



# DETERMINATION REPORT

IMEX ENERGO SP. ZO.O.

## DETERMINATION OF THE TERNOPIOBLENERGO OJSC POWER DISTRIBUTION SYSTEM MODERNIZATION

REPORT NO. UKRAINE-DET/0456/2012

REVISION No. 03

BUREAU VERITAS CERTIFICATION



DETERMINATION REPORT

Date of first issue: 17/12/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Imex Energo sp. zo.o.	Client ref.: Vasyl Protsyshyn
<p>Summary: Bureau Veritas Certification has made the determination of the "Ternopiloblenergo OJSC power distribution system modernization" project of Imex Energo sp. zo.o. located in Ternopil 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.</p> <p>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 &amp; Opinion, was conducted using Bureau Veritas Certification internal procedures.</p> <p>The first output of the determination process is a list of Clarification and Corrective Action Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.</p> <p>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.</p>	

Report No.: UKRAINE-det/0456/2012	Subject Group: JI
Project title: "Ternopiloblenergo OJSC power distribution system modernization"	
Work carried out by: Oleg Skoblyk – Team Leader, Lead Verifier Sergiy Kustovskyy – Team Member, Verifier	
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer Vyacheslav Yeriomin – Technical Specialist	
Work signed by: Ivan Sokolov - Internal Technical Reviewer	
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## 1 INTRODUCTION

Imex Energo sp. zo.o. has commissioned Bureau Veritas Certification to determine its JI project “Ternopiloblenergo OJSC power distribution system modernization” (hereafter called “the project”) at Ternopil region, Ukraine.

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

### 1.1 Objective

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction units (ERUs).

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

### 1.2 Scope

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

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

### 1.3 Determination team

The determination team consists of the following personnel:

Oleg Skoblyk

Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Sergiy Kustovskyy

Bureau Veritas Certification Team Member, Climate Change Verifier





This determination report was reviewed by:

Ivan Sokolov  
Bureau Veritas Certification, Internal technical reviewer

Vyacheslav Yeriomin  
Bureau Veritas Certification, Technical Specialist

## **2 METHODOLOGY**

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

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

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

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

### **2.1 Review of Documents**

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

To address Bureau Veritas Certification corrective action and clarification requests, Imex Energo sp. zo.o. revised the PDD and resubmitted it on 04/03/2013.

The determination findings presented in this report relate to the project as described in the PDD version(s) 1.0, 2.0 and 3.0.



## 2.2 Follow-up Interviews

On 12/12/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Ternopiloblenergo OJSC and Ltd “Ekologichni Energetychni Systemy” were interviewed (see References). The main topics of the interviews are summarized in Table 1.

**Table 1 Interview topics**

Interviewed organization	Interview topics
Ternopiloblenergo OJSC	<ul style="list-style-type: none"> <li>➤ Implementation schedule</li> <li>➤ Project management organisation</li> <li>➤ Evidence and records on reconstruction and new equipment and its operation</li> <li>➤ Environmental Impact Assessment</li> <li>➤ Project monitoring responsibilities</li> <li>➤ Monitoring equipment</li> <li>➤ Quality control and quality assurance procedures</li> <li>➤ Environmental impacts affected</li> <li>➤ Local authorities and public opinion</li> </ul>
CONSULTANT Ltd “Ekologichni Energetychni Systemy”	<ul style="list-style-type: none"> <li>➤ Applicability of methodology</li> <li>➤ Baseline and Project scenarios</li> <li>➤ Barriers analysis</li> <li>➤ Additionality justification</li> <li>➤ Common practice analysis</li> <li>➤ Monitoring plan</li> <li>➤ Conformity of PDD to JI requirements</li> </ul>

## 2.3 Resolution of Clarification and Corrective Action Requests

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

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

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



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

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

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

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

### **3 PROJECT DESCRIPTION**

Open joint stock company Ternopiloblenergo (Ternopiloblenergo OJSC ) is an integral part of the unified energy system (UES) of Ukraine and provides the consumers of Ternopil region with the electric energy regularly and reliably under the uniform tariff.

At the beginning of the project (at the end of 2002) Ternopiloblenergo OJSC was realizing only such measures that were directed on the maintaining of electrical networks in good working order. These measures mainly included repairing work on eliminations of errors, that arise during the operation of electric networks. That resulted in the technological power consumption, in 2002, in networks of Ternopiloblenergo OJSC which reached 28,92% of the electric energy amount, that was coming into the company's network.

The objective of the project is the realization of technical reconstruction of electrical network and equipment programme, introduction of the progressive technologies, organization structure improvement, transition to the higher organizational level of electricity grid transmission and distribution by attracting investments.

The basis of the Joint Implementation Project is the Program of "Technological power consumption (TVE) reduction in the Ternopiloblenergo OJSC electric networks", complex of organizational and technical measures to reduce the TVE (the system of electrical networks, the system of electricity and the power flow management system), which are financed and implemented since 2004 in the framework of the future development of Ternopiloblenergo OJSC which in its turn includes:



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- 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.

