

# DETERMINATION REPORT CARBON MANAGEMENT COMPANY GMBH

# DETERMINATION OF THE POWER DISTRIBUTION SYSTEM MODERNIZATION OF PJSC "AES KYIVOBLENERGO"

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PJSC "AES Kyivoblenergo" project of PJSC "AE of UNFCCC criteria for the JI, as well as criteria	rmination of the "Power distribution system modernization of S Kyivoblenergo" located in Kyiv region, Ukraine on the basis given to provide for consistent project operations, monitoring 6 of the Kyoto Protocol, the JI rules and modalities and the mittee, as well as the host country criteria.
the project's baseline study, monitoring plan ar three phases: i) desk review of the project design with project stakeholders; iii) resolution of outstan	bendent and objective review of the project design document, and other relevant documents, and consisted of the following in and the baseline and monitoring plan; ii) follow-up interviews anding issues and the issuance of the final determination report Contract Review to Determination Report & Opinion, was ernal procedures.
	a list of Clarification and Corrective Action Requests (CL and ccount this output, the project proponent revised its project
	opinion that the project correctly applies "Combined tool to additionality" and meets the relevant UNFCCC requirements
Report No.: UKRAINE-det/0509/2012 JI	
Project title: Power distribution system modernization PJSC "AES Kyivoblenergo"	n of
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## 1 INTRODUCTION

Carbon Management Company GmbH has commissioned Bureau Veritas Certification to determine its JI "Power distribution system modernization of PJSC "AES Kyivoblenergo" project of PJSC "AES Kyivoblenergo" (hereafter called "the project") in Kyiv region, Ukraine.

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

## 1.1 Objective

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance 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 to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction 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 study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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

## **1.3 Determination team**

The determination team consists of the following personnel:

#### Vyacheslav Yeriomin

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Volodymyr Kulish

Bureau Veritas Certification Team Member, Climate Change Verifier



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This determination report was reviewed by:

Ivan Sokolov Bureau Veritas Certification Internal Technical Reviewer

Victoria Legka

Bureau Veritas Certification Technical Specialist

## 2 METHODOLOGY

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

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

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

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

## 2.1 Review of Documents

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

To address Bureau Veritas Certification corrective action and clarification requests, Carbon Management Company GmbH revised the PDD and resubmitted it as version 2.0 dated 20/07/2012.

The determination findings presented in this report relate to the project as described in the PDD versions 1.0 від 22/03/2012, 2.0 dated 20/07/2012.



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## 2.2 Follow-up Interviews

On 14/06/2012 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 "AES Kyivoblenergo" and Carbon Management Company GmbH were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics
--------------------------

Interviewed organization	Interview topics
PJSC "AES Kyivoblenergo"	<ul> <li>Implementation schedule</li> <li>Organizational structure</li> <li>Responsibilities and authorities</li> <li>Data collection and processing responsibilities and authorities</li> <li>Equipment installation</li> <li>Data recording, archiving and reporting system</li> <li>Rehabilitation/Implementation of equipment (records)</li> <li>Metering equipment control</li> <li>Metering record keeping system, database</li> <li>IT control</li> <li>Training of personnel</li> <li>Quality management procedures and technology</li> <li>Internal audits and checks</li> </ul>
Carbon Management Company GmbH	<ul> <li>Baseline methodology</li> <li>Applicability of methodology</li> <li>Monitoring plan</li> <li>Conformity of PDD to JI requirements</li> </ul>

## 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.

If the determination team, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to JI project requirements, it will raise these issues and inform the project participants of these issues in the form of:

(a) Corrective action request (CAR), requesting the project participants to correct a mistake in the published PDD that is not in accordance with the (technical) process used for the project or relevant JI project requirement or that shows any other logical flaw;



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(b) Clarification request (CL), requesting the project participants to provide additional information for the determination team to assess compliance with the JI project requirement in question;

(c) Forward action request (FAR), informing the project participants of an issue, relating to project implementation but not project design, that needs to be reviewed during the first verification of the project.

The determination team will make an objective assessment as to whether the actions taken by the project participants, if any, satisfactorily resolve the issues raised, if any, and should conclude its findings of the determination.

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

## **3 PROJECT DESCRIPTION**

The main purpose of the Joint Implementation project "Power distribution system modernization of PJSC "AES Kyivoblenergo" is the realization of the technical reconstruction of power grid and equipment programme, implementation of the advanced technologies, improvement of organizational structure, transition to a higher level of organization of transmission and distribution of power.

#### Situation at the beginning of the project activity

At the beginning of the project, (in 2002) "AES Kyivoblenergo" PJSC has been carrying out only the measures aimed at the maintaining of power grid in good working condition. Generally, these measures included repair works on eliminations of breakdowns occurring during the operation of power grid. That resulted in 22.36% power losses at "AES Kyivoblenergo" PJSC grids out of the total amount of the power transmitted to the network as of 2002.

#### Project scenario

Joint Implementation project is based on the implementation of investment plans, introduced and financed since the period end of 2003 - beginning of 2004, which includes a set of measures aimed at the preventing of excess power losses.

Measures taken within this Programme, as well as implementation and performance of regular monitoring of possible sources of power losses and their prevention, allowed "AES Kyivoblenergo" PJSC to reduce technical power losses in their own power grids from 22.36% (in 2002) to 15.44% (in 2011) out of the total amount of power that has been transferred into the network.





Technological power losses reduction in the grids allowed the Company to reduce  $CO_2$  emissions, caused by the power generation that was lost.

Duration of the project is unlimited, since the measures taken to identify and eliminate inadmissible TPL in the components and feeders of power grids, power sites and power networks districts, as well as to reduce the total amount of reported technological power losses in the "AES Kyivoblenergo" PJSC power networks, are considered to be ongoing and continual process.

#### Baseline scenario

Baseline scenario assumes further use of existing equipment along with performing of routine maintenance and repair works without significant investment. Justification of baseline scenario is provided in Section B PDD.

#### History of the project

Chronologically, the history of the project may be represented by the following dates:

- 17/09/2002 Minutes of general meeting of shareholders of PJSC "AES Kyivoblenergo" regarding development and implementation of investment plans aimed at reducing TPL. This date can be considered as the date of qualifying this project as a JI Project.
- 31/12/2003 recording the first results from a reduction of TPL by the results of this investment plan.
- 01/01/2004 31/12/2011 gradual reduction of TPL, according to investment plans, along with the preparation and study of the situation regarding the implementation of JI projects in Ukraine (the order of execution of projects, precedents research of JI projects in Ukraine, tax legislation, the choice of project developer, etc.)

#### Benefits of the project

Besides the reduction of greenhouse gas emissions, implementation of measures described in the investment plans has the following benefits:

- Increase of employment opportunities due to the introduction of new equipment into service, construction and renovation of enterprise's facilities;
- Reduction of hazardous pollutants emission due to the power generation cut down as a result of power losses reduction in the grid;
- Production cost reduction.



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Realization of Joint Implementation project will ensure the greenhouse gas emissions reduction by cutting power generation supplied to the "AES Kyivoblenergo" PJSC networks. In such a way, project realization will result in the greenhouse gas emissions reduction and prevention of their further atmospheric concentration, which, in its turn, will speed down climate changes.

The Project envisages the development of TPL control system (energy rating, energy audit and energy management) in the Company in order to implement a number of organizational and technical measures, as well as measures aimed at development and improvement of methodological support for TPL reduction during realization of licensable types of activity in terms of power distribution and supply.

The identified areas of concern as to the project description, project participants response and BVC's conclusion are described in Appendix A (refer to CAR 01-CAR 04, CL 01-CL 03).

## 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 15 Corrective Action Requests and 09 Clarification Requests.

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

## 4.1 **Project approvals by Parties involved (19-20)**

After issuing the Determination Report by AIE, project documentation will be submitted to the State Environmental Investment Agency of Ukraine and Federal Department of the Environment, Transport, Energy and Communications of Switzerland for receiving the Letter of Approval.

The identified areas of concern as to the project approval by Parties involved, project participants response and BVC's conclusion are described in Appendix A (refer to CAR 05).

The project has not been approved by the parties involved thus CAR 05 is pending. The issue will be closed after the Letter of Approval is issued by the Host Party.



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## 4.2 Authorization of project participants by Parties involved (21)

The official authorization by the Parties Involved will be provided in the written approvals of the project by the relevant parties indicating the designated body.

The identified areas of concern as to the authorization of project participants by Parties involved, project participants' response and BVC's conclusion are described in Appendix A (refer to CAR 05).

The project has not been approved by the parties involved thus CAR 05 is pending. The issue will be closed after the Letter of Approval is issued by the Host Party.

## 4.3 Baseline setting (22-26)

The PDD explicitly indicates that JI specific approach was the selected approach for identifying the baseline.

Baseline scenario was developed according to the Annex B to JI Guidelines, Guidelines on criteria for baseline setting and monitoring, also methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality".

