DETERMINATION REPORT
CRIMENERGO PJSC

DETERMINATION OF THE "REDUCTION OF PROCESS LOSSES IN POWER LINES CRIMENERGO PJSC"

REPORT NO. UKRAINE-DET/0247/2011

REVISION NO. 03

BUREAU VERITAS CERTIFICATION

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Client: Crimenergo PJSC	Client ref.: Grygoriy Gruba

Summary:

Bureau Veritas Certification has made the determination of the "Reduction of Process Losses in Power Lines Crimenergo PJSC" project of Crimenergo PJSC located in Autonomous Republic of the Crimea, Ukraine, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

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

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

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.: UKRAINE-det/0247/2011	Subject Group: JI	
Project title: "Reduction of Process Losses in Power Lines Crimenergo PJSC "		
Work carried out by: Oleg Skoblyk – Team Leader, Lead Verifier, Technical Specialist Denis Pishchalov – Team Member, Financial Specialist		
Work verified by: Ivan Sokolov - Internal Technical Reviewer		
Work signed by: Flavio Gomes – Operational Manager		
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1 INTRODUCTION

Crimenergo PJSC has commissioned Bureau Veritas Certification to determinate its JI project “Reduction of Process Losses in Power Lines Crimenergo PJSC” (hereafter called “the project”) in Autonomous Republic Crimea, 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 derminated in order to confirm that the project design, as documented, is sound and reasonable, and meet the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emissions reductions units (ERUs).

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

1.2 Scope

The determination scope is defined as an independent and objective review of the project design document, the 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:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Lead Verifier Technical Specialist
Denis Pishchalov
Bureau Veritas Certification Team member, Financial Specialist

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal reviewer

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 Crimenergo PJSC 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, Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by a Accredited Independent Entity were reviewed.

PDD «Reduction of Process Losses in Power Lines Crimenergo PJSC» project of Crimenergo PJSC version 1.0 was submitted on 25/10/2010.

To address Bureau Veritas Certification corrective action, forward action and clarification requests Crimenergo PJSC revised the PDD and resubmitted it as version 3.0 of 09/11/2011 which is deemed final.

The determination findings presented in this report relate to the project as described in the PDD version 1.0 dated 25/10/2010 version 2.0 of 18/09/2011 and version 3.0 dated 09/11/2011.

2.2 Follow-up Interviews

On 07/04/2011 Bureau Veritas Certification performed on-site visit interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Crimenergo PJSC and Ltd «EES» were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Crimenergo PJSC	➢ Implementation schedule ➢ Project management organisation ➢ Evidence and records on reconstruction and new equipment and its operation ➢ Environmental Impact Assessment ➢ Project monitoring responsibilities ➢ Monitoring equipment ➢ Quality control and quality assurance procedures ➢ Environmental impacts affected ➢ Local authorities and public opinion
CONSULTANT Ltd «EES»	➢ Applicability of methodology ➢ Baseline and Project scenarios ➢ Barriers analysis ➢ Additionality justification ➢ Common practice analysis ➢ Monitoring plan ➢ Conformity of PDD to JI requirements

2.3 Resolution of Clarification and Corrective Action Requests

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

Corrective Action Requests (CAR) is issued, where:

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

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

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

3 PROJECT DESCRIPTION

The main objective of the project introduction Joint Implementation "Reduction of Process Losses in Power Lines Crimenergo PJSC" is the technical reconstruction of electrical network and equipment programme realization, introduction of the progressive technologies, organization structure improvement, transition to the higher level organization of electricity grid transmission and distribution,.

Taking measures, foreseen by the draft, will let to increase the reliability and effectiveness of the electric power distribution network in Autonomous Republic of the Crimea, and enhance the quality of consumers service. As well as, taking such measures, will help to reduce the amount of electric power, that is lost in the distributive and transport electrical networks of Crimenergo PJSC, and that, in its turn, will help to reduce the amount of the generated electric energy, and, as the result, pollutant emissions in the atmosphere.

Situation at the beginning of the project activity
Public Joint Stock Company Crimenergo (Crimenergo PJSC) is an integral part of the unified energy system (UES) of Ukraine and provide the consumers of Autonomous Republic of the Crimea with the electric energy regularly and reliably under the uniform tariff.

At the beginning of the project (the beginning of the year 2002) Crimenergo PJSC was realizing only such measures that were directed on the maintaining of electrical networks in good working order. These measures mainly included repairing work on eliminations of errors, that arise during the operation of electric networks. That resulted in the losses, in 2002, in networks of Crimenergo PJSC which reached 35.19% from the electric energy amount, that was coming into the company's network.

Most of the used, at that moment, equipment in the networks of Crimenergo PJSC was already physically and morally outdated, but because of the insufficient financing and operational reserves of this equipment, remained still in use. Besides, changing of this situation was possible not only in the case of modification of technical provision of the

network, but also in the case of company's organizational structure improvement, which also required financing and people.
Selling possibility of greenhouse reduction units, became one of the factors for the start of introduction program, the goal of which is the reduction of technological power consumption in the Crimenergo PJSC electric network.

Project scenario
Joint implementation project is based on the introduction of investment program, directed on the reduction of technological power losses in the Crimenergo PJSC, complex of measures on elimination of over normative power consumption, which is introduced and financed since 2003.

Measures taken within the framework of this program, as well as introduction and completion of regular monitoring of possible losses sources and there prevention, let Crimenergo PJSC to reduce losses in the networks.

Baseline scenario
Baseline scenario foresees further usage of available equipment with performing of planned repairing work without substantial investment. More information about baseline scenario is provided in section B.

Brief history of a project
25/12/2002 – 2003 investment programme approval by the NCPR decree of 25.12.2002 № 1444. That programme includes the chapter " TPL reduction measures". This date is the date the acceptance of this project as a JI project.
January 2003 - TPL reduction, in the Crimenergo PJSC electric networks, programme introduction start
28/09/2011 – signing of a contract with the ImexEnergo. PDD preparation.

Project advantages
Besides the reduction of greenhouse gasses, implementation project of the program «Reduction of Process Losses in Power Lines Crimenergo PJSC» has the following advantages:

- Creation of additional working positions, connected with the introducing of new equipment, erection and reconstruction of enterprise's establishments;
- Pollutant emissions reduction due to the electric energy generation cut down as a result of losses shortening in the networks.
- Production cost price cut down.

Joint implementation project realization will provide pollutant emissions reduction due to the electric energy, that comes to the Crimenergo PJSC

network, generation cut down. In such a way, project realization will lead to the greenhouses gasses reduction and prevention of their further accumulation in the atmosphere, which in its turn, will loosen climate changes.

