

# VERIFICATION REPORT "KRAMATORSKTEPLOENERGO" LLC

VERIFICATION OF THE

# "RECONSTRUCTION OF KRAMATORSK HEAT AND POWER PLANT"

INITIAL AND 1<sup>ST</sup> PERIODIC (2008)

REPORT NO. UKRAINE-/0056/2009
REVISION NO. 01

**BUREAU VERITAS CERTIFICATION** 



### **VERIFICATION REPORT**

Date of first issue: 01 July 2010	Organizational unit: Bureau Veritas Certification
5 . ca., 25 . c	Holding SAS
"Kramatorskteploenergo" LLC	Client ref.: Mr. Kudryavtsev I.

Summary

Bureau Veritas Certification has made the verification of the "Reconstruction of Kramatorsk heat and power plant" project of "Kramatorskteploenergo" LLC located in Kramatorsk, Ukraine on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting, as well as the host country criteria under Track 1 procedure.

The verification scope is defined as a periodic independent review and post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the Monitoring Report, Project Design Document and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures. The first output of the verification process is a list of Clarification Requests, Corrective Actions Requests, Forward Actions Requests (CL, CAR and FAR), presented in Appendix A.

The verification is based on the Monitoring Report (covers January 1<sup>st</sup> 2008 – December 31<sup>st</sup> 2008), the determined PDD, Version 2.2, and supporting documents made available to Bureau Veritas Certification by the project participant.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in validated and registered project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated without material misstatements.

Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the valid and registered project baseline and monitoring, and its associated documents. Based on information seen and evaluated we confirm that the implementation of the project has resulted in 49 658 tCO2e reductions during period from 01/01/2008 up to 31/12/2008.

On behalf of verification team, Flavio Gomes, the Bureau Veritas Certification Holding SAS Global Product Manager for Climate Change, approved final version of the Verification Report and it is signed by Ivan Sokolov authorized Bureau Veritas Certification Holding SAS Local product manager for Climate Change in Ukraine.

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### **Abbreviations**

AIE Accredited Independent Entity

BVCH Bureau Veritas Certification Holding SAS

CAR Corrective Action Request
CL Clarification Request
CO<sub>2</sub> Carbon Dioxide

ERU Emission Reduction Unit FAR Forward Action Request GHG Green House Gas(es) HPP Heat and power plant

IETA International Emissions Trading Association

IEEC Institute for Environment and Energy Conservation

JI Joint Implementation
JISC JI Supervisory Committee
MoV Means of Verification
MP Monitoring Plan

PCF Prototype Carbon Fund PDD Project Design Document

UNFCCC United Nations Framework Convention on Climate Change



Table	of Contents Pa	ge
1 1.1 1.2 1.3	INTRODUCTION Objective Scope GHG Project Description	4 4 5 5
2 2.1 2.2 2.3	METHODOLOGY	8 11 11
3 3.1 3.2 3.3 3.4 3.5	INITIAL VERIFICATION FINDINGS  Remaining issues CAR's, FAR's from previous determination/verification  Project Implementation Internal and External Data Environmental and Social Indicators Management and Operational System	13 14 17 17
4 4.1 4.2 4.3 4.4	FIRST PERIODIC VERIFICATION (2008) FINDINGS	18 18 18 19 26
5	PROJECT SCORECARD	27
6	INITIAL AND FIRST PERIODIC VERIFICATION STATEMENT	27
7	REFERENCES	28
APPE	NDIX A: COMPANY JI PROJECT VERIFICATION PROTOCOL	23
APPE	NDIX B: VERIFICATION TEAM	55
APPE	NDIX C: DOCUMENTS CHECKED DURING VERIFICATION	59



### **VERIFICATION REPORT**

### 1 INTRODUCTION

"Kramatorskteploenergo" LLC has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Reconstruction of Kramatorsk heat and power plant" (hereafter called "the project") at Kramatorsk, Ukraine.

This report summarizes the findings of the verification of the project, performed on the basis of criteria given to provide for consistent project operations, monitoring and reporting, and contains a statement for the verified emission reductions. The order includes the initial and first periodic verification of the project for 2008.

It is based on the Initial Verification Report Template Version 3.0, December 2003 and on the Periodic Verification Report Template Version 3.0, December 2003, both part of the Validation and Verification Manual (VVM) published by International Emission Trading Association (IETA).

Initial and first periodic verification has been performed as one integrated activity. It consisted of a desk review of the project documents including PDD, monitoring plan, determination report, monitoring report and further documentation.

The results of the determination were documented by Bureau Veritas Certification Holding SAS the report: "Determination the in Reconstruction of Kramatorsk heat and power plant" Report No. UKRAINE-0029/2008, Revision No.01.

PDD of the project have been submitted to National Environmental Investments Agency of Ukraine and the Letter of Approval was received #1469/23/7 dated 04/12/2009. Germany Environmental Agency issued the Letter of Approval dated 25/03/2010.

### Objective

Verification is the periodic independent review and ex post determination by the AIE of the monitored reductions in GHG emissions during defined verification period.

The objective of verification can be divided in Initial Verification and Periodic Verification.

Initial Verification: The objective of an initial verification is to verify that the project is implemented as planned, to confirm that the monitoring system is in place and fully functional, and to assure that the project will generate verifiable emission reductions. A separate initial verification prior to the project entering into regular operations is not a mandatory

Periodic Verification: The objective of the periodic verification is to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan; furthermore the periodic verification evaluates the GHG reduction data and express a conclusion with a high, but not absolute. level of assurance about whether the reported GHG emission reduction data is free of material misstatements; and verifies that the reported GHG



### **VERIFICATION REPORT**

emission data is sufficiently supported by evidence, i.e. monitoring records. If no prior initial verification has been carried out, the objective of the first periodic verification also includes the objectives of the initial verification.

The verification follows UNFCCC criteria referring to the Kyoto Protocol criteria, the JI rules and modalities, and the subsequent decisions by the JISC, as well as the host country criteria.

### 1.2 Scope

Verification scope is defined as an independent and objective review and ex post determination by the AIE of the monitored reductions in GHG emissions. The verification is based on the submitted monitoring report and the determined project design document including 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. Bureau Veritas Certification has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach in the verification, focusing on the identification of significant risks of the project implementation and the generation of ERUs.

The verification is not meant to provide any consulting towards the Client. However, stated requests for forward actions and/or corrective actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

The audit team has been provided with a Monitoring Report version 1.0 and underlying data records, covering the period 01 January 2008 to 31 December 2008 inclusive.

### 1.3 GHG Project Description

The main goal of Joint implementation project "Reconstruction of Kramatorsk heat and power plant" is implementation of measures which will improve fuel consumption efficiency and will reduce own consumption of electric power by the plant, therefore resulting in GHG emissions reduction to the atmosphere.

The project foresees large-scale reconstruction of existing equipment of Kramatorsk HPP. The program of reconstruction of Kramatorsk HPP within Joint implementation includes the following measures:

- -Reconstruction of boilers № 7, 9;
- -Reconstruction of turbines № 3, 4;
- -Reconstruction of cooling tower № 1;
- -Frequency controllers' installation;
- -Feeding pump replacement №5;
- -Hydraulic ash removal modernization;

In addition to this, rehabilitation of district heating system in Kramatorsk is foreseen within JI project. It includes:

# B U R E A U VERITAS

### **VERIFICATION REPORT**

- Replacement of old heat pipelines which supply consumers with heat power generated at HPP by new pre-insulated pipes in polyurethane foam cover and pipes with lagging from mineral cotton;
- Replacement of 200 capacitive heat exchangers by plate heat exchangers at substations of the town;
- Major rehabilitation of boiler-rooms with replacement of pipes and valves.

As the result of reconstruction the efficiency of Kramatorsk HPP equipment will increase from 56% of gross efficiency (combined heat and electric capacity with the use of natural gas) to approximately 78% of efficiency with the use of natural gas and 65% of efficiency – with the use of coal. The increase of the equipment efficiency will lead to reduction of the level of fuel consumption. As far as natural gas is more expensive compared to coal, it is considered that fuel savings are to be completely savings of natural gas. This is conservative assumption. Besides, the reduction of own electric power consumption will allow increasing supply of electricity into the grid therefore contributing to additional emission reductions.

The project with the total investment costs over 67 million UAH will give the following benefits:

- Positive effect on the environment;
- Improvement of technical and economic indicators of work of HPP;
- · Positive social effect.

Therefore, project implementation will be economically and socially beneficial.

Positive aspects of social and economic effect from the project implementation:

- -The national grid of Ukraine and industrial consumers of Kramatorsk are expected to benefit from increased of reliability of power supply by the Kramatorsk HPP;
- -Local community and employees of Kramatorsk HPP will benefit from the jobs available on long term prospective due to more reliable work of the enterprise in future;
- -The industrial and residential consumers of Kramatorsk who will receive a better quality heat supply service.

Positive aspects of project effect on the environment of Kramatorsk:

- -as a result of project implementation the amount of fossil fuel (valuable non-renewable source of energy) will be reduced at the process of heat and power energy generation;
- -Project implementation will reduce greenhouse and toxic gases emissions (carbon dioxide, nitric oxide and carbon monoxide) and prevent further GHG accumulation at the atmosphere what in its turn causes climate change.

### 2 METHODOLOGY



### **VERIFICATION REPORT**

The verification is as a desk review and field visit including discussions and interviews with selected experts and stakeholders.

In order to ensure transparency, a verification protocol was customized for the project, according to the Validation and Verification Manual (IETA/PCF) a verification protocol is used as part of the verification (see Section 7). The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from verifying the identified criteria. The verification protocol serves the following purposes:

- It organises, details and clarifies the requirements the project is expected to meet; and
- It ensures a transparent verification process where the verifier will document how a particular requirement has been verified and the result of the verification;

The verification protocol consists of one table under Initial Verification checklist and four tables under Periodic verification checklist. The different columns in these tables are described in Figure 1.

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification procedures.

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

Initial Verification Protocol Table 1			
Objective	Reference	Comments	Conclusion (CARs/FARs)
The requirements the project must meet	Gives reference to where the requirement is found.	Description of circumstances and further comments on the conclusion	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non-compliance of the stated requirements. Forward Action Request (FAR) indicates essential risks for further periodic verifications.

Periodic Verification Checklist Protocol Table 2: Data Management System/Controls		
Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
The project operator's data management system/controls are assessed to identify reporting risks and to assess the data management system's/control's ability to mitigate reporting risks. The GHG data management system/controls are assessed	A score is assigned as follows:  • Full - all best-practice expectations are implemented.  • Partial - a proportion of the	Description of circumstances and further commendation to the conclusion. This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non compliance with stated requirements. The corrective action requests are numbered and presented to the client in the verification report. The Initial Verification has

# TAZB BUREAU VERITAS

against the expectations detailed in the table.	best practice expectations is implemented  • Limited - this should be given if little or none of the system component is in place.	additional Forward Action Requests (FAR). FAR indicates essential risks for further periodic verifications.
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Periodic Verification Protocol Table 3: GHG calculation procedures and management control testing			
Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks	
Identify and list potential reporting risks based on an assessment of the emission estimation procedures, i.e.  Ithe calculation methods,  raw data collection and sources of supporting documentation,  reports/databases/informat ion systems from which data is obtained.  Identify key source data. Examples of source data include metering records, process monitors, operational logs, laboratory/analytical data, accounting records, utility data and vendor data. Check appropriate calibration and maintenance of equipment, and assess the likely accuracy of data supplied.  Focus on those risks that impact the accuracy, completeness and consistency of the reported data. Risks are weakness in the GHG calculation systems and may include:  Imanual transfer of data/manual calculations,  unclear origins of data,  cacuracy due to technological limitations,  lack of appropriate data protection measures? For example, protected calculation cells in spreadsheets and/or password restrictions.	Identify the key controls for each area with potential reporting risks. Assess the adequacy of the key controls and eventually test that the key controls are actually in operation.  Internal controls include (not exhaustive):   > Understanding of responsibilities and roles  > Reporting, reviewing and formal management approval of data;  > Procedures for ensuring data completeness, conformance with reporting guidelines, maintenance of data trails etc.  > Controls to ensure the arithmetical accuracy of the GHG data generated and accounting records e.g. internal audits, and checking/ review procedures;  > Controls over the computer information systems;  > Review processes for identification and understanding of key process parameters and implementation of calibration maintenance regimes  > Comparing and analysing the GHG data with previous periods, targets and benchmarks.	Identify areas of residual risks, i.e. areas of potential reporting risks where there are no adequate management controls to mitigate potential reporting risks. Areas where data accuracy, completeness and consistency could be improved are highlighted.	



