VERIFICATION REPORT

RME "DONETSKTEPLOCOMUNENERGO"

VERIFICATION OF THE

REHABILITATION OF THE DISTRICT HEATING SYSTEMS IN MAKIIVKA, MARIUPOL, ARTEMIVSK CITIES OF DONETSK REGION

4TH PERIODIC

(01 JANUARY 2010 – 31 DECEMBER 2010)

REPORT NO. UKRAINE-VER/0295/2011/3

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VERIFICATION REPORT

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Client: RME "Donetskteplocomunenergo"	Client ref.: Mr. Vasyl Vorotyntsev

Summary:

Bureau Veritas Certification has made 4th periodic verification of the JI project "Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region" project of RME "Donetskteplocomunenergo" located in the Makiivka, Mariupol, Artemivsk Cities of Donetsk Region, Ukraine and applying JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final 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 (CR, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved 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 ready to generate GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize:

104 684 tons of CO_2 equivalents for the monitoring period 01/01/2010 – 31/12/2010.

Our opinion relates to the project's GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring, and its associated documents.

Report No.: UKRAINE-ver/0295/2011/3	Subject Group: JI	
Project title: "Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region"		
Work carried out by: Rostislav Topchiy – Team Leader, Lead Verifier Vitaliy Minyaylo – Team Member, Verifier		
Work reviewed by: Ivan Sokolov - Internal Technical Reviewer		
Work approved by: Flavio Gomes - Operational Manager		
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Bureau Veritas Certification Holding SAS

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1 INTRODUCTION

RME “Donetskteplocomunenergo” has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project ”Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region” (hereafter called “the project”) at Makiivka, Mariupol, Artemivsk Cities of Donetsk Region, Ukraine.

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

1.1 Objective

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

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

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

1.2 Scope

The verification scope is defined as an independent and objective review of submitted monitoring reports 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.

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

1.3 Verification Team

The verification team consists of the following personnel:

Rostislav Topchiy
Bureau Veritas Certification, Team Leader, Climate Change Lead Verifier

Vitaliy Minyaylo
Bureau Veritas Certification Team Member, Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

2 METHODOLOGY

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

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

- It organizes, details and clarifies the requirements a JI project is expected to meet;
- 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 completed verification protocol is enclosed in Appendix A to this report.

2.1 Review of Documents

The Monitoring report (MR) submitted by RME "Donetskteplocomunenergo" and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), developed JI specific approach and/or Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification requirements to be checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the:

- Annual Monitoring report for the period 01/01/2010 – 31/12/2010 version 01 dated 25/07/2011 and Annual Monitoring report for the period 01/01/2010 – 31/12/2010 version 02 dated 28/09/2011;
- project as described in the determined PDD.

2.2 Follow-up Interviews

On 16-17/08/2011 Bureau Veritas Certification during site visit performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of RME

"Donetskteplocomunenergo", ME "Makiivteplomerezha", MCE "Mariupolteplomerezha", "Artemivsk-Energy", Ltd and Institute of Engineering Ecology were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
RME "Donetskteplo-comunenergo", ME "Makiivteplo-merezha", MCE "Mariupolteplo-merezha", "Artemivsk-Energy", Ltd	➢ 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 ➢ Monitoring procedure
Institute of Engineering Ecology	➢ Baseline methodology ➢ Monitoring plan ➢ Monitoring report ➢ Deviations from PDD ➢ Emission reduction calculation

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.

If the Verification Team, in assessing the monitoring reports and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to the monitoring requirements, it should raise these issues and inform the project participants of these issues in the form of:

(a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;

(b) Clarification request (CL), requesting the project participants to provide additional information for the AIE to assess compliance with the monitoring plan;

(c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

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

3 VERIFICATION CONCLUSIONS

In the following sections, the conclusions of the verification are stated.

The findings from the desk review of the original monitoring documents and the findings from interviews during the follow up visit are described in the Verification Protocol in Appendix A.

The Clarification Requests, Corrective Action Requests and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the project resulted in 08 Corrective Action Requests and 04 Clarification Requests.

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

3.1 Remaining issues and FARs from previous verifications

Remaining issues and FARs from previous verification are absent.
Not applicable.

3.2 Project approval by Parties involved (90-91)

Written project approval by the host Party (Ukraine) was received at the determination stage.

Written project approval by the Netherlands has been issued by the DFP of that Party when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest.

The abovementioned written approvals are unconditional.

3.3 Project implementation (92-93)

Implementation of boiler houses equipment rehabilitation and network rehabilitation are realized mainly according to project plan with some deviations from time-table.

