. In CDM-PDD section C.2.1.1 are dates in the following format: (DD/MM/YYYY) provided?	EB 41	Ann 12	Yes: *" 01/03/2013"*		OK
bb. In CDM-PDD section C.2.1.2 is the length of the	EB	Ann	Yes:		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
first crediting period in years and months provided?	41	12	*" 7 years, 0 months"*		
cc. In CDM-PDD section C.2.2 is the fixed crediting period at most ten (10) years provided?	EB 41	Ann 12	N/A.		OK
dd. In CDM-PDD section C.2.2.1are the dates provided in the following format: (DD/MM/YYYY)?	EB 41	Ann 12	N/A.		OK
ee. In CDM-PDD section C.2.2.2 is te length of the crediting period in years and months Provided?	EB 41	Ann 12	N/A.		OK
ff. In CDM-PDD section D.2 are the conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the Host Party, if environmental impacts are considered significant by the project participants or the Host, provided?	EB 41	Ann 12	According o the PDD v.1: *"Given the project already possesses the preliminary environmental license, it can be concluded that it does not indicate in significant negative transboundary environmental impacts; otherwise the license would not have been issued by the environmental agency".*		OK
gg. In CDM-PDD section E.1 are the following provided?	EB 41	Ann 12	-	-	-
i. The process by which comments by local stakeholders have been invited and compiled. An invitation for comments by local stakeholders shall be made in an open and transparent manner, in a way that facilities comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted.	EB 41	Ann 12	**CL 05**: It is not clear, whether the invitation letters sent to those institutions listed in section E.1 of the PDD v.1 (local stakeholders), was efficiently to reach and inform in a transparent manner, also the local population living close to the project site.	**CL 05**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. The project activity is described in a manner, which allows the local stakeholders to understand the project activity, taking into account confidentiality provisions of the CDM modalities and procedures.	EB 41	Ann 12	**CL 06**: the PDD v.1 refers to the following projects: Delta do Parnaíba, Porto das Barcas and Porto Salgado, however the invitation letters make reference to Delta do Paranaíba, Porto das Barcas e Rio Igaraçu.	**CL 06**	OK
iii. The local stakeholder process has been completed before submitting the proposed project activity to the DOE for validation.	EB 41	Ann 12	Yes. As presented in the PDD v.1: *"The Portuguese version of the PDD was published at the internet website <http://sites.google.com/site/consultadcp/> on 26/10/2011 which is also the date when the invitation letters were sent to the following agents"* While the PDD upload was done by the DOE in 11/11/2011. (15 days after the local stakeholder comments period)		**OK**
hh. In CDM-PDD section E.2 are following provided?	EB 41	Ann 12	**-**	**-**	**-**
i. Identification of local stakeholders that have made comments	EB 41	Ann 12	According to the PDD V.1, no comments have been received until the PDD be submitted to the DOE.		OK
ii. A summary of this comments.	EB 41	Ann 12	N/A. Please refer to item 3.hh.i, above		OK
ii. In CDM-PDD section E.3 is the explanation of how due account have been taken of comments received from local stakeholders provided?	EB 41	Ann 12	N/A. Please refer to item 3.hh.i, above		OK
jj. In CDM-PDD Annex 1 are the following	EB	Ann	-	-	-

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
provided?	41	12			
i. Contact information of project participants	EB 41	Ann 12	Yes.		OK
ii. For each organisation listed in section A.3 the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail	EB 41	Ann 12	Yes.		OK
kk. In CDM-PDD Annex 2 is information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties provided?	EB 41	Ann 12	N/A, according to the PDD v.1: "No public funding is involved in the present project. This project is not a diverted ODA from an Annex 1 country. "		OK
ll. In CDM-PDD Annex 3 is the background information used in the application of the baseline methodology provided?	EB 41	Ann 12	No, according to the PDD v.1: "This section is intentionally left blank. For details please refer to section B.6.1. and B.6.3"		OK
mm. In CDM-PDD Annex 4 is the background information used in the application of the monitoring methodology provided?	EB 41	Ann 12	No, according to the PDD v.1: This section is intentionally left blank. For details please refer to section B.7.2."		OK
4. Project description					
a. Does the PDD contain a clear description of the project activity that provides the reader with a clear understanding of the precise nature of the	VVM	58	Please refer to CL 01, above	**CL 01**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
project activity and the technical aspects of its implementation?					
b. Is the description of the proposed CDM project activity as contained in the PDD:	VVM	59	-	-	-
i. sufficiently covering all relevant elements?	VVM	59	Please refer to CL 01, above	**CL 01**	OK
ii. acurate?	VVM	59	Please refer to CL 01, above	**CL 01**	OK
iii. providing the reader with a clear understanding of the nature of the proposed CDM project activity?	VVM	59	Please refer to CL 01, above	**CL 01**	OK
iv. Are there any changes/modifications compared to the webhosted PDD?	VVM	59	Please refer to CL 03, above	**CL 03**	OK
c. Is the proposed CDM project activity in existing facilities or or utilizing existing equipments?	VVM	60	No, it is a greenfield power plant		OK
d. Is the CDM project activity one of the following types:	VVM	60	-	-	-
i. Large scale?	VVM	60	Yes, it is a large scale CDM project		OK
ii. Non-bundled small scale projects with emission reductions exceeding 15,000 tonnes per year?	VVM	60	No. please refer to item 4.d.i, above		OK
iii. Bundled small scale projects, each with emission reductions not exceeding 15,000 tonnes?	VVM	60	No. please refer to item 4.d.i, above		OK
e. If yes to (c) and (d) above, was a physical site inspection conducted to confirm that the description in the PDD reflects the proposed	VVM	60	**CL 07**: According to the PP the construction phase has not started yet, thus the site visit was conducted in the PP's office in Sao Paulo city,	**CL 07**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
CDM project activity, unless other means are specified in the methodology?			between 15th and 16th December, 2011. However, the PP did not provide evidence to support this statement, justifying the absence of the site visit		
f. If yes to (d.iii) above, was the number of physical site visits base on samping?	VVM	60	N/A		OK
g. If yes is the sampling size appropriately justified through statistical analysis?	VVM	60	N/A		OK
h. For other individual proposed small scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, was a physical site inspection conducted?	VVM	61	No. please refer to item 4.d.i, above		OK
i. For all other proposed CDM project activities not referred to in paragraphs 59 – 61, was a physical site inspection conducted?	VVM	62	N/A		OK
j. If no, was it appropriately justified?	VVM	62	N/A		OK
k. Does the proposed CDM project activity involve the alteration of an existing installation or process?	VVM	63	No, it is a Greenfield power plant		OK
l. If yes, does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	VVM	63	N/A		OK
5. Baseline and monitoring methodology					
a. General requirement					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
a. Do the the baseline and monitoring methodologies selected by the project participants comply with the methodologies previously approved by the CDM Executive Board?	VVM	65	Yes. The ACM0002 v.12.1 was used to develop the PDD. The referred methodology is applicable to the proposed project activity.		OK
b. Is the selected methodology applicable to the project activity?	VVM	66	Refer to (5.b.a) below	-	-
c. Had the PP correctly applied the selected methodology?	VVM	66	Refer to (5.b.d) below	-	-
d. Had the selected methodology been correctly applied with respect to project boundary?	VVM	67	Refer to (5.c) below	-	-
e. Had the selected methodology been correctly applied with respect to baseline identification?	VVM	67	Refer to (5.d) below	-	-
f. Had the selected methodology been correctly applied with respect to Algorithms and/or formulae used to determine emission reductions?	VVM	67	Refer to (5.e) below	-	-
g. Had the selected methodology been correctly applied with respect to additionality?	VVM	67	Yes. As stated in the PDD v.1: *" The additionality of the proposed project activity will be assessed and demonstrated through the application of the "Tool for the demonstration and assessment of additionality".*		OK
i. Has the additionality of the project activity been demonstrated and assessed using the latest version of the "Tool for the	ACM	0002 v.11	**CAR 11**: the PP has used the version 5.2 of the "Tool for the demonstration and assessment of additionality", as stated in section B.1 of the PDD	**CAR 11**	OK

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demonstration and assessment of additionality" agreed by the Board, which is available on the UNFCCC website?			v.1, however this version has expired in 24 Nov 2011, The version 6 is now available.		
h. Had the selected methodology been correctly applied with respect to monitoring methodology?	VVM	67	Refer to (7.g), (7.h), (7.i), (7.j) and (7.k) below		OK
b. Applicability of the selected methodology to the project activity					
a. Is the selected baseline and monitoring methodology, previously approved by the CDM Executive Board, applicable to the project activity? Is the used version valid?	VVM	68	Yes. The ACM0002 v.12.1.0 was used to develop the PDD. The referred methodology is applicable to the proposed project activity. Also, the v. 12.1.0 is the last version made available by UNFCCC.		OK
i. 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 plants); (b) involve a capacity addition; (c) involve a retrofit of (an) existing plant(s); or (d) involve a replacement of (an) existing plant(s).	ACM	0002	The "Delta do Parnaíba Wind Power Plant Complex CDM Project Activity." fits in item "a" (greenfield plant)		OK
b. Has the DOE applied specific guidance provided by the CDM Executive Board in respect to the applicable approved methodology?	VVM	69	The only guidance used by the DOE is the GUIDELINES FOR COMPLETING THE PROJECT DESIGN DOCUMENT - EB 41, annex 12		OK
c. Is the methodology correctly quoted?	VVM	70	Yes. *"ACM0002 - "Consolidated baseline*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			methodology for grid-connected electricity generation from renewable sources" (Version 12.1.0)."		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
d. Are the applicability conditions of the methodology met?	VVM	71	Yes. Please refer to the item 3.l.i, above		OK
i. 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	ACM	0002	Yes, the project is a greenfield wind power plant		OK
ii. In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects which use Option 2: on page 10 to calculate the parameter $EG_{PJ,y}$): the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.	ACM	0002	N/A, please refer to item 5.b.d.i, above		OK
iii. In case of hydro power plants, one of the	ACM	0002	N/A, please refer to item 5.b.d.i, above		OK

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following conditions must apply: - The project activity is implemented in an existing reservoir, with no change in the volume of reservoir; or - The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the Project Emissions section, is greater than 4 W/m2; or - The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the Project Emissions section, is greater than 4 W/m2.					
iv. The methodology is not applicable to the following conditions. Please confirm - Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity - Biomass fired power plants; - Hydro power plants that result in new reservoirs or in the increase in existing reservoirs where the power density of the power plant is less than 4 W/m2.	ACM	0002	N/A, please refer to item 5.b.d.i, above		OK
v. In the case of retrofits, replacements, or	ACM	0002	N/A, please refer to item 5.b.d.i, above		OK

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capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".					
e. Is the proeject activity expected to result in emissions other than those allowed by the methodology?	VVM	71	No.		OK
f. Is the choice of the methodology justified?	VVM	71	Yes. Please refer to the item 3.l.i, above		OK
g. Have the project participants shown that the project activity meets each of the applicability conditions or the approved methodology?	VVM	71	Refer to (5.b.d) above	-	-
h. Have the project participants shown that the project activity meets each of the applicability conditions of any tool or other methodology component referred to the methodology?	VVM	71	There is no applicability conditions listed in the tools referred by ACM0002 v.12.1.0, so that the only applicability conditions applicable to the project are those listed in the own methodology; please refer to item 5.b.d, above.		OK
i. Are each of the applicability conditions of the "Tool to calculate the emission factor for an electricity system" met?	EB 50	Ann 40	N/A, please refer to item 5.b.h, above		OK
ii. Are each of the applicability conditions of the	EB	Ann	N/A, please refer to item 5.b.h, above		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
"Tool for the demonstration and assessment of additionality" met?	39	10			
iii. Are each of the applicability conditions of the "Combined tool to identify the baseline scenario and demonstrate additionality" met?	EB 28	Ann 14	N/A, please refer to item 5.b.h, above		OK
iv. Are each of the applicability conditions of the "Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion" met?	EB 41	Ann 11	N/A, please refer to item 5.b.h, above		OK
i. Is the DOE, based on local and sectoral knowledge, aware that comparable information is available from sources other than that used in the PDD?	VVM	71	Yes.		OK
j. If yes, was the PDD cross checked agains the other sources to confirm that the project activity meets the applicability conditions of the methodology? (provide the reference to these choices)	VVM	71	Some of the sources used to cross check against the PDD to confirm that the project activity meets the applicability conditions were: UNFCCC website, The UNFCCC site information were: Methodology ACM0002, version 12.1.0, Tool for the Demonstration and Assessment of additionality, version 05.2, Annex 12 of EB 35 - Tool to calculate the emission factor for an electricity system, version 2, Guidelines for completing the Project Design Document Form (CDM PDD), version 07.		OK
k. Can a determination regarding the applicability of the selected methodology to the proposed CDM	VVM	72	Yes. The project activity is applicable under the selected methodology.		OK

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project activity be made?					
l. If no, clarification of the methodoloy was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	72	N/A		OK
m. If answer to (5.b.d) above is “no”, revision or deviation from the methodology was requested, in accordance with the guidance provided by the CDM Executive Board?	VVM	73	N/A		OK
n. If yes to (5.b.l) and (5.b.m) above, a request for registration was submited before the CDM Executive Board has approved the proposed deviation or revision?	VVM	74	N/A		OK
c. Project boundary					
a. Does the PDD correctly describe the project boundary, including the physical delineation of the proposed CDM project activity included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity?	VVM	78	According to the PDD v.1, section B.3: *"According to ACM0002, the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to."* Also the figure 3 of the section B.3 of the PDD provides the physical delineation of the proposed CDM project activity.		OK
i. Does the extent of the project boundary, as described in the PDD, includes	ACM	0002	Yes, please refer to item 5.c.a, above		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to?					
ii. Are the greenhouse gases and emission sources that are included in or excluded from the project boundary shown in a table format as per applicable methodology?	ACM	0002	Yes, it was presented in section B.3 of the PDD v.1		OK
b. Is the delineation in the PDD of the project boundary correct and include identification of all locations, processes and equipment including secondary equipment and associated processes such as logistics etc.?	VVM	79	Please refer to CAR 05, above	**CAR 05**	
c. Does the delineation in the PDD of the project boundary meet the requirements of the selected baseline?	VVM	79	Yes, the PDD v.1 has considered the spatial extent of the project boundary including the project power plant and all power plants physically connected to the electricity system that the CDM project power plant is connected to, as defined by ACM0002 v.12.1.0.		OK
d. Have changes been made to the project boundary in comparison to the webhosted PDD. If yes please comment on the reason for the changes.	VVM	79	No.		OK
e. Have all sources and GHGs required by the methodology been included within the project boundary?	VVM	79	Yes, please refer to item 5.c.a.ii, above		OK