When testing the specific internal controls, the following questions are considered:	
<ol> <li>Is the control designed properly to ensure that it would either prevent or detect and correct any significant misstatements?</li> </ol>	
2. To what extent have the internal controls been implemented according to their design;	
3. To what extent have the internal controls (if existing) functioned properly (policies and procedures have been followed) throughout the period?	
4. How does management assess the internal control as reliable?	

Periodic Verification Protocol Table 4: Detailed audit testing of residual risk areas and random testing		
Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
List the residual areas of risks (Table 2 where detailed audit testing is necessary.  In addition, other material areas may be selected for detailed audit testing.	The additional verification testing performed is described. Testing may include:  1. Sample cross checking of manual transfers of data  2. Recalculation  3. Spreadsheet 'walk throughs' to check links and equations  4. Inspection of calibration and maintenance records for key equipment  Check sampling analysis results  Discussions with process engineers who have detailed knowledge of process uncertainty/error bands.	Having investigated the residual risks, the conclusions should be noted here. Errors and uncertainties should be highlighted.  Errors and uncertainty can be due to a number of reasons:  Calculation errors. These may be due to inaccurate manual transposition, use of inappropriate emission factors or assumptions etc.  Lack of clarity in the monitoring plan. This could lead to inconsistent approaches to calculations or scope of reported data.  Technological limitations. There may be inherent uncertainties (error bands) associated with the methods used to measure emissions e.g. use of particular equipment such as meters.  Lack of source data. Data for some sources may not be cost effective or practical to collect. This may result in the use of default data which has been derived based on certain assumptions/conditions and which will therefore have varying applicability in different situations.  The second two categories are explored with the site personnel, based on their knowledge

# VERIFICATION REPORT

	and experience of the processes. High risk process parameters or source data (i.e. those
	with a significant influence on the reported data, such as meters) are reviewed for these uncertainties.

Verification Protocol Table 5: Resolution of Corrective Action and Clarification Requests			
Report clarifications and corrective action requests	Ref. to checklist question in tables 2/3		Verification conclusion
If the conclusions from the Verification are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	number in Tables 2, 3	project participants during the communications with the verification team	This section should summarize the verification team's responses and final conclusions. The conclusions should also be included in Tables 2, 3 and 4, under "Final Conclusion".

Figure 1 Verification protocol tables

### 2.1 Review of Documents

The Monitoring Report (MR) version 01 submitted by "Kramatorskteploenergo" LLC and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), applied methodology, Kyoto Protocol, Clarifications on Verification Requirements to be checked were reviewed. To address Bureau Veritas Certification corrective action and clarification requests, "Kramatorskeploenerg" LLC revised the MR and resubmitted it as version 04 dated 12/04/2010.

The verification findings presented in this report relate to the project as described in the PDD version 2.2 and Monitoring Report version 01 dated 06/11/2009, version 02 dated 11/11/2009, version 03 dated 25/11/2009, version 04 dated 12/04/2010 and last version 05 dated 12/04/2010.

### 2.2 Follow-up Interviews

On 15/10/2009 Bureau Veritas Certification performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of "Kramatorskteploenergo" LLC, developer and local stakeholders were interviewed (see References). The main topics of the interviews are summarized in Table 1.



VERIFICATION REPORT

### **Table 1 Interview topics**

Interviewed organization	Interview topics
"Kramatorskteploenergo" LLC	Organizational structure.
	Responsibilities and authorities.
	Training of personnel.
	Quality management procedures and technology.
	Implementation of equipment (records).
	Metering equipment control.
	Metering record keeping system, database.
Local Stakeholder:	Social impacts.
District State Administration	Environmental impacts.
Consultant:	Baseline methodology.
GreenStream Network GmbH	Monitoring plan.
	Monitoring report.
	Deviations from PDD.

# 2.3 Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the GHG emission reduction calculation.

Findings established during the initial verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

Corrective Action Requests (CAR) are issued, where:

- i) there is a clear deviation concerning the implementation of the project as defined by the PDD;
- ii) requirements set by the MP or qualifications in a verification opinion have not been met; or
- iii) there is a risk that the project would not be able to deliver (high quality) ERUs.

Forward Action Requests (FAR) are issued, where:

- iv) the actual status requires a special focus on this item for the next consecutive verification, or
- v) an adjustment of the MP is recommended.

The verification team may also use the term Clarification Request (CL), which would be where:

vi) additional information is needed to fully clarify an issue.



### **VERIFICATION REPORT**

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

### 3 INITIAL VERIFICATION FINDINGS

In the following sections, the findings of the verification are stated. The verification findings for each verification subject are presented as follows:

- 1) The findings from the desk review of the original project activity 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 Verification Protocol in Appendix A.
- 2) The conclusions for verification subject are presented.

In the final verification report, the discussions and the conclusions that followed the preliminary verification report and possible corrective action requests are encapsulated in this section.

# 3.1 Remaining issues CAR's, FAR's from previous determination/verification

One task of the verification is to check the remaining issues from the previous determination and verification or issues which are clearly defined for assessment in the PDD. The determination report prepared by Bureau Veritas Certification Holding SAS notes following open issues.

### **Corrective Action Request 2 (CAR2):**

After finishing of project determination report, the PDD and Determination Report will be presented to National Environmental Investments Agency of Ukraine for receiving of the Letter of Approval. The Letter of Approval from the country - investor will be provided after approval of project by Ukraine.

There is no evidence of written project approvals by the Parties involved.

### Response

Letter of Approval Nº 1469/23/7 was issued by the National Agency of Ecological Investments from  $04^{th}$  of December 2009. Germany Environmental Agency issued the Letter of Approval dated 25/03/2010.

### Conclusion of the Verification team

Evidencing documents were seen and found satisfactory.





# **VERIFICATION REPORT**

# 3.2 Project Implementation

# 3.2.1 Discussion

Nº	Measures	Beginning of design stage	Beginning of construction	Commissioning
1	Reconstruction of boiler № 7	_	September 2008	January 2009
2	Reconstruction of boiler № 9		April 2008	November 2008
3	Modernization of turbine PT-60-90/13 st. №3	September 2007	April 2008	August 2008
4	Modernization of turbine PT-60-90/13 st. №4	September 2008	April 2009	August 2009
5	Reconstruction of cooling tower № 1	May 2006	June 2008	September 2008
6	Capital repair of boiler- rooms with replacement of tubes and valves	April 2008	June 2008	November 2008
7	Replacement of capacitive heat exchangers by lamellar - 35 un.  40 unit 65 unit 60 unit	May 2008  May 2009  May 2010  May 2011	July 2008 July 2009 July 2010 July 2011	November 2008 November 2009 November 2010 November 2011
8	Replacement of heat supply pipelines by pipeline from polyurethane foam	June 2008	June 2008 2009 2010 2011 2012	November 2008 2009 2010 2011 2012

Table 1. Status of implementation (according to PDD version 2.2)

Changes to the schedule are not foreseen.

# 3.2.2 Findings





Findings, corrective action requests and clarifications are listed in the Table below.

### 3.2.3 Conclusion

The project complies with the requirements.

### 3.3 Internal and External Data

### 3.3.1 Discussion

The control and monitoring system is divided into three main parts:

- 1) Power measurement;
- 2) Heat measurement;
- 3) Fuel measurement (natural gas, coal).

### Power measurement

The following power parameters have to be measured for this project:

total generated power, power consumption for own needs of HPP, power supplied to the consumers.

There are 3 technical flow meters measuring power generated by turbines.

There are 114 technical flow meters which measure power consumption for own needs of HPP.

There are 14 commercial flow meters which measure the amount of power supplied to the consumers.

The amount of power generated and power supplied to the consumers is kept in the form of reports on generation and supply and in the registration journal of HPP as well as in the reports on power sales.

### Heat measurement

The HPP is equipped with heat measurement devices, which control heat supply to the consumers. Total amount of heat generated at HPP is also kept in the journal of heat supplied to the consumers. The data on heat supply from each of 4 boiler-rooms is used to determine the heat saving from heat supply network rehabilitation. Data on heat supply to the consumers from boiler-rooms is saved at the journal of accounting of heat supplied to the consumers (boiler-rooms' data). The data on generated steam by boilers №№ 7, 9 is used to determine the amount of heat generated by these boilers. The HPP is equipped by special flow-meters which measure the amount of generated steam by boilers №№ 7, 9.

Measurement of fuel consumption (natural gas, coal)

Measurement of natural gas consumption

The volume of consumed gas is measured by means of "Universal-02" gas flow meter. The software of "Universal-02" gas flow meter has following functions: transformation of



### **VERIFICATION REPORT**

the entering signal of gas flow meters, vertical converters of consumption, transformation and measuring of incoming signals from converters of measured pressure and gas temperature. It also calculates and summarizes the data on volume and volume consumption according to the conditions of GOST 2939-63 (standard conditions). "Universal-02" gas flow meter is certified for serial production and use in Ukraine and is listed in the state registry under U759-01.

"Universal-02" gas flow meter keeps in memory the archives of the following parameters which are summarized into hourly and daily archives:

- consumption of energy;
- emergency cases;
- access to the operative memory device with possibility of its transfer by RS232 or RS485 at PC for further processing and printing.

Data on quality of natural gas (physical and chemical indicators) is put into the program "Universal-02" manually according to the Passport or telephone message (in case of indicators changes) given by Kramatorsk Department of gasification and gas supply. The acceptance certificates of natural gas, fuel diagrams and accounting journals are used for cross-checking of data on the amount of consumed natural gas volume.

### Measurement of coal

The arrival of coal had been controlled by means of RS-150C13V mechanical car scale, which was leased from Novokramatorsk machine building plant in 2008.

The reserves of coal at the store for the campaign period are measured by independent experts. Coal amount is calculated by means of accounting of coal carrier's capacity and content of the bunkers. Coal remains are measured during quarterly inventories. The acts of coal measurement and accounting journal are used for cross-check of coal consumption data. However, the main data is the data of measurement of coal by the scale.

Other parameters used during calculation are not measured. These parameters are listed in the table below.

Identification number	Variable	Source of data	Unit	Comment
КЗ	Carbon emission factor for coal	IPCC	t C/TJ	IPCC values are given in Section 2 of IPCC Guidelines for National Greenhouse Gas Inventories (Volume 2 (Energy), 1996)
К6	Carbon emission factor for natural gas	IPCC	t C/TJ	IPCC values are given in Section 2 of IPCC Guidelines for National Greenhouse Gas Inventories (Volume 2 (Energy), 1996)



### **VERIFICATION REPORT**

K10	Carbon emission factor of the electric grid of Ukraine	Baseline study of UES of Ukraine	t CO2/ kWh	Carbon emission factor for national grid of Ukraine is given in JI PDD 0018 «Energy saving programme at "Istil" mini steel mill, Ukraine»
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### 3.3.2 Findings

Findings, corrective action requests and clarifications are listed in the Table below.

