DETERMINATION REPORT
CEP CARBON EMISSIONS PARTNERS S.A.

DETERMINATION OF THE

"Modernization and technical reequipment of PJSC "Donbasenergo" TPP"

REPORT №UKRAINE-DET/0723/2012

REVISION NO. 02

BUREAU VERITAS CERTIFICATION

REPORT NO.: UKRAINE-DET/0723/2012

DETERMINATION REPORT

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Client: CEP Carbon Emissions Partners S.A.	Client ref.: Fabian Knodel

Summary:
Bureau Veritas Certification has made the determination of the "Modernization and technical reequipment of PJSC "Donbasenergo" TPP" project of CEP CARBON EMISSIONS PARTNERS S.A. located in the Donetsk region, Ukraine, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The determination 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 determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the determination 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 Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.: UKRAINE-det/0723/2012	Subject Group: JI
Project title: "Modernization and technical reequipment of PJSC «Donbasenergo» TPP"	
Work carried out by: Oleg Skoblyk – Team Leader, Climate Change Lead Verifier Vladimir Kulish – Team Member, Climate Change Lead Verifier	
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer Yulia Pylnova – Technical expert	
Work approved by: Ivan Sokolov - Operational Manager	

Date of this revision:	Rev. No.:	Number of pages:
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Bureau Veritas Certification Holding SAS

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1 INTRODUCTION

CEP CARBON EMISSIONS PARTNERS S.A. has commissioned Bureau Veritas Certification to determine its JI project "Modernization and technical reequipment of heat energy facilities" (hereafter called "the project") in the Donetsk region, Ukraine.

This report summarizes the findings of the determination 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 determination serves as project design verification and is a requirement of all projects. The determination 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 relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emissions reductions units (ERUs).

UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

1.2 Scope

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

The determination 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 Determination team

The determination team consists of the following personnel:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Vladimir Kulish
Bureau Veritas Certification Team Member, Climate Change Lead Verifier

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

Vasiliy Kobzar
Bureau Veritas Certification, Technical expert

2 METHODOLOGY

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

In order to ensure transparency, a determination protocol was customized for the project, according to the version 01 of the Joint Implementation Determination and Verification Manual, issued by the Joint Implementation Supervisory Committee at its 19 meeting on 04/12/2009. The protocol shows, in a transparent manner, criteria (requirements), means of determination and the results from determining the identified criteria. The determination protocol serves the following purposes:

- It organizes, details and clarifies the requirements a JI project is expected to meet:
- It ensures a transparent determination process where the determiner will document how a particular requirement has been determined and the result of the determination.

The completed determination protocol consists of two tables and is enclosed in Appendix A to this report.

2.1 Review of Documents

The Project Design Document (PDD) submitted by CEP CARBON EMISSIONS PARTNERS S.A. and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint implementation project design document form, Approved CDM methodology and/or Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, CEP CARBON EMISSIONS PARTNERS S.A. revised the PDD version 01 dated 17/09/2012 and resubmitted it on 05/10/2012 as version 02.
The determination findings presented in this report relate to the project as described in the PDD versions 01 and 02.

2.2 Follow-up Interviews

On 10/10/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of PJSC ñDonbasenergoò and CEP CARBON EMISSIONS PARTNERS 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
PJSC ñDonbasenergoò	ü Project History ü Project approach ü Project boundary ü Schedule of implementation ü Organizational Structure ü Responsibilities and obligations ü Training ü Quality control procedures and technologies ü Modernization / installation of equipment (records) ü Control of metering equipment ü The system of keeping records of measurements, the database ü Technical Documentation ü Monitoring Plan and procedures ü Permits and licenses ü Environmental Impact Assessment ü Stakeholders comments
CEP CARBON EMISSIONS PARTNERS S.A.	ü Baseline methodology ü Monitoring Plan ü Additionality proofs ü The calculations of emission reductions ü Project design ü Legal issues relating to the project ü Environmental Impacts ü Approval of the host party

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination 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 Request (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 JI requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

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

The determination team may also issue Forward Action Request (FAR), informing the project participants of an issue that needs to be reviewed during the verification.

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

3 PROJECT DESCRIPTION

The main purpose of the Joint Implementation Project (hereinafter - JIP) entitled "Modernization and technical reequipment of PJSC "Donbasenergo" TPP" is reduction of greenhouse gas emissions by modernization of technological equipment used in the course of electricity generation at TPP.
Prior to the proposed project PJSC "Donbasenergo" implemented only measures aimed at maintaining the main technological equipment in working order. Factors that hindered the modernization work:

1. Limited financing of existing system modernization work.
2. Underdeveloped regulatory base, which was unable to regulate the functionality for implementation of energy-efficient measures in the system of heat and electricity generation.

The project provides for the modernization of technological equipment based on the use of more efficient production technologies and equipment. As a result the project implementation will increase fuel consumption efficiency and will reduce greenhouse gas emissions compared to baseline scenario.

28/01/2000 ï date when PJSC "Donbasenergo" started implementation of project measures in introducing of modernization of technological equipment and improvement of its efficiency, reliability and safety rates.

03/04/2000 ï Project design document development for the project activities.
26/09/2012 ï The State Environmental Investment Agency of Ukraine issued a Letter of Endorsement ¯ 2759/23/

The determination protocol contains CARs and CLs relating to the PDD versions 01 and 02.

4 DETERMINATION CONCLUSIONS

In the following sections, the conclusions of the determination 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 Determination Protocol in Appendix A.

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A. The determination of the Project resulted in 25 Corrective Action Requests and 8 Clarification Requests.

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

4.1 Project approvals by Parties involved (19-20)

The project ñModernization and technical reequipment of PJSC çDonbasenergoè Tð has already obtained support of the government of Ukraine, namely a Letter of Endorsement 2759/23/7 dated 26/09/2012 issued by the State Environmental Investment Agency of Ukraine.
Bureau Veritas Certification received this letter from the Project Participants and has no doubts in its authenticity.

After completion of Determination Report the project documentation will be submitted to the State Environmental Investment Agency of Ukraine for obtaining a Letter of Approval.
As the project has no approval by the Host Party, CAR 11 remains pending and will be closed after report finalizing (see Appendix A).
The identified areas of concern as to project approvals by the Parties, project participants response and Bur conclusion are described in Appendix A to the Determination Report (refer to CAR 11).

4.2 Authorization of project participants by Parties involved (21)

The participation for each of the legal entities listed as project participants in the PDD is authorized by Parties involved, which are also

listed in the PDD, through written Letters of Approval (from the government of Switzerland, as the country-investor, and from the government of Ukraine, as the host party). See CAR 11.

4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (hereinafter referred to as JI-specific approach) was the selected approach for identifying the baseline (in accordance with paragraph 11 of the Guidance on criteria for baseline setting and monitoring for JI projects, version 03).

The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline is established:

(a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:

   a. Scenario in which the company continues its current practice, without the JI project.

   b. Scenario in which the project activities are implemented without the Joint Implementation mechanism.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. In this context, the following key factors that affect a baseline are taken into account:

   a. In the existing model electricity market could not fully ensure effective competition among electricity producers and create a unified pricing strategy that would assist increase of investment in the energy sector. No existing today market mechanisms or direct administrative measures did not provide the necessary modernization of existing production facilities of power generating companies.

   b. A limited number of modernization and rehabilitation projects of power stations were adopted for implementation. The situation is particularly critical given the rise in the near future, the need for shunting facilities, lack of which is a threat to the safe operation of United Energy Systems of Ukraine.

