DETERMINATION REPORT

VEMA S.A.

DETERMINATION OF THE JI PROJECT

Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC “Donbasenergo”

REPORT NO. UKRAINE-DET/0872/2012

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BUREAU VERITAS CERTIFICATION

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DETERMINATION REPORT

Date of first issue	Organisational unit:
05/11/2012	Bureau Veritas Certification Holding SAS
Client: VEMA S.A.	**Client ref.:** Fabian Knodel

Summary:

Bureau Veritas Certification has made the determination of VEMA S.A.'s project "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo" located in the territory of the urban-type settlement Novyi Svit, Starobeshivskyi district, Donetsk oblast, 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 study of project's baseline, monitoring plan and other relevant documents. It 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.:	Subject Group:
UKRAINE-DET /0872/2012	JI

Project title:
Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo"

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1 INTRODUCTION

VEMA S.A. has commissioned Bureau Veritas Certification to determine its JI project "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo" (hereinafter referred to as the "project") located in the territory of the urban-type settlement Novyi Svit, Starobeshivskyi district, Donetsk oblast, 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 with 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 and obligatory 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 project's baseline, the monitoring plan and other relevant documents. The information in these documents meets the Kyoto Protocol requirements, UNFCCC rules and associated interpretation.

The determination is not meant to provide any consulting towards clients. However, stated requests for clarifications and/or corrective, forward action requests may provide input for improvement of the project design.

1.3 Determination team

The determination team consists of the following personnel:

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

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

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification Internal Technical Reviewer

Viacheslav Yeriomin
Bureau Veritas Certification Team Member, 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 verification and the results from determining the identified criteria.
The determination protocol serves the following purposes:

- It organizes, describes 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 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) was submitted by VEMA S.A. together with such additional documents related to the project design and baseline as: host country Law, Guidelines for users of the joint implementation project design document form, approved CDM methodologies and/or Guidance on criteria for baseline setting and monitoring, the Kyoto Protocol, Clarifications on Determination Requirements to be checked by an Accredited Independent Entity.

To address Bureau Veritas Certification corrective action, forward action and clarification requests, VEMA S.A. revised the PDD version 06 of October 10, 2012 and PDD version 07 of November 23, 2012, and resubmitted it on January 14, 2013, as version 07-1.

The determination findings presented in this report relate to the project as described in the PDD versions 06, 07 and 07-1.

2.2 Follow-up Interviews

On 12/11/2012 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 "Donbasenergo" and VEMA S.A. were

interviewed (see "Reference"). The main topics of the interviews are summarised in Table 1.

Table 1 Interview Topics

Interviewed organization	Interview topics
PJSC "Donbasenergo"	➢ Project History ➢ Project approach ➢ Project boundary ➢ Implementation schedule ➢ Organizational Structure ➢ Responsibilities and obligations ➢ Personnel training ➢ Quality control procedures and technologies ➢ Modernization / installation of equipment (records) ➢ Control over metering equipment ➢ System of measurements record-keeping, database ➢ Technical Documentation ➢ Monitoring Plan and procedures ➢ Permits and licenses ➢ Environmental Impact Assessment ➢ Stakeholders' response
VEMA S.A.	➢ Baseline methodology ➢ Monitoring plan ➢ Additionality proofs ➢ Calculations of emission reductions ➢ Project design ➢ Legal issues relating to the project ➢ Environmental impacts ➢ Approval by 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 purpose of the project is reduction of greenhouse gas emissions by lowering fuel consumption through reconstruction of generating units and implementation of technically accessible fuel saving measures while producing electric energy at Starobeshivska thermal power plant (TPP). The project is to facilitate sustainable development and environmental improvement by way of implementation of energy-saving technologies.

Current operation of Starobeshivska TPP is characterised by continuous constant lowering of energy efficiency of generating units of the TPP due to physical wear of the equipment and lack of funds for its reconstruction and modernisation. As a result, specific spend of fossil fuel for electric energy generation constantly rises.

The project scenario provides for enhancing the efficiency of fuel and power resourses (FPR) consumption in order to reduce greenhouse gas emissions, as compared to the current practice, by way of reconstruction and modernisation of major and minor equipment of all tagged generating units of the plant (station Nos. 4–13).

The scheduled measures include modernisation of: boiler equipment, turbines, control systems, electrical and automatic schemes, optimisation of equipment operation modes, of fuel preparation, etc. (described in details in Section A.4.2). The most significant reconstruction and technical re-equipping measures are being implemented at power generating units No. 4 and No. 7.

At Unit No. 4, the highly effective ecologically clean technology for combustion of low-grade fuel and waste of coal-preparation plants in the boiler with atmospheric circulating fluidized bed (ACFB) technology of Lurgi GmbH (Germany) company is being implemented. The unit installed capacity increases from 175 MWe to 210 MWe, with planned efficiency increasing from 83 % to 90.3 %. After implementation of technology of combustion in a fluidized bed, the unit will use low-quality domestic coal and wastes from coal-preparation plants.

At unit No. 7 the technical re-equipment of the main and supplementary equipment is scheduled, in order to increase unit capacity to 210 MW, to prolong equipment life by 20-30 years, to increase unit maneuverability and to reduce toxic emissions to a level that does not exceed the permitted limits.

The project was initiated in 2000.

January, 2000, – Technical meeting of the OJSC "Donbasenergo" has accepted the Decision to realise the activity on GHG emission reduction through reconstruction and technical re-equipment of thermal power plants of the OJSC “Donbasenergo” (Protocol of the Technical meeting dated 28/01/2000).

April, 2008, – Contract was signed between OJSC «Donbasenergo» and "E-Energy B.V." for purchase of emission reductions (Contract dated April 23, 2008).

May, 2008, – The Ministry for Environmental Protection of Ukraine has issued the Letter of Endorsement for the JI project "Rehabilitation and technical re-equipping of Starobeshivska TPP of the OJSC "Donbasenergo" (No. 6140/11/10-08 dated May 15, 2008).

August, 2010, - The Letter of Approval from the Party of buyer - The Netherlands No. 2010JI23 was issued on 30.08.2010.

November, 2010, - The National Environmental Investment Agency of Ukraine has issued the Letter of Approval No. 1916/23/7 for the JI project "Rehabilitation and technical re-equipping of Starobeshivska TPP of OJSC" Donbasenergo» (No. 1916/23/7 dated 17.11.2010).

November, 2010, - The National Environmental Investment Agency of Ukraine has confirmed this JI project under Track 1 procedure by the Order No. 178 dated November 25, 2010.

The project identification number provided in the International Journal of transactions (ITL project ID) is UA1000198.

PDD version 06 is designed due to change of the project boundaries and the baseline for the project.

PDD, version 07-1, dated January 14, 2013, was developed to address Bureau Veritas Certification corrective action and clarification requests.
The determination protocol of the project contains CARs and CLs for PDD versions 06, 07 and 07-1.

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 35 Corrective Action Requests and 9 Clarification Requests.

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

4.1 Project approval by Parties involved (19-20)

The project "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo" has received support from the Ukrainian

government, specifically Letter of Endorsement No. 6140/11/10-08 issued by the Ministry for Environmental Protection of Ukraine on 15.05.2008.

The Letter of Approval from the Party of buyer - The Netherlands No. 2010JI23 was issued on 30.08.2010.

The National Environmental Investment Agency of Ukraine has issued the Letter of Approval No. 1916/23/7 dated 17.11.2010for the JI project "Rehabilitation and technical re-equipping of Starobeshivska TPP of OJSC" Donbasenergo» (for the PDD, version 05).

The National Environmental Investment Agency of Ukraine has confirmed this JI project under Track 1 procedure by the Order No. 178 dated November 25, 2010.

The project identification number provided in the International Journal of transactions (ITL project ID) is UA1000198.

PDD version 06 is designed due to change of the project boundaries and the baseline for the project.

After the additional project determination, pursuant to Order No. 79 by the National Environmental Investment Agency of Ukraine, the project design document (PDD) and the Determination Report will be submitted to the State Environmental Investment Agency of Ukraine for information.

The identified areas of concern as to the project approval, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 17, CAR 18, CAR 19, CAR 20).

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 authorised by the Parties involved, through the written Letters of Approval (from the government of the Netherlands as the country-investor, and from Ukraine as the host party).

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 (Version 03)).

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

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

a. "business-as-usual" scenario with implementation of minimum operation maintenance and repair works at the Starobeshivska TPP balanced by overall degradation of the TPP.

b. Implementation of measures for energy efficiency increasing of the Starobeshivska TPP operation, analogous to the project activity, without JI mechanism.

c. Partial implementation of the project activities, without energy efficiency measures at the generating equipment.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, energy 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. 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. Existing market mechanisms or direct administrative measures did not provide the necessary modernisation of existing production facilities of power generating companies.

b. A limited number of modernisation and rehabilitation projects of power stations were adopted for implementation. The situation is particularly critical given the rise in the near future, of the need for shunting facilities, lack of which is a threat to the safe operation of United Energy Systems of Ukraine. Imperfect pricing policy leads to an increase in payable accounts of energy generation companies, leading to their bankruptcy.

c. The structure of existing tariffs for electricity is regulated by the state and does not include investment needs of energy generation companies. This causes permanent shortage of funding and impossibility to conduct timely overhauls, ensure stable operation of equipment and invest into modernisation and development of the industry.

d. State support in the power generating sector is provided in amounts of funds provided by the law of Ukraine on 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 ("Reconstruction of units No. 1, 2, 3, 4 of Zuyevska TPP", "Reconstruction of generating units of structural division "Luhanska TPP" of LLC "Skhidenergo", "Reconstruction of generating units of structural division "Kurakhovska TPP" of LLC "Skhidenergo") 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 ex-ante and ex-post baseline emissions, are sufficiently described in Sections E and D of the PDD, respectively.