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f. Does the methodology allow project participant to choose whether a source or gas is to be included within the project boundary	VVM	79	No, the ACM0002 v.12.1.0 states which sources and GHGs must be included in each situation based in the type of the project.		OK
g. If yes, have the project participants justified that choice?	VVM	79	N/A		OK
h. If yes, is the justification provided reasonable? (provide reference to the supporting documented evidence provided by the project participants)	VVM	79	N/A		OK
d. Baseline identification					
a. Does the PDD identify the baseline for the proposed CDM project activity, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed CDM project activity?	VVM	81	Yes, please refer to section 3.n.i, above.		OK
b. Has any procedure contained in the methodology to identify the most reasonable baseline scenario, been correctly applied?	VVM	82	Yes.		OK
i. If the project activity is the install a new grid-connected renewable power plant/unit (greenfield plant), is the baseline scenario identified appropriately in accordance with the ACM0002 ver.12.1.0?	ACM	0002	Yes, the project is a Greenfield power plant and the baseline scenario was defined in accordance to the ACM0002 v.12.1.0. Please refer to section 3.n.i, above.		OK
ii. If the project activity is a capacity addition to existing grid-connected renewable	ACM	0002	N/A		OK

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power plant/unit, is the baseline scenario identified appropriately in accordance with the ACM0002 ver. 11? And is the point of time at which the generation facility would likely be replaced or retrofitted (DATE Baseline Retrofit) reasonably defined?					
iii. If the project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit, is the baseline scenario identified following the step-wise procedure in accordance with the ACM0002 ver.11?	ACM	0002	N/A		OK
iv. Are the realistic and credible alternative baseline scenarios for power generation appropriately identified following the Step 1 of the "Combined tool to identify the baseline scenario and demonstrate additionality"? (Step 1)	ACM	0002	This project is a greenfield plant and not a "retrofit or replacement of existing grid-connected renewable power plant/unit(s) at the project site" so than the "Combined tool to identify the baseline scenario and demonstrate additionality" does not apply, as stated in the ACM 0002 v.12.1.0. In the case of Greenfield plants (project case), the methodology states the baseline scenario as follow: *"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*		OK

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			reflected in the combined margin (CM) calculations described in the .Tool to calculate the emission factor for an electricity system".		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
v. Are the realistic and credible alternative baseline scenarios i.e. P1, P2 and P3 appropriately applied ***Barrier analysis*** following the Step 2 of the "Combined tool to identify the baseline scenario and demonstrate additionality"? (Step 2)	ACM	0002	N/A, please refer to item 5.d.b.iv, above		OK
vi. If more than one alternative is remaining after Step 2, is ***Investment analysis*** appropriately applied (apply an Investment Comparison as per step 3 of the "Combined tool to identify the baseline scenario and demonstrate additionality" or a Benchmark Analysis as per step 2b of the "Tool for the demonstration and assessment of additionality")? (Step 3)	ACM	0002	N/A, please refer to item 5.d.b.iv, above		OK
c. Does the selected methodology require use of tools (such as the "Tool for the demonstration and assessment of additionality" and the "Combined tool to identify the baseline scenario and demonstrate additionality") to establish the baseline scenario?	VVM	82	Yes, however please refer to item 5.d.b.iv, above		OK
d. If yes, was the methodology consulted on the application of these tools? (In such cases, the guidance in the methodology shall supersede the tool.)	VVM	82	N/A, please refer to item 5.d.b.iv, above		OK

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e. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	VVM	83	Not in the case of this project (greenfield plant)		OK
f. If yes, are all scenarios that are considered by the project participants and are supplementary to those required by the methodology reasonable in the context of the proposed CDM project activity?	VVM	83	N/A		OK
g. Has any reasonable alternative scenario been excluded?	VVM	83	N/A, please refer to item 5.d.b.iv, above		OK
h. Is the baseline scenario identified reasonably supported by:	VVM	84	please refer to item 5.d.b.iv, above		OK
i. Assumptions?	VVM	84	The baseline scenario is defined by the methodology and the baseline emission factor (grid emission factor) was defined ex-ante.		OK
ii. Calculations?	VVM	84	Yes.		OK
iii. Rationales?	VVM	84	Yes.		OK
i. Are the documents and sources referred to in the PDD correctly quoted and interpreted?	VVM	84	Yes.		OK
j. Was the information provided in the PDD cross checked with other verifiable and credible sources, such as local expert opinion, if available? (idendify the sources)	VVM	84	The information crosschecking was not necessary in the case of the baseline scenario identification, once, according to the ACM0002 v.12.1.0 the baseline scenario for greenfield power plants		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			(project case) is already defined, as follow: *"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".*		

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k. Have all applicable CDM requirements been taken into account in the identification of the baseline scenario for the proposed CDM project activity?	VVM	85	Yes. Please refer to item 5.d.b.iv, above		OK
l. Have all relevatn policies and circumstances been identified and correctly considered in the PDD, in accordance with the guidance by the CDM Executive Board?	VVM	85	The ACM0002 v.12.1.0 already provides the baseline scenario description for this kind of project activity. So that the EB22 annex 3 does not apply.		OK
m. Does the PDD provide 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?	VVM	86	Yes, please refer to item 5.d.j, above		OK
e. Algorithms and/or formulae used to determine emission reductions					
a. Do the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected baseline and monitoring?	VVM	89	Yes, please refer to item 3.p.i, above		OK
b. Have the equations and parameters in the PDD been correctly applied with respect those in the select approved methodology?	VVM	90	Yes. Basically the only calculation refers to the grid emission factor (baseline emission), and the project emission reductions (plant power generation delivered to the grid x grid emission factor)		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Are the Project emissions appropriately calculated?.	ACM	0002	Yes, please refer to section 3.p.i, above		OK
ii. Are the Baseline emissions appropriately calculated specifically for (a)greenfield plants or (b) retrofit and replacements or (c) capacity additions?	ACM	0002	Yes, this project fits in the first case (a)		OK
iii. Are the Leakage appropriately calculated?	ACM	0002	Yes, please refer to section 3.p.i, above		OK
iv. Are the Emission reductions appropriately calculated?	ACM	0002	Yes, please refer to section 3.p.i, above		OK
c. Have project participants prepared as part of the CDM-PDD an estimate of likely emission reductions for the proposed crediting period? This estimate should, in principle, employ the same methodology as selected for the calculation of emission reductions. Where the grid emission factor (EFCM,grid,y) is determined ex post during monitoring, project participants may use models or other tools to estimate the emission reductions prior to validation.	ACM	0002	Yes. The PP has opted to calculate emission reduction by using the ex-ante grid emission factor, thus both, ex-ante and ex-post calculation are done in the same way.		OK
d. Does the methodology provide for selection between different options for equations or parameters?	VVM	90	No options are provided for Greenfield renewable energy power plants. It is pre defined in the ACM0002 v.12.1.0		OK
e. If yes, has adequate justification been provided (based on the choice of the baseline scenario,	VVM	90	N/A		OK

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context of the proposed CDM project activity and other evidence provided)?					
f. If yes, have correct equations and parameters been used, in accordance with the methodology selected?	VVM	90	Refer to (5.e.b) above	-	-
g. Will data and parameters be monitored throughout the crediting period of the proposed CDM project activity?	VVM	91	Only the $EG_{facility,y}$ (Quantity of net electricity generation supplied by the project plant/unit to the grid in year y) will have to be monitored in the case of this greenfield project. However an ex-ante value was defined based in the *"capacity factor - as determined by the Wind Certification conducted by Camargo Schubert"*		OK
h. If no, and these data and parameters will remain fixed throughout the crediting period, are all data sources and assumptions:	VVM	91	the $\mathbf{EF}_{grid,\ CM,y}$ (combined Margin CO2 emission factor for grid connected power generation in year y) was defined ex-ante and will remain fixed during the crediting period, so its correlated parameters also remain fixed, as follow: ***EFCO2,m,i,y (***CO2 emission factor of fossil fuel type *i* used in power unit *m* in year *y)* $\boldsymbol{EG_{m,y}}$ ***and*** $\boldsymbol{EG_{k,y}}$ (Net electricity generated by power plant/unit *m* or *k* in year *y)* $\boldsymbol{\eta_{m,y}}$ (Average net energy conversion efficiency of		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			power unit *m* in year *y)* $EF_{grid,OM-adj,y}$ (Simple adjusted operating margin CO2 emission factor in year y) ***EFBM,2010 (***Build Margin CO2 emission factor in year *y)*		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. Appropriate and correct?	VVM	91	Yes.		OK
ii. Applicable to the proposed CDM project activity?	VVM	91	Yes.		OK
iii. Resulting in a conservative estimate of the emission reductions?	VVM	91	Yes.		OK
i. Will data and parameters be monitored on implementation and hence become available only after validation of the project activity?	VVM	91	Please refer to item 5.e.g, above		OK
j. If yes, are the estimates provided in the PDD for these data and parameters reasonable?	VVM	91	Yes, please refer to item 5.e.g, above		OK
6. Additionality of a project activity					
a. Does the PDD describe how a proposed CDM projet activity is additional?	VVM	94	Yes, please refer to item 3.o.i, above		OK
b. Does the CDM-PDD state the latest version of the additionality tool being used?	ACM	0002	No, please refer to CAR 11, above	**CAR 11**	
c. Were the following steps of the tool to assess additionality used:	EB 39	Ann 10	-	-	-
i. Identification of alternatives to the project activity?	EB 39	Ann 10	Yes, as follow: *" Scenario 1: Continuation of the current (previous) situation of electricity supplied by the Brazilian Interconnected Grid.* *Scenario 2: The proposed project activity undertaken without being registered as a CDM*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			project activity".		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
ii. Investment analysis to determine that the proposed project activity is either: 1) not the most economically or financially attractive, or 2) not economically or financially feasible?	EB 39	Ann 10	Yes.		OK
iii. Barriers analysis?	EB 39	Ann 10	N/A.		OK
iv. Common practice analysis?	EB 39	Ann 10	**CAR 12**: The section "Usinas Eólicas" listed in the Aneel hyperlink, presented in footnote 29 of PDD v.1, does not work, thus the information could not be retrieved.	**CAR 12**	OK
d. In step 1 (i) have all the sub-steps as below been followed?	EB 39	Ann 10	-	-	-
i. Sub-step 1a: Define alternatives to the project activity	EB 39	Ann 10	Yes, please refer to item 6.c.i, above		OK
ii. Sub-step 1b: Consistency with mandatory laws and regulations	EB 39	Ann 10	As stated in the PDD v.1: *" Both alternative scenarios identified above are in compliance with all regulations according the following entities: National Electric System Operator (ONS from the Portuguese Operador Nacional do Sistema Elétrico), Electricity Regulatory Agency (ANEEL from the Portuguese Agência Nacional de Energia Elétrica), Piauí State Environmental Agency (SEMAR - from the Portuguese Secretaria de Meio Ambiente e*	**CL 08**	OK

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			Recursos Hídricos) and the CDM Executive Board" However, **CL 08:** the auction results presented in the ANEEL hyperlink sent to the DOE: http://www.aneel.gov.br/aplicacoes/editais_geracao/documentos_editais.cfm?IdProgramaEdital=95 does not contain the 3 Wind power plants of the project activity.		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
e. Have the following alternatives been included while defining alternatives as per sub-step 1a?	EB 39	Ann 10	-	-	-
i. (a) The proposed project activity undertaken without being registered as a CDM project activity;	EB 39	Ann 10	Yes, please refer to item 6.c.i, above		OK
ii. (b) Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, taking into account, where relevant, examples of scenarios identified in the underlying methodology;	EB 39	Ann 10	**CAR 13**: The sub-step 1a, section B.5 of the PDD v.1 does not provide other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, as required by EB 39, annex 10.	**CAR 13**	OK
iii. (c) If applicable, continuation of the current situation (no project activity or other alternatives undertaken).	EB 39	Ann 10	Yes, please refer to item 6.c.i, above		OK
f. Has the project participant included the technologies or practices that provide outputs or services with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region?	EB 39	Ann 10	Please refer to CAR 13, above	**CAR 13**	OK
g. Has the outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project activity done correctly? Please briefly mention the	EB 39	Ann 10	**CAR 14**: No outcome is provided in section B.5 of the PDD v.1, as the result of sub-step 1a assessment, as required by EB 39, annex 10.	**CAR 14**	OK

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outcome.					
h. Is the alternative(s) in compliance with all mandatory applicable legal and regulatory requirements, even if these laws and regulations have objectives other than GHG reductions, e.g. to mitigate local air pollution.?	EB 39	Ann 10	Please refer to CAR 13, above	**CAR 13**	OK
i. If an alternative does not comply with all mandatory applicable legislation and regulations, has it been shown that, based on an examination of current practice in the country or region in which the law or regulation applies, those applicable legal or regulatory requirements are systematically not enforced and that noncompliance with those requirements is widespread in the country?	EB 39	Ann 10	N/A.		OK
j. Has the outcome of Step 1b: Identified realistic and credible alternative scenario(s) to the project activity that are in compliance with mandatory legislation and regulations taking into account the enforcement in the region or country and EB decisions on national and/or sectoral policies and regulations done correctly? Please state the outcome.	EB 39	Ann 10	Please refer to item 6.d.ii, above		OK
k. Has PP selected Step 2 (Investment analysis) or Step 3 (Barrier analysis) or both Steps 2 and 3?	EB 39	Ann 10	The PP has selected the Step 2 (Investment analysis)		OK