Imperfect rate policy leads to an increase in payable accounts of energy generation companies, leading to their bankruptcy.

c. Existing tariffs for electricity are regulated by the state and do not include investment needs of energy generation companies. This situation leads to a constant shortage of funds and the inability of timely capital repair of equipment, ensuring equipment operation, investment in modernization and development of the infrastructure.

d. State support in the electricity generation is provided in accordance with the volume of funds provided by the law of Ukraine on the State Budget of Ukraine for the relevant year.

e. Wholesale electricity market faces a debt problems its stakeholders and their imbalance.

f. The project scenario requires attracting significant additional funds. Such investment is characterized by a significant payback period and high investment risks that is why it is not attractive for investors.

g. Ukraine is already implementing JI projects in the energy sector (Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC ñ D o n b a s è) by selling emission reduction units.

The PDD provides a detailed description in a complete and transparent manner, as well as justification, that the baseline was duly set.

The methods of calculation used to determine the estimated and actual baseline emissions, are sufficiently described in Sections E and D of the PDD, respectively.
The identified areas of concern as to baseline setting, project participants r e s p o n s e a n d B u r e a u V e r i t a s C e r t i f i c a t i o Appendix A to Determination report (refer to CAR 12 ï CAR 16, CL 05, CL 06).

4.4 Additionality (27-31)

T h e m o s t r e c e n t v e r s i o n o f t h e ñ T o o l a s s e s s m e n t o f a d d i t i o n a l i t yò a p p r o v e d b y used, in accordance with the JI specific approach, defined in accordance with paragraph 9 (a) of the Guidance on criteria for baseline setting and monitoring for JI projects, version 03. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 4.3 above.

The developer of the project proved that anthropogenic emissions under the project are lower than the emissions that would take place in the absence of the project activity.
Additionality proofs are provided.
Two plausible and realistic alternative scenarios were identified in the project:

- Alternative 1.1: Continuation of the current practice without the JI project implementation.
- Alternative 1.2: The project activities without the Joint Implementation mechanism.

and mandatory compliance of the scenarios with the laws and legal acts was demonstrated.

According to the "Tool for the demonstration and assessment of additionality (version 06.0.0)" barrier analysis and common practice analysis were used in the PDD to justify additionality of the project.
Thus, the overall conclusion is that the project activity meets the criteria of additionality, is not a baseline scenario and is additional.
Additionality is demonstrated appropriately, as a result of the analysis, which is used by the approach chosen.
The identified areas of concern as to additionality, project participants' response and Bureau Veritas Certification's opinion are presented in Appendix A to Determination report (refer to CAR 17, CAR 18).

4.5 Project boundary (32-33)

The project boundary defined in the PDD, which in accordance with the specific approach is delineated by the physical, geographical site of the TPP of PJSC "Donbasenergo" (Slovyanska TPP in Donetsk region) and encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

(i) Under the control of the project participants.
(ii) Reasonably attributable to the project, such as:
- CO_2 emissions in the course of electricity generation.

(iii) Significant, i.e., as a rule of thumb, would by each source account on average per year over the crediting period for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceed an amount of 2 000 tonnes of CO_2 equivalent, whichever is lower.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD.

4.6 Crediting period (34)

The PDD states the starting date of the project as the date when PJSC "Donbasenergo" started implementation of the project activities aimed at improving of the technological equipment and improving indexes of its efficiency, reliability and security, and the starting date is 28/01/2000 which is after the beginning of 2000.

The PDD states the expected operational lifetime of the project in years and months, which is 14 years and 0 months, or 168 months, from January 1, 2004, to December 31, 2017.

The PDD states the length of the crediting period in years and months, which is 14 years and 0 months, or 168 months, and the date on which first emission reductions are expected to be generated was taken as the starting date of the crediting period, namely January 1, 2004.

The PDD states that the crediting period for the issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project.

The PDD states that the extension of its crediting period beyond 2012 is subject to the host Party approval, and the estimates of emission reductions or enhancements of net removals are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

The identified areas of concern as to crediting period, project participants response and Bureau Veritas Certificatio Appendix A to the Determination Report (refer to CAR 19 - CAR 21).

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was selected.

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance, such as reporting forms, the operating structure and management structure of the enterprise, that will be applied when implementing the monitoring plan.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions or enhancements of net removals to be monitored such as: net caloric value of reference fuel,

total amount of reference fuel combustion, total amount of supplied electricity, coefficient of the carbon content in fuel "i", carbon oxidation factor in the course of fuel "i" combustion, percentage of fuel "i" from consumption of reference fuel.

The monitoring plan draws on the list of standard variables contained in appendix B of ñGuidance on criteria for developed by the JISC, as appropriate: baseline emissions (BE_y) ï baseline emissions; (PE_y) - project emissions; ($EF_{CO2\text{-}e,XX}$) ï default CO_2 emission factor for stationary combustion of fuel; (EG_y) ï electricity generation; (NCV_{xx}) ï net caloric value; (FC_{XX}) ï amount of burnt fuel; ($OXID_{xx}$) ï carbon oxidation factor in the course of fuel combustion.

According to the guidelines for users of the JI PDD forms, revision # 04, the described approach to monitoring plan explicitly and clearly distinguishes:

(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the PDD development stage:

$NCV^{y}_{p,tpp,i,rf}$	Net caloric value of reference fuel in monitoring period çyè scenario, is 29,3 GJ/trf
$FC^{j}_{b,tpp,i,rf}$	Total amount of reference fuel combustion in historical period çjtrfè bas
$EG^{j}_{b,tpp,i,rf}$	Total amount of supplied electricity in historical period çjè, baseline scen

(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the PDD development stage: none.

(iii) Data and parameters that are monitored throughout the crediting period:

$EF^{y}_{p,tpp,i,c}$	Coefficient of the carbon content in fuel "i" in monitoring period çyè baseline scenario,
$OXID^{y}_{p,tpp,i}$	Carbon oxidation factor in the course of fuel "i" combustion in monitoring period çyè proje
$NCV^{y}_{p,tpp,i}$	Net calorific value of fuel " i project scenario, GJ/(ths m^3 or t)

$W^{y}_{p,tpp,i}$	Percentage of fuel "i" from consumption of reference fuel in monitoring period çyè project
$EG^{y}_{p,tpp,i,rf}$	Total amount of supplied elect project scenario, ths kW*h
$FC^{y}_{p,tpp,i,rf}$	Total amount of reference fuel baseline scenario, trf

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording, such as data storage through accounting software.

The most objective and cumulative factor that provides a clear picture of whether the emission reduction took place is the fact of GHG emission reduction through increase of the efficiency of fossil fuel consumption. It can be determined as the difference between baseline emissions and GHG emissions after the project implementation.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions and project emissions, including:

Formulae used to estimate project emissions (for each gas, source, etc.; emissions in units of CO_2 equivalent):

$$PE^{y}_{p} = \sum_{n=1}^{3} PE^{y}_{p,tpp} \quad ; \qquad (1)$$

PE^{y}_{p} - total estimated GHG emission reduction in monitoring period çyè project scenario, t CO_{2eq};

$PE^{y}_{p,tpp}$ - total estimated TPP GHG emission reduction in monitoring period çyè project scenario, t CO_{2eq};

$$PE^{y}_{p,tpp} = \sum_{n=1}^{3} PE^{y}_{p,tpp,i} \quad ; \qquad (2)$$

$PE^{y}_{p,tpp,i}$ - total estimated TPP GHG emission reduction from fuel "i" in monitoring period çyè project scenario, t CO_{2eq};

$$PE^{y}_{p,tpp,i} = FC^{y}_{p,tpp,i} \times EF^{y}_{p,tpp,i} \quad ; \qquad (3)$$

$FC^{y}_{p,tpp,i}$ - total amount of fuel "i" combustion in monitoring period çyè project scenario, ths m^3 or t;

$EF^{y}_{p,tpp,i}$ - default CO_2 emission factor for stationary combustion of fuel "i" in monitoring period y, in the project scenario, t CO_2/TJ;

$$EF^{y}_{p,tpp,i} = EF^{y}_{p,tpp,i,c} \cdot OXID^{y}_{p,tpp,i} \cdot NCV^{y}_{p,tpp,i} \cdot \frac{44}{12} \cdot 10^{-3} \quad ; \qquad (4)$$