Crimenergo PJSC is an integral part of the unified energy system (UES) of Ukraine and provide the consumers of Autonomous Republic of the Crimea with the electric energy regularly and reliably under the uniform tariff.

At the beginning of the project (at the end of the year 2002) Crimenergo PJSC was realizing only such measures that were directed on the maintaining of electrical networks in good working order. These measures mainly included repairing work on eliminations of errors, which arise during the operation of electric networks. That resulted in the losses, in 2002, in networks of Crimenergo PJSC which reached 35.19% from the electric energy amount, that was coming into the company's network.

The main objective of the project introduction Joint Implementation in the Crimenergo PJSC is the technical reconstruction of electrical network program realization through the introduction of progressive technologies, organization structure improvement, transition to the higher maintenance level organization, by means of investments attraction, in particular, investments from the reduction of greenhouse gasses emissions in the atmosphere.

Joint implementation project is based on the introduction of investment program, directed on the reduction of technological power losses in the Crimenergo PJSC electric networks, and on the complex of measures on elimination of over normative power consumption, which is introduced and financed since 2003.

Prospective development program include:

- scientific and technical support realization, functioning equipment exploitation term over rated extension, equipment diagnostics system realization and its residual operating time prognostication;
- introduction of organizational and technical measures for technological power losses reduction;
- conducting of reconstructions and renovation works in the electric networks, and substitution of outdated equipment;
- attraction of investments for the development and achievement of high technical and economical level of the Company;
- increase of power supply reliability level for the region consumers, by means of, Automatize commercial accounting power consumption system (ACAPCS), and complex technical power losses reduction Program introduction;

- equipment diagnostics system realization and its residual operating time prognostication;
- complex technical power losses reduction Program introduction;
- operating equipment modernization, within the framework of electric networks development investment programs.

Implementation of the program is continuous process that wills conduct over the operational period of the project.

The Project implementation provided the following measures:

1. Organizational measures of methodological ensuring.
2. Organizing – technical measures.
3. Technical measures.

All these measures, and also introduction and carrying out of losses possible sources constant monitoring, and there prevention allowed Crimenergo PJSC to reduce technical power losses in their own electrical networks from 35,19% (2002 year) to 15,42% (2010 year) from the electrical power amount that came to the network.

Losses reduction in the networks allowed to reduce CO2 emissions, that were caused by the generation of electric power, that was lost.

Duration of the draft is unlimited, as measures taken to find and remove power losses in the Crimenergo PJSC electrical networks, are a constant and continual process. CO2 eq emissions reduction are affirmed on one crediting period (22 years) according to the modality and JI Mechanism procedures(3).

For the completion of investment programme on the TPL reduction part the Company purchased the following devices and equipment:

- electricity meters(DNVP" Ob'ednannya Comunar" "NIK"," Modul' Telecom", ltd producers);
- electricity meters with the PLS modem converters ("TELETEC" ltd. producer);
- test bench for 1- phase and 3- phase electricity meters ("NIK" ltd. producer)
- 10 kV measuring transformers ("Ukrtransenergo" NVP producer)

The purchase of the foregoing equipment was realized according the legislation of Ukraine that was in effect at the moment of procurement. Since 2003 the purchase was realized according to the Ukraine NCPR decree of 25.12.2002 № 1455 " About the Procedure approval of products, labour and services purchase by the licensees, the corresponding operation of whom tariffs NCPR."

On 17.03.2006 The Law of Ukraine of 15.12.2005 № 3205-IV " About alteration of The Law of Ukraine " About the products, labour and services purchase at the public funds " and other legislative acts of Ukraine", that introduced a new regulation, videlicet: "to complete the indention number three with the words: public enterprises, utilities and economic associations in which public shares exceeds 50 %." (While tendering, Ukraine Minpalyvenergo enterprises should cease to apply the NCPR decree № 1455 and start to realize the tender according to The Law of Ukraine of 22.02.2000 № 1490-III " About the products, labour and services purchase at the public funds ")

Then, on 11.03.2007 The Law of Ukraine of 01.12.2006 № 424-V " About the legislative acts of Ukraine, on the products, labour and services purchase at the public funds, alteration" comes into effect. This revision, changes organization and tendering essentially, Ukraine Chamber of Commerce is endowed with the specific powers, interdepartmental commission concerning public purchase is created, participant's catalogue is formed, procedures conducting "certificates" etc.

On 02.04.2008 The Law of Ukraine of 20.03.2008 № 150-VI " About considering null and void, The Law of Ukraine "About the products, labour and services purchase at the public funds" and in accordance with it The Law of Ukraine № 1490-III becomes inept."

At the same time, on 02.04.2008, comes into force, The Cabinet of Ministers of Ukraine decree of 28.03.2008 № 274 " About the products, labour and services purchase at the public funds", which later became null and void because of The Cabinet of Ministers of Ukraine decree 17.10.2008 № 921 " About the Statute confirmation on the products, labour and services purchase at the public funds."

At the present time, The Company purchases products and services according to The Law of Ukraine of 01.06.2010 № 2289-VI " About the public purchase realization."

Purchase procedures, conducted by Crimenergo PJSC were checked by the control and auditing agency, and by anti-monopoly committee more than once. No breaches were exposed.

With the purpose of power looses reduction programme implementation, the department of power balances and TPL regulation (nowadays it is the department of power balances and control (DPBC)), the department of compulsory tax collection and technical audit (now it's the department of technical audit and contractual work - DTAaCW), the domestic consumer department(DCD) were formed, and in the structural subunits - the office of control engineer was introduced. DPBC creation and control engineer office introduction was directed on the organization of calculation with the purpose of variable tension areas, with the overnormative technical power looses, selection, and efforts direction on their reduction to the normative value. DTAaCW and DCD creation was directed on the PJSC

«Crimenergo» structural subunits operation reorganization, in the first place, on the power theft and illegal usage elimination part, accounting and measuring power complexes operation improvement. JV «Energooblic»

is a part of Crimenergo PJSC since 2006. The objective of its activity, is to improve servicing of all power meters that are located on the Crimenergo PJSC territory (technical and commercial accounting), Company ACAPCS maintenance system, namely meters: consumers and those that are located within the Company's area.