The Project provides creation of the TVE system management (energy rationing, energy audits and energy management) in the Company to effectively implement a number of organizational and technical measures and measures for the development and improvement of the TVE reduction methods during the implementation of licensed activities of electricity transmission and distribution.

Implementation of the programme is a continuous process that will be conducted over the whole operational period of the project.

#### **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.

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





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

After finishing JI project determination report, the PDD and Determination Report will be presented to State Environmental Investments Agency of Ukraine (SEIA) for receiving the Letter of Approval (LoA).

The project has no approvals by the Parties involved, therefore CAR07 remains pending. This CAR will be closed after report finalizing.

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

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

The project has no approvals by the Parties involved, therefore CAR07 remains pending. This CAR will be closed after report finalizing.

#### **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 18<sup>th</sup> Meeting of the JISC and used Methodological Tool "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 04.0.0).

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

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



- Complexity of production process
- Permanent change in price of electricity in Ukraine.
- Long payback period.
- Implementation of proposed project requires significant annual capital investments and human resources.
- Ukraine has one of the lowest electricity tariffs in Europe.

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 04.0.0).

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.

#### **4.4 Additionality (27-31)**

Barriers 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 barriers 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 barrier analysis.

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

#### **4.5 Project boundary (32-33)**

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

- (i) Under the control of the project participants.
- (ii) Reasonably attributable to the project.

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



The AIE determined the project boundary by:

- a) Detailed review of relevant documentation (list of all determined documents provided in “Category 2 Document” below).
- b) Interviews and observations during site visit to Ternopiloblenergo OJSC (list of interviewed 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.

#### **4.6 Crediting period (34)**

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 22/11/2002, which is after the beginning of 2000.

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

#### **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.

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.



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.

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.
- (ii) Data and parameters that are monitored throughout the crediting period.

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 scenario emissions**

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.

$$PE_y = 0$$

### **Baseline scenario emissions**

$$BE_y = V_y \cdot CEF_y,$$

where

$BE_y$  = baseline emissions (tCO<sub>2</sub>e);

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

$CEF_y$  = Carbon dioxide emission factor for projects of power loss reduction in power transport networks of Ukraine in the year y, tCO<sub>2</sub>e/MWh (kg CO<sub>2</sub>e/kWh);

y = the year for which estimates are made.



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Emission reduction is calculated using the formulae:

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

where

- $ER_y$  = GHG emission reduction in year  $y$ , tCO<sub>2</sub>eq;  
 $BE_y$  = GHG emissions according to baseline scenario in year  $y$ , tCO<sub>2</sub>eq;  
 $PE_y$  = GHG emissions according to project scenario in year  $y$ , tCO<sub>2</sub>eq;  
 $LE_y$  = GHG emissions due to leakages in year  $y$ , tCO<sub>2</sub>eq;  
 $y$  = year for which calculations are carried out.

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 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.

#### 4.8 Leakage (40-41)

The PDD appropriately describes an assessment of the potential indirect external leakage 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:

Year	Greenhouse gases project emission
	(tonnes of CO <sub>2</sub> equivalent)
2004	0
2005	0
2006	0
2007	0
<b>Total 2004-2007:</b>	0
<b>Average number of reduction 2004-2007:</b>	0
2008	0
2009	0
2010	0
2011	0
2012	0
<b>Total 2008-2012:</b>	0
<b>Average number of reduction 2008-2012:</b>	0
2013	0
2014	0
2015	0
2016	0
2017	0
2018	0
2019	0
2020	0
2021	0
2022	0
2023	0
2024	0
2025	0



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<b>Total 2013-2025:</b>	0
<b>Average number of reduction 2013-2025:</b>	0

- (b) No leakage is expected during the project activity;
- (c) Emissions for the baseline scenario (within the project boundary), which are:

<b>Year</b>	<b>Greenhouse gases baseline emission (tonnes of CO2 equivalent)</b>
2004	78464
2005	97009
2006	115845
2007	114406
<b>Total 2004-2007:</b>	405723
<b>Average number of reduction 2004-2007:</b>	101431
2008	151399
2009	165484
2010	159857
2011	159644
2012	159040
<b>Total 2008-2012:</b>	795423
<b>Average number of reduction 2008-2012:</b>	159085
2013	159040
2014	159040
2015	159040
2016	159040
2017	159040
2018	159040
2019	159040
2020	159040
2021	159040
2022	159040
2023	159040
2024	159040
2025	159040
<b>Total 2013-2025:</b>	2067515
<b>Average number of reduction 2013-2025:</b>	159040

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



Year	Estimated emission reductions
	(tonnes of CO2 equivalent)
2004	78464
2005	97009
2006	115845
2007	114406
<b>Total 2004-2007:</b>	405723
<b>Average number of reduction 2004-2007:</b>	101431
2008	151399
2009	165484
2010	159857
2011	159644
2012	159040
<b>Total 2008-2012:</b>	795423
<b>Average number of reduction 2008-2012:</b>	159085
2013	159040
2014	159040
2015	159040
2016	159040
2017	159040
2018	159040
2019	159040
2020	159040
2021	159040
2022	159040
2023	159040
2024	159040
2025	159040
<b>Total 2013-2025:</b>	2067515
<b>Average number of reduction 2013-2025:</b>	159040