$EF^{y}_{p,tpp,i,c}$ - coefficient of the carbon content in fuel "i" in monitoring period çyè project scenario, tCO2/t or tCO2/ths m3;

$OXID^{y}_{p,tpp,i}$ - carbon oxidation factor in the course of fuel "i" combustion in monitoring period çyè project scenario, relative units;

$NCV^{y}_{p,tpp,i}$ - net calorific value of fuel "i" in monitoring period çyè project scenario, GJ/(ths m3 or t);

$\frac{44}{12}$ - stoichiometric ratio of CO_2 and C molecular masses, (t_2 /t C);

10^{-3} - transfer coefficient from GJ to TJ;

$$FC^{y}_{p,tpp,i} = \frac{FC^{y}_{p,tpp,i,rf} \cdot W^{y}_{p,tpp,i} \cdot NCV^{y}_{p,tpp,i,rf}}{NCV^{y}_{p,tpp,i}} \quad ; \qquad (5)$$

$FC^{y}_{p,tpp,i,rf}$ - total amount of reference fuel in monitoring period scenario, trf;

$W^{y}_{p,tpp,i}$ - percentage of fuel "i" from consumption of reference fuel in monitoring period çyè project scenario, %

$NCV^{y}_{p,tpp,i,rf}$ - net caloric value of reference fuel in monitoring period çyè project scenario, is 29,3 GJ/trf;

$NCV^{y}_{p,tpp,i}$ - net calorific value of fuel "i" in monitoring period çyè project scenario, GJ/(ths m3 or t);

[p] - index corresponding to project scenario;
[y] - index corresponding to monitoring period;
[tpp] - index related to TPP;
[i] - index corresponding to fuel combustion;
[rf] ï index related to reference fuel.

Formulae used to estimate baseline emissions (for each gas, source etc.; emissions in units of CO_2 equivalent):

$$BE^{y}_{b} = \sum_{n=1}^{3} BE^{y}_{b,tpp} \quad ; \qquad (6)$$

BE^{y}_{b} - total estimated GHG emission reduction in baseline scenario, t CO_{2eq};

$BE^{y}_{b,tpp}$ - total estimated TPP GHG emission reduction in monitoring period çyè baseline scenario, t CO_{2eq};

$$BE^{y}_{b,tpp} = \sum_{n=1}^{3} BE^{y}_{b,tpp,i} \quad ; \qquad (7)$$

$BE^{y}_{b,tpp,i}$ - total estimated TPP GHG emission reduction from fuel "i" in monitoring period çyè baseline scenario, t CO_2eq;

$$BE^{y}_{b,tpp,i} = FC^{y}_{b,tpp,i} \cdot EF^{y}_{p,tpp,i} \quad ; \qquad (8)$$

$FC^{y}_{b,tpp,i}$ - total amount of fuel "i" combustion baseline scenario, ths m^3 or t;

$EF^{y}_{p,tpp,i}$ - default CO_2 emission factor for stationary combustion of fuel "i" in monitoring period y, in the project scenario, t CO_2/TJ;

$$EF^{y}_{p,tpp,i} = EF^{y}_{p,tpp,i,c} \cdot OXID^{y}_{p,tpp,i} \cdot NCV^{y}_{p,tpp,i} \cdot \frac{44}{12} \cdot 10^{-3} \quad ; \qquad (9)$$

$EF^{y}_{p,tpp,i,c}$ - coefficient of the carbon content in fuel "i" in monitoring period çyè baseline scenario, t C/GJ;

$OXID^{y}_{p,tpp,i}$ - carbon oxidation factor in the course of fuel "i" combustion in monitoring period çyè project scenario, r

$NCV^{y}_{p,tpp,i}$ - net calorific value of fuel "i" in monitoring peri od çyè proj ect scenario, GJ/(ths m^3 or t);

$\frac{44}{12}$ - stoichiometric ratio of CO_2 and C molecular masses, (CO_2/C);

10^{-3} - transfer coefficient from GJ to TJ;

$$FC^{y}_{b,tpp,i} = \frac{FC^{y}_{b,tpp,i,rf} \cdot W^{y}_{p,tpp,i} \cdot NCV^{y}_{p,tpp,i,rf}}{NCV^{y}_{p,tpp,i}} \quad ; \qquad (10)$$

$FC^{y}_{b,tpp,i,rf}$ - total amount of reference fuel in mo scenario, trf;

$W^{y}_{p,tpp,i}$ - percentage of fuel "i" from consumption of reference fuel in monitoring period çyè project scenario, %;

$NCV^{y}_{p,tpp,i,rf}$ - net caloric value of reference fuel in monitor project scenario, is 29,3 GJ/trf;

$NCV^{y}_{p,tpp,i}$ - net calorific value of fuel "i" in scenario, GJ/(ths m^3 or t);

$$FC^{y}_{b,tpp,i,rf} = BPER^{y}_{b,tpp,i,rf} \cdot EG^{y}_{p,tpp,i,rf} \quad ; \qquad (11)$$

$BPER^{y}_{b,tpp,i,rf}$ - specific reference fuel consumption baseline scenario, trf/ ths.kW*h;

$EG^{y}_{p,tpp,i,rf}$ - total amount of supplied electricity in monitorin project scenario, ths.kW*h;

Calculation of specific reference fuel consumption in monitoring period çyè baseline scenario is based on the assumption of its linear growth with time. This linear dependence is based on historical data (historical period) from 1993 to 1999 using the method of least squares.

$$BPER^{y}_{b,tpp,i,rf} = a \cdot y - b \quad (12)$$

$$a = \frac{j \cdot \sum_{j} BPER^{j}_{b,tpp,i,rf} - \sum_{j} BPER^{j}_{b,tpp,i,rf} \cdot \sum_{j} j}{j \cdot \sum_{j} j^{2} - (\sum_{j} j)^{2}} \quad (13)$$

$$b = \frac{\sum_{j} BPER^{j}_{b,tpp,i,rf} - a \cdot \sum_{j} j}{j} \quad (14)$$

$$BPER^{j}_{b,tpp,i,rf} = \frac{FC^{j}_{b,tpp,i,rf}}{EG^{j}_{b,tpp,i,rf}} \quad (15)$$

$FC^{j}_{b,tpp,i,rf}$ - total amount of reference fuel combustion in historical period çjè baseline scenario, trf;

$EG^{j}_{b,tpp,i,rf}$ - total amount of supplied electricity in historical period çjè, baseline scenario, ths.kW*h;

Θ - coefficient of linear dependence;
b - coefficient of linear dependence;
[b] - index corresponding to baseline scenario;
[p] - index corresponding to project scenario;
[y] - index corresponding to monitoring period;
[j] - index corresponding to historical period;
[tpp] - index related to TPP;
[i] - index corresponding to fuel combustion;
[rf] - index related to reference fuel.

Formulae used to estimate emission reductions for the project (for each gas, source etc.; emissions/emission reductions in units of t CO_2 equivalent):

Quantity of Emission Reduction Units (ER), t CO_2e:

% 2 سي " % طي% 0 % (16)

% 2 - emission reductions achieved as a result of the project activity, in p e r i o d ç l z è ; , (t u ∫
0 % t o t a l e s t i m a t e d G H G e m i s s i o n s , i n m o n i t
scena r i o ( ) t u ∫
" % t o t a l e s t i m a t e d G H G e m i s s i o n s , i n m o n i t
s c e n a r i o) ; (t u ∫
Ù - index corresponding to monitoring period;
Â - index corresponding to baseline scenario;
Ð - index corresponding to project scenario.

The monitoring plan presents the quality assurance and control procedures for the monitoring process, which are sufficiently described in tabular form in PDD Sections D.1.1.1., D.1.1.3. and D.2. This includes, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. Collection of all the key parameters necessary for monitoring and calculation of greenhouse gases emissions reduction are constantly carried out according to the practice, established in PJ S CDoñbasenergoò . Monitoring under the project does not require changes in existing data accounting and collection system.