The identified areas of concern as to the baseline, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 21 – CAR 23; CL 08).

4.4 Additionality (27-31)

The most recent version of the "Tool for the demonstration and assessment of additionality" approved by the CDM Executive Board was used in accordance with the JI specific approach, defined pursuant to paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", 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.

Three plausible and realistic alternative scenarios of the project were identified:

- "business-as-usual" scenario with implementation of minimum operation maintenance and repair works at the Starobeshivska TPP balanced by overall degradation of the TPP.

- Implementation of measures for energy efficiency increasing of the Starobeshivska TPP operation, analogous to the project activity, without JI mechanism.

- Partial implementation of the project activities, without energy efficiency measures at the generating equipment.

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

According to the “Tool for the demonstration and assessment of additionality” (Version 06.1.0) 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 using the approach chosen.

The identified areas of concern as to the additionality, project participants’ response and Bureau Veritas Certification’s conclusion are described in Appendix A to Determination Report (refer to CAR 24 – CAR 30, CAR 09).

4.5 Project boundary (32-33)

The project boundary, which is defined in the PDD and in accordance with the specific approach, delineated by the physical, geographical location of Starobeshivska TPP, encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs), which are:

(i) Under the control of the project participants;

- Emissions due to the fossil fuels combustion in boilers of power generating units of the TPP for electricity production (CO_2);

(ii) Reasonably attributable to the project, such as:

- Emissions due to the fossil fuels combustion in boilers of power generating units of the TPP for electricity production (N_2O);

(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 32 years or 384 months – from January 01, 2000 to December 31, 2032.

The PDD states the length of the crediting period in years and months, which is 29 years or 348 months, and the starting date of the crediting period is 01/01/2004, which is the date from which the emission reductions are subject to crediting, according to the rules of the State Environmental Investment Agency of Ukraine.

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 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 the crediting period, project participants' response and Bureau Veritas Certification's conclusion are described in Appendix A to Determination Report (refer to CAR 31 - CAR 32).

4.7 Monitoring plan (35-39)

The PDD in the section relating to the monitoring plan clearly states that a specific JI approach was chosen.

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 all decisive factors for the control and reporting of project performance, such as reporting forms, operational 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: actual standard fuel consumption in year *y*; part of the fuel type *i* in the standard fuel in year *y*; carbon content factor for fuel type *i*; carbon oxidation factor under combustion of fuel type *i*; coal (sludge) consumption; net calorific value of coal (sludge); nitrous oxide emission factor for coal (sludge) combusted by ACFB technology; quantity of limestone used; carbon dioxide emission factor for limestone; electricity output to the grid.

- The monitoring plan draws on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC, as appropriate, among which are: (BE_y) – baseline emissions; (PE_y) – project emissions; ($EF_{CO2\text{-}e,XX}$) – carbon dioxide equivalent emission factor; (EG_y)

– electricity production; (NCV_{xx}) – net calorific value; (FC_{XX}) – quantity of fuel conbusted; ($OXID_{xx}$) – oxidation factor under fuel combustion;

According to the guidelines for users of the JI PDD forms, revision 04, the described approach to monitoring clearly states:

a) Data and parameters that are not subject to monitoring during the crediting period but are identified only once and are available at the PDD development stage:

B_j	Actual standard fuel consumption for generation of electricity output to the grid in year *j* of the historical period before the project implementation
EG^j	Electricity output to the grid in year *j* of the historical period

b) Data and parameters that are not controlled during the crediting period but are identified only once (and thus remain fixed for the crediting period) and are not available at the PDD development stage: none.

c) Data and parameters controlled during the whole crediting period:

B^y	Actual standard fuel consumption in year *y*
$S^{i,y}$	Part of the fuel type *i* in the standard fuel in year *y*
$EF^{i,y}$	Carbon content factor for fuel type *i* in year *y*
$OXID^{i,y}$	Carbon oxidation factor under combustion of fuel type *i* in year *y*
$FC^{sl,y}$	Coal (sludge) consumption in year *y*
$NCV^{sl,y}$	Net calorific value of coal (sludge) in year *y*
$EF^{N2O,sl,y}$	Nitrous oxide emission factor for coal (sludge) combusted by ACFB technology in year *y*
L^y	Quantity of limestone used in year *y*
$EF^{CO2,l,y}$	Carbon dioxide emission factor for limestone in year *y*
B^{d}_{y}	Dynamic baseline standard fuel consumption in year *y*
$S^{i,y}$	Part of the fuel type *i* in the standard fuel in year *y*
$OXID^{i,y}$	Carbon oxidation factor under combustion of fuel type *i* in year *y*
EG^y	Electricity output to the grid in year *y*

The monitoring plan describes the methods applied for monitoring data (including its frequency) and record-keeping methods 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 the raising of fossil fuel consumption efficiency. The emission reductions can be defined 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, such as:

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

GHG baseline emissions for dynamic baseline setting is calculated as follows:

$$PE_y = \sum_i PE_{i,y} + PE_y^{АЦКШ} \quad (1)$$

where:

$PE^{i,y}$ – emissions due to the fuel combustion of type *i* in year *y*, t CO_2eq;

$PE_y^{АЦКШ}$ – additional GHG emissions due to features of fuel combustion in the ACFB boiler (N_2O emissions) and CO_2 emissions from limestone addition in year *y*, t CO_2eq.

GHG emissions due to the fuel combustion of type *i* in year *y*;

$$PE^{i,y} = \frac{B_y \times S_{i,y}}{100} \times 29{,}3 \times EF_{i,y} \times 44/12/1000 \times OXID_{i,y} \quad (2)$$

where:

B^y – actual standard fuel consumption in year *y*, t.s.f.;

$S^{i,y}$ – part of the fuel type *i* in the standard fuel in year *y*, %;
29.3 – calorific value of standard fuel, GJ / t;

$EF^{i,y}$ – carbon content factor for fuel type *i* in year *y,* t C/TJ;
44/12 – stoichiometric ratio of carbon dioxide and carbon molecular weight, t CO_2/t C;
1000 – conversion factor of GJ into TJ;

$OXID^{i,y}$ – carbon oxidation factor under combustion of fuel type *i* in year *y;*
[i] – the type of combusted fuel (coal, natural gas, fuel oil);
[y] – reported year.

Additional GHG emissions due to features of fuel combustion in the ACFB boiler in year y:

$$PE_y^{АЦКШ} = PE_{sl,y}^{АЦКШ} + PE^{l,y} \quad (3)$$

where:

$PE_{sl,y}^{АЦКШ}$ – nitrous oxide emissions in units of carbon dioxide equivalent due to fuel combustion in the ACFB boiler in power generating unit No. 4 in year *y*, t CO_2eq;

$PE^{l,y}$ – GHG emissions due to limestone using in power generating unit No. 4 in year *y*, t CO_2eq.

Nitrous oxide emissions in units of carbon dioxide equivalent due to fuel combustion in the ACFB boiler in power generating unit No. 4 in year y:

$$PE_{sl,y}^{АЦКШ} = FC_{sl,y} \times NCV_{sl,y} \times EF_{N2O,sl,y} \times 310 \quad (4)$$

where:

$FC^{sl,y}$ – coal (sludge) consumption in year *y,* t;

$NCV^{sl,y}$ – net calorific value of coal (sludge) in year *y,* GJ/t;

$EF^{N2O,sl,y}$ – nitrous oxide emission factor for coal (sludge) combusted by ACFB technology in year y, t N_2O/ GJ;

310 – global warming potential of nitrous oxide, t CO_2e / t N_2O.

CO_2 emissions due to limestone using in power generating unit No 4 in year *y*:

$$PE^{l,y} = L^y \bullet EF^{l,CO2}, \quad (5)$$

where:

L^y – quantity of limestone used in year *y*, t;

$EF^{l,CO2}$ – carbon emission factor for limestone in year y, t CO_2eq/ t limestone.

