DETERMINATION REPORT
DNIPROOBLENERGO PJSC

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

REPORT NO. UKRAINE-DET/0375/2011

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DETERMINATION REPORT

Date of first issue:	Organizational unit:
30/09/2011	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
Dniprooblenergo PJSC	Andriy Deykalo

Summary:

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

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

The first output of the determination process is a list of Clarification and Corrective Actions Requests (CL and CAR), *presented in Appendix A. Taking into account this output, the project proponent 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.:	Subject Group:
UKRAINE-det/0375/2011	JI

Project title:
"Reduction of Process Losses in Power Lines Dniprooblenergo PJSC"

Work carried out by:
Oleg Skoblyk – Team Leader, Lead Verifier
Denis Pishchalov – Team Member, Financial Specialist

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Work signed by:
Flavio Gomes – Operational Manager

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1 INTRODUCTION

Dniprooblenergo PJSC has commissioned Bureau Veritas Certification to determinate its JI project “Reduction of Process Losses in Power Lines Dniprooblenergo PJSC” (hereafter called “the project”) in Dnipropetrovsk region, Ukraine.

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

1.1 Objective

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project’s compliance with relevant UNFCCC and host country criteria are 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, corrective and/or forward actions may provide input for improvement of the project design.

1.3 Determination team

The determination team consists of the following personnel:

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

Denis Pishchalov
Team Member, Bureau Veritas Certification Financial Specialist

This determination report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification Internal technical 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 Dniprooblenergo 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 of the “Reduction of Process Losses in Power Lines Dniprooblenergo PJSC” project of Dniprooblenergo PJSC version 1.0 was submitted on 22/08/2011.

To address Bureau Veritas Certification corrective action, forward action and clarification requests Dniprooblenergo PJSC revised the PDD and resubmitted it as version 3.0 of 01/11/2011 which is deemed final.

The determination findings presented in this report relate to the project as described in the PDD version 1.0 dated 22/08/2011 and version 2.0 of 16/09/2011.

2.2 Follow-up Interviews

On 07/09/2011 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 Dniprooblenergo PJSC and "EES" Ltd. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Dniprooblenergo 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: "EES" Ltd.	➢ 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.

If the determination team, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or

improved with regard to JI project requirements, it will raise these issues and inform the project participants of these issues in the form of:

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

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

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

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

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

3 PROJECT DESCRIPTION

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

Taking measures foreseen by the project will let to increase the reliability and effectiveness of the distribution network of electric power in Dnipropetrovsk and Dnipropetrovsk Region, and enhance the quality of consumers service. It will also help to reduce the amount of electric power, that is lost in the distributive and transport electrical networks of Dniprooblenergo 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.

Public Joint Stock Company Dniprooblenergo (Dniprooblenergo PJSC) is an integral part of the unified energy system (UES) of Ukraine and provide the consumers of Dnipropetrovsk region with the electric energy regularly and reliably under the uniform tariff.

At the beginning of the project (2002) Dniprooblenergo PJSC was realizing only such measures that were directed to the maintaining of

electrical networks in good working order. These measures mainly included repairing work to eliminate errors, that arise during the operation of power networks. That resulted in the technological consumption, in 2002, in networks of Dniprooblenergo PJSC which reached 10,78% from the electric energy amount, that was coming into the company's network.

Most of the equipment that was being used at that moment in the networks of Dniprooblenergo PJSC was already physically and morally outdated, but because of the insufficient financing and operational reserves of this equipment, it remained still in use. Besides, it was possible to change this situation not only in the case of technical provision of the network modification, but also in the case of company's organizational structure improvement, which also required financing and manpower.

The possibility to sell greenhouse gas emission reduction units became one of the factors for the start of the introduction program, the goal of which is the reduction of technological power consumption in the Dniprooblenergo PJSC electric network.