### 3.3.3 Conclusion

The project complies with the requirements.

### 3.4 Environmental and Social Indicators

### 3.4.1 Discussion

The project improved efficiency of use of natural gas, electricity and heat at the Kramatorsk HPP and thus leaded to decrease of harmful emissions. This project by reducing GHG emissions contributes towards a better environment and hence works towards social well-being for all. Project implementation will lead to improvement of ecological climate of the region, increase of payments to the budgets of all levels for social needs, improvement of customer's service quality.

### 3.4.2 Findings

None

### 3.4.3. Conclusion

The project complies with the JI requirements as well as with the local requirements.

### 3.5 Management and Operational System

### 3.5.1 Discussion

The general project management is done by the General Director of Kramatorsk HPP and the First Deputy Director. The Director manages and



### **VERIFICATION REPORT**

coordinates activity of all departments. Every parameter is monitored by the respective department headed by the Head of the department.

### 3.5.2 Findings

The project complies with the JI requirements as well as with the local requirements.

### 3.5.2 Conclusion

The Monitoring Report and the Management and Operational Systems are eligible for reliable project monitoring.

### 4 FIRST PERIODIC VERIFICATION FINDINGS

### 4.1 Completeness of Monitoring

### 4.1.1 Discussion

The reporting procedures reflect the monitoring plan completely. It is confirmed that the monitoring report does comply with the monitoring methodology and PDD.

All parameters were determined as prescribed. The complete data is stored electronically and documented. The necessary procedures have been defined in internal procedures.

According to PDD version 2.2, emission reductions during 2008 monitoring period were expected to be 33379 t CO2 e. According to Monitoring Report version 05 emission reductions achieved are 49658 t CO2 e.

### 4.1.2 Findings

Findings, corrective action requests and clarifications are listed in the Table below.

### 4.1.3 Conclusion

The project complies with the requirements.

### 4.2 Accuracy of Emission Reduction Calculations

### 4.2.1 Discussion

The audit team confirms that emission reduction calculations have been performed according to the Monitoring Plan.

According to the Article 10 paragraph 1 of the Ukrainian Law "On Metrology and Metrological Activity" measurement results can be used in case if appropriate characteristics of errors and uncertainty are known.



### **VERIFICATION REPORT**

Characteristics of errors are presented in the passports of the equipment. The level of uncertainty is considered as low which is why it can be neglected in the calculations.

Project consists of the 13 monitoring parameters. Some of the parameters that are used in the calculation of the baseline and project emissions are measured directly with the use of special equipment while others are estimated with the use of appropriate coefficients.

### 4.2.2 Findings

Findings, corrective action requests and clarifications are listed in the Table below.

### 4.2.3 Conclusion

The project complies with the requirements.

### 4.3 Quality Evidence to Determine Emissions Reductions

### 4.3.1 Discussion

Concerning verification the calculation of emission reductions is based on internal and external data. The origin of those data was explicitly checked. Further on, entering and processing of those data in the monitoring workbook Excel sheet was checked where predefined algorithms compute the annual value of emission reductions. All equations and algorithms used in the different workbook sheets were checked. Inspection of calibration and maintenance records for key equipment was performed for all relevant meters.

Necessary procedures have been defined in internal procedures and additional internal documents relevant for the determination of the various parameters on daily basis.

### 4.3.2 Findings

None

### 4.3.3 Conclusion

The project complies with the requirements.

### 4.4 Management System and Quality Assurance

### 4.4.1 Discussion

The general project management is done by the General Director of Kramatorsk HPP and the First Deputy Director. The Director manages and coordinates activity of all departments. Every parameter is monitored by the respective department headed by the Head of the department.

BUREAU VERITAS

**VERIFICATION REPORT** 

### 4.4.2 Findings

Findings, corrective action requests and clarifications are listed in the Table below.

### 4.4.3 Conclusion

The project complies with the requirements.

### 5 PROJECT SCORECARD

Risk Areas		Conclusions			Summary of findings and comments
		Baseline Emissions	Project Emissions	Calculated Emission Reductions	
Completeness	Source coverage/ boundary definition	<b>✓</b>	<b>~</b>	<b>~</b>	All relevant sources are covered by the monitoring plan and the boundaries of the project are defined correctly and transparently.
Accuracy	Physical Measurement and Analysis	✓	<b>√</b>	<b>√</b>	State-of-the-art technology is applied in an appropriate manner. Appropriate backup solutions are provided.
	Data calculations	✓	✓	✓	Emission reductions are calculated correctly
	Data management & reporting	✓	✓	✓	Data management and reporting were found to be satisfying.
Consistency	Changes in the project	✓	✓	✓	Results are consistent to underlying raw data.

### 6 INITIAL AND FIRST PERIODIC VERIFICATION STATEMENT

Bureau Veritas Certification has performed a verification of the JI project "Reconstruction of Kramatorsk heat and power plant". The verification is based on the currently valid documentation of the United Nations Framework Convention on the Climate Change (UNFCCC).

The management of the Kramatorsk HPP is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring and Verification Plan indicated in the final PDD version 2.2. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project is the responsibility of the management of the project.

VERIFICATION REPORT

Bureau Veritas Certification verified the Project Monitoring Report version 04 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in validated and registered project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

Bureau Veritas Certification can confirm that the GHG emission reduction is calculated without material misstatements. Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the valid and registered project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated we confirm the following statement:

Reporting period: From 01/01/2008 to 31/12/2008 Baseline emissions : 399288 t CO2 equivalents. Project emissions : 349630 t CO2 equivalents. Emission Reductions: 49658 t CO2 equivalents.

### 7 REFERENCES

### **Category 1 Documents:**

Documents provided by that relates directly to the GHG components of the project.

- /1/ Project Design Document, version 2.2 dated 28 of August 2008
- /2/ Monitoring Report version 01, dated 27 of May 2009
- /3/ Monitoring Report version 05 dated 12 of April 2010
- Determination Report by Bureau Veritas Certification Holding SAS dated 16 of /4/ June 2009
- Letter of Approval of National Ecological Investment Agency of Ukraine, № /5/ 1469/23/7 from 04.12.2009
  - Approval of Voluntary participation in a Joint Implementation project of
- Germany Environmental Agency received the Letter of Approval dated /6/ 25/03/2010.

### **Category 2 Documents:**

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

Documents checked during the verification onsite are presented in /1/ Annex C



### **VERIFICATION REPORT**

### Persons interviewed:

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

- /1/ Igor Kudryavtsev: general director;
- /2/ Igor Kibalnyk: head of technical department;
- /3/ Volodymyr Zverev: depute head of product department;
- /4/ Natalya Novosyolova: engineer of product department;
- /5/ Anatoliy Shylo: head of work safety department;
- /6/ Valentyna Kostyanyuk: engineer metrologist I category;
- /7/ Sergey Baranovych: electric department
- 78/ Tatiana Zolotova, GreenStream Network GmbH representative

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### VERIFICATION REPORT

### APPENDIX A: COMPANY JI PROJECT VERIFICATION PROTOCOL

# APPENDIX A: COMPANY JI PROJECT VERIFICATION PROTOCOL

### **Initial Verification Protocol Table 1**

Objective	Reference	Comments	Conclusion (CARs/FARs)
1. Opening Session			
1.1. Introduction to audits	/2/	The intention and the target of the audit were illustrated to the participants of the audit. Participants at the audit were the following persons:  Verification team: Mrs. Nadezhda Kaiiun Lead Verifier, Bureau Veritas Ukraine, Kateryna Zinevych, Verifier, Bureau Veritas Ukraine, Oleg Skoblyk, Verifier, Bureau Veritas Ukraine.  Interviewed persons: «Kramatorskteploenergo» LLC:  Igor Kudryavtsev: general director; Igor Kibalnyk: head of technical department; Volodymyr Zverev: depute head of product department; Natalya Novosyolova: engineer of product department; Anatoliy Shylo: head of work safety department; Valentyna Kostyanyuk: engineer metrologist I category; Sergey Baranovych: electric department;	ОК



Objective	Reference	Comments	Conclusion (CARs/FARs)
		Andrey Gusev	
1.2. Clarification of access to data archives, records, plans, drawings etc.	/2/	The verification team got open access to all required plans, data, records, drawings and to all relevant facilities.	OK
1.3. Contractors for equipment and installation works	/2,7/	Project has been implemented as defined in the PDD version 2.2 and the implementation is evidenced by statements of work completion.	OK
1.4. Actual status of installation works	/2/	See section A.6 of MR.  Status of implementation, including time table for major project parts:  Reconstruction of boiler № 7;  Reconstruction of boiler № 9;  Modernization of turbine PT-60-90/13 st. №3;  Modernization of turbine PT-60-90/13 st. №4;  Reconstruction of cooling tower № 1;  Capital repair of boiler-rooms with replacement of tubes and valves;  Replacement of capacitive heat exchangers by lamellar - 35 un;  Replacement of heat supply pipelines by pipeline from polyurethane foam.  See "Table 1. Status of implementation". The date of	CAR1
		beginning reconstruction of boiler № 7 is September 2008 and date of commission January 2008. Its impossible.	CART



Objective	Reference	Comments	Conclusion (CARs/FARs)
2. Open issues indicated in validation report			
2.1. Missing steps to final approval	/5,6/	Based on the determination report the verification team identified one missing step. Letters of Approval from NFP are not provided.	CAR2
3. Implementation of the project			
3.1. Physical components	/2/	Project was implemented according PDD version 2.2.	OK
3.2. Project boundaries	/1/, /2/, /3/, /4/	Yes, the project boundaries are as defined in the PDD version 2.2.	ОК
3.3. Monitoring and	/2/	The control and monitoring system is divided into three main parts:	
metering systems		1)Power measurement;	
		2)Heat measurement;	
		3)Fuel measurement (natural gas, coal).	
		Information about measuring equipment is provided in MR. See section B1.2.	
		In section B of MR is indicated "There are 3 technical flow meters measuring power generated by turbines". There are only 2 meters presented in "Table 3. Data on flow-meters for generated power measurement". Please, clarify it.	CL1
		In section B of MR is indicated that "The reserves of coal at the store	CL2



Objective	Reference	Comments	Conclusion (CARs/FARs)
		for the campaign period are measured by independent experts". Please, clarify (named) this independent experts.	
3.4. Data uncertainty	/2/	Best available techniques are used in order to minimize uncertainties. Uncertainties are generally low.	
		Please provide information on how the level of uncertainty is taken into account.	CL3
3.5. Calibration and quality	/2/	All monitoring equipment is calibrated according to all relevant norms	OK
assurance		On the date of verification, Calibration records of the measuring and monitoring equipment has been verified at site. All the meters have been found to be calibrated regularly as per determined calibration plan for each site.	
		See section B.1.3 of MR.	
3.6. Data acquisition and data processing systems	/2/	Monitoring of consumed fuel amount and quality is performed by the Production Department. The measurements of natural gas amount are done by "Universal-02" gas meter. Measurements of the coal quantity supplied to the plant are done by means of the railway weighbridge of Novokramatorsk machine building plant under the lease agreement. Starting from April 1, 2009 all coal supplies will be measured by the new KNV-2D-2R conveyor weighbridge.	OK
		To register fuel amount and quality, HPP is equipped with special meters, facilities and instruments. The data on delivered and consumed	