Emission reductions estimation after the first commitment period

The estimates referred to above are given:

- (a) On a periodic basis;
- (b) From 01/01/2004 to 31/12/2025, covering the whole crediting period;
- (c) On a source-by-source basis;
- (d) For CO2



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

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

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

where

$ER_y$  = GHG emission reduction in year  $y$ , tCO<sub>2</sub>eq;  
 $BE_y$  = GHG emissions according to baseline scenario in year  $y$ , tCO<sub>2</sub>eq;  
 $PE_y$  = GHG emissions according to project scenario in year  $y$ , tCO<sub>2</sub>eq;  
 $LE_y$  = GHG emissions due to leakages in year  $y$ , tCO<sub>2</sub>eq;  
 $y$  = year for which calculations are carried out.

is consistent throughout the PDD.

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

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

The estimates referred to above are consistent throughout the PDD.

#### **4.10 Environmental impacts (48)**

The PDD lists and attaches documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.

The PDD provides conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party, if the analysis referred to above indicates that the environmental impacts are considered significant by the project participants or the host Party.

#### **4.11 Stakeholder consultation (49)**

No stakeholders' comments were received.

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

Not applicable



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

Not applicable

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

Not applicable

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

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

### **6 DETERMINATION OPINION**

Bureau Veritas Certification has performed a determination of the “Ternopiloblenergo OJSC power distribution system modernization” Project in Ukraine. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

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

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

The determination revealed one pending issue related to the current determination stage of the project: the issue of the written approval of the project and the authorization of the project participant by the host Party. If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 3.0 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.





The review of the project design documentation (version 3.0) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

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



## 7 REFERENCES

### Category 1 Documents:

Documents provided by Imex Energo sp. zo.o. that relate directly to the GHG components of the project.

- /1/ PDD “Ternopiloblenergo OJSC power distribution system modernization” project version 1.0 dated 03/12/2012
- /2/ PDD “Ternopiloblenergo OJSC power distribution system modernization” project version 2.0 dated 14/12/2012
- /3/ PDD “Ternopiloblenergo OJSC power distribution system modernization” project version 3.0 dated 04/03/2013
- /4/ Emission reduction calculation, excel file
- /5/ Letter of Endorsement №2686/23/7 issued by State ecological investment agency of Ukraine dated 20.09.2012

### Category 2 Documents:

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

- /1/ License Series AB # 552121 on proving educational services issued by the Ministry of Education and Science of Ukraine
- /2/ License Series AB # 121779 on proving educational services issued by the Ministry of Education and Science of Ukraine
- /3/ Permit # 19 dated 23/02/2010 on the beginning of OJSC “Ternopiloblenergo” Scientific and Methodological Centre premises work, issued by the Ministry of Emergencies of Ukraine GA CA Ternopil State Fire Safety Department
- /4/ Permit # 41/22-2 dated 13/01/2010 on the beginning of OJSC “Ternopiloblenergo” Scientific and Methodological Centre premises work, issued by the Ternopil State Sanitary and Epidemiological Station
- /5/ Permit # 00-П.019.03.515.173 on the beginning of OJSC “Ternopiloblenergo” Scientific and Methodological Centre premises work, issued by the Ternopil Region State Health and Safety Department
- /6/ Extract Series АГ # 807401 from the Unified State Register of Legal Entities and Individual Entrepreneurs concerning OJSC “Ternopiloblenergo”
- /7/ Training and vocational education of OJSC “Ternopiloblenergo” personnel at Scientific and Methodological Centre
- /8/ Educational schedule of distributive network operation electricians, approved 28/09/2010
- /9/ Typical educational schedules and plans for personnel vocational technical education (training and vocational training). Specialty: distributive network operation electrician, issued by the Ministry of Education and Science of Ukraine