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

- (a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one:
  - a. Continuation of the existing situation
  - b. Implementation of the proposed project activity without the project registration as JI project

Partial implementation of the Power losses reduction programme within the "AES Kyivoblenergo" PJSC networks will considerably decrease the outcome effect of the project. Therefore, this scenario cannot be considered as an alternative to the proposed project activity.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic



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situation in the project sector. In this context, the following key factors that affect a baseline are taken into account:

- a. Prices on power and fuel are established by the government though may be changed based on the private needs of the enterprise
- b. Power grid is a complex system which includes equipment units for energy conversion, transition and distribution, control and monitoring systems, and only in case these systems operate appropriately, the positive result is possible. This means that all installed at "AES Kyivoblenergo" PJSC units shall operate in coordination with other parts of the system. Besides new equipment without statistical data showing its efficiency is planned to be installed;
- c. Energy cost in Ukraine is one of the lowest in Europe. That is why it is hard to find investors who will provide funds on reconstruction and modernization of the equipment.

JI specific approach and "Combined tool to identify the baseline scenario and demonstrate additionality" were chosen by the project participants for setting the baseline.

Multiproject default emission factor for Ukrainian National Power Grid was established by the National Environmental Investment Agency of Ukraine.

All explanations, descriptions and analyses pertaining to the baseline in the PDD are made in accordance with the referenced approved CDM methodology and the baseline is identified appropriately.

The identified areas of concern as to the baseline setting, project participants' response and BVC's conclusion are described in Appendix A (refer to CL 04 - CL 05).

## 4.4 Additionality (27-31)

Traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances (same GHG mitigation measure, same country, similar technology, similar scale) would result in a reduction of anthropogenic emissions by sources that is additional to any that would otherwise occur and a justification why this determination is relevant for the project at hand was provided.

Barrier analysis and common practice analysis were chosen for additionality demonstration. All explanations, descriptions and analyses with regard to additionality are made in accordance with the selected tool or approach.

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The following additionality proofs were provided:

- 1. Identifying two alternative project scenarios;
- 2. The identified financial barrier may hinder planned project activity without its registration as JI project
- 3. Common practice analysis complementing barrier analysis.

Additionality is demonstrated appropriately as a result of the steps mentioned above.

The identified areas of concern as to the additionality, project participants' response and BVC's conclusion are described in Appendix A (refer to CL 04 - CL 05).

## 4.5 Project boundary (32-33)

The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

Reasonably attributable to the project:

• CO<sub>2</sub> emissions that are generated as the result of electricity production for power grid.

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

The AIE determined the project boundary by:

a) Detailed analysis of corresponding documentation (the list of assessed documents is provided in the Table "Category 2 Documents" below).

b) Interview and observations made during the site visit to "AES Kyivoblenergo" PJSC 14/06/2012 (the list of persons interviewed is provided in the Table "Persons interviewed" below).

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

The identified areas of concern as to the project boundary, project participants' response and BVC's conclusion are described in Appendix A (refer to CL 07).

## 4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which real action of the project began, and the starting date is 17/09/2002, which is after the beginning of 2000.





The PDD states the expected operational lifetime of the project in years and months, which is 25 years and 300 months.

The PDD states the length of the crediting period in years and months, which is 25 years and 300 months, and its starting date as 01/01/2004, which is on the date of the first emission reductions generated by the project.

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

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

The identified areas of concern as to crediting period, project participants' response and BVC's conclusion are described in Appendix A (refer to CL 06 - CL 07).

## 4.7 Monitoring plan (35-39)

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

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance, such as fuel economy.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. are 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:

- 1. Actual flows of power supply into the grid
- 2. Power loss reduction in power distributive network
- 3.  $CO_2$  emission factor in UES of Ukraine

The monitoring plan draws on the list of standard variables indicated in appendix B of "Guidance on criteria for baseline setting and monitoring" developed by the JISC, such as  $PE_y$ ;  $BE_y$ ;  $GEF_y$ .

The monitoring plan explicitly and clearly distinguishes:



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(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. Not applicable.

(ii) Data and parameters that are monitored throughout the crediting period, such as  $PE_y$ ;  $BE_y$ ;  $GEF_y$ ,  $V_y$ .

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording.

The monitoring plan elaborates 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:

#### Project emissions

GHG emissions reduction will be achieved by reducing power losses in the Company's power grids, which in its turn will be achieved due to the project implementation.

Since the baseline emissions are calculated based on the difference between power loss before and after the project implementation, consequently the project emissions will equal zero, i.e:

$$PE_y=0$$

Baseline emissions

#### $BE_y = V_y \cdot GEF_y$

where

$BE_y$	<ul> <li>Baseline emissions, tCO<sub>2</sub>e;</li> </ul>
$V_y$	<ul> <li>Total technological power losses reduction in the power</li> </ul>
	distributive network over the period y under the project
	scenario compared to the baseline, MWh;
$GEF_y$	- $CO_2$ emission factor in UES of Ukraine for the power
	replacement projects in period y, tCO2e/MWh;

y - Period in which calculations are made.

#### Emissions Reduction

Emissions reductions are calculated as follows:

$$ER_y = BE_y - (PE_y + LE_y)$$

where:





- $ER_y$  Emission reduction during the period y, tCO<sub>2</sub>e;
- $BE_y$  Baseline emission of the greenhouse gases in the period y, tCO<sub>2</sub>e;
- PEy
   Greenhouse gases emission caused by the project activity in the period y, tCO<sub>2</sub>e;
- $LE_y$  Leakages emission in the period y, tCO<sub>2</sub>e.

The monitoring plan presents the quality assurance and control procedures for the monitoring process. Information on calibration and on how records on data and/or method validity and accuracy are kept and made available on request.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities.

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

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

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

The identified areas of concern as to monitoring plan, project participants' response and BVC's conclusion are described in Appendix A (refer to CAR 08 – CAR 14, CL 08 – CL 09).

## 4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential indirect leakages of  $CO_2$ ,  $CH_4$ ,  $N_2O$  which occur in the fuel production and transportation process and appropriately explains which sources of leakage can be neglected.

Electronegative gas  $(SF_6)$  used in circuit breakers and other equipment of "AES Kyivoblenergo" PJSC is toxic and is listed as a gas, circulation and utilization of which is under the control of state environment organizations.

Equipment containing electronegative gas is hermetically sealed and prevents leakage of gas into the atmosphere. In the case of its failure or decommissioning  $SF_6$  will be collected and reused by filling in new similar



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equipment. Potential emissions do not exceed 1  $tCO_2e$  per year. In connection with all the mentioned above, SF<sub>6</sub> emissions were excluded from the calculations.

No outstanding issues were raised.

## 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 for the project scenario (within the project boundary), which are 0 tonnes of  $CO_2eq$ ;

Since the baseline emissions are calculated based on the difference between power loss before and after the project implementation, consequently the project emissions will equal zero.

 $PE_y=0$ 

(b) Leakage, as applicable, which are 0 tonnes of  $CO_2eq$ ;

Leakages are not envisaged by the project.

(c) Emissions for the baseline scenario (within the project boundary) which are:

Baseline emissions over the period from 01/01/2004 till 31/12/2007	Baseline e	emissions	over the	period from	01/01/2004	till 31/12/2007
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Year	Estimated baseline emissions (tCO <sub>2</sub> e)
2004	194 848
2005	286 711
2006	400 616
2007	418 467
Total for the period:	1 300 642

Baseline emissions over the period from 01/01/2008 till 31/12/2012

Year	Estimated baseline emissions (tCO <sub>2</sub> e)
2008	443 510
2009	473 211
2010	432 932
2011	671 342



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2012	1 074 147
Total for the period:	3 095 142

Baseline emissions over the period from 01/01/2013 till 31/12/2028

Year	Estimated baseline emissions (tCO <sub>2</sub> e)	
2013	1 074 147	
2014	1 074 147	
2015	1 074 147	
2016	1 074 147	
2017	1 074 147	
2018	1 074 147	
2019	1 074 147	
2020	1 074 147	
2021	1 074 147	
2022	1 074 147	
2023	1 074 147	
2024	1 074 147	
2025	1 074 147	
2026	1 074 147	
2027	1 074 147	
2028	1 074 147	
Total for the period:	17 186 352	

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are:

Emission reductions over the period from 01/01/2004 till 31/12/2007

Year	Sum of the project leakage and emissions (tCO <sub>2</sub> e)	Estimated baseline emissions (tCO <sub>2</sub> e)	Estimated emission reductions (tCO <sub>2</sub> e)
2004	0	194 848	194 848
2005	0	286 711	286 711
2006	0	400 616	400 616
2007	0	418 467	418 467
Total for the period:	0	1 300 642	1 300 642

Emission reductions over the period from 01/01/2008 till 31/12/2012

Year	Sum of the	Estimated	Estimated
	project leakage	baseline	emission
	and emissions	emissions	reductions



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	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)
2008	0	443 510	443 510
2009	0	473 211	473 211
2010	0	432 932	432 932
2011	0	671 342	671 342
2012	0	1 074 147	1 074 147
Total for the period:	0	3 095 142	3 095 142

Emission reductions over the period from 01/01/2013 till 31/12/2028

Year	Sum of the project leakage and emissions (tCO <sub>2</sub> e)	Estimated baseline emissions (tCO <sub>2</sub> e)	Estimated emission reductions (tCO <sub>2</sub> e)
2013	0	1 074 147	1 074 147
2014	0	1 074 147	1 074 147
2015	0	1 074 147	1 074 147
2016	0	1 074 147	1 074 147
2017	0	1 074 147	1 074 147
2018	0	1 074 147	1 074 147
2019	0	1 074 147	1 074 147
2020	0	1 074 147	1 074 147
2021	0	1 074 147	1 074 147
2022	0	1 074 147	1 074 147
2023	0	1 074 147	1 074 147
2024	0	1 074 147	1 074 147
2025	0	1 074 147	1 074 147
2026	0	1 074 147	1 074 147
2027	0	1 074 147	1 074 147
2028	0	1 074 147	1 074 147
Total for the period:	0	17 186 352	17 186 352

The estimates referred to above are given:

(a) On a periodic basis;

- (b) From 01/01/2004 to 31/12/2028, covering the whole crediting period;
- (c) On a source-by-source basis;
- (d) For each GHG gas, which is CO<sub>2</sub>;

(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;



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The formula used for calculating the estimates referred above are consistent throughout the PDD.