The project is based on the implementation of complex of measures on elimination of power losses, which is introduced and financed since 2003. The measures are taken within the framework of this program (presented in the Section A.4.2 of the PDD), for the implementation and constant monitoring of potential sources of the technological losses and prevention of their appearing enabled Dniprooblenergo PJSC to reduce technological consumption to 4,75% of the amount of electric power delivered to the network.
The Joint implementation project is based on the implementation complex of organizational and technical measures on electricity losses reduction, which includes:

- realization of scientific and technical support, extension of the exploitation term of the functioning equipment, realization of the equipment diagnostics system and prognostication of its residual operating time;
- introduction of organizational and technical measures for technological power consumption reduction;
- reconstructions and renovations of 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;
- implementation of the Automatized system of commercial accounting of power consumption of the energy-supplying company perimeter, ASCAPC of consumers and substations;
- introduction of complex technical power consumption reduction Program;

- modernization of the equipment in the framework of the electric power development investment programs.

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

Baseline scenario foresees further usage of equipment while performing of planned repairing work without substantial investments.

All these measures, implementation and continuous monitoring of possible sources of energy losses and prevent possible occurrence of Dniprooblenergo PJSC reduce technical electricity losses in their electrical systems.

Reduction of technological power consumption in the Company networks allowed reducing CO_2 emissions, caused by generation of electricity that was lost.

Duration of the project is unlimited, since the measures taken to detect and remove TPC (TVE) in separate power network units and feeders, power network areas, as well as to reduce general technological power consumption in the Dniprooblenergo PJSC, are a constant and continual process.

Purchase of equipment and supplies as well as carrying out of project assembly and commissioning operations are accomplished by contract organizations by tender in the order, established in Ukraine. Besides the equipment and work cost, the main criteria of equipment selection is its quality and reliability, as well as professionatism and responsiveness to ISO–9000 of executors. The equipment suppliers are national and foreign producers which have proved themselves in the power.

Works on technological power losses reduction are held in the framework of investment Programs of the Company, Plans of current and capital repairs, Plans of power networks maintenance that are annually approved by “Minpalyvenergo”of Ukraine and NPRC of Ukraine.

Apart from emissions reduction the implementation of project Reduction of Process Losses in Power Lines Dniprooblenergo PJSC has the following advantages:

- Creation of additional jobs, connected with the introducing of new equipment, construction and reconstruction of enterprise facilities;
- Pollutant emissions reduction by the cut down of the electric energy generation as a result of shortening of losses in the netwrks;
- Cutting production costs.

The realization of joint implementation project will reduct pollutant emissions by the shortage of electric energy generation, which is delivered to the network of Dniprooblenergo PJSC. Thus, the realization of the project will reduce the greenhouses gasses emissions and will

prevent from their further accumulation in the atmosphere, which in its turn, will loosen the climate changes.

The identified areas of concern as to the project description, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR01-CAR06, CL01, CL02).

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)

As for the present moment no written approvals of the project by Parties involved are available. After receiving Determination Report from the Accredited Independent Entity the project documentation will be submitted to the Ukrainian Designated Focal Point (DFP) which is State Environmental Investment Agency of Ukraine, for receiving a Letter of Approval.
The project has no approvals by the Parties involved, therefore CAR07 remains pending. This CAR will be closed after the Host Party and Sponsor Party Letters of Approval presentation.

The identified areas of concern as to the project approval by Parties involved, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR07, CL03).

4.2 Authorization of project participants by Parties involved (21)

The official authorization of each legal entity listed as project participant in the PDD by Parties involved will be provided in the written project approvals (refer to 4.1 above).

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 Dniprooblenergo 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.

The identified areas of concern as to the baseline setting, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR08, CL04).

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.

The identified areas of concern as to the additionality, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR09).

4.5 Project boundary (32-33)

The approach to the emission calculation takes into consideration the CO2 emission only, which is formed as a result of the electric power production, necessary for the compensation of the technological consumption in the network and in the distributing transformer stations, and in the substations of Dniprooblenergo PJSC. The project boundary

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

(i) Under the control of the project participants;

(ii) Reasonably attributable to the project; and

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

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

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 Dniprooblenergo PJSC dated 7/09/2011 (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.