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- /10/ Typical educational schedules and plans for personnel vocational technical education (training and vocational training). Specialty: emergency crew electrician, issued by the Ministry of Education and Science of Ukraine
- /11/ Typical educational schedules and plans for personnel vocational technical education (training and vocational training). Specialty: power control , issued by the Ministry of Education and Science of Ukraine
- /12/ Typical educational schedules and plans for personnel vocational technical education (training and vocational training). Specialty: sling fastener, issued by the Ministry of Education and Science of Ukraine
- /13/ Scientific and technological card on conducting practical classes, approved 05/10/2005
- /14/ Logbook on training courses of distributive network operation electrician from 10/10/2011 to 04/11/2011
- /15/ Logbook on retraining of personnel conducting special works at Lanovets district from 14/12/2011 to 15/12/2011
- /16/ Logbook on retraining of regional distributive networks electricians from 07/11/2011 to 11/11/2011
- /17/ List of reactive power compensation devices installed at 0,4 kW power grid (2003)
- /18/ List of replaced insulators per types and voltage during 2003
- /19/ List of reactive power compensation devices installed at 0,4 kW power grid (2004)
- /20/ List of reactive power compensation devices installed at 0,4 kW power grid (2005)
- /21/ List of reactive power compensation devices installed at 0,4 kW power grid (2006)
- /22/ List of reactive power compensation devices installed at 0,4 kW power grid (2007)
- /23/ List of reactive power compensation devices installed at 0,4 kW power grid (2008)
- /24/ List of reactive power compensation devices installed at 0,4 kW power grid (2009)
- /25/ Order # 205 dated 22/11/2002 on appointment of working team on reduction of power losses during its transportation and improvement of power supply to Ternopil region consumers
- /26/ Project design 15513.05-ПД 0,4 kW power lines reconstruction using self-supporting insulated wires in Zboriv town, Ternopil region
- /27/ Project design 16159.05-ПД 0,4-10 kW power lines reconstruction using self-supporting insulated wires in Svershkiivtsi village, Zalishchyky district, Ternopil region
- /28/ Project design EM-34/3-06-2011 10 and 0,38 kW power lines reconstruction in Zalishchyky town, Ternopil region
- /29/ Agreement on retraining # 20/1-02 dated 23/01/2012



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- /30/ Agreement # 44/2012/5 dated 17/01/2012 with educational establishment on retraining
- /31/ Agreement on retraining # 20/1-238 dated 26/02/2010
- /32/ Agreement # 48/2010/286 dated 30/12/2009 with educational establishment on retraining
- /33/ Agreement on retraining # 20/1-221 dated 14/01/2009
- /34/ Agreement # 02-11/11/208 dated 27/10/2011 on practical training
- /35/ Certificate # 8623 on educational training (Viktor Makukh)
- /36/ Certificate # 8622 on educational training (Serhii Slipets)
- /37/ Claim # 114/20 dated 17/01/2007 on vocational education
- /38/ Certificate СПК # 20/1-107 dated 17/11/2010 on training, issued to Valerii Krasnodemskyi by the Scientific and Educational Postgraduate Institute
- /39/ Certificate 12СПК 622792 on retraining (Anatolii Onyskiy)
- /40/ Certificate # СПК 20/1-28 dated 18/02/2009 on training, issued to Ruslan Filkevych
- /41/ Certificate # СПК 20/1-29 dated 18/02/2009 on training, issued to Andrii Buryi
- /42/ Certificate 12СПК 766631 on retraining (Andrii Buryi)
- /43/ Certificate 12СПК 621788 on retraining (Volodymyr Vorona)
- /44/ Certificate # СПК 20/1-22 dated 16/03/2011 on training, issued to Volodymyr Vorona
- /45/ Certificate СПК # 390131 on retraining (Vasyl Maladyka)
- /46/ Invoice dated 15/05/2012 on meters delivery
- /47/ Goods delivery note dated 16/05/2012 on meters delivery
- /48/ Goods delivery note dated 15/05/2012 on meters delivery
- /49/ Inquiry # 98 dated 10/05/2012 on measuring equipment unserviceability (power meters 1φ – 33 items), issued by the Ternopil Scientific and Production Centre for Standardization, Metrology and Certification State Enterprise
- /50/ List dated 10/05/2012 on meters to be replaced
- /51/ List on three-phase meters to be replaced at Pidvolochynsk distributive network
- /52/ Certificate # C8.493-2011 dated 28/02/2011 on state metrological attestation of Automatic Electricity Metering System
- /53/ Calibration certificate # 988 dated 25/09/2007, valid till 09/2011, on current transformer ТФН-35М, fabrication # 4663, issued by the Ternopil State Centre for Standardization, Metrology and Certification
- /54/ Certificate # 17/1047 dated 15/12/2009 on state metrological attestation of Automatic Electricity Metering System
- /55/ Order # 250/1 dated 11/12/2009 on OJSC “Ternopiloblenergo” Automatic Electricity Metering System commissioning
- /56/ Certificate on OJSC “Ternopiloblenergo” AEMS registration in the Automatic Electricity Metering Systems Register, valid from 28/07/2011 till 30/06/2014, registration # 134, issued by Enerhorynok State Enterprise



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- /57/ Statement dated 30/06/2011 on AEMS testing on readiness to calculation data compilation
- /58/ Regulation on Electricity Wholesale Market of Ukraine Metering System operator (registered under # 134 dated 27/07/2011 in the Chief Operator Register)
- /59/ Certificate on OJSC "Ternopiloblenergo" AEMS registration in the Automatic Electricity Metering Systems Register, valid from 19/01/2011 till 30/06/2011, registration # 17, issued by Enerhorynok State Enterprise
- /60/ Regulation on Electricity Wholesale Market of Ukraine Metering System operator (OJSC "Ternopiloblenergo" AEMS)
- /61/ Statement dated 13/01/2011 on AEMS testing on readiness to calculation data compilation
- /62/ Description # 10188-0042 of materials used during the general (current) maintenance
- /63/ Statement on acceptance of construction works for 01/07/2011 – 31/07/2011
- /64/ Statement dated 09/12/2011 on technical commission session on distributive network objects commissioning with cost up to 1 mil hrn
- /65/ Technical passport on oil circuit breaker type CMB-110 kW, fabrication # 178
- /66/ Operational card and maintenance technical schedule of elegas circuit breaker 110 kW (Khorostkiv ПС-110/35/10 kW), fabrication # 9077-20-2035520/3
- /67/ Technical passport on 35 kW oil circuit breaker type BM-35, fabrication # 5182
- /68/ Operational card and maintenance technical schedule of vacuum circuit breaker 35 kW type BP-35 HCM (Khorostkiv ПС-110/35/10 kW), fabrication # 180
- /69/ Annual schedule on substation ПС 35-110 kW general and current maintenance for 2011, approved as of 08/12/2010
- /70/ Photo-Transformer complex substation type КТП1-250/10/0,4-У1, fabrication # 02446