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l. In step 2, have all the sub-steps as below been followed?	EB 39	Ann 10	-	-	-
i. Sub-step 2a: Determine appropriate analysis method;	EB 39	Ann 10	Yes, *"Additionality is demonstrated through an investment benchmark analysis (option III) "*		OK
ii. Sub-step 2b: Option I. Apply simple cost analysis;	EB 39	Ann 10	N/A		OK
iii. Sub-step 2b: Option II. Apply investment comparison analysis;	EB 39	Ann 10	N/A		OK
iv. Sub-step 2b: Option III. Apply benchmark analysis;	EB 39	Ann 10	Yes.		OK
v. Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III);	EB 39	Ann 10	Yes.		OK
vi. Sub-step 2d: Sensitivity analysis (only applicable to Options II and III).	EB 39	Ann 10	Yes.		OK
m. In sub-step 2a has the determination of appropraite method of analysis done as per the guidance as below?	EB 39	Ann 10	-	-	-
i. Simple cost analysis if the CDM project activity and the alternatives identified in Step 1 generate no financial or economic benefits other than CDM related income (Option I).	EB 39	Ann 10	N/A. As stated in the section B.5 of the PDD v.1: "*both the CDM project activity and the alternatives identified in Step 1 generate financial and economic benefits other than CDM related income".*		OK
ii. Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis	EB 39	Ann 10	Yes, as stated in the section B.5 of the PDD v.1: *"The implementation of other project types of renewable*		OK

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(Option III). Specify option used with justification.			*energy generation - i.e. cogeneration or small hydro power plant projects - are not potential alternatives in the site where the project is planned.* *In addition, in accordance with paragraph 19, Annex 5, EB62, the benchmark analysis was identified as the most appropriate method to demonstrate the additionality of the proposed CDM Project Activity since the alternative to the implementation of the wind power plants is the supply of electricity from the grid".*		
n. Has the below guideline followed for sub-step 2b Option I. Apply simple cost analysis? Document the costs associated with the CDM project activity and the alternatives identified in Step1 and demonstrate that there is at least one alternative which is less costly than the project activity.	EB 39	Ann 10	N/A, please refer to item 6.I.i, above		OK
o. Has the below guideline followed for sub-step 2b Option II. Apply investment comparison analysis? Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service most suitable for the project type and decision-making context. Please specify	EB 39	Ann 10	N/A, please refer to item 6.I.i, above		OK
p. Has the below guideline followed for Sub-step 2b: Option III. Apply benchmark analysis?	EB 39	Ann 10	-	-	-
i. Identify the financial/economic indicator, such	EB	Ann	Yes, as stated in the section B.5 of the PDD v.1:		OK

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as IRR, most suitable for the project type and decision context.	39	10	*"The financial indicator identified for the project activity is the projects Internal Rate of Return (IRR) calculated in each wind power plant cash-flow".*		
ii. When applying Option II or Option III, the financial/economic analysis shall be based on parameters that are standard in the market, considering the specific characteristics of the project type, but not linked to the subjective profitability expectation or risk profile of a particular project developer. Only in the particular case where the project activity can be implemented by the project participant, the specific financial/economic situation of the company undertaking the project activity can be considered.	EB 39	Ann 10	Please refer to section 6.c "investment analysis", below		OK
iii. Discount rates and benchmarks shall be derived from: (a) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data; (b) Estimates of the cost of financing and required return on capital (e.g. commercial lending rates and guarantees	EB 39	Ann 10	Please refer to section 6.c "investment analysis", below		OK

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required for the country and the type of project activity concerned), based on bankers views and private equity investors/funds' required return on comparable projects; (c) A company internal benchmark (weighted average capital cost of the company), only in the particular case referred to above in 2. The project developers shall demonstrate that this benchmark has been consistently used in the past, i.e. that project activities under similar conditions developed by the same company used the same benchmark; (d) Government/official approved benchmark where such benchmarks are used for investment decisions; (e) Any other indicators, if the project participants can demonstrate that the above Options are not applicable and their indicator is appropriately justified. Please specify benchmark and justify.					
q. Has the below guideline followed for Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III)?	EB 39	Ann 10	-	-	-
i. Calculate the suitable financial indicator for the proposed CDM project activity and, in the case of Option II above, for the other alternatives. Include all relevant costs (including, for	EB 39	Ann 10	Yes, as follow: ***"Table 7 -*** *Comparison between Project IRR and the Weighted Average Cost of Capital"*		OK

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example, the investment cost, the operations and maintenance costs), and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives, ODA, etc, where applicable), and, as appropriate, non-market cost and benefits in the case of public investors if this is standard practice for the selection of public investments in the host country.			<table><tr><th></th><th>IRR (%)</th><th>WACC (%)</th></tr><tr><td>Delta do Parnaiba Complex</td><td>5.37</td><td>9.38</td></tr></table>		
ii. Present the investment analysis in a transparent manner and provide all the relevant assumptions, preferably in the CDM-PDD, or in separate annexes to the CDM-PDD.	EB 39	Ann 10	**CL 09**: It is not clear whether the exceeding energy, supposed to be sold in the spot market, was considered in the cash flow and how this could impact the financial analysis, as well as the project additionality.	**CL 09**	OK
iii. Justify and/or cite assumptions.	EB 39	Ann 10	Please refer to section 6.c “investment analysis”, below		OK
iv. In calculating the financial/economic indicator, the project’s risks can be included through the cash flow pattern, subject to project-specific expectations and assumptions.	EB 39	Ann 10	Please refer to section 6.c “investment analysis”, below		OK
v. Assumptions and input data for the investment analysis shall not differ across the project activity and its alternatives, unless differences can be well substantiated.	EB 39	Ann 10	N/A, please refer to item 6.I.i, above		OK
vi. Present in the CDM-PDD a clear comparison of	EB	Ann	Please refer to section 6.c “investment analysis”,		OK

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the financial indicator for the proposed CDM activity.Please specify details for above.	39	10	below		
r. Has the below guideline followed for Sub-step 2d: Sensitivity analysis (only applicable to Options II and III)? Include a sensitivity analysis that shows whether the conclusion regarding the financial/economic attractiveness is robust to reasonable variations in the critical assumptions.	EB 39	Ann 10	In the section B.5 of the PDD v.1 the PP states: *"A sensitivity analysis was conducted by altering the following parameters:* *Increase in electricity generation, which may increase the project revenues;* *Increase in electricity tariff, which may also influence project revenues;* *Reduction in expected investments* *Those parameters were selected as being the most likely to fluctuate over time. In addition, these variables constitute more than 20% of either total project costs or total project revenues…Financial analyses were performed altering each of these parameters by 10%, and assessing what was the impact on project's IRR…the project's IRR remains lower than the benchmark (9.38%) either increasing project revenues (electricity generation and tariff) or reducing project investments.*		OK

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s. Has the outcome of Step 2 clearly mentioned with justification?	EB 39	Ann 10	Yes, as follow: *"The IRR of the project activity without being registered as a CDM project is significantly below the sector benchmark, evidencing that project activity is not financially attractive to investor. Then, scenario 1 would be the most plausible alternative to the project activity, i.e. the continuation of the current situation with additional electricity supplied by the Brazilian Interconnected Grid"*		OK
t. In step 3: Barrier analysis have all the sub-steps as below been followed?	EB 39	Ann 10	N/A		OK
i. Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project activity;	EB 39	Ann 10	N/A		OK
ii. Sub-step 3 b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity).	EB 39	Ann 10	N/A		OK
u. Has the below guideline followed for Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project?	EB 39	Ann 10	N/A		OK
i. (a) Investment barriers: For alternatives undertaken and operated by private entities: Similar activities have only been implemented	EB 39	Ann 10	N/A		OK

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with grants or other non-commercial finance terms. No private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed CDM project activity is to be implemented, as demonstrated by the credit rating of the country or other country investments reports of reputed origin.					
ii. (b) Technological barriers: Skilled and/or properly trained labour to operate and maintain the technology is not available in the relevant country/region, which leads to an unacceptably high risk of equipment disrepair and malfunctioning or other underperformance; Lack of infrastructure for implementation and logistics for maintenance of the technology, Risk of technological failure: the process/technology failure risk in the local circumstances is significantly greater than for other technologies that provide services or outputs comparable to those of the proposed CDM project activity, as demonstrated by relevant scientific literature or technology manufacturer information, The particular	EB 39	Ann 10	N/A		OK

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technology used in the proposed project activity is not available in the relevant region.					
iii. (c) Barriers due to prevailing practice: The project activity is the "first of its kind".	EB 39	Ann 10	N/A		OK
iv. (d) Other barriers, preferably specified in the underlying methodology as examples.	EB 39	Ann 10	N/A		OK
v. Has the outcome from Step 3a clearly mentioned in PDD?	EB 39	Ann 10	N/A		OK
w. Has the below guideline followed for Sub-step 3 b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)?	EB 39	Ann 10	N/A		OK
i. If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity. In other words, demonstrate that the identified barriers do not prevent the implementation of at least one of the alternatives. Any alternative that would be prevented by the barriers identified in Sub-step 3a is not a viable alternative, and shall be eliminated from consideration.	EB 39	Ann 10	N/A		OK
ii. Provide transparent and documented evidence, and offer conservative interpretations of this	EB 39	Ann 10	N/A		OK

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documented evidence, as to how it demonstrates the existence and significance of the identified barriers and whether alternatives are prevented by these barriers.					
iii. The type of evidence to be provided should include at least one of the following: (a) Relevant legislation, regulatory information or industry norms; (b) Relevant (sectoral) studies or surveys (e.g. market surveys, technology studies, etc) undertaken by universities, research institutions, industry associations, companies, bilateral/multilateral institutions, etc; (c) Relevant statistical data from national or international statistics; (d) Documentation of relevant market data (e.g. market prices, tariffs, rules); (e) Written documentation of independent expert judgments from industry, educational institutions (e.g. universities, technical schools, training centres), industry associations and others. Please specify.	EB 39	Ann 10	N/A		OK
x. Has the outcome from Step 3 clearly mentioned in PDD?	EB 39	Ann 10	N/A		OK
y. In step 4: Common practise analysis have all the sub-steps as below followed?	EB 39	Ann 10	-	-	-
i. Sub-step 4a: Analyze other activities similar to	EB	Ann	Yes.		OK

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the proposed project activity;	39	10	By following the *Guidelines on Common Practice*" (Annex 12, EB63), the PP has found 11 similar projects (step 1 and 2). However *"All the wind power plants identified in the previous step have received incentives from PROINFA (identified as a promotional policy)" (step 3).* Finally, in the step 4 the PP states: *"The factor determined above in step 4 is not greater than 0.2. Also Nall – Ndiff is not greater than 3. Hence, the proposed project activity cannot be considered a common practice in the applicable geographical area"*		
ii. Sub-step 4b: Discuss any similar Options that are occurring.	EB 39	Ann 10	Yes, please refer to item 6.y.i, above		OK
z. Has the below guideline followed for Sub-step 4a: Analyze other activities similar to the proposed project activity? Provide an analysis of any other activities that are operational and that are similar to the proposed project activity. Other CDM project activities are not to be included in this analysis. Provide documented evidence and,	EB 39	Ann 10	Yes, please refer to item 6.y.i, above		OK

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where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.					
aa. Has the below guideline followed for Sub-step 4b: Discuss any similar Options that are occurring? If similar activities are identified, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially/economically unattractive or subject to barriers. This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially/economically attractive (e.g., subsidies or other financial flows) and which the proposed project activity cannot use or did not face the barriers to which the proposed project activity is subject. In case similar projects are not accessible, the PDD should include justification about non-accessibility of data/information.	EB 39	Ann 10	Yes, please refer to item 6.y.i, above		OK

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bb. Has the outcome from Step 4 clearly mentioned in PDD?	EB 39	Ann 10	Yes, please refer to item 6.y.ii, above		OK
cc. Has it been proved that the porject is additional?	EB 39	Ann 10	Please refer to **CAR 12, 13, 14, CL 08, CL 09, CAR BQA 01** and **CL BQA 01** and **02**, below	**CAR 12, 13, 14, CL 08, CL 09, CAR BQA 01** and **CL BQA 01** and **02**	OK

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a. Prior consideration of the clean development mechanism					
a. Is the project ativity start date prior to the date of publication of the PDD for stakeholder comments?	VVM	98	No. Please refer to item 3.w.ii, above.		OK
b. If yes, were the CDM benefits considered necessary in the decision to undertake the project as a proposed CDM project activity?	VVM	98	N/A. Please refer to item 3.w.ii, above.		OK
c. Is the start date of the project activity, reported in the PDD, in accordance with the "Glossary of CDM terms", which states that "The starting date of a CDM project activity is the earliest date at which either the implementation or construction or real action of a project activity begins."?	VVM	99	**CL 10**: According to the section B.5 of PDD v.1 the project starting date was supposed to be the *"Major equipment orders"* on 30th November 2011. However, until 16th December 2011, this event had still not happened. Then it is not clear if this event will be updated and maintained as the project starting date, or if it's not the case to consider instead, the Bid Price Guarantee "Garantia de Fiel Cumprimento" (that corresponds to 5% of total investment of the project), and had happened on 5th December, 2011.	**CL 10**	OK
d. Does the project activity require construction, retrofit or other modifications?	VVM	99	Construction, it is a Greenfield project		OK
e. If yes, is it ensured that the date of commissioning cannot be considered as the project activity start date?	VVM	99	N/A. Please refer to item 3.w.ii, above.		OK
f. Is it a new project activity (a project activity with a start date on or after 02 August 2008) or an	VVM	100	It is a new project, with starting date expected to		OK

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existing project activity (a project activity with a start date before 02 August 2008)?			05/12/2010		
g. For a new project, for which PDD has not been published for global stakeholder consultation or a new methodology proposed to the CDM Executive Board before the project activity start date, had PPs informed the host Party DNA and the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status? (Provide reference to such confirmation from host Party DNA and UNFCCC secretariat).	VVM	101	N/A.		OK
h. For an existing project activity, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, are the following evidences provided:	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
ii. evidence that must indicate that awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project, including, inter alia:	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
a. minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participant, to undertake the project as a	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK

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proposed CDM project activity?					
iii. 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, including, inter alia:	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
a. contract with consultants for CDM/PDD/methodology services?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
b. Emission Reduction Purchase Agreements or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds)?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
c. evidence of agreements or negotiations with a DOE for validation services?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
d. submission of a new methodology to the CDM Executive Board?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
e. publication in newspaper?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
f. interviews with DNA?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
g. earlier correspondence on the project with the DNA or the UNFCCC secretariat?	VVM	102	N/A. Please refer to item 3.w.ii, above.		OK
h. Has the chronology of events including	VVM	102	**CAR 15**: The chronology of events including	**CAR**	OK