The identified areas of concern as to the project boundary, project participants’ response and BVC’s conclusion are described in Appendix A, Table 2 (refer to CAR10, CL05, CL06).

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 began, and the starting date is 28/10/2003, 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.

The identified areas of concern as to the crediting period, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CL07, CL08).

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, which are absent.

(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: absent.

(iii) Data and parameters that are monitored throughout the crediting period, such as baseline emissions, power loss reduction in power distribution system during the monitoring period, CO2 emission factor for power grid of Ukraine for the the power replacement projects.

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.

The identified areas of concern as to the monitoring plan, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR11-CAR15, CL09, CL10).

4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential Indirect external leakage of CO2, CH_4, N_2O 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 equal zero tons of CO_2eq;

(b) Leakage, which is considered equal zero tons of CO_2eq;

(c) Emissions for the baseline scenario (within the project boundary), which are 1408908 ons of CO2eq for 2004-2007, 5423942 ons of CO2eq for 2008-2012 and 14093748 or 2013-2025;

(d) Emission reductions adjusted by leakage (based on (a)-(c) above), which are 1408908 tons of CO2eq for 2004-2007, 5423942 tons of CO2eq for 2008-2012 and 14093748 for 2013-2025.

The estimates referred to above are given:

(a) On an annual basis;

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

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

(d) For each GHG gas, that is CO_2;

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

The formulas used for calculating the estimates referred above are the same as those used for project monitoring and described in the section 4.7 above. All formulas are consistent throughout the PDD. The emission 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.

For calculating the estimates referred to above, key factors, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

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

Emission factor, such as CO_2 emission factor for power grid of Ukraine, was selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

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

The estimates referred to above are consistent throughout the PDD.

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

No areas of concern as to the estimation of emission reductions were identified.

4.10 Environmental impacts (48)

The analysis of the environmental impacts of the project is done by the specialized companies. They also issued documents in which there is the estimation of emissions into the atmosphere by permanent sources - industrial areas (mechanical, welding, woodworking enterprises etc). According to the expert's report this enterprise belongs to the 3rd group, as its emissions do not exceed emissions limit. Due to the low level of emissions, the enterprise meets the pollution standard and its risk level is considered as harmless to the environment.

Aiming at increasing efficiency of the operating plans of harmful environmental impacts restriction, every year all the energy objects of the enterprise are subjected to complex verification, held by the State Ecological Inspection in Dnipropetrovsk Region, as to check whether they abide the environmental legislation, to estimate the technical condition of

the power plants and the general condition of the environmental protection, to check whether they take appropriate measures to minimize emissions, water discharge and wastes.

Ecological audit of the enterprise is submitted to: The State Department of water economy in Dnipropetrovsk region – quarterly and yearly report on water usage; The State Statistics Department - the report on the environmental protection expenses and the ecological payments for the year (№1-Ecological expenses), report on wastes management for the year (№1-Wastes).

In accordance with the laws of Ukraine "On fire safety" and "On environmental protection", aiming at organization and control of meeting the requirements of the regulatory documents on fire and ecological security, taking organizational and other kinds of measures for preventing fires, reduction of the harmful impact of the production factor on the environment, life and health of the workers; coordination and improvement of the work, connected with fire and ecological safeguarding in the company units,- in 2006 Environmental protection and fire safety service was created, which consists of a service chief, an engineer and a technician. The main tasks and functions of the Service are:

