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TÜV Rheinland (China) Ltd. (TÜV Rheinland)

DETERMINATION REPORT

Determination of the Joint Implementation Project

Implementation of energy saving measures at PJSC “Ingulets iron ore enrichment works”

REPORT № 01 998 9105072415 - DR
REVISION №02

Customer: PJSC “Ingulets iron ore enrichment works”

DETERMINATION REPORT

Date of first issue: 21/10/2012	Project №: 01 998 9105072415
Executor: TÜV Rheinland (China) Ltd. (TÜV Rheinland)	Organizational unit: TÜV Rheinland Ukraine Ltd. Technical Competence Center
Customer: PJSC "Ingulets iron ore enrichment works"	Client ref.: Levitskiy Andriy Pavlovych

Summary:

TÜV Rheinland (China) Ltd. (TÜV Rheinland) has performed a determination of the JI project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" 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 serves as project design objective and complete assessment, and is a requirement for all JI projects. It consists of the following three phases: i) a desk review of the project design documents including analysis of the baseline justification and monitoring plan; ii) follow-up interviews with project stakeholders including on site visit; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion. The overall determination, from Contract signing to Determination Report & Opinion, was conducted using TÜV Rheinland (China) Ltd. (TÜV Rheinland) internal procedures.

To address TÜV Rheinland (China) Ltd. (TÜV Rheinland) corrective action and clarification requests, PJSC "Ingulets iron ore enrichment works" revised the PDD and resubmitted it on 16/11/2012 as version 2.0.

The determination findings presented in this report relate to the project as described in the PDD version 2.0 dated 16/11/2012.

In summary, it is TÜV Rheinland (China) Ltd. (TÜV Rheinland) opinion that the project complies with the criteria for baseline setting and monitoring methodology according to developed JI specific approach, and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report №: 01 998 9105072415 – DR	Subject Group: JI	
Project title: "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works"		
Work carried out by: Dr. Valery Yakubovsky - Team Leader, Technical Competence Center Director Dr. Yuriy Kononov – Technical Expert; Ganna Zadnipriana – Auditor; Dmytro Rakovich – Trainee.		☒ No distribution without permission from the Client or responsible organizational unit
Work verified by: Dr. Lixin Li – Technical Reviewer		☐ Limited distribution
Determination Report approved by: Dr. Manfred Brinkmann – Accredited Independent Entity Operational Manager		☐ Unrestricted distribution
Date of this revision: 19/11/2012	Revision №: 02	Number of pages: **67**

TÜV Rheinland (China) Ltd.
(TÜV Rheinland)

Abbreviations

AIE	Accredited Independent Entity
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CO_2	Carbon Dioxide
DNA	Designated National Authority
DR	Document Review
e	equivalent
EIA	Environmental Impact Assessment
ERU	Emission Reduction Unit
FAR	Forward Action Request
GHG	Greenhouse Gas
GWh	Giga Watt Hours
I	Interview
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
kW	Kilo Watt
kWh	Kilo Watt Hours
LoA	Letter of Approval
LoE	Letter of Endorsement
MoV	Means of Verification
MP	Monitoring Plan
MW	Mega Watt
MWh	Mega Watt Hours
NGO	Non Government Organization
NOx	Nitrogen Oxides
NPV	Net Present Value
OSV	On Site Visit
PDD	Project Design Document
PE	Project Emissions
SO_2	Sulphur Dioxide
STHS	Stakeholder Survey
t	Tonne
tCO_2e	Tonnes of CO_2 equivalent
UNFCCC	United Nations Framework Convention on Climate Change

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1 DETERMINATION OPINION

The determination team of TÜV Rheinland (China) Ltd. (TÜV Rheinland) has performed a determination of the JI project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" under Track 1. 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 document (PDD) including analysis of the baseline justification and monitoring plan;

ii) follow-up interviews with project stakeholders including on site visit;

iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

The project participants of the JI project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" selected the JI specific approach for identifying the baseline, defined in paragraph 22 (a) of the "Determination and Verification Manual" (DVM).

A baseline for the project was set in accordance with criteria stated in Appendix B to decision 9/CMP.1 (JI guidelines). The JI specific approach is provided in paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03 (Guidance):

> (a) An approach for baseline justification and monitoring is developed in accordance with appendix B of the JI guidelines (JI specific approach).

The PDD version 2.0 dated 16/11/2012 provides a description of the chosen baseline in a clear and transparent manner according to "Guidelines for users of the joint implementation project design document form", version 04, as well as a justification per the "Guidance on Criteria for Baseline Setting and Monitoring" (paragraphs 23 - 29), version 03.

Project participants used the following approach defined in paragraph 28 (c) of the DVM: Application of the "Tool for the demonstration and assessment of additionality" version 06.0.0 (the most recent version of the Tool at the time of PDD development) for demonstration of the additionality. In line with this tool, the PDD version 2.0 dated 16/11/2012 provides investment analysis, barrier analysis and common practice analysis to determine that the project activity itself is not the baseline scenario.

The JI project is likely to result in reductions of GHG emissions in accordance with the project description. An analysis of the investment and prevailing practice demonstrates that the proposed project activity is not a likely 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 review of the project design documentation (version 2.0 dated 16/11/2012) and the subsequent interviews have provided TÜV Rheinland (China) Ltd. (TÜV Rheinland) with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for JI projects and the relevant host country criteria.

The determination is based on the information made available to the determination team of TÜV Rheinland (China) Ltd. (TÜV Rheinland) and the engagement conditions detailed in this report.

2 INTRODUCTION

PJSC "Ingulets iron ore enrichment works" has commissioned TÜV Rheinland (China) Ltd. (TÜV Rheinland) to determinate its JI project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" (hereafter called "Project") that is located in Kryvyi Rih, Dnipropetrovsk Region, Ukraine.

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

2.1 Objective

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 considered 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, Appendix B of the JI guidelines and the subsequent decisions by the JISC, as well as the host country criteria.

2.2 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.

2.3 JI Project Description

The brief information regarding the project is provided in table 1.

Table 1 - JI project brief information

Project Parties involved:	1. Ukraine (Host country); 2. The Netherlands.
Title of the project:	"Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works"
Type of JI activity:	Large scale
Baseline and monitoring methodology:	JI specific approach
Project entity participant:	PJSC "Ingulets iron ore enrichment works"
Other project participants:	Metinvest International SA
Location of the project:	Kryvyi Rih, Dnipropetrovsk Region, Ukraine
Starting date of the project:	12/01/2005
Length of the crediting period:	Form 01/01/2007 to 31/12/2020
Length of the part of the crediting period before the first commitment period of the Kyoto Protocol:	Form 01/01/2007 to 31/12/2007
Length of the part of crediting period within the first commitment period of the Kyoto Protocol:	From 01/01/2008 to 31/12/2012
Length of the part of the crediting period after the end of the first commitment period of the Kyoto Protocol:	From 01/01/2013 to 31/12/2020

The starting date of the JI project activity was 12/01/2005, when the decision on investing the measures aimed on electric energy efficiency was made. The evidence document of starting date was provided by project participants to the determination team as supporting document (please refer to evidence document # /26/ in Documents of Category 2 in Table 2, Section 3.1. of the Determination Report).

3 METHODOLOGY

The determination consists of the following three phases:

I) a desk review of the project design documents including analysis of the baseline justification and monitoring plan;

II) follow-up interviews with project stakeholders including on site visit;

III) the resolution of outstanding issues and the issuance of the final determination report and opinion.

The following sections outline each step in more detail.

3.1 Desk Review of the Project Design Documentation

The Project Design Document (PDD) submitted by PJSC "Ingulets iron ore enrichment works" and additional background documents related to the project design to be checked by an Accredited Independent Entity were reviewed. The list of submitted documentation is provided below.
To address TÜV Rheinland (China) Ltd. (TÜV Rheinland) corrective action and clarification requests PJSC "Ingulets iron ore enrichment works" revised the PDD and resubmitted it on 16/11/2012 as version 2.0.

The determination findings presented in this report relate to the project as described in the PDD version 2.0 dated 16/11/2012.

The following table outlines the documentation reviewed during the determination. The documents provided by PJSC "Ingulets iron ore enrichment works" are indicated in table 2 below. The documents of Category 1 relate directly to the components of the project. The documents of Category 2 relate to the design and/or methodologies employed in the design or other reference documents.

Table 2 - Documents reviewed during the determination

№	Title of the document
	Documents of Category 1
/1/	PDD "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works", version 1.0 dated 18/09/2012.
/2/	PDD "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works", version 2.0 dated 16/11/2012.
/3/	GHG emission reduction calculation spreadsheet in Excel format (*20120914_ER_INGOK_ver1.0.xls*).
/4/	GHG emission reduction calculation spreadsheet in Excel format (*20121106_ER_INGOK_ver2.0.xls*).
/5/	Excel files of investment analysis (*20120918_CF_INGOK_ver1.0.xls*).

№	Title of the document
/6/	Excel files of investment analysis (*20121106_CF_INGOK_ver2.0.xls*).
/7/	"Guidelines for users of the Joint implementation project design document form", version 04.
/8/	"Guidance on Criteria for Baseline Setting and Monitoring", version 03.
/9/	"Tool for the demonstration and assessment of additionality", version 06.0.0.
/10/	"Guidelines on the assessment of investment analysis", version 05.
/11/	Kyoto Protocol to the United Nations Framework Convention On Climate Change.
/12/	Marrakech Accords, JI Modalities.
/13/	JI guidelines. Appendix B to decision 9/CMP.1.
/14/	"Joint implementation determination and verification manual", version 01.
/15/	"Glossary of JI terms", version 03.
/16/	Letter of Endorsement for the project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" # 3486/23/7 dated 15.11.2012.
Documents of Category 2	
/17/	"THIRD, FORTH AND FIFTH NATIONAL COMMUNICATION ON CLIMATE CHANGE FROM UKRAINE", 2009
/18/	DECREE # 206 dated February 22, 2006 "On Approval of the Procedure of Drafting, Review, Approval and Implementation of Projects Aimed at Reduction of Anthropogenic Emissions of Greenhouse Gases"
/19/	State program for industrial development in the 2003-2011 period
/20/	Standardized emission factors for the Ukrainian electricity grid for 2006-2007 period dated 17/08/2007.
/21/	Order # 62 of the National Environmental Investment Agency of Ukraine "On approval of specific carbon dioxide emission factors in 2008" dated15/04/2011.
/22/	Order # 63 of the National Environmental Investment Agency of Ukraine "On approval of specific carbon dioxide emission factors in 2009" dated15/04/2011.
/23/	Order # 43 of the National Environmental Investment Agency of Ukraine "On approval of specific carbon dioxide emission factors in 2010" dated 28/03/2011/
/24/	Order # 75 of the National Environmental Investment Agency of Ukraine "On approval of specific carbon dioxide emission factors in 2011" dated 12/05/2011/

№	Title of the document
/25/	The Statute of PJSC "Ingulets iron ore enrichment works" dated March 24, 2011.
/26/	Minutes #4. PJSC "Ingulets iron ore enrichment works" Board of Directors meeting dated 12/01/2005.
/27/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2005"
/28/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2006"
/29/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2007"
/30/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2008"
/31/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2009"
/32/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2010"
/33/	Form #11-MTP "Report on fuel, heat and electric energy consumption at PJSC "Ingulets iron ore enrichment works" in 2011"
/34/	Statement on the most significant energy saving measures implemented at PJSC "Ingulets iron ore enrichment works" during 2002-2011.
/35/	Statement on the most significant energy saving measures implemented at PJSC "Ingulets iron ore enrichment works" during 2006-2011.
/36/	Reconciliation statement of the actual consumption of electric energy in June 2012.
/37/	Permit #1211036900-40 for air pollution emissions from stationary sources of PJSC "Ingulets iron ore enrichment works"
/38/	Permit #1211036900-40a for amendments to the Permit #1211036900-40 for air pollution emissions from stationary sources of PJSC "Ingulets iron ore enrichment works"
/39/	Permit #1211036900-40б for amendments to the Permit #1211036900-40 for air pollution emissions from stationary sources of PJSC "Ingulets iron ore enrichment works"
/40/	Form # 2-TP (air) "Report on air protection", 2007.
/41/	Form # 2-TP (air) "Report on air protection", 2008.