As from 2003, Crimenergo PJSC has been taken yearly the following measures, on their own funds, for the TPL reduction:

- 1- phase and 3- phase electricity meters with precision grade of 2,5 and higher, substitution with modern electrical meters with the precision grade of 1;
- accounting equipment bearing out, terminals substitution with the isolated ones.
- unloading TP 10/0,4 kV establishment;
- on the loaded TP its reconstruction with the transformer substitution for more powerful one;
- 0,4-10-kV lines reconstruction, with the wire substitution for the one with greater diameter, with the application of cable joint new technology, and china and glass isolation substitution with the polymeric one.
- as from 2004, VL 0,4-10kV reconstruction is carried out actively, with the use of SYP;
- distributive networks transfer from the tension of 6 kV to 10 kV;
- as from 2006, the Company actively uses accounting devices with PLS modems, which give an opportunity to organize mini ACAPCS.

Henceforth, Crimenergo PJSC will continue substitution of meters with precision grade of 2,5 with the modern one, portable accounting devices establishment, networks reconstruction with the use of isolated wire, it is planned to realize substations reconstruction with the dry transformers usage, which will help to reduce TPL, still more.

CARs (CAR01-CAR06), CLs (CL01-CL02) and their resolutions/conclusions applicable to project description are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

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 16 Corrective Action Requests and 10 Clarification Requests.

4.1 Project approvals by Parties involved (19-20)

After receiving Determination Report from the Accredited Independent Entity the project documentation will be submitted to the National Environmental Investment Agency of Ukraine for receiving a Letter of Approval.

Ministry of the Environment of Poland provided Letter of Approval DZKiOApek-350-2/21167/11/TK dated 11/05/2011.

CAR07, CL03 and their resolutions/conclusions applicable to project approvals by Parties involved are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.2 Authorization of project participants by Parties involved (21)

The participation of each project participant listed in the PDD will be authorized by Letter of Approval from appropriate party explicitly stating the name of the legal entity.

CAR07, CL03 and their resolutions/conclusions applicable to authorization of project participants by Parties involved are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.3 Baseline setting (22-26)

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

The baseline scenario has been established in accordance with Appendix B of the JI Guidelines and in accordance with the 'Guidance on Criteria for Baseline Setting and Monitoring' (Version 2) adopted at 18th Meeting of the JISC and used Methodological Tool "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0).

The 'Guidance on Criteria for Baseline Setting and Monitoring' established by the JISC states: *"The baseline for a JI project is the scenario that*

reasonably represents the anthropogenic emissions by sources or anthropogenic removals by sinks of GHG that would occur in the absence of the proposed project."

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 practice of power grid operation;

b. implementation of the above project without JI mechanism.

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

- Electricity and main fuel prices are fixed by the government and change independently from the enterprise needs.
- The Power Grid is a very complicated system, which consists of the groups of power transformation, transmission and distributing equipment, management and monitoring systems and only if these groups work coherently the result will be positive. It means that all of the groups of measures implemented in the Crimenergo PJSC power grid should be coordinated with the other parts of the system. Besides, some new equipment will be implemented on the Units and there is no experience or historical data that could show the possibility of the effective work of such a system.
- Ukraine has one of the lowest electricity tariffs in Europe. Therefore, it is really hard invest some cost for the reconstruction or the rehabilitation of the equipment.

In order to establish the baseline scenario project participants has chosen the use of JI specific approach and "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0). Default multi-project emission factors for Ukraine National Power Grid defined by National Environmental Investment Agency of Ukraine have been applied for calculation of greenhouse gases emissions.

All explanations, descriptions and analyses pertaining to the baseline in the PDD are made in accordance with the identified JI specific approach and the baseline is identified appropriately.

CAR08, CL04 and and their resolutions/conclusions applicable to baseline setting are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.4 Additionality (27-31)

Brriers analysis and common practice analysis were used to demonstrate additionality of the project activity. All explanations, descriptions and analyses are made in accordance with the selected tool or method.

The following additionality proofs are provided:

1. there are two alternative scenarios to the project activity identified;
2. the identified financial barrier would credibly prevent the implementation of the proposed project activity undertaken without being registered as a JI activity;
3. the common practice analyses carried out by the PP's, complementing the investment and barrier analysis

Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.

CAR09 and its resolution/conclusion applicable to additionality are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

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:

- CO2 emissions related to electric energy production for electrical grid

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

The AIE determinated the project boundary by:
a) Detailed review of relevant documentation (list of all determinated documents provided in "Category 2 Document" below).
b) Interviews and observations during site visit to Crimenergo PJSC dated 07/04/2011 (list of interviewd persons provided in "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.

CAR10, CLs (CL05, CL06) and their resolutions/conclusions applicable to project boundary are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 25/12/2002, 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 (300 months).

The PDD states the length of the crediting period in years and months, which is 22 years or 264 months, and its starting date as 01/01/2004, which is the date the first emission reductions or enhancements of net removals are 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.

CLs (CL07, CL08) and their resolutions/conclusions applicable to crediting period are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

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 saving.

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

1. Actual receiving of electricity to the grid
2. Total reduction of technical power losses
3. CO2 emission factor for Ukranian Grid

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

The monitoring plan explicitly and clearly distinguishes:

(i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination, such as: N/A.

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

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording depending on its kind. It is provided in comprehensive manner in Tables for the key-parameters in Section B.1. of the PDD.

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate, such as:

Project emissions

The mission reduction will be achieved by reducing power losses in the company's power grids which in its turn will be achieved as a result of the project implementation.

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

$$PE_y = 0$$

Baseline emissions

Baseline emissions are defined by the following equation:

$$BE_y = V_y \cdot CEF_y, \quad (1)$$

where

BE_y = baseline emissions (tCO2e);

V_y = total technical loss reduction in the power distribution system during the period *y* of the project scenario compared with the baseline, MWh;

CEF_y = CO_2 emission factor in UPS of Ukraine for the the power replacement projects in the year y, tCO_2e/MWh;

y = the year for which estimates are made.

Emission reduction

Emissions reductions are defined by the following equation:

$$ER_y = BE_y - (PE_y + LE_y), \quad (2)$$

Where:
ER_y = emission reduction during the year y, t CO2e;
BE_y = baseline emission of the greenhouse gases in the year y, t CO2e;
PE_y = greenhouse gases emission caused by the project activity in the year y, t CO2e;
LE_y = escape emission in the year y , t CO2e.

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

Data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities. The roles and responsibilities of the persons involved to monitoring process are described in full in section D.3 of PDD and vividely demonstrated on the Scheme of data collection for Monitoring Report.

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

The monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources (e.g. official statistics, 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.

CARs (CAR11-CAR15), CLs (CL09, CL10) and their resolutions/conclusions applicable to monitoring plan are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential Indirect external leakage of CO2, CH4, N2O generated by fuel production and its transportation and appropriately explains that they are neglected.

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:

The mission reduction will be achieved by reducing power losses in the company's power grids which in its turn will be achieved as a result of the project implementation.