- conduct the internal fire and ecological safety audit in the administration of the Company and in the military and industrial complex to check their conformity with the regulatory acts;
- coordination of the fire-preventive work, organization of the complex measures elaboration to improve fire and ecological security, control of their performance;
- methodological management and control in the sphere of fire and ecological;
- registration of fires and accidents having impact on ecology, analysis of causes and their prevention;
- elaboration of the effective system of the environmental protection management;
- introduction of the achievements in science and technics, progressive and environmentally sound technologies into the manufacture;
- to hold meetings, seminars, conferences on ecological security;
- organization of briefings on fire and ecological security for the employees who are accepted on a permanent or temporary job;
- providing with the national, sectoral and intersectoral regulatory acts on fire and ecological security;
- organization of the complex measures elaboration to improve fire and ecological security, control of their performance;
- to prepare the project orders, decrees, information materials on fire and ecological security and to bring the to the knowledge of the subunits;
- propagation of fire and ecological security;

- control the abidance by the legislative and other kinds of regulatory acts on fire and ecological security, fulfilment of orders, directions and the requirements of the instructions and ordinances of the State and internal monitoring;
- organization of the official investigation of fires and accidents;
- make reportings according to the set forms;
- ensuring the appropriate issuance and keeping of documentation according to the standard practice;
- consideration of the letters, applications, complaints from the employees and other organizations as to the keeping the laws on environmental protection and fire security.

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.

The identified areas of concern as to the environmental impacts, project participants' response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR16).

4.11 Stakeholder consultation (49)

Information on the project activities is presented in regional media, on television, and on the official website of the Dniprooblenergo PJSC www.doe.com.ua. All received comments regarding project activity implementation were of the positive nature. No negative comments in respect of current project were gained.

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 Dniprooblenergo PJSC" located in Dnipropetrovsk region, 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 participants 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 one pending issue related to the current determination stage of the project: the issue of the written approval of the project by the host Party. If the written approval by the host Party is 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 Dniprooblenergo PJSC that relate directly to the GHG components of the project.

/1/ PDD "Reduction of Process Losses in Power Lines Dniprooblenergo PJSC" version 1.0 dated 22/08/2011
/2/ PDD "Reduction of Process Losses in Power Lines Dniprooblenergo PJSC" version 2.0 dated 16/09/2011
/3/ PDD "Reduction of Process Losses in Power Lines Dniprooblenergo PJSC" version 3.0 dated 01/11/2011
/4/ Calculation of emission reductions, Excel file " DOE-1БТВЕ-2002-2010-18-09-2011-Km=1-ok-КП"
/5/ Calculation of emission reductions, Excel file "DOE-1БТВЕ-2002-2010-01-11-2011-Km=1-ok-КП"

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

/1/ Decree of Cabinet of Ministers of Ukraine #206, dated 22/02/2006
/2/ Joint Implementation Project Design Document Form, version 01
/3/ Guidelines for Users of the Joint Implementation Project Design Document Form/Version 04, JISC.
/4/ JISC Guidance on criteria for baseline setting and monitoring. Version 02.
/5/ "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0)
/6/ Glossary of Joint Implementation Terms, Version 03.
/7/ Decree #43 on approval of indexes of specific carbon dioxide emissions in the year 2010 issued by NEIA dated 28.03.2011.
/8/ Decree #62 on approval of indexes of specific carbon dioxide emissions in the year 2008 issued by NEIA dated 15.04.2011.
/9/ Decree #63 on approval of indexes of specific carbon dioxide emissions in the year 2009 issued by NEIA dated 15.04.2011.
/10/ Decree #75 on approval of indexes of specific carbon dioxide emissions in the year 2011 issued by NEIA dated 12.05.2011.
/11/ The methodology of technical power losses amount determination,

in 150-0,38 kV tension power grids power supply company for the indirect carbon dioxide emissions estimation

/12/ Presentation of JSC EC "Dniprooblenergo"for 2007

/13/ Journal "Power engineer of Pridniprovya" for August 2008 #8(58)

/14/ Agreement on services #00346-00 dated 19/12/2010

/15/ Statement of inspection of environmental regulations realization for the period from 08/08/2006 till 21/08/2006 Sinelnukove city