On the whole, the monitoring report reflects good monitoring practices appropriate to the project type.

The monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature etc.) but not including data that are calculated with equations.

The monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

The identified areas of concern as to the monitoring plan, project p a r t i c i p a n t s ô B r u e r s e p a o u n s V é e r a i n t d a s C e r t i f i c a t i o
described in Appendix A to Determination Report (refer to CAR 22 ï CAR 24; CL 07, CL 08).

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential leakage of the project and appropriately explains which sources of leakage are to be calculated, and which can be neglected.

According to the selected specific approach used in this JI project, there are no potential sources of leakage from the project activity.

4.9 Estimation of emission reductions or enhancements of net removals (42-47)

The PDD indicates assessment of emissions in the baseline scenario and in the project scenario as the approach chosen to estimate the emission reductions or enhancement of net removals generated by the project.

The PDD provides the ex ante estimates of:

(a) Emission reductions from the project (within the project boundary), which are 11 431 709 tonnes of CO2e in 2004-2007, 15 338 972 tonnes of CO2e in 2008-2012, 17 115 910 tonnes of CO2e in 2013-2017;

(b) Leakage is not expected in the project boundary;

(c) Emissions for the baseline scenario (within the project boundary), which are 12 451 388 tonnes of CO2e 2004-2007, 17 886 426 tonnes of CO2e in 2008-2012, 20 423 000 tonnes of CO2e in 2013-2017;

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are 1 019 679 tonnes of CO2e in 2004-2007, 2 547 454 tonnes of CO2e in 2008-2012, 3 307 090 tonnes of CO2e in 2013-2017.

The estimates referred to above are given:

(a) On an annual basis;

(b) From 01/01/2004 to 31/12/2017, covering the whole crediting period;

(c) On a source-by-source/sink-by-sink basis;

(d) For each GHG, i.e. CO_2;

(e) In tonnes of CO_2 equivalent using global warming potentials defined by Decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol.

The formulae used for calculating the estimates referred above are given in Section 4.7. All formulae are consistent throughout the PDD.

For calculating the estimates referred to above, key factors, e.g. the Ukrainian environmental legislation and other national legislation, as well as key relevant factors such as availability of funds for implementation of measures envisaged by the project, tariffs that are set by the state, modern technology and the ability to implement know-how in energy sector, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating the estimates referred to above, such as documents and archival data of the enterprise, standards and statistical forms, results of annual meter readings, etc. are clearly identified, reliable and transparent.

Emission factors, such as coefficient of the carbon content in fuel ($EF^{y}_{p,tpp,i,c}$) were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions over the crediting period are calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period, and multiplying by twelve.

Detailed algorithms of calculations and their results are described in Section D, E and Supporting Documents to the PDD.

The identified areas of concern as to the evaluation of emission reductions, project participantsô resp
Certificationôs conclusion are described
Report (refer to CAR 25)

4.10 Environmental impacts (48)

Sections F.1. and F.2. of the PDD provide information about the attached documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.

According to the PDD, impact on water resources will be the same as in the baseline scenario. The existing technology of heat generation run at

the objects of PJSC "Donbasenergo" foresees discharging of waste water to the sewage grid with obligatory chemical control in accordance to Water Code of Ukraine, State Standard 28.74-82 "Hygienic regulations and quality control", Building Standards and Rules 4630-92 on determining maximum concentration limits for internal water bodies. The project implementation will have positive effect on ambient air:

1) Reduction of GHG emissions through the implementation of measures to improve the production equipment for the production of electricity;
2) Reduction of fuel consumption for electricity production and power generation for own needs of power unit will lead to the air pollutants emissions reduction.

There is no impact on the land/soil. Relevant regulation is the sphere of land use is presented by the Land Code of Ukraine. National technological practice/standard: State Standart 17.4.1.02.-83 "Protection of Nature, Soils. Classification of chemical substances for pollution control".

Transboundary impacts of project activities according to their definitions in the text ratified by Ukraine "Convention on transboundary pollution at a great distance" will not take place. Project implementation does not bring any harmful effects on the environment.

The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party.

4.11 Stakeholder consultation (49)

Stakeholdersô comments on the project are include the negative impact on the environment and the negative social effects that the discussion was not necessary.

4.12 Determination regarding small scale projects (50-57)

Not applicable.

4.13 Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)

Not applicable.

4.14 Determination regarding programmes of activities (65-73)

Not applicable.

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

No comments, pursuant to paragraph 32 of the JI Guidelines, were received.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed the determination of the project "Modernization and technical reequipment of PJSC "Donbasenergo" TPP in Ukraine. The determination 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 determination 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 determination report and opinion.

Project participant/s used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides barrier analysis and common practice analysis to determine that the project activity itself is not the 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 project is likely to achieve the estimated amount of emission reductions.

The determination revealed one pending issue related to the current determination stage of the project: the written approval of the project by the host Country (Ukraine) wasn't obtained. Once the written approval by the host Country is awarded, it is our opinion that the project as described in the Project Design Document, Version 02 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 02) 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 JI and the relevant host country criteria.

The determination is based on the information made available to us and the engagement conditions detailed in this report.

7 REFERENCES

Category 1 Documents:

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

/1/	PDD çModernization and technical reequipment of PJSC çDonbasenergoè T ê P Pversion 01 dated 17/09/2012
/2/	PDD çModernization and technical reequipment of PJSC çDonbasenergoè T ê P Pversion 02 dated 05/10/2012
/3/	Supporting Document 1çCalculation of GHG emission reductions u n d e r t h e M o d e r n i z a t i o n a n d ñ t e c h n i c a l r e e q u i p m e n t o f P J S C D o n ç b a s e n e r g o è T ê P P
/4/	Supporting Document 2 "Investment analysis under the project ñModernization and technical reequipment of PJSC çDonbasenergoè T ê P P
/5/	Letter of Endorsement ¯ 2 7 5/23/7 dated 26/09/2012 issued by the State Environmental Investment Agency of Ukraine
/6/	Guidelines for users of the JI PDD form. Version 04, JISC
/7/	Tool for the demonstration and assessment of additionality, Version 06.0.0
/8/	The Kyoto Protocol
/9/	Marrakech Accords, JI Methods
/10/	National inventory report on emissions by sources and removals of greenhouse gases in Ukraine for the period of 1990-2010
/11/	U k r a i n e ô s N a t i o n a l T h i r d C o m m u n i c a t i o n on Climate Change under the Kyoto Protocol
/12/	U k r a i n e ô s F o u r t h N a t i o n a l C o m m u n under the Kyoto Protocol
/13/	U k r a i n e ô s F i f t h N a t i o n a l C o m m u n i c the Kyoto Protocol
/14/	JI Guidelines. Annex to Decision 9/CMP.1.
/15/	JI Guidance for determination and verification, version 01
/16/	Guidance on criteria for baseline setting and monitoring, JISC. Version 03

Category 2 Documents:

Documents provided to CEP CARBON EMISSIONS PARTNERS S.A. that relate directly to the GHG components of the project.