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

$$BE_y = \sum_i BE_{i,y} \quad (6)$$

where:

$BE^{i,y}$ – dynamic baseline emissions due to the fuel combustion of type i in year y, t CO_2e;

$$BE^{i,y} = B_y^d * S^{i,y}/100 * 29,3 * EF^{i,y} * 44/12/1000 * OXID^{i,y} \quad (7)$$

where:

B^{d}_{y} – dynamic baseline standard fuel consumption in year y, t.s.f.;

$S^{i,y}$ – part of the fuel type *i* in the standard fuel in year *y*, %;

29.3 – calorific value of standard fuel, GJ / t;

$EF^{i,y}$ – carbon content factor for fuel type *i* in year *y,* t C/TJ;

44/12 – stoichiometric ratio of carbon dioxide and carbon molecular weight, t CO_2/t C;

1000 – conversion factor of GJ into TJ;

$OXID^{i,y}$ – carbon oxidation factor under combustion of fuel type *i* in year *y;*

[i] – the type of combusted fuel (coal, natural gas, fuel oil);

[y] – reported year.

$$B^{d}_{y} = SEC^{d}_{y} \times EG_{y} \quad (8)$$

where:

SEC^{d}_{y} – dynamic baseline specific standard fuel consumption in year y, t.s.f. / MWh;

EG_{y} – electricity output to the grid in year y, MWh;

[y] – reported year.

Dynamic baseline specific standard fuel consumption SEC^{d}_{y} are calculated based on the assumption of their linear increasing with time. This linear dependence is based on historical data for the period *j* from 1993 till 1999 with using of the least-squares method:

$$SEC^{d}_{y} = a \times y + b \quad (9)$$

where:

a – coefficient of linear dependence;

b - coefficient of linear dependence;

[y] – reported year.

$$a = \frac{k \times \sum_{j}\left(SEC_{j} \times j\right) - \sum_{j} SEC_{j} \times \sum_{j} j}{k \times \sum_{j} j^{2} - \left(\sum_{j} j\right)^{2}}$$

$$b = \frac{\sum_j SEC_j - a \times \sum_j j}{k}$$

where:

SEC^j – specific standard fuel consumption in year j of the historical period, t.s.f. / MWh;

[k] – number of years in the historical period;

[j] – year of the historical period.

$$SEC^j = B^j / EG^j \quad (10)$$

where:

B^j – actual standard fuel consumption for generation of electricity output to the grid in year *j* of the historical period before the project implementation , t.s.f.;

EG^j – electricity output to the grid in year j of the historical period, MWh;
[j] – year of the historical period.

More detailed information is provided in the Appendix to the PDD (Excel table).

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

Estimated emission reductions for the project activity in the reported year *y*:

$$ER_y = BE_y - PE_y \quad (11)$$

where:
ER_y – GHG emission reductions in year *y*, t CO_2e;
BE_y – GHG baseline emissions due to fossil fuels combustion in year y, t CO_2e;
PE_y – GHG project emissions due to fossil fuels combustion in year *y*, t CO_2e;
[y] – reported year.

The monitoring plan represents quality control procedures and quality assurance 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, where appropriate, provision and submission on request of information about calibration, as well as information about how data are recorded and / or how the applicability of the method and accuracy of data are assured.

The monitoring plan clearly establishes responsibility and authority in respect of monitoring actions. 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 PJSC “Donbasenergo”. 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 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 (for example, official statistics, experts’ opinions, company’s own data, IPCC, commercial and scientific literature, etc.) but not including data that are calculated with equasions.

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 participants’ response and Bureau Veritas Certification’s conclusion are described in Appendix A to Determination Report (refer to CAR 33 – CAR 35).

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 generated by the project.

The PDD provides the ex ante estimates of:

(a) emissions from the project (within the project boundary), which are 16 440 319 tonnes of CO2e in 2004-2007, 26 578 621 tonnes of CO2e in 2008-2012, 113 597 380 tonnes of CO2e in 2013-2032;

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

(c) emissions in the baseline scenario (within the project boundary), which are 17 250 692 tonnes of CO2e in 2004-2007, 28 067 712 tonnes of CO2e in 2008-2012, 119 292 760 tonnes of CO2e in 2013-2032;

(d) reduction of emissions adjusted by leakages (based on the above (a) - (c)) that make up 810 373 tonnes of CO2e in 2004-2007, 1 489 091 tonnes of CO2e in 2008-2012, 5 695 380 tonnes of CO2e in 2013-2032.

The estimates referred to above are given:

(a) on an annual basis;

(b) from 01/01/2004 to 31/12/2032, covering the entire crediting period;

(c) based on primary sources and sources;

(d) for each GHG, which is 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.

To calculate the above estimations such key factors as 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 sphere, that affect the baseline emissions level, project activity level and level of emissions, as well as risks associated with the project were properly taken into account.

Sources of data that were used for calculation of the above estimations such as documents and archival data of the enterprise, standards and statistical forms, results of annual meter readings, etc. are clearly defined, credible and transparent.

Emission factors, such as nitrous oxide emission factor for coal (sludge) combusted by ACFB technology in year *y* ($EF_{N2O,sl,y}$), carbon dioxide emission factor for limestone in year *y* ($EF_{CO2,l,y}$), were selected by careful balancing of accuracy and reasonability and justified their choice in appropriate manner.

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 or enhancements of net removals over the crediting period is 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 sections D, E and Supporting Documents to the PDD.

4.10 Environmental impacts (48)

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

In general, the project will have positive impact on the environment.
1. Due to the use of more environmental friendly combustion technology at the unit No.4, installation of electric filter and of the system for monitoring of toxic substances emissions from the power generating unit No.4, the emissions will be reduced:
NOx: from 900 to 200 mg/nm3;
SO2: from 1500 to 200 mg/nm3;
Dust: from 2500 to 50 mg/nm3.
2. Due to technical re-equipment of the power generating unit No. 7, installation of the system for the exhaust gas cleaning from dust and sulfur dioxide, the emissions will be reduced:
SO2: from 3000-5000 to 400 mg/nm3;
Dust: from 2000 to 50 mg/nm3.
3. The environmental pollution will be reduced due to the use of existing huge clutters of wastes in the waste reservoirs of coal concentration plants (slimes) as a fuel in the boiler with the atmospheric circulating fluidized bed and due to recycling of such wastes as coke-ashy wastes which are the raw material for production of building materials.
Transboundary impacts of the project activity according to their definition in the text ratified by Ukraine "Convention on Transboundary Pollution at a great distance", will not take place, because as far as the usual activity of the Starobeshsvska TPP does not cause the tansboundary transfer of pollutants, the project activity which reduces the negative environmental impact does not cause the tansboundary transfer as well.

The PDD provides opinions and references to supporting documents on environmental impact assessment, which is carried out in accordance with the procedures set by the host Party.

4.11 Stakeholder consultation (49)

The Stakeholders' comments are presented in the following publications:
«Statement on environmental consequences of equipment modernization at power unit No. 7 of the Starobeshivska TPP" (Newspaper "Golos Energetika" No.28 (2414) dated 29.07.2005).
«Statement on Starobeshivska TPP intention to get permissions for pollutant emissions from boiler unit with the atmospheric circulating fluidized bed at the power unit No. 4" (Newspaper "Golos Energetika No.20 (2554) dated 13.06.2008).
Project "Rehabilitation and technical re-equipment of Starobeshivska TPP of the OJSC "Donbasenergo" was presented at XVIII and XIX International conferences „Problems of

ecology and operation of energy facilities" (Yalta, June 10-14, 2008 and June 8-12, 2009), where it was comprehensively discussed by the representatives of generating companies and potential investors.

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 carried out the determination of the project “Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC “Donbasenergo”. 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. According to this tool the PDD contains barrier analysis and analysis of common practice to determine that the project activity isn’t 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.

It is our opinion that the project as described in the Project Design Document, version 07-1 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Country criteria as well as expectations of the stakeholders.

The review of the project design documentation (version 07-1) 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/	PTD "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo", version 06 dated 10/10/2012
/2/	PTD "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo", version 07 dated 23/11/2012
/3/	PTD "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo", version 07-1 dated 14/01/2013
/4/	Annex A. (Microsoft Office Excel table)
/5/	Letter of Endorsement of the Joint Implementation project "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo" (No. 6140/11/10-08 dated 15.05.2008);
/6/	Letter of Approval of the Joint Implementation project "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo" from Ukraine (No. 1916/23/7 dated 17.11.2010)
/7/	Letter of Approval of the Joint Implementation project "Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the OJSC "Donbasenergo" from the country of the purchaser, the Netherlands (No. 2010JI23 dated 30.08.2010)
/8/	Guidelines for users of the JI PDD form. Version 04, JISC.
/9/	Tool for the demonstration and assessment of additionality, Version 06.1.0
/10/	Kyoto Protocol
/11/	Marrakech Accords, JI Methods
/12/	National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases in Ukraine for 1990-2010
/13/	Ukraine's Third National Communication on Climate Change under the Kyoto Protocol
/14/	Ukraine's Fourth National Communication on Climate Change under the Kyoto Protocol
/15/	Ukraine's Fifth National Communication on Climate Change under the Kyoto Protocol
/16/	JI Guidelines. Appendix to decision 9/CDM.1
/17/	JI Guidance for determination and verification, version 01
/18/	Guidance on criteria for baseline setting and monitoring, JISC. Version 03.

Category 2 Documents:

Documents provided by VEMA S.A. that relate directly to the GHG components of the project.