Reconstruction of boiler-houses sometimes has insignificant deviations from the project particularly in changes of installed boilers capacity. It

was dictated by changes in heat energy demand. In several cases replacement of different (from planned before) diameters of network pipes takes place.

In 2010 implementation of CHP units has been started. But no CHP unit has been putted into operation yet.

Table of implemented energy saving measures is presented below.

Implemented energy saving measures	Volume of performed works (number of boilers, length of network replacement, etc.)		
	2006-2009	2010	Total
ME “Makiivteplomerezha”			
Boilers replacement			
Super Rac 2330	5		5
KSVa-2	3		3
KSVa-0,63	2		2
KSVa -1,0	3		3
Kolvi-300	2		2
BGV-50E	12		12
Rac 1060	3		3
Sunier duval	3		3
REX-200	2		2
REX-100	7		7
Modul Bernard 120	10		10
Super Rac 465	2		2
Super Rac 2100	2		2
Super Rac 2910	3		3
Super Rac 345	4		4
KVT - 1	4		4
Total	67	0	67
Rehabilitation of network, m	6700	1312	8012
Switching of boiler-houses’ load to the more effective including the newly built ones	7		7
MCE “Mariupolteplomerezha”			
Boilers replacement			
PTVM-30	2		2
PTVM-50	3		3
TVG-8M	5	4	9

E-1-09	1		1
KVG-6,5	4		4
VPR-500	1		1
NIISTU-5M	2		2
KVGM -50	1		1
Total	19	4	23
Replacement of boiler burners			
SNG-33	81		81
MDGG 150	2		2
Total	83		83
Rehabilitation of network, m	92273	31595	123868
Replacement of pumps	6		6
Switching of boiler-houses' load to the more effective ones	3		3
Replacement of heat exchangers	2	12	14
Reconstruction of boilers	6		6
Chemical flushing of boilers	9		9
Replacement of boiler convection part pipes	0	5	5
Frequency controllers installation	81	35	116
Implementation of heat utilizers	3	1	4
"Artemivsk-Energy", Ltd.			
Boilers replacement			
KVG-0,63	6		6
KV-GM-1,0	4		4
KV-GM-1,6	3		3
Viessmann	2		2
Riello	2	2	4
Total	17	2	19
Rehabilitation of network, m	4692	1903	6595
Frequency controllers installation	5		5
Replacement of pumps	22		22
Setting up of boilers	0	18	18
Switching of boiler-houses' load to the more effective ones	1		1

The identified areas of concern as to Project implementation, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 01, CAR 02, CAR 03, CAR 04, CL 01, CL 02).

3.4 Compliance of the monitoring plan with the monitoring methodology (94-98)

The monitoring occurred in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website.

For calculating the emission reductions key factors, such as natural gas consumption at boiler houses, coal consumption at boiler houses, average annual net calorific value of natural gas average annual net calorific value of coal, average outside temperature during the heating period, average inside temperature during the heating period, number of customers of the hot water supply service, heated area (total), average heat transfer factor of heated buildings in the base year, heated area of buildings (previously existed in the base year) with the renewed (improved) thermal insulation in the reported year, heated area of newly connected buildings (assumed with the new (improved) thermal insulation) in the reported year, heat transfer factor of buildings with new thermal insulation, heating period duration, duration of period of hot water supply service, maximum connected load to a boiler-house, that is required for heating, connected load to a boiler-house, that is required for hot water supply service, standard specific discharge of hot water per personal account, natural gas carbon emission factor, coal carbon emission factor, reducing electricity consumption carbon emission factor, electricity consumption, fuel consumption by the cogeneration units, influencing the baseline emissions and the activity level of the project and the emissions due to the JI project as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions or enhancements of net removals, such as Boilerhouse records, Statistics of ME “Makiivteplomerezha”, MCE “Mariupolteplomerezha”, “Artemivsk-Energy”, Ltd., IPCC Guidelines for National Greenhouse Inventories are clearly identified, reliable and transparent.

Emission factors, including default emission factors, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The calculation of emission reductions or enhancements of net removals is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The monitoring equipment used for baseline and project emission calculation is present in the Annex 2 of Monitoring Reports.

The identified areas of concern as to Compliance with monitoring plan, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CAR 05, CAR 06, CAR 07, CAR 08).

3.5 Revision of monitoring plan (99-100)

Not applicable for this verification process.

3.6 Data management (101)

The data and their sources, provided in Monitoring report, are clearly identified, reliable and transparent.