Objective	Reference	Comments	Conclusion (CARs/FARs)
		fuel is represented in statistic reports. The primary data on fuel consumption is registered in special journals, supply bills and is used for monthly and annual reports.  Environmental parameters such as emissions of dust, SOx and NOx	
		will be available for the verifier. This data is communicated in monthly and annual reports to Donetsk regional authorities, and stored at the plant.	
3.7. Reporting procedures	/2/	The Monitoring Plan defines the responsibilities to consolidate the data required for emission reduction calculations. Calculations are transparent and restricted to entering annually the production data into a predefined Excel spreadsheet.	ОК
3.8. Documented instructions	/2/	All data will be processed and achieved in electronic and/or paper view.	OK
3.9. Qualification and training	/2/	During interviews onsite training was checked and found adequate.  The studying of 6 people from operational personnel of "Kramatorskteploenergo", Ltd was hold at BKZ-220 type boiler equipment of Chernihiv HPP with the purpose of operation of modernized equipment of Kramatorsk HPP. The cost of training is 21 ths. UAH.	OK
3.10. Responsibilities	/2/	Management system of HPP that presented in PDD an management system that presented in MR are different. Please, clarify it.	CL4



Objective	Reference	Comments	Conclusion (CARs/FARs)
3.11. Troubleshooting procedures	/2/	Troubleshooting procedures are not provided in Monitoring Report.	CAR3
4. Internal Data			
4.1. Type and sources of internal data	/2/	The internal parameters are obtained according to the monitoring plan:  Monitoring report, section B contains internal parameters that are monitored.	OK
4.2. Data collection	/2/	Kramatorsk HPP has the system-complex KTC "Energiya". The technical support of this system is implemented by the Department of information technologies and communication. Minimum frequency of data collection is 5 minutes (for each technological parameter). The system implements achieving of collected information, which is saved by 1 year. The accounting group of production department implements the data collection.	OK
		All data processed and achieved in electronic and/or paper view. See section B of MR.	
4.3. Quality assurance	/2/	Sections B and C of MR. Data processing and archiving (including software used) of the Monitoring Report provides with the necessary information relating the procedures for the monitoring, measurements and reporting. These were verified onsite and found satisfactory	OK
4.4. Significance and reporting risks	/2/	There is no information about significance and reporting risks in Monitoring Report.	CAR4



Objective	Reference	Comments	Conclusion (CARs/FARs)
5. External Data			
5.1. Type and sources of external data	/2/	There is no information about type and sources of external data in MR. Provide it in MR.	CAR5
5.2. Access to external data	/2/	See item 5.1 above.	OK
5.3. Quality assurance	/2/	See item 5.1 above.	OK
5.4. Data uncertainty	/2/	See item 5.1 above.	OK
5.5. Emergency procedures	/2/	See item 5.1 above.	OK
6. Environmental and Social Indicators			
6.1. Implementation of measures	/2/	There are no information about Environmental and Social Indicators in MR. Please, provide this information in MR.	CAR6
6.2. Monitoring equipment	/2/	See item 6.1 above.	OK
6.3. Quality assurance procedures	/2/	See item 6.1 above.	ОК
6.4. External data	/2/	See item 6.1 above.	OK
7. Management and Operational System			
7.1. Documentation	/2/	The company complies with all legal and statutory requirements of the Ukraine and the same were made available to the verification team.	OK



Objective	Reference	Comments	Conclusion (CARs/FARs)
7.2. Qualification and training	/2/	See item 3.9 above.	OK
7.3. Allocation of responsibilities	/2/	The responsibilities and authorities are described for each individual in job descriptions as required statutorily. Persons working at sites are aware of their responsibilities, and relative records are maintained.	OK
7.4. Emergency procedures	/2/	The emergency procedures with respect to operation controls are available in data control	OK
7.5. Data archiving	/2/	Data are archived in the physical and electronic forms.	OK
7.6. Monitoring report	/2/	Data information is laid down in the monitoring report.	OK
7.7. Internal audits and management review	/2/	The data is cross checked as well as internal audits and corrective actions are taken as defined in Instructions. For the project case, similar procedures will followed based on forthcoming Order of Director General of the Plant defining the exact JI monitoring procedures. Responsibilities for JI monitoring are indicated in section B.3 of the PDD version 2.2.	OK

Report No: UKRAINE-0056/2009

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# VERIFICATION REPORT

# Periodic Verification Checklist Protocol Table 2: Data Management System/Controls

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
1. Defined organizational structure, responsibilities and competencies		
1.1. Position and roles	Full	The general project management is implemented by the Director of Kramatorsk HPP and the Deputy Director. He manages and coordinates activity of all departments. Each department in the lead of its Head is responsible for each parameter.
1.2. Responsibilities	Full	The general project management is implemented by the Director of Kramatorsk HPP and the Deputy Director. He manages and coordinates activity of all departments. Each department in the lead of its Head is responsible for each parameter.



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
1.3. Competencies needed	Full	The responsibilities and authorities are described for each individual in job descriptions as required statutorily. Training needs were identified in advance and training was delivered that was checked onsite.
2. Conformance with monitoring plan		
2.1. Reporting procedures	Full	The monitoring plan is as per the registered PDD version 2.2. The applauded version of PDD version 2.2 is publicly available at the site <a href="http://ji.unfccc.int/JIITLProject/DB/STCWEAA5UHRVFDT9ID8TPFW4S15XYA/details">http://ji.unfccc.int/JIITLProject/DB/STCWEAA5UHRVFDT9ID8TPFW4S15XYA/details</a> The monitoring methodology developed for specifically for this project was used in monitoring process.
2.2. Necessary Changes	Full	Changes to the project are not foreseen.
3. Application of GHG determination methods		
3.1. Methods used	Full	The reporting procedures reflect the monitoring plan content. The calculation of the emission reduction is correct.
3.2. Information/process flow	Full	Kramatorsk HPP has the system-complex KTC "Energiya". The technical support of this system is implemented by the Department of information technologies and communication. Minimum frequency of data collection is 5 minutes (for each technological parameter). The system implements achieving of collected information, which is saved by 1 year. The accounting group of production department implements the data collection.



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
		All data processed and achieved in electronic and/or paper view. See section B of MR.
3.3. Data transfer	Full	The complete data is stored electronically and also the part of Management information system which is controlled by accounts
3.4. Data trails	Full	The necessary procedures have been defined in internal procedures and additional internal documents relevant for the determination of the all the parameters listed in the monitoring plan
4. Identification and maintenance of key process parameters		
4.1. Identification of key parameters	Full	The critical parameters for the determination of GHG emissions are the parameters listed in section D of the approved PDD version 2.2.
4.2. Calibration/maintenance	Full	Equipment is calibrated according to all relevant norms.  The audit team verified the status for all the equipment at the sites sampled for the audit and found them to be complying with the plan.
5. GHG Calculations		



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
5.1. Use of estimates and default data	Full	Emission factor of each fuel in are used as a predetermined default value which have been defined in the PDD version 2.2 and confirmed during determination of the project.
5.2. Guidance on checks and reviews	Full	The data is cross checked as well as internal audits and corrective actions are taken as defined in Instructions. For the project case, similar procedures will followed based on forthcoming Order of Director General of the Plant defining the exact JI monitoring procedures. Responsibilities for JI monitoring are indicated in section D.3 of the PDD version 2.2.
5.3. Internal determination and verification	Full	Monitoring procedure for JI Project includes the responsibility and frequency for carrying out internal audits. Internal audits did not reveal any non-conformances. The audit team did verify all the parameters listed in monitoring report.
5.4. Data protection measures	Full	The necessary procedures relating to Information technology are in place to provide necessary data security, and also prevent the unauthorized use of the same.
5.5. IT systems	Full	Data is collected in electronic database.



## VERIFICATION REPORT

# Periodic Verification Protocol Table 3: GHG calculation procedures and management control testing

Identification, assessment and testing of management controls	Areas of residual risks
Regarding the potential reporting risks identified in the left column the following mitigation measures have been observed during the document review and the on site mission:  Key source data for this parameter are:  • meter reading.  • Invoices and record for Fuels (and coal) for consumption and purchase.	The issue remaining is the way the data obtained is used to calculate the emission reduction in a conservative manner according to the approach prescribed in the PDD version 2.2 as well as the way data obtained is used to calculate the emissions reductions.
The metering equipments are installed appropriately in the enclosure panels and same are of reputed make.	
	of management controls  Regarding the potential reporting risks identified in the left column the following mitigation measures have been observed during the document review and the on site mission:  Key source data for this parameter are:  • meter reading.  • Invoices and record for Fuels (and coal) for consumption and purchase.  The metering equipments are installed appropriately in the enclosure panels and



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
<ul> <li>operational logs (metering records),</li> <li>laboratory/analytical data (for energy content of fuels),</li> <li>accounting records,</li> <li>Appropriate calibration and maintenance of equipment resulting in high accuracy of</li> </ul>	The reporting procedures reflect the monitoring plan content and the calculation of the emission reduction is correct and also additionally deducting the project emissions caused by fossil fuel.	
data supplied should be in place.  It is hereby needed to focus on those risks that impact the accuracy, completeness and consistency of the reported data. Risks are weakness in the GHG calculation systems and may include:		
<ul><li>manual transfer of data/manual calculations,</li></ul>		
position of the metering equipment,		
unclear origins of data,		
<ul><li>accuracy due to technological limitations,</li></ul>		
lack of appropriate data protection measures (for example, protected calculation cells in spreadsheets		



Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
and/or password restrictions).		



## VERIFICATION REPORT

# Periodic Verification Protocol Table 4: Detailed audit testing of residual risk areas and random testing

Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including Forward Action Requests)
obtained is used to calculate the emission reduction	transferred from daily consumption and generation readings to the calculation tool. There was no error in such transfer. The correct installation of the	Having investigated the residual risks, the audit team comes to the following conclusion: Immediate action is not needed with respect to the current emission reduction calculation. Those corrections have been considered during the verification process, so no residual risk is open.



# VERIFICATION REPORT

## **Verification Protocol Table 5: Resolution of Corrective Action and Clarification Requests**

Report clarifications and corrective action requests	Ref. to checklist question in tables 2/3	Summary of project owner response	Verification conclusion
Corrective Action Request (CAR) 1 See "Table 1. Status of implementation". The date of beginning reconstruction of boiler № 7 is September 2008 and date of commission January 2008. Its impossible.	1.4.	Date of commission January 2008. MR was corrected.	MR version 05 was checked. CAR is closed.
Corrective Action Request (CAR) 2  Based on the determination report the verification team identified one missing step. Letters of Approval from NFP are not provided.	2.1.	Letter of Approval № 1469/23/7 was issued by the National Agency of Ecological Investments from 04 <sup>th</sup> of December 2009. Germany Environmental Agency issued the Letter of Approval dated 25/03/2010.	Evidence provided is found satisfactory. Issue is closed.
Corrective Action Request (CAR) 3 Troubleshooting procedures are not provided in Monitoring Report.	3.11.	Troubleshooting procedures are provided in section B.5 of the Monitoring Report version 05.	Provided corrections are found satisfactory. Issue is closed.



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Report clarifications and corrective action requests	Ref. to checklist question in tables 2/3	Summary of project owner response	Verification conclusion
Corrective Action Request (CAR) 4 There is no information about significance and reporting risks in Monitoring Report.	4.4.	A system of technical tools 'KTS Energiya' is used at Kramatorsk HPP as the main internal control instrument. The system is managed by the department of information technologies and communication. The data is collected with the minimum range of 5 minutes for each technological parameter. The system archives the information collected and keeps the archived data for at least one year. The data is collected by the accounting group of the production department.	Provided corrections are found satisfactory. Issue is closed.
Corrective Action Request (CAR) 5 There is no information about type and sources of external data in MR. Provide it in MR.	5.1.	Information about type and sources of external data provided in section B.6 of MR version 05.	
Corrective Action Request (CAR) 6 There are no information about Environmental and Social Indicators in MR. Please, provide this information in MR.	6.1.	Information about Environmental and Social Indicators provided in section C.3 of MR version 05.	Provided corrections are found satisfactory. Issue is closed.