Data sources used for calculating the estimates referred to above are clearly identified, reliable and transparent.

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

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions over the crediting period is 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.

No outstanding issues concerning the estimated emission reduction were raised.

## 4.10 Environmental impacts (48)

All activities under the project do not envisage any negative impacts on the environment, therefore no EIA was specifically developed for this project.

Accordingly, the project also does not have any transboundary impact, as it is implemented in the Kyiv region (Ukraine) and does not include any impact that may occur in another region or another country.

No outstanding issues concerning the environmental impact were raised.

## 4.11 Stakeholder consultation (49)

The stakeholders are the citizens of Kyiv region who were informed about the project implementation through the mass-media.

The programme of power losses reduction was discussed on the meetings of the representatives of the regional State Administration, Ministry of Energy and Coal Industry of Ukraine, NJSC "Energy Company of Ukraine", Derzhenerhonahlyad; the main principles of the project were announced by the regional radio of Kyiv State-owned TV and Radio Company.

No comments on the project have been received from stakeholders.



DETERMINATION REPORT

No outstanding issues concerning the stakeholder consultation were raised.

## 4.12 Determination regarding small scale projects (50-57)

Not applicable

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

Not applicable

## 4.14 Determination regarding programmes of activities (65-73)

Not applicable

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

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

## **6** DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Power distribution system modernization of PJSC "AES Kyivoblenergo" project at the PJSC "AES Kyivoblenergo" facilities in Kyiv region. 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 participants used the latest tool for demonstration of the additionality. In line with this tool, the PDD provides investment analysis, technological and organizational barriers analysis, as well as common practice analysis, to determine that the project activity itself is not the baseline scenario.



DETERMINATION REPORT

Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The determination revealed one pending issue related to the current determination stage of the project (the issue of the written approval of the project and the authorization of the project participants by the host Party). If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 2.0 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 2.0) 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.



DETERMINATION REPORT

## 7 REFERENCES

#### Category 1 Documents:

Documents provided by PJSC "AES Kyivoblenergo" that relate directly to the GHG components of the project.

- /1/ Project Design Document "Power distribution system modernization of PJSC "AES Kyivoblenergo" version 1.0 dated 22/03/2012
- /3/ Project Design Document "Power distribution system modernization of PJSC "AES Kyivoblenergo" version 2.0 dated 20/07/2012
- /5/ Letter of Endorsement # 2043/23/7 dated 31/07/2012 of JI project "Power distribution system modernization of PJSC "AES Kyivoblenergo"

#### Category 2 Documents:

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

- /1/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2002
- /2/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2003
- /3/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2004
- /4/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2005
- /5/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2006
- /6/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2007
- /7/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2008
- /8/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2009
- /9/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2010
- /10/ Structure of power balance and TPL for transfer within "AES Kyivoblenergo" PJSC 154-0,38 kV power grid for 2011
- /11/ Power commercial accounting balance sheet dated 01/12/2012 (devices calibration schedule)
- /12/ Photo-Rehabilitated power line
- /13/ Photo-Rehabilitated Boryspil 10/35/810kB substation
- /14/ Photo-sulfur hexafluoride switch which was replaced within the



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project activity

- /15/ Photo-power meter # 50082531
- /16/ Photo-power meter # 260171
- /17/ Personnel cooperation activities schedule for 2012
- /18/ Schedule of "AES Kyivoblenergo" PJSC personnel training in vocational schools for 2012
- /19/ Protocol # 5/21/2 dated 25/05/2012 on knowledge testing of regulations and state norms, field instructions on technical and safe operation of constructions, facilities and engineering networks, issued by the Novator Scientific and Methodological Centre
- /20/ Protocol # 62/12 dated 01/06/2012 on knowledge testing commission session
- /21/ Inquiry AA # 559401 from the Unified State Register of Enterprises and Organizations of Ukraine
- /22/ Form # 67-energo. Report on organization of the active energy accounting system at consumers as of 01/01/2012 and on installation of automated power accounting system and local data recording and processing system at consumer's power grid and power transporting organizations as of 01/01/2012
- /23/ Form # 67-energo. Report on organization of the active energy accounting system at consumers as of 01/01/2011 and on installation of automated power accounting system and local data recording and processing system at consumer's power grid and power transporting organizations as of 01/01/2011
- /24/ Form # 67-energo. Report on organization of the active energy accounting system at consumers as of 01/01/2010 and on installation of automated power accounting system and local data recording and processing system at consumer's power grid and power transporting organizations as of 01/01/2010
- /25/ Form # 67-energo. Report on organization of the active energy accounting system at consumers as of 01/01/2009 and on installation of automated power accounting system and local data recording and processing system at consumer's power grid and power transporting organizations as of 01/01/2009
- /26/ "AES Kyivoblenergo" CJSC automatic system for commercial accounting of power consumption (ASCAPC) within the Wholesale Energy Market of Ukraine (WPM). Technical project 518/05.1.AC-ПЗ.
- /27/ Statement dated 12/08/2010 on commissioning of "AES Kyivoblenergo" CJSC automatic system for commercial accounting of power consumption on the boarder of the Wholesale Energy Market of Ukraine objects
- /28/ Certificate on introduction of the amendments to the Register of Automatic System for Commercial Accounting of Power Consumption "AES Kyivoblenergo" CJSC ASCAPC, registration # 171, valid from 01/01/2012 to 30/12/2014



- /29/ Certificate on introduction of the amendments to the Register of Automatic System for Commercial Accounting of Power Consumption "AES Kyivoblenergo" CJSC ASCAPC, registration # 149, valid from 20/09/2011 to 30/12/2011
- /30/ Certificate # C8.219-2009 dated 09/07/2009 on state metrological attestation of "AES Kyivoblenergo" CJSC automatic system for commercial accounting of power consumption on the boarder of the Wholesale Energy Market of Ukraine objects
- /31/ Protocol # Y04728690/8.210-2009Π dated 09/07/2009 on state metrological attestation of "AES Kyivoblenergo" CJSC automatic system for commercial accounting of power consumption on the boarder of the Wholesale Energy Market of Ukraine objects
- /32/ Photo-ASCAPC operator control panel
- /33/ Investment plan of "AES Kyivoblenergo" CJSC for 2011, covering the period till 2015
- /34/ Report dated 17/04/2012 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2011
- /35/ Investment plan of "AES Kyivoblenergo" CJSC for 2010, covering the period till 2014
- /36/ Report dated 25/01/2011 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2010
- /37/ Investment plan of "AES Kyivoblenergo" CJSC for 2009, covering the period till 2013
- /38/ Report dated 22/01/2010 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2009
- /39/ Investment plan of "AES Kyivoblenergo" CJSC for 2008, covering the period till 2012
- /40/ Report dated 10/02/2009 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2008
- /41/ Investment plan of "AES Kyivoblenergo" CJSC for 2007, covering the period till 2011
- /42/ Report dated 18/01/2008 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2007
- /43/ Investment plan of "AES Kyivoblenergo" CJSC for 2006, covering the period till 2010
- /44/ Report dated 23/01/2007 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2006
- /45/ Investment plan of "AES Kyivoblenergo" CJSC for 2005, covering the period till 2009
- /46/ Report dated 25/01/2006 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2005
- /47/ Investment plan of "AES Kyivoblenergo" CJSC for 2004, covering the period till 2008
- /48/ Report dated 26/01/2005 on implementation of "AES Kyivoblenergo" CJSC investment development programme for 2004
   /40/ Investment along of "AES Kyivoblenerge" O IOO for 2002
- /49/ Investment plan of "AES Kyivoblenergo" OJSC for 2003
- /50/ Report dated 16/03/2004 on implementation of "AES