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

$$PE_y = 0$$

(b) No leakage is expected during the project activity;

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

Year	Greenhouse gases baseline emission (tonnes of CO2 equivalent)
2004	203409
2005	150455
2006	261833
2007	248119
Total 2004-2007:	863817
Average number of baseline emission 2004-2007:	215954
2008	385202
2009	392835
2010	415190
2011	397595
2012	397595
Total 2008-2012:	1988418
Average number of baseline emission 2008-2012:	397684
2013	397595
2014	397595
2015	397595
2016	397595
2017	397595
2018	397595
2019	397595
2020	397595
2021	397595
2022	397595
2023	397595
2024	397595
2025	397595
Total 2013-2025:	5168737
Average number of baseline emission 2013-2025:	397595
Total 2004-2025:	8020941
Average number of baseline emission 2004-2025:	364590

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

Year	Estimated emission reductions (tonnes of CO2 equivalent)
2004	203409
2005	150455
2006	261833
2007	248119
Total 2004-2007:	863817
Average number of reduction 2004-2007:	215954
2008	385202
2009	392835
2010	415190
2011	397595
2012	397595
Total 2008-2012:	1988418
Average number of reduction 2008-2012:	397684
2013	397595
2014	397595
2015	397595
2016	397595
2017	397595
2018	397595
2019	397595
2020	397595
2021	397595
2022	397595
2023	397595
2024	397595
2025	397595
Total 2013-2025:	5168737
Average number of reduction 2013-2025:	397595
Total 2004-2025:	8020971
Average number of reduction 2004-2025:	364590

For ease of calculation of emission reductions in the Excel file «KRYM-1БТВЕ-2002-2010-01-11-2011-km-ok-КП», all the values with the quotient of one hundred are rounded to integers. Therefore, when summing the values of ERUs, which are listed in Tables (c), (d) there may be minor differences.

Emission reductions estimation after the first commitment period

The estimates referred to above are given:

(a) On a periodic basis;

(b) From 01/01/2004 to 31/12/2025, covering the whole crediting period;

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

(d) For CO2
(e) In tonnes 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;

The formula used for calculating the estimates referred above, which is

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

де

ER_y = emission reduction for year y, t CO_2e;

BE_y = baseline emissions for year y, t CO_2e;

PE_y = project emissions for year y, t CO_2e;

LE_y = leakages for year y , t CO_2e

is 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.

No issues applicable to estimation of emission reductions or enhancements of net removals were found.

4.10 Environmental impacts (48)

EIA was not elaborated for this project.

Rescompryroda AR of the Crimea inspectorate controls observation by the Company of environmental legislation of Ukraine requirements. The

places of temporal by-products conservation, atmospheric emissions sources, treating facility documentation, ventilating pipes, sewers schemes are being examined during the verification. All the reports, waste products control registers, atmospheric emissions measurement results, regulations observation of by-products conservation, waste products certificates, land documents were the structural subunit is located, and a line of other nature-oriented documents, are also being inspected.

PJSC «Crimenergo» company provides the following reporting on the environmental protection:

- №1 form " Treatment of the by- products" to the public statistics body, to the NAK " EKU" and to the Rescompryroda AR of the Crimea once a year;
- 2-TP form " Atmosphere protection report", to the public statistics body, to the NAK " EKU" and to the Rescompryroda AR of the Crimea quarterly;
- №1 form – ecological expenses "Environmental protection expenses and ecological payments" to the public statistics body and to the NAK " EKU" once a year;
- PJSC «Crimenergo» water resources application reporting to the NAK " EKU" twice a year.

The project will not result in significant environmental impacts in addition to reducing greenhouse gas emissions.

The project activities will not have transboundary environmental impacts.

During the reconstruction sets up the elegass switchers instead the oil one. There exists the instruction on their usage, which contains the list of actions the staff has to do in the case of emergency.

During the Crimenergo PJSC labour activity process, the following waste products are formed: used fluorescent lamps, used capacitors, used accumulators, used electrolyte, technical and transformer lubricants waste, used oil filters, contaminated with the mazout soil, oiled rags, used oiled silicagel, packing from varnish and paint products, used automobile tyres, carbide, waste that contains asbestos, car wash mud, abrasive, black and nonferrous scrap metal waste, used ceramic insulators, office equipment, waste paper, wood waste, glass waste.

According to the covenants, the Company passes over, all the aforementioned waste, for the recovery to the organizations, which possess the appropriate license.

The suggested project will generally have the positive influence on the environment in comparison with the already existing state, since the reconstructions will improve the use of power resources and will reduce

the pollutants emission into the air and into the Black Sea. Therefore in general the influence of the reconstruction is inconsiderable.

CAR16 and its resolution/conclusion applicable to environmental impacts are listed in the APPENDIX A: DETERMINATION PROTOCOL (Table 2) below.

4.11 Stakeholder consultation (49)

No stakeholders' comments were received.

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 "Reduction of Process Losses in Power Lines Crimenergo PJSC" located in Autonomous Republic of the Crimea, Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final Determination report and opinion.
Project participant/s used the latest "Combined tool to identify the baseline scenario and demonstrate additionality". In line with this tool, the PDD provides barrier analysis, investment analysis and common practice

analysis, to determine that the project activity itself is not the baseline scenario.
Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The determination revealed 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 participant 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 3.0 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 3.0) 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.

7 REFERENCES

Category 1 Documents:
Documents provided by Crimenergo PJSC that relate directly to the GHG components of the project.

/1/ PDD “Reduction of Process Losses in Power Lines Crimenergo PJSC” version 1.0 dated 25/10/2010
/2/ PDD “Reduction of Process Losses in Power Lines Crimenergo PJSC” version 2.0 dated 18/09/2011
/3/ PDD “Reduction of Process Losses in Power Lines Crimenergo PJSC” version 3.0 dated 09/11/2011
/4/ Emission reduction calculation excel file – KRYM-1БТВЕ-2002-2010-18-09-2011-km-ok-КП
/5/ Emission reduction calculation excel file – KRYM-1БТВЕ-2002-2010-01-11-2011-km-ok-КП
/6/ Letter of Approval DZKiOApek-350-2/21167/11/TK dated 11/05/2011 issued by Ministry of the Environment of Poland
/7/ Letter of Endorsement #3228/23/7 dated 04/11/2011 issued by State Environmental Investment Agency of Ukraine

Category 2 Documents:
Background documents related to the design and/or methodologies employed in the design or other reference documents.