**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/ I.Iukhymets – general director of Ternopiloblenergo OJSC
- /2/ S.Bartkiv – senior engineer of Ternopiloblenergo OJSC
- /3/ S.Olianitskiy – energy supply director of Ternopiloblenergo OJSC
- /4/ V.Galushko – deputy senior engineer of Ternopiloblenergo OJSC
- /5/ O.Maladyka – senior metrologist of Ternopiloblenergo OJSC
- /6/ R.Prots – director on technical questions of Ltd “Ekologichni Energetychni Systemy”



## DETERMINATION REPORT

## 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
<b>General description of the project</b>				
<b>Title of the project</b>				
-	Is the title of the project presented?	"Ternopiloblenergo OJSC power distribution system modernization"	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Scope #2:Energy distribution	OK	OK
-	Is the current version number of the document presented?	PDD version number: 3.0	OK	OK
-	Is the date when the document was completed presented?	Data of Completion: 04/03/2013	OK	OK
<b>Description of the project</b>				
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical description)?	<u>Corrective Action Request (CAR) 01:</u> 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?	<u>Corrective Action Request (CAR) 02:</u> Please provide brief description of the project history.	CAR02	OK
<b>Project participants</b>				
-	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.		



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<u>Corrective Action Request (CAR) 03:</u> 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?	<u>Corrective Action Request (CAR) 04:</u> 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
<b>Technical description of the project</b>				
<b>Location of the project</b>				
-	Host Party(ies)	Ukraine	OK	OK
-	Region/State/Province etc.	The project is located in Ternopil region, Ukraine	OK	OK
-	City/Town/Community etc.		OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	<u>Corrective Action Request (CAR) 05:</u> Section A.4.1.4 more than 1 page.	CAR05	OK
<b>Technologies to be employed, or measures, operations or actions to be implemented by the project</b>				
-	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	The project include implementing program of technology power consumption reduction in Ternopiloblenergo OJSC power networks which includes a number of technical and organizational measures listed in section A.4.2 PDD.  <u>Corrective Action Request (CAR) 06:</u> Implementation schedule is not described.	CAR06	OK
<b>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</b>				



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
<b>circumstances</b>				
-	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?	<u>Clarification Request (CL) 01:</u> Please include in this section refer to the corresponding «Excel» file with the calculations.  <u>Clarification Request (CL) 02:</u> 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
<b>Estimated amount of emission reductions over the crediting period</b>				
-	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
<b>Project approvals by Parties</b>				
19	Have the DFPs of all Parties listed as “Parties involved” in the PDD provided written project approvals?	<u>Clarification Request (CL) 03:</u> Section A.5 PDD must specify the name DFPs (parties involved) that will approve the project.	CL03	OK
19	Does the PDD identify at least the host Party as a “Party involved”?	Yes, Ukraine is the Host Party.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	<u>Corrective Action Request (CAR) 07:</u> No Letter of Approval of the project issued by the sponsor party.	CAR07	Pending
20	Are all the written project approvals by Parties involved unconditional?	See CAR07 above.	OK	OK
<b>Authorization of project participants by Parties involved</b>				



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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
<b>Baseline setting</b>				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? - JI specific approach - Approved CDM methodology approach	<u>Clarification Request (CL) 04:</u> Please specify which approach was used to identify the baseline scenario and additionality: • JI specific approach • Approved CDM methodology approach.  <u>Corrective Action Request (CAR) 08:</u> Please provide date of baseline setting according required format DD/MM/YYYY.	CL04          CAR08	OK          OK
<b>JI specific approach only</b>				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	Yes, the PDD provide a detailed theoretical description in a complete and transparent manner.	OK	OK
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance?	In the PDD in a reasonable way showed that the baseline was determined by compiling a listing and description of real scenarios of future scenarios based on conservative assumptions and subsequent selection the most attractive of these scenarios.	OK	OK