/1/	Act of traffic and balances of fuel as of March 31, 2008, dated 04.03.2008.
/2/	Act of transferring / receiving of natural gas dated April 01, 2008.
/3/	Act of transferring / receiving of natural gas dated May 05, 2008.
/4/	OJSC "Donetskshakhtbud". Separated subdivision "Training and course centre". Protocol No. 225 dated 29.08.2008 - assessment of knowledge of Rules of design and safe operation of vessels under pressure NPAOP 0.00-.07.-94 steam and hot water pipelines NPAOP 0.00-1.11-98 steam and hot water boilers NPAOP 0.00-1.08-94 security of systems
/5/	Automatic conveyor balance 1202 VAK Passport OPA 101.00.000 PS. Date of calibration 17/09/2009
/6/	Conclusion of the state ecological expertise on the project "Starobeshivska TPP, OJSC "Donbasenergo". Reconstruction. St. unit No.4 Project LOT 1 "Boiler 2 "Dryer" No. 9248/08/1-5 dated 28.11.01.
/7/	Schedule of metrological control strain gauge balances as of 2009
/8/	Schedule of calibration and maintenance of belt (conveyor) weights on the conveyors No. 9А-2, 9Б-2, 7А of the TTC dated 08.01.2009.
/9/	Annex to the permit for release of pollutant emissions into the atmosphere from stationary sources No. 1424555400-3a
/10/	Permit No. 1424555400-3 for release of pollutant emissions into the atmosphere from stationary sources dated 26.12.2008
/11/	Permit No. 1424555400 for amending permit No. 1424555400-3 for release of pollutant emissions into the atmosphere from stationary sources dated 20.02.2009
/12/	Permit No. 37.06 dated 23.11.2007 for waste disposal in 2008. Valid from 01.01.2008 till 31.12.2008
/13/	Permit No. 37.05 dated 25.09.2008 for waste disposal in 2009. Valid from 01.01.2009 till 01.01.2010
/14/	Gas calorific value log, started 21.09.2008
/15/	Fuel oil calorific value log, started 09.06.2006
/16/	Splid fuel calorific value log, started 01.01.2008
/17/	Daily and five-day test results log.
/18/	Consolidated comprehensive explanation No. 44-A. of Ukrinvestekspertiza Central Service on the project "Starobeshivska TPP. Reconstruction. St. unit No.4 of OJSC "Donbasenergo".
/19/	Report on air protection for 2007
/20/	Report on air protection for 2008
/21/	Report on air protection for 2007
/22/	Report on formation, processing and disposal of waste of I-III hazard classes for 2008
/23/	Inventory of waste for 2007
/24/	Calibration tables.
/25/	Emission reduction units (ERUs) purchase contract No. 12561050020000070 dated 23.04.2008.

/26/	License AB No. 220585 issued to OJSC "Donbasenergo" for electricity generation. The lisence becomes valid on 19.09.1996.
/27/	License AB No. 220586 issued to OJSC "Donbasenergo" for electricity supply at unregulated rates. The lisence becomes valid on
/28/	Passport of steel vertical cylindrical tank. Technological chart
/29/	Minutes of the committee meeting for the examinion of knowledge of operating personnel of BTS No. 1 of Starobeshivska TPP which took the course "Design and operation of thermal-mechanical equipment of unit 210 MW with boiler ATSKS-670 and turbine K-200-130-1PR1 dated November 20, 2007"
/30/	Minutes of extended meeting of Technical Committee of OJSC "Donbasenergo" dated 28/01/2000.
/31/	Certificate of accenptance. Conveyor balance 1202 VAK-140 factory No. 16
/32/	Certificate No 30127 on conferral of 5th class in boiler operation to Halkovskyi, A. V., dated 28.12.2008.
/33/	Certificate No. 52 on State Metrological Attestation dated 23.01.2009. Automatic calorimeter AS-500 No. 3407.
/34/	Metering Device Calibration Certificate No. 497 dated 29/10/2009. Valid until
/35/	Metering Device Calibration Certificate No. 1605 dated 12/05/2009. Valid until 12.05.2010.
/36/	Certificate issued by the Department for Training and Control of the company Siemens at Starobeshivska TPP.
/37/	Certificate issued by Coal Energy Technology Institute to Lavarko, Anatoliy Valentynovych, in April 2007 on attendance of the course "Modern CFB technologies".
/38/	Certificate issued by Coal Energy Technology Institute to Shmonin, Serhiy Ivanovych, in April 2007 on attendance of the course "Modern CFB technologies".
/39/	List of members of personnel training at SBTPP. FH 01.1 - Boiler. FH 01.4 - Smoke ducts. FH 01.6 - Boiler-house equipment as of 20.08.2007.
/40/	List of members of personnel training at SBTPP FH 03 Connective pipelines as of 22.08.2007.
/41/	List of members of personnel training at SBTPP FH 06.1 Booster station. FH 01.9 - Pressurised air distribution as of 20.08.2007.
/42/	List of members of personnel training at SBTPP. FH 01.1 - Boiler. FH 01.5 - Internal fuel oil and gas facilities as of 21.08.2007.
/43/	List of members of personnel training (safety rules) at SBTPP FH05 - System of external ash handling as of 04.08.2008.
/44/	List of members of personnel training in maintenance and operation SBTPP, 26.08.2008.
/45/	Starobeshivska TPP, OJSC "Donbasenergo", reconstruction. St. unit No.4 Project LOT1 "Boiler"/2 "Dryer" Section 6 Environmental impact assessment No.-EIA Vol. 6, 2000.

/46/	MCP daily record of Starobeshivska TPP as of December 30, 2008.
/47/	MCP daily record of Starobeshivska TPP as of December 2008 dated 31/12/2008
/48/	Daily record for 2008. Delivery of fuel for production.
/49/	Daily record for OHPL 220 kW and OHPL 110 kW, 35 kW for 2007.
/50/	Daily report of the shift supervisor of Starobeshivska TPP as of 09.03.2008.
/51/	Daily report of the shift supervisor of Starobeshivska TPP as of 10.03.2008.
/52/	Technical and economic work indicators of equipment for 2007. Starobeshivska TPP. Plantwide parameters.
/53/	Technical and economic work indicators of equipment for 2007. Starobeshivska TPP. Parameters of steam boiler.
/54/	Technical and economic work indicators of equipment for 2007. Starobeshivska TPP. Parameters of steam turbines.
/55/	Technical and economic work indicators of equipment for 2008. Starobeshivska TPP. Plantwide parameters.
/56/	Technical and economic work indicators of equipment for 2008. Starobeshivska TPP. Parameters of steam boiler.
/57/	Technical and economic work indicators of equipment for 2008. Starobeshivska TPP. Parameters of steam turbines.
/58/	Photo - Scales No. 254558
/59/	Photo - calorific value measuring instrument RM-02.2 asset id. No. 5052
/60/	Photo - Boiler TK3 6 bl. Type TP-100, reg. No. KS 30127
/61/	Photo - Meter Alpha No. 01002619
/62/	Photo - Meter asset id. No. 5038
/63/	Photo - Type SL761A071 meter No. 3614863
/64/	Photo - Type SL761A071 meter No. 3614865
/65/	Photo - Type SL761A071 meter No. 36148672
/66/	Photo - Type SL761A071 meter No. 5502482

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	Organisation	Position
/1/	Smirnov, Ihor Khrystoforovych	PJSC “Donbasenergo”	Director for Investment Projects and Strategic Development
/2/	Yuhay, Elesa	PJSC “Donbasenergo”	Head of Production and Technical Department, PJSC “Donbasenergo”
/3/	Sushilnykova, Natalya Mykolayivna	PJSC “Donbasenergo”	Lead Environmental Team Engineer

/4/	Bekerov, Valerii Ametovych	PJSC “Donbasenergo”	Deputy Chief Operating and Environmental Engineer of Starobeshivska TPP
/5/	Fedorenko, Olena Vasylivna	PJSC “Donbasenergo”	Deputy Head of Production and Technical Department of Starobeshivska TPP
/6/	Prykhodko, Serhiy Anatoliyovych	PJSC “Donbasenergo”	Head of boiler-turbine shop No. 1 of Starobeshivska TPP
/7/	Hulov, Kostiantyn Serhiyovych	PJSC “Donbasenergo”	Head of boiler-turbine shop No. 2 of Starobeshivska TPP
/8/	Bakhmatska, Olena Hennadiyivna	PJSC “Donbasenergo”	Head of Chemical Labiratory of Chemical Section of Starobeshivska TPP
/9/	Pavliuk, Nonna Yuriyivna	Institute of Engineering Ecology	Senior Scientist of the Institute of Engineering Ecology (the PDD developer)