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/4/ JISC Guidance on criteria for baseline setting and monitoring. Version 02.
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/196/ Typical educational schedules and programmes for professional technical training of workers (training and professional development). Slinger (2-6 categories). Issued by the Ministry of Education and Science of Ukraine, approved 02/07/2007

/197/ Verification certificate for standart metre №007667. Facility for regulation and verification of electric power meters УРПС-1Ф-18У Reg.№026 dated 16.07.2010

/198/ Verification certificate for standart metre №11-П/064. Standard three-phase counter-wattmeter ВХ-14 Reg.№056 dated 16.04.2010

/199/ Verification certificate for standart metre №11-П/302 standard three-phase counter-wattmeter НС-3100 Reg.№0712346 dated 28.04.2010

/200/ Verification certificate for standart metre №11-П/701 standard three-phase counter-wattmeter СТО-1Y7E Reg.№081 dated 29.07.2009

/201/ Verification certificate for standart metre №25-03/5183. Facility for verification of three-phase and one-phase one-phase and three-phase active and reactive electric power meters Reg.№0801670 dated 04.08.2010

/202/ 1B-TVE Form for 2002

/203/ 1B-TVE Form for 2003

/204/ 1B-TVE Form for 2004

/205/ 1B-TVE Form for 2005

/206/ 1B-TVE Form for 2006

/207/ 1B-TVE Form for 2007

/208/ 1B-TVE Form for 2008

/209/ 1B-TVE Form for 2009

/210/ 1B-TVE Form for 2010

Persons interviewed:

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

/1/ Oleksandr Medvedev - director of educational-course complex
/2/ Tetiana Kovalenko - secretary on investment program implementation and organozation
/3/ Viktor Kalashnikov - deputy technical director
/4/ Olena Burlaka - deputy head of the board
/5/ Petro Kravchenko - deputy head of the board - technical director
/6/ Igor Len - electricity supply department director
/7/ Alla Chekalina - electricity supply department deputy director
/8/ Viktor Osadchyy - electricity supply department mode deputy director
/9/ Mykhaylo Markin - chief of balances and modes department
/10/ Iryna Chemerychko - deputy head of informational-consalting center of working with electric power consumers
/11/ Volodymyr Belamar - lead engineer programmer of the group of implementation and support of comuter systems service program systems
/12/ Valeriy Sergeev - Deputy chief of SD "Energooblik"
/13/ Andriy Rychkov - chief of SD "Energooblik"
/14/ Maryna Kolesnikova - Deputy chief of SD "Energooblik"
/15/ Abliamyt Gromov - chief of PTS
/16/ Taras Lazebnyy - lead engineer of PTS
/17/ Yiriy Zverev - chief of central dispetching service
/18/ Oleksandr Tsvetkov - chief of Symferopil high-voltage distribution zone
/19/ Prots R. – representative of Ltd «EES»

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APPENDIX A: DETERMINATION PROTOCOL