/16/ Statement of inspection of Ukrainian environmental regulations realization for the period from 02/09/2006 till 3/09/2006 Pokrovske town

/17/ Statement of inspection of Ukrainian environmental regulations compliance by Vasilkivskyi RG for the period from 16/03/2007 till 19/03/2007 Vaselkivske village

/18/ Statement of inspection of Ukrainian environmental regulations compliance for the period from 06/02/2007 till 08/02/2007 Verhnedniprovsk city

/19/ Statement of inspection of Ukrainian environmental regulations realization for the period from 26/02/2007 till 27/02/2007 Megova town

/20/ Statement of inspection of Ukrainian environmental regulations compliance dated 23/04/20078 Vaselkivka town

/21/ Statement of inspection of sanitary regulations compliance for the period from 04/02/2008 till 09/02/2008

/22/ Statement of inspection of Ukrainian environmental regulations realization dated 10/04/2008 Sunelnukove town

/23/ Statement of inspection of Ukrainian water condition regulations compliance dated 17/06/2008 Pokrovske town

/24/ Statement of inspection of Ukrainian environmental regulations compliance dated 17/04/2008 Petropavlovsk town

/25/ Statement of inspection of Ukrainian environmental regulations compliance dated 20/05/2009 Dneprodzerzhinsk town

/26/ Statement of inspection of sanitary-epidemiological survey dated 28/03/2011 Dnepropetrovsk city

/27/ Statement of inspection of sanitary-epidemiological survey dated 12/05/2011 Dnepropetrovsk city

/28/ Statement of inspection of sanitary-epidemiological survey dated 02/06/2011 Dnepropetrovsk city

/29/ Opening of a new substation "Auli"35|/6 kV- news agency "Noviy mist" dated 08/06/2011

/30/ Statement of inspection of Ukrainian environmental regulations compliance for the period from 08/08/2011 till 19/08/2011 Dnipropetrovsk city

/31/ Instruction on compiling, reporting and analyzing of departmental reporting analysis forms 1Б-ТВЕ "Energy balance structure and technological power consumption for transfer through power grid" dated 09/09/1997

/32/ Departmental report 1Б-ТВЕ power grid JSC EC "Dniprooblenergo"

for 2001
/33/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2002
/34/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2003
/35/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2004
/36/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2005
/37/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2006
/38/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2007
/39/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2008
/40/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2009
/41/ Departmental report 1Б-ТВЕ power grid JSC EC “Dniprooblenergo” for 2010
/42/ Newspaper “КП” dated 19/03/2011
/43/ Newspaper “Visty Prudniprovya” dated 16/12/2010 #92 (1184)
/44/ Newspaper “Visty Prudniprovya” dated 09/06/2011 #43 (1231)
/45/ Substation “Vuzlova ”- general view
/46/ Transformer field “Tie station”
/47/ Panel ЕВ Л – КР-1 substation “Vuzlova”
/48/ Switcher DDI-150Б-Л-93 substation “Vuzlova”
/49/ Panel Л-93 substation “Vuzlova”
/50/ Second busbar substation “Vuzlova”
/51/ Mnemonic diagram of substation “Vuzlova”
/52/ Volt meters (substation “Vuzlova”)
/53/ Active energy meter type EMP 211.02.1, serial #73526 Substation “Vuzlova”
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/57/ Active energy meter type EMP 211.02.1, serial #73500 Substation “Vuzlova
/58/ Active energy meter type EMP 211.02.1, serial #73506 Substation “Vuzlova
/59/ Active energy meter type EMP 211.02.1, serial #73502 Substation “Vuzlova
/60/ Active energy meter type EMP 211.02.1, serial #73548 Substation “Vuzlova
/61/ Active energy meter type EMP 211.02.1, serial #73509