Report clarifications and corrective action requests	Ref. to checklist question in tables 2/3	Summary of project owner response	Verification conclusion
Clarification Request (CL) 1 In section B of MR is indicated "There are 3 technical flow meters measuring power generated by turbines". There are only 2 meters presented in "Table 3. Data on flow-meters for generated power measurement". Please, clarify it.	3.3.	Table 3. Data on flow-meters for generated power measurement was corrected. See MR version 05.	Provided evidences and corrections are found satisfactory. Issue is closed.
Clarification Request (CL) 2 In section B of MR is indicated that "The reserves of coal at the store for the campaign period are measured by independent experts". Please, clarify (named) this independent experts.	3.3.	Ukrainian Center on standardization and metrology	Issue is closed.
Clarification Request (CL) 3 Please provide information on how the level of uncertainty is taken into account.	3.4.	Information on how the level of uncertainty is taken into account provided in section B.7 of the MR version 05.	Validated onsite. Issue is closed.
Clarification Request (CL) 4 Management system of HPP that presented in PDD an	3.11	Management system of HPP was corrected in MR version 05.	Provided evidences are found satisfactory. Issue is closed.



Report clarifications and corrective action requests	Ref. to checklist question in tables 2/3	Summary of project owner response	Verification conclusion
management system that presented in MR are different. Please, clarify it.			

VERIFICATION REPORT



## APPENDIX B: VERIFICATION TEAM

The verification team consists of the following personnel:

## Nadiya Kaiiun, M. Sci. (environmental science)

Climate Change Lead Verifier

Bureau Veritas Ukraine Health, Safety and Environment Department Project Manager.

Nadiya Kaiiun has graduated from National University of Kyiv-Mohyla Academy with the Master Degree in Environmental Science. She is a Lead auditor of Bureau Veritas Certification for Environment Management Systems. She has performed over 15 audits since 2008. She has undergone intensive training on Clean Development Mechanism /Joint Implementation and is involved in the determination/verification of 10 JI projects.

## Kateryna Zinevych, M.Sci. (environmental science) Verifier

Bureau Veritas Ukraine Health, Safety and Environment Departement Project Manager

Kateryna Zinevych has graduated from National University of Kyiv-Mohyla Academy with the Master Degree in Environmental Science. She has successfully completed IRCA registered Lead Auditor Training Course for Environment Management Systems and Quality Management Systems. She has undergone a training course on Clean Development Mechanism /Joint Implementation and she is involved in the determination/verification of 26 JI projects.

## Oleg Skoblyk, Specialist (Power Management)

Climate Change Verifier

Bureau Veritas Ukraine HSE Department project manager.

Oleg Skoblyk has graduated from National Technical University of Ukraine 'Kyiv Polytechnic University" with specialty Power Management. He has successfully completed IRCA registered Lead Auditor Training Course for Environment Management Systems and Quality Management Systems. Oleg Skoblyk has undergone intensive training on Clean Development Mechanism /Joint Implementation and he is involved in the determination/verification of 20 JI projects.

## Igor Kachan, Ph.D. (chemistry)

Team member, Climate Change Verifier



### **VERIFICATION REPORT**

Bureau Veritas Ukraine Health, Safety and Environment Project Manager

Igor Kachan has graduated from Kyiv National Taras Shevchenko University and took the Ph.D. degree in the analytical chemistry speciality. He has successfully completed IRCA registered Lead Auditor Training Course for Environment Management Systems and Quality Management Systems. Igor Kachan has undergone a training course on Clean Development Mechanism / Joint Implementation and performed determination/verification of 9 JI projects.

Verification Report reviewed by:

## Ivan G. Sokolov, Dr.Sci (biology, microbiology)

Internal Technical Reviewer, Climate Change Lead Verifier, Bureau Veritas Certification Holding SAS Local Climate Change Product Manager for Ukraine

Bureau Veritas Black Sea District Health, Safety and Environment Department Manager

He has over 25 years of experience in Research Institute in the field of biochemistry, biotechnology, and microbiology. He is a Lead auditor of Bureau Veritas Certification for Environment Management System (IRCA registered), Quality Management System (IRCA registered), Occupational Health and Safety Management System, and Food Safety Management System. He performed over 140 audits since 1999. Also he is Lead Tutor of the IRCA registered ISO 14000 EMS Lead Auditor Training Course, and Lead Tutor of the IRCA registered ISO 9000 QMS Lead Auditor Training Course. He is Lead Tutor of the Clean Development Mechanism /Joint Implementation Lead Verifier Training Course and he was involved in the determination/verification over 50 JI/CDM projects.



VERIFICATION REPORT

## APPENDIX C: DOCUMENTS CHECKED DURING VERIFICATION

- 1. Statement #01/154 of receiving-transferring of natural gas dated from 31.01.2008.
- 2. Statement #02/139 of receiving-transferring of natural gas dated from 29.02.2008.
- 3. Statement #03/139 of receivin-transferring of natural gas dated from 31.03.2008. Statement #10 on production, letting (in the network) of electricity produced by LLC
- 4. "Kramatorskteploenergo" on July 2008.
  - Statement #11 on production, letting (in the network) of electricity produced by LLC
- "Kramatorskteploenergo" on August 2008. 5.
  - Statement #12 on production, letting (in the network) of electricity produced by LLC
- 6. "Kramatorskteploenergo" on September 2008.
  - Statement #13 on production, letting (in the network) of electricity produced by LLC
- "Kramatorskteploenergo" on October 2008. 7. Statement #14 on production, letting (in the network) of electricity produced by LLC
- 8. "Kramatorskteploenergo" on November 2008.
- Statement #15 on production, letting (in the network) of electricity produced by LLC
- 9. "Kramatorskteploenergo" on December 2008.
- Statement #4 on production, letting (in the network) of electricity produced by LLC
- 10. "Kramatorskteploenergo" on January 2008.
  - Statement #5 on production, letting (in the network) of electricity produced by LLC
- 11. "Kramatorskteploenergo" on February 2008.
  - Statement #6 on production, letting (in the network) of electricity produced by LLC
- 12. "Kramatorskteploenergo" on March 2008.
  - Statement #7 on production, letting (in the network) of electricity produced by LLC
- 13. "Kramatorskteploenergo" on April 2008.
  - Statement #8 on production, letting (in the network) of electricity produced by LLC "Kramatorskteploenergo" on May 2008.
- - Statement #9 on production, letting (in the network) of electricity produced by LLC
- 15. "Kramatorskteploenergo" on June 2008.
- Statement of putting the object into operation dated from 12.10.2009. 16.
- 17. Statement of putting the object into operation dated from 20.09.2008.
- Statement of putting the object into operation dated from 30.04.2009. 18.
- Statement of putting the reconstruction object into operation dated from 10.02.2008. 19. Statement of putting the turbogenerator set  $\Pi T$  60-90/13 st. #3 into operation dated
- 20. from 07.10.2008.

14.

- Kramatorsk department of SOC "Donetskstandartmetrologiia" #1 statement of
- 21. expertise of the node calculation of heat with the heat meter CBTU-10M (M1). Kramatorsk department of SOC "Donetskstandartmetrologiia" #3 statement of
- 22. expertise of the node calculation of heat with the heat meter CBTU-10M (M1). Kramatorsk department of SOC "Donetskstandartmetrologiia" #4 statement of
- expertise of the node calculation of heat with the heat meter CBTU-10M (M1). 23. Kramatorsk department of SOC "Donetskstandartmetrologiia" #5 statement of
- 24. expertise of the node calculation of heat with the heat meter CBTU-10M (M1). Kramatorsk department of SOC "Donetskstandartmetrologiia" #6 statement of
- 25. expertise of the node calculation of heat with the heat meter CBTU-10M (M1). Kramatorsk department of SOC "Donetskstandartmetrologiia" #7 statement of
- 26. expertise of the node calculation of heat with the heat meter CBTU-10M (M1).
- Kramatorsk department of SOC "Donetskstandartmetrologiia" #8 statement of 27. expertise of the node calculation of heat with the heat meter CBTU-10M (M1).
- Statement on the hydraulic test of the tube bank of district heater BO-350. Station №
- 28. 10-PSO inv. №3311
  - Statement on the hydraulic test of the tube bank of district heater BO-350. Station №
- 8-PSO inv. №3309 29.
  - Statement on the hydraulic test of the tube bank of district heater BO-350. Station №
- 30. 9-PSO inv. №3310

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- Statement on the hydraulic test of the tube bank of district heater BO-500. Station №
- 31. 13-PSO inv. №5961
  - Statement on the acceptance of networks and equipment from the reconstruction
- 32. dated from 03.07.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 33. dated from 05.08.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 34. dated from 10.08.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 35. dated from 14.10.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 36. dated from 15.08.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 37. dated from 25.07.2008.
- Statement on the acceptance of networks and equipment from the reconstruction
- 38. dated from 26.08.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 39. dated from 26.09.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 40. dated from 27.07.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 41. dated from 28.08.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 42. dated from 29.09.2008.
  - Statement on the acceptance of networks and equipment from the reconstruction
- 43. dated from 30.09.2008.
- 44. Statement of motion and remaining fuel for August 2008.
- 45. Statement of motion and remaining fuel for April 2008.
- 46. Statement of motion and remaining fuel for December 2008.
- 47. Statement of motion and remaining fuel for July 2008.
- 48. Statement of motion and remaining fuel for June 2008.
- 49. Statement of motion and remaining fuel for May 2008.
- 50. Statement of motion and remaining fuel for March 2008.
- 51. Statement of motion and remaining fuel for November 2008.
- 52. Statement of motion and remaining fuel for October 2008.
- 53. Statement of motion and remaining fuel for September 2008.
- 54. Statement of motion and remaining fuel for February 2008.
- 55. Statement of motion and remaining fuel for January 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 56. on August 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 57. on April 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 58. on December 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 59. on July 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 60. on June 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 61. on May 2008.
  - Statement of the volume of active electricity physically produced, consumed for own
- 62. needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"



#### VERIFICATION REPORT

on March 2008.

Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"

- 63. on March 2009.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 64. on November 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 65. on October 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 66. on September 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 67. on September 2009.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 68. on February 2008.
  - Statement of the volume of active electricity physically produced, consumed for own needs and tempered from tires LLC "Kramatorskteploenergo"at SOC "Energorynok"
- 69. on January 2008.
  - Statement of receiving-transferring of natural gas for the heat energy production for
- 70. budgetary institutions, organizations, and other consumers dated from 31.08.2008. Statement of receiving-transferring of natural gas to provide public services for
- 71. heating and hot water supply dated from 30.09.2008.
  - Statement of receiving-transferring of natural gas to provide public services for
- 72. heating and hot water supply dated from 31.08.2008.
  - Statement of receiving-transferring of natural gas to provide public services for
- 73. heating and hot water supply dated from 31.10.2008.
- 74. Statement of receiving-transferring of natural gas for industry dated from 30.09.2008.
- 75. Statement of receiving-transferring of natural gas for industry dated from 30.11.2008.
- 76. Statement of receiving-transferring of natural gas for industry dated from 30.04.2008. Statement of receiving-transferring of natural gas to provide public services for
- 77. heating and hot water supply dated from 30.04.2008.
  - Statement of receiving-transferring of construction site and repair object TG #4
- 78. dated from 07.05.2009.
  - Statement of acceptance-delivery of the boiler condensate pump equipment #2 from
- 79. the current reconstruction. Station #2 dated from 03.10.2008.
- Statement of acceptance-delivery of the boiler condensate pump equipment #2 from
- 80. the current reconstruction. Station #1 dated from 02.10.2008.
- Statement of acceptance-delivery of the boiler condensate pump equipment #2 from
- 81. the current reconstruction. Station #3 dated from 07.10.2008.
  - Statement of acceptance-delivery of the boiler condensate pump equipment #2 from
- 82. the current reconstruction. Station #4 dated from 22.10.2008.
  - Statement of acceptance-delivery of the main boiler equipment #11 from the current
- 83. reconstruction. Station #11 dated from 11.10.2008.
- Statement of acceptance-delivery of the district heater equipment #11 from the
- 84. current reconstruction BO-350. Station #10-PSO dated from 13.10.2008. Statement of acceptance-delivery of the district heater equipment #11 from the
- 85. current reconstruction ΠCB-500. Station #13-PSO dated from 14.10.2008.
- Statement of acceptance-delivery of the main boiler equipment BO-350 from the
- 86. current reconstruction. Station #7.
  - Statement of acceptance-delivery of the peaking water heater equipment IICB-315
- 87. from the reconstruction. Station #5.
  - Statement of acceptance-delivery of the peaking water heater equipment IICB-315
- 88. from the reconstruction. Station #8.
- 89. Statement of acceptance-delivery of the boiler condensate pump equipment #10 from



#### VERIFICATION REPORT

the current reconstruction. Station #10 dated from 08.10.2008.

Statement of acceptance-delivery of the boiler condensate pump equipment #5 from

- 90. the current reconstruction. Station #5 dated from 10.10.2008.
  - Statement of acceptance-delivery of the boiler condensate pump equipment from the
- 91. current reconstruction. Station #5 dated from 19.10.2008.
  - Statement of acceptance-delivery of the boiler condensate pump equipment from the
- 92. current reconstruction. Station #6 dated from 14.10.2008.
  - Statement of acceptance-delivery of the boiler condensate pump equipment from the
- 93. current reconstruction. Station #7 dated from 16.10.2008.
  - Statement of acceptance-delivery of the boiler condensate pump equipment from the
- 94. current reconstruction. Station #8 dated from 17.10.2008.
  - Statement of acceptance-delivery of the boiler condensate pump equipment from the
- 95. current reconstruction. Station #9 dated from 21.10.2008.
  - Statement of acceptance-delivery of the main boiler #8 equipment BO-350 from the
- 96. current reconstruction. Station #PSO-8 dated from 13.10.2008.
  - Statement of acceptance-delivery of the main boiler #9 equipment BO-350 from the
- 97. current reconstruction. Station #9 dated from 24.10.2008.
  - Statement of acceptance-delivery of the makeup heating pump equipment BO-350
- 98. from the current reconstruction. Station #4 dated from 24.10.2008.
- 99. Statement of receiving-transferring of natural gas dated from 30.04.2008.
- 100. Statement of receiving-transferring of natural gas dated from 31.05.2008. Statement of selling SOC "Energorynok" the electricity produced by LLC
- 101. "Kramatorskteploenergo" for March 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 102. "Kramatorskteploenergo" for September 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 103. "Kramatorskteploenergo" for December 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 104. "Kramatorskteploenergo" for October 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 105. "Kramatorskteploenergo" for April 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 106. "Kramatorskteploenergo" for July 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 107. "Kramatorskteploenergo" for November 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 108. "Kramatorskteploenergo" for February 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 109. "Kramatorskteploenergo" for August 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 110. "Kramatorskteploenergo" for January 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 111. "Kramatorskteploenergo" for May 2008.
  - Statement of selling SOC "Energorynok" the electricity produced by LLC
- 112. "Kramatorskteploenergo" for June 2008.
- 113. Statement of actual consumption of natural gas dated from 29.02.2008.
- 114. Statement of actual consumption of natural gas dated from 30.11.2008.
- 115. Statement of actual consumption of natural gas dated from 31.01.2008.
- 116. Statement of actual consumption of natural gas dated from 31.03.2008.
- 117. Statement of actual consumption of natural gas dated from 31.05.2008.
- 118. Statement of actual consumption of natural gas dated from 31.07.2008.
- 119. Statement of actual consumption of natural gas dated from 31.12.2008.
- 120. Statement of actual consumption of natural gas dated from 30.06.2008. Statement of production accounting and stable release of power on the basis of metering devices installed at interfaces of the balance inventory
- 121. at for the current month in 2009.
  - Certificate of expert's examination of flow measuring device CJSC "NKMZ", the tap of
- 122. CHP, reg. #343.



- 123. Certificate of the flow meter (alternating drop). Steam meter thread -I. TG-4.
- 124. Certificate of the flow meter (alternating drop). Steam meter thread -II. TG-4. Certificate of the flow meter (alternating drop). Steam consumption selections 8/13
- 125. left. 4M-133.
- 126. Statement of steam production by the boiler #7 for 2007.
- 127. Statement of steam production by the boiler #9 for 2007.
- 128. Statement of steam production by the boiler #7 for 2008.
- 129. Statement of steam production by the boiler #9 for 2008.

  Statement of verification. Temperature measurement PVT-01-1-type-1-160-10 dated
- 130. from 29.07.2009.
- 131. Expert opinion dated from 01.12.2008.
- 132. Expert opinion dated from 27.06.2007.
- 133. Expert opinion 2008.
  - General information on the product. Temperature measurement PVT-01-1-type-1-
- 134. 160-10. Production date 24.07.2007.
- 135. General information. Universal-02. Serial number 5672. General production rules of specific fuel consumption by LLC
- 136. "Kramatorskteploenergo" for 2008.

  Set of protection, measurement and control of mechanical quantities equipment "LMZ-97.04C" for the turbogenerator set ΠΤ-60-90. Passport ЯШМИ 402243.200
- 137. P32.
  - Letter to the Chairman of National Electricity Regulatory Commission of Ukraine
- 138. Kalchenko V.M. #№ 01-32-2158 dated from 07.10.2008. Letter to National Electricity Regulatory Commission of Ukraine #01-34-534 dated
- 139. from 13.03.2008.
- 140. The model of form the daily electricity generation for 15.10.2009.
- 141. Metran-55
- 142. Calculator of gas volume UNIVERSAL-02. SPE "GREMPIS". Report on the measurement results 02.03.09-OP1. Enterprise: LLC "Kramatorskteploenergo". Facilities: coal storage, coal pier open, closed discharge
- 143. arrangement.
  - Passport #9K on 3KM K23-2 ser.#107287 dated from 31.10.1997. Verification date
- 144. 11.09.2009
  - Passport #9K-23-3 on 3KM ser.#224992 dated from 31.10.1997. Verification date
- 145. 11.09.2009
  - Passport #9K on 9KM K23-1 ser.#230708 dated from 14.03.2000. Verification date
- 146. 11.09.2009
- Passport #9K on 3KM K-25 ser.#205067 dated from 31.10.1997. Verification date
- 147. 11.09.2009
  - Passport. Boiler #7 МЩ from 12.07.2005. Ser. #1067893. Verification date
- 148. 07.08.2008.
  - Passport. Boiler #7 ЦТЩ from 12.07.2005. Ser. #20620518. Verification date
- 149. 07.08.2008.
  - Passport. Boiler #7 (К-1) ЦТЩ from 26.05.2005. Ser. #2121763. Verification date
- 150. 07.08.2008.
  - Passport. Boiler #7 (К-10)МЩ from 06.06.2005 г. Ser. #2054353. Verification date
- 151. 07.08.2008.
- Passport. Boiler #7 (К-12)ЦТЩ from 06.06.2005. Ser. #8015726. Verification date
- 152. 07.08.2008.
  - Passport. Boiler #7 (К-13)ЦТЩ from 12.07.2005. Ser. #0081210. Verification date
- 153. 07.08.2008.
  - Passport. Boiler #7 (К-14)ЦТЩ from 11.07.2005. Ser. #0026807. Verification date
- 154. 07.08.2008.
  - Passport. Boiler #7 (К-15)ЦТЩ from 11.07.2005. Ser. #1094799. Verification date
- 155. 07.08.2008.
  - Passport. Boiler #7 (К-16)МЩ from 11.07.2005. Ser. #7035174. Verification date
- 156. 07.08.2008.
- 157. Passport. Boiler #7 (K-18)МЩ from 11.07.2005. Ser. #9090939. Verification date



#### VERIFICATION REPORT

07.08.2008.

Passport. Boiler #7 (К-2)ЦТЩ from 26.05.2005. Ser. #712178. Verification date

158. 07.08.2008.

Passport. Boiler #7 (К-20)МЩ from 11.07.2005. Ser. #8110056. Verification date

159. 07.08.2008.

Passport. Boiler #7 (K-21-1)ЦТЩ from 12.07.2005. Ser. #106227. Verification date

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Passport. Boiler #7 (К-21-2)ЦТЩ from 12.07.2005. Ser. #108215. Verification date

161. 07.08.2008.

Passport. Boiler #7 (К-3)ЦТЩ from 11.05.2005. Ser. #3121601 Verification date

162. 07.08.2008.

Passport. Boiler #7 (K-5)UTU from 31.05.2005. Ser. #1014384. Verification date

163. 07.08.2008.

Passport. Boiler #7 (K-5)MUI from 02.06.2005. Ser. #2053897. Verification date

164. 07.08.2008.

Passport. Boiler #7 (K-6)MUI from 02.06.2005. Ser. #9037551. Verification date

165. 07.08.2008.

Passport. Boiler #7 (К-8)МЩ from 06.06.2005. Ser. #4040452. Verification date

166. 07.08.2008.

Passport. Boiler #7 (К-9)МЩ from 06.06.2006. Ser. #4040460. Verification date

167. 07.08.2008.

168. Passport KT9. Water meter after K9H. TG-4 dated from 05.06.2009.

169. Passport KT3. Steam meter thread-I. TG-4 4M-123 dated from 05.06.2009.

170. Passport KT3. Steam meter thread-II. TG-4 4M-123 dated from 05.06.2009. Passport KT3. Steam meter selections 8/13 left. TG-4 4M-133 dated from

171. 05.06.2009.

172. Passport KT9. Steam meter selections. TG-4 4M-123 dated from 05.06.2009. Passport M-20 MЛ-312. Ser.№38096 dated from 09.01.1998. Verification date

173. 11.09.2009.

Passport M-21 MΠ-312. Ser.№37426 dated from 09.01.1998. Verification date

174. 11.09.2009.

175. Passport M-22. Ser.№5087334 dated from 19.01.1999. Verification date 11.09.2009. Passport M-28 ЦТЩ. Ser.№37742 dated from 07.01.1998. Verification date

176. 11.09.2009.

177. Passport M-29 ЦТЩ. Ser.1477 dated from 09.01.1998. Verification date 11.09.2009.

Passport M-33 ЦТЩ. Ser.№2333 dated from 01.01.1998. Verification date

178. 11.09.2009.

Passport M-35 ЦТЩ. Ser.№5850 dated from 09.01.1998. Verification date

179. 11.09.2009.

Passport M-48 ЦТЩ. Ser.№5989 dated from 09.01.1998. Verification date

180. 11.09.2009.

Passport M-51 ЦТЩ. Ser.№5141 dated from 09.01.1998. Verification date

181. 11.09.2009.

Passport M-59 ЦТЩ. Ser.№5087334 dated from 09.01.1998. Verification date

182. 11.09.2009.

Passport M-60 ЦТЩ. Ser.№3072188 dated from 07.01.1998. Verification date

183. 11.09.2009.