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				
A.1	Is the title of the project presented?	Rehabilitation and technical re-equipment of Starobeshivska thermal power plant of the PJSC "Donbasenergo"	OK	OK
A.1	Is the sectoral scope to which the project pertains presented?	Sectoral scope: Sector 1 - Energy industry (renewable / nonrenewable energy sources).	OK	OK
A.1	Is the current version number of the document presented?	The current version of the document: PDD, Version 07-1 dated 14/01/2013. Ref. to Section A.1.	OK	OK
A.1	Is the date when the document was created presented?	The date when the document was created: 10/10/2012.	OK	OK
A.2. Description of the project				
A.2	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the:	The purpose of the project is reduction of greenhouse gas emissions by lowering fuel consumption through reconstruction of generating units and implementation of	**CAR 01** **CAR 02** **CL 01** **CL 02**	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
	a) Situation existing prior to the starting date of the project b) Baseline scenario and c) Project scenario (expected outcome, including a technical description)?	technically accessible fuel saving measures while producing electric energy at Starobeshivska thermal power plant (TPP). The project is to facilitate sustainable development and environmental improvement by way of implementation of energy-saving technologies. The project scenario provides for enhancing the efficiency of fuel and power resourses (FPR) consumption in order to reduce greenhouse gas emissions, as compared to the current practice, by way of reconstruction and modernisation of major and minor equipment of all tagged generating units of the plant (station Nos. 4–13). The scheduled measures include modernisation of: boiler equipment, turbines, control systems, electrical and automatic schemes, optimisation of equipment operation modes, and of fuel preparation. The most significant reconstruction and technical re-equipping measures are being implemented at power generating units No. 4 and No. 7. **CAR 01.** Section A.2 of the PDD states that the project has already received the Letter of Approval from the project participants and the ITL project ID, whereas this is possible only after the determination stage. Please provide	**CL 03**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		information explaining that the said data pertains to the other (not final) version of the project. **CAR 02.** Please indicate the exact date and the number of Letter of Endorsement for this project. **CL 01.** Please provide the Letter of Endorsement for this JI project to the determination team. **CL 02.** Please provide the Technical Meeting Minutes dated 28.01.2000 to the determination team. **CL 03.**Please provide the Contract dated 23.04.2008 to the determination team.		
A.2	Is the history of the project (incl. its JI component) briefly summarized?	The brief summary of the project history is presented in Section A.2. of the PDD.	OK	OK
A.3. Project participants				
A.3	Are project participants and Party(ies) involved in the project listed?	**CAR 03.** According to the SEIAU's order No. 33, PDD should contain information on the enterprise's USREOU code (Unified State Register of Enterprises and Organisations of Ukraine); its type of economic activity according to CTEA (Code of types of economic activities under the general Classifier of types of economic activities).	**CAR 03** **CAR 04** **CAR 04** **CAR 05** **CL 04**	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
		CAR 04. Please provide information on the project activity authorities of the parties indicated in Section A.3 of the PDD. **CAR 05.** Information on the development of the enterprise should be found in Section A.2 of the PDD, not in Section A.3 of the PDD. **CL 04.** Please provide explanation as to why in Section A.3 of the PDD, Carbon Emissions Partners S.A. is mentioned, whereas the credit purchaser is E-energy B.V.		
A.3	Is the data of the project participants presented in tabular format?	**CAR 06.** The table of Section A.3 does not comply with the Guidelines for users of the JI PDD form.	**CAR 06**	OK
A.3	Is contact information provided in Annex 1 of the PDD?	**CAR 07.** According to the SEIAU's order No. 33, PDD should contain information on the ERU purchaser and project owner. Please state in Annex 1, which of the mentioned companies is the ERU purchaser, and which, the owner. **CAR 08.** Section A.2 states that, in September 2007, the Ministry of Fuel and Energy of Ukraine, the Institute of Gas of NAS of Ukraine and the Institute of Engineering Ecology (Co-contractor) concluded an Agreement for the preparation of the project design documentation for the Joint Implementation project for greenhouse gas emission reduction at	**CAR 07** **CAR 08** **CAR 09**	OK OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		Starobeshivska TPP, OJSC "Donbasenergo", and there is no information on those parties in Annex 1. Please provide relevant information. **CAR 09.** If E-energy B.V. is the ERU purshaser, it should be indicated in Annex 1.		
A.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. **CAR 10.** According to the Law of Ukraine "On the foundations of the state language policy", the basic language for work, record management and documentation of central and local governmental bodies is the national language. Settlements on Figure A.2 of the PDD (map of Donetsk region) should be indicated in Ukrainian.	**CAR 10**	OK
A.4.1.2	Region/State/Province etc.	The project is located in the territory of Donetsk region, Ukraine.	OK	OK
A.4.1.3	City/Town/Community etc.	Donetsk region, Starobeshiv district, urban-type settlement Novyi Svit.	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

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
A.4.2. Technologies to be employed, or measures, operations or actions to be implemented by the project				
A.4.2	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 11.** Section A.4.2 of the PDD states that ECE of the boiler increases from 83% to 90.2%, whereas Section A.2 of the PDD states that ECE of the boiler increases from 83% to 90.3%. **CL 05.** Please indicate in Section A.4.2, which 9 of the 10 project generating units were operative. **CL 06.** Please provide the documents on efficiency of the boilers within the project boundary (Boiler's parameter chart) to the determination team. **CL 07.** Please provide references to the websites of manufacturers/suppliers of equipment to be implemented under the project activities. **CAR 12.** Section A.4.2 of the PDD states that not all the envisaged measures have been implemented. Please represent the further project activities, in the Implementation	**CAR 11** **CAR 12** **CL 05** **CL 06** **CL 07**	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
		Schedule (Table A.2).		
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 activity is directed at rehabilitation of power generating units No.No. 4, 7 and implementation of measures for energy efficiency improvement at power generating units No.No. 5, 6, 8 - 13 of Starobeshivska TPP. Implementation of these measures will lead to increasing of the energy efficiency of equipment and will decrease the specific fuel consumption for electric energy production. Fuel saving at electric energy production and reduction of energy consumption for own needs of power generating units will lead to reduction of emissions of greenhouse and toxic gases and substances such as CO2, SO2, NOx, CO and particulate matter. In the absence of the proposed project, only minimum repair works for maintenance of operation of power generating units at the existing level will be made. Emission reductions would not occur.		
A.4.3	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 13.** Please correct Tables of Section	**CAR 13** **CAR 14** **CAR 15**	OK OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		A.4.3.1 in line with the requirements of the Guidelines for users of the JI PDD form. **CAR 14.** Tables under format described in the Guidelines for users of the JI PDD form, are not to be numbered. **CAR 15.** The estimated emission reductions for the period of 2001-2003 should be removed from the PDD, as these reductions are not to be credited neither as ERUs, nor as AAUs. So, the inclusion of these reductions into the first commitment period is pointless. **CAR 16.** According to the previous CAR, recalculate the average annual and total GHG emission reductions.	**CAR 16**	OK
A.4.3	Is the estimated annual reduction for the chosen credit period in tCO_2e provided?	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
A.4.3	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.	OK	OK
A.4.3.1. Estimated amount of emission reductions over the crediting period				
A.4.3.1	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
A.4.3.1	Are estimates of total as well as	Total as well as annual and average annual	OK	OK

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	annual and average annual emission reductions in tonnes of CO_2 equivalent provided?	emission reductions in tonnes of CO_2 equivalent are provided in accordance with the calculated values in the tables of Section A.4.3.1. of PDD and the Supporting Documents.		
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	**CAR 17.** In Section A.5 of the PDD please indicate that all Letters of Approval were received previously. **CAR 18.** The PDD indicates that the PDD was developed due to the change of the project boundary, as well as of the Project Participant – purchaser of the project-generated emission reductions. But, along with that, the very approach to the project baseline setting was changed. As an obviuos fact, it should be indicated and sufficiently justified. **CAR 19.** The title of the project in the PDD differs from that stated in the Letter of Endorsement. **CAR 20.** The project has not received the final approval (confirmation) by the host Party and the participant country.	**CAR 17** **CAR 18** **CAR 19** **CAR 20**	OK OK OK OK
19	Does the PDD identify at least the host Party as a "Party involved"?	The Host Party involved is Ukraine.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	The Letters of Approval for this project from the host Party (Ukraine) and from the country of the purchaser (the Netherlands) are already issued and do not have to be re-issued.	OK	OK

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20	Are all the written project approvals by Parties involved unconditional?	The Letters of Approval for this project from the host Party (Ukraine) and from the country of the purchaser (the Netherlands) are already issued and do not have to be re-issued.	OK	OK
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: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	Each of the legal entities listed as project participants in the PDD is authorised by a Party involved, which is also listed in the PDD (see Section A.3. of the PDD).	OK	OK
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	The baseline chosen is described in Section B.1 of the PDD. A specific JI approach is used for setting the baseline.	OK	OK
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; theoretical description is provided in Section B.1 of PDD version 07-1.	**CAR 21** **CAR 22**	OK OK

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		CAR 21. There is no notion "dynamic baseline scenario" in the Glossary of JI project terms. The project has a baseline scenario and a project scenario. The parameters which determine the baseline scenario may be dynamic, but the term "dynamic" is better not to be applied to the baseline scenario. **CAR 22.** Section B.1 of the PDD should contain formulae to calculate baseline GHG emissions. **CL 08.** Please provide references to the projects mentioned in Section B.1 of the PDD.	**CL 08**	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 and/or sectoral policies and circumstance? − Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors?	The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline was established: (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 been identified and will be used as a baseline: - "business-as-usual" scenario with implementation of minimum operation maintenance and repair works at the Starobeshivska TPP balanced by overall degradation of the TPP; - implementation of measures for energy efficiency increasing of the Starobeshivska TPP operation, analogous to the project activity,	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	(d) 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 "Guidance on criteria for baseline setting and monitoring", as appropriate?	without JI mechanism; - partial implementation of the project activities, without energy efficiency measures at the generating equipment. (b) Taking into account key factors such as for example technological rules of the energy generating sector, Ukrainian environmental legislation and other national legislation, and key relevant factors, such as the ability of financing of construction and reconstruction of energy generating systems, tariffs for electricity generation, 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 identified, the description is given in Section B of the PDD.		