№	Title of the document
/42/	Form # 2-TP (air) "Report on air protection", 2009.
/43/	Form # 2-TP (air) "Report on air protection", 2010.
/44/	Form # 2-TP (air) "Report on air protection", 2011.
/45/	Permit #169 dated April 06, 2011 for waste disposal in 2011. Issued to PJSC "InGOK"
/46/	Waste generation and disposal limits in 2011 at PJSC "InGOK"
/47/	Accounting for waste, packaging materials and containers in 2009 at PJSC "Ingulets iron ore enrichment works"
/48/	Accounting for waste, packaging materials and containers in 2010 at PJSC "Ingulets iron ore enrichment works"
/49/	Accounting for waste, packaging materials and containers in 2011 at PJSC "Ingulets iron ore enrichment works"
/50/	Minutes # 7 dated 18/05/2012. Session of the commission on examination of OSH department for knowledge of occupational and fire safety.
/51/	Minutes # 24 dated 27/06/2012. Session of the commission on examination of OSH department for knowledge of occupational and fire safety.
/52/	Minutes # 31 dated 20/08/2012. Session of the commission on examination of OSH department for knowledge of occupational and fire safety.
/53/	Simplified flowchart of PJSC "Ingulets iron ore enrichment works"
/54/	Order "On document storage" dated 20/09/2012.
/55/	Order on the withdrawal of pumping device GR 160/31.5 from a flowchart

3.2 Interviews with project stakeholders

TÜV Rheinland (China) Ltd. (TÜV Rheinland) performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of PJSC "Ingulets iron ore enrichment works" were interviewed and their names are summarized in Table 3. The main topics of the interviews are summarized in Table 4.

Table 3 - Persons interviewed

№	Name	Organization	Position
/1/	Kucher Serhiy Yu.	Head of Technical Department	PJSC "Ingulets iron ore enrichment works"
/2/	Buhaev Serhiy S.	Head of Energy Management Department	PJSC "Ingulets iron ore enrichment works"

№	Name	Organization	Position
/3/	Babanskiy Serhiy V.	Chief Metrologist of Ingulets Integrated Laboratory (CIL)	PJSC "Ingulets iron ore enrichment works"
/4/	Bondarchuk Oleksandr A.	Chief Engineer of Shop of service water and slurry pumping installations (TsTVShH)	PJSC "Ingulets iron ore enrichment works"
/5/	Shapovalov Yuriy S.	Head of Occupational Safety and Health Department	PJSC "Ingulets iron ore enrichment works"

Table 4 - Interview topics

№	Date	Interviewed organization	Interview topics
/1/	10/10/2012	PJSC "Ingulets iron ore enrichment works"	➢ Project design ➢ Project related legal issues ➢ Additionality ➢ Crediting period ➢ Monitoring plan ➢ Stakeholder comments ➢ Project implementation ➢ Technical equipment ➢ Monitoring plan ➢ Training history ➢ Management system ➢ Environmental impacts

3.3 Resolution of Clarification and Corrective Action Requests

The overall determination, from Contract signing to Determination Report and Opinion, was conducted using TÜV Rheinland (China) Ltd. (TÜV Rheinland) internal procedures. 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 TÜV Rheinland (China) Ltd. (TÜV Rheinland) positive conclusion on the project design.

In order to ensure transparency, a determination protocol (Annex A to the Determination report) was customized for the project, in accordance with the Annex to "Joint Implementation Determination and Verification Manual", version 01. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from

determining the identified criteria. The determination protocol serves the following purposes:

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

The determination protocol consists of three tables. The different columns in these tables are described in Figure 1 below.

To guarantee the transparency of the determination process, the concerns raised are documented in more detail in the determination protocol (Annex A to the Determination report).

The PDD, final version 2.0 dated 16/11/2012 was submitted to the determination team for final determination. The final version of the PDD (version 2.0 dated 16/11/2012) was revised based on the determination protocol (Annex A to the Determination report) with the issued corrective action requests and clarification requests. The major changes include: starting dates of project activity; monitoring plan.

Determination Protocol Table 1: Mandatory Requirement for Joint Implementation (JI) Project Activities			
Requirement	**Reference**	**Conclusion**	**Cross reference**
The requirements the project must meet.	Gives reference to the legislation or agreement where the requirement is found.	This is either acceptable based on evidence provided (OK), a Corrective Action Request (CAR), a Clarification Request (CL) or a Forward Action Request (FAR) of risk or non-compliance with stated requirements. The CAR's, CL's and FAR's are numbered and presented to the client in the Determination Report.	Used to refer to the relevant protocol questions in Tables 2, to show how the specific requirement is determined. This is to ensure a transparent determination process.

Determination Protocol Table 2: Requirements checklist				
Checklist Question	**Reference**	**Means of verification (MoV)**	**Comments**	**Draft and/or Final Conclusion**
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organized in several sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided **(OK)**, or a **Corrective Action Request (CAR)** due to non-compliance with the checklist question. (See below). **Clarification Request (CL)** is used when the determination team has identified a need for further clarification. **Forward action request (FAR)** informs the project participants of an issue that needs to be reviewed during the verification.

Determination Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Report clarifications and corrective action requests	**Ref. to checklist question in tables 1, 2**	**Summary of project owner response**	**Determination team conclusion**
If the conclusions from the Determination are a Corrective Action Request, a Clarification Request or a Forward action request, these should be listed in this section.	Reference to the checklist question number in Tables 2 where the Corrective Action Request, Clarification Request or a Forward action request is explained.	The responses given by the Client or other project participants during the communications with the determination team should be summarized in this section.	This section should summarize the determination team's responses and final conclusions. The conclusions should also be included in Tables 2, under "Final Conclusion".

Figure 1 - Determination protocol tables

3.4 Internal Technical Review

The determination report including the determination findings underwent a technical review before requesting registration of the project activity. The technical review was performed by an internal technical reviewer qualified in accordance with TÜV Rheinland (China) Ltd. (TÜV Rheinland) qualification scheme for JI project determination and verification.

3.5 Determination team

The determination team consists of the following personnel indicated in Table 5 below.
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Table 5 - Determination team

Name	Role
Dr. Manfred Brinkmann	Accredited Independent Entity Operational Manager
Dr. Lixin Li	Technical Reviewer
Dr. Valery Yakubovsky	Team Leader
Dr. Yuriy Kononov	Technical Expert
Ganna Zadnipriana	Auditor
Dmitry Rakovich	Trainee

4 DETERMINATION FINDINGS

In the following subsections the determination findings are stated as follows:

1) the findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Determination Protocol (Annex A to the Determination report);
2) in case TÜV Rheinland (China) Ltd. (TÜV Rheinland) had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following subsections and are further documented in the Determination Protocol (Annex A to the Determination report). The determination of the Project resulted in 10 Corrective Action Requests (CARs), 9 Clarification Requests (CLs) and 1 Forward Action Request(s) (FARs) that will be considered during the first verification and closed after issuing written project approvals by Parties involved.
3) the conclusions for determination subject are presented in each subsection.

The considerations, findings and means of verification for areas of determination are provided below in accordance with the Determination and Verification Manual (DVM). All information indicated in the following subsections relates to the PDD version 2.0 dated 16/11/2012 (hereinafter called "PDD").

4.1 Project approval by Parties Involved

In accordance with paragraphs 19 - 20 of the DVM the assessment of this area focuses on whether the designated focal points (DFPs) of all Parties listed as "Parties involved" in the PDD have provided written project approvals. It also should be assessed whether the written project approvals referred to above are unconditional.

The project has no written project approvals by Parties involved. "Glossary of joint implementation terms", version 03 defines the following:
a) At least the written project approval(s) by the host Party(ies) should be provided to the AIE and made available to the secretariat by the AIE when submitting the determination report regarding the PDD for publication in accordance with paragraph 34 of the JI guidelines;
b) At least one written project approval by a Party involved in the JI project, other than the host Party(ies), should be provided to the AIE and made available to the secretariat by the AIE when submitting the

first verification report for publication in accordance with paragraph 38 of the JI guidelines, at the latest.

To obtain a written project approval by the host Party (Ukraine) a final Determination Report should be submitted to the State Environmental Investment Agency of Ukraine. Written project approval by The Netherlands (a Party involved in the project, other than the host Party); will be obtained before the submission of the initial verification report for publication in accordance with paragraph 38 of JI Guidelines.

The **FAR 01** was raised. It will be closed after issuing written project approvals by Parties involved.

Identified problem areas for project approval, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination Report (refer to FAR 01).

4.2 Authorization of project participants by Parties involved

In accordance with paragraph 21 of the DVM the assessment of this area focuses on whether each of the legal entities listed as project participants in the PDD is authorized by a Party involved, which is also listed in the PDD, through: a written project approval by a Party involved, explicitly stating the name of the legal entity; or any other form of project participant authorization in writing, explicitly stating the name of the legal entity.

The following legal entities are listed as project participants in the PDD:

- PJSC "Ingulets iron ore enrichment works";
- Metinvest International SA.

Detailed information on the project participants are provided in Section A.3. of the PDD. The contact information on project participants, explicitly stating the name of the legal entities, is provided in Annex 1 to the PDD.

Identified problem areas for authorization of project participants by Parties involved, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination Report (refer to FAR 01).

4.3 Baseline Setting

In accordance with paragraphs 22 - 26 of the DVM the assessment of this area focuses on various aspects of the baseline setting by project participants.

The paragraph 22 of the DVM defines two following approaches selected for identifying the baseline:

(a) By using a methodology for baseline setting and monitoring developed in accordance with Appendix B of the JI guidelines (hereinafter referred to as JI specific approach);
(b) By using a baseline and monitoring methodology approved by the CDM Executive Board in its totality (hereinafter referred to as approved CDM methodology approach).

The project participants of the project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" selected the JI specific approach for identifying the baseline.

A baseline for the project was set in accordance with criteria stated in Appendix B to decision 9/CMP.1 (JI guidelines). The JI specific approach is provided in paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03.

The PDD provides a description of the chosen baseline in a clear and transparent manner according to "Guidelines for users of the joint implementation project design document form", version 04, as well as a justification per the "Guidance on criteria for baseline setting and monitoring", version 03 (paragraphs 23 - 29).