Table 1 Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General description of the project				
Title of the project				
-	Is the title of the project presented?	Reduction of Process Losses in Power Lines Crimenergo PJSC	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Sectoral Scope: (2) Energy Distribution	OK	OK
-	Is the current version number of the document presented?	PDD version number: 2.0	OK	OK
-	Is the date when the document was completed presented?	Data of Completion: 18/09/2011	OK	OK
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)?	Corrective Action Request (CAR) 01: Please use in the PDD font size provided «JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM» - version 01.	CAR01	OK
-	Is the history of the project (incl. its JI component) briefly summarized?	Corrective Action Request (CAR) 02: Please provide brief description of the project history.	CAR02	OK
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	Project participants and parties listed in the table in section A.3 of PDD. Parties Project: Ukraine (host country), Poland.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Corrective Action Request (CAR) 03: Please provide brief information about the company "Imex Energo", sp. z o. o. in section A.3, and relevant information about this company in Annex 1.	CAR03	OK
-	Is the data of the project participants presented in tabular format?	Corrective Action Request (CAR) 04: Table A.3 in the PDD must be submitted in a format that provided in the version 04 of the "Guidelines for users of the JI PDD form".	CAR04	OK
-	Is contact information provided in Annex 1 of the PDD?	Contact information on project participants listed in Annex 1 to PDD.	OK	OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Yes, it is indicated, if it is the case, if the Party involved is a host Party	OK	OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	The project is located in the Autonomous Republic of the Crimea, Ukraine	OK	OK
-	City/Town/Community etc.	Autonomous Republic of the Crimea	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	The Autonomous Republic of the Crimea – administrative unit in the south of Ukraine, is located on the Crimea peninsula between 44°23' and 46°15' North latitude, and 32°29' and 36°39' East longitude. In the west and s outh it is washed by the Black Sea, and in the east by the Sea of Azov, both of which belong to the Atlantic Ocean basin. The peninsula is approximately on the same distance from the equator and North Pole. Tarkhankutsk peninsula form its western cost, and Kerch Peninsula – eastern. In the North, Crimea is connected with the neighboring Kherson region with the seven kilometers - long Perekopsk isthmus, in the south west, it borders on the city with the special status – Sevastopol, on the sea it has eastern border with Krasnodar	CAR05	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Krai of the Russian Federation. From the north to the south the peninsula stretches on 200 km, and from the west to the east on 325 km. On the autonomous republic territory, lays the state boundary of Ukraine that measures 821 km. The capital of the Autonomous Republic of the Crimea is Simferopol (coordinates of main office: 34°6′22.62″ eastern longitude 44°57′43.57″ northern latitude). Also see. Section A.4.1.4 PDD. Corrective Action Request (CAR) 05: Section A.4.1.4 more than 1 page.		
Technologies to be employed, or measures, operations or actions to be implemented by the project				
-	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 include implementing program of technology power consumption reduction in Crimenergo PJSC power networks which includes a number of technical and organizational measures listed in section A.4.2 PDD. Corrective Action Request (CAR) 06: Implementation schedule is not described.	CAR06	OK
Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
-	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	Reduction of technological losses of electricity in the power network of the company has reduced CO2 emissions that resulted due to the generation of lost electricity.	OK	OK
-	Is it provided the estimation of emission reductions over the crediting period?	Clarification Request (CL) 01: Please include in this section refer to the corresponding «Excel» file with the calculations. Clarification Request (CL) 02: Please number the tables with information of the estimates (calculations) of emission reductions.	CL01 CL02	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
-	Is it provided the estimated annual reduction for the chosen credit period in tCO2e?	Yes, the estimated annual reduction for the chosen credit period in tCO2e is provided.	OK	OK
-	Are the data from questions above presented in tabular format?	Yes.	OK	OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	Yes, leight of crediting period is 22 years (264 months).	OK	OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	Yes, estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided in section A.4.3.1 of PDD.	OK	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	Clarification Request (CL) 03: Section A.5 PDD must specify the name DFPs (parties involved) that will approve the project.	CL03	OK
19	Does the PDD identify at least the host Party as a "Party involved"?	Yes, Ukraine is the Host Party.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	Corrective Action Request (CAR) 07: No Letter of Aapproval of the project issued by the sponsor party.	CAR07	Pending
20	Are all the written project approvals by Parties involved unconditional?	See CAR07 above.	OK	OK
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? or − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	See CAR07 above.	OK	OK
Baseline setting				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	Clarification Request (CL) 04: Please specify which approach was used to identify the baseline scenario and additionality: • JI specific approach • Approved CDM methodology approach. Corrective Action Request (CAR) 08: Please provide date of baseline setting according required format DD/MM/YYYY.	CL04 CAR08	OK OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	Yes, the PDD provide a detailed theoretical description in a complete and transparent manner.	OK	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance? − Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure? (f) By drawing on the list of standard variables	In the PDD in a reasonable way showed that the baseline was determined by compiling a listing and description of real scenarios of future scenarios based on conservative assumptions and subsequent selection the most attractive of these scenarios.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?			
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?	To determine the baseline scenario and demonstrate additionality used "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0).	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	For baseline emissions calculations were used CO2 emission factor for the projects of reducing electricity consumption for it transmission by Ukrainian electricity networks. All factors are justified.	OK	OK
Approved CDM methodology approach only				
26 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
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)?	N/A	OK	OK
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	OK	OK
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	N/A	OK	OK
26 (d)	Is the baseline identified appropriately as a	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	result?			
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".	Section B.1 of the PDD the analysis of project additionality, which aims to demonstrate that the project scenario is not part of the specified baseline, and that the project will achieve GHG emissions reductions against to baseline. The analysis was performed based on the latest version of "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0), which was approved by the CDM Executive Board and fully applied to JI projects.	OK	OK
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Barriers analysis and common practice which applied considered are good practice of additionality demonstration of the project activity.	OK	OK
29 (b)	Are additionality proofs provided?	Corrective Action Request (CAR) 09: In the PDD does not specify how the registration of this project as JI project will help overcome identified technological barriers.	CAR09	OK
29 (c)	Is the additionality demonstrated appropriately	See CAR09 above.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	as a result?			
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	N/A	OK	OK
Approved CDM methodology approach only				
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	N/A	OK	OK
31 (c)	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	N/A	OK	OK
31 (d)	Are additionality proofs provided?	N/A	OK	OK
31 (e)	Is the additionality demonstrated appropriately as a result?	N/A	OK	OK
Project boundary (applicable except for JI LULUCF projects)				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	Yes, the project boundary defined in line with all presented requirements.	OK	OK
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 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	Yes, project boundary represented the scheme form on Fig. 3a and 3b and in tabular form in Table 4.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	described and justified in the PDD by using a figure or flow chart as appropriate?			
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?	Clarification Request (CL) 05: Please change the title of fourth column Table 4 (Section B.3 PDD). Title "Included?" recommend changing the "Included/Excluded" Clarification Request (CL) 06: Precise figures numbering in the PDD. Corrective Action Request (CAR) 10: During site visit to the company Crimenergo PJSC determination team found that some equipment implemented within project activities (eg circuit breakers) included insulating gas (SF6). Please include the insulating gas to the list of project emissions.	CL05 CL06 CAR10	OK OK OK
Approved CDM methodology approach only				
33	Is the project boundary defined in accordance with the approved CDM methodology?	N/A	OK	OK
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	25/12/2002 – 2003 investment programme approval by the NCPR decree of 25.12.2002 № 1444. That programme includes the chapter " TPL reduction measures". This date is the date the acceptance of this project as a JI project.	OK	OK
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)	OK	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	22 years (264 months)	OK	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	Yes, starting date of the crediting period is after the date the first emission reductions are generated.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the project?			
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?	Clarification Request (CL) 07: Please specify that the crediting period of ERUs generating started after the beginning of 2008 and continuing over the life cycle.	CL07	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	Clarification Request (CL) 08: Please specify that crediting period extension beyond 2012 requires approval by the Host country.	CL08	OK
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	Clarification Request (CL) 09: It seems that the in PDD used JI specific approach for monitoring plan identification, but it is not explicitly indicated. Please clearly clarify in PDD what approach was used.	CL09	OK
JI specific approach only				
36 (a)	Does the monitoring plan describe: − All relevant factors and key characteristics that will be monitored? − The period in which they will be monitored? − All decisive factors for the control and reporting of project performance?	The approach of monitoring developed for this project corresponds to assumptions and practices used in the baseline approach. This approach to monitoring requires monitoring and measurement of variables and parameters necessary for quantitative determination of baseline and project emission levels in transparent manner. Clarification Request (CL) 10: Please provide justification for choosing of the each used parameters.	CL10	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net	See CL10 above.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	removals to be monitored?			
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?	Corrective Action Request (CAR) 11: Used TPC rate include technical and commercial consumption and losses. Commercial losses have no impact on GHG emissions and must be excluded from calculations.	CAR11	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	Yes. All procedures of selection and justification of necessary values are described.	OK	OK
36 (b) (ii)	For other values, − Does the monitoring plan clearly indicate the precise references from which these values are taken? − Is the conservativeness of the values provided justified?	Corrective Action Request (CAR) 12: Please specify who is responsible for providing actual value of CO2 emission factor for the projects of reducing electricity consumption for it transmission by Ukrainian electricity networks.	CAR12	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	Corrective Action Request (CAR) 13: Please indicate in PDD that the data monitored and required for the project determination will be kept for two years after the last transfer of ERUs the project.	CAR13	OK
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, Emission factors for the projects of reducing electricity consumption for it transmission by Ukrainian electricity networks used to calculate baseline emissions but are obtained through monitoring.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline	Yes, use of parameters, coefficients, variables, etc. is consistent between the baseline and monitoring plan.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	and monitoring plan?			
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	Yes monitoring plan developed in line with "Guidance on criteria for baseline setting and monitoring".	OK	OK
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	Yes, all relevant parameters are described (see section D.1 of PDD).	OK	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	The table in section D.1.1 PDD defined time (regularity) of monitoring and information sources with respect to 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 emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	In the PDD described and explained all the algorithms and formulas used to calculating emissions for the baseline and project scenarios.	OK	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Yes, all necessary algorithms and formulae are clearly described.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Yes, all variables, equation format, subscripts etc. used consistent.	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?	See CAR11 above.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	The level of uncertainty of data specified in the table of quality control and quality assurance procedures (see Section D.2 of PDD). Taken into account that all used data and parameters are defined according to current and accepted standards and methods based on official data and results of measurements by calibrated measuring equipment with the relevant accuracy their level of uncertainty is defined as low.	OK	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	Yes.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	No, all algorithms and formulas clearly explained	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	Yes.	OK	OK
36 (f) (vii)	Are references provided as necessary?	All necessary references provided.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Yes, all implicit and explicit assumptions explained in a transparent manner.	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	Used assumptions and procedures not have significant uncertainty.	OK	OK
36 (f) (vii)	Is the uncertainty of key parameters described	Uncertainty range was defined as low.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
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 identified a national and international monitoring standards applied to proposed project. All relevant references provided.	OK	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	See CAR11 above.	OK	OK
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	The quality assurance and control procedures described in section D.2 of PDD.	OK	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	Yes, the responsibilities and the authority regarding the monitoring activities are clearly identified in section D.3 of PDD. See CAR12 above.	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?	Corrective Action Request (CAR) 14: Section D.1.5 of the PDD requires from project participants to submit information about collection and archiving data on the environment impact as well as references to relevant norms of the host country. Please provide relevant data.	CAR14	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled	Yes, all used parameters presented in sections D.1.1.1 and D.1.1.3 of PDD.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	and data that are collected from other sources but not including data that are calculated with equations?			
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?	See CAR13 above.	OK	OK
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	No any selected elements or combinations of approved CDM methodologies or methodological tools used in monitoring plan.	OK	OK
Approved CDM methodology approach only				
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
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)?	N/A	OK	OK
38 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	OK	OK
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	N/A	OK	OK
38 (d)	Is the monitoring plan established appropriately	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	as a result?			
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?	There are no overlapping monitoring periods during the crediting period.	OK	OK
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	No leakage is expected in proposed project activity.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	No leakage is expected in proposed project activity.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Approved CDM methodology approach only				
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	N/A	OK	OK
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	Assessment of emissions or net removals in the baseline scenario and in the project scenario was used.	OK	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	Emissions for the project, baseline scenario and emission reductions were ex ante estimated. Results of estimations provided in section E of PDD and excel spreadsheets.	OK	OK
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?	N/A	OK	OK
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period?	See CAR11 above. <u>Corrective Action Request (CAR) 15</u>: In ex-ante calculations were used CO2 emission factor for the projects of reducing electricity consumption for it	CAR15	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (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? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner? (g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total	transmission by Ukrainian electricity networks provided in Order #43 dated 28/03/2010. But this factor applicable only for 2010. Please correct.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	Yes, the PDD include an illustrative ex ante emissions calculation.	OK	OK
Approved CDM methodology approach only				
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N/A	OK	OK
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 the crediting period? − On a source-by-source/sink-by-sink basis? − For each GHG? − In tones 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? − 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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	Corrective Action Request (CAR) 16: There is no information on transboundary impacts in the PDD.	CAR16	OK
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	No significant environmental impacts related to project implementation expected. Therefore separate environmental impact is not required.	OK	OK
Stakeholder consultation				
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?	Procedures of Ukraine did not require consultations with stakeholders for proposed project. However, information on implementation measures of reducing technological power consumtion provided in the media and in electronic media (see section G of PDD). No negative stakeholders' comments were received on company adress.	OK	OK
Determination regarding small-scale projects (additional elements 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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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"?			
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: (a) Which has the same project participants; and (b) Which applies the same technology/measure and pertains to the same project category; and (c) Whose determination has been made publicly available in accordance with paragraph 34 of the JI guidelines within the previous 2 years; and (d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC project at the closest point?	N/A	OK	OK
Applicable to bundled JI SSC projects only				
52 (a)	Do all projects in the bundle: (i) Have the same crediting period?	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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.)?			
52 (b)	Does the composition of the bundle not change over time?	N/A	OK	OK
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 the JISC? (iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19 above?	N/A	OK	OK
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?	N/A	OK	OK
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects, do(are) all the projects:	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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?			
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?	N/A	OK	OK
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.	N/A	OK	OK
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?	N/A	OK	OK
Applicable to all JI SSC projects				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	N/A	OK	OK
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
58	Does the PDD appropriately specify how the LULUCF project conforms to: (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? (b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies: (i) A single minimum tree crown cover value (between 10 and 30 per cent)? and (ii) A single minimum land area value (between 0.05 and 1 hectare)? and (iii) A single minimum tree height value (between 2 and 5 metres)?	N/A	OK	OK
JI specific approach 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?	N/A	OK	OK
60	Project boundary - alternative to 32-33 (a) Does the project boundary geographically	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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; − Litter; − Dead wood; and − Soil organic carbon? (c) Does the PDD provide: (i) The information of which carbon pools are selected? (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? (d) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above?			