	Kyivoblenergo" OJSC investment development programme for 2003
/51/	Development programme of 35-110 kV power grids and decision on
	0,4-(6)10 kV power grids rehabilitation for 2007-2011, "AES
	Kyivoblenergo" OJSC
/52/	Order # 727-p dated 11/09/2007 on approving the Development
	Programme of 35-110 kV Power Grids and Decision on 0,4-(6)10
	kV Power Grids Rehabilitation for 2007-2011, issued by the
	Cabinet of Ministers of Ukraine
/53/	Development programme of 35-110 kV power grids and decision on
1001	0,4-(6)10 kV power grids rehabilitation for 2012-2015, "AES
	Kyivoblenergo" OJSC
/54/	License Series AF $\#$ 578470 on power transfer to "AES"
/34/	Kyivoblenergo" PJSC local power grids, issued by Ukrainian
/EE/	Electricity Supervision Authority
/55/	List of Wholesale Energy Market points and dates of power
	accounting at "AES Kyivoblenergo" PJSC Wholesale Energy Market
(= 0 (	points dated 14/06/2012
/56/	Passport-protocol on measuring unit of N. Petrivtsi PS 110/10 kV
	substation, B-10kB T-I adjunction
/57/	Passport-protocol on measuring unit of N. Petrivtsi PS 110/10 kV
	substation, B-10κB «TΠ-949 №1» adjunction
/58/	Passport-protocol on measuring unit of N. Petrivtsi PS 110/10 kV
	substation, B-10kB T-2 adjunction
/59/	Passport-protocol on measuring unit of N. Petrivtsi PS 110/10 kV
	substation, B-10κB «TΠ-949 №2» adjunction
/60/	Passport-protocol on measuring unit of Zhuliany PS 110/10 kV
	substation, B-10кВ T-1 I с.ш. adjunction
/61/	Passport-protocol on measuring unit of Zhuliany PS 110/10 kV
	substation, B-10кВ T-2 II с.ш. adjunction
/62/	Passport-protocol on measuring unit of Zhuliany PS 110/10 kV
	substation, B-10кВ T-1 III с.ш. adjunction
/63/	Passport-protocol on measuring unit of Zhuliany PS 110/10 kV
	substation, B-10кВ T-2 IV с.ш. adjunction
/64/	Passport-protocol on measuring unit of KPTF PS 35/10 kV
	substation, ПЛ-35 "ДТЕЦ" adjunction
/65/	Passport-protocol on measuring unit of Mostyshche PS 35/10 kV
	substation, Л-10кВ "ТП # 266" adjunction
/66/	Passport-protocol on measuring unit of Mostyshche PS 35/10 kV
	substation, Л-10κB "TΠ # 325" adjunction
/67/	Passport-protocol on measuring unit of Mostyshche PS 35/10 kV
/0//	substation, $\Pi$ -10kB "T $\Pi$ # 3030" adjunction
/68/	Passport-protocol on measuring unit of Irpin PS 110/10 kV
100/	substation, ПЛ-110кВ "Северна-3" (Serverna-3) adjunction
/69/	Passport-protocol on measuring unit of Irpin PS 110/10 kV
,001	substation, ПЛ-110кВ "Біличі" (Bilychi) adjunction
/70/	Passport-protocol on measuring unit of Irpin PS 110/10 kV
1101	substation, OB-110kB adjunction



/71/	Passport-protocol on measuring unit of Vyshhorod PS 110/10/6 kV substation, $\Pi$ -10κB "TΠ-7567" adjunction
/72/	Passport-protocol on measuring unit of Vyshhorod PS 110/10/6 kV
/73/	substation, $\Pi$ -10 $\kappa$ B "T $\Pi$ -7305" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV T $\Pi$ -2416
/74/	substation, B-0,4κB "TΠ-2416 T-1" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV TΠ-2416
/75/	substation, B-0,4κB "TΠ-2416 T-2" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV TΠ-2930
/76/	substation, B-0,4κB "TΠ-2930 T-1" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV TΠ-2930
/77/	substation, B-0,4κB "TΠ-2930 T-2" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV "PΠ-261"
/78/	substation, B-0,4κB "PΠ-261 T-1" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV "PΠ-261"
/79/	substation, B-0,4κB "PΠ-261 T-2" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV "PΠ-296"
/80/	substation, B-0,4κB "PΠ-296" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV "TΠ-3238 T-
/81/	1" substation, B-0,4κB "TΠ-3238 T-1" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV "TΠ-963"
/82/	substation, B-0,4 $\kappa$ B "T $\Pi$ -963" adjunction Passport-protocol on measuring unit of TP 10/0,4 kV "T $\Pi$ -1306"
/83/	substation, B-0,4 $\kappa$ B "T $\Pi$ -1306" adjunction Passport-protocol on measuring unit of SV 10 kV "P $\Pi$ -4"
	substation, CB-10κB "PΠ-4" adjunction
/84/	110/10 kV substation, Л-10кВ "РП-261" adjunction
/85/	Passport-protocol on measuring unit of Oseschyna PS 110/6 kV substation, B-6kB T-1 adjunction
/86/	Passport-protocol on measuring unit of Oseschyna PS 110/6 kV substation, B-6kB T-2 adjunction
/87/	Passport-protocol on measuring unit of Kalena PS 35/10 kV substation, ПЛ-35кВ «Калена-Фастів» (Kalen-Fastiv) adjunction
/88/	Passport-protocol on measuring unit of Myronivka PS 110/35/27,5/10 kV substation, ПЛ-110кВ "PM3" adjunction
/89/	Passport-protocol on measuring unit of Myronivka PS 110/35/27,5/10 kV substation, ПЛ-110кВ "Завадівка" (Zavadivka)
/90/	adjunction Passport-protocol on measuring unit of Myronivka PS
	110/35/27,5/10 kV substation, ПЛ-110кВ "Юрківка" (Yurkivka) adjunction
/91/	Passport-protocol on measuring unit of Myronivka PS 110/35/27,5/10 kV substation, OB-110kB adjunction
/92/	Passport-protocol on measuring unit of Kolos PS 110/35/27,5/10 kV substation, Kaniv HPS ΠЛ-110κB adjunction
/93/	Passport-protocol on measuring unit of Kolos PS 110kV



/94/	substation, МПЛ-110кВ "Колос" (Kolos) adjunction Passport-protocol on measuring unit of Selektsiina PS 110/35/10
/95/	kV substation, Kaniv HPS ПЛ-110кВ adjunction Passport-protocol on measuring unit of Selektsiina PS 110/35/10 kV substation, Kolos-Kaniv HPS ПЛ-110кВ adjunction
/96/	Passport-protocol on measuring unit of Bohuslav 110/35/10 kV substation, Myronivka-Yurkivka ПЛ-110 adjunction
/97/	Passport-protocol on measuring unit of Medvin 110/10 kV substation, Myronivka-Yurkivka ПЛ-110 adjunction
/98/	Passport-protocol on measuring unit of Medvin 110 kV substation, Boiarka ПЛ-10 adjunction
/99/	Passport-protocol on measuring unit of Brylivka 110/10 kV substation, Zhashkiv ПЛ-110кВ adjunction
/100/	substation, ПЛ-35кВ ХПП adjunction
/101/ /102/	ПЛ-0,́4кВ ́ "Посьолок" (Posiolok) adjunction
/102/	kV substation, B-10κB T-1 adjunction Passport-protocol on measuring unit of Kozhanka PS 110/35/10
/104/	kV substation, Romanivka Л-10кВ adjunction
/105/	kV substation, V.Polovetske ПЛ-35 adjunction
/106/	kV substation, B-10κB T-2 adjunction Passport-protocol on measuring unit of Kozhanka PS 110/35/10
/107/	
/108/	
/109/	kV substation, ТВП-2 0,23кВ adjunction Passport-protocol on measuring unit of Fastiv PS 110/35/10 kV substation, Brivky ПЛ-110 adjunction
/110/	Passport-protocol on measuring unit of Fastiv PS 110/35/10 kV substation, Koziatyn ПЛ-110 adjunction
/111/	
/112/	Passport-protocol on measuring unit of Makariv PS 110/35/10 kV substation, ПЛ-110кВ adjunction
	Passport-protocol on measuring unit of Teteriv PS 110/27,5/10 kV substation, Pinizevychi ПЛ-110кВ adjunction
/114/	substation, OB-110kB adjunction
/115/	substation, B-110 T-3 adjunction
/116/	Passport-protocol on measuring unit of Fastiv 110/35/10 kV substation, B-110 T-4 adjunction



/117/	Passport-protocol on measuring unit of Fastiv PS 110/35/10 kV
/118/	substation, Л-10κВ ТП10 adjunction Passport-protocol on measuring unit of Fastiv PS 110/35/10 kV
	substation, Л-10кВ ТП14 adjunction
/119/	Passport-protocol on measuring unit of Fastiv PS 110/35/10 kV
	substation, Л-10кВ ТП17 adjunction
/120/	Passport-protocol on measuring unit of Fastiv PS 110/35/10 kV substation, Л-10κB TΠ49 adjunction
/121/	Passport-protocol on measuring unit of TП76 substation, ВВОД-
	TΠ76 adjunction
/122/	Passport-protocol on measuring unit of Yahotyn PS 110/35/27,5/10 kV substation, B-110kB T-3 adjunction
/123/	Passport-protocol on measuring unit of Yahotyn PS 110/35/27,5/10
/123/	kV substation, B-35kB T-3 adjunction
/124/	Passport-protocol on measuring unit of Yahotyn PS substation, Л-
14051	0,4κB BΠ adjunction
/125/	Passport-protocol on measuring unit of Yahotyn PS 110/35/27,5/10
	kV substation, Л-10кВ "Л-34 Баришівка" (L-34 Baryshivka) adjunction
/126/	Passport-protocol on measuring unit of PS 3ETO 110/10 KB
/120/	substation, TI-55 adjunction
/127/	Passport-protocol on measuring unit of PS 3ETO 110/10 KB
,,	substation, TT-2 adjunction
/128/	Passport-protocol on measuring unit of Sadova PS substation,
	Yahotyn Л-10κB # 5 PΠ adjunction
/129/	Passport-protocol on measuring unit of Kirovska PS 35/10 kV
	substation, Л- ТП-148 adjunction
/130/	
	Kozelets ПЛ-110кВ adjunction
/131/	Passport-protocol on measuring unit of Vyshhorod PS substation,
/132/	Л-6κВ KFEC-1 adjunction
/132/	Passport-protocol on measuring unit of Vyshhorod PS substation, Π-6κΒ ΚΓΕC-2 adjunction
/133/	Passport-protocol on measuring unit of ChAES DSP substation, B-
/100/	110 kB AT-1 adjunction
/134/	Passport-protocol on measuring unit of ChAES DSP substation, B-
	110kB AT-2 adjunction
/135/	Passport-protocol on measuring unit of ChAES DSP substation,
	OB-110kB adjunction
/136/	Passport-protocol on measuring unit of ChAES DSP substation, B-
	6κB 2TPA adjunction
/137/	Passport-protocol on measuring unit of ChAES DSP substation, B-
1400/	6κB 2TPE adjunction
/138/	Passport-protocol on measuring unit of ChAES DSP substation, B-
/120/	6κB 3TPA adjunction Passport-protocol on measuring unit of ChAES DSP substation, B-
/139/	6κB 3TPE adjunction