The desk review of the PDD and follow-up interviews provided enough reasons for TÜV Rheinland (China) Ltd. (TÜV Rheinland) to assess that the baseline for this JI project is established:

a) **By listing and describing plausible scenarios on the basis of conservative assumptions and selecting the most plausible one.**
Plausible future scenarios are listed below:

- *Scenario 1. Continuation of existing situation.*
- *Scenario 2. Implementation of energy saving measures at the plant (proposed project activity without JI incentives).*
- *Scenario 3. Partial implementation of energy saving measures at the plant.*

All scenarios, except Scenario 1 - Continuation of the existing situation, face prohibitive barriers. Therefore, continuation of the existing situation is the most plausible future scenario and is the baseline scenario for the 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 TÜV Rheinland (China) Ltd. (TÜV Rheinland) assessed whether the key factors that affect a baseline were taken into account. The project participants established the baseline taking into account the following key factors:

- Sectoral reform policies and legislation;

- Economic situation/growth and socio-demographic factors in the relevant sector as well as resulting predicted demand;
- Availability of capital (including investment barriers).
- Local availability of technologies/techniques, skills and know-how and availability of the best available technologies/techniques in the future.
- Fuel prices and availability.

c) **In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors.**
The project participants applied the selected approach with transparency. Necessary information on approaches, assumptions, parameters, data sources and key factors is available in the PDD.

d) **Taking into account of uncertainties and using conservativeness assumptions.**
Project participants used default values to the extent possible in order to reduce uncertainty and provide conservative data for emission calculations. Values for parameters that were fixed ex-ante were calculated on the basis of historical data prior to the project implementation and using conservative assumptions.

e) **In such a way that emission reduction units (ERUs) cannot be earned for decreases in activity levels outside the project activity or due to force majeure.**
According to the proposed approach emission reductions will be earned only within the project activity, so no emission reductions can be earned due to any changes outside the project activity or due to force majeure.

f) **By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate.**
The PDD draws on the list of standard variables contained in Appendix B to "Guidance on criteria for baseline setting and monitoring", version 03.

As the result of this analysis TÜV Rheinland (China) Ltd. (TÜV Rheinland) can confirm that the baseline for this project is established in accordance with criteria stated in the Appendix B of the JI guidelines and justified in accordance with paragraphs 23 - 29 of the "Guidance on criteria for baseline setting and monitoring", version 03.

Identified problem areas for baseline setting, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.4 Additionality

In accordance with paragraphs 27 - 31 of the DVM the assessment of this area focuses on whether a project provides "a reduction in emissions by sources, or an enhancement of net removals by sinks, that is additional to any that would otherwise occur" in accordance with Article 6 of the Kyoto Protocol.

The paragraph 28 of the DVM defines three approaches used to demonstrate additionality – items (a), (b), (c) for JI specific approach.

Project participants used the "Tool for the demonstration and assessment of additionality" version 06.0.0 (hereinafter "Tool") for demonstration additionality (approach indicated in item (c) of paragraph 28 of the DVM). The "Guidance on criteria for baseline setting and monitoring" (paragraph 44 (c) of the Annex 1), version 03 defines the application of the most recent version of the "Tool" approved by the CDM Executive Board for demonstrating that the project provides reductions in emissions by sources that are additional to any that would otherwise occur. At the time of the PDD development, the version 06.0.0 was the most recent version of the "Tool".

The following steps are taken as per "Tool for the demonstration and assessment of additionality" version 06.0.0:
Step 1. Identification of alternatives to the project activity consistent with current laws and regulations;
Step 2. Investment Analysis;
Step 3. Barrier analysis;
Step 4. Common practice analysis.

The determination team's assessment on application of each step according to the Tool is presented below.

Step 1. Identification of alternatives to the project activity consistent with current laws and regulations.

As per "Tool for the demonstration and assessment of additionality" version 06.6.0 TÜV Rheinland (China) Ltd. (TÜV Rheinland) assessed that project participants defined the following alternative baseline scenarios that include:
(a) **The proposed project activity undertaken without being registered as a JI project activity:**

- *Scenario 2. Implementation of energy saving measures at the plant (proposed project activity without JI incentives).*

(b) **Other realistic and credible alternative scenarios to the proposed JI project activity scenario that deliver outputs services**

or services with comparable quality, properties and application areas:

- *Scenario 3. Partial implementation of energy saving measures at the plant.*

(c) **Continuation of the current situation:**

- *Scenario 1. Continuation of the current situation.*

The analysis of each alternative baseline scenario was assessed by TÜV Rheinland (China) Ltd. (TÜV Rheinland) through the desk review of the PDD with presented references on publicly available information and follow-up interviews. All abovementioned scenarios do not contradict with all applicable legislation in force of Ukraine.

The alternative baseline scenario that includes the continuation of the current situation is the most plausible one in case of the project absence, and is regarded as realistic and credible alternative scenario to the project activity.

Step 2. Investment Analysis.

Project participants applied the Investment analysis (step 2) as per "Tool for the demonstration and assessment of additionality" version 06.0.0 in order to determine whether the proposed project activity is not economically or financially feasible, without the revenue from the sale of emission reduction units (ERUs). Determination team has taken into account the latest approved version of the "Guidelines on the assessment of investment analysis", version 05 while assessing the investment analysis.

The desk review of the PDD enabled TÜV Rheinland (China) Ltd. (TÜV Rheinland) to assess that the benchmark analysis (Option III) is appropriate analysis method to the proposed project activity.

The Net Present Value (NPV) was identified by project participants as financial indicator that is most suitable for the project type and decision context. TÜV Rheinland (China) Ltd. (TÜV Rheinland) assessed trough the desk review of the PDD with presented references to publicly available financial data and presented evidence documents that investment analysis is based on parameters that are standard in the market, considering the specific characteristics of the project type.

Project participants presented the calculation and comparison of financial indicators in a separate supporting document, notably EXCEL calculation file containing data and results of investment analysis. All relevant assumptions are presented in section B.2. of the PDD. EXCEL calculation file contains input data with presented references to the data sources. The input data of capital expense was confirmed by project participants through presented evidence documents.

The determination team assessed through the desk review of the PDD and supporting documents that investment analysis is presented in a transparent manner and provide all the relevant assumptions according to the "Tool for the demonstration and assessment of additionality" version 06.0.0 and "Guidelines on the assessment of investment analysis" version 05.

Step 3. Barrier analysis.

This step was not applied by project participants as after the sensitivity analysis it was concluded that the proposed JI project activity is unlikely to be financially/economically attractive. As per "Tool for the demonstration and assessment of additionality" version 06.0.0 project participants proceed to "Step 4. Common practice analysis".

Step 4. Common practice analysis.

Sub-step 4a: Analyze other activities similar to the proposed project activity:

A common practice in Ukraine is the use of old production facilities that remained from the Soviet Union times, without investing significant funds and performing only small repairs scheduled for maintenance of the equipment. Existing mining and processing plants in Ukraine are large plants with extensive material and technical basis, which mostly includes obsolete equipment and a large staff of employees. Companies usually try to keep the current activities from decline and do not have sufficient funds to implement investment programs.

Ukraine has no such projects, except those that are introduced or intend to be implemented with the incentive of the Joint Implementation mechanism. This project is "Implementation of energy saving measures at PJSC "Poltava GZ".

Sub-step 4b: Discuss any similar Options that are occurring:

It is required to follow Sub-step 4b according to the Tool when this project is widely observed and commonly carried out. The proposed JI project does not represent a widely observed practice in the area considered (see Sub-step 4a). There is no similar activity that can be observed in Ukraine and those implemented as JI projects are excluded from the analysis. Therefore, this sub-step is not applied. The facts mentioned above allow concluding that the proposed JI project is not common practice in Ukraine.

The desk review of submitted documentation and follow-up interviews enabled TÜV Rheinland (China) Ltd. (TÜV Rheinland) to assess that all explanations, descriptions and analyses in the demonstration of additionality were made in accordance with Tool. The all key pieces of

evidence for the investment barrier were checked. The evidences were transparently reviewed by the determination team and considered to be effective.

Project participants have provided AIE with sufficient evidence of additionality as supporting document in the PDD. All key evidence of investment barrier has been verified. Evidence was considered by determination team in a transparent manner and was found as valid.

Investment analysis and sensitivity analysis clearly demonstrate that the proposed project activity is financially unattractive. Common practice analysis was carried out showing that the proposed project activity is one of the first in Ukraine. Therefore, the proposed project activity is not business-as-usual, i.e. the proposed project activity provides the reductions in emissions by sources that are additional to any that would otherwise occur.

Identified problem areas for additionality of the project, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.5 Project boundary

In accordance with paragraphs 32 - 33 of the DVM the assessment of this area focuses on correct and complete delineation of the project boundary, inclusion and exclusion of any sources of greenhouse gases (GHGs) related to the baseline or the project.

It was assessed through the desk review of submitted documentation and follow-up interviews that project participants used the JI specific approach towards baseline setting in this project and establishing the project boundary.

The details on the project boundary were provided in section B.3. of the PDD. The desk review of submitted documentation enabled TÜV Rheinland (China) Ltd. (TÜV Rheinland) to assess that the project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are:

- under the control of the project participants;
- reasonably attributable to the project; and
- significant.

The baseline emission sources of GHGs that are included in the project boundaries are listed below.

- *Specific consumption of electricity for production of iron ore concentrate.*

All gases and sources included in the project boundary were explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD and the details were provided by Table 14, Section B.3. of the PDD.

Identified problem areas for project boundary, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.6 Crediting period

In accordance with paragraph 34 of the DVM the assessment of this area focuses on correct and complete provision of information on the projects starting date, expected operational lifetime and the length of the crediting period.

It was assessed through the desk review of submitted documentation and follow-up interviews that the project participants had correctly stated in the PDD:

- **the starting date of the project is** 12/01/2005 (date when the decision on investing the measures aimed on electric energy efficiency was made). The starting date of the project is after the beginning of 2000.

- **the expected operational lifetime** of the project in years and months is: 14 years and 0 months or 168 months.

- **the length of the crediting period** (from 01/01/2008 to 31/12/2012)) in years and months is 5 years and 0 months or 60 months.
  Project participants stated 3 parts of crediting period in years and months in the PDD for this project that are:
  - **Part of crediting period before the first commitment period of the Kyoto Protocol** - from 01/01/2007 to 31/12/2007.
    Length of the part of crediting period before the first commitment period of the Kyoto Protocol is 1 year and 0 months or 12 months.
  - **Part of crediting period within the first commitment period of the Kyoto Protocol** - from 01/01/2008 to 31/12/2012.
    Length of the part of crediting period within the first commitment period of the Kyoto Protocol is 5 years and 0 months or 60 months.
  - **Part of the crediting period after the end of the first commitment period of the Kyoto Protocol** - from 01/01/2013 to 31/12/2020.
    Length of the part of crediting period after the first commitment period of the Kyoto Protocol is 8 years and 0 months or 96 months.

The starting date of the crediting period is after the date the first emission reductions are generated by the project.

The desk review of submitted documentation and follow-up interviews enabled TÜV Rheinland (China) Ltd. (TÜV Rheinland) to assess that all information on the projects starting date, expected operational lifetime and the length of the crediting period is correct and complete.

The evidence documents of projects' starting date, operational lifetime, starting date of the crediting period were provided by project participants to the determination team as supporting documents (please refer to evidence documents # /26,56/ in Table 2, Section 3.1. of the Determination Report).

Identified problem areas for crediting period, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.7 Monitoring plan

In accordance with paragraphs 35-39 of the DVM the assessment of this area focuses on assessing the completeness and correctness of the established monitoring plan and whether it meets the necessary requirements.

The paragraph 35 of the DVM defines two following approaches selected for establishment of the monitoring plan:
(a) JI specific approach;
(b) Approved CDM methodology approach.

The project participants of the project "title of the project" selected the JI specific approach for establishment of the monitoring plan.

The monitoring plan was established in accordance with criteria stated in Appendix B to decision 9/CMP.1 (JI guidelines). JI specific approach is defined in paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring", version 03.

The information indicated below, that refers to the components of monitoring plan, was assessed by TÜV Rheinland (China) Ltd. (TÜV Rheinland) through the desk review of the submitted documentation and follow-up interviews.

I. The chosen monitoring plan includes all procedures necessary for accurate and conservative calculation of emission reductions, 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.