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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 version 07-1. **CAR 23.** Section B.1 does not provide all the key information and data used to establish the baseline.	**CAR 23**	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	When setting baseline the following factors are used: nitrous oxide emission factor for coal (sludge) combusted by ACFB technology ($EF_{NO2,s,l,y}$) and carbon dioxide emission factor for limestone in year *y* ($EF_{CO,2,l,y}$). Source of data to be applied: "Methodology for calculation of greenhouse gas emission reductions achieved through above-standard natural gas leak repair at the gas distribution networks".	OK	OK
CDM methodology approach only				
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that	The PDD indicates that the project scenario is not a part of the established baseline scenario. It is also stated that the project will lead to emission reductions. Additionality of the project activity is demonstrated and assessed in Section B.2 of the PDD using the "Tool for the demonstration and assessment of additionality"	**CAR 24** **CAR 25** **CAR 26** **CAR 27** **CAR 28** **CAR 29** **CAR 30**	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 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 "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".	(Version 06.1.0). **CAR 24.** The picture in Figure B.1 is controversial. Please delete this Figure. **CAR 25.** Please translate the text of the scheme of Figure B.2 of the PDD. **CAR 26.** In Section B.2, give titles to the Alternatives to the project activities, according to Section B.1 of the PDD. **CAR 27.** Enumeration of laws and other regulatory acts does not prove the compliance of the alternatives with actual laws and decrees. Please provide a better founded information. **CAR 28.** The investment barrier is contradicted by the fact that the enterprise will make profit out of the saved fuel. **CAR 29.** Information presented in Section B.2 of the PDD on the Organisational barrier, contradicts the point of Section B.1 of the PDD - "organisational risks are minimised". **CAR 30.** Please indicate in the PDD that the chosen barrier analysis was conducted according to the Guidance for objective demonstration and assessment of barriers. **CL 09.** Please provide references to the projects mentioned in Section B.2 of the PDD, in Step 4.	**CL 09**	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Detailed analysis described in Section 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
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 sections A.2, B.1, B.2 of the PDD.	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 06.1.0)	OK	OK
Approved CDM methodology approach only_ Paragraphs 31(a) – 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, such as: - Emissions due to the fossil fuels combustion in boilers of power generating units of the TPP for electricity production (CO_2); (ii) Reasonably attributable to the project,	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
		such as: - Emissions generated from fuel combustion in boilers of the TPP power generating units for electricity production (N_2O); (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 CO2 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 schematic form in Section B.3 of the PDD and is understandable enough.	OK	OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the	All gases and sources included are explicitly stated. Ref. to Section B of PDD version 02.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	baseline or the project are appropriately justified?			
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?	The date of the technical meeting of the OJSC "Donbasenergo" which accepted the Decision to realise the activity on GHG emission reduction through reconstruction and technical re-equipment of thermal power plants of the OJSC "Donbasenergo" (Protocol of the Technical meeting dated 28/01/2000) was taken as the project beginning date.	OK	OK
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?	The minimal nominal lifetime of the new boilers is 20 years. The real average lifetime of the new energy equipment (boilers, turbines, etc.) is estimated to be up to 30 – 40 years. In accordance with conservative approach, the operational lifetime for the project is assumed equal to 20 years since implementation of the last project activity (31.12.2012).	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	**CAR 31.** The date of the crediting period beginning should be taken as 01/01/2004 (the beginning of generating essential GHG emission reductions), as from this very date the emission reductions are subject to crediting. **CAR 32.** Please recalculate the crediting period according to CAR 31.	**CAR 31** **CAR 32**	OK OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	Ref. to CAR 31.	OK	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?	ERU generation belongs to the first commitment period of 5 years (January 1, 2008 – December 31, 2012).	OK	OK
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 is presented separately for those until 2012 and those after 2012 in the relevant sections of the 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, 2032.	OK	OK
Monitoring plan				
35	Does the PDD clearly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology	The proposed project uses a JI-specific approach in accordance with paragraph 9 (a) of the JI "Guidance on criteria for baseline setting and monitoring", Version 03.	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	approach.			
JI specific approach only				
36 (a)	Does the monitoring plan describe: - All relevant factors and key characteristics that will be monitored? - The period in which they will be monitored? - All decisive factors for the control and reporting of project performance?	The monitoring plan specifies all decisive factors for the control and reporting of project performance: quality control (QC) and quality assurance (QA) procedures; operational and management structures that will be applied when implementing the monitoring plan.	OK	OK
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.	OK	OK
36 (b)	If defailt values are used: - Are accuracy and reasonableness carefully balanced in their selection? - Do the default values originate from recognized sources? - Are the default values supported by statistical analyses providing reasonable confidence levels? - Are the default values presented in a 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

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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
36 (b) (ii)	For other values, - Does the monitoring plan clearly indicate the precise references from which these values are taken? - Is the conservativeness of the values provided justified?	The monitoring plan clearly indicates the precise references from which these values are taken, and the conservativeness of the values provided is duly justified.	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 Unit (SI units) used?	The International System Units are used for some 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. **CAR 33.** Calorific value of standard fuel is on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" and has a relevant designation (NCV).	**CAR 33**	OK
36 (b) (v)	Is the use of parameters,	The use of parameters, coefficients and	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	coefficients, variables, etc. consistent between the baseline and monitoring plan?	variables is consistent between the baseline and monitoring plan.		
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	The monitoring plan is identified on the basis of the Guidance on criteria for baseline setting and monitoring.	OK	OK
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (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 already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	**CAR 34.** Section D.1 of the PDD should contain information on: - data and parameters that are not monitored throughout the crediting period, but are determined only once and that are available already at the stage of PDD development; - data and parameters that are not monitored throughout the crediting period, but are determined only once but that are not available already at the stage of PDD development: none; - data and parameters that are monitored throughout the crediting period.	**CAR 34**	OK
36 (e)	Does the monitoring plan describe	In tables of parameters provided in section	OK	OK

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	the methods employed for data monitoring (including its frequency) and recording?	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.		
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 given in Section D of the PDD.	OK	OK
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?	Yes, all equations are numbered.	OK	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	There is consistency between the elaboration on the baseline scenario and calculating the baseline emission in the monitoring plan and in	OK	OK

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	emissions or net removals of the baseline ensured?	tables.		
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 system and data collection existing in PJSC "Donbasenergo" practice.	OK	OK
36 (f) (vii)	Are references provided as necessary?	References to corresponding rules and regulatory documents of the Host Party are provided.	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 used by PJSC "Donbasenergo" for its project activities is calibrated and examined according to the quality control procedures.	OK	OK

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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 in accordance with the national rules 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
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?	**CAR 35.** Please provide in Section A.2 of the PDD, information on the procedure of verification of the measuring equipment used by the project.	**CAR 35**	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	The scheme describing the operational and management structure that the project operator will apply in implementing the monitoring plan, and identifying the responsibilities and the authority regarding the monitoring activity as to the parameters to be monitored is presented in	OK	OK

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		Annex 3 to the PDD.		
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 plan includes the following sections: 1. Identification of all potential sources and types of GHG emissions within the project boundary. 2. Collection of information on monitoring parameters required for the estimation of GHG emissions. 3. Collection of information on calibration of the measuring equipment. 4. Collection of information on the environmental impact of the project activity. 5. Archiving of data.	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
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 for the project.	OK	OK
37	If selected elements or combinations	Yes, the baseline was set using selected	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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?	elements of approved CDM methodology. 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.		
Approved CDM methodology approach only_Paragraphs 38(a) – 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 dependent on/effect data/parameters to be monitored for another component)?	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
	(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?	In accordance with the JI-specific approach in accordance with paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", Version 03, no leakage is expected.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	The PDD states that there isn't any leakage.	OK	OK
Approved CDM methodology approach only_Paragraph 41_Not applicable				
Estimation of emission reductions or enhancements of net removals				

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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 estimation of emissions in the baseline scenario and in the project scenario is indicated.	OK	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
	(d) 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 with the	(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) Emission factors were taken from the defined 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
	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	Baseline emission level is calculated using the	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	emissions or net removals is to be performed de facto, does the PDD include an illustrative forecasted emissions or net removals calculation?	specific approach based upon the consolidated methodology AM0061 "Methodology for rehabilitation and/or energy efficiency improvement in existing power plants" (the latest version for the time is 02.1). Forecasted emissions calculation is clearly provided in the PDD.		
Approved CDM methodology approach only_Paragraphs 47(a) – 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?	No negative impact is expected as a result of the project implementation.	OK	OK
Stakeholder consultations				
49	If stakeholder consultation was	The Stakeholders' comments are presented in	OK	OK