/1/	F o r m -tēch-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1993
/2/	F o r m -tēch-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1994

/3/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1995
/4/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1996
/5/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1997
/6/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1998
/7/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 1999
/8/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2000
/9/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2001
/10/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2002
/11/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2003
/12/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2004
/13/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2005
/14/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2006
/15/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2007
/16/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2008
/17/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2009
/18/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2010
/19/	Form -tech-3-TPP. The Ministry of Fuel and Energy of Ukraine "Technical and economic work indicators of equipment" 2011
/20/	Certificate of equipment. Scales conveying
/21/	Schedule of metrological control strain gauge balances
/22/	Schedule of calibration and maintenance of belt (conveyor) weights on the conveyors
/23/	Permit of relies of pollutant emissions into the atmosphere.
/24/	Report on air protection 2007
/25/	Report on air protection 2008
/26/	Report on air protection 2009
/27/	Report on air protection 2010
/28/	Report on air protection 2011
/29/	Calibration tables
/30/	License issued PJSC "Donbasenergo" for electricity generation

/31/	License issued PJSC "Donbasenergo" for electricity distribution
/32/	Certificate of state metrological certification. Automatic calorimeter
/33/	Certificate on calibration of the measuring instruments
/34/	Photo - weight conveyor
/35/	Photo - calorific value measuring instrument
/36/	Photo - calculator of gas volume

Persons interviewed:

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

	Name	Organization	Title
/1/	Unhuryan O.M.	PJSC "Donbasenergo"	Director of the structural unit of PJSC "Donbasenergo" " Slovyanska TPP"
/2/	Penkov V.V.	PJSC "Donbasenergo"	Chief Engineer - Deputy Director
/3/	Zelensky S.A.	PJSC "Donbasenergo"	Head of production department
/4/	Bondarenko R.U.	PJSC "Donbasenergo"	Chief of fuel and transport department
/5/	Sharpan O.M.	PJSC "Donbasenergo"	Chief of Electrical department
/6/	Palamarchuk D.O.	LLC "CEP"	CEP CARBON EMISSIONS PARTNERS S.A. Consultant

APPENDIX A: COMPANY PROJECT DETERMINATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

Check list for determination, according to the JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
Guidelines for Users of the JI PDD form Section A General description of the project				
A.1. Title of the project				
ϕ . 1	Is the title of the project presented?	The title is presented. The title of the project is ñModernization and technical reequipment of PJSC çDonbasenergoè T ðP P	OK	OK
ϕ . 1	Is the sectoral scope to which the project pertains presented?	Sectoral scope: Sector 1 - Energy industry	OK	OK
ϕ . 1	Is the current version number of the document presented?	The current version of the document: PDD, Version 02 dated 05/10/2012. See Section A.1.	OK	OK
ϕ . 1	Is the date when the document was created presented?	The date when the document was created: 05/10/2012.	OK	OK
A.2. Description of the project				
ϕ . 2	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting	The main purpose of the project is reduction of greenhouse gas emissions by modernization of technological equipment used in the course of electricity generation at TPP. The project provides for	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	date of the project b) Baseline scenario and c) Project scenario (expected outcome, including a technical description)?	the modernization of technological equipment based on the use of more efficient production technologies and equipment. Detailed information on the baseline and project scenarios with technical description is given in Sections A.2 and A.4.2. of the PDD.		
ϕ . 2	Is the history of the project (incl. its JI component) briefly summarized?	**CAR 01.** Please in Section A.2 provide the date when development of project design documents for the JI project started.	**CAR 01**	OK
A.3. Project participants				
ϕ . 3	Are project participants and Party (ies) involved in the project listed?	Parties involved in the project: PJSC "Donbasenergo" (Ukraine - the host party), CEP CARBON EMISSIONS PARTNERS S.A. (Switzerland).	OK	OK
ϕ . 3	Is the data of the project participants presented in tabular format?	**CAR 02.** Please section A.3 describe according to "Guidelines for users of the PDD for JI projects" (version 04).	**CAR 02**	OK
ϕ . 3	Is contact information provided in Annex 1 of the PDD?	Contact information of the PJSC ñDonbasenergoò is provided in Annex 1 of the PDD. **CAR 03.** Please in Annex 1 provide contact information of the project participants according to "Guidelines for users of the PDD for JI projects"	**CAR 03**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		(version 04).		
ϕ . 3	Is it indicated, if it is the case, that the Party involved is a host Party?	Ukraine is the Host Party.	OK	OK
A.4 Technical description of the project				
Location of the project				
A.4.1.1	Host Party(ies)	Ukraine is the Host Party.	OK	OK
A.4.1.2	Region/State/Province etc.	Donetsk region, Ukraine	OK	OK
A.4.1.3	City/Town/Community etc.	The project in the territory of Donetsk region, Ukraine.	OK	OK
A.4.1.4	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page).	Information about location is given in Section A.4.1.4 of the PDD.	OK	OK
A.4.2. Technologies to be employed, or measures, operations or actions to be implemented by the project				
ϕ . 4 .	Are the technology (ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	PDD Section A.4.2 provides the description of the main stages of the project implementation, the annual project activities schedule, some relevant technical data relating to main equipment to be installed as well as project activities. Project engineering represents the current cutting-edge practice. **CAR 04**. Please provide information on technological operations of recovery of rotor blades. **CAR 05.** Figure 3 does not match its description. **CAR 06.** Please provide information on optimization of	**CAR 04** **CAR 05** **CAR 06** **CAR 07** **CL 01** **CL 02** **CL 03**	OK OK OK OK OK OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		the network and the circulation pumps, blower fans and smoke exhauster. **CAR 07.** Please verify the pictures numbering in Section A.4.2. Make the appropriate corrections. **CL 01.** Provide an explanation on fault detection. **CL 02.** Please provide a link to the manufacturer's website of high- pressure pump. **CL 03.** Please, provide information on positive changes caused by implementation of flow path leads.		
A.4.3. Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
A.4.3	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	The project provides for modernization of technological equipment for electricity generation. Implementation of the project activities will increase the efficiency of fossil fuel consumption, which in turn will reduce GHG emissions. **CL 04.** Please provide information about the reasons why the proposed measures will not be implemented without the project activity, taking into account national and/or sectoral policies and circumstances.	**CL 04**	OK
ϕ . 4 .	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided in Section A.4.3.1. of the PDD. **CAR 08.** Tables in Section A.4.3.1. shall comply with Guidelines for users of the JI PDD form.	**CAR 08** **CAR 09** **CAR 10**	OK OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		CAR 09. In Section A.4.3.1. there are incorrect references to Section E and Supporting Documents. Please provide the correct references. **CAR 10.** The period that follows the first commitment period is incorrect in the name of Table 4 in Section A.4.3.1.		
ϕ . 4 .	Is it provided the estimated annual reduction for the chosen credit period in tCO_2e?	The estimated annual reduction for the first commitment period in tCO_2e is provided, as well as the estimated annual reduction for the period before and after the first commitment period within the project.	OK	OK
ϕ . 4 .	Are the data from questions above presented in tabular format?	Information for the credit period and after the credit period is presented in tabular format. See PDD Tables 2, 3 and 4, Section A.4.3.1.	OK	OK
A.4.3.1. Estimated amount of emission reductions over the crediting period				
ϕ . 4 . 3	Is the length of the crediting period Indicated?	The length of the crediting period is indicated in the PDD Section A.4.3.1. and Section C.	OK	OK
ϕ . 4 . 3	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent provided?	Total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent are provided in accordance with the calculated values in the tables of Section A of PDD and the Supporting Documents.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as ñ P a r t i e s i n v o l v e d ò written project approvals?	**CAR 11**. The project has no approval of the Host Party and the investing country. To obtain the Letter of Approval the final Determination	**CAR 11**	Pending decision.