II. The established monitoring plan specifies the indicators, constants and variables that are reliable and provide consistent and accurate values; are valid and clearly connected with the effect to be measured, and that provide a transparent picture of the emission reductions to be monitored. The default values which were used in the monitoring plan were selected by carefully balancing accuracy and reasonableness. These values originate from recognized sources, are supported by statistical analyses providing reasonable confidence levels and are presented in a transparent manner in the PDD.

III. For those values that are to be provided by the project participants it is clearly indicated, how the values are to be selected and justified by explanation of what types of sources are to be used and the vintage of data to be used. For all values the precise references from which these values are taken are clearly indicated in section D of the PDD and the conservativeness of the values is justified. The sources from which the data are obtained do not foresee the situations where the expected data are not available.

IV. The International System Units (SI units) are used for values provided by the project participants.

V. Any parameters, coefficients, variables that are used to calculate baseline emissions but are obtained through monitoring are noted. The desk review of the documentation showed that the consistency between the baseline and monitoring plan is ensured.

VI. The project activity will include monitoring of GHG emissions in the baseline and project scenarios. Variables to be monitored in the baseline and project scenarios include the parameters listed in tables 6, 7 and 8 below.

Table 6 - Data and parameters that are not monitored throughout the crediting period, but are determined only once and that are available already at the stage of determination regarding the PDD.

Parameter	Unit	Description
$SEC_{BL,iron}$	MWh/t	Specific consumption of electricity for production of iron ore concentrate in baseline scenario

Table 7 - 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 regarding the PDD.

Parameter	Unit	Description
N/A	N/A	N/A

Table 8 - Data and parameters that are monitored throughout the crediting period.

Parameter	Unit	Description
$P_{iron,y}$	т	Production of iron ore concentrate in period *y*
$EC_{iron,y}$	MWh	Specific consumption of electricity for production of iron ore concentrate in the project scenario for period *y*
$EF_{EL,grid,y}$	tCO_2/MWh	Specific indirect carbon dioxide emission factor from electricity consumption by the 1st class electricity consumers according to the Procedure for determining the class of consumers, approved by the National Electricity Regulatory Commission of Ukraine from August 13, 1998 # 1052 in period *y*

There are no such data and parameters in the project 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 regarding the PDD.

VII. The monitoring plan draws on the list of standard variables contained in Appendix B to "Guidance on criteria for baseline setting and monitoring", version 03, as appropriate.

VIII. The established monitoring plan described the methods employed for data monitoring (including its frequency) and recording. This information is provided in the tabular format in section D.2. of the PDD. The monitoring plan also elaborates all algorithms and formulae used for the calculation of baseline emissions and project emissions. The underlying rationale for the algorithms and formulae is sounded and explained as necessary. The project participants used consistent variables, equation formats, subscripts etc.; numbered all equations throughout the PDD; defined and indicated all variables and constants with units.

IX. The conservativeness of the algorithms and procedures is justified and methods to quantitatively account for uncertainty in key parameters are included, to the extent possible (Annex 2 to the PDD provides quantitative estimations of uncertainty in key baseline parameters). References for all parameters are provided as necessary. It is clearly stated in Annex 2 to the PDD which

assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed. The desk review of the documentation showed that the consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline is ensured.

X. The national and international monitoring standards are not applied to monitor certain aspects of the project.

XI. A clear management structure will be identified to establish the division of responsibilities for gathering monitoring data. Respective services of the plant will collect relevant data in the form of technical reports and other statistical documents. All monitored data will be stored both electronically and in hard copy. The quality of collected data will be secured by conducting regular calibrations of applied meters and sensors. Calibration interval will be chosen as per passport or technical manual data.

XII. The document which indicates that data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project was provided to the AIE in supporting documentation (please refer to the evidence document # /54/ in Table 2, section 3.1. of the Determination Report).

XIII. The monitoring plan, on the whole, reflects good monitoring practices: the structure of data collection is clearly defined; all data concerning the greenhouse gas emissions within the project boundaries is monitored and used in calculations appropriately; all meters are properly calibrated and precisely indicate values of the measured parameters.

The evidence documents that relates to the completeness and correctness of the established monitoring plan were provided by project participants to the determination team as supporting documents (please refer to evidence documents # /27-33/ in Table 2, section 3.1. of the Determination Report).

Identified problem areas for monitoring plan, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.8 Leakage

In accordance with paragraphs 40 - 41 of the DVM this area focuses on checking of the assessment of the potential leakage in the project.

Participants of the project "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works" used JI specific approach for baseline setting.

The methodology used does not envisage any leakage under the project activity.

The problem areas for project's leakage were not identified.

4.9 Estimation of emission reductions

In accordance with paragraphs 42 - 47 of the DVM the assessment of this area focuses on checking the completeness and correctness of the provided methods and results of emission reduction estimates in the JI project.

The paragraph 42 of the DVM defines two following approaches to estimate the emission reductions or enhancement of net removals generated by the project selected the JI specific approach:
(a) Assessment of emissions or net removals in the baseline scenario and in the project scenario; or
(b) Direct assessment of emission reductions.

As per JI specific approach project participants chose the following approach to estimate the emission reductions generated by the project: assessment of emissions in the baseline scenario and in the project scenario. According to this approach emission reductions were calculated as follows:

$$ER_y = BE_y - PE_y \quad (1)$$

Where:

ERy – GHG emissions reduction in period y, [tCO_2e];

BEy – GHG emissions in baseline scenario in period y, [tCO_2e];

PEy – GHG emissions in project scenario in period y, [tCO_2e].

Ex ante estimates of emissions for the project scenario (within the project boundary), emissions for the baseline scenario (within the project boundary) and emission reductions are provided in section E of the PDD version 2.0. These estimates in the PDD are given on a periodic basis, from the beginning until the end of the crediting period, in tonnes of CO_2 equivalent, using appropriate emission factors. The formula used for calculating these estimates are consistent throughout the PDD.

The **baseline emissions** of the project are calculated under the formula:

$$BE_y = BE_{ELy}, \quad (2)$$

Where:

BE_y - GHG emissions in baseline scenario in period *y*, tCO_2e;

$BE_{EL,y}$ - GHG emissions in baseline scenario from electricity consumption in period *y*, tCO_2e.

GHG emissions in baseline scenario from electricity consumption are in turn calculated as follows:

$$BE_{EL,y} = P_{iron,y} \times SEC_{BL,iron} \times EF_{EL,grid,y}, \quad (3)$$

Where:

$BE_{EL,y}$ – GHG emissions in baseline scenario from electricity consumption in period *y*, tCO_2e;

$P_{iron,y}$ – Production of iron ore concentrate in period *y*, t;

$SEC_{BL,iron}$ – Specific consumption of electricity for production of iron ore concentrate in baseline scenario, MWh/t;

$EF_{EL,grid,y}$ – Specific indirect carbon dioxide emission factor from electricity consumption by the 1st class electricity consumers according to the Procedure for determining the class of consumers, approved by the National Electricity Regulatory Commission of Ukraine from August 13, 1998 # 1052 in period *y,* tCO_2/MWh.

The detailed algorithms and formulae for estimating emissions in the baseline scenario of the project are described under sections B.1 and D.1. of the PDD. The details of the calculation are provided in the GHG emission reductions calculation spreadsheet in Excel format.

GHG emissions in **project scenario** for electricity consumption are in turn calculated as follows:

$$PE_y = PE_{EL,y}, \quad (4)$$

Where:

PE_y – GHG emissions in project scenario in period *y*, tCO_2e;

$PE_{EL,y}$ – GHG emissions in project scenario from electricity consumption in period *y,* tCO_2e.

GHG emissions in project scenario for electricity consumption are in turn calculated as follows:

$$PE_{EL,y} = EC_{iron,y} \times EF_{EL,grid,y}, \quad (5)$$

Where:

$PE_{EL,y}$ – GHG emissions in project scenario from electricity consumption in period *y,* tCO_2e;

$EC_{iron,y}$ – Electricity consumption for production of iron ore concentrate in project scenario in period *y*, MWh;

$EF_{EL,grid,y}$ – Specific indirect carbon dioxide emission factor from electricity consumption by the 1st class electricity consumers according to the Procedure for determining the class of consumers, approved by the National Electricity Regulatory Commission of Ukraine from August 13, 1998 # 1052 in period *y,* tCO_2/MWh.

The detailed algorithms and formulae for estimating emissions in the project scenario of each subproject are described under section D.1. of the PDD. The details of the calculation are provided in the GHG emission reductions calculation spreadsheet in Excel format.

No leakages take place during the project activities.

It was assessed by the desk review of submitted documentation, especially GHG emission reductions calculation spreadsheet in Excel format that key factors influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account. Data sources used for calculating the estimates referred above are clearly identified, reliable and transparent. Emission factors used for calculating the estimates referred to above, were selected by carefully balancing accuracy and reasonableness, and the choice is appropriately justified. The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner. The estimates of emission reductions are consistent throughout the PDD. The annual average of estimated emission reductions over the crediting period is calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period, and multiplying by twelve.

According to the PDD and GHG emission reductions calculation spreadsheet in Excel format the emissions for the project scenario, emissions for the baseline scenario and emission reductions are provided in tables 9, 10 and 11 below.

Table 9 – Estimated emission reductions generated by the project over the part of crediting period before the first commitment period of the Kyoto Protocol

Period:	01/01/2007 – 31/12/2007
Emissions for the project scenario, tCO_2e:	1 761 820
Leakage, tCO_2e	0
Emissions for the baseline scenario, tCO_2e:	1 820 100
Emission reductions, tCO_2e:	58 280
Annual average of estimated emission reductions, tCO_2e:	58 280

Table 10 – Estimated emission reductions generated by the project over the part of crediting period within the first commitment period of the Kyoto Protocol

Period:	01/10/2008 – 31/12/2012
Emissions for the project scenario, tCO_2e:	10 385 367
Leakage, tCO_2e	0
Emissions for the baseline scenario, tCO_2e:	10 770 420
Emission reductions, tCO_2e:	385 053
Annual average of estimated emission reductions, tCO_2e:	77 011

Table 11 - Estimated emission reductions generated by the project over the part of the crediting period after the end of the first commitment period of the Kyoto Protocol

Period:	01/01/2013 – 31/12/2020
Emissions for the project scenario, tCO_2e:	17 782 296
Leakage, tCO_2e	0
Emissions for the baseline scenario, tCO_2e:	18 293 992
Emission reductions, tCO_2e:	511 696
Annual average of estimated emission reductions, tCO_2e:	63 962

Identified problem areas for calculation of GHG emission reductions, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.10 Environmental impacts

In accordance with paragraph 48 of the DVM the assessment of this area focuses on checking the completeness and correctness of the provided information on the assessment of the environmental impacts of the JI project.

The host Party for the project is Ukraine. The conclusion and all references to supporting documentation of environmental impacts are provided in section F of the PDD. Implementation of the project is not associated with negative influence on the environment; in fact, the

influence has been assessed to be positive. There was no necessity to perform the EIA for this project in accordance with procedures as determined by the host Party.

The evidence documents of environmental impacts were provided by project participants to the determination team as supporting documents (please refer to evidence documents ## /38-46/ in Table 2 – Documents reviewed during the determination in section 3.1. of the Determination Report).

Identified problem areas for environmental impacts, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.11 Stakeholder consultation

In accordance with paragraph 49 of the DVM the assessment of this area focuses on checking if stakeholder consultation was undertaken in accordance with procedures as required by the host Party.