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time lines been appropriately captured and explained/detailed in the PDD?			activity time lines (future and past activities, as: licenses, project starting date, site preparation, construction, start-up, etc..) were not presented in the PDD v.1	**15**	
b. Identification of alternatives					
a. Does the approved methodology that is selected by the proposed CDM project activity prescribe the baseline scenario and hence no further analysis is required?	VVM	105	Yes, this is the case. Please refer to item 6.n.i		OK
b. If no, does the PDD identify credible alternatives to the project activity in order to determine the most realistic baseline scenario?	VVM	105	N/A		OK
c. Does the list of alternatives given in the PDD esure that:	VVM	106	-	-	-
i. 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?	VVM	106	Yes, please refer to item 6.c.i, above		OK
ii. the list contains all plausible alternatives that the DOE, on the basis of its local and sectoral knowledge, considers to be viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?	VVM	106	Please refer to CAR 13, above	**CAR 13**	OK
iii. the alternatives comply with all applicable	VVM	106	Please refer to CAR 13, above	**CAR**	OK

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and enforced legislation?				13	
c. Investment analysis					
a. Has investment analysis been used to demonstrate the additionality of the proposed CDM project activity?	VVM	108	Yes.The proposed project activity used the investment analysis to demonstrate the additionality.		OK
b. If yes, does the PDD provide evidence that the proposed CDM project activity would not be:	VVM	108	See Below.		OK
i. the most economically or financially attractive alternative?	VVM	108	Not Applicable.		NA
ii. economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs)?	VVM	108	Yes. The PDD and the spreadsheet demonstrate that the project is not attractive without the revenue from the sale of certified emission reductions (CERs)		OK
c. Was this shown by one of the following approaches?	VVM	109	See Below.		OK
i. The proposed CDM project activity would produce no financial or economic benefits other than CDM-related income. Document the costs associated with the proposed CDM project activity and the alternatives identified and demonstrate that there is at least one alternative which is less costly than the proposed CDM project activity.	VVM	109	Not Applicable.		NA
ii. The proposed CDM project activity is less economically or financially attractive than at	VVM	109	Not Applicable		NA

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least one other credible and realistic alternative.					
iii. The financial returns of the proposed CDM project activity would be insufficient to justify the required investment.	VVM	109	Yes.The PP demonstrated in the spreadsheet that the financial returns of the proposed CDM project activity are insufficient to justify the required investiment.		OK
d. Is the period of assessment limited to the proposed crediting period of the CDM project activity?	EB 61	Ann 13	No.		OK
e. Does the project IRR and equity IRR calculations reflect the period of expected operation of the underlying project activity (technical lifetime), or - if a shorter period is chosen - include the fair value of the project activity assets at the end of the assessment period?	EB 61	Ann 13	Yes.		OK
f. Does the IRR calculation include the cost of major maintenance and/or rehabilitation if these are expected to be incurred during the period of assessment?	EB 61	Ann 13	Yes. The Spreadsheet contains the costs of major maintenance through the O&M costs.		OK
g. Do the project participants justify the appropriateness of the period of assessment in the context of the underlying project activity, without reference to the proposed CDM crediting period?	EB 61	Ann 13	Yes.		OK
h. Does the cash flow in the final year include a fair	EB	Ann	No.		OK

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value of the project activity assets at the end of the assessment period?	61	13			
i. Has the fair value been calculated in accordance with local accounting regulations where available, or international best practice?	EB 61	Ann 13	Not applicable.		NA
j. Does the fair value calculations include both the book value of the asset and the reasonable expectation of the potential profit or loss on the realization of the assets?	EB 61	Ann 13	Not applicable.		NA
k. Was depreciation, and other non-cash items related to the project activity, which have been deducted in estimating gross profits on which tax is calculated, added back to net profits for the purpose of calculating the financial indicator (e.g. IRR, NPV)?	EB 61	Ann 13	Yes.		OK
l. Has taxation been included as an expense in the IRR/NPV calculation in cases where the benchmark or other financial indicator is intended for post-tax comparisons?	EB 61	Ann 13	Yes, it has been included.		OK
m. Are the input values used in all investment analysis valid and applicable at the time of the investment decision taken by the project participant?	EB 61	Ann 13	**CL BQA 1** – Clarify with evidences the moment of investment decision, in order to guarantee that the input values are the correct ones at this moment in the project chronology.	CL BQA 1	OK
n. Is the timing of the investment decision consistent and appropriate with the input values?	EB 61	Ann 13	Refer to the CL BQA 1.	CL BQA 1	OK

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o. Are all the listed input values been consistently applied in all calculations?	EB 61	Ann 13	Yes.		OK
p. Does the investment analysis reflect the economic decision making context at point of the decision to recomence the project in the case of project activities for which implementation ceases after the commencement and where implementation is recommenced due to consideration of the CDM?	EB 61	Ann 13	Not Applicable.		NA
q. Have project participants supplied the spreadsheet versions of all investment analysis?	EB 61	Ann 13	Yes.		OK
r. Are all formulas used in this analysis readable and all relevant cells be viewable and unprotected?	EB 61	Ann 13	Yes. All formulas and cells are viewable and could be verified by de DOE		OK
s. In cases where the project participant does not wish to make such a spreadsheet available to the public has the PP provided an exact read-only or PDF copy for general publication?	EB 61	Ann 13	Not Applicable.		NA
t. In case the PP wishes to black-out certain elements of the publicly available version, is it justifiable?	EB 61	Ann 13	Not Applicable.		NA
u. Was the cost of financing expenditures (i.e. loan repayments and interest) included in the calculation of project IRR?	EB 61	Ann 13	No.		OK
v. In the calculation of equity IRR, has only the	EB	Ann	Not Applicable.		NA

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portion of investment costs which is financed by equity been considered as the net cash outflow?	61	13			
w. Has the portion of the investment costs which is financed by debt been considered a cash outflow in the calcualtion of equity IRR? (this is not allowed)	EB 61	Ann 13	Not Applicable.		NA
x. Was a pre-tax benchmark be applied?	EB 61	Ann 13	No.		
y. In cases where a post-tax benchmark is applied, is actual interest payable taken into account in the calculation of income tax?	EB 61	Ann 13	Yes.		OK
z. In such situations, was interest calculated according to the prevailing commercial interest rates in the region, preferably by assessing the cost of other debt recently acquired by the project developer and by applying a debt-equity ratio used by the project developer for investments taken in the previous three years?	EB 61	Ann 13	Yes.		OK
aa. In cases where a benchmark approach is used is the applied benchmark appropriate to the type of IRR calculated?	EB 61	Ann 13	Yes. According to the “Guidelines of Investment Assessment- Version 5”, weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR.		OK
bb. Has local commercial lending rates or weighted average costs of capital (WACC) selected as appropriate benchmarks for a project IRR?	EB 61	Ann 13	Yes.		OK

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cc. Has required/expected returns on equity selected as appropriate benchmark for an equity IRR?	EB 61	Ann 13	Not Applicable.		NA.
dd. In case benchmarks supplied by relevant national authorities selected is it applicable to the project activity and the type of IRR calculation presented?	EB 61	Ann 13	Not Applicable.		NA.
ee. In the cases of projects which could be developed by an entity other than the project participant is the benchmark applied based on parameters that are standard in the market?	EB 61	Ann 13	Yes.		OK
ff. Whether a company-specific benchmark or a benchmark based on parameters that are standard in the market is suitable in the context of the underlying project activity?	EB 61	Ann 13	The benchmark was based on parameters that are standard in the market so it is suitable in the context of the underlying project activity.		OK
gg. Have internal company benchmarks/expected returns (including those used as the expected return on equity in the calculation of a weighted average cost of capital - WACC) been applied in cases where there is only one possible project developer?	EB 61	Ann 13	Not Applicable.		NA
hh. In such cases, have these values been used for similar projects with similar risks, developed by the same company or, if the company is brand new, would have been used for similar projects in the same sector in the country/region?	EB 61	Ann 13	Not Applicable.		NA

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ii. Has a minimum clear evidence of the resolution by the company's Board and/or shareholders been provided to the effect as above?	EB 61	Ann 13	Not Applicable.		NA
jj. Has a thorough assessment of the financial statements of the project developer - including the proposed WACC - to assess the past financial behavior of the entity during at least the last 3 years in relation to similar projects been conduted?	EB 61	Ann 13	Not Applicable.		NA
kk. If the benchmark is based on parameters that are standard in the market, is the cost of equity determined either by: (a) selecting the values provided in Appendix A; or by (b) calculting the cost of equity using best financial practices, based on data sources which can be clearly validated by the DOE, while properly justifying all underlying factors?	EB 61	Ann 13	In the PDD, the WACC calculation is presented and the rationale explained using the best financial practices, based on data sources which could be clearly validated by the DOE.		OK
ll. If a company internal benchmark is used, are the values in the table in Appendix A used, as a simple default option?	EB 61	Ann 13	No.		OK
mm. If a company's internal benchmark is used for the expected return on equity, is the cost of debt based on the weighted average cost of debt financing of the legal entity owning the CDM project activity?	EB 61	Ann 13	Not Applicable.		NA

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nn. For loans, is the weighted average cost of outstanding long-term debt used?	EB 61	Ann 13	Not Applicable.		NA
oo. For bonds, is the weighted average yield of the bonds during the last three months prior to the submission of the CDM-PDD for validation or prior to the investment decision, whichever is earlier, used? The use of bonds to determine the cost of debt is only appropriate for corporate bonds issued in the host country of the CDM project.	EB 61	Ann 13	Not Applicable.		NA
pp. In cases where the debt finance structure of the project is not yet available (e.g. a letter of intent for debt funding is not available), the cost of debt can be assumed as the commercial lending rate in the country or the yield of a 10 year bond issued by the government of the host country or, if this is not available, the bond with the maturity which is closest to 10 years. Was the following documented in the CDM-PDD?	EB 61	Ann 13	Not Applicable.		NA
i. for bonds: the key parameters of the bond including the time of maturity, yield, registration issuance in the financial system and set-up in the market;	EB 61	Ann 13	Not Applicable.		NA
ii. for loans from a financial institution: the contract of lending between the financial	EB 61	Ann 13	Not Applicable.		NA

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institution and the legal entity owning the assets of the project activity, or, in absence of the contract, a letter from the bank stating its intention to award the loan and the key terms for the loan;					
iii. for debt financing from a parent company: the transfer of capital to the legal entity, documented with the contract of lending between the parent company and the legal entity owning the assets of the project activity and/or the parameters of the corporate bonds as mentioned above. (This latter option is only valid for corporate bonds issued in the host country of the CDM project activity)	EB 61	Ann 13	Not Applicable.		NA
qq. If the benchmark is based on parameters that are standard in the market, is the cost of debt e calculated as the cost of financing in the capital markets (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on documented evidence from financial institutions with regard to the cost of debt financing of comparable projects?	EB 61	Ann 13	Yes.		OK
rr. In cases where this data is not available, is the	EB	Ann	Not Applicable.		NA

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commercial lending rate in the host country used to calculate the cost of debt?	61	13			
ss. If a company's internal benchmark is used for the expected return on equity, is the percentage of debt financing and equity financing reflect the long-term debt/equity finance structure of the legal entity owning the assets of the project activity?	EB 61	Ann 13	Not Applicable.		NA
tt. If: (a) the legal entity owning the assets of the project activity has balance sheets audited by a third party within two years prior to the submission of the CDM-PDD for validation; and (b) the accounting books of the legal entity reflect at least the total value of all the assets needed for the project activity. Is the percentage determined based on the latest balance sheet provided under local fiscal/accounting standards and rules?	EB 61	Ann 13	Not Applicable.		NA
uu. If the debt/equity finance structure is not yet available, was 50% debt and 50% equity financing assumed as a default?	EB 61	Ann 13	Yes.		OK
vv. Is the benchmark based on parameters that are standard in the market?	EB 61	Ann 13	Yes.		OK
ww. If yes, is the typical debt/equity finance structure observed in the sector of the country	EB 61	Ann 13	No.		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
used?					
xx. If such information is not readily available, was 50% debt and 50% equity financing assumed as a default?	EB 61	Ann 13	Yes.		OK
yy. Has an investment comparison analysis and not a benchmark analysis used when the proposed baseline scenario leaves the project participant no other choice than to make an investment to supply the same (or substitute) products or services?	EB 61	Ann 13	Not Applicable.		NA
zz. Have variables, including the initial investment cost, that constitute more than 20% of either total project costs or total project revenues been subjected to reasonable variation (positive and negative) and the results of this variation been presented in the PDD and be reproducible in the associated spreadsheets?	EB 61	Ann 13	Yes.		OK
aaa. Have a corrective action been raised for a variable to be included in the sensitivity analysis which constitute less than 20% and have a material impact on the analysis ?	EB 61	Ann 13	Yes.		OK
bbb. Is the range of variations selected is reasonable in the project context?	EB 61	Ann 13	Yes.		OK
ccc. Dos the variations in the sensitivity analysis at least cover a range of +10% and -	EB 61	Ann 13	Yes.		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
10%, unless this is not deemed appropriate in the context of the specific project circumstances?					
ddd. In cases where a scenario will result in the project activity passing the benchmark or becoming the most financially attractive alternative, is an assessment done of the probability of the occurrence of this scenario in comparison to the likelihood of the assumptions in the presented investment analysis, taking into consideration correlations between the variables as well as the specific socio-economic and policy context of the project activity?	EB 51	Ann 58	Not applicable.		NA.
eee. Was the plant load factor defined ex-ante in the CDM-PDD according to one of the following options:	EB 48	Ann 11	See Below.		OK
i. The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval?	EB 48	Ann 11	Not Applicable		NA
ii. The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company)?	EB 48	Ann 11	Refer to CAR BQA 1.	CAR BQA 1	OK
fff. Was a thorough assessment of all parameters and assumptions used in calculating the relevant	VVM	111	Yes. All parameters and assumptions used in calculating the relevant indicator are suitable and		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
financial indicator, and determine the accuracy and suitability of these parameters using the available evidence and expertise in relevant accounting practices conducted?			accurate.		
ggg. Were the parameters cross-checked agains third-party or publicly available sources, such as invoices or price indices?	VVM	111	**CAR BQA 01 –** Present all evidences to support the followings input values. Make sure that all information and evidences are based on the relevant information available at the time of the investment decision and not information available at an earlier or later point. Provide the dates of each evidence. -Plant Export Capacity:60 MW; -Number of Towers: 30; -Plant Capacity Factor: 55.8%; -Transmission loss (CCEE) -Power Output: 293,285 MWh; -PPA price: 104.76 R$/MWh -AEROGERADORES VESTAS- V100 1.6-100: R$165.690.000,00 - Gerenciamento de Contrato, Frete, Seguros, Comissionamento:R$ 3.488.471,82 -SE'S Unitárias 34,5kV: R$ 9.381.507,78; -Subestação 138kV-Banco de Transformadores: R$ 61,100,367.68	CAR BQA 1	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			-Linha de Transmissão 138kV: R$ 8,812,354.25 -Bay 138kV: R$1,311,875.00 -Civil: R$ 38.868.389,16; -Meio Ambiente: R$ 5.000.000,00; -Pessoal: R$ 8.354.081,21; -Engenharia do Proprietário:R$ 1.311.875,00; -Projeto Executivo: R$ 1.450.000,00; -Seguro: R$ 1.875.000,00; -O&M: R$ 115.000,00/Tower/Year -Land Lease: 1,80%; -Enviromental/Managerial: R$ 891,982.00; -Insurance: 0,27%; -TUSD: R$ 3,13/kW/month; -TUSD: 100%; -ANEEL: 385,7; -Energy Sold @ A-3: 32.8 MW -Forward PLD (NE region): variable; -Electricity Sales- PPA: variable; -PIS/COFINS: 3,65%; -Assumed Income for Social Tax: 12%; -Social Tax: 9%; -Assumed Income for Income Tax: 8%; -Income Tax: 25%		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
hhh. Were feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants reviewed?	VVM	111	Refer to CAR BQA 01.	CAR BQA 1	OK
iii. Was the correctnes of computations carried out and documented by the project participants assessed?	VVM	111	Refer to CAR BQA 01	CAR BQA 1	OK
jjj. Was the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions assessed?	VVM	111	Not applicable.		NA.
kkk. Is the type of benchmark applied is suitable for the type of financial indicator presented?	VVM	112	Yes. According to the “Guidelines of Investment Assessment- Version 5”, weighted average costs of capital (WACC) are appropriate benchmarks for a project IRR.		OK
lll. Do any risk premiums applied determining the benchmark reflect the risks associated with the project type or activity?	VVM	112	Yes.		OK
mmm. To determine this, was it assessed whether it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark by:	VVM	112	See Below.		
i. assessing previous investment decisions by the project participants involved?	VVM	112	Not Applicable.		NA.
ii. determining whether the same benchmark	VVM	112	Not Applicable.		NA.