Substation “Vuzlova
/62/ Active energy meter type EMP 211.02.1, serial #73577
Substation “Vuzlova
/63/ Multifunction electric meter type EQPS 122.21.12LL, serial # 500279
Substation “Vuzlova”
/64/ Instruction on measuring of electricity consumption from meters type EQPS
Substation “Vuzlova”
/65/ Active energy meter type EMP 211.02.1, serial #73553
Substation “Vuzlova
/66/ Active energy meter type EMP 211.02.1, serial #73554
Substation “Vuzlova
/67/ Meter type Дельта 8010-01, serial #01246
Substation “Vuzlova”
/68/ Meter type Дельта 8010-01, serial #01271
Substation “Vuzlova”
/69/ Allocation scheme of automatic direct current substation “Vuzlova”
/70/ Substation “Nagorna”- general view
/71/ Panel T-31 substation “Nagorna”
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/86/ Multifunction electric meter type EQPS 122.21.12LL, serial # 500146
Substation “Nagorna”
/87/ Multifunction electric meter type EQPS 122.21.12LL, serial # 500142, Substation “Nagorna”
/88/ Meter type ЦЭ6803В, serial #2910734 substation “Nagorna”
/89/ Meter type ЦЭ6803В, serial #2911154 substation “Nagorna”
/90/ Meter type ЦЭ6803В, serial #2911422 substation “Nagorna”
/91/ Meter type ЦЭ6803В, serial #2911187 substation “Nagorna”
/92/ Meter type ЦЭ6803В, serial #2911175 substation “Nagorna”
/93/ Meter type ЦЭ6803В, serial #2911163 substation “Nagorna”
/94/ Multifunction electric meter type LZQM 321.02.534, serial #

500142, Substation “Nagorna”
/95/ Meter type ЦЭ6803В, serial #2911421 substation “Nagorna”
/96/ Electric meter type САЗУ, serial #343412
/97/ Meter type ЦЭ6803В, serial #2911191 substation “Nagorna”
/98/ Multifunction electric meter type LZQM 321.02.534, serial # 337318, Substation “Nagorna”
/99/ Multifunction electric meter type LZQM 321.02.534, serial # 337317, Substation “Nagorna”
/100/ Multifunction electric meter type EPQS 122.21.12LL, serial # 500312, Substation “Nagorna”
/101/ Multifunction electric meter type EPQS 122.21.12LL, serial # 500192, Substation “Nagorna”
/102/ Multifunction electric meter type LZQM 321.02.534, serial # 605139, Substation “Nagorna”
/103/ Current circuit of protection and alarm and airflow
/104/ Contact joins Substation “Г-1”
/105/ Multifunction electric meter type LZQM 321.02.534, serial # 327869, Substation “Г-1”
/106/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 327869, Substation “Г-1”
/107/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 337456, Substation “Г-1”
/108/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 327870, Substation “Г-1”
/109/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 337463, Substation “Г-1”
/110/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 327874, Substation “Г-1”
/111/ УЗА – 10А.Second substation “Г-1”
/112/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 327875, Substation “Г-1”
/113/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 327877, Substation “Г-1”
/114/ Multirate active and reactive energy meter type LZQM 321.02.534, serial # 327469, Substation “Г-1”
/115/ Control panel substation “Г-1”
/116/ Protection section of switcher type С-61,substation «Г - 1»
/117/ Protection section of switcher type С-63,substation «Г - 1»
/118/ Protection of input 6kV Т-61Б substation «Г-1»
/119/ Protection of input 6kV Т-61А substation «Г-1»
/120/ Main protection of transformer type 1Т substation «Г - 1»
/121/ Reserve protection of transformer type 1Т substation «Г - 1»
/122/ Reserve protection of transformer type 2Т substation «Г - 1»
/123/ Main protection of transformer type 2Т substation «Г - 1»
/124/ Protection of input 6kV Т-62Б substation «Г-1»
/125/ Protection of input 6kV Т-62А substation «Г-1»
/126/ Microprocessor device for protection and control of 6-35kV busbar

type “Альтра” III bus section on substation “Г-1”