Guidelines for Users of the JI PDD form or DVM Paragraph	Check Item	Initial finding	Project participants' actions review	Final Conclusion
	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 received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	the following publications: "Statement on environmental consequences of equipment modernization at power unit No. 7 of the Starobeshivska TPP" (Newspaper "Golos Energetika" No. 28 (2414) dated 29.07.2005). "Statement on Starobeshivska TPP intention to get permissions for pollutant emissions from boiler unit with the atmospheric circulating fluidized bed at the power unit No. 4" (Newspaper "Golos Energetika" No. 20 (2554) dated 13.06.2008). Project "Rehabilitation and technical re-equipment of Starobeshivska TPP of the OJSC "Donbasenergo" was presented at XVIII and XIX International conferences „Problems of ecology and operation of energy facilities" (Yalta, June 10-14, 2008 and June 8-12, 2009), where it was comprehensively discussed by the representatives of generating companies and potential investors.		
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 CLARIFICATION 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. Section A.2 of the PDD states that the project has already received the Letter of Approval from the project participants and the ITL project ID, whereas this is possible only after the determination stage. Please provide information explaining that the said data pertains to the other (not final) version of the project.	A.2	Letters of Approval from the project participant countries and identification number in the International Journal of transactions (ITL project ID) were provided for version 05 of the PDD. Version 06 of the PDD has been designed due to change of the project boundary, which is a cause for additional determination. The information is provided in Section A.5 of the PDD.	The information is provided, the issue is closed.
CAR 02. Please indicate the exact date and the number of Letter of Endorsement for this project.	A.2	The Ministry for Environmental Protection of Ukraine has issued the Letter of Endorsement for the JI project "Rehabilitation and technical re-equipping of Starobeshivska TPP of the OJSC "Donbasenergo" (No. 6140/11/10-08 dated May 15, 2008). This is indicated in Section A.5 of the PDD.	The information is provided, the issue is closed.
CAR 03. According to the SEIAU's order No. 33, PDD should contain	A.3	USREOU code of PJSC "Donbasenergo" (owner of the facility):	The information is provided, 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
information on the enterprise's USREOU code (Unified State Register of Enterprises and Organisations of Ukraine); its type of economic activity according to CTEA (Code of types of economic activities under the general Classifier of types of economic activities).		23343582. The type of economic activity according to the CTEA: 40.11.0 Electricity production, 40.30.0. Steam and hot water supply, 74.60.0 Investigation and security activities, 74.20.3 Activities in the field of geodesy, hydrography and hydrometeorology, 37.10.0 Treatment of metal waste and scrap, 41.00.0 Water collection, treatment and supply. The information is added to Section A.3 of the PDD, version 07-1.	
CAR 04. Please provide information on the project activity authorities of the parties indicated in Section A.3 of the PDD. .	A.3	PJSC "Donbasenergo" is the project applicant and the project-generated ERUs' supplier. E–energy B.V. is the project-generated ERUs' purchaser. The information is added to Section A.3 of the PDD, version 07-1.	The information is provided, the issue is closed.
CAR 05. Information on the development of the enterprise should be found in Section A.2 of the PDD, not in Section A.3 of the PDD.	A.3	The project history comprises the history of the enterprise itself, so this information should be presented in Section A.2 of the PDD, which does not contradict the requirements of neither the national legislation, nor the official Kyoto documentation. The issue is not	The relevant argumentation is provided. 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
		closed. The history of the project does not on any account comprise the history of the enterprise itself, even if this enterprise is the owner of the emission sourse. Moreover, it is advisable to present brief information on other project participants as well (besides the mandatory contacts in Annex 1). It is worth stressing that the said information on the project participants is not envisaged by the PDD Form and Guidance for users of JI PDD form, i. e. is not obligatory and has no specially designated space for presentation. Still, such information on the project participant – "owner of the source where the project activities are planned to take place", in addition to the mandatory contact information in Annex 1, should be present in the PDD, according to the NAEIU's order No. 33. Given the rigid PDD form, almost the only place for such information is Section A.3.	
CAR 06. The table of Section A.3 does not comply with the Guidelines for users of the JI PDD form.	A.3	The table of Section A.3 does comply with the Guidelines for users of the JI PDD form.	Relevant corrections are made, 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 06 could possibly be linked to the absence, in the Table of Section A.3, of a note indicating which involved Party is the Host party. As the requirements of this note are satisfied in the Table of Section A.3, this note is unnecessary and redundant. However, this note is added to the Table of Section A.3 of the PDD, version 07-1.	
CAR 07. According to the SEIAU's order No. 33, PDD should contain information on the ERU purchaser and project owner. Please state in Annex 1, which of the mentioned companies is the ERU purchaser, and which, the owner.	A.3	Indicating in Annex 1, which of the mentioned companies is the ERU purchaser, and which, the owner, will not be in line with the Guidance for users of JI PDD form. The information is presented in Section A.3 of the PDD, version 07-1.	The issue is closed as relevant well-reasoned justification is provided.
CAR 08. Section A.2 states that, in September 2007, the Ministry of Fuel and Energy of Ukraine, the Institute of Gas of NAS of Ukraine and the Institute of Engineering Ecology (Co-contractor) concluded an Agreement for the preparation of the project design documentation for the Joint Implementation project for greenhouse gas emission reduction at Starobeshivska TPP, OJSC "Donbasenergo", and there is no	A.3	Neither the Ministry of Fuel and Energy of Ukraine, nor the Institute of Gas of NAS of Ukraine, nor the Institute of Engineering Ecology is a project participant, so adding information about them to Annex 1 will not be in line with the Guidance for users of JI PDD form.	The explanation is provided. 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
information on those parties in Annex 1. Please provide relevant information.			
CAR 09. If E-energy B.V. is the ERU purshaser, it should be indicated in Annex 1 or Section A.3 of the PDD.	A.3	Information on E-energy B.V. is presented in Annex 1 to the PDD, version 07-1. Indicating in Annex 1, that this company is the ERU purchaser, will not be in line with the Guidance for users of JI PDD form. Ref. to Section A.3. of the PDD.	The relevant information is provided, the issue is closed.
CAR 10. According to the Law of Ukraine "On the foundations of the state language policy", the basic language for work, record management and documentation of central and local governmental bodies is the national language. Settlements on Figure A.2 of the PDD (map of Donetsk region) should be indicated in Ukrainian.	A.4.1.	Settlements on Figure A.2 of the PDD (map of Donetsk region) are indicated in Ukrainian.	Relevant corrections are made, the issue is closed.
CAR 11. Section A.4.2 of the PDD states that ECE of the boiler increases from 83% to 90.2%, whereas Section A.2 of the PDD states that ECE of the boiler increases from 83% to 90.3%.	A.4.2	The planned efficiency of the boiler is increased from 83 % to 90.3 %.The relevant corrections were made in the PDD, version 07-1.	Relevant corrections are made, the issue is closed.
CAR 12. Section A.4.2 of the PDD states that not all the envisaged measures have been implemented.	A.4.2	Information on the planned project activities till the end of 2012 is presented in the Implementation	The issue is closed as relevant information is provided.

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
Please represent the further project activities, in the Implementation Schedule (Table A.2).		Schedule (Table A.2).	
CAR 13. Please correct Tables of Section A.4.3.1 in line with the requirements of the Guidelines for users of the JI PDD form.	A.4.3	The tables have been remade according to the provided format.	Corrections are made, the issue is closed.
CAR 14. Tables under format described in the Guidelines for users of the JI PDD form, are not to be numbered.	A.4.3	The Guidelines for users of the JI PDD form state that the tables whose format is presented therein must not be changed or removed, but more lines could be added. The table numbering is not regulated, but is practic for the sake of convenient identification and references.	The issue is closed as well-reasoned justification is provided.
CAR 15. The estimated emission reductions for the period of 2001-2003 should be removed from the PDD, as these reductions are not to be credited neither as ERUs, nor as AAUs. So, the inclusion of these reductions into the first commitment period is pointless.	A.4.3	According to JISC rules, reductions for the period from 2000 can be calculated as AAUs, that is why they were presented in the PDD. According to the resolution taken by the SAEI of Ukraine though not formalised in regulatory documents, reductions prior to 2003, inclusive, are not subject to crediting. The reductions for the period of 2001-2003 are removed from the calculations in the PDD, version 07-1.	Corrections are made, 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 16. According to the previous CAR, recalculate the average annual and total GHG emission reductions.	A.4.3	The relevant corrections were made in the PDD, version 07-1.	Corrections are made, the issue is closed.
CAR 17. In Section A.5 of the PDD please indicate that all Letters of Approval were received previously.	19	Section A.5. of the PDD states that the Letters of Approval from Ukraine and from the Netherlands are already obtained (for the PDD, version 05). Re-issue (confirmation) of the Letter of Approval by the host country is expected after the submission of this version of the PDD, Determination Report and supporting documents to the State Environmental Investment Agency of Ukraine.	The issue is closed as relevant information is provided.
CAR 18. The PDD indicates that the PDD was developed due to the change of the project boundary, as well as of the Project Participant – purchaser of the project-generated emission reductions. But, along with that, the very approach to the project baseline setting was changed. As an obviuos fact, it should be indicated and sufficiently justified.	19	The relevant corrections were made in the PDD, version 07-1.	The issue is closed as relevant information is provided.
CAR 19. The title of the project in the PDD differs from that stated in the Letter of Endorsement.	19	In the PDD, version 07-1, the previous title is used again, which was indicated in Letters of Endorsement and Approval.	Corrections are made, 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 20. The project has not received the final approval (confirmation) by the host Party and the participant country.	19	The Letters of Approval for this project from the host Party (Ukraine) and from the country of the purchaser (the Netherlands) are already issued and do not have to be re-issued. After the additional project determination, pursuant to Order No. 79 by the NEIAU, the new version of the PDD and the Determination Report will be submitted to the State Environmental Investment Agency of Ukraine for information. The relevant corrections were made in the PDD, version 07-1.	Relevant justification has been provided. The issue is closed.
CAR 21. There is no notion "dynamic baseline scenario" in the Glossary of JI project terms. The project has a baseline scenario and a project scenario. The parameters which determine the baseline scenario may be dynamic, but the term "dynamic" is better not to be applied to the baseline scenario.	23	The Glossary of JI Project Terms (latest version dated June 2010, meaning it has not been updated for a long time) does not contain a comprehensive list of terms which may be used in the context of JI-related documents, but is mainly designed to simplify the filling out of the PDD forms and explanation and particularisation of JI-related terms. (Ref. to [http://ji.unfccc.int/Ref/Documents/Glossary_JI_terms.pdf, S. 2]). The expression "dynamic baseline" is a compact and quite precise description	Relevant justification has been provided. 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
		of the baseline in relevant cases. Besides, search for the expression "dynamic baseline" in the CDM methodology documents yields more that 10 pages of documents with 5800 examples of this expression used as a set term inter alia. (Ref. to [http://cdm.unfccc.int/search?q=dynamic+baseline]). Examples of usage: "Step 1: Identification of all possible baseline scenarios…. Alt-2: Continuation of as is scenario (**Dynamic Baseline**)" [Proposed new methodology: baseline (cdm-nmb) - version 02. "Energy Conservation in the District Heating Sector", p.7.] "The methodology provides for a tool to select the baseline similar to the approved UNFCCC/CCNUCC tool for additionality assessment. It constructs a **dynamic baseline** around the most	