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
has been applied?					
iii. determining if there are verifiable circumstances that have led to a change in the benchmark?	VVM	112	Not Applicable.		NA.
nnn. Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed CDM project activities?	VVM	113	**CL BQA 02** - Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed CDM project activities?	CL BQA 2	OK
ooo. If yes:	VVM	113	See Below.		
i. has the FSR been the basis of the decision to proceed with the investment in the project, i.e. that the period of time between the finalization of the FSR and the investment decision is sufficiently short for the DOE to confirm that it is unlikely in the context of the underlying project activity that the input values would have materially changed?	VVM	113	Refer to CL BQA 02.	CL BQA 2	OK
ii. Are the values used in the PDD and associated annexes fully consistent with the FSR?	VVM	113	Refer to CL BQA 02.	CL BQA 2	OK
iii. If not, was the appropriateness of the values validated?	VVM	113	Refer to CL BQA 02.	CL BQA 2	OK
iv. On the basis of its specific local and sectoral expertise, is confirmation provided,	VVM	113	Refer to CL BQA 02.	CL BQA 2	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
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?					
d. Barrier analysis					
a. Has barrier analysis been used to demonstrated the additionality of the proposed CDM project activity?	VVM	115	No.		OK
b. If yes, does the PDD demonstrate that the proposed CDM project activity faces barriers that:	VVM	115	N/A		OK
i. prevent the implementation of this type of proposed CMD project activity?	VVM	115	N/A		OK
ii. do not prevent the implementation of at least one of the alternatives?	VVM	115	N/A		OK
c. Are there any issues that have a clear direct impact on the financial returns of the project activity, other than: risk related barriers, for example risk of technical failure, that could have negative effects on the financial performance; or barriers related to the unavailability of sources of finance for the project activity? {If yes, these issues cannot be considered barriers and shall be assessed by investment analysis. [Refer to (6.c) above]}	VVM	116	N/A		OK
d. Were the barriers determined as real by:	VVM	117	N/A		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
i. asssing the available evidence and/or undertaking interviews with relevant individuals (including members of industry associations, government officials or local experts if necessary) to determine whether the barriers listed in the PDD exist?	VVM	117	N/A		OK
ii. ensuring that existence of barriers is substantiated by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics?	VVM	117	N/A		OK
iii. Is existence of a barrier substantiated only by the opinions of the project participants? (If yes, this barrier cannot be considered as adequately substantiated)	VVM	117	N/A		OK
e. Were the barriers determined as preventing the implementation of the project activity but not the implementation of at least one of the possible alternatives by applying local and sectoral expertise to judge whether a barrier or set of barriers would prevent the implementation of the proposed CDM project activity and would not equally prevent implementation of *at least one of* the possible alternatives, in particular the identified baseline scenario?	VVM	117	N/A		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
e. Common practice analysis					
a. Is this a proposed large-scale, or first-of-its kind small-scale project activity?	VVM	119	It is a large-scale project activity.		OK
b. If yes, was common practice analysis carried out as a credibility check of the other available evidence used by the project participants to demonstrate additionality?	VVM	119	Yes, please refer to item 6.y.i, above		OK
c. Was it assessed whether the geograpphical scope (e.g. 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? (For certain technologis the relevatn region for assessment will be local and for others it may be transnational/global.	VVM	120	The entire host country was used.		OK
d. Was a region other than the entire host country chosen?	VVM	120	No, please refer to item 6.e.c, above		OK
e. If yes, was the explanation why this region is more appropriate assessed?	VVM	120	N/A, please refer to item 6.e.c, above		OK
f. Using official sources and local and industry expertise, was it determined to what extent similar and operational projects (e.g., using similar technology or practice), other than CDM project activities, have been undertaken in the defined region?	VVM	120	Yes, according to the PDD v.1: *"The database of ANEEL (2009b) and UNFCCC (2009) were used"* please refer to item 6.y.i, above		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
g. Are similar and operational projects, other than CDM project activities, already ”widely observed and commonly carried out” in the defined region?	VVM	120	No, please refer to item 6.y.i, above		OK
h. If yes, was it assessed whether there are essential distinctions between the proposed CDM project activity and the other similar activities?	VVM	120	Yes, please refer to item 6.y.i, above		OK
7. Monotoring plan					
a. Does the PDD include a monitoring plan?	VVM	122	Yes.		OK
b. Is this monitoring plan based on the approved monitoring methodology applied to the proposed CDM project activity?	VVM	122	Yes. ACM0002 v.12.1.0		OK
c. Were the list of parameters required by the the selected methodology identified?	VVM	123	Yes. The applicable parameters were addressed in the monitoring plan.		OK
d. Does the monitoring plan contains all necessary parameters?	VVM	123	Yes, once the Delta do Parnaíba Wind Power Plant Complex CDM Project Activity is a greenfield project and has defined the grid emission factor ex-ante, the only parameter to be monitored, according to the ACM0002 v.12.1.0, is the "$EG_{facility,y}$ " (Quantity of net electricity supplied by the project to the grid in year y).		OK
e. Are the parameters clearly described?	VVM	123	Yes, please refer to item 7.d, above		OK
f. Does the means of monitoring described in the plan comply with the requirements of the methodology?	VVM	123	Yes. please refer to item 3.t.ii.b, above		OK
g. Are all data and parameters monitored as per	ACM	0002	Yes, please refer to item 7.d, above		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
monitoring methodology?					
h. Are all data collected as part of monitoring archived electronically and kept at least for 2 years after the end of the last crediting period?	ACM	0002	**CAR 16**: the monitoring plan of the PDD v.1 does not inform whether all data collected as part of monitoring archived electronically and kept at least for 2 years after the end of the last crediting period, as required by ACM0002.	**CAR 16**	OK
i. Are 100% of the data monitored, if not indicated otherwise?	ACM	0002	Please refer to item 7.d, above.		OK
j. Are measurements conducted with calibrated measurement equipment according to relevant industry standards?	ACM	0002	Yes, as presented in the section B.7.2 of the PDD v.1: *"There will be two energy meters (principal and backup) located at the substation, as specified by CCEE. Before the operation starts, CCEE demands that these meters are individually registered within their system and calibrated by an entity with Rede Brasileira de Calibração (RBC) credential. Beyond that, energy information will be controlled in real time by CCEE."*		OK
k. Are the monitoring provisions in the tools referred to in the methodology correctly applied?	ACM	0002	N/A.		OK
l. Are the monitoring arrangements described in the monitoring plan feasibl within the project design?	VVM	123	**CL 11**: It is not clear how the meters will be set at the shared substation for the project monitoring purpose, and if this arrangement will be able to identify precisely the Quantity of net electricity	**CL 11**	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			supplied by the project to the grid in year y, taken due account that the same substation will be shared with other power plants.		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
m. Are the following means of implementation of the monitoring plan sufficient to ensure that the emission reductions achieved by/resulting from the proposed CDM project activity can be reported ex post and verified:	VVM	123	-	-	-
i. data management procedures?	VVM	123	Yes, as presented in section B 7.2 of the PDD v.1: *"The company that owns the wind farms will be the responsible for data collection and archiving as well as the calibration and maintenance of the monitoring equipment, for dealing with possible monitoring data adjustments and uncertainties, review of reported results/data, internal audits of GHG project compliance with operational requirements and corrective actions. Also, it is responsible for project management, as well as for the organising and training of the staff in the appropriate monitoring, measurement and reporting techniques".*		OK
ii. quality assurance procedures?	VVM	123	Yes. As presented in item B 7.2 of the PDD v.1: "*The Project owner will proceed with the necessary monitoring measures as established in the procedures from the Electric System National Operator (ONS – from the Portuguese Operador Nacional do Sistema), Brazilian Electricity*		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			Regulatory Agency (ANEEL from the Portuguese Agência Nacional de Energia Elétrica) and the Electric Power Commercialization Chamber (CCEE form the Portuguese Câmara de Comercialização de Energia Elétrica)… The total electricity exported to the grid will be monitored following the procedures and requirements established by ONS which defines the technical characteristics and precision class (0.2% of maximum permissible error) of the electricity meters to be used[36]. In addition, ONS also rules about the electricity meter calibration requirements (every two years)[37]"		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iii. quality control procedures?	VVM	123	Please refer to item 7m.ii, above		OK
8. Sustainable development					
a. Does the CDM project activity assists Parties not included in Annex I to the Convention in achieving sustainable development?	VVM	125	Yes, please refer to the item 3.d.iii, above.		OK
b. Does the letter of approval by the DNA of the host Party confirm the contribution of the proposed CDM project activity to the sustainable development of the host Party?	VVM	126	Please refer to CAR 01, above	**CAR 01**	OK
9. Local stakeholder consultation					
a. Were local stakeholders (public, including individuals, groups or communities affected, of likely to be affected, by the proposed CDM project activity or actions leading to the implementation of such an activity) invited by the PPs to comment on the proposed CDM project activity prior to the publication of the PDD on the UNFCCC website?	VVM	128	Please refer to CL 05 and CL 06, above	**CL 05 and CL 06**	OK
b. Have comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity been invited?	VVM	129	Please refer to CL 05, above	**CL 05**	OK
c. Is the summary of the comments received as provided in the PDD complete?	VVM	129	N/A. Please refer to item 3.hh.i, above		OK
d. Have the project participants taken due account	VVM	129	N/A. Please refer to item 3.hh.i, above		OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
of any comments received and described this process in the PDD?					
10. Environmental impacts					
a. Have the project participants submitted documentation on the analysis of the environmental impacts of the project activity?	VVM	131	**CAR 17**: the documentation on the analysis of the environmental impacts of the project activity was not submitted to the DOE, furthermore, it is not clear why the PP refers to environmental impact assessment and respective environmental impact report, once the licences refer to Simplified Environmental Report.	**CAR 17**	OK
b. Have the project participants undertaken an analysis of environmental impacts?	VVM	132	Please refer to CAR 17, above	**CAR 17**	OK
c. Does the host Party require an environmental impact assessment?	VVM	132	No, in this case the requirement is the RAS (Simplified Environmental Report), as stated by the art. 1º, inciso IV da Resolução CONAMA nº 279/2001, please refer to CAR 17, above	**CAR 17**	OK
d. If yes, have the project participants undertaken an environmental impact assessment?	VVM	132	No, please refer to item 10.c, above.		OK

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
CAR 01: The PP didn't provide to the DOE the letter of approval from the party (Brazil) obtained for this CDM project, according to the VVM, §44 requirements.	VVM 44	*Answer 03/02/2012* The Letter of Approval will be issued only after all the required documents, including the Validation Report, are submitted to the Brazilian DNA (Article 6 of the Resolution #1 of the Brazilian DNA: CIMGC – Comissão Interministerial de Mudança Global do Clima). The Letter of Approval will be forward to the DOE when it is issued.	Answer 1 (09/02/2012) The DOE confirms that it is a Brazilian DNA determination that the letter of approval must be issued just after the DOE positive validation. In this case the Brazilian DNA states that the validation report must contain the following sentence: *"Prior to the submission of the Project Design Document and the Validation Report to the CDM Executive Board, the Project will have to receive the written approval of voluntary participation from the DNA of Brazil, including the confirmation that the Project assists the country in achieving sustainable development".*