/127/ Microprocessor device for protection and control of 6-35kV busbar type “Альтра” IV bus section on substation “Г-1”

/128/ Microprocessor device for protection and control of 6-35kV busbar type “Альтра” I bus section on substation “Г-1”

/129/ Microprocessor device for protection and control of 6-35kV busbar type “Альтра” II bus section on substation “Г-1”

/130/ Substation “Г-1”-general view

/131/ Order #189a/129/211a dated 21/07/2008

/132/ Annex #1 for order # 189a/129/211a dated 21/07/2008

/133/ Regulation about anitial verification of electricity meters on JSC EC “Dniprooblenergo”for 2007

/134/ Certificate #16/924 dated 19/05/2011 on verification of work standart

/135/ Certificate #6341 dated 01/09/2011 on verification of work standart

/136/ Standart multifunction meter type ВХ – 33, serial #6341

/137/ Standart multifunction meter type ВХ – 33, serial #064

/138/ Standart monophase meter type ВХ – 14, serial #025

/139/ Certificate #11-П/779 dated 10/08/2011 on analysis of work standart

/140/ Certificate #16/1934 dated 29/10/2011 on analysis of work standart

/141/ Certificate #16/787 dated 28/04/2011 on analysis of work standart

/142/ Standart analysis device type ЦЭ6806П, serial #040099

/143/ Standart analysis device type ZERA

/144/ Standart analysis device type PWS 2.3PLUS – 50085.01, serial #32578

/145/ Analysis passport #81 on active energy meter type СТК3 – 10A1H9P, serial #32161

/146/ Analysis passport #132 on active energy meter type EMS 134.001, serial #232850

/147/ Analysis passport #8 on active energy meter type Ф68700В, serial #54245700287

/148/ Analysis passport #318 on active energy meter, serial #0040657

/149/ Analysis passport #81 on active energy meter type СТК3 – 10Q2H4K4, serial #25248

/150/ Analysis protocol dated 08/09/2011 on meters type «Дельта8010 - 10» 1.05-60А ч1

/151/ Analysis protocol dated 08/09/2011 on meters type «Дельта8010 - 10» 1.05-60А ч2

/152/ Analysis protocol dated 08/09/2011 on meters type «НІК 231АП2» 1.0 5(60)А ч1

/153/ Analysis protocol dated 08/09/2011 on meters type «НІК 231АП2» 1.0 5(60)А ч2

/154/ Analysis protocol dated 07/09/2011 on meters type «НІК2102-02» 1.0 (5-60) and «НІК2102» 1.0 (5-60)

/155/ Statement of Introduction exploitation for automated system of

commercial electric power accounting of JSC EC “Dniprooblenergo”for 2007

/156/ Instruction E-36 on exploitation of КРУЕ – 150kV, type PASS MO 170DBB

/157/ Instruction E-36(second part) on exploitation of КРУЕ – 150kV, type PASS MO 170DBB

/158/ Instruction E-23 on exploitation of gas-insulated switchers, type LTB – 170Д

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/	Andriy Deykalo – Head of investment department of Dniprooblenergo PJSC
/2/	Lyudmula Zagnina – Head of department for electricity balance and valuation of process loss of electricity of Dniprooblenergo PJSC
/3/	Larysa Potapenko – Head of the environmental protection group of Dniprooblenergo PJSC
/4/	Alla Gurova – representative of foreing affairs department of Dniprooblenergo PJSC
/5/	Sergiy Bublikov – Technical Director of Dniprooblenergo PJSC
/6/	Yuriy Parshyn – Commercial Director of Dniprooblenergo PJSC
/7/	Roman Prots – representative of “EES” Ltd.