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
		attractive alternative option to the project that is identified. … The methodological steps involved in constructing the **dynamic baseline** and project-activity are…" [Proposed new methodology: baseline (cdm-nmb) - version 02. "GhG emissions reductions in urban transportation projects that affect specific routes or bus corridors or fleets of buses including where fuel usage is changed", pp.2,3.]	
CAR 22. Section B.1 of the PDD should contain formulae to calculate baseline GHG emissions.	23	Step 2 – Application of the approach chosen. The application of the chosen approach in the context of this JI project, according to the requirements of the PDD Form and Guidance for users of JI PDD form, is presented in detail in Section B.1. Description of formulae used to assess baseline GHG emissions, according to the requirements of the PDD Form and Guidance for users of JI PDD form, is presented in detail in sub-section D.1.1.4. A more detailed reference is provided in	Relevant justification has been provided. 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
		Section B.1 of the PDD, version 07-1.	
CAR 23. Section B.1 does not provide all the key information and data used to establish the baseline.	24	The relevant corrections were made in Section B.1 of the PDD, version 07-1.	Corrections are made, the issue is closed.
CAR 24. The picture in Figure B.1 is controversial. Please delete this Figure.	28	The unsound description and caption to Figure B.1 which could mislead the reader are corrected in the PDD, version 07-1.	Corrections are made, the issue is closed.
CAR 25. Please translate the text of the scheme of Figure B.2 of the PDD.	28	The scheme in Figure B.2 is taken directly from the original: one of the documents most widely used in the course of JI PDD development, "Tool for the demonstration and assessment of additionality". The full translation of texts of this scheme is presented along in Figure B.2 of the PDD. Such order does not contradict the legislation of Ukraine.	Relevant justification has been provided. The issue is closed. .
CAR 26. In Section B.2, give titles to the Alternatives to the project activities, according to Section B.1 of the PDD.	28	The relevant corrections were made in the PDD, version 07-1.	Corrections are made, 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 27. Enumeration of laws and other regulatory acts does not prove the compliance of the alternatives with actual laws and decrees. Please provide a better founded information.	28	The PDD states (p. 23, version 07-1) that all the alternative scenarios comply with basic legislative acts in the area: By the Law of Ukraine "On Electric Power Industry" dated 16.10.1997 No. 575/97-VR , the Law of Ukraine "On Energy Saving", the Decree of the Cabinet of Ministers of Ukraine dated 19.11.2008 No. 1446-p "On approving of the Concept for the State Task Economic Energy Efficiency Program for 2010–2015" .	Corrections are made, the issue is closed.
CAR 28. The investment barrier is contradicted by the fact that the enterprise will make profit out of the saved fuel.	28	The existence of investment barrier is connected to the structure of the current electricity tariffs which are regulated by the state (approved by the National Electricity Regulatory Commission of Ukraine (NERC)) and do not allow to benefit from saving fuel.	The issue is closed as well-reasoned answer is provided.
CAR 29. Information presented in Section B.2 of the PDD on the Organisational barrier, contradicts the point of Section B.1 of the PDD - "organisational risks are minimised".	28	The expression "organisational risks are minimised" has been removed from Section A.5 of the PDD, version 07-1.	Corrections are made, the issue is closed.
CAR 30. Please indicate in the PDD that the chosen barrier analysis was conducted according to the Guidance for objective demonstration and assessment of barriers.	28	The relevant corrections were made in the PDD, version 07-1.	The information is provided, 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 31. The date of the crediting period beginning should be taken as 01/01/2004 (the beginning of generating essential GHG emission reductions), as from this very date the emission reductions are subject to crediting.	34(c)	The relevant corrections were made in the PDD, version 07-1.	Corrections are made, the issue is closed.
CAR 32. Please recalculate the crediting period according to CAR 31.	34(c)	The relevant corrections were made in the PDD, version 07-1.	Corrections are made, the issue is closed.
CAR 33. Calorific value of standard fuel is on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" and has a relevant designation (NCV).	36(b) (v)	Please note that calorific value of standard fuel is not a variable quantity, but a specific numeric value by convention. Thus, in the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring" there is no, and can be no, calorific value of standard fuel.	Relevant justification has been provided. The issue is closed.
CAR 34. Section D.1 of the PDD should contain information on: - data and parameters that are not monitored throughout the crediting period, but are determined only once and that are available already at the stage of PDD development; - data and parameters that are	36 (d)	The relevant information is presented immediately prior to tables D.1.1.1 and D.1.1.3 with the list of variable data. According to the Guidance for users of JI PDD form, this information should be presented in relevant sections, but not specifically in tables, and all the more so as this is not envisaged by the table forms.	Relevant justification has been provided. 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
not monitored throughout the crediting period, but are determined only once but that are not available already at the stage of PDD development: none; data and parameters that are monitored throughout the crediting period.			
CAR 35. Please provide in Section A.2 of the PDD, information on the procedure of verification of the measuring equipment used by the project.	36 (i)	The verification procedure of measuring equipment used by the project should comply with the national standards (the State Standard of Ukraine No. 2708:2006 “Metrology. Calibration of measuring equipment. The organization and procedure"). The relevant information and references are added to Section D.2 of the PDD, version 07-1.	The information is provided, the issue is closed.
CL 01. Please provide the Letter of Endorsement for this JI project to the determination team.	A. 2	A copy of the Letter of Endorsement is provided to the AIE.	The relevant documentation is provided. The issue is closed.
CL 02. Please provide the Technical Meeting Minutes dated 28.01.2000 to the determination team.	A. 2.	A copy of the Technical Meeting Minutes dated 28.01.2000 is provided to the AIE.	The relevant documentation is provided. The issue is closed.
CL 03. Please provide the Contract dated 23.04.2008 to the determination team.	A. 2.	A copy of the Contract dated 23.04.2008 is provided to the AIE.	

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
CL 04. Please provide explanation as to why in Section A.3 of the PDD, Carbon Emissions Partners S.A. is mentioned, whereas the credit purchaser is E-energy B.V.	A.2.	The relevant corrections were made in the PDD, version 07-1.	Corrections are made, the issue is closed.
CL 05. Please indicate in Section A.4.2, which 9 of the 10 project generating units were operative.	A.4.2.	The relevant corrections were made in Section A.4.2 of the PDD, version 07-1.	Corrections are made, the issue is closed.
CL 06. Please provide the documents on efficiency of the boilers within the project boundary (Boiler's parameter chart) to the determination team.	A.4.2.	The boilers' parameter charts are provided to the AIE.	The relevant documentation is provided. The issue is closed.
CL 07. Please provide references to the websites of manufacturers/suppliers of equipment to be implemented under the project activities.	A.4.2.	The relevant information is provided in Section A.4.2 of the PDD, version 07-1.	The relevant references are provided, the issue is closed.
CL 08. Please provide references to the projects mentioned in Section B.1 of the PDD.	23	The relevant information is provided in the PDD, version 07-1.	The relevant reference is provided, the issue is closed.
CL 09. Please provide references to the projects mentioned in Section B.2 of the PDD, in Step 4.	28	The relevant information is provided in the PDD, version 07-1.	The relevant reference is provided, the issue is closed.