			CAR 01 is closed
CAR 02: In the section A.4.3 of the PDD v.1, the PP did not address information regarding environmentally safety and technology/know-how transference, as required by EB 41, annex 12.	EB 41 Ann 12	*Answer 03/02/2012* The requested information was included in section A.4.3. of the revised version of the PDD, dated 03/02/2012.	Answer 1 (09/02/2012) Ok, the missing information was added to the section A.4.3 of PDD v.2, as follow: *"The equipment and technology utilized in the proposed project activity has been applied to similar projects all over the world. Thus, no adverse effects to human health as well as the environment are expected from their installation.* *Some components of the wind turbines, like the blades, are built locally. Therefore, thought not solely connected to the implementation of the project, it can be said that the expansion in the electricity generation by wind power plants, favors the local industry and contributes to the technology transfer to the Host Country".* **CAR 02 is closed**
CAR 03: No explanation regarding the purpose of project activity with scenario existing prior to the start	EB 41 Ann 12	*Answer 03/02/2012* The requested information was included	Answer 1 (09/02/2012)

of project, scope or present activities and the baseline scenario was provided in section A.4.3 of the PDD v.1, as required by EB41, annex 12.		in section A.4.3. of the revised version of the PDD, dated 03/02/2012.	Ok, the missing information was added to the section A.4.3 of PDD v.2, as follow: *"…in a site where no electricity was generated prior to their implementation. In this sense, the baseline scenario is the same as the scenario existing prior to the implementation of the project activity, which is electricity supplied by the grid."* **CAR 03 is closed**
CAR 04: No information regarding emissions sources or GHGs involved was found in the section A.4.3 of the PDD v.1, as required by EB 41, annex 12.	EB 41 Ann 12	*Answer 03/02/2012* The requested information was included in section A.4.3. of the revised version of the PDD, dated 03/02/2012.	Answer 1 (09/02/2012) Ok, the missing information was added to the section A.4.3 of PDD v.2, as follow: *"the proposed project activity reduces emissions of greenhouse gases (GHG), i.e. CO2, by displacing electricity generation from the mix of fossil fuel sources connected to the Brazilian Grid, which would be generated (and emitted) in its absence".* **CAR 04 is closed**

CAR 05: The flow diagram presented in the PDD v.1, section B.3 did not consider the flow of energy, as required by EB 41, annex 12.	EB 41 Ann 12	*Answer 03/02/2012* The flow diagram was corrected in the second version of the PDD, dated 03/02/2012. *Answer 13/03/2012* It is PPs understanding that the figure already presents the flow of energy (form the power plants to substation and then to the grid). In addition to the requested information, the installed capacity of each wind power plant is mentioned in the figure. Please refer to the revised third version of the PDD, dated 13/02/2012..	Answer 1 (09/02/2012) The flow of energy was not included in the figure 2 of section B.3 of the PDD v.2, as stated by the PP, in this form. Answer 2 (13/02/2012). The PDD v.3 was amended **CAR 05 is closed**
CAR 06: Some of the parameter values ($EFCO_{2,m,i,y}$, $EG_{m,y}$ *and* $EG_{k,y}$ *and* $\eta_{m,y}$) make reference to the "*emission factor calculation spreadsheet which is attached to the PDD*" however, this spreadsheet was not presented to the validation team.	EB 41 Ann 12	*Answer 03/02/2012* Project Participants have opted to change the data vintage used for the calculation of the emission factor of the grid. Instead of ex-ante option, the revised version of the PDD used the ex-post option. With the purpose of estimating the ex-post emission factor, data from 2010 which is available at the Brazilian DNA website, was used. Please refer to the second version of the PDD and CERs calculation spreadsheet, both dated 03/02/2012.	Answer 1 (09/02/2012) The PP has changed the EF calculation approach. Now the EF will be updated according to the Brazilian DNA values, issued annually by this entity. Therefore the CAR 06 is no longer applicable. **CAR 06 is closed**
CAR 07: No information regarding responsibilities and institutional arrangements for data collection and archiving was provided in section B.7.2 of the	EB 41 Ann 12	*Answer 03/02/2012* As described in section B.7.2, Omega Energia Renovável S.A. which is the	Answer 1 (09/02/2012)

PDD v.1, as required by EB41 annex 12.		project owner will be responsible for data collection, archiving, calibration and maintenance of the monitoring equipment.	Ok, according to the PDD v.2: *"The company that owns the wind farms - Omega Energia Renovável S.A. - will be the responsible for data collection and archiving as well as the calibration and maintenance of the monitoring equipment, for dealing with possible monitoring data adjustments and uncertainties, review of reported results/data, internal audits of GHG project compliance with operational requirements and corrective actions".* **CAR 07 is closed**
CAR 08: the section B.8 of the PDD v.1, does not indicate if the person/entity is also a project participant listed in Annex 1, as required by EB 41, annex 12.	EB 41, Ann 12	*Answer 03/02/2012* The requested information was included in section B.8 of the revised version of the PDD, dated 03/02/2012.	Answer 1 (09/02/2012) Ok, in section B.8 of the PDD v.2, the PP states: *"Ecopart Assessoria em Negócios Empresariais Ltda. is also a Project Participant listed in Annex 1."* **CAR 08 is closed**
CAR 09: The PP did not state in section C.2 of the PDD v.1, if the project activity will use a renewable or a fixed crediting period, as required by EB 41, annex 12"	EB 41, Ann 12	*Answer 03/02/2012* The requested information was included in section C.2 of the revised version of the PDD. Please note that only section C.2.1. was completed since this section refers to the option actually chosen by the Project	Answer 1 (09/02/2012) Ok, the section C.2 of the PDD v.2, now states: "*The proposed project activity will use a renewable crediting period.*"

		Participants (PPs). It is PPs understanding that, since the fixed crediting period was not the chosen one, the sections referring to it must not be completed. Please refer to the second version of the PDD, dated 03/02/2012.	**CAR 09 is closed**
CAR 10: The section C.2.1 of the PDD v.1, does not make reference to the number of crediting period renewals, as required by EB 41, annex 12.	EB 41, Ann 12	*Answer 03/02/2012* It is PPs understanding that this section does not have to be completed since this information corresponds to the ruling provided by the EB 41, Annex 12. However, this information was included in section C.2.1 as requested by the DOE. Please refer to the second version of the PDD, dated 03/02/2012.	Answer 1 (09/02/2012) Ok, the section C.2.1 of the PDD v.2, now states: *"Each crediting period shall be at most 7 years and may be renewed at most two times."* **CAR 10 is closed**
CAR 11: the PP has used the version 5.2 of the "Tool for the demonstration and assessment of additionality", as stated in section B.1 of the PDD v.1, however this version has expired in 24 Nov 2011, The version 6 is now available.	ACM 0002 v. 12.1	*Answer 03/02/2012* The version of the mentioned Tool was updated. The main revisions are connected to the new guidance provided by the tool regarding the common practice analysis. Please refer to the second version of the PDD, 03/02/2012. Documents used in the common practice are referenced in the PDD and/or attached to this protocol.	Answer 1 (09/02/2012) Ok, the tool version was adjusted in section B.1 of the PDD v.2. The PP has also considered the new methodological procedures addressed in this new version of the tool. **CAR 11 is closed**
CAR 12: The section "Usinas Eólicas" listed in the Aneel hyperlink, presented in footnote 29 of PDD v.1, does not work, thus the information could not be retrieved.	EB 39 Ann 10	*Answer 03/02/2012* The section "Usinas Eólicas" listed in the Aneel hyperlink was working on 18/01/2012. The documents found in this section are attached to this protocol.	Answer 1 (09/02/2012) Ok, the referred document was provided. **CAR 12 is closed**

CAR 13: The sub-step 1a, section B.5 of the PDD v.1 does not provide other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, as required by EB 39, annex 10.	EB 39 Ann 10	*Answer 03/02/2012* Other types of alternatives are not realistic. An explanation for not including other alternatives was included in the second version of the PDD, dated 03/02/2012.	Answer 1 (09/02/2012) Ok, in the PDD v.2, the PP has explained why did not include other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas, as follow: "*Ecopart Assessoria em Negócios Empresariais Ltda. is the CDM consultancy and does not invest in the construction and operation of Wind Power Plants. Also Omega Energia Renovável S.A. focuses in the development of electricity generation projects using alternative sources, as the company's portfolio is basically composed by small hydro power plants and wind power plants. In addition to this, the only possible resource to be used for electricity generation at the site where the plants are going to be*

			located is the wind. Therefore, based on the nature of these two companies, namely the project participants, and the energy sources available at the site where the plants are going to be implemented, the only realistic alternatives to the project activity identified are: *Scenario 1:* *Continuation of the current (previous) situation of electricity supplied by the Brazilian Interconnected Grid.* *Scenario 2:* *The proposed project activity undertaken without being registered as a CDM project activity".* **CAR 13 is closed**
CAR 14: No outcome is provided in section B.5 of the PDD v.1, as the result of sub-step 1a assessment, as required by EB 39, annex 10.	EB 39 Ann 10	*Answer 03/02/2012* EB39, Annex 10 corresponds to the previous version of the additionality tool. As requested above in CAR11, this tool was up-dated. Anyway, the latest version of the tool (EB65, Annex 21) presents the same structure. Although Project	Answer 1 (09/02/2012) Ok, the DOE has the same understanding presented by the PP, thus the outcome of sub-step 1a, presented in PDD v.1 and PDD v.2

		Participants understand that including such statement is not necessary, the PDD was revised to clearly state that the outcome of sub-step 1a is the alternative scenarios identified as Scenario 1 and 2. Please refer to the second version of the PDD dated 03/02/2012.	is as follow: *"Scenario 1: Continuation of the current (previous) situation of electricity supplied by the Brazilian Interconnected Grid.* *Scenario 2: The proposed project activity undertaken without being registered as a CDM project activity".* **CAR 14 is closed**
CAR 15: The chronology of events including activity time lines (future and past activities, as: licenses, project starting date, site preparation, construction, start-up, etc..) were not presented in the PDD v.1	VVM 102	*Answer 03/02/2012* In accordance with the guidance provided by the Annex 12, EB 41, the presentation of an implementation timeline in section B.5. of the PDD is only necessary for CDM project activities for which the starting date of the project is before the commencement of the GSP. No event indicating a significant commitment towards the implementation of the project has happened yet. Therefore, the starting date of the project was revised to 02/05/2012 (please refer to the CL BQA 1 answer). This date is after the GSP started. Therefore, it is PPs understanding that this request is not applicable.	Answer 1 (09/02/2012) Ok, the DOE understands that the timeline helps to understand the project chronology as a whole, however the DOE also shares the PP understanding that the implementation timeline is not a CDM requirement, in cases when the validation process has begun before the project starting date (project case), thus **CAR 15 is closed**
CAR 16: the monitoring plan of the PDD v.1 does not inform whether all data collected as part of monitoring archived electronically and kept at	ACM 0002	*Answer 03/02/2012* The requested information was included in section B.7.3 of the revised version of	Answer 1 (09/02/2012)

least for 2 years after the end of the last crediting period, as required by ACM0002.		the PDD, dated 03/02/2012.	The PDD does not has the section B.7.3, Actually this input was done in section B.7.2 of the PDD v.2, as follow: "*Yet, in line with the CDM requirements, all data used to monitor the emission reductions by the proposed project activity will be kept for at least 2 years after the end of the last crediting period".* It is in accordance to the ACM0002 requirements. **CAR 16 is closed**
CAR 17: the documentation on the analysis of the environmental impacts of the project activity was not submitted to the DOE, furthermore, it is not clear why the PP refers to environmental impact assessment and respective environmental impact report, once the licences refer to Simplified Environmental Report.	VVM 131	*Answer 03/02/2012* In accordance with the Brazilian environmental laws, the environmental impact of wind power plants is small. In this sense, the licensing process of wind power plants only requires the Simplified Environmental Assessment. This information was included in the second version of the PDD, dated 03/02/2012. The Simplified Environmental Reports for the Wind Power Plants are attached.	Answer 1 (09/02/2012) In PDD v.2, the PP has correctly changed the term "environmental impact assessment/report" by "Simplified Environmental assessment/report.", as follow: "*in accordance with the National Environment Council (from the Portuguese CONAMA - Conselho Nacional do Meio Ambiente) Resolution #279, dated 27/06/2001*, wind power plants*

*Available at: http://www.mma.gov.br/port/conama/legiabre.cfm?codlegi=277

			must do a simplified environmental impact assessment in order to obtain the necessary licenses to the project." **CAR 17 is closed**
CAR BQA 01 – Present all evidences to support the followings input values. Make sure that all information and evidences are based on the relevant information available at the time of the investment decision and not information available at an earlier or later point. Provide the dates of each evidence. (a) -Plant Export Capacity:60 MW; (b) -Number of Towers: 30; (c) -Plant Capacity Factor: 55.8%; (d) -Transmission loss (CCEE) (e) -Power Output: 293,285 MWh; (f) -PPA price: 104.76 R$/MWh (g) -AEROGERADORES VESTAS- V100 1.6-100: R$165.690.000,00 (h) - Gerenciamento de Contrato, Frete, Seguros, Comissionamento:R$ 3.488.471,82 (i) -SE'S Unitárias 34,5kV: R$ 9.381.507,78; **(j)** -Subestação 138kV-Banco de Transformadores: R$ 61,100,367.68 (k) -Linha de Transmissão 138kV: R$ 8,812,354.25 **(l)** -Bay 138kV: R$1,311,875.00 (m) -Civil: R$ 38.868.389,16; (n) -Meio Ambiente: R$ 5.000.000,00; (o) -Pessoal: R$ 8.354.081,21; (p) -Engenharia do Proprietário:R$ 1.311.875,00; (q) -Projeto Executivo: R$ 1.450.000,00;	VVM 112	*Answer 03/02/2012* The investment decision is going to be made only when the project developer commits himself to expenditures related to the implementation of the project. As discussed below in CL BQA 1 answer, no event indicating a significant commitment towards the implementation of the project has happened yet. Therefore, the values used in the IRR calculation are based on the most recent information available at the time the GSP of the project started. The evidences requested by the DOE are listed below. (a) Provided in the IRR calculation spreadsheet corresponding to the preliminary study conducted by Garrad Hassan. This document was provided during the site visit; (b) Provided in the IRR calculation spreadsheet corresponding to the preliminary study conducted by Garrad Hassan. This document was provided during the site visit; (c) Provided in the IRR calculation spreadsheet corresponding to the preliminary study conducted by Garrad Hassan. This document was	First Answer (10/02/2012): All evidences have been checked and were considered in accordance to the CDM rules. CAR BQA 1 is closed.