The host Party for the project is Ukraine. The local population was informed through the media about the projects. Since the project has a positive nature to improve the environment and social status, received only positive feedback on the project. The project complies with the applicable standards and requirements set out in Ukraine.

Identified problem areas for comments by local stakeholders, project participants' responses and conclusions of TÜV Rheinland (China) Ltd. (TÜV Rheinland) are described in Annex A to the Determination report.

4.12 Other areas

In accordance with paragraphs 50 - 73 of the DVM the assessment of the areas such as additional elements for assessment in determination regarding small-scale projects, determination regarding land use, land-use change and forestry projects, determination regarding programs of activities is not applicable to this JI project.

5 SUMMARY OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

According to paragraph 32 of the JI Guidelines, the AIE shall make the project design document publicly available through the secretariat, subject to confidentiality provisions set out in paragraph 40 of the JI Guidelines, and receive comments from Parties, stakeholders and UNFCCC accredited observers on the project design document and any supporting information for 30 days from the date the project design document is made publicly available.

TÜV Rheinland (China) Ltd. (TÜV Rheinland) published the project design document (version 1.0 dated 18/09/2012) on the website http://www.tuv.com.ua as of 05/10/2012 and invited comments within 05/11/2012 by Parties, stakeholders and UNFCCC accredited observers.

There were no comments from Parties, stakeholders and UNFCCC accredited observers received.

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ANNEX A: JI PROJECT DETERMINATION PROTOCOL

Table 1 - Mandatory Requirement for Joint Implementation (JI) Project Activities

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
1. The project shall have the approval of the Parties involved.	Kyoto Protocol Article 6.1 (a)	**FAR 01**	Table 2, section A.5. **FAR 01.** The project has no written unconditional project approvals by Parties involved. Please, provide those. "Glossary of joint implementation terms", version 03 defines the following: a) At least the written project approval(s) by the host Party(ies) should be provided to the AIE and made available to the secretariat by the AIE when submitting the determination report regarding the PDD for publication in accordance with paragraph 34 of the JI guidelines; b) At least one written project approval by a Party involved in the JI project, other than the host Party(ies), should be provided to the AIE and made available to the secretariat by the AIE when submitting the first verification report for publication in accordance with paragraph 38 of the JI guidelines, at the latest. To obtain a written project approval (Letter of Approval) a final Determination Report should be

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
			submitted to the State Environmental Investment Agency of Ukraine Written project approval by a Party involved in the JI project, other than the host Party will be obtained before the first verification. **FAR 01** will be closed after issuing Letters of Approval by the parties involved.
2. Emission reductions, or an enhancement of removal by sinks, shall be additional to any that would otherwise occur.	Kyoto Protocol Article 6.1 (b)	**OK**	Please refer to Table 2, section B.
3. The sponsor Party shall not acquire emission reduction units if it is not in compliance with its obligations under Articles 5 & 7.	Kyoto Protocol Article 6.1 (c)	**OK**	Article 5 requires: "Each Party included in Annex I shall have in place, no later than one year prior to the start of the first commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases". According to the Article 7: "Annex I Parties to submit annual greenhouse gas inventories, as well as national communications, at regular intervals, both including supplementary information to demonstrate compliance with the Protocol". Luxembourg has submitted its Initial Report on 29 December 2006: *http://unfccc.int/files/national_reports/initial_reports_under_the_kyoto_protocol/application/pdf/mev_initial_repo*

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
			rt_0612.pdf
4. The acquisition of emission reduction units shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3.	Kyoto Protocol Article 6.1 (d)	**OK**	Please refer to Table 2, section B.2.
5. Parties participating in JI shall designate national focal points for approving JI projects and have in place national guidelines and procedures for the approval of JI projects.	Marrakech Accords, JI Modalities, §20	**OK**	Ukraine has designated its Focal Point. National guidelines and procedures for approving JI projects have been published. Contact data in Ukraine: State Environmental Investment Agency of Ukraine 35 Urytskogo St, Kyiv, P.O. 03035 Phone: +380 44 594 91 11 Fax: +380 44 5949115 Ukrainian national guidelines and procedures for the approval of JI projects are available on the site www.neia.gov.ua. On February 22, 2006 the Cabinet of Ministers of Ukraine adopted the Regulation № 206, which established assessment and implementation procedures of JI projects within the Kyoto Protocol.
6. The host Party shall be a Party to the Kyoto Protocol.	Marrakech Accords, JI Modalities, §21(a)/24	**OK**	The Ukraine is a Party (Annex I Party) to the Kyoto Protocol and has ratified the Kyoto Protocol at February 4th, 2004.
7. The host Party's assigned amount shall have been calculated and recorded in accordance with the modalities for the accounting of assigned amounts.	Marrakech Accords, JI Modalities, §21(b)/24	**OK**	The annual compliance target for Ukraine is 100% of its emissions in 1990.

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
			In the Initial Report (Ukraine's Initial Report Under Article 7, Paragraph 4, Of The Kyoto Protocol) submitted by Ukraine to the UNFCCC Secretariat, on the 26 May 2006 the AAUs are quantified as: 925 362 174.39 (x 5) = 4 626 810 872 tCO_2e http://unfccc.int/files/national_reports/initial_reports_under_the_kyoto_protocol/application/pdf/ukraine_aa_report.pdf Currently Ukraine has submitted to the UNFCCC its fifth national communication on climate change under the Kyoto Protocol.
8. The host Party shall have in place a national registry in accordance with Article 7, paragraph 4.	Marrakech Accords, JI Modalities, §21(d)/24	**OK**	The designed system of the national registry has been described in the Initial Report: http://unfccc.int/files/national_reports/initial_reports_under_the_kyoto_protocol/application/pdf/ukraine_aa_report.pdf
9. Project participants shall submit to the independent entity a project design document that contains all information needed for the determination.	Marrakech Accords, JI Modalities, §31	**OK**	Project participants have submitted to the Accredited Independent Entity TÜV Rheinland (China) Ltd. (TÜV Rheinland) PDD that contains all information needed for the determination.
10. The project design document shall be made publicly available and Parties, stakeholders and UNFCCC accredited observers shall be invited to, within 30 days, provide comments.	Marrakech Accords, JI Modalities, §32	**OK**	TÜV Rheinland (China) Ltd. (TÜV Rheinland) published the project design document on the http://www.tuv.com.ua website from

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference/Comment
			05.10.2012 to 05.11.2012. There were no comments from Parties, stakeholders and UNFCCC accredited observers received.
11. Documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts, in accordance with procedures as determined by the host Party shall be submitted, and, if those impacts are considered significant by the project participants or the host Party, an environmental impact assessment in accordance with procedures as required by the host Party shall be carried out.	Marrakech Accords, JI Modalities, §33(d)	**OK**	Please refer to Table 2, section F.
12. The baseline for a JI project shall be the scenario that reasonably represents the GHG emissions or removal by sources that would occur in absence of the proposed project.	Marrakech Accords, JI Modalities, Appendix B	**OK**	Please refer to Table 2, section B.
13. A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national and/or sectoral policies and circumstances.	Marrakech Accords, JI Modalities, Appendix B	**OK**	Please refer to Table 2, section B.
14. The baseline methodology shall exclude to earn ERUs for decreases in activity levels outside the project activity or due to force majeure.	Marrakech Accords, JI Modalities, Appendix B	**OK**	Please refer to Table 2, section B.
15. The project shall have an appropriate monitoring plan.	Marrakech Accords, JI Modalities, §33(c)	**OK**	Please refer to Table 2, section D.
16. A project participant is a legal entity authorized by a Party involved to participate in the JI project.	"Glossary of Joint Implementation Terms", Version 03.	Conclusion is pending a follow-up on **FAR 01**.	Please refer to Table 2, section A. Project participant from Ukraine will host a party authorized by an approval of the project.

Table 2 - Requirements Checklist

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
A. General description of the project					
A.1. Title of the project					
1.1. Does the provided title of the JI project represent project activity?	PDD	DR	Project title: "Implementation of energy saving measures at PJSC "Ingulets iron ore enrichment works"	OK	OK
1.2. Is(are) the sectoral scope(s) to which the project pertains presented?	PDD	DR	Sector: (8) Mining/mineral production.	OK	OK
1.3. Are the version number and date of the document presented?	PDD	DR	Initial version of the document: PDD version 1.0 dated September 18, 2012 Final version of the document: PDD version 2.0 dated November 16, 2012	OK	OK
A.2. Description of the project					
2.1. Is the purpose of the project indicated (with the concise, summarizing explanation of the situation existing prior to the starting date of the project, baseline scenario and project scenario)?	PDD	DR	Project activity is aimed at the reduction of GHG emissions. **CAR 01.** The purpose of the project implementation is not indicated in the Section A.2 of the PDD. **CAR 02.** Please, provide annual average of estimated emission reductions over 2008-2012 period under Section A.4.3.1.	**CAR 01** **CAR 02**	OK
2.2 Is the history of the Project including its JI component summarized?	PDD	DR	Yes, the history of the project including its JI component is summarized in section A.2. of the PDD.	OK	OK
2.2.1. Is it clarified how the proposed project activity reduces emissions GHG that would occur	PDD	DR	The project aims at the reduction of GHG emissions by reducing the energy consumption	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
in the baseline scenario?			and includes implementation of the following measures: • Modernization, replacement, optimization and adjusting the operation mode of pumping equipment and units; • Modernization, replacement, optimization and adjusting the operation mode of the compressor equipment and units; • Modernization, replacement, optimization and adjusting the operation mode of the electric motors; • Installation of saving high pressure hydraulic dredge pumps; • Upgrading equipment for the ore blending; • Modernization and operation mode optimization of underloaded transformer equipment; • Replacing lighting to more energy efficient types; • Construction and commissioning of the gravity discharge bypass of the pumping station to supply service water; • Installation of frequency converters for pump equipment and electric motors.		
A.3. Project participants					
3.1. Are project participants and Party(ies) involved in the project listed?	PDD	DR	Two project participants are listed in Section A.3 of the PDD: • PJSC "Ingulets iron ore enrichment works";	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
			• Metinvest International SA.		
3.2. Is contact information provided in Annex 1 of the PDD that is indicated in section A.3?	PDD	DR	The contact information on project participants is provided in Annex 1 of the PDD.	OK	OK
3.3. Is it indicated, if the Party involved is a host Party?	PDD	DR	Ukraine is a Host Party.	OK	OK
3.4. Is it indicated, if it is the case, if the Party involved wishes to be considered as a project participant?	PDD	DR	Parties involved don't wish to be considered as project participants.	OK	OK
A.4. Technical description of the project					
A.4.1. Location of the project					
4.1.1. Host Party(ies)	PDD	DR	Ukraine	OK	OK
4.1.2. Region/State/Province etc.	PDD	DR	Dnipropetrovsk Region	OK	OK
4.1.3. City/Town/Community etc.	PDD	DR	Kryvyi Rih	OK	OK
4.1.4. Detail of the physical location, including information allowing the unique identification of the project (maximum one page)					
4.1.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s) (this section should not exceed one page)?	PDD	DR	The physical location of the project activity is provided in Section A.4.1.4. of the PDD. The proposed project will be implemented at PJSC "Ingulets iron ore enrichment works" in Kryvyi Rih. This section does not exceed one page.	OK	OK
A.4.2. Technology(ies) to be employed, or measures, operations or actions to be implemented by the project					
4.2.1. Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project described?	PDD	DR	The technology(ies) to be employed, or measures to be implemented under the project are described in Section A.4.2. of the PTD. **CL 01.** Please, indicate the type of frequency converters for pump equipment and electric motors. **CL 02.** Please, provide the number of installed	**CL 01** **CL 02** **CL 03** **CL 04** **CAR 03**	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
			floodlights КТU-01-2000-2. **CL 03.** Please provide explanations and evidence that measures on modernization of vibration feeders PT-196 were not implemented due to the repair works. **CAR 03.** To add transparency project description, please use the same terms to describe equipment in different sections of the PDD. **CL 04.** Please provide technical specifications and amount of hydraulic dredge pumps HHD.		
4.2.1.1. Does the project design engineering reflect current good practices?	PDD	DR	The project design reflects good engineering practices. Installed equipment and implemented technologies provide significant reduction of energy consumption, give greater effect compared to the equipment that is widely used in Ukraine.	ОК	ОК
4.2.1.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	PDD	DR	Technologies that are used in this project gained prominence and displays фт advanced engineering practice.	ОК	ОК
4.2.1.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	PDD	DR	Technologies that are used in this project are the latest, and are unlikely to be replaced by any other technology during the project lifetime.	ОК	ОК
4.2.2. Are all relevant technical data and the implementation schedule indicated?	PDD	DR	All relevant technical data and the implementation schedule are indicated in Section A.4.2. of the ПТД.	ОК	ОК