- /140/ Passport-protocol on measuring unit of Trypilska TPS substation, Л-6кВ Nasosna 2-го п.72T adjunction
   /141/ Passport-protocol on measuring unit of Trypilska TPS substation, Л-6кВ Nasosna 2-го п.73T adjunction
- /142/ Passport-protocol on measuring unit of Trypilska TPS substation, Л-6кВ Artsverdlovyna 532 adjunction
- /143/ Passport-protocol on measuring unit of HPP PS T110/6 substation, Л-6κΒ Φ№7 (HPP TP THP) adjunction

- /151/ Agreement # 891 dated 04/12/2006 on right to provide power meters repair and calibration services
- /152/ Additional agreement # 4 to the Agreement # 891 dated 04/12/2006 on right to provide power meters repair and calibration services
- /153/ Statement dated 30/11/2011 of working technical commission on commissioning of delivery grid cost up to 1 mln UAH (replacement of Hlushky ПЛ-10кВ district from oп. 83 to КТП-249, Hlushky, Bila Tserkva district)
- /154/ Contract # 1019 dated 03/10/2011 on mounting and construction works from reconstruction of 0,4-10 kV grids with "AES Kyivoblenergo" PJSC accounting
- /155/ Statement dated 26/12/2011 of working technical commission on commissioning of delivery grid cost up to 1 mln UAH (reconstruction of 0,47кВ Л-1, 2 ТП1040, Rudyky, Obukhiv district, Kyiv region)
- /156/ Contract # 243 dated 21/03/2011on mounting and construction works from reconstruction of 0,4-10 kV grids with "AES Kyivoblenergo" PJSC accounting
- /157, Order # 586 dated 22/06/2012 on storage of documents concerning JI project within Kyoto Protocol
- /158/ Protocol # 8 dated 17/09/2002 on "AES Kyivoblenergo" CJSC shareholders meeting





#### Persons interviewed:

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

/1/	Oleksandr Kharchenko	Head of the Power Metering and Metrology Department of PJSC "AES Kyivoblenergo"
/2/	Vasyl Morhun	Head of the Training Centre of PJSC "AES Kyivoblenergo"
/3/	Tetiana Maiorenko	Networks development planning engineer at PJSC "AES Kyivoblenergo"
/4/	Oleh Perushko	Head of the Informational Technologies Department Technological Processes Automatization Division of PJSC "AES Kyivoblenergo"
/5/	Oleksii Anatoliev	Head of the ASCAPS Calculations Division of PJSC "AES Kyivoblenergo" Commercial Department
/6/	Ella Marchenko	Head of the Database Analysis and Planning Department of PJSC "AES Kyivoblenergo"
/7/	lhor Nein	Head of the Power Balance Analysis Department of PJSC "AES Kyivoblenergo" Regulatory Department
/8/	Viacheslav Kobzar	Analyst of PJSC "AES Kyivoblenergo" Regulatory Department
/9/	Andrii Radchenko	Engineer on shift (Boryspil) of PJSC "AES Kyivoblenergo"
/10/	Denys Rzhanov	Carbon Management Company GmbH Deputy Director for technical affairs

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## APPENDIX A: DETERMINATION PROTOCOL

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

DVM	Check Item	Initial finding	Draft	Final
Paragraph			Conclusion	Conclusion
	scription of the project			
Title of the				
-	Is the title of the project presented?	"Power distribution system modernization of PJSC "AES Kyivoblenergo"	OK	ОК
-	Is the sectoral scope to which the project pertains presented?	Sectoral scope (2) Power distribution.	OK	ОК
-	Is the current version number of the document presented?	PDD version 2.0	ОК	ОК
-	Is the date when the document was completed presented?	Date of completion: 20/07/2012	ОК	ОК
Description	of the project			
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description)?	<u>Clarification Request (CL) 01:</u> Please provide the documented evidence of the losses in "AES Kyivoblenergo" PJSC networks for 2002. <u>Clarification Request (CL) 02:</u> Please provide the documented evidence of implementation of the programme aimed at the reduction of TPL.	CL 01 CL 02	ОК
-	Is the history of the project (incl. its JI component) briefly summarized?	<u>Clarification Request (CL) 03:</u> Please provide the documented evidence of the date since the project is considered to be a JI activity.	CL 03	ОК
Project part		The list of the partice involved and project participants is		OK
-	Are project participants and Party(ies) involved in the project listed?	The list of the parties involved and project participants is provided in the tabular format in Section A3 of the PDD.	CAR 01	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Parties involved: Ukraine (Host country), Switzerland.		
		<u>Corrective Action Request (CAR) 01:</u> Please update the indicated production activities as per KVED (Classification of economic activities).		
-	Is the data of the project participants presented in tabular format?	The data of the project participants is presented in tabular format.	ОК	ОК
-	Is contact information provided in Annex 1 of the PDD?	The contact information is provided in Annex 1 of the PDD.	ОК	ОК
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Ukraine, the Party involved, is the host Party.	OK	ОК
Technical de	escription of the project			
Location of	the project			
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	The project is implemented in the Kyiv region	OK	OK
-	City/Town/Community etc.	Kyiv region (headquarters of the company is located in Kyiv)	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	The project is implemented_at the PJSC "AES Kyivoblenergo" facilities located in the Kyiv region. For more detailed information please refer to the Section A.4.1.4. of the PDD.	CAR 02	OK
		<u>Corrective Action Request (CAR) 02:</u> Please indicate geographic coordinates of the company's headquarters.		
Technologie	es to be employed, or measures, operations or			
-	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?	The project envisages the implementation of the programme aimed at reduction of technological power losses in the PJSC "AES Kyivoblenergo" power grid, which includes a number of technological and organizational activities – section A.4.2 of the PDD.	CAR 03	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Corrective Action Request (CAR) 03: Please provide the project implementation schedule.		
	ission reductions would not occur in the abse	greenhouse gases by sources are to be reduced by the pr ence of the proposed project, taking into account national		
-	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	The reduction of technological power losses in the company's power grid led to the reduction of CO <sub>2</sub> emissions connected with generation of additional (needed for coverage of TPL) power.	ОК	ОК
-	Is it provided the estimation of emission reductions over the crediting period?	The estimation of emission reductions over the crediting period is provided.	OK	OK
-	Is it provided the estimated annual reduction for the chosen credit period in tCO <sub>2</sub> e?	The estimated annual reduction for the chosen credit period is provided in tCO <sub>2</sub> e.	OK	OK
-	Are the data from questions above presented in tabular format?	Yes, the data is presented in tabular format.	ОК	OK
Estimated a	mount of emission reductions over the creditin	ig period		
-	Is the length of the crediting period Indicated?	Yes, the duration of the crediting period is 25 years (300 months).	CAR 04	OK
		<u>Corrective Action Request (CAR) 04:</u> Please justify the chosen duration of the crediting period.		
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	The estimates of total as well as annual and average annual emission reductions in tonnes of $CO_2$ equivalent are provided in section A.4.3.1 of the PDD.	OK	OK
Project app	rovals by Parties			
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	Corrective Action Request (CAR) 05: The Letters of Approval from parties involved are absent.	CAR 05	Pending
19	Does the PDD identify at least the host Party as a "Party involved"?	Yes, Ukraine is the host Party.	ОК	OK
19	Has the DFP of the host Party issued a written project approval?	Refer to CAR 05 above.	OK	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
20	Are all the written project approvals by Parties involved unconditional?	Refer to CAR 05 above.	ОК	ОК
	on 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? or - Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	Refer to CAR 05 above.	ОК	ОК
Baseline set	tting			
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 PDD describes the JI specific approach which is used for setting the baseline. <u>Clarification Request (CL) 04:</u> Please indicate which of the mentioned approaches is used for setting the baseline: - JI specific approach; - approved CDM methodology. <u>Corrective Action Request (CAR) 15:</u> Please provide in the Section B1 theoretical description of the chosen baseline.	CL 04 CAR 15	ОК
-	pproach only			
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	Yes, the PDD provides a detailed theoretical description of the project in a complete and transparent manner.	OK	ОК
23	Does the PDD provide justification that the baseline is established:	The PDD provides justification that the baseline is established by listing and describing plausible future	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul> <li>(a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one?</li> <li>(b) Taking into account relevant national and/or sectoral policies and circumstance?</li> <li>Are key factors that affect a baseline taken into account?</li> <li>(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors?</li> <li>(d) Taking into account of uncertainties and using conservative assumptions?</li> <li>(e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure?</li> <li>(f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?</li> </ul>	scenarios on the basis of conservative assumptions and selecting the most plausible one.		
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?	"Combined tool to identify the baseline scenario and demonstrate additionality" was used for baseline setting and demonstration of additionality. <u>Clarification Request (CL) 05:</u> Please indicate the valid version of the document used.	CL 05	ОК
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	Carbon dioxide emission factor for projects of power loss reduction in power supply networks of Ukraine, emission factor for natural gas and methane global warming potential were used for calculation of baseline emissions. The usage of the factors was justified.	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Approved C	DM methodology approach only			
26 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	Not applicable	N/A	N/A
26 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	Not applicable	N/A	N/A
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	Not applicable	N/A	N/A
26 (d)	Is the baseline identified appropriately as a result?	Not applicable	N/A	N/A
Additionalit	ý			
JI specific a	pproach 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 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	The Section B.1 of the PDD provides the analysis of the project additionality shoving that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions. The analysis was performed based on the "Combined tool to identify the baseline scenario and demonstrate additionality" (Refer to CL 05 above) approved by the CDM Executive Board and fully applicable for JI projects.	ОК	OK


DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	The barrier analysis and common practice analysis are used for the demonstration of project activity additionality.	OK	OK
29 (b)	Are additionality proofs provided?	The additionality proofs are provided in the Section B.1 of the PDD.	OK	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	<u>Corrective Action Request (CAR) 06:</u> The PDD does not provide any information on how the registration of the project as JI activity will aid to overcome the identified barriers.	CAR 06	ОК
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 were made in accordance with "Combined tool to identify the baseline scenario and demonstrate additionality" (Refer to CL 05 above).	OK	ОК
	DM methodology approach only			
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	Not applicable	N/A	N/A
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
31 (c)	Are all explanations, descriptions and analyses	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	with regard to additionality made in accordance with the selected methodology?			
31 (d)	Are additionality proofs provided?	Not applicable	N/A	N/A
31 (e)	Is the additionality demonstrated appropriately as a result?	Not applicable	N/A	N/A
Project bou	ndary (applicable except for JI LULUCF project	S		
JI specific a	pproach 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?	Yes, project boundary is defined according to the all requirements.	ОК	ОК
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?	Yes, the project boundary is defined on the basis of a case- by-case assessment with regard to the criteria referred to in 32 (a) above.	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 as appropriate?	Yes, the project boundary is provided in the Figure 2 and in tabular format. <u>Corrective Action Request (CAR) 07:</u> Please indicate the # of the mentioned table.	CAR 07	ОК
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	All gases and sources included are explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified.	OK	ОК
Approved C	DM methodology approach only			
33	Is the project boundary defined in accordance with the approved CDM methodology?	Not applicable	N/A	N/A
Crediting pe				
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	17/09/20012 – The Decision of the "AES Kyivoblenergo" PJSC board of directors on development and implementation of the Programme on TPL Reduction (Protocol # 8). This	OK	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the project will begin or began?	date is the date since the project is considered to be a JI activity. Refer to CL 03 above.		
34 (a)	Is the starting date after the beginning of 2000?	Yes.	OK	OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	25 years (300 months).	ОК	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	25 years (300 months).	ОК	OK
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?	The starting date of the crediting period is on the date of the first emission reductions generated by the project.	ОК	ОК
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?	<u>Clarification request (CL) 06:</u> Please 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.	CL 06	ОК
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?	<u>Clarification request (CL) 07:</u> Please specify that the extension of the crediting period beyond 2012 is subject to the host Party approval.	CL 07	ОК
Monitoring	plan			
35	Does the PDD explicitly indicate which of the following approaches is used? - JI specific approach - Approved CDM methodology approach	<u>Clarification request (CL) 08:</u> During the analysis of the PDD it was revealed that the project developer used JI specific approach for setting the monitoring plan, but it is not explicitly indicated. Please clearly describe in the PDD the approach chosen.	CL 08	ОК
JI specific a	pproach only			
36 (a)	Does the monitoring plan describe: – All relevant factors and key characteristics	Monitoring approach developed for this project conforms to assumptions and methods used in the baseline. Such	CL 09	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	that will be monitored? – The period in which they will be monitored? – All decisive factors for the control and reporting of project performance?	approach to the monitoring requires control and measurement of the variables and parameters needed for calculation of the baseline and project emissions in a transparent manner. <u>Clarification request (CL) 09:</u> Please provide the calculation algorithm for the parameter		
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?	V <sub>y</sub> . Refer to CL 09 above.	ОК	ОК
36 (b)	If default 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?	The used TPL level includes technical and commercial consumption and losses. Commercial losses do not influence GHG emissions and are excluded from the calculation.	ОК	ОК
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?	Yes. The monitoring plan clearly indicates how the values are to be selected and justified. <u>Corrective Action Request (CAR) 08:</u> Please provide operational and management structure which will be developed by the project operator for monitoring plan implementation.	CAR 08	ОК
36 (b) (ii)	For other values, – Does the monitoring plan clearly indicate the precise references from which these values are	<u>Corrective Action Request (CAR) 09:</u> Please indicate who is responsible for providing the actual $CO_2$ emission factors for projects on power loss reduction in	CAR 09	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	taken? – Is the conservativeness of the values provided justified?	power supply networks of Ukraine.		
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	<u>Corrective Action Request (CAR) 10:</u> Please provide the documented evidence that the data to be monitored and needed for the determination will be stored for two years after last transfer of ERUs by the project.	CAR 10	ОК
36 (b) (iv)	Are International System Unit (SI units) used?	Yes.	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?	Yes, the emission factors for projects on power loss reduction in power supply networks of Ukraine are used in calculations and are obtained through monitoring.	ОК	ОК
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	Yes, the use of parameters, coefficients, variables, etc. Is consistent between the baseline and monitoring plan.	OK	OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	The monitoring plan is developed in accordance with the "Guidance on criteria for baseline setting and monitoring".	ОК	ОК
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 are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination?	Yes, all the relevant parameters are described (refer to the Section D.1 of the PDD).	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(iii) Data and parameters that are monitored throughout the crediting period?			
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	The Table in the Section D.1.1 of the PDD defines the frequency of monitoring and data sources for all parameters and data to be monitored.	OK	OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emission reductions from the project, leakage, as appropriate?	The PDD describes all algorithms and formulae used for the calculation of baseline and project emissions. <u>Corrective Action Request (CAR) 11:</u> Please provide the expanded formula of the emissions reduction calculation due to the project activity (Equation 2).	CAR 11	ОК
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	The underlying rationale for the algorithms/formulae is explained.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Yes, consistent variables, equation formats, subscripts etc. are used.	OK	OK
36 (f) (iii)	Are all equations numbered?	Yes.	OK	OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Please refer to CAR 11 above.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	The level of data uncertainty is provided in the quality control and assurance table (refer to the section D.2 of the PDD). Taking into account that almost all data and parameters are based on the statistical data and calibrated measuring equipment recordings of a certain class of accuracy and tested by the official energy resources supplier and state bodies, their level of uncertainty is considered as low.	ОК	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	Yes.	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	Any parts of the algorithms or formulae that are not self- evident are explained.	OK	ОК
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes, it is justified that the procedure is consistent with standard technical procedures in the relevant sector.	OK	OK
36 (f) (vii)	Are references provided as necessary?	All the references are provided as necessary.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Yes.	OK	ОК
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?	Used assumptions and procedures do not have any significant uncertainty associated with them.	ОК	ОК
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?	Level of uncertainty is indicated as low.	ОК	ОК
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 identifies national and international monitoring standards used for the proposed project. All relevant references are provided. <u>Corrective Action Request (CAR) 12:</u> Please indicate for the parameter <i>EFgrid.produced.y</i> the source of data and the page where the used for 2003-2007 values are indicated.	CAR 12	ОК
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	Refer to CAR 12 above.	ОК	ОК
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	Corrective Action Request (CAR) 13: Please indicate quality control and assurance procedures described in the Section D.2 of the PDD.	CAR 13	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	on data and/or method validity and accuracy are kept and made available upon request?			
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Yes, the monitoring plan in the Section D.3 of the PDD clearly identifies the responsibilities and authorities regarding the monitoring activities.	OK	OK
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	<u>Corrective Action Request (CAR) 14:</u> The Section D.1.5 of the PDD requires from the project participants to indicate the information on data collection and archivation concerning environmental impact and to provide references on the relevant regulations of the host country. Please provide all the necessary information.	CAR 14	ОК
36 (I)	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?	Yes all the parameters are provided in Sections D.1.1.1 and D.1.1.3 of the PDD.	ОК	ОК
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?	Refer CAR 12.	ОК	ОК
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	No elements or combinations of approved CDM methodologies or methodological tools are used in the monitoring plan.	ОК	ОК
Approved C 38 (a)	DM methodology approach only Does the PDD provide the title, reference	Not applicable	N/A	N/A
()	number and version of the approved CDM			