(r) -Seguro: R$ 1.875.000,00; (s) -O&M: R$ 115.000,00/Tower/Year (t) -Land Lease: 1,80%; (u) -Enviromental/Managerial: R$ 891,982.00; (v) -Insurance: 0,27%; (w) -TUSD: R$ 3,13/kW/month; (x) -TUSD: 100%;		provided during the site visit; (d) No transmission losses are considered since the project is going to be connected to the distribution system; (e) The power output is a calculated parameter. The formulae is available in the Excel IRR calculation spreadsheet supplied during the site visit; (f) Reference to the PPA price is publicly available and mentioned in Table 7 of the PDD and also supplied as evidence to the CL 08; (g) Please refer to the file named "*WTG - Vestas / 25211-PR-OME-V100-2.0-95m REV0 25072011*" supplied to the DOE in the meeting held on 13/01/2012; (h) Please refer to the file named "*Planilha de Preços Complexo Eólico Parnaiba - Rev.2 OPÇÃO VESTAS*" supplied to the DOE in the meeting held on 13/01/2012; (i) Please refer to the file named "*Planilha de Preços Complexo Eólico Parnaiba - Rev.2 OPÇÃO VESTAS*" supplied to the DOE in the meeting held on 13/01/2012; (j) Please refer to the file named "*Planilha de Preços Complexo Eólico Parnaiba - Rev.2 OPÇÃO VESTAS*" supplied to the DOE in the meeting held on 13/01/2012;	

		(k) Please refer to the file named "*Planilha de Preços Complexo Eólico Parnaiba - Rev.2 OPÇÃO VESTAS*" supplied to the DOE in the meeting held on 13/01/2012; (l) Please refer to the file named "*Planilha de Preços Complexo Eólico Parnaiba - Rev.2 OPÇÃO VESTAS*" supplied to the DOE in the meeting held on 13/01/2012; (m) Please refer to the file named "*Civil - Cortez / Carta Proposta Delta (sem R Igaracu) Rev03*" supplied to the DOE in the meeting held on 13/01/2012; (n) This input value was based on PPs experience; (o) This input value was based on PPs experience; (p) Please refer to the file named "*Engecorps_ PP-01-10098-OER-R1*" supplied to the DOE in the meeting held on 13/01/2012; (q) Please refer to the file named "*Engecorps_ PP-01-10098-OER-R1*" supplied to the DOE in the meeting held on 13/01/2012; (r) This input value was based on PPs experience; (s) Please refer to page 11 of the file named "*WTG - Vestas / 25211-PR-OME-V100-2.0-95m REV0 25072011*" supplied to the DOE in the meeting held on 13/01/2012; (t) Please refer to the file named "*CAR*	

		BQA 1 - Contrato_PI_Ecopart BomJesus_Locação Porto Salgado" attached to this protocol; (u) This input value was based on PPs experience; (v) Based on PPs experience and consistent with the insurance of other operational small hydro power plants. Please refer to the files named "*Apólice - Hidrelétrica Pipoca - RCG*" and "*Apólice - Hidrelétrica Pipoca - RO*". The value used is slightly higher to account for the risk perception related to the implementation of wind power plants in Brazil; (w) Reference to the TUST fee is provided in the Excel file supplied to the DOE in the meeting held on 13/01/2012; (x) As discussed in Table 7 of the PDD, the discount in the TUSD fee is not being taken into account since it can be considered a type E- policy.	
CL 01: It is not clear in section A.2 fo the PDD v.1, what are the scenario existing prior to the start of the project, present scenario and baseline scenario, as required by EB41, annex 12.	EB 41 Ann 12	*Answer 03/02/2012* The requested information was included in section A.2 of the revised version of the PDD, dated 03/02/2012.	Answer 1 (09/02/2012) The missing information was added to section A.3 of the PDD v.2, as follow: *"No electricity was generated in the sites where the wind power plants are going to the implemented. In this sense, the baseline scenario is the same as the scenario existing*

			prior to the implementation of the project activity, which is electricity supplied by the grid" **CL 01 is closed**
CL 02: The section A.3 of the PDD v.1 refers to "*Omega Energia Renovável S.A*." as the Project participant, however during site visit a different structure was presented, that was composed for different companies (Zeta, Ecopart, Seawest, etc…). It´s is not clear what is the role of each company and who should be in charge of the CDM project.	EB 41 Ann 12	*Answer 03/02/2012* Ecopart Assessoria em Negócios Empresariais Ltda. is the company name of the CDM consultancy. Zeta Energia S.A. and Seawest do Brasil – Projetos e Participações Ltda. were the owners of the assets which were assigned to Omega Energia Renovável S.A. The formal documentation of the project will be updated in the due course. Nevertheless, the documentation is in line with the local regulations. Additionally, a document evidencing that the assets owned by Zeta Energia S.A. and Seawest do Brasil – Projetos e Participações Ltda. were transferred to Omega Energia Renovável S.A. is attached. In summary, the company that is responsible for the CDM Project Activity is Omega Energia Renovável S.A. that is listed as Project Participant. *Answer 13/03/2012* In order to build the plant a partnership between the Project Participants Omaga and Zeta, among other, was set-up. Please refer to the attached contract as a evidence of the agreement.	Answer 1 (09/02/2012) The companies structure was clarified, however the attached document does not refer to the transference of assets from Zeta Energia S.A. and Seawest do Brasil – Projetos e Participações Ltda to Omega Energia Renovável S.A., as mentioned by the PP, instead the document refers to the transference of assets from Ecopart Investimentos S.A. to Gamma Energia S.A. and Zeta Energia S.A. No reference to the PP (Omega Energia Renovável S.A.), was found in this document. Answer 2 (13/03/2012) Ok, the contract presented to the DOE (Segundo Aditamento ao Consórcio Delta - Final.pdf) clearly refers to the setting up a partnership

			between the PP (Omega Energia Renovável S.A), Seawest do Brasil – Projetos e Participações Ltda e Zeta Energia S.A. in order to participate in the ANEEL auction for energy hiring, with wind power projects (Complexo Delta) in the state of Piauí. **CL 02 is closed**
CL 03: Some technical parameters of the Garrad Hassan and Camargo Schubert documents, are different between them (e.g.: plant load factor), thus it is not clear which one refers to the real project situation and then supposed to be applicable to the PDD and investment analysis.	EB 41 Ann 12	*Answer 03/02/2012* As discussed during the site visit, the preliminary study conducted by Garrad Hassan shall be used to perform the investment analysis. Since the auction was conducted the technical configuration of the wind power plants has been optimized. Thus, although the Garrad Hassan study is not the final configuration of the plant, it represents the available arrangement by the time of the investment decision. Nevertheless, the Garrad Hassan certification does not provide the installed capacity separately for each one of the plants being considered under the proposed project activity. Then, for the purpose of emission reduction calculation and in order to provide a consistent technical description of the project (model of turbines, load	Answer 1 (09/02/2012) The DOE understand understands the PP´s approach for the applicability of each one of the two studies, However the preliminary study conducted by Garrad Hassan (used for Investment analysis), is restricted to a couple of sheets in the financial analysis spreadsheet. Furthermore, this preliminary study is very limited in terms of project information, and the configuration presented there is significantly different from the project configuration, especially regarding number of turbines, project installed capacity, and annual production in GWh, as follow:

		fator, etc…) the wind certification conducted by Camargo Schubert which was available by the time the auction was conducted, is used. *Answer 13/03/2012* PPs understand the concerns of the DOE related to the acceptance of a preliminary study which was used to perform the investment analysis. Nevertheless, it must be noted that the starting date of the project, consisting of the first relevant commitment towards the implementation of the project, is a future date scheduled to happen after the GSP started. In this sense, the preliminary study conducted by Garrad Hassan that was the most up-dated information available at the time the GSP of the project started, was used. It is PPs understanding that this assumption is in accordance with the requirements and shall not be changed. From the date the PDD was first revised until now, the wind certification and the final layout of the wind power plants were approved. Therefore, the technical configuration of the wind power plants which is used for emission reduction calculations was revised in the third version of the PDD. The influence concerning the difference of the installed capacity – thus electricity generation – between the preliminary and final wind	• Garrad Hassan: 30 turbines; 60MW, 293 GWh • Final project configuration: 41 turbines; 75.6MW, 341 GWh Thus it is not clear whether this preliminary study is applicable to the Investment analysis. Answer 2 (13/03/2012) The PP´s argument that the Garrad Hassan study, (used in the Investment analysis) is the most up-dated information available by the time of the Global stakeholder process, is not valid, once the GSP has started in 15th November 2011 and Camargo Schubert reports (more detailed and updated than GH study), were issued in 16th March 2011. Also the Camargo Schubert report was already available by the time of Auction, once as presented in the PDD v.3: *"The project developer has negotiated electricity to be generated by the plants in the 12th New Energy Auction, which took*

		certifications in the financial analysis of the project is discussed in the sensitivity analysis section. Please refer to the final wind certification of the plants as well as the revised documents (PDD, CERs and IRR calculation spreadsheets), dated 13/02/2012. *Answer 15/03/2012* PPs would like to reiterate that the preliminary study issued by the Garrad Hassan, which was used in the financial analysis of the project, was the most up-dated information available when the project started the GSP and the information used during the auction. In order to clarify this aspect a explanation regarding the development of the project is to be provided. The registering of the project started on March 13, 2011 (this date is in the left top of the page and refers to when the datasheet started to be completed). During this process, project owners have to provide to EPE several documents confirming the expected electricity generation, technology to be used, location of the project and rights to use the area considered, among others. The data sheets used for the purpose of registering the project are attached (Please refer to files named "*SEAWEST - DP - Anexo 5_Ficha de Dados ER_v7",*	*place in August 2011."* Taking this due account, it is not clear to the DOE why the Camargo Schubert report were not used for the Auction purpose. Finally the PP has not provided to the DOE the official data sheet, issued by EPE, with the project configuration. Answer 3 (15/03/2012) Ok, the chronology of events and issuance of the technical documentation was assessed and is coherent and reliable in the validator opinion, also the pending documentation was provided. **CL03 is closed**

		"*ZETA - PS - Anexo 5_Ficha de Dados ER_v6*" and "*SEAWEST - PB - Anexo 5_Ficha de Dados ER_v7*"). The wind certifications issued by Camargo Schubert were issued on March 16, 2011. These documents were already forwarded to the DOE. The information presented in the wind certificates were used when completing the datasheets. The deadline for the registration of the project was March 18, 2011. This deadline was set out in the ANEEL Ordinance #113, dated February 1st, 2011 The ANEEL Ordinance is available at http://www.aneel.gov.br/cedoc/prt2011113mme.pdf and also attached. Please refer to the file named "prt2011113mme". Since the project successfully negotiated its electricity in the auction, it can be assumed that the registering process was effectively concluded. Nevertheless, as mentioned in the PDD, as per the auction rules (article 14.14 of the public announcement) modifications in the layout of the project are permitted. In this sense, project owners have commissioned Garrad Hassan to conduct simulations aiming at optimizing the power plants. On August 16th, 2011 – *i.e.* one day before the auction – have forwarded to the project owners the preliminary result	

		of the wind certification related to the optimized project (please refer to the file named "*ENC 237502 Produções individuais Casos 05 06 e 08*"). This preliminary study was considered during the auction which started in the next day. Tough the GSP have started after the preliminary study was issued, this study did not present the plant load factor separately for each one of the plant. In this sense, it was opted to use the Camargo Schubert certification to technically describe the project. However, it is PPs understanding that the most appropriate information to be used in the financial analysis is the one considered by the project owners during the auction. Nevertheless, as informed in the answer to this CL provided on March 13th, 2012, the final layout of the project was issued on this date. Please note that the first version of the PDD already considered a possibility related to the update in the technical aspects of the project. Therefore, PPs updated all the sections related to the technical aspects of the project since it is going to be implemented as described in the Final Certification conducted by Garrad Hassan issued on March 13th, 2012, which was already provided to the DOE. Nonetheless, PPs understand that the financial analysis	

		shall not be amended since this information was available neither when the auction took place nor the GSP started. However, with the purpose of confirming the project continuous additional even after the optimization, the final certification impact in the IRR calculation was assessed in the sensitivity analysis section.	
CL 04: The net electricity generation supplied to the grid, used for the baseline emission calculation purpose, the PDD v.1, section B.6.3, states: *"This technical configuration will be optimized and updated during the validation"* Thus, it is not clear whether the baseline emission calculation presented in the PDD v.1 is valid.	EB 41 Ann 12	*Answer 03/02/2012* The Garrad Hassan final wind certification has not been issued yet. The emission reduction calculation presented in the PDD is based on the most recent available wind certification, which was provided by Camargo Schubert (a third party as requested by the relevant guideline). The project is currently being optimized. However, only after the final issuance of the wind certification by GH, the emission reduction calculation can be revisited. Thus, it is PPs understanding that the emission reduction calculation is valid.	Answer 1 (09/02/2012) Ok, considering that the Camargo Schubert study represents the most recent available wind certification (also used for the auction and official purposes), the DOE understands that this represents a satisfactory source for ex-ante calculation, what includes also the baseline emission ex-ante estimative (please also refer to the DOE comments of CL 03) . **CL 04 is closed**
CL 05: It is not clear, whether the invitation letters sent to those institutions listed in section E.1 of the PDD v.1 (local stakeholders), was efficiently to reach and inform in a transparent manner, also the local population living close to the project site	EB 41 Ann 12	*Answer 03/02/2012* The procedure described in section E.1. of the PDD was done following the recommendations established by the Brazilian DNA which has approved many other project for which the same procedure was adopted.	Answer 1 (09/02/2012) The DOE confirms that the PP has correctly followed the Brazilian DNA procedures, however the delivery