184. Passport M-65. Ser.№14589 dated from 07.01.1998. Verification date 11.09.2009.

185. Passport M-87. Ser.№13319 dated from 09.01.1998. Verification date 11.09.2009.

186. Passport M-95. Ser.№5571 dated from 09.01.1998. Verification date 11.09.2009.

187. Passport. Manometer ser. №008645 or 14.03.2000. Verification date 11.09.2009 Passport, Gas consumption by lighting burner #1 of the boiler #9 dated from 18.02.2009. Safir M 5420 4-20мA №07032213. МЛ-312 №1108004. Verification date

188. 11.09.2009.

Passport. Gas consumption by lighting burner #2 of the boiler #9 dated from 18.02.2009. Safir M 5420 4-20мA №07142255. МЛ-312 №1108003. Verification date

189. 11.09.2009.

190. Passport. Gas consumption by lighting burner #3 of the boiler #9 dated from



#### VERIFICATION REPORT

18.02.2009. Safir M 5420 4-20мА №07112214. МЛ-312 №1007002. Verification date 11.09.2009.

Passport. Gas consumption by lighting burner #4 of the boiler #9 dated from 18.02.2009. Safir M 5420 4-20мA №07456215. MЛ-312 №1007005. Verification date

191. 11.09.2009.

192. Passport. Gas consumption during boiler kindling. Verification date 11.09.2009. Passport of the flowmeter (variable difference) dated 09/09/1998. Type ДМ3537M serial #18994. Type БПЛ-1К serial #3028. Type БИК-1 serial #6590. Type РП 160-09

193. serial #1110288.

Passport of the flowmeter (variable difference) dated 10/09/1998. Type ДМ3583M serial #12048. Type БПЛ 1К serial #1934. Type БИК 1 serial #6560. Type РП 160-09

194. serial #1120476.

Passport of the flowmeter (variable difference) dated 10/09/1998. Type ДМ3583M serial #60752. Type БПЛ-1K serial #2167. Type БИК-1 serial #6760. Type РП 160-09

195. serial #1115054.

Passport of the flowmeter (variable difference) dated 11/05/1998. Type ДМ 3583М

196. serial #44553. Type BMД4862 serial #3178.
Passport of the flowmeter (variable difference) dated 15/02/1998. Type ДМ3583М

serial #14136. Туре БПЛ-1К serial #4920. Туре БИК-1 serial #3231. Туре РП 160-09

197. serial #2091176.

Passport of the flowmeter (variable difference) dated 15/09/1998. Type ДМ3583M serial #15751. Type  $Б\Pi \Pi$ -1K serial #10090. Type БИK-1 serial #2158. Type  $P\Pi$  160-

198. 09 serial #1120592.

Passport of the flowmeter (variable difference) dated 17/09/1998. Type ДМ3577M serial #31793. Type БПЛ-1K serial #4426. Type БИК-1 serial #3218. Type РП 160-09

199. serial #104285.

Passport of the flowmeter (variable difference) dated 21/04/1998. Туре ДМ3583М

200. serial #23490. Type ДПР-4-15 serial #37346.

Passport of the flowmeter (variable difference) dated 22/09/1998. Type ДМ 3583M

201. serial #60013. Type ДПР4-15 serial #3208.

Passport of the flowmeter (variable difference) dated 22/09/1998. Type

202. ДМ3583Mserial #4798. Type ДПР4-09 serial #34448.

Passport of the flowmeter (variable difference) dated 22/09/1998. Type ДМ3583M

203. serial #9722. Type ДС1-05 serial #3014241.

Passport of the flowmeter of continuous blowing, boiler #9 dated 18/02/2009.

- 204. Verification date 11/09/2009.
- 205. Passport of level meter, boiler #3. Verification date 11/09/2009.
- 206. Passport of level meter, boiler #9. Verification date 11/09/2009.
- 207. Passport of electric manometer serial #1101797. Verification date 11/09/2009. Passport of parameters and environmental characteristics. CJSC "NKMZ", Martin

208. plant dated 28/03/2004.

Passport of parameters and environmental characteristics. Kramatorsk CHP steam

209. consumption NKMZ (Martin plant) dated 12/07/2002.

Passport of CV parameters and environmental characteristics. CJSC "NKMZ". Martin

- 210. plant. Dated 15/12/2006.
- 211. Passport. 636128.010 ПС. Ultrasonic flowmeter УРВ-011.
- 212. Passport 9K-24 dated 13/03/2009. Serial #38532. Verification date 11/09/2009.
- 213. Passport 9K-28 dated 13/03/2009. Serial #36150. Verification date 11/09/2009.
- 214. Passport 9K-33 dated 13/03/2009. Serial #37419. Verification date 11/09/2009.
- 215. Passport 9K-52 dated 13/03/2009. Serial #34779. Verification date 11/09/2009.
- 216. Passport 9K-53 dated 13/03/2009. Serial #34843. Verification date 11/09/2009.
- 217. Passport 9K-58,59 dated 13/03/2009. Serial #004096. Verification date 11/09/2009.
- 218. Passport 9K-60 dated 13/03/2009. Serial #38387. Verification date 11/09/2009.
- 219. Passport 9K-61 dated 14/03/2009. Serial #11486. Verification date 11/09/2009.220. Passport 9K-62 dated 13/03/2009. Serial #008749. Verification date 11/09/2009.
- Passport dated 02/07/2007. Vacuum TG-4 ЦТЩ. Serial #9110924. Verification date
- 221. 11/09/2009.
- 222. Passport dated 01/01/1998. ГП-17.ЦТЩ. Verification date 11/09/2009.

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#### VERIFICATION REPORT

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223. 11/09/2003.

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224. 11/09/2009.

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225. 11/09/2009.

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226. 11/09/2009.

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227. 11/09/2009.

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228. 11/09/2009.

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229. 11/09/2009.

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230. 11/09/2009.

Passport dated 20/11/2006. TG№4(M-3) ЦТЩ. Serial #1050551. Verification date

231. 11/09/2009.

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232. 11/09/2009.

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233. 11/09/2009.

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234. 11/09/2009.

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235. 11/09/2009.

236. Passport dated 13/03/2009. 9KM-34. Serial #581597. Verification date 11/09/2009.

237. Passport dated 13/03/2009. 3KM-35. Serial #0968. Verification date 11/09/2009.

238. Vortical converter of the gas flow MPBMC-K-300.

Site visit program to LLC "Kramatorskteploenergo" for the verification of GHG emmisions reduction according to JI project "Kramatorsk CHP Reconstruction" dated

239. 14/10/2009.

Permit #001659 to removal of tengible values and non-tradable goods dated

240. 03/10/2008.

Protocol 19/10-06 of the line-angular measurements of the pipeline part in the installation place of piezoacoustic transducers (PAT) of the ultrasonic flowmeter YPB-

241. 011.

Protocol #704 of the State enterprise "Specialized training center" of the meeting of

242. knowledge commission on labour safety and technical operation dated 25/04/2008. Protocol #714 of the State enterprise "Specialized training center" of the meeting of

243. knowledge commission on labour safety and technical operation dated 23/05/2008. Protocol #735 of the State enterprise "Specialized training center" of the meeting of

244. knowledge commission on labour safety and technical operation dated 20/06/2008. Protocol #920 of the State enterprise "Specialized training center" of the meeting of

245. knowledge commission on labour safety and technical operation dated 24/07/2009. Protocol #921 of the State enterprise "Specialized training center" of the meeting of

246. knowledge commission on labour safety and technical operation dated 24/07/2009. Protocol #922 of the State enterprise "Specialized training center" of the meeting of

247. knowledge commission on labour safety and technical operation dated 24/07/2009. Protocol #934 of the State enterprise "Specialized training center" of the meeting of

248. knowledge commission on labour safety and technical operation dated 14/08/2009.

249. Verification results of differential manometer. Calibrator "Metran".

250. Verification results of flow meters dated 03/06/2009.

Information on the verification by supervisory bodies. Multifunctional measurement

251. transducer ИСТОК-ТМ serial #0609009.

252. Information on the boiler rooms for 2008.

253. Information on the boiler rooms for April 2008.

254. Information on the boiler rooms for Desember 2008.



- 255. Information on the boiler rooms for July 2008.
- 256. Information on the boiler rooms for June 2008.
- 257. Information on the boiler rooms for May 2008.
- 258. Information on the boiler rooms for March 2008.
- 259. Information on the boiler rooms for November 2008.
- 260. Information on the boiler rooms for October 2008.
- 261. Information on the boiler rooms for September 2008.
- 262. Information on the boiler rooms for February 2008.
- 263. Information on the boiler rooms for January 2008.
- 264. Certificate of packaging dated 19/10/2006. TCΠ Metran-206. #565545
- 265. Certificate of packaging dated 19/10/2006. TCΠ Metran-206. #565546
- 266. Certificate of packaging dated 17/10/2006. TCΠ Metran-206. #565547
- 267. Certificate #1085 of the state metrological validation dated 07/04/2009. Certificate of the acceptance of equipments of the technological control "LMZ-
- 268. 97.04C" dated 13/08/2008. Serial #119-08/200 for Kramatorsk CHP.
  Certificate of the acceptance of BΓД-7A. Three-phase static electricity meter "Mercurii 230 AM-03" serial #01413685. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts
- 269. AVLG.411152.025 TU. Packaging date 11/09/2007.
  Certificate of the acceptance of ВГД-7Б. Three-phase static electricity meter "Mercurii 230 AM-03" serial #01413694. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts
- 270. AVLG.411152.025 TU. Packaging date 11/09/2007. Certificate of the acceptance and first verification. Ultrasonic flowmeter YPB-011.
- 271. Serial #1080. Certificate of the acceptance. Power measurement transducer PC-28/Ex,-
- 272. 20/0...0,6MΠa ABS/PD/M. Serial #07073155. Verification date 16/08/2007. Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118771, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 274. serial number 36118775, is in confirmity with technical standards.

  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118781, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 276. serial number 36118791, is in confirmity with technical standards.
  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118792, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118793, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
   serial number 36118802, is in confirmity with technical standards.
- Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118803, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118811, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 282. serial number 36118813, is in confirmity with technical standards.

  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118823, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 284. serial number 36118833, is in confirmity with technical standards.

  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118841, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 286. serial number 36118842, is in confirmity with technical standards.
- 287. Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,



#### VERIFICATION REPORT

serial number 36118843, is in confirmity with technical standards.

Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,

- 288. serial number 36118851, is in confirmity with technical standards.

  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118852, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118853, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- serial number 36118861, is in confirmity with technical standards.
   Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 292. serial number 36118862, is in confirmity with technical standards.

  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart,
- 293. serial number 36118863, is in confirmity with technical standards.

  Certificate of the acceptance. Electricity meter type SL761 BO71 SL7000 Smart, serial number 53000884, is in confirmity with technical standards. It was verified
- 294. 12/12/2008 while commissioned and regarded as a proper for operation. Certificate of the acceptance. Electricity meter type ACE3000, serial number 4848597, is in confirmity with technical standards, was verified while commissioned
- 295. and regarded as a proper for operation. Certificate of the acceptance. Electricity meter type ACE3000, serial number 4848599, is in confirmity with technical standards, was verified while commissioned
- 296. and regarded as a proper for operation. Certificate of the acceptance. Electricity meter type ACE3000, serial number 4848600, is in confirmity with technical standards, was verified while commissioned
- 297. and regarded as a proper for operation. Certificate of the acceptance. Electricity meter type ACE3000, serial number 4848601, is in confirmity with technical standards, was verified while commissioned
- 298. and regarded as a proper for operation. Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070745. Released date 04/06/2007. First verification date 04/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 299. TU. Packaging date 18/06/2007. Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070750. Released date 13/06/2007. First verification date 13/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 300. TU. Packaging date 18/06/2007. Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070760. Released date 08/06/2007. First verification date 09/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 301. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070765. Released date 18/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 302. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070767. Released date 04/06/2007. First verification date 05/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 303. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070785. Released date 04/06/2007. First verification date 05/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 304. TU. Packaging date 18/06/2007.