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
A.4.3. Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances					
4.3.1. Is it indicated how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed project?	PDD	DR	The proposed project aims to implement a comprehensive program aimed at significant energy savings. Reduction of GHG emissions into the atmosphere will be achieved by reducing the energy consumption from the grid.	OK	OK
4.3.2. Is it stated why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances?	PDD	DR	Taking into account national sectoral circumstances and financial barriers for the project, the project activity would not have been realized in the absence of Joint Implementation Initiative (for more detail see Section B.2. of the PDD).	OK	OK
4.3.3. Are the estimates of anticipated total reductions provided in tonnes of CO_2 equivalent as determined in section E of the PDD. (This section should not exceed one page).	PDD	DR	Anticipated total reductions in tonnes of CO_2 equivalent are provided in Section A.4.3.1., as determined in section E of the PDD. This section does not exceed one page.	OK	OK
A.4.3.1. Estimated amount of emission reductions over the crediting period					
4.3.1.1. Is it provided the length of the crediting period and estimates of total as well as annual emission reductions using the appropriate tabular format?	PDD	DR	Yes, the length of the crediting period and estimates of total as well as annual emission reductions is provided using the appropriate tabular format.	OK	OK
4.3.1.2. 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	PDD	DR	The annual average of estimated emission reductions was calculated correctly according to the rules and formulas provided by Guidance on Determination and Verification.	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
multiplying by twelve?					
A.5. Project approval by the Parties involved					
5.1. Are written project approvals by the Parties involved attached? Are they unconditional?	PDD	DR	Written project approvals by Parties involved have not been obtained at this stage of the project. Information on the procedures for receiving written project approvals by Parties involved are specified in Section A.5. of the PDD. **Refer to FAR 01.**	Pending **FAR 01**	OK
B. Baseline					
B.1 Description and justification of the baseline chosen					
1.1. Is it indicated in the PDD: - a detailed theoretical description of the baseline in a complete and transparent manner, as well as a justification of chosen baseline using the step-wise approach; - a justification of baseline setting; - references on regulations according to baseline setting.	PDD	DR	The detailed theoretical description, justification of chosen baseline are indicated in Section B.1. of the PDD using the step-wise approach. The references on regulations according to baseline setting are also provided in this Section. Identofication of the chosen baseline for project category is quite reasonable, detailed theoretical description is presented in Section B.1. of this PDD.	OK	OK
1.2. Does the PDD explicitly indicate the approach used for identifying the baseline with references on regulations?	PDD	DR	JI specific approach is used for baseline setting.	OK	OK
1.3. Is it indicated in the PDD that baseline was established:					
1.3.1. by listing and describing plausible	PDD	DR, I	Plausible future scenarios are listed and	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
(alternative) future scenarios on the basis of conservative assumptions and selecting the most plausible one?			described on the basis of conservative assumptions and selecting the most plausible one in the context of this project. All scenarios, except - continuation of existing situation, face prohibitive barriers. Therefore, continuation of existing situation is the most plausible future scenario and is the baseline scenario. Analysis of the barriers is given in Section 4.2		
1.3.2. 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?	PDD	DR	Relevant national and/or sectoral policies and circumstances are taken into account. It is demonstrated by the above analysis that the baseline chosen clearly represents the most probable future scenario given the State program for industrial development in the 2003-2011 period.	OK	OK
1.3.3. in a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?	PDD	DR	JI specific approach is used for baseline setting. The baseline was identified by listing and analysing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one. **CAR 04.** Please, provide the definition of all abbreviations and acronyms in the text of PDD. **CAR 05.** Please provide the references to Orders of the State Environmental Investment Agency for 2008-2011 period. **CL 05.** Provide evidence that the project facility is 1st class electricity consumer.	**CAR 04** **CAR 05** **CL 05**	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
1.3.4. taking into account of uncertainties and using conservative assumptions?	PDD	DR	Baseline was established taking into account of uncertainties and using conservative assumptions.	OK	OK
1.3.5. in such a way that emission reduction units (ERUs) cannot be earned for decreases in activity levels outside the project activity or due to force majeure?	PDD	DR	Emission reduction units (ERUs) cannot be earned due to force majeure, because Ukraine has an extensive system of energy production (with significant excess of reserve capacity) and united electric transport system that provides stable performance and reliability of electricity supply to the company.	OK	OK
1.3.6. by drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring"?	PDD	DR	Baseline is established by drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring''.	OK	OK
1.4. If a multi-project emission factor is used, does the PDD provide appropriate justification?	PDD	DR	Project participants have used multi-project emission factor.	OK	OK
1.5. Are the title, reference number and version of the approved CDM methodology clearly indicated in the context of the project?	PDD	DR	N/A	OK	OK
1.6. Is the applied version of the CDM methodology the most recent one and/or is this version still applicable?	PDD	DR	N/A	OK	OK
1.7. Is it described how the chosen approach is applied in the context of the project?	PDD	DR	The PDD in Section B.1. describes in sufficient detail how the chosen approach is applied in the context of the project	OK	OK
1.8. Are the key information and data used to establish the baseline (variables, parameters, data sources etc.) indicated in tabular form?	PDD	DR	Key information and data used to establish the baseline (variables, parameters, data sources etc.) are indicated in tabular form.	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
1.9. Are all regulations and sources clearly referenced?	PDD	DR	All regulations and sources are clearly referenced in the PDD. **CL 06.** Please clarify what regulations adopted by the project owner will be used as a QC/QA procedures related to basic parameters are be used? (Section B.1., Table with parameters). **CAR 06.** Please provide the version of the investment analysis assessment methodology.	**CL 06** **CAR 06**	OK
B.2. Description of how the anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the JI project					
2.1. Is the demonstration of project additionality indicated and described in the PDD using the step-wise approach?	PDD	DR	The step-wise approach is used for this project to demonstrate that the project provides reductions in emissions by sources that are additional to any that would otherwise occur. It is fully described in the Section B.2. of the PDD. This description corresponds to the "Guidelines for users of the Joint implementation project design document form", version 04.	OK	OK
2.2. Does the PDD provide a justification of the applicability of the approach with a clear and transparent description with relevant reference on regulations?			The PDD provides a justification of the applicability of the approach in accordance to Paragraph 44 (c) of the Annex 1 of the Guidance. Refer to Section B.2. of the PDD.		
2.3. Is it described how the chosen approach is applied in the context of the project?	PDD	DR	Section B.2. of the PDD provided the description how the chosen approach is applied in the context of the project.	OK	OK
2.4. Are additionality proofs provided?					
2.4.1. If the application of the most recent version	PDD	DR	Section B.2. of the PDD provides all	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
of the "Tool for the demonstration and assessment of additionality" is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?			explanations, descriptions and analyses in accordance with "Tool for the demonstration and assessment of additionality" (version 06.0.0).		
2.4.2. Is an analysis showing why the emissions in the baseline scenario would likely exceed the emissions in the project scenario included?	PDD	DR	Detailed analysis provided in sections A.4.3., B.1. and B.2. of the PDD demonstrates that emissions in the baseline scenario would likely exceed the emissions in the project scenario by the implementation of project activities.	OK	OK
2.4.3. Is it demonstrated that the project activity itself is not a likely baseline scenario?	PDD	DR	Yes, it is clearly demonstrated scenario in sections A.2., B.1. and B.2. of the PDD that the project activity itself is not a likely baseline	OK	OK
2.5. Are national policies and circumstances relevant to the baseline of the proposed project activity summarized?	PDD	DR	Baseline is set by taking into account relevant national policies and circumstances (please refer to sections B.1. and B.2. of the PDD). None of listed in section B.1. alternatives does not contradict Ukrainian legislation.	OK	OK
B.3. Description of how the definition of the project boundary is applied to the project					
3.1. Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: - under the control of the project participants; - reasonably attributable to the project; - significant?	PDD	DR	The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are under the control of the project participants; reasonably attributable to the project. Please refer to Section B.3. of the PDD.	OK	OK
3.2. Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 3.1. above?	PDD	DR	Some sources have been excluded from the project boundary based on the assessment of a particular case taking into account the criteria specified in item 3.1.	OK	OK
3.3. 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?	PDD	DR	Project boundaries and emission sources of relevant gases are indicated in Section B.3..	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
3.4. Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	PDD	DR	All gases and sources in the project boundary or under the project are explicitly stated and their being excluded is justified .	OK	OK
B.4. Further baseline information, including the date of baseline setting and the name(s) of the person(s)/entity(ies) setting the baseline					
4.1 Is the date of the baseline setting presented (in DD/MM/YYYY)?	PDD	DR	Date of baseline setting: 14/09/2012.	OK	OK
4.2 Is the contact information of persons setting the baseline provided?	PDD	DR	PJSC "Ingulets iron ore enrichment works" is the PDD developer setting the baseline. Contact details are provided in the Annex 1 of the PDD.	OK	OK
4.3 Is the person/entity also a project participant listed in Annex 1 of PDD?	PDD	DR	PJSC "Ingulets iron ore enrichment works" is is the project participant. Contact details are provided in the Annex 1 of the PDD.	OK	OK
C. Duration of the project/crediting period					
C.1. Starting date of the project					
1.1. Is the project's starting date clearly defined?	PDD	DR	Starting date of the project: 12/01/2005. **CL 07.** Please provide supporting documents to prove the starting date of the project, when the project implementation, construction or real project activity have started.	**CL 07**	OK
1.2. Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	PDD	DR	Starting date of the project: 12/01/2005, when the decision on investing the measures aimed on electric energy efficiency was made.	OK	OK
1.3. Is the starting date after the beginning of 2000?	PDD	DR	Yes, the starting date is after the beginning of 2000.	OK	OK
C.2. Expected operational lifetime of the project					