		Answer 09/04/2012 As of March 23rd, 2012, PPs did not receive a formal instruction from the Brazilian DNA on how to adjust the local consultation process. To ensure the local stakeholder consultation is in compliance with the Brazilian DNA requirement, a second invitation letter was forwarded to another local community association. A copy of the letter as well as the post office invoice and the confirmation receipt (ARs) are attached.	confirmation of the invitation letter sent to the "Associação de Parnaíba (Comunity Association of Parnaíba)" was not signed by this association, neither stamped by the mail service. Thus, there ´s no evidences that the direct impacted population was informed regarding the invitation for comment the CDM project. Notwithstanding, according to the PP, the delivery confirmation letter has return to sender after 3 delivery attempts. The PP has already asked for guidance for Brazilian DNA how to proceed in this case, and now is waiting for reply. Answer 2 09/04/2012 Until the end of the validation process the Brazilian DNA has not replied the PP regarding to this issue. In this regarding, considering that the PP has correctly followed the DNA procedures and has re-sent

			the invitation letter to another local community association, the CL 05 will be put on hold as FAR 02, in order to be re-assessed after the DNA response and before the first verification. **CL 05 is closed**
CL 06: the PDD v.1 refers to the following projects: Delta do Parnaíba, Porto das Barcas and Porto Salgado, however the invitation letters make reference to Delta do Paranaíba, Porto das Barcas e Rio Igaraçu.	EB 41 Ann 12	*Answer 03/02/2012* The PPs acknowledge the inconsistence between the title of the proposed CDM Project Activity and the title mentioned in the invitations. Guidance from the Brazilian DNA on how to correct this mistake was seek by the PPs. A copy of the e-mail sent to the DNA is attached. As soon as the PPs get some guidance regarding this matter, the necessary measures will be done and the DOE will be informed. *Answer* 09/04/2012 As of March 23rd, 2012, PPs did not receive a formal instruction from the Brazilian DNA on how to adjust the local consultation process. Hence, letters were sent to the recipients mentioned in the PDD informing that the title of the project was wrongly informed.	Answer 1 (09/02/2012) The PP has already asked for guidance for Brazilian DNA how to proceed in this case, and now is waiting for reply. Answer 2 09/04/2012 Until the end of the validation process the Brazilian DNA has not replied the PP regarding to this issue. In this regarding, considering that the PDD v.1 available in: <http://sites.google.com/site/consultadcp

		The letters also informed the correct title and reiterated that the project would still be available for consultation in the same website informed earlier. Nevertheless, the document available for consultation at the time the first letters were sent already presented the correct title of the CDM Project Activity as it can be confirmed at https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxjb25zdWx0YWRjcHxneDo1NDM2MjQ5YTAwYWEwM2Uz. Copies of the letters as well as the post office invoice and the confirmation receipt (ARs) are attached.	/> on 26/10/2011, for the LS was correct, and the fact that the PP has resent the invitation letter with this amendment to the LS, the CL 06 will stay on hold as FAR 03, in order to be re-assessed after the DNA response and before the first verification. **CL 06 is closed**
CL 07: According to the PP the construction phase has not started yet, thus the site visit was conducted in the PP's office in Sao Paulo city, between 15th and 16th December, 2011. However the PP did not provide evidence to support this statement, justifying the absence of the site visit	VVM 60	*Answer 03/02/2012* As mentioned above in CL 04, the final wind certification is not available yet. Thus the final technical configuration of the wind power plants is also not available. Hence, it is reasonable to assume that the construction of the wind power plant has not begun.	Answer 1 (09/02/2012) Ok, the DOE agrees and accepts the PP´s explanation, once this is reasonable. **CL 07 is closed**
CL 08: the auction results presented in the ANEEL hyperlink sent to the DOE: http://www.aneel.gov.br/aplicacoes/editais_geracao/documentos_editais.cfm?IdProgramaEdital=95 does not contain the 3 Wind power plants of the project activity.	EB 39 Ann 10	*Answer 03/02/2012* The corrected hyperlink is: <http://www.aneel.gov.br/aplicacoes/editais_geracao/documentos/2_Resultado_Vendedor_12LEN_A3.pdf> which was working as of 03/02/2012. Nevertheless, the PDF file is also attached to this protocol.	Answer 1 (09/02/2012) Ok, the new hyperlink is correct and make reference to the 3 units of the project activity, also the technical parameters officially registered are in accordance to the project technical documentation used as source for the PDD v.2 (Camargo

			Schubert study). **CL 08 is closed**
CL 09: It is not clear whether the exceeding energy, supposed to be sold in the spot market, was considered in the cash flow and how this could impact the financial analysis, as well as the project additionality.	EB 39 Ann 10	*Answer 03/02/2012* The exceeding energy is considered in the project's cash-flow in lines 25 (price of the spot market) and 28 (amount of electricity exceeding the total negotiated under the auction) of the spreadsheet.	Answer 1 (09/02/2012) Ok, the DOE confirms that the exceeding energy, supposed to be sold in the spot market, was also considered for investment analysis purpose, as well as additionality assessment. **CL 09 is closed**
CL 10: According to the section B.5 of PDD v.1 the project starting date was supposed to be the *"Major equipment orders"* on 30th November 2011. However, until 16th December 2011, this event had still not happened. Then it is not clear if this event will be updated and maintained as the project starting date, or if it's not the case to consider instead, the Bid Price Guarantee "Garantia de Fiel Cumprimento" (that corresponds to 5% of total investment of the project), and had happened on 5th December, 2011.	VVM 99	*Answer 03/02/2012* PPs understands that the date in which the guarantee was deposited should not be considered since it is not fully paid by the project developer. Usually, insurance is made to bear the expense of the guarantee. Then, not the entire quantity corresponding to 5% of the total investment is disbursed by the Project Developer. Thus, this event cannot be considered a significant commitment towards the implementation of the project. In addition, the PPs clarify that the equipment order has not been made yet since the final technical configuration of the plants is not available. Please refer to the answer provide to the explanation provided above in CLs 4 and 7 above.	Answer 1 (09/02/2012) Ok, the DOE accepts the explanation, that is reasonable and is in accordance to the other evidences provided. **CL10 is closed**
CL 11: It is not clear how the meters will be set at	VVM 123	Answer 03/02/2012	Answer 1 (09/02/2012)

the shared substation for the project monitoring purpose, and if this arrangement will be able to identify precisely the Quantity of net electricity supplied by the project to the grid in year y, taken due account that the same substation will be shared with other power plants.		The electricity to be generated by the proposed project activity was contracted under the regulated market. As per the applicable regulations of the electricity sector, this type of power plant must follow the grid procedures established by the National Operator of the System. These procedures set the basis for a correct measurement of electricity generated and delivered to the system by each power plant connected to the Brazilian Interconnected Electricity System. Each wind power plant will consist of an independent SPC which will be individually identified by the operator. Hence, although the wind power plant may share the substation, it can be assured that the measurement will be individualized. Please refer to item 1.5 of Module 12.1 of the Grid Procedures established by the National Operator of the System, which is available at http://www.ons.org.br/download/procedimentos/modulos/Modulo_12/Submodulo%2012.1_Rev_1.1.pdf, but also attached to this protocol.	The Module 12.1 of the Grid Procedures established by the National Operator of the System, clear states that the Billing Measurement System (Sistema de Medição para Faturamento – SMF, in Portuguese), must be installed in the generating units (or group of generation units in the case of wind power plants), and also in the "Other Shared Transmission Facilities" that according to the normative resolution of ANEEL n°385/2009, includes substation equipment, with voltage below 230 kV (Project case). Thus, the DOE concludes that the shared substation will have a SMF for each one of the three project activity power plants. **CL 11 is closed**
CL 12: In the sub-step 4a of section B.5 of PDD v.2, the PP defines Piauí state as the applicable geographical area, based in the following justifications: Different climate conditions, specific environmental regulatory framework, the energy	EB 65 Ann 21	*Answer 13/03/2012* The northeastern states do not have the same regulatory framework. Tough the National environment Council has established that wind power plants have	Answer 1 (13/03/2012) In response to the CL 12, the PP has provided general examples to

price subdivision per markets and different values of TUSD/TUST. However no evidences were provided to support that Piaui has different climate conditions, specific environmental regulatory framework and the energy price subdivision, compared to other Northwest states. Despite of the DOE agrees that the entire host country is too heterogenic to be considered as a unique applicable geographic area, for common practice analysis; it is not clear why the PP has consider only the Piauí state, instead of the entire Northwest region, for instance, that is supposed to share similar natural and regulatory conditions.		smaller environmental impacts when compared to other sources, each state has its own requirements concerning the issuance of environmental permits. As an example, some states may require a public consultation meeting while in other states this would not be needed. This kind of requirement may influence the decision to build a power plant since it increase expenses related to the power plant implementation. Also, it was explained that depending on the location of the plant a different tariff for the use of the transmission or distribution system is applicable. This tariff varies between the concession area of local utilities, and as a consequence among the states. The tariff directly impacts the operational cost of a project. This also may influence the investment decision. In summary, tough the natural conditions between the different states of the northeastern region were not clearly demonstrated, other aspects, such as environmental regulatory framework and tariffs differentiate the states. Therefore, it is PPs understanding the analysis shall not be changed. *Answer 15/03/2012* It is PPs understanding that the single fact that TUSD/TUST price is different would be enough to evidence that there is	distinguish Piauí state from the rest of the Northwest region, notwithstanding no evidences were provided to support that Piaui has, indeed, different: i) climate conditions, ii) specific environmental regulatory framework and iii) the energy price subdivision, compared to other Northwest states. Answer 2 (15/03/2012) Ok, the DOE has analysed the documentation presented by the PP to support the geographic area used in the common practices analysis, and agrees with this approach. **CL 12 is closed**

		a difference among states. In this sense, the common practice analysis should be carried out within the state where the project is located. To confirm that the northeastern states have indeed different climate conditions and environmental regulatory frameworks, the PDD was amended to include reference to studies which presents information regarding these two aspects. Please refer to the revised third version of the PDD, dated 15/12/2012, and to the files related below: - A presentation made by a Ministry of Environment representative in the National Wind Forum in 2012, showing the results of a research conducted by the government about the different perceptions and procedures set out by the environmental agencies of the states related to the wind power plant environmental licensing process (file named “Jorge Brito_FNE2010”); - The complete study conducted by the government detailed presenting the different procedures amongst the environmental agencies of the Brazilian states (file named “*PESQUISA SOBRE LICENCIAMENTO AMBIENTAL DE PARQUES EÓLICOS*”); - Brazilian Wind Energy Atlas (File named	

		"*Atlas do Potencial Eolico Brasileiro*"); - Alagoas Wind Energy Atlas (File named "*ATLAS_EOLICO_AL*"); - Bahia Wind Energy Atlas (File named "*AtlasBA_Rev_1*"); - Rio Grande do Norte Wind Energy Atlas (File named "*mapa_eolico_rn*").	
CL 13: in the sub-step 4a, presented in section B.5 of the PDD v.2, the output range was calculated based in the sum of the three power plants (75,6MW), however the comparison was done against individual wind power plants (most of than ranging between 20 and 30MW). Thus, it is not clear whether this comparison is valid, once according to **ANEEL**, each wind power plant is considered a single project.	EB 65 Ann 21	*Answer 13/03/2012* As per the regulatory framework, each one of the plant is considered as a single project. However, the stepwise approach clearly mentions that the analysis shall be done considering the proposed CDM Project Activity, as mentioned in the Step 1 of paragraph 47 of the tool: "*Calculate applicable output range as +/-50% of the design output or capacity of the proposed project activity*". In addition, it is worth mentioning that there is only one operational wind power plant in the same region where the project is located. Therefore, it clearly cannot be considered as common practice. In this sense, Project Participants understand that the document does not need further revisions.	Answer 1 (13/03/2012) Ok, once all the project analysis (e.g. additionality assessment) was done based in the project as a whole, the DOE understand that the PPs argument is in accordance to the "Guidelines on the assessment of investment analysis" when consider the 3 power plants as one single project. **CL 13 is closed**
CL 14: There were identified critical changes in the version 3 of the PDD, regarding to the Installed capacity, plant load factor, number of turbines, as well as the geographic location. However no justifications were provided for these	-	*Answer 15/03/2012* Please refer to CL 03 answer provided above for the justification as to why the technical configuration of the project was revised in the third version of the PDD	Answer 1 (15/03/2012). Ok, the modifications wee adequately justified by the PP

important changes, neither explanation of how these changes could affect the project additionality (e.g.: financial analysis, investment costs, incomes…), environmental licences, among other relevant aspects, applicable to any CDM validation process.		(issuance of the final design of the plants). The influence of these changes was assessed in the sensitivity analysis provided in section B.5. of the third version of the PDD. As it can be observed, the project continuous to be additional and significant variations in electricity generation, investment and tariff so the IRR equals the benchmark. Regarding the environmental permits, PPs clarify that the changes in the final layout of the project will be communicated to the environmental agency by the time the permits are renewed and or requested.	and found ok, by the validator, also a new financial and sensitive analysis was conducted in order to confirm the project additionality. **CL 14 is closed, please refer to FAR 01**
CL BQA 1 – Clarify with evidences the moment of investment decision, in order to guarantee that the input values are the correct ones at this moment in the project chronology.	VVM 112	*Answer 03/02/2012* The equipment supply agreement has not been signed yet. This agreement is only going to be signed after the technical configuration of the plant is set. Hence, there is a high probability that the first event that will indicate the project developer commitment toward the implementation of the project is the PPA signing, which is scheduled by ANEEL to be on 02/05/2012. Therefore, the starting date of the project activity was revised. As it can be observed, it is after the commencement of the validation, which indicates that the investment decision has not been made yet. Therefore, the input	First Answer (10/02/2012): DOE agrees to the approach used. CL BQA 01 is closed.

		values are based on the most recent information available at the time the GSP of the project started.	
CL BQA 02 - Did the project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed CDM project activities?	VVM 112	*Answer 03/02/2012* No.	CAR BQA 02 is closed.
FAR 01: During the validation process, the project layout has suffered significant changes if compared to the layout presented to obtain the previous licence. So please check if these changes were taken due account by the time of requesting the subsequent environmental licences.			
FAR 02: Please confirm if the PP has followed the Brazilian DNA procedures (not available until the end of the validation process), in order to solve the issue raised in the CL 05 of this protocol.			
FAR 03: Please confirm if the PP has followed the Brazilian DNA procedures (not available until the end of the validation process) , in order to solve the issue raised in the CL 06 of this protocol.			