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Paragraph	methodology used?		Conclusion	Conclusion
38 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	Not applicable	N/A	N/A
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	Not applicable	N/A	N/A
38 (d)	Is the monitoring plan established appropriately as a result?	Not applicable	N/A	N/A
Applicable 1	to both JI specific approach and approved CDN	l 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)? (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	No overlapping of monitoring periods is envisaged during the crediting period.	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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				
	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?	No leakages are envisaged by the proposed project activity.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	No leakages are envisaged by the proposed project activity.	OK	OK
Approved C	DM methodology approach only			
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	Not applicable	N/A	N/A
Estimation	of emission reductions or enhancements of net	removals		
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	Emissions baseline scenario and in the project scenario were assessed.	ОК	ОК
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	The PDD provides ex ante estimates of the project and baseline scenarios, and also emissions reduction. The estimated results are provided in the Section E of the PDD, and also in the Excel spreadsheets.	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul><li>scenario (within the project boundary)?</li><li>(d) Emission reductions or enhancements of net removals adjusted by leakage?</li></ul>			
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?	Not applicable	N/A	N/A
45	<ul> <li>For both approaches in 42</li> <li>(a) Are the estimates in 43 or 44 given:</li> <li>(i) On a periodic basis?</li> <li>(ii) At least from the beginning until the end of the crediting period?</li> <li>(iii) On a source-by-source/sink-by-sink basis?</li> <li>(iv) For each GHG?</li> <li>(v) In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?</li> <li>(b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD?</li> <li>(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 project taken into account, as appropriate?</li> <li>(d) Are data sources used for calculating the</li> </ul>	The estimates are provided on a periodic basis in tones CO <sub>2</sub> equivalent. The formulas used are consistent throughout the PDD.	OK	OK



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul> <li>estimates in 43 or 44 clearly identified, reliable and transparent?</li> <li>(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?</li> <li>(f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?</li> <li>(g) Are the estimates in 43 or 44 consistent throughout the PDD?</li> <li>(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 the total crediting period by the total months of the</li> </ul>			
46	crediting period and multiplying by twelve? If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	Yes, the PDD includes an illustrative ex ante emissions calculation.	ОК	ОК
Approved C	DM methodology approach only			
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	Not applicable	N/A	N/A
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: - On a periodic basis? - At least from the beginning until the end of	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the crediting period? - On a source-by-source/sink-by-sink basis? - For each GHG? - In tones of CO <sub>2</sub> equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? - Are the formula used for calculating the estimates consistent throughout the PDD? - Are the estimates consistent throughout the PDD? - 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?			
Environmer			014	01/
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 project also does not have any transboundary impact, as it is implemented in the Kyiv region (Ukraine) and does not include any impact that may occur in another region or another country.	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?	All activities under the project do not envisage any negative impacts on the environment, therefore no EIA was specifically developed for this project.	ОК	ОК



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Environmen	tal impacts			
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	The procedures of Ukraine don't require any stakeholder consultation concerning the proposed project. However, the information on TPL reduction was announced by the printed mass media and on the Internet (refer to the Section G of the PDD). No comments on the project have been received from stakeholders.	ОК	ОК
Determinati	on regarding small-scale projects (additional el	ements for assessment)		
50	Does the PDD appropriately specify and justify the SSC project type(s) and category(ies) that fall under: (a) One of the types and thresholds of JI SSC projects as defined in .Provisions for joint implementation small-scale projects.? If the project contains more than one JI SSC project type component, does each component meet the relevant threshold criterion? (b) One of the SSC project categories defined in the most recent version of appendix B of annex II to decision 4/CMP.1, or an additional project category approved by the JISC in accordance with the relevant provision in "Provisions for joint implementation small-scale projects"?	Not applicable	N/A	N/A
51	Does the SSC PDD confirms and shows that the proposed JI SSC project is not a debundled component of a large project by explaining that there does not exist a JI (SSC) project with a publicly available determination in accordance with paragraph 34 of the JI guidelines:	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul> <li>(a) Which has the same project participants; and</li> <li>(b) Which applies the same technology/measure and pertains to the same project category; and</li> <li>(c) Whose determination has been made publicly available in accordance with paragraph 34 of the JI guidelines within the previous 2 years; and</li> <li>(d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC project at the closest point?</li> </ul>			
Applicable	to bundled JI SSC projects only			
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions for JI SSC projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?	Not applicable	N/A	N/A
52 (b)	Does the composition of the bundle not change over time?	Not applicable	N/A	N/A
52 (c)	Has the AIE received (from the project participants): (i) Information on the bundle using the form developed by the JISC (F-JI-SSCBUNDLE)? (ii) A written statement signed by all project participants indicating that they agree that their individual projects are part of the bundle and nominating one project participant to represent all project participants in communicating with	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the JISC? (iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19 above?			
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects, do(are) all the projects: (a) Pertain to the same JI SSC project category? (b) Apply the same technology or measure? (c) Located in the territory of the same host Party?	Not applicable	N/A	N/A
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects, do(are) all the projects: (a) Have SSC PDDs been prepared for all JI SSC projects in the bundle? (b) Does each SSC PDD contain a single JI SCC project in the bundle?	Not applicable	N/A	N/A
55	If the projects in the bundle use the same baseline, does the F-JI-SSC-BUNDLE provide an appropriate justification for the use of the same baseline considering the particular situation of each project in the bundle?	Not applicable	N/A	N/A
56	Does the PDD indicate which of the following approaches is used for establishing a monitoring plan? (a) By preparing a separate monitoring plan for each of the constituent projects; (b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
56 (b)	If the approach 57 (b) above is used, (i) Are all the JI SSC projects located in the territory of the same host Party? (ii) Do all the JI SSC projects pertain to the same project category? (iii) Do all the JI SSC projects apply the same technology or measure? (iv) Does the overall monitoring plan reflect good monitoring practice appropriate to the bundled JI SSC projects and provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled projects?	Not applicable	N/A	N/A
Applicable t	to all JI SSC projects			
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	Not applicable	N/A	N/A
		restry projects (additional/alternative elements for assessm	ent)	
58	<ul> <li>Does the PDD appropriately specify how the LULUCF project conforms to:</li> <li>(a) The definitions of LULUCF activities included in paragraph 1 of the annex to decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP, as appropriate?</li> <li>(b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies:</li> <li>(i) A single minimum tree crown cover value (between 10 and 30 per cent)? and</li> <li>(ii) A single minimum land area value (between 0.05 and 1 hectare)? and</li> <li>(iii) A single minimum tree height value</li> </ul>	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(between 2 and 5 metres)?			
JI specific a	ipproach only			
59	Baseline setting - in addition to 22-26 above Does the PDD provide an explanation how the baseline chosen: - Takes into account the good practice guidance for LULUCF, developed by the IPCC? - Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?	Not applicable	N/A	N/A
60	Project boundary - alternative to 32-33 (a) Does the project boundary geographically delineate the JI LULUCF project under the control of the project participants? (a) If the JI LULUCF project contains more than one discrete area of land, (i) Does each discrete area of land have a unique geographical identification? (ii) Is the boundary defined for each discrete area? (ii) Does the boundary not include the areas in between these discrete areas of land? (b) Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant? (c) Does the project boundary account for all changes in the following carbon pools: – Above-ground biomass; – Below-ground biomass;	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul> <li>Litter;</li> <li>Dead wood; and</li> <li>Soil organic carbon?</li> <li>(c) Does the PDD provide:</li> <li>(i) The information of which carbon pools are selected?</li> <li>(ii) If one or more carbon pools are not selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source?</li> <li>(d) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above?</li> </ul>			
61 (a)	Project boundary - alternative to 32-33 (cont.) Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified in the PDD?	Not applicable	N/A	N/A
61 (b)	Project boundary - alternative to 32-33 (cont.) Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	Not applicable	N/A	N/A
62	Monitoring plan - in addition to 35-39 Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?	Not applicable	N/A	N/A
63	Does the PDD take into account only the	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?			
Approved C	DM methodology approach only			
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	Not applicable	N/A	N/A
64 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	Not applicable	N/A	N/A
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	Not applicable	N/A	N/A
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	Not applicable	N/A	N/A
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?	Not applicable	N/A	N/A
Determinati	on regarding programmes of activities (addition	nal/alternative elements for assessment)		
66	Does the PDD include: (a) A description of the policy or goal that the JI PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which all JPAs included in the JI PoA will be implemented?	Not applicable	N/A	N/A



DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul> <li>(c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including:</li> <li>The maintenance of records for each JPA?</li> <li>A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)?</li> <li>Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA?</li> <li>(d) A description of each type of JPAs that will be included in the JI PoA, including the technology or measures to be used?</li> <li>(e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?</li> </ul>			
67	Project approvals by Parties involved - additional to 19-20 Are all Parties partly or entirely within the geographical boundary for the JI PoA listed as "Parties involved" and indicated as host Parties in the PDD?	Not applicable	N/A	N/A
68	Authorization of project participants by Parties involved - additional to 21 Is the coordinating entity presented in the PDD authorized by all host Parties to coordinate and manage the JI PoA?	Not applicable	N/A	N/A
69	Baseline setting - additional to 22-26 Is the baseline established for each type of JPA?	Not applicable	N/A	N/A
70	Additionality - additional to 27-31 Does the PDD indicate at which of the following levels that additionality is demonstrated?	Not applicable	N/A	N/A