#### VERIFICATION REPORT

Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070789. Released date 15/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025

- 305. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070794. Released date 18/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 306. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070797. Released date 15/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 307. TU. Packaging date 18/06/2007. Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070798. Released date 18/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 308. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070801. Released date 15/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 309. TU. Packaging date 18/06/2007.
   Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070803. Released date 15/06/2007. First verification date 18/06/2007.
   Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
   310. TU. Packaging date 18/06/2007.
  - Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01070804. Released date 15/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 311. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01073255. Released date 15/06/2007. First verification date 18/06/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 312. TU. Packaging date 18/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169457. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 313. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169459. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 314. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169460. Released date 11/09/2007. First verification date 12/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 315. TU. Packaging date 12/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169461. Released date 12/09/2007. First verification date 13/09/2007.
- 316. Meter verification. Information on the packaging. It was packed by "INKOTEX"



#### VERIFICATION REPORT

Company" according to the requirements of technical standarts AVLG.411152.025 TU. Packaging date 13/09/2007.

Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169462. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025

- 317. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169463. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"
  - Meter verification. Information on the packaging. It was packed by "INKOTEX"

    Company" according to the requirements of technical standarts AVLG.411152.025
- 318. TU. Packaging date 10/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169464. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 319. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169468. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 320. TU. Packaging date 10/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169470. Released date 11/09/2007. First verification date 12/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 321. TU. Packaging date 12/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169471. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 322. TU. Packaging date 10/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169477. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 323. TU. Packaging date 10/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169478. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 324. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169486. Released date 11/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025 TU. Packaging date
- 325. 12/09/2007.
  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169487. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 326. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169489. Released date 11/09/2007. First verification date 12/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 327. TU. Packaging date 12/09/2007.
- 328. Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-



#### VERIFICATION REPORT

00" serial #01169491. Released date 11/09/2007. First verification date 12/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025 TU. Packaging date 12/09/2007.

Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169494. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025

- 329. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169496. Released date 11/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025 TU. Packaging date
- 330. 12/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169496. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 331. TU. Packaging date 13/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169497. Released date 11/09/2007. First verification date 12/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 332. TU. Packaging date 12/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169501. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 333. TU. Packaging date 10/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169502. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 334. TU. Packaging date 12/09/2007. Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169866. Released date 12/09/2007. First verification date 13/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025 335. TU. Packaging date 13/09/2007.
- Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01054724. Released date 01/06/2007. First verification date 01/06/2007. Meter verification 11/06/2008. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts
- 336. AVLG.411152.025 TU. Packaging date 01/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01066452. Released date 06/06/2007. First verification date 06/06/2007. Meter verification 11/06/2008. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts
- 337. AVLG.411152.025 TU. Packaging date 06/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01066464. Released date 06/06/2007. First verification date 06/06/2007. Meter verification 11/06/2008. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts
- 338. AVLG.411152.025 TÜ. Packaging date 06/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01066478. Released date 06/06/2007. First verification date 06/06/2007. Meter verification 11/06/2008. Information on the packaging. It was packed by
- 339. "INKOTEX" Company" according to the requirements of technical standarts



#### VERIFICATION REPORT

AVLG.411152.025 TU. Packaging date 06/06/2007.

Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01072418. Released date 01/06/2007. First verification date 04/06/2007. Meter verification 11/06/2008. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts

- 340. AVLG.411152.025 TU. Packaging date 04/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01072443. Released date 01/06/2007. First verification date 04/06/2007. Meter verification 11/06/2008. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts
- 341. AVLG.411152.025 TU. Packaging date 04/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169456. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 342. TU. Packaging date 12/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01169472. Released date 10/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 343. TU. Packaging date 12/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #02605818. Released date 04/06/2007. First verification date 04/06/2007. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025 TU. Packaging date
- 344. 04/06/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01413832. Released date 07/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 345. TU. Packaging date 11/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01413848. Released date 07/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 346. TU. Packaging date 11/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01413859. Released date 07/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX" Company" according to the requirements of technical standarts AVLG.411152.025
- 347. TU. Packaging date 11/09/2007.

  Certificate of the acceptance. Three-phase static electricity meter "Merkurii 230 AM-00" serial #01413888. Released date 07/09/2007. First verification date 10/09/2007. Meter verification. Information on the packaging. It was packed by "INKOTEX"

  Company" according to the requirements of technical standarts AVLG.411152.025
- 348. TU. Packaging date 11/09/2007.
- Certificate of the acceptance. Meter, serial #31771, is in confirmity with technical 349. standards. Production date September 2006. Verification date September 2006.
- 350. Certificate of the packaging. Ultrasonic fowmeter YPB-011. Serial #1080. Certificate of the measurement working devices verification #02/04-1126 dated
- 351. 14/11/2007. Applicable to 14/11/2013. Electricity meter "Energia-9", serial #31660. Certificate of the measurement working devices verification #02/04-1267. Applicable to 14/12/2013. Electronic electricity meter "Energia-9" CTK3-10A147.K4E, serial
- 352. #31771.
  - Certificate of the measurement working devices verification #108008 dated from
- 353. 26/08/2008 to 26/08/2010.
  - Certificate of the measurement working devices verification #909/45 dated from
- 354. 29/07/2009 to 29/07/2010.



- Certificate of the measurement working devices verification #24-2/5154. Heat water
- 355. meter CBTU-10M (M1) serial #14295 dated from 04/08/2008 to 04/08/2012. Certificate of the measurement working devices verification #24-2/5154. Heat water
- 356. meter CBTU-10M (M1) serial #14390 dated from 05/08/2008 to 05/08/2012. Certificate of the measurement working devices verification #24-25123 dated from
- 357. 31/07/2008 to 31/07/2012.
  - Certificate of the measurement working devices verification #406 dated from
- 358. 21/12/2007 to 21/12/2011.
  - Certificate of the acceptance. Measurement temperature transducer PVT-01-1-type-
- 359. 1-160-10. Serial #6410 dated 24/07/2007.

  Certificate #C8.084-2009 on the state meteorological attestation dated 02/04/2009.

  Computer-based system of commercial electric power accounting of LLC
- 360. "Kramatorskteploenergo".
- 361. Statement of commission #1814 dated 01/12/2008.
- 362. Statement of commission #1517 dated 03/10/2008.
- 363. Statement of commission #1518 dated 03/10/2008.
- 364. Statement of commission #1530 dated 05/10/2008.
- 365. Statement of commission #1531 dated 05/10/2008.
- 366. Statement of commission #1540 dated 06/10/2008.
- 367. Statement of commission #1553 dated 08/10/2008.
- 368. Statement of commission #1681 dated 02/11/2008.
- 369. Statement of commission #1702 dated 06/11/2008.
- 370. Statement of commission #1718 dated 09/11/2008.
- 274. Otatamant of commission #17 to dated 05/11/2000
- 371. Statement of commission #1723 dated 11/11/2008.
- 372. Statement of commission #1724 dated 11/11/2008.
- 373. Statement of commission #1731 dated 12/11/2008.
- 374. Statement of commission #1771 dated 22/11/2008.
- 375. Statement of commission #1773 dated 23/11/2008.
- 376. Statement of commission #1900 dated 22/12/2008. 377. Statement of commission #1901 dated 22/12/2008.
- 378. Statement of commission #1906 dated 24/12/2008.
- 379. Statement of commission #1907 dated 24/12/2008.
- 380. Statement of commission #1908 dated 24/12/2008.
- 381. Statement of commission #1926 dated 29/12/2008.
- 382. Information letter of the natural gas consumption in 2008.
- 383. Scheme of electrical connections of Kramatorsk CHP 110-04кв.
- 384. Meter. Commercial and industrial meter. SL7000 ACTARIS. Substation 5. Addr. 8811
- 385. Meter. Commercial and industrial meter. SL7000 ACTARIS. TF #3.
- 386. Meter. Commercial and industrial meter. SL7000 ACTARIS. ΤΓ #4.
- 387. Meter. Commercial and industrial meter. SL7000 ACTARIS. Block #3 (Reserved).
- 388. Meter. Commercial and industrial meter. SL7000 ACTARIS. Block #3 (Basic).
- 389. Meter. Commercial and industrial meter. SL7000 ACTARIS. Block #4 (Reserved).
- 390. Meter. Commercial and industrial meter. SL7000 ACTARIS. Block #4 (Basic). Meter. Commercial and industrial meter. SL7000 ACTARIS. Druzhkovka-1
- 391. (Reserved).
  - Meter. Commercial and industrial meter. SL7000 ACTARIS. Druzhkovka-2
- 392. (Reserved).
  - Meter. Commercial and industrial meter. SL7000 ACTARIS. Kuibysheva-1
- 393. (Reserved).
- Meter. Commercial and industrial meter. SL7000 ACTARIS. Kuibysheva-2 394. (Reserved).
- 395. Meter. Commercial and industrial meter. SL7000 ACTARIS. ЛИП-1 (Reserved). 396. Meter. Commercial and industrial meter. SL7000 ACTARIS. ЛИП-2 (Reserved).
- 397. Meter. Commercial and industrial meter. SL7000 ACTARIS. TC-1 (Reserved).
- 398. Meter. Commercial and industrial meter. SL7000 ACTARIS. TC-1 (Basic).
- 399. Meter. Commercial and industrial meter. SL7000 ACTARIS. TC-2 (Reserved).
- 400. Meter. Commercial and industrial meter. SL7000 ACTARIS. TC-2 (Basic).
- 401. Meter. Commercial and industrial meter. SL7000 ACTARIS. TC-3 (Reserved).



- 402. Meter. Commercial and industrial meter. SL7000 ACTARIS. TC-3 (Basic).
- 403. Meter. Commercial and industrial meter. SL7000 ACTARIS. WCMB (Reserved).
- 404. Meter. Commercial and industrial meter. SL7000 ACTARIS. ШСМВ (Basic).
- 405. Meter. Commercial and industrial meter. NKMZ-1 (Reserved).
- 406. Meter. EA02RALX-P4B-4. NKMZ-1 (Basic).
- 407. Meter. EA02RALX-P4C-4.
- 408. Meter. EA05RALX-P4B-4.NKMZ-2 (Basic).
- 409. Meter. EA05RALX-P4C-4. Kuibysheva-2 (Basic).
- 410. Heat water meter. CBTU 10M. Modifications M1 and M2 #14295.
- 411. Heat water meter. CBTU 10M. Modifications M1 and M2 №14390.

- 411. Heat water frieter. CBTO Tolki. Modifications for and Miz Net 12.
  412. Technical and economic work indicators in 2008.
  413. Technical and economic work indicators for August 2008.
  414. Technical and economic work indicators for April 2008.
  415. Technical and economic work indicators for Desember 2008.
- 416. Technical and economic work indicators for July 2008.
- 417. Technical and economic work indicators for June 2008.
- 418. Technical and economic work indicators for May 2008.
- 419. Technical and economic work indicators for March 2008.
- 420. Technical and economic work indicators for November 2008.
- 421. Technical and economic work indicators for October 2008.
- 422. Technical and economic work indicators for September 2008.
- 423. Technical and economic work indicators for February 2008.
- 424. Technical and economic work indicators for January 2008. Sides of grid replaced by ΠΠΥ pipes in 2008 according to invest program LLC
- 425. "Kramatorskteploenergo".