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		report must be submitted to the State Environmental Investment Agency of Ukraine that includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval of Switzerland as the investing country is not obtained at the current stage of the Project either. **CAR 11** will be closed after the Letter of Approval is issued by the are issued by the Host Party and the investing country.		
19	Does the PDD identify at least the host Party as a ñParty in	The Host Party involved is Ukraine.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Reference to **CAR 11.**	**CAR 11**	Pending
20	Are all the written project approvals by Parties involved unconditional?	Reference to **CAR 11.**	**CAR 11**	Pending
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: ī A written projec involved, explicitly indicating the name of the legal entity? or	Party involved 1: Ukraine (the host Party), legal entity is PJSC "Donbasenergo". Party involved 2: Switzerland, legal entity is CEP CARBON EMISSIONS PARTNERS S.A. The project participants will be authorized in accordance with the relevant project approvals.	**CAR 11**	Pending

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	ī Any other form o authorization in writing, explicitly indicating the name of the legal entity?	Pending **CAR 11**		
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? ī JI specific appro ī Approved CDM meth	The chosen baseline is described in Section B.1 of the PDD. A specific JI approach is used for setting the baseline. **CAR 12.** Please indicate in PDD the full title of ACM0061 methodology whose elements were used for setting the baseline. **CL 05.** Please provide references to ACM0011 methodology in Section B.1.	**CAR 12** **CL 05**	OK ʃ ʂ
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The choice of the applicable baseline for the project is justified; detailed theoretical description is provided in section B.1 of PDD. **CAR 13**. Please provide references to the Guidance on criteria for baseline setting and monitoring in PDD Section B.1.	**CAR 13**	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national	The PDD provides detailed, full and transparent description and justification that the baseline is established by: (a) Identifying plausible future scenarios and choosing the most plausible one. As a result of evaluation of several alternatives the most plausible of them have	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	and/or sectoral policies and circumstance? ī Are key factors taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables contained in appendix B to ñGuidance on criteri and monitoringò, as	been identified and will be used as a baseline: - Alternative 1.1: Continuation of existing practice, without the JI project. - Alternative 1.2: The project activities without the use of the Joint Implementation mechanism. (b) Taking into account key factors such as for example Ukrainian environmental legislation and other national legislation, and key relevant factors, such as the ability of financing energy sector, tariffs for gas supply, availability of local technologies and methods of the project, skills and experience of implementing similar projects (c) In a transparent manner with regard to the choice of JI approach and assumptions, parameters, data sources and key factors for identifying initial conditions listed in tabular format in Section B.1. (d) Taking into account of uncertainties and using conservative assumptions (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure (f) By drawing on the list of standard variables. The baseline is set; the description is given in Section B of the PDD.		

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	The baseline assumptions of the developed JI specific approach are clearly described in full in Section B.1 of the PDD. **CAR 14.** The definition of $OXID^{y}_{p,tpp,i}$ parameter is incorrect. Please provide correct definition for the parameter. **CAR 15.** Please provide the correct description of $EG^{y}_{p,tpp,i,rf}$ and $EG^{j}_{b,tpp,i,rf}$ parameters in Section D.1 of the PDD. **CAR 16**. Annex 2 must include a summary of key elements. Please add relevant information in Annex 2. **CL 06.** Please, provide a reference to the "Guidance on criteria for baseline setting and monitoring" in the tables in Section B 1.	**CAR 14** **CAR 15** **CAR 16** **CL 06**	OK OK OK OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	When setting baseline the following factors are used: Coefficient of carbon content in fuel "i". Source of data (to be) used "National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010"	OK	OK
CDM methodology approach only				
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating	The PDD indicates that the project scenario is not a part of the established baseline scenario. It is also	**CAR 17** **CAR 18**	OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality (c) Application of the most recent version of the ñTool for t assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive	stated that the project will lead to emission reductions. Additionality of the project activity is demonstrated in PDD Section B.2 using the "Tools for the demonstration and assessment of additionality" (Version 06.0.0). **CAR 17.** At the beginning of Section B.2. of the PDD it is stated that the additionality of the project activity is demonstrated and assessed by using the "Tool for the demonstration and assessment of additionality" (Version 5.2). But version 06.0.0. is used for the project. **CAR 18.** Additionality assessment does not follow the example which was set by the "Tool for the demonstration and assessment of additionality": steps 3, 4 are not duly divided into sub-steps.		
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Detailed analysis described in Sections A.4.3, B.1 and B.2, shows that emissions of the baseline scenario are likely to exceed emissions of the project scenario due to the implementation of project activities.	OK	OK
29 (b)	Are additionality proofs provided?	Yes. Refer to Section B.2. of the PDD.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
29 (c)	Is the additionality demonstrated appropriately as a result?	The fact that the project activity itself is not the baseline scenario is clearly demonstrated in Section s ϕ . 2 J . 2 o f t h e P D D .	OK	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses are made in accordance with the newest version of the "Tools for the demonstration and assessment of additionality". (Version 06.0.0)	OK	OK
Approved CDM methodology approach only_ Paragraphs 31(a) ï 31(e)_Not applicable				
Project boundary (applicable except for JI LULUCF projects)				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants. (ii) Reasonably attributable to the project, such as: - CO2 emissions in the course of electricity generation (iii) Significant, i.e., as a rule of thumb, would by each source account on average per year over the crediting period for more than 1 per cent of the annual average anthropogenic emissions by		