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
2.1. Is the project's operational lifetime clearly defined in years and months?	PDD	DR	The operational lifetime of the project is clearly defined in years and months (15 years or 168 months)	OK	OK
C.3. Length of the crediting period					
3.1. Is the length of the crediting period specified in years and months?	PDD	DR	The length of the crediting period specified in years and months in Section C.3. of the PDD. The starting date of the crediting period - the date of first emissions reduction generation achieved under the project – has to be proved with a document (for example, Certificate of completion, Act of commissioning, etc.). **CL 08.** Please provide supporting document with the starting date of the crediting period that is specified in the PDD.	**CL 08**	OK
3.2. 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?	PDD	DR	PDD states that the crediting period for issuance of ERUs starts only since the beginning of 2007. PDD also indicates that in the period from 1 January 2008 to 31 December 2012, emission reductions will be transferred in accordance with Article 6 of the Kyoto Protocol (JI mechanism). The crediting period for issuance of ERUs does not extend beyond the operational lifetime of the project. **CL 09.** Please provide an evidence that the equipment after the project will operate within the specified period.	**CL 09**	OK
3.3. If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host	PDD	DR	Crediting period for 2013-2020 extends beyond 2012. PDD states that that the extension is	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?			subject to the host Party approval. Estimates of emission reductions for the period before 2012 and after 2012 are presented separately in every Section of the PDD.		
D. Monitoring Plan					
D.1. Description of monitoring plan chosen					
1.1. Is it indicated in PDD a detailed theoretical description in a complete and transparent manner, as well as a justification of chosen monitoring plan using the step-wise approach?	PDD	DR	The detailed theoretical description in a complete and transparent manner, as well as a justification of chosen monitoring plan using the step-wise approach has been provided by the project participants in the Section D.1. of the PDD.	OK	OK
1.2. Does the PDD explicitly indicate the chosen approach used for monitoring with references on regulations?	PDD	DR	The project participant has chosen the JI specific approaches regarding monitoring according to "Guidance on criteria for baseline setting and monitoring", version 03.	OK	OK
1.3. Is the applied methodology considered being the most appropriate one?	PDD	DR	Yes, chosen JI specific approach is appropriate for this project.	OK	OK
1.4. If national or international monitoring standart has to be applied to monitor certain aspects of the project, is this standart identified and is the reference as to where a detailed description of the standart can be found provided?	PDD	DR	Yes, all relevant references are provided in section D of the PDD.	OK	OK
1.5. Are the description of the assumptions, formulas, parameters, data sources and key factors indicated?	PDD	DR	The assumptions, formulas, parameters, data sources and key factors are described in Section D of the PDD.	OK	OK
1.5.1. Is it stated how uncertainties are taken into account and conservativeness is safeguarded?	PDD	DR	Yes, it is indicated in section D.1. of the PDD.	OK	OK

<table>
<tr><th>CHECKLIST QUESTION</th><th>Ref.*</th><th>MoV**</th><th>COMMENTS</th><th>Draft Concl.</th><th>Final Concl.</th></tr>
<tr><td>1.6. Is it described how the chosen approach is applied in the context of the project?</td><td>PDD</td><td>DR</td><td>The explanation of how the chosen approach is applied in the context of the project is provided in Section D of the PDD.</td><td>OK</td><td>OK</td></tr>
<tr><td>1.7. Does the monitoring plan explicitly and clearly distinguish:
1) 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 regarding the PDD;
2) 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 regarding the PDD;
3) data and parameters that are monitored throughout the crediting period?</td><td>PDD</td><td>DR</td><td>All necessary information is explicitly and clearly indicated according to "Guidelines for users of the JI PDD form", version 04.</td><td>OK</td><td>OK</td></tr>
<tr><td>1.8. Are alternative tables used instead of using the tables provided in sections D.1.1.1., D.1.1.3., D.1.2.1., D.1.3.1. and D.2. in line with the approach regarding monitoring chosen for all data/parameters?</td><td>PDD</td><td>DR</td><td>N/A</td><td>OK</td><td>OK</td></tr>
<tr><td>1.8.1. Are all the required data / parameters according to the used methodology indicated?</td><td>PDD</td><td>DR</td><td>N/A</td><td>OK</td><td>OK</td></tr>
<tr><td>1.9. Checklist for parameters<table><tr><th>Data Checklist</th><th>Parameter Title</th></tr><tr><td>Is the title in line with me hodology?</td><td></td></tr><tr><td>Are data unit correctly expressed?</td><td></td></tr><tr><td>Is the appropriate description of parameter indicated?</td><td></td></tr><tr><td>Is the time of monitoring clearly indicated?</td><td></td></tr></table></td><td>PDD</td><td>DR</td><td>N/A</td><td>OK</td><td>OK</td></tr>
</table>

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
Is the source clearly referenced?					
Is the correct value provided?					
Has this value been verified?					
Is the choice of data correctly justified or is the measurement method correctly described?					
Are quality control and quality assurance procedures indicated?					
D.1.1. Option 1 – Monitoring of the emissions in the project scenario and the baseline scenario					
1.1.1. Is the option 1 used for monitoring of the emissions in the project scenario and the baseline scenario?	PDD	DR	Monitoring using Option 1 is applied for project scenario and the baseline scenario.	OK	OK
D.1.1.1. Data to be collected in order to monitor emissions from the project, and how these data will be archived					
1.1.1.1. Are the data to be collected in order to monitor emissions from the project described?	PDD	DR	Table D.1.1.1. of the PDD indicates data to be collected in order to monitor emissions from the project.	OK	OK
1.1.1.2. Is it indicated how the data will be archived?	PDD	DR	Table D.1.1.1. of the PDD indicates how these data will be archived.	OK	OK
1.1.1.3. Is it indicated that data monitored are to be kept for two years after the last transfer of ERUs for the project?	PDD	DR	Documents and other data monitored and required for determination and verification, as well as any other data that are relevant to the operation of the project will be kept for at least two years after the last transfer of ERUs. **CAR 07.** Please provide more information on measuring instruments, used for monitoring of the GHG emissions.	**CAR 07**	OK
D.1.1.2. Description of formulae used to estimate project emissions (for each gas, source etc.; emissions in units of CO_2 equivalent)					

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
1.1.2.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The formulae are clearly and consistently indicated throughout the PDD.	OK	OK
D.1.1.3. Relevant data necessary for determining the baseline of anthropogenic emissions of greenhouse gases by sources within the project boundary, and how such data will be collected and archived					
1.1.3.1. Are the data necessary for determining the baseline of anthropogenic emissions of greenhouse gases by sources within the project boundary described?	PDD	DR	Section D.1.1.3. of the PDD indicates and describes data to be collected in order to monitor emissions under the project.	OK	OK
1.1.3.2. Is it indicated how data will be archived?	PDD	DR	Yes. Section D.1.1.3. of the PDD indicates how these data will be archived. All data will be archived in electronic and paper form.	OK	OK
D.1.1.4. Description of formulae used to estimate baseline emissions (for each gas, source etc.; emissions in units of CO_2 equivalent)					
1.1.4.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The formulae are clearly and consistently indicated in Section D.1.1.2. of the PDD and throughout the PDD.	OK	OK
D.1.2. Option 2 - Direct monitoring of emission reductions from the project (values should be consistent with those in section E.)					
1.2.1. Is the option 2 used for monitoring of the emissions in the project scenario and the baseline scenario?	PDD	DR	Option 2 is not used for monitoring of emissions under the project.	OK	OK
D.1.2.1. Data to be collected in order to monitor emission reductions from the project, and how these data will be archived					
1.2.1.1. Are the data to be collected in order to monitor emissions from the project described?	PDD	DR	The table D.1.1.3. of the PDD indicates data to be collected in order to monitor emissions under the project.	OK	OK
1.2.1.2. Is it indicated how the data will be archived?	PDD	DR	N/A	OK	OK
1.2.1.3. Is it indicated that data monitored are to be kept for two years after the last transfer of ERUs for the project?	PDD	DR	N/A	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
D.1.2.2. Description of formulae used to calculate emission reductions from the project (for each gas, source etc.; emissions/emission reductions in units of CO2 equivalent):					
1.2.2.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The formulae are clearly and consistently indicated in the PDD.	OK	OK
D.1.3. Treatment of leakage in the monitoring plan					
1.3.1. Are data and information that will be collected in order to monitor leakage effects of the project described, if applicable?	PDD	DR	Section D.1.3.1. of the PDD indicates that the leakage due to the project activity are not identified.	OK	OK
1.3.2. Are formulae used to estimate leakage (for each gas, source etc.; emissions in units of CO_2 equivalent) described?	PDD	DR	N/A	OK	OK
D.1.4. Description of formulae used to estimate emission reductions for the project (for each gas, source etc.; emissions/emission reductions in units of CO_2 equivalent)					
1.4.1. Are the formulae clearly and consistently indicated throughout the PDD?	PDD	DR	The description of formulae is clearly and consistently indicated throughout the PDD.	OK	OK
D.1.5. Where applicable, in accordance with procedures as required by the host Party, information on the collection and archiving of information on the environmental impacts of the project					
1.5.1. Is information on the collection and archiving of information on the environmental impacts of the project indicated?	PDD	DR	Information on the environmental impact by the project will be collected by the Department of environmental protection and will remain in print for the entire crediting period and two years after the last transfer of ERUs.	OK	OK
1.5.2. Is reference to the relevant host Party regulation(s) provided?	PDD	DR	All references presented in section F.1	OK	OK
1.5.3. If not applicable is it stated so?	PDD	DR	N/A	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
D.2. Quality control (QC) and quality assurance (QA) procedures undertaken for data monitored					
2.1. Are the quality assurance and control procedures for the monitoring process established? 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?	PDD	DR	Quality control and quality assurance procedures undertaken for data monitored are indicated in tabular format in section D.2. of the PDD.	OK	OK
2.2. Are data corresponded with those in section D.1?	PDD	DR	Yes. Data corresponded with those in section D.1 of the PDD.	OK	OK
D.3. Please describe the operational and management structure that the project operator will apply in implementing the monitoring plan					
3.1 Is it described briefly the operational and management structure that the project participants(s) will implement in order to monitor emission reduction and any leakage effects generated by the project?	PDD	DR, I	The project owner made all needed actions to implement provisions of this monitoring plan into its organizational and quality management structure. The operational and management structure is presented in Section D.3. of the PDD in Figure 4.	OK	OK
3.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	PDD	DR	Yes, all the responsibilities and institutional arrangements for data collection and archiving are clearly provided. Information on organization measures for data collection and its storage is not provided in Section D.3. of the PDD. **CAR 08.** Describe in detail the organizational structure, procedures, duties and responsibilities of each paticipant of the monitoring process. **CAR 09.** Please provide information on the procedures for data storage.	**CAR 08** **CAR 09**	OK
3.3. Does the monitoring plan, on the whole, reflect	PDD	DR	Monitoring plan, on the whole, reflects good monitoring practices appropriate to the project	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
good monitoring practices appropriate to the project type?			type		
D.4. Name of person(s)/entity(ies) establishing the monitoring plan					
4.1. Is the contact information of person(s)/entity(ies) establishing the monitoring plan provided?	PDD	DR	Contact information is provided in Annex 1 of the PDD.	OK	OK
4.2. Is the person/entity also a project participant listed in Annex 1 of PDD?	PDD	DR	PJSC "Ingulets iron ore enrichment works" is a project participant.	OK	OK
E. Estimation of greenhouse gases emission reductions					
E.1. Estimated project emissions					
1.1. Are described the formulae used to estimate anthropogenic emissions by source of GHGs due to the project (for each gas, source etc.; emissions in units of CO_2 equivalent)?	PDD	DR	Yes, they are. Formulae used to estimate project emissions are described in Section D of the PDD.	OK	OK
1.1.1. Is there a description of calculation of GHG project emissions in accordance with the formula? (Supporting documentation)	PDD	DR	The description of calculation of GHG project emissions is provided in EXCEL electronic files as supporting documentation and it is made in accordance with the indicated formula. Results of calculations are provided in Section E.1. of the PDD. **CAR 10.** Please provide the project title, version and date in the calculation of project emissions of greenhouse gases (file EXCEL).	**CAR 10**	OK
1.1.2. Have conservative assumptions been used to calculate project GHG emissions?	PDD	DR	Yes. Assumptions which were used to calculate project GHG emissions are conservative.	OK	OK
E.2. Estimated leakage					
2.1. Are described the formulae used to estimate	PDD	DR	Leakage due to the project activity is not	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
leakage due to the project activity where required (for each gas, source etc.; emissions in units of CO_2 equivalent)?			expected.		
2.1.1. Is there a description of calculation of leakage in accordance with the formula? (supporting documentation)	PDD	DR	N/A	OK	OK
2.2. Have conservative assumptions been used to calculate leakage?	PDD	DR	N/A	OK	OK
2.3. If not applicable, is it stated in the PDD?	PDD	DR	The corresponding statement was provided. For more information, please, refer to Section D.1.3.	OK	OK
E.3. Sum of E.1 and E.2.					
3.1. Does the sum of E.1. and E.2. represent the project activity emissions?	PDD	DR	Yes. The sum of E.1. and E.2. represents the project activity emissions.	OK	OK
E.4. Estimated baseline emissions					
4.1. Are the formulae used to estimate the anthropogenic emissions by source of GHGs in the baseline described (for each gas, source etc.; emissions in units of CO2 equivalent)?	PDD	DR	Formulae used to estimate baseline emissions are described in section D. of the PDD.	OK	OK
4.1.1. Is there a description of calculation of GHG baseline emissions in accordance with the formula? (supporting documentation)	PDD	DR	The description of calculation of baseline emissions is provided in EXCEL electronic files as supporting documentation and it is made in accordance with the indicated formula. Results of calculations are provided in Section E.1. of the PDD.	OK	OK
4.2. Have conservative assumptions been used to calculate baseline emissions?	PDD	DR	Conservative assumptions were used to calculate baseline emissions.	OK	OK
E.5. Difference between E.4. and E.3. representing the emission reductions of the project					
5.1. Does the difference between E.4. and E.3. represent the emission reductions due to the project	PDD	DR	The difference between E.4. and E.3. represents the emission reductions due to the	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
during a given period?			project during a period indicated in Section E.5. of the PDD.		
E.6. Table providing values obtained when applying formulae above					
6.1. Is the data provided under this section in consistency with data as presented by other chapters E of the PDD?	PDD	DR	The data provided under section E.6. is in consistency with data as presented by other chapters of the PDD.	OK	OK
6.2. Is there a table providing the total value of emission reductions?	PDD	DR	Yes. A table which providing the total value of emission reductions located in section E.6. of the PDD.	OK	OK
F. Environmental impacts					
F.1. Documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party					
1.1. Has an analysis of the possible environmental impacts of the project been sufficiently described?	PDD	DR	The analysis of possible environmental impacts of the project is provided in Section F of the PDD	OK	OK
1.2. Are transboundary environmental impacts considered in the analysis?	PDD	DR	The project is implemented in Ukraine, so transboundary impact on the territory of another state is not revealed.	OK	OK
1.3. Are all regulations and sources clearly referenced?	PDD	DR	No references.	OK	OK
F.2. If environmental impacts are considered significant by the project participants or the host Party, provision of conclusions and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party					
2.1. Is a viewpoint regarding significant environmental impacts of the project participants or the host Party indicated?	PDD	DR	Project participants concluded that the proposed project will have a positive effect on the environment.	OK	OK