DVM Baragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Paragraph	(a) For the JI PoA		Conclusion	Conclusion
	(b) For each type of JPA			
71	<i>Crediting period - additional to 34</i> Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	Not applicable	N/A	N/A
72	Monitoring plan - additional to 35-39 Is the monitoring plan established for each technology and/or measure under each type of JPA included in the JI PoA?	Not applicable	N/A	N/A
73	Does the PDD include a table listing at least one real JPA for each type of JPA?	Not applicable	N/A	N/A
73	<ul> <li>For each real JPA listed, does the PDD provide the information of:</li> <li>(a) Name and brief summary of the JPA?</li> <li>(b) The type of JPA?</li> <li>(c) A geographical reference or other means of identification?</li> <li>(d) The name and contact details of the entity/individual responsible for the operation of the JPA?</li> <li>(e) The host Party(ies)?</li> <li>(f) The starting date of the JPA?</li> <li>(g) The length of the crediting period of the JPA?</li> <li>(h) Confirmation that the JPA meets all the eligibility requirements for its type, including a description of how these requirements are met?</li> <li>(i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?</li> </ul>	Not applicable	N/A	N/A



# DETERMINATION REPORT

# 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 participant response	Determination team conclusion
Clarification Request (CL) 01: Please provide the documented evidence of the losses in "AES Kyivoblenergo" PJSC networks for 2002.	-	The documented evidence in form of statistic report "Structure of power balance and technological power losses for transfer within power grid" for 2002 was provided to the determination team. Please refer to supporting documents 01.	The issue is closed.
<u>Clarification Request (CL) 02:</u> Please provide the documented evidence of implementation of the programme aimed at the reduction of TPL.	-	The documented evidence of implementation of the programme aimed at the reduction of TPL is the reports on investment plans implementation. These reports (for the period 2003-2011) were provided to the determination team.	The issue is closed.
Clarification Request (CL) 03: Please provide the documented evidence of the date since the project is considered to be a JI activity.	-	The starting date of the JI project is 17/09/2002 The Protocol of the "AES Kyivoblenergo" PJSC board of directors meeting on development and implementation of the Programme on TPL Reduction (Protocol # 8). The documented evidence was provided to the determination team. Please refer to the supporting documents Protokol.pdf	The issue is closed.



Clarification Request (CL) 04: Please indicate which of the mentioned approaches is used for setting the baseline: - JI specific approach; - approved CDM methodology.	22	"The methodology used to determine the baseline and the corresponding calculations based on the JI specific approach, according to the Guidelines on criteria for baseline setting and monitoring (version 03), paragraph 9a. Also, methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.1) was used for setting of the baseline scenario and demonstration of additionality". This information was added to the PDD version 2.0 (refer to the Section B.1).	The issue is closed.
Clarification Request (CL) 05: Please indicate the valid version of the document used.	24	At the start of the determination of the project, the latest version of "Combined tool to identify the baseline scenario and demonstrate additionality" is version 04.0.0, dated from March 2, 2012. In this project, the project participants using a previous version of this tool, according to "Guidelines on criteria for baseline setting and monitoring" (version 03), paragraph (10), page 3 Thus "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.1) was used. <u>This clarification was added to the PDD version 2.0 (refer to the Section B.1).</u>	The issue is closed.



Clarification request (CL) 06: Please 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.	34 (d)	"ERUs generation period will start at 01/01/2008 and will not exceed the project operation period." <u>This clarification was added to the PDD version 2.0 (refer to the Section C.3).</u>	The issue is closed.
Clarification request (CL) 07: Please specify that the extension of the crediting period beyond 2012 is subject to the host Party approval.	34 (d)	The status of emissions reduction or enhancement of net removals generated by the JI projects after ending of the first commitment period within Kyoto Protocol (continuation of the crediting period after 2012) may be defined as per relevant agreements and procedures within the framework of UNFCCC and host country. <u>This clarification was added to the PDD</u> version 2.0 (refer to the Section C.3).	The issue is closed.
Clarification request (CL) 08: During the analysis of the PDD it was revealed that the project developer used JI specific approach for setting the monitoring plan, but it is not explicitly indicated. Please clearly describe in the PDD the approach chosen.	35	Methodology used to monitor emission reductions for the project based on a JI specific approach, according to the Guidelines on criteria for baseline setting and monitoring (version 03), Article 9a. This approach is also foresees to use the approach similar to one used in the registered (ITL UA1000316) PDD "Khmelnytskoblenergo PJSC Power Distribution System Modernization". <u>This clarification was added to the PDD</u> <u>version 2.0 (refer to the Section D.1).</u>	The issue is closed.



Clarification request (CL) 09: Please provide the calculation algorithm for the parameter $V_{y}$ .	36 (a)	Calculation of this parameter is carried out according to the algorithm as shown in the registered (ITL UA1000316) PDD "Khmelnytskoblenergo PJSC Power Distribution System Modernization". <u>This clarification was added to the PDD</u> version 2.0 (refer to the Section D.1.1.4)	The issue is closed.
<u>Corrective Action Request (CAR) 01:</u> Please update the indicated production activities as per KVED (Classification of economic activities).	-	Production activities as per KVED were updated. <u>The updated information is added to the PDD</u> version 2.0 (please refer to the Section A.3).	The issue is closed.
Corrective Action Request (CAR) 02: Please indicate geographic coordinates of the company's headquarters.	-	Geographic coordinates of the company's headquarters were indicated. <u>The updated information is added to the PDD</u> <u>version 2.0 (please refer to the Section</u> <u>A.4.1.4).</u>	The issue is closed.
Corrective Action Request (CAR) 03: Please provide the project implementation schedule.	-	The implementation schedule and quantity and quality parameters of the project were developed within company's investment plans aimed at TPL reduction. These investment plans were provided to the determination team during the site visit. The main stages of the project implementation were described in the Section A.4.2.	The issue is closed.



Corrective Action Request (CAR) 04: Please justify the chosen duration of the crediting period.	-	The duration of the crediting period 22 years was indicated incorrectly. Correct duration of the crediting period is 25 years (300 months), which corresponds with the project operational lifetime. <u>The updated information is added to the PDD</u> version 2.0 (please refer to the Section C.3)	The issue is closed.
Corrective Action Request (CAR) 05: The Letters of Approval from parties involved are absent.	19	Letters of Approval from Parties involved will be obtained after the successful determination process as per the acting regulations of the Parties.	Pending
<u>Corrective Action Request (CAR) 06:</u> The PDD does not provide any information on how the registration of the project as JI activity will aid to overcome the identified barriers.	29 (c)	The updated information is added to the PDD version 2.0 (please refer to the Section B.1)	The issue is closed.
Corrective Action Request (CAR) 07: Please indicate the # of the mentioned table.	32 (c)	The number of the Table was indicated. <u>The updated information is added to the PDD</u> version 2.0 (please refer to the Section B.3)	The issue is closed.
<u>Corrective Action Request (CAR) 08:</u> Please provide operational and management structure which will be developed by the project operator for monitoring plan implementation.	36 (b) (i)	Flow-chart of the monitoring structure was added. <u>The updated information is added to the PDD</u> <u>version 2.0 (please refer to the Section D.3)</u>	The issue is closed.



$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	36 (b) (ii)	Different emission factors data sources were used for emissions reduction calculation. The detailed description of the parameters was added to the Section B.1. For more transparency the same information was added to the Section D.2 of the PDD. <u>The updated information is added to the PDD</u> version 2.0 (please refer to the Section D.2)	The issue is closed.
Corrective Action Request (CAR) 10:	36 (b) (iii)		
Please provide the documented evidence that the data to be monitored and needed for the determination will be stored for two years after last transfer of ERUs by the project.		The documented evidence for the fact is the Order # 586 dated 22/06/2012 which was provided to the determination team.	The issue is closed.
Corrective Action Request (CAR) 11:	36 (f)	Equation 2 was corrected as per the requirement of the CAR.	
Please provide the expanded formula of the emissions reduction calculation due to the project activity (Equation 2).		<u>The updated information is added to the PDD</u> <u>version 2.0 (please refer to the Section</u> <u>D.1.4)</u>	The issue is closed.
Corrective Action Request (CAR) 12:Pleaseindicatefortheparameter	36 (g)	Data sources were provided.	
<i>EF<sub>grid.produced.y</sub></i> the source of data and the page where the used for 2003-2007 values are indicated.		The updated information is added to the PDD version 2.0 (please refer to the Section B.1)	The issue is closed.
Corrective Action Request (CAR) 13: Please indicate quality control and assurance	36 (i)	Quality control and assurance procedures are described in the PDD.	
procedures described in the Section D.2 of the PDD.		The updated information is added to the PDD version 2.0 (please refer to the Section D.2)	The issue is closed.



Corrective Action Request (CAR) 14: The Section D.1.5 of the PDD requires from the project participants to indicate the information on data collection and archivation concerning environmental impact and to provide references on the relevant regulations of the host country. Please provide all the necessary information.	36 (k)	"Any negative impact on the environment as a result of project implementation is absent. Accordingly, the requirements of the country where the project is implemented cannot be applied". Please refer to the PDD, version 2.0 (see Section D.1.5)	The issue is closed.
Corrective Action Request (CAR) 15: Please provide in the Section B1 theoretical description of the chosen baseline.		The updated information is added to the PDD version 2.0 (please refer to the Section B.1)	The issue is closed.