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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<p>– Are key factors that affect a baseline taken into account?</p> <p>(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?</p> <p>(d) Taking into account of uncertainties and using conservative assumptions?</p> <p>(e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure?</p> <p>(f) By drawing on the list of standard variables contained in appendix B to “Guidance on criteria for baseline setting and monitoring”, as appropriate?</p>			
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 04.0.0).	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	For baseline emissions calculations was used carbon dioxide emission factor for projects of power loss reduction in power transport networks of Ukraine. All factors are justified.	OK	OK
<b>Approved CDM methodology approach only</b>				
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	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	within the grace period (was the methodology revised to a newer version in the past two months)?			
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
<b>Additionality</b>				
<b>Jl specific approach only</b>				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-	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 04.0.0), which was approved by the CDM Executive Board and fully applied to JI projects.	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?	Justification of additionality is provided in section B.1.	OK	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	<u>Corrective Action Request (CAR) 09:</u> In the PDD does not specify how the registration of this project as JI project will help overcome identified technological barriers.	CAR09	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	All explanations, descriptions and analyses are made in accordance with the selected tool	OK	OK
<b>Approved CDM methodology approach only</b>				
31 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	OK	OK
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	N/A	OK	OK
31 (c)	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	N/A	OK	OK
31 (d)	Are additionality proofs provided?	N/A	OK	OK
31 (e)	Is the additionality demonstrated appropriately as a result?	N/A	OK	OK
<b>Project boundary (applicable except for JI LULUCF projects)</b>				
<b>JI specific approach only</b>				



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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?	<p><u>Clarification Request (CL) 05:</u> Please change the title of fourth column Table 4 (Section B.3 PDD). Title "Included?" recommend changing the "Included/Excluded"</p> <p><u>Clarification Request (CL) 06:</u> Precise figures numbering in the PDD.</p> <p><u>Corrective Action Request (CAR) 10:</u> During site visit to the company Ternopiloblenergo OJSC determination team found that some equipment implemented within project activities included insulating gas (SF<sub>6</sub>). Please include the insulating gas to the list of project emissions.</p>	<p>CL05</p> <p>CL06</p> <p>CAR10</p>	<p>OK</p> <p>OK</p> <p>OK</p>
<b>Approved CDM methodology approach only</b>				
33	Is the project boundary defined in accordance with the approved CDM methodology?	N/A	OK	OK
<b>Crediting period</b>				
34 (a)	Does the PDD state the starting date of the	29/12/2002	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project as the date on which the implementation or construction or real action of the project will begin or began?			
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?	<u>Clarification Request (CL) 07:</u> 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?	<u>Clarification Request (CL) 08:</u> Please specify that crediting period extension beyond 2012 requires approval by the Host country.	CL08	OK
<b>Monitoring plan</b>				
35	Does the PDD explicitly indicate which of the following approaches is used? – JI specific approach – Approved CDM methodology approach	<u>Clarification Request (CL) 09:</u> 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
<b>JI specific approach only</b>				
36 (a)	Does the monitoring plan describe: – All relevant factors and key characteristics that will be monitored?	The approach of monitoring developed for this project corresponds to assumptions and practices used in the baseline approach. This approach to monitoring requires		



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul style="list-style-type: none"> <li>- The period in which they will be monitored?</li> <li>- All decisive factors for the control and reporting of project performance?</li> </ul>	<p>monitoring and measurement of variables and parameters necessary for quantitative determination of baseline and project emission levels in transparent manner.</p> <p><u>Clarification Request (CL) 10:</u> Please provide justification for choosing of the each used parameters.</p>	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)	<p>If default values are used:</p> <ul style="list-style-type: none"> <li>- Are accuracy and reasonableness carefully balanced in their selection?</li> <li>- Do the default values originate from recognized sources?</li> <li>- Are the default values supported by statistical analyses providing reasonable confidence levels?</li> <li>- Are the default values presented in a transparent manner?</li> </ul>	<p><u>Corrective Action Request (CAR) 11:</u> Used TPC rate include technical and commercial consumption and losses. Commercial losses have no impact on GHG emissions and must be excluded from calculations.</p>	CAR11	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	Yes. All procedures of selection and justification of necessary values are described.	OK	OK
36 (b) (ii)	<p>For other values,</p> <ul style="list-style-type: none"> <li>- Does the monitoring plan clearly indicate the precise references from which these values are taken?</li> <li>- Is the conservativeness of the values provided justified?</li> </ul>	<p><u>Corrective Action Request (CAR) 12:</u> Please specify who is responsible for providing actual value of Carbon dioxide emission factor for projects of power loss reduction in power transport networks of Ukraine.</p>	CAR12	OK





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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	<u>Corrective Action Request (CAR) 13:</u> 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, Carbon dioxide emission factors for projects of power loss reduction in power transport networks of Ukraine 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 throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	Yes, all relevant parameters are described (see section D.1 of PDD).	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
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 by calibrated measuring equipment with the relevant accuracy their level of uncertainty is defined as low.	OK	OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for	Yes.	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	calculating the emissions or net removals of the baseline ensured?			
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 are used in a conservative manner?	See CAR11 above.	OK	OK
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the	The quality assurance and control procedures described in section D.2 of PDD.	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
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?	<b>Corrective Action Request (CAR) 14:</b> 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 participants in line with 36 above?	No any selected elements or combinations of approved CDM methodologies or methodological tools used in monitoring plan.	OK	OK
<b>Approved CDM methodology approach only</b>				
38 (a)	Does the PDD provide the title, reference	N/A	OK	OK



## DETERMINATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	number and version of the approved CDM methodology used?			
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
<b>Applicable to both JI specific approach and approved CDM methodology approach</b>				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the	There are no overlapping monitoring periods during the crediting period.	OK	OK



## DETERMINATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
<b>Leakage</b>				
<b>JI specific approach only</b>				
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
<b>Approved CDM methodology approach only</b>				
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	N/A	OK	OK
<b>Estimation of emission reductions or enhancements of net removals</b>				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	Assessment of emissions or net removals in the baseline scenario and in the project scenario was used.	OK	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable?	Emissions for the project, baseline scenario and emission reductions were ex ante estimated. Results of estimations provided in section E of PDD and excel spreadsheets.	OK	OK





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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?			
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 and the emissions or net removals as well as risks associated with the project taken into account, as appropriate?	See CAR11 above.  <u>Corrective Action Request (CAR) 15:</u> In ex-ante calculations were used Carbon dioxide emission factor for projects of power loss reduction in power transport networks of Ukraine provided in Order #43 dated 28/03/2010. But this factor applicable only for 2010. Please correct.	CAR15	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<p>(d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent?</p> <p>(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?</p> <p>(f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?</p> <p>(g) Are the estimates in 43 or 44 consistent throughout the PDD?</p> <p>(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?</p>			
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
<b>Approved CDM methodology approach only</b>				
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N/A	OK	OK
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: - On a periodic basis?	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul style="list-style-type: none"> <li>- At least from the beginning until the end of the crediting period?</li> <li>- On a source-by-source/sink-by-sink basis?</li> <li>- For each GHG?</li> <li>- In tones of CO<sub>2</sub> equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol?</li> <li>- Are the formula used for calculating the estimates consistent throughout the PDD?</li> <li>- Are the estimates consistent throughout the PDD?</li> <li>- 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?</li> </ul>			
<b>Environmental impacts</b>				
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?	<b>Corrective Action Request (CAR) 16:</b> There is no information on transboundary impacts in the PDD.	CAR16	OK
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	No significant environmental impacts related to project implementation expected. Therefore separate environmental impact is not required.	OK	OK



## DETERMINATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
<b>Stakeholder consultation</b>				
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 consumption provided in the media and in electronic media (see section G of PDD). No negative stakeholders' comments were received on company adress.	OK	OK
<b>Determination regarding small-scale projects (additional elements for assessment)</b>				
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 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:	N/A	OK	OK



## DETERMINATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(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?			
<b>Applicable to bundled JI SSC projects only</b>				
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 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	N/A	OK	OK



## DETERMINATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	the JISC? (iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19 above?			
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects, do(are) all the projects: (a) Pertain to the same JI SSC project category? (b) Apply the same technology or measure? (c) Located in the territory of the same host Party?	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; (b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.	N/A	OK	OK





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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
56 (b)	If the approach 57 (b) above is used, (i) Are all the JI SSC projects located in the territory of the same host Party? (ii) Do all the JI SSC projects pertain to the same project category? (iii) Do all the JI SSC projects apply the same technology or measure? (iv) Does the overall monitoring plan reflect good monitoring practice appropriate to the bundled JI SSC projects and provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled projects?	N/A	OK	OK
<b>Applicable to all JI SSC projects</b>				
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	N/A	OK	OK
<b>Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)</b>				
58	Does the PDD appropriately specify how the LULUCF project conforms to: (a) The definitions of LULUCF activities included in paragraph 1 of the annex to decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP, as appropriate? (b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies: (i) A single minimum tree crown cover value (between 10 and 30 per cent)? and (ii) A single minimum land area value (between 0.05 and 1 hectare)? and (iii) A single minimum tree height value	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(between 2 and 5 metres)?			
<b>JI specific approach only</b>				
59	<p>Baseline setting - in addition to 22-26 above</p> <p>Does the PDD provide an explanation how the baseline chosen:</p> <ul style="list-style-type: none"> <li>- Takes into account the good practice guidance for LULUCF, developed by the IPCC?</li> <li>- Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?</li> </ul>	N/A	OK	OK
60	<p>Project boundary - alternative to 32-33</p> <p>(a) Does the project boundary geographically delineate the JI LULUCF project under the control of the project participants?</p> <p>(a) If the JI LULUCF project contains more than one discrete area of land,</p> <p>(i) Does each discrete area of land have a unique geographical identification?</p> <p>(ii) Is the boundary defined for each discrete area?</p> <p>(ii) Does the boundary not include the areas in between these discrete areas of land?</p> <p>(b) Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are:</p> <p>(i) Under the control of the project participants;</p> <p>(ii) Reasonably attributable to the project; and</p> <p>(iii) Significant?</p> <p>(c) Does the project boundary account for all changes in the following carbon pools:</p> <ul style="list-style-type: none"> <li>- Above-ground biomass;</li> <li>- Below-ground biomass;</li> </ul>	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	<ul style="list-style-type: none"> <li>- Litter;</li> <li>- Dead wood; and</li> <li>- Soil organic carbon?</li> </ul> (c) Does the PDD provide: <ul style="list-style-type: none"> <li>(i) The information of which carbon pools are selected?</li> <li>(ii) If one or more carbon pools are not selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source?</li> </ul> (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 in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?	N/A	OK	OK
63	Does the PDD take into account only the	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?			
<b>Approved CDM methodology approach only</b>				
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
<b>Determination regarding programmes of activities (additional/alternative elements for assessment)</b>				
66	Does the PDD include: (a) A description of the policy or goal that the JI PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which all JPAs included in the JI PoA will be implemented?	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including: <ul style="list-style-type: none"> <li>- The maintenance of records for each JPA?</li> <li>- A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)?</li> <li>- Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA?</li> </ul> (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	<i>Project approvals by Parties involved - additional to 19-20</i> 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	<i>Authorization of project participants by Parties involved - additional to 21</i> 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	<i>Baseline setting - additional to 22-26</i> Is the baseline established for each type of JPA?	N/A	OK	OK
70	<i>Additionality - additional to 27-31</i> Does the PDD indicate at which of the following levels that additionality is demonstrated?	N/A	OK	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(a) For the JI PoA (b) For each type of JPA			
71	<i>Crediting period - additional to 34</i> Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	N/A	OK	OK
72	<i>Monitoring plan - additional to 35-39</i> 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 met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?	N/A	OK	OK