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
2.2. Are there any host Party requirements for an Environmental Impact Assessment (EIA)?	PDD	DR	Implementation of the project does not contradict with any of the laws, agreements and Environment codes ratified by Ukraine and listed in Appendix E of the DBN A.2.2-1-2003. Thus, it was not necessary to carry out the EIA of the project activity	OK	OK
2.3. Have conclusions and all references to the supporting documentation on the analysis of the environmental impacts been indicated?	PDD	DR	EIA was not conducted.	OK	OK
G. Stakeholders' comments					
G.1. Information on stakeholders' comments on the project, as appropriate					
1.1. Have relevant stakeholders been consulted and how?	PDD	DR	Implementation of the project does not pose an environmental hazard and carries a negative environmental impact; therefore, in accordance with the relevant rules of the host Party, there was no requirement to inform stakeholders. Their comments will be collected during the time of this PDD publication in the web-page of UNFCCC during the determination.	OK	OK
1.1.1. Have appropriate media been used to invite comments by local stakeholders?	PDD	DR	Mass media was not attracted to collect comments from local stakeholders.	OK	OK
1.2. Is there a list of stakeholders from whom comments on the project have been received?	PDD	DR	N/A	OK	OK
1.3. Is the nature of comments provided?	PDD	DR	N/A	OK	OK
1.4. Has due account been taken of any stakeholder comments received?	PDD	DR	N/A	OK	OK
Annexes					
Annex 1. Contact information on project participants					

CHECKLIST QUESTION	Ref.*	MoV**	COMMENTS	Draft Concl.	Final Concl.
1.6. Is the information provided in consistency with the one given under section A.3?	PDD	DR	Yes, the information provided on project participants in Annex 1 is in consistency with the one given in Section A.3.of the PDD.	OK	OK
1.7. Are the mandatory fields for each organisation listed in section A.3. of the PDD filled notably organisation, name of contact person, street, city, postal code, country, telephone number(s) and fax number or e-mail address?	PDD	DR	All mandatory fields for each organization listed in the Section A.3. of the PDD are filled.	OK	OK
Annex 2. Baseline information					
2.1. Is a table containing the key elements of the baseline (including variables, parameters and data sources) provided?	PDD	DR	Table, which contains the basic elements of the baseline, is given in Annex 2 of the PDD.	OK	OK
2.2. If additional background information on baseline data is provided: is this information in consistency with data presented by other sections of the PDD?	PDD	DR	Additional background information on baseline is not available.	OK	OK
Annex 3. Monitoring plan				OK	OK
3.1. Is the detail description of all key elements of monitoring plan provided?	PDD	DR	All the necessary information is presented in section D of the PDD.	OK	OK
3.2. Is the provided information on monitoring plan in consistency with data presented in section D of the PDD?	PDD	DR	The information on monitoring plan is in a consistency with the one given under section D. of the PDD.	OK	OK

Ref.* - gives reference to Category 1 and Category 2 documents (see section 3.1. of the Determination Report) where the answer to the checklist question or item is found.

MoV** - Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.

Table 3 - Resolution of Corrective Action and Clarification Requests я

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
FAR 01. The project has the approval of the Parties.	Table 1, checklist question 1	Approval by the Parties involved will be obtained after a positive determination opinion, under the law of the Parties.	Endorsement from Ukraine (Host Party) was obtained from the National Authority as the Letter of Endorsement #3486/23/7 dated 15.11.2012. Approval by the Parties involved will be obtained after a positive determination opinion, under the law of the Parties. **Issue is temporarily closed and pending for a decision before the first verification of the project.**
CAR 01. The purpose of the project implementation is not indicated in the Section A.2 of the PDD.	Table 2, checklist question A.2.1.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CAR 02. Please, provide annual average of estimated emission reductions over 2008-2012 period under Section A.4.3.1.	Table 2, checklist question A.2.1.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CAR 03. To add transparency project description, please use the same terms to describe equipment in different sections of the PDD.	Table 2, checklist question A.4.2.1.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CAR 04. Please, provide the definition of all abbreviations and acronyms in the text of PDD.	Table 2, checklist question B.1.3.3.	This information was provided in updated PDD version 2.0.	PDD was updated as requested.

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
			Issue is closed.
CAR 05. Please provide the references to Orders of the State Environmental Investment Agency for 2008-2011 period.	Table 2, checklist question B.1.3.3.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CAR 06. Please provide the version of the investment analysis assessment methodology.	Table 2, checklist question B.1.9.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CAR 07. Please provide more information on measuring instruments, used for monitoring of the GHG emissions.	Table 2, checklist question D.1.1.1.3.	Details on the measuring complex used for monitoring of ERUs under the project will be provided as part of monitoring reports for the respective periods.	**Issue is closed**
CAR 08. Describe in detail the organizational structure, procedures, duties and responsibilities of each paticipant of the monitoring process.	Table 2, checklist question D.3.2	PDD provides a schematic representation of the organizational structure and the structure of the distribution of responsibility for the monitoring of emission reductions under the project. More structure and procedures, duties and responsibilities of each member of the monitoring process will be presented in the monitoring reports for the respective periods.	**Issue is closed**
CAR 09. Please provide information on the procedures for data storage.	Table 2, checklist question D.3.2.	The information was presented in an updated PDD, version 2.0.	PDD was updated as requested. **Issue is closed.**
CAR 10. Please provide the project title, version and date in the calculation of project emissions of greenhouse gases (file EXCEL).	Table 2, checklist question E.1.1.	The information was presented in an updated calculation file, version 2.0.	Calculation of greenhouse gases (file EXCEL) was updated as requested. **Issue is closed.**

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
CL 01. Please, indicate the type of frequency converters for pump equipment and electric motors.	Table 2, checklist question A.4.2.1.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CL 02. Please, provide the number of installed floodlights KTU-01-2000-2.	Table 2, checklist question A.4.2.1.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CL 03. Please provide explanations and evidence that measures on modernization of vibration feeders PT-196 were not implemented due to the repair works.	Table 2, checklist question A.4.2.1.	Modernization includes the measures that require capital investments and, but not routine maintenance and preventive measures, since the term of depreciation of equipment has been exhausted. It also shows the total cost of the project.	Explanation provided is accepted. **Issue is closed.**
CL 04. Please provide technical specifications and amount of hydraulic dredge pumps HHD.	Table 2, checklist question A.4.2.1.	This information was provided in updated PDD version 2.0.	PDD was updated as requested. **Issue is closed.**
CL 05. Provide evidence that the project facility is 1st class electricity consumer.	Table 2, checklist question B.1.3.3.	Please refer to supporting document "Reconciliation statement".	The document is received, the data provided in the PDD version 2.0 available and uncontroversial. **Issue is closed.**
CL 06. Please clarify what regulations adopted by the project owner will be used as a QC/QA procedures related to basic parameters are be used? (Section B.1., Table with parameters).	Table 2, checklist question B.1.9.	Periodically performed cross-checks with the nominal characteristics of the equipment. Monthly and annual reports are based on data from monthly technical reports and periodic cross-checks these data with earlier statistics. This information was provided in updated PDD version 2.0.	Explanation provided is accepted. **Issue is closed.**

Draft report clarifications and corrective action requests by determination team	Ref. to checklist question in tables 1, 2	Summary of project owner response	Determination team conclusion
CL 07. Please provide supporting documents to prove the starting date of the project, when the project implementation, construction or real project activity have started.	Table 2, checklist question C.1.1.	Starting date of the project is 12/01/2005. It is the date when the decision on investing the measures aimed on electric energy efficiency was made. Please refer to supporting document "Minutes". This information was provided in updated PDD version 2.0.	The document is received, the data provided in the PDD version 2.0 available and uncontroversial. **Issue is closed.**
CL 08. Please provide supporting document with the starting date of the crediting period that is specified in the PDD.	Table 2, checklist question C.3.1.	Starting date of the crediting period is 01/01/2007. It is the date when the pump GR 160/31.5 was withdrawn of the technical flowchart. Please, refer to the supporting document "Starting date of the crediting period". This information was provided in updated PDD version 2.0.	The document is received, the data provided in the PDD version 2.0 available and uncontroversial. **Issue is closed.**
CL 09. Please provide an evidence that the equipment after the project will operate within the specified period.	Table 2, checklist question C.3.2.	All power equipment is designed for trouble-free operation for many years under proper use and maintenance. As a confirmation that the equipment after the project will operate within the specified period may be the fact that the previous equipment was operated for more than 20 years.	Explanation provided is accepted. **Issue is closed.**