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		sources of GHGs, or exceed an amount of 2000 tonnes of CO_2 equivalent, whichever is lower.		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Project boundary is defined on the basis of case-by-case assessment of different emission sources.	OK	OK
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart if it is possible?	The project boundary is presented in a tabular form and are understandable enough so that there is no need of graphic presentation.	OK	OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	All gases and sources included are explicitly stated. See Section B of PDD.	OK	OK
Approved CDM methodology approach only_Paragraph 33_ Not applicable				
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	According to the Guidelines for users of JI PDD form (version 04) the starting date of the project is the date on which the implementation or construction or real action of the project begins. The project is identified and specified in Section C. 1 of the PDD. The starting date of the project is 28/01/2000 when PJSC "Donbasenergo" started implementation of the	**CAR 19**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		project activities aimed at improving of the technological equipment and improving indexes of its efficiency, reliability and security. **CAR 19.** The starting date of the project specified in Section C.1 does not comply with the date specified in Section A.2. Please make necessary corrections.		
34 (a)	Is the starting date after 2000?	The starting date is after 2000.	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	**CAR 20.** The expected operational lifetime of the project in years and months is incorrect.	**CAR 20**	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	The length of the crediting period is stated in years and months in Section ~~ú~~.3. **CAR 21.** The date of the crediting period beginning - is the date when the first emission reductions are expected to be generated. Please clearly set the crediting period boundaries and justify them.	**CAR 21**	OK
34 (c)	Is the starting date of the crediting period before or after the date of the first emission reductions or enhancements of net removals generated by the project?	Refer to **CAR 21**.	**CAR 21**	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	Generation of ERUs relates to the first commitment period of 5 years (January 1, 2008 ï December 31, 2012).	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	The PDD states that the prolongation of the crediting period beyond 2012 is subject to approval of the host party and estimation of emission reductions of enhancements of net removals is presented separately for those until 2012 and those after 2012 in the relevant sections of PDD. If after the first commitment period under the Kyoto protocol it is prolonged, the crediting period under the project will be prolonged by 5 years/60 months until December 31, 2017.	OK	OK
Monitoring Plan				
35	Does the PDD explicitly indicate which of the following approaches is used? ī JI specific appro ī Approved CDM meth	The proposed project uses a JI specific approach based on the JI requirements in accordance with paragraph 9 (a) of the JI Guidance on criteria for baseline setting and monitoring, version 03.	OK	OK
JI specific approach only				
36 (a)	Does the monitoring plan describe: ī All relevant f characteristics subject to monitoring? ī The period in w monitored? ī All critical fact reporting of project performance?	The monitoring plan specifies all decisive factors for the control and reporting on project performance: quality control (QC) and quality assurance (QA) procedures; operational and management structures that will be applied when implementing the monitoring plan. **CAR 22.** Description of $W^{y}_{p,tpp,i}$ parameter in the table in Section D 1.1.1. does not comply with the description that was stated in the formula.	**CAR 22**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	The monitoring plan specifies indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancement of net removals to be monitored. Data to be monitored are presented in section D of the PDD version 02. **CL 07.** Please clarify whether the data necessary for determination will be stored after the last transfer of ERUs under the project.	**CL 07**	OK
36 (b)	If default values are used: ī Are accuracy and carefully balanced in their selection? ī Do the default v recognized sources? ī Are the default statistical analyses providing reasonable confidence levels? ī Are the default v transparent manner?	Default values are provided in the table of Annex 3 to the PDD. They originate from recognized sources and are presented in a transparent manner.	OK	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	The monitoring plan clearly indicates how the values are to be selected and justified.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (b) (ii)	For other values, ī Does the monitoring plan specify the precise references from which these values are taken? ī Is the conservativeness provided justified?	**CAR 23**. Please, number all formulae in Section D of the PDD. **CAR 24**. Please provide all the values of emission reductions in tonnes of CO_2 equivalent in the PDD.	**CAR 23** **CAR 24**	OK OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Refer to section D of the PDD.	OK	OK
36 (b) (iv)	Are International System Units (IS units) used?	IS units are used for certain parameters.	OK	OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	Relevant data necessary for determining the baseline of anthropogenic emissions of greenhouse gases within the project boundary is presented in table D.1.1.3. of the PDD.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	The use of parameters, coefficients and variables are consistent between the baseline and monitoring plan.	OK	OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of ñGuidance on criteria for baseline setting and monitoring, version 03ò	The monitoring plan is established taking into account the ñGuidance on criteria for baseline setting and monitoring, version 03ò	OK	OK
36 (d)	Does the monitoring plan explicitly and clearly distinguish:	The monitoring plan clearly distinguishes three types of data and parameters. Refer to Section D.1. of the PDD.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not yet available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination. (ii) Data and parameters that are monitored throughout the crediting period. (iii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not yet available at the stage of determination are absent.		
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	In tables of parameters provided in section D.1.1.1. of the PDD the time of monitoring (frequency) and the source of data to be used, as well as recording method are indicated for all the monitored parameters and data.	OK	OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	All algorithms and formulae used for the estimation of baseline and project emissions are indicated and explained in the PDD. The description of formulae is provided in Section D.1.4. of the PDD	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Refer to section 36 (f) of this table.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats, subscripts etc. are used.	OK	OK
36 (f) (iii)	Are all equations numbered?	See **CAR 23.**	**CAR 23**	OK
36 (f) (iv)	Are all variables with units indicated defined?	Yes. Refer to section D of the PDD.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes, algorithms/procedures comply with state norms and are conservative.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	Uncertainty in parameters used is low taking into account the algorithms of data monitoring.	OK	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	There is consistency between the elaboration on the baseline scenario and procedure for calculating the baseline emissions in the monitoring plan and in tables.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	The formulae used in the PDD are sufficiently described.	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Monitoring under the project does not require changes in existing accounting and data collection system existing at PJSC "Donbasenergo".	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (f) (vii)	Are references provided as necessary?	All necessary references are provided in the PDD.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All key assumptions are explained in a transparent manner.	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	N/A	OK	OK
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	Measuring equipment is regularly calibrated in accordance with the procedures of quality management, the Law of Ukraine "On metrology and metrological activity." Thus, the issue of uncertainty range and confidence interval is irrelevant for such measurements.	OK	OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	The monitoring plan was set according to national norms and standards.	OK	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Yes	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	Inspection (calibration) of meters is carried out in accordance with manuals of the manufacturer, approved methodologies on inspection/calibration of meters as well as according to the national standards of Ukraine.	OK	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Detailed operational and management structures are given in Section D.3 to the PDD. **CL 08.** Please provide in Section D.4 information concerning who determined the monitoring plan.	**CL 08**	OK
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	Monitoring under the project does not require changes in existing accounting system and data collection procedure.	OK	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	Tables D.1.1.1 and D.1.1.3 provide compilation of all data needed to monitor project and baseline emissions.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	Data to be monitored and required for determination will be kept for two years after the last transfer of ERUs under the project.	OK	OK
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	Yes, selected elements of approved CDM methodology are used for setting the baseline scenario. The selected elements and combinations with additional elements that were additionally developed by the project participants are in line with requirements of paragraph 36 above.	OK	OK
Approved CDM methodology approach only_Paragraphs 38(a) ï 38(d)_Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not	No periods to overlap during the crediting period are expected.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?			
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	According to the JI specific approach, there aren ô t potential sources of leakage due to the project activities.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	The PDD s t a t e s t h a t t h e r e i s n	OK	OK
Approved CDM methodology approach only_Paragraph 41_Not applicable				

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	In the PDD the approach of assessment of emissions in the baseline scenario and in the project scenario is indicated. **CAR 25.** Please check the numbering of tables in Section E of the PDD and make corresponding corrections.	**CAR 25**	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	PDD provides estimates of: (a) Emissions in the project scenario (Section E.1) (b) Leakage (Section E.2) (c) Emissions in the baseline scenario (Section E.4) (d) Emission reductions adjusted by leakage (Section E.6).	OK	OK
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable?	N/A	N/A	N/A

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(c) Emission reductions or enhancements of net removals adjusted by leakage?			
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tonnes of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formulae used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated	(a) Estimates in 43 are given on the periodic basis, in tonnes of CO_2 equivalent, on a source-by-source basis, before, during and after the crediting period. (b) The formulae used in PDD are consistent. (c) Key factors influencing baseline emissions and activity level of the project and risks associated with the project are taken into account, as appropriate. (d) Data sources used to calculate the estimates are clearly identified, reliable and transparent. (e) Default values are taken from identified sources. (f) Estimation in 43 is based on conservative assumptions and the most plausible scenario in a transparent manner. (g) Estimates in 43 are consistent throughout the PDD. (h) The annual average of estimated emission reductions are calculated correctly (by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve).	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed de facto, does the PDD include an illustrative	Baseline emission level is calculated using the specific approach. Forecasted emissions calculation is clearly provided in	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	forecasted emissions or net removals calculation?	the PDD.		
Approved CDM methodology approach only_Paragraphs 47(a) ï 47(b)_Not applicable				
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	The environmental impacts of the project have been sufficiently described	OK	OK
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to Supporting Documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	the PDD provide conclusion and all references to Supporting Documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party	OK	OK
Stakeholder consultations				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been	Stakeholdersô comments or because PDD does not include the negative impact on the environment and the negative social effects that the discussion was not necessary.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?			
Determination regarding small-scale projects (additional elements for assessment)				
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
Determination regarding programmes of activities (additional/alternative elements for assessment)				

TABLE 2 RESOLUTION OF CORRECTIVE ACTION AND CLARIFICTION REQUESTS

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 01. Please in Section A.2 provide the date when development of project design documents for the JI project started.	ϕ . 2	28/01/2000 ï date when PJSC "Donbasenergo" started implementation of project measures in introducing of modernization of technological equipment and improvement of its efficiency, reliability and safety rates.	The information is provided in Section A.2 PDD. The issue is closed.
CAR 02. Please section A.3 describe according to "Guidelines for users of the PDD for JI projects" (version 04).	ϕ 3	The data of the project participants in Section A.3 presented in tabular format according to "Guidelines for users of the PDD for JI projects" (version 04).	The issue is closed as corresponding changes are made.
CAR 03. Please in Annex 1 provide contact information of the project participants according to "Guidelines for users of the PDD for JI projects" (version 04).	ϕ 3	Contact information of the project participants in Annex 1 presented according to "Guidelines for users of the PDD for JI projects" (version 04).	The issue is closed as corresponding changes are made.
CAR 04. Please provide information on technological operations of recovery of rotor blades.	ϕ . 4 . 2	Technological operations: ¶ applying of modernized diaphragms with high profiles of guide vanes and improved meridional contours;; ¶ Å applying of blades with whole milling shroud flange and the ring	The information was provided in Section A.4.2. The issue is closed.