## DETERMINATION REPORT

**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
<u>Corrective Action Request (CAR) 01:</u> 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 3.0.	PDD version 3.0 was checked and recognized as satisfactory. Issue is closed.
<u>Corrective Action Request (CAR) 02:</u> Please provide brief description of the project history.	-	Brief description of the project history was provided in section A.2 of PDD version 3.0.	Issue is closed due to the amendments made in the PDD.
<u>Corrective Action Request (CAR) 03:</u> 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.
<u>Corrective Action Request (CAR) 04:</u> 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.
<u>Corrective Action Request (CAR) 05:</u> Section A.4.1.4 more than 1 page.	-	Section A.4.1.4 was corrected.	CAR05 is closed
<u>Corrective Action Request (CAR) 06:</u> Implementation schedule is not described.	-	Implementation sheudle was described in PDD version 3.0.	CAR06 is closed based on the amendments made in the PDD.





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<u>Corrective Action Request (CAR) 07:</u> No Letter of Approval of the project issued by the sponsor party.	Item 19	Pending	Pending
<u>Corrective Action Request (CAR) 08:</u> 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.
<u>Corrective Action Request (CAR) 09:</u> 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.
<u>Corrective Action Request (CAR) 10:</u> During site visit to the company Ternopiloblenergo OJSC 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 Ternopiloblenergo OJSC 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.
<u>Corrective Action Request (CAR) 11:</u> 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 3.0 and Excel file	PDD version 3,0 and Excel file were checked and recognized as satisfactory. Issue is closed.



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<u>Corrective Action Request (CAR) 12:</u> Please specify who is responsible for providing actual value of Carbon dioxide emission factor for projects of power loss reduction in power transport networks of Ukraine.	Item 36(b)(ii)	Actuality of factor will be reviewed annually representatives Technical Consultant Ltd «EES».	The issue is closed due to the corrections made.
<u>Corrective Action Request (CAR) 13:</u> 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 3.0	The response to CAR13 was found satisfactory. CAR13 is closed.
<u>Corrective Action Request (CAR) 14:</u> 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.
<u>Corrective Action Request (CAR) 15:</u> In ex-ante calculations were used Carbon dioxide emission factor for projects of power loss reduction in power transport networks of Ukraine 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.
<u>Corrective Action Request (CAR) 16:</u> There is no information on transboundary impacts in the PDD.	Item 48(a)	Transboundary impact is not expected.	Issue closed.
<u>Clarification Request (CL) 01:</u> Please include in this section refer to the corresponding «Excel» file with the calculations.	-	Relevant references were included to PDD version 3.0.	The issue is closed based on the corrections made in the PDD.
<u>Clarification Request (CL) 02:</u> Please number the tables with information of the estimates (calculations) of emission reductions.	-	Tables were numbered.	Necessary corrections have been made. The issue is closed.



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<u>Clarification Request (CL) 03:</u> 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.
<u>Clarification Request (CL) 04:</u> 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.
<u>Clarification Request (CL) 05:</u> 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.
<u>Clarification Request (CL) 06:</u> 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.
<u>Clarification Request (CL) 07:</u> 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 3.0.	Due to the corrections made and necessary information provided, the issue is closed.
<u>Clarification Request (CL) 08:</u> 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 3.0.	CL08 is closed based on the amendments made in the PDD.
<u>Clarification Request (CL) 09:</u> 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.



DETERMINATION REPORT

<u>Clarification Request (CL) 10:</u> 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.
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