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 Dniprooblenergo 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: 16/09/2011	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 Dnipropetrovsk region, Ukraine	OK	OK
-	City/Town/Community etc.	Dnipropetrovsk city and towns of Dnipropetrovsk region	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	Also see. Section A.4.1.4 PDD. The project is implemented at the objects of PJSC "Dniprooblenergo" located in Dnepropetrovsk and Dnipropetrovsk region, which are located in the central part of Ukraine (main office coordinates: 35 ° 01'20 .12 "SD 48 ° 25'18 .28" north latitude) . The territory area is 31.9 thousand km ² (5,3% of total territory of Ukraine). Corrective Action Request (CAR) 05: Section A.4.1.4 more than 1 page.	CAR05	OK
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	The project include implementing program of technology power consumption reduction in Dniprooblenergo PJSC power networks which includes a number of technical and		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	relevant technical data and the implementation schedule described?	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
-	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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
19	Has the DFP of the host Party issued a written project approval?	Corrective Action Request (CAR) 07: No Letters of Aapproval of the project issued by the parties involved.	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				
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:	In the PDD in a reasonable way showed that the baseline was determined by compiling a listing and description of real	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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 contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?	scenarios of future scenarios based on conservative assumptions and subsequent selection the most attractive of these scenarios.		
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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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 result?	N/A	OK	OK
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	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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	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 as a result?	See CAR09 above.	OK	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	with the selected methodology?			
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 described and justified in the PDD by using a figure or flow chart as appropriate?	Yes, project boundary represented the scheme form on Fig. 3a and 3b and in tabular form in Table 4.	OK	OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	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 Dniprooblenergo PJSC determination team found that some equipment implemented within project activities (eg circuit breakers) included	CL05 CL06 CAR10	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		insulating gas (SF6). Please include the insulating gas to the list of project emissions.		
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?	On 28.10.2003 a decree of chairman of board – director general of OJSC EC "Dniprooblenergo" №169 «On measures about reduction of abnormal energy losses» was signed. 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 the project?	Yes, starting date of the crediting period is after the date the first emission reductions are generated.	OK	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	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				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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 removals to be monitored?	See CL10 above.	OK	OK
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	Yes. All procedures of selection and justification of necessary values are described.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	clearly indicate how the values are to be selected and justified?			
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 and monitoring plan?	Yes, use of parameters, coefficients, variables, etc. is consistent between the baseline and monitoring plan.	OK	OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring”?	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	Yes, all relevant parameters are described (see section D.1 of PDD).	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
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
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	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		by calibrated measuring equipment with the relevant accuracy their level of uncertainty is defined as low.		
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 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?	Uncertainty range was defined as low.	OK	OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	The monitoring plan 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	See CAR11 above.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	are used in a conservative manner?			
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 and data that are collected from other sources but not including data that are calculated with equations?	Yes, all used parameters presented in sections D.1.1.1 and D.1.1.3 of PDD.	OK	OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	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	No any selected elements or combinations of approved CDM methodologies or methodological tools used in monitoring plan.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	participants in line with 36 above?			
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 as a result?	N/A	OK	OK
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)?	There are no overlapping monitoring periods during the crediting period.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?			
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	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
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:	Emissions for the project, baseline scenario and emission reductions were ex ante estimated. Results of estimations	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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?	provided in section E of PDD and excel spreadsheets.		
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? (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	See CAR11 above. 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.	CAR15	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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 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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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 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	No significant environmental impacts related to project implementation expected. Therefore separate environmental impact is not required.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?			
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 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"?	N/A	OK	OK
51	Does the SSC PDD confirms and shows that the proposed JI SSC project is not a debundled	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
Applicable to bundled JI SSC projects only				
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions for JI SSC projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?	N/A	OK	OK
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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
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: (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?	N/A	OK	OK
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;	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.			
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				
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:	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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)?			
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 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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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?			
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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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.?			
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 months)?	N/A	OK	OK
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?	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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 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*	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	Is the baseline established for each type of JPA?			
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
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	N/A	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?			

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 Letters of Aapproval of the project issued by the parties involved.	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 Dniprooblenergo 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 Dniprooblenergo 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 with emission reduction calculation.	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 “EES” Ltd.	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.