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	N/A	OK	OK
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?	N/A	OK	OK
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.?	N/A	OK	OK
63	Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	N/A	OK	OK
Approved CDM methodology approach only				
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	months)?			
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	OK	OK
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	N/A	OK	OK
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?	N/A	OK	OK
Determination regarding programmes of activities (additional/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? (c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including: − The maintenance of records for each JPA? − A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)? − Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA? (d) A description of each type of JPAs that will	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	be included in the JI PoA, including the technology or measures to be used? (e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?			
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?	N/A	OK	OK
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?	N/A	OK	OK
69	*Baseline setting - additional to 22-26* Is the baseline established for each type of JPA?	N/A	OK	OK
70	*Additionality - additional to 27-31* Does the PDD indicate at which of the following levels that additionality is demonstrated? (a) For the JI PoA (b) For each type of JPA	N/A	OK	OK
71	*Crediting period - additional to 34* Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	N/A	OK	OK
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?	N/A	OK	OK
73	Does the PDD include a table listing at least one real JPA for each type of JPA?	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
73	For each real JPA listed, does the PDD provide the information of: (a) Name and brief summary of the JPA? (b) The type of JPA? (c) A geographical reference or other means of identification? (d) The name and contact details of the entity/individual responsible for the operation of the JPA? (e) The host Party(ies)? (f) The starting date of the JPA? (g) The length of the crediting period of the JPA? (h) Confirmation that the JPA meets all the eligibility requirements for its type, including a description of how these requirements are met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?	N/A	OK	OK