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
		ligation; ¶ Å optimizatio meridional contours of rotor blades; ¶ Å reduction the levels by using the optimal value of the axial gap formed shroud flange, thereby increasing efficiency and reducing the aerodynamic forces acting on the rotor blades; ¶ introduction of throttle axial radially over radial seals that maintain high efficiency during operation and eliminates lateral aerodynamic forces.	
CAR 05. Figure 3 does not match its description.	ϕ . 4 . 2	Figure 3 shows Left to right: upgraded liquid end before high-pressure pumps with triggering devices; overhaul repair of drive turbine of feed pumps.	The issue is closed as corresponding changes are made.
CAR 06. Please provide information on optimization of the network and the circulation pumps, blower fans and smoke exhauster.	ϕ . 4 . 2	The detailed information and references to manufacturers are provided in Sectio	The information was provided in Section A.4.2. The issue is closed.

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 07. Please verify the pictures numbering in Section A.4.2. Make the appropriate corrections.	ϕ . 4 . 2	The pictures numbering in Section A.4.2. was verified. Appropriate corrections made.	The issue is closed as corresponding changes are made.
CAR 08. Tables in Section A.4.3.1. shall comply with Guidelines for users of the JI PDD form.	A.4.3	Tables in Section A.4.3.1. are provided according to Guidelines for users of the JI PDD form.	The issue is closed as corresponding changes are made.
CAR 09. In Section A.4.3.1. there are incorrect references to Section E and Supporting Documents. Please provide the correct references.	A.4.3	Incorrect references were corrected in Section ϕ . 4 . 3 . 1 .	Correct references are provided, the issue is closed.
CAR 10. The period that follows the first commitment period is incorrect in the name of Table 4 in Section A.4.3.1.	ϕ . 4 . 3	Table 4. Estimated amount of emission reductions for the period following the first commitment period (2013-2017)	The issue is closed as corresponding changes are made.
CAR 11. The project has no approval of the Host Party and the investing country.	19	To obtain the Letter of Approval the final Determination report must be submitted to the State Environmental Investment Agency of Ukraine that includes this Determination Protocol and the list of sources of Reference Information. A Letter of Approval of Switzerland as the investing country is not obtained at the current stage of the Project either.	**CAR 11** will be closed after the Letters of Approval are issued by the Host Party and the country-investor.
CAR 12. Please indicate in PDD the full title of ACM0061 methodology whose elements were used for setting the baseline.	22	the baseline and monitoring methodology ACM 0061	The issue is closed as corresponding changes are made.

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
		"Methodology for rehabilitation and/or energy efficiency improvement in existing power plants"	
CAR 13. Please provide references to the Guidance on criteria for baseline setting and monitoring in PDD Section B.1.	23	References to the Guidance on criteria for baseline setting and monitoring are provided in Section B.1 of the PDD.	Correct references are provided, the issue is closed.
CAR 14. The definition of $OXID^{y}_{p,tpp,i}$ parameter is incorrect. Please provide correct definition for the parameter.	24	$OXID^{y}_{p,tpp,i}$ - carbon oxidation factor in the course of fuel "i" combustion, relative units;	The issue is closed as corresponding changes are made.
CAR 15. Please provide the correct description of $EG^{y}_{p,tpp,i,rf}$ and $EG^{j}_{b,tpp,i,rf}$ parameters in Section D.1 of the PDD.	24	$EG^{y}_{p,tpp,i,rf}$ - total amount of supplied electricity in monitorin project scenario, ths kW*h; $EG^{j}_{b,tpp,i,rf}$ - total amount of supplied electricity in historical period çjè, baseline scenario, ths kW*h.	The issue is closed as corresponding changes are made.
CAR 16 Annex 2 must include a summary of key elements. Please add relevant information in Annex 2.	24	Annex 2 to the PDD provides key elements for baseline setting (including their description, data source and measurement units).	The information is verified, the issue is closed.
CAR 17. At the beginning of Section B.2. of the PDD it is stated that the additionality of the project activity is demonstrated and assessed by using the "Tool for the	28	Additionality of the project activity is demonstrated by using the ñ Tool the demonstration and assessment of additionality ò (Ve	The issue is closed as corresponding changes are made.

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
demonstration and assessment of additionality" (Version 5.2). But version 06.0.0. is used for the project.			
CAR 18. Additionality assessment does not follow the example which was set by the "Tool for the demonstration and assessment of additionality": steps 3, 4 are not duly divided into sub-steps.	28	Section 4 of the PDD, which describes the additionality of the JI project, was corrected according to the methodological guidance for the demonstration and assessment of additionality. Sub-steps were added to Steps 3 and 4, as provided by the "Tool for the demonstration and assessment of additionality" (Version 06.0.0).	The issue is closed as corresponding changes are made.
CAR 19. The starting date of the project specified in Section C.1 does not comply with the date specified in Section A.2. Please make necessary corrections.	34 (O)	The date is specified and corresponding corrections were made in the PDD.	The issue is closed as corresponding changes are made.
CAR 20. The expected operational lifetime of the project in years and months is incorrect.	34 (fi	The expected operational lifetime of the project in years and months is 14 years or 168 months and the date on which the first emission reductions are expected to be generated was taken as the starting date of the crediting period, namely January 1, 2004.	The issue is closed as corresponding changes are made.
CAR 21. The date of the crediting period	34 (fn)	The starting date of the crediting	The boundaries of the crediting

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
beginning is a date when the first emission reductions are expected to be generated. Please clearly set the crediting period boundaries and justify them.		period is on the date when the first emission reductions, namely January 1, 2004. Generation of ERUs relates to the first commitment period of 5 years (January 1, 2008 ï December 31, 2012). The PDD states that the prolongation of the crediting period beyond 2012 is subject to approval of the host party and estimation of emission reductions of enhancements of net removals is presented separately for those until 2012 and those after 2012 in the relevant sections of PDD. If after the first commitment period under the Kyoto protocol it is prolonged, the crediting period under the project will be prolonged by 5 years/60 months until December 31, 2017.	period are set in Section C of the PDD. The issue is closed.
CAR 22. Description of $W^{y}_{p,tpp,i}$ parameter in the table in Section D 1.1.1. does not comply with the description that was stated in the formula.	3 6 (Θ)	The mistake was corrected. Refer to the PDD.	The issue is closed as corresponding changes are made.
CAR 23. Please, number all formulae in Section D of the PDD.	36 (b) (ii)	All the formulae given in Section D of the PDD were numbered.	The issue is closed as corresponding changes are made.

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in table 1	Summary of project participants' responses	Determination team conclusion
CAR 24. Please provide all the values of emission reductions in tonnes of CO_2 equivalent in the PDD.	36 (b) (ii)	The values for emission reductions were given in tonnes of CO_2 equivalent throughout the PDD.	The issue is closed as corresponding changes are made.
CAR 25. Please check the numbering of tables in Section E of the PDD and make corresponding corrections.	42	All formulae resented in Section E of the PDD were numbered.	The issue is closed as corresponding changes are made.
CL 01. Provide an explanation on fault detection.	ϕ . 4 . 2	Detection - is non-destructive control methods (ultrasonic, eddy current, capillary, etc.).	The issue is closed as necessary explanations are provided.
CL 02. Please provide a link to the manufacturer's website of high- pressure pump.	ϕ . 4 . 2	Links are provided. Necessary corrections were made	The information is satisfactory, the issue is closed.
CL 03. Please, provide information on positive changes caused by implementation of flow path leads.	ϕ . 4 . 2	Replacement of flow path leads to a significant increase in pump efficiency and thus reduces specific energy consumption of devices, which in turn leads to a reduction of greenhouse gas emissions.	The information is satisfactory, the issue is closed.
CL 04. Please provide information about the reasons why the proposed measures will not be implemented without the project activity, taking into account national and/or sectoral policies and circumstances.	ϕ . 4 . 2	Without implementation of the project activities reduction of GHG emissions wount take plase because national or sectoral policies does not oblige company to implement energy efficiency measures in the system of heat and electricity generation, aimed at reduction of GHG emissions.	The issue is closed as necessary explanations are provided.
CL 05. Please provide references to	22	The Section B.1 PDD provides	The issue is closed as necessary