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
Corrective Action Request (CAR) 01: Please use in the PDD font size provided «JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM» - version 01.	-	Font size was corrected in line with «JOINT IMPLEMENTATION PROJECT DESIGN DOCUMENT FORM» - version 01. See PDD version 2.0.	PDD version 2.0 was checked and recognized as satisfactory. Issue is closed.
Corrective Action Request (CAR) 02: Please provide brief description of the project history.	-	Brief description of the project history was provided in section A.2 of PDD version 2.0.	Issue is closed due to the amendments made in the PDD.
Corrective Action Request (CAR) 03: Please provide brief information about the company "Imex Energo", sp. z o. o. in section A.3, and relevant information about this company in Annex 1.	-	Brief information about the company "Imex Energo", sp. z o. o. in section A.3, and in Annex 1.	The issue is closed due to the corrections made.
Corrective Action Request (CAR) 04: Table A.3 in the PDD must be submitted in a format that provided in the version 04 of the "Guidelines for users of the JI PDD form".	-	Table A.3 corrected.	Issue closed.
Corrective Action Request (CAR) 05: Section A.4.1.4 more than 1 page.	-	Section A.4.1.4 was corrected.	CAR05 is closed
Corrective Action Request (CAR) 06: Implementation schedule is not described.	-	Implementation sheudle was described in PDD version 2.0.	CAR06 is closed based on the amendments made in the PDD.

Corrective Action Request (CAR) 07: No Letter of Aapproval of the project issued by the sponsor party.	Item 19	Pending	Pending
Corrective Action Request (CAR) 08: Please provide date of baseline setting according required format DD/MM/YYYY.	Item 22	Date of baseline setting was corrected.	The response to CAR08 was found satisfactory. CAR08 is closed.
Corrective Action Request (CAR) 09: In the PDD does not specify how the registration of this project as JI project will help overcome identified technological barriers.	Item 29(b)	Technological barrier was excluded from PDD.	The issue is closed due to the corrections made.
Corrective Action Request (CAR) 10: During site visit to the company Crimenergo PJSC determination team found that some equipment implemented within project activities (eg circuit breakers) included insulating gas (SF6). Please include the insulating gas to the list of project emissions scenario.	Item 32(d)	Insulating gas (SF6), used in circuit breakers and other equipment Crimenergo PJSC is toxic and is listed as gas circulation and utilization of which is under the control of state environment organizations. Equipment containing Insulating gas is hermetically sealed and prevents leakage of gas into the atmosphere. In the case of it failure or decommissioning SF6 will be collected and reused by filling in new similar equipment. In connection with all the above SF6 emissions were excluded from the calculations.	CAR10 is closed based on the provided information.
Corrective Action Request (CAR) 11: Used TPC rate include technical and commercial consumption and losses. Commercial losses have no impact on GHG emissions and must be excluded from calculations.	Item 36(b)	Monitoring plan was corrected. All non-technical and metrological losses were excluded from calculations. See PDD version 2.0 and Excel file KRYM-1БТВЕ-2002-2010-18-09-2011-km-ok-КП.	PDD version 2.0 and Excel file were checked and recognized as satisfactory. Issue is closed.

Corrective Action Request (CAR) 12: Please specify who is responsible for proniding actual value of CO2 emission factor for the projects of reducing electricity consumption for it transmission by Ukrainian electricity networks.	Item 36(b)(ii)	Actuality of factor of specific indirect carbon dioxide emissions associated with the consumtion of electricity during its transmission by power grids of Ukraine will be reviewed annually representatives Technical Consultant Ltd «EES».	The issue is closed due to the corrections made.
Corrective Action Request (CAR) 13: Please indicate in PDD that the data monitored and required for the project determination will be kept for two years after the last transfer of ERUs the project.	Item 36(b)(iii)	PDD was corrected. See PDD version 2.0	The response to CAR13 was found satisfactory. CAR13 is closed.
Corrective Action Request (CAR) 14: Section D.1.5 of the PDD requires from project participants to submit information about collection and archiving data on the environment impact as well as references to relevant norms of the host country. Please provide relevant data.	Item 36(k)	The project implementation does not require gathering of information on the influence on the environment in excess of information collected at the company prior to the project inception.	The issue is closed due to the corrections made.
Corrective Action Request (CAR) 15: In ex-ante calculations were used CO2 emission factor for the projects of reducing electricity consumption for it transmission by Ukrainian electricity networks provided in Order #43 dated 28/03/2010. But this factor applicable only for 2010. Please correct.	Item 45	Data was updated.	The response was found satisfactory. CAR15 is closed.
Corrective Action Request (CAR) 16: There is no information on transboundary impacts in the PDD.	Item 48(a)	Transboundary impact is not expected.	Issue closed.
Clarification Request (CL) 01: Please include in this section refer to the corresponding «Excel» file with the calculations.	-	Relevant references were included to PDD version 2.0.	The issue is closed based on the corrections made in the PDD.

Clarification Request (CL) 02: Please number the tables with information of the estimates (calculations) of emission reductions.	-	Tabbles were numbered.	Necessary corrections have been made. The issue is closed.
Clarification Request (CL) 03: Section A.5 PDD must specify the name DFPs (parties involved) that will approve the project.	Item 19	State Environmental Investment Agency of Ukraine is DFP of Ukraine and Ministry of the Environment of Poland is DFP of Poland.	CL03 is closed based on the amendments made in the PDD.
Clarification Request (CL) 04: Please specify which approach was used to identify the baseline scenario and additionality: • JI specific approach • Approved CDM methodology approach.	Item 22	JI specific approach was used.	Issue closed.
Clarification Request (CL) 05: Please change the title of fourth column Table 4 (Section B.3 PDD). Title "Included?" recommend changing the "Included/Excluded"	Item 32(d)	Was corrected.	Issue closed.
Clarification Request (CL) 06: Precise figures numbering in the PDD.	Item 32(d)	Figures numbers were checked and corrected.	Issue is closed due to the amendments made in the PDD.
Clarification Request (CL) 07: Please specify that the crediting period of ERUs generating started after the beginning of 2008 and continuing over the life cycle.	Item 34(d)	Relevant information was included to section C.3 of PDD version 2.0.	Due to the corrections made and necessary information provided, the issue is closed.
Clarification Request (CL) 08: Please specify that crediting period extension beyond 2012 requires approval by the Host country.	Item 34(d)	Relevant information was included to section C.3 of PDD version 2.0.	CL08 is closed based on the amendments made in the PDD.

Clarification Request (CL) 09: It seems that the in PDD used JI specific approach for monitoring plan identification, but it is not explicitly indicated. Please clearly clarify in PDD what approach was used.	Item 35	JI specific approach was used for developing monitoring plan.	The issue is closed based on the corrections made in the PDD.
Clarification Request (CL) 10: Please provide justification for choosing of the each used parameters.	Item 36(a)	Justification for choosing of the each used parameters provided.	The issue is closed based on the corrections made in the PDD.