Registration of Natural gas consumption at boiler houses of district heating enterprises that implement the project is carried out by the following scheme:

1. Natural gas consumption is measured by gas flow meter, installed at a boiler-house. All boiler-houses are equipped with gas flow meters.

2. The majority of boiler-houses are equipped with automatic correctors for temperature and pressure. Gas consumption is registered automatically. Every day operator of a boiler house makes registration of daily gas consumption in the special paper journal "Journal of registration of boiler-house's operation parameters".

3. At the boiler-houses that are not equipped with gas volume correctors, operator of a boiler house every 2 hours registers parameters of natural gas (temperature and pressure) in the paper journal "Journal of registration of boiler-house's operation parameters". These parameters are used to bring gas consumption to standard conditions.

4. Every day operators report values of gas consumption by phone to Production-Technical Department (PTD) of ME "Makiivteplomerezha", MCE "Mariupolteplomerezha" and "Artemivsk-Energy", Ltd., correspondingly, where they are storing and used for payments to gas suppliers.

5. Every month the account centers transfer data to gas suppliers.

During site visit, all passports of measurement equipments that used in the JI project were provided for revision. Thus, the function of the monitoring equipment, including its calibration status, is in order.

The evidence and records used for the monitoring are maintained in a traceable manner.

The data collection and management system for the project is in accordance with the monitoring plan.

The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.

Data, required for emission reductions calculation and verification, are to be kept for two years after the last transfer of ERUs for the project in accordance with Order dated 04.07.2011 “On creation of the operation team and period of storage of documents II project”.

The identified areas of concern as to Data management, project participants response and BV Certification’s conclusion are described in Appendix A Table 2 (refer to CL 03, CL 04).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the initial and periodic verification of the JI project ”Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region” located in the Makiivka, Mariupol, Artemivsk Cities of Donetsk Region, Ukraine, which applies JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

The management of RME “Donetskteplocomunenergo” 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 04. 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.

Bureau Veritas Certification verified the project Monitoring reports version 02 for the reporting periods as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and

described in approved 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 accurately calculated and is free of material errors, omissions, or misstatements. Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the approved project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated, we confirm, with a reasonable level of assurance, the following statement:

Reporting period from 01/01/2010 to 31/12/2010

Baseline emissions	: 712 173	t CO_2 equivalents
Project emissions	: 607 489	t CO_2 equivalents
Leakages	: 0	t CO_2 equivalents
Emission reductions	: 104 684	t CO_2 equivalents

5 REFERENCES

Category 1 Documents:
Documents provided by RME "Donetskteplocomunenergo" that relate directly to the GHG components of the project.

/1/ PDD of the JI project "Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region" version 04 dated 02/08/2011

/2/ Monitoring report for the period 01/01/2010 – 31/12/2010 of JI project "Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region" version 01 dated 25/07/2011

/3/ Monitoring report for the period 01/01/2010 – 31/12/2010 of JI project "Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region" version 02 dated 28/09/2011

/4/ Letter of Approval from State Environmental Investment Agency of Ukraine № 2811/23/7 dated 28/09/2011

/5/ Letter of Approval from Ministry of Economic Affairs of Netherlands 2011JI33 dated 14 September 2011

/6/ Determination report №UKRAINE-det/0294/2011 of the JI project "Rehabilitation of the District Heating Systems in Makiivka, Mariupol, Artemivsk Cities of Donetsk Region" dated 03/08/2011

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

/1/ Qualification certificate of PE Umantsev A.P. №ВЛ-485 applicable to 09/08/2013

/2/ Passport of physic-chemical parameters of natural gas. January 2010.

/3/ Passport of physic-chemical parameters of natural gas. February 2010.

/4/ Passport of physic-chemical parameters of natural gas. March 2010.

/5/ Passport of physic-chemical parameters of natural gas. April 2010.

/6/ Passport of physic-chemical parameters of natural gas. May 2010.

/7/ Passport of physic-chemical parameters of natural gas. June 2010.

/8/ Passport of physic-chemical parameters of natural gas. July 2010.

/9/ Passport of physic-chemical parameters of natural gas. August 2010.

/10/ Passport of physic-chemical parameters of natural gas. September 2010.

/11/ Passport of physic-chemical parameters of natural gas. October 2010.

/12/ Passport of physic-chemical parameters of natural gas. November 2010.

/13/ Passport of physic-chemical parameters of natural gas. December 2010.

/14/ MCE “Mariupolteplomerezha” - Register of gas for January 2010.

/15/ MCE “Mariupolteplomerezha” - Register of gas for February 2010.

/16/ MCE “Mariupolteplomerezha” - Register of gas for March 2010.

/17/ MCE “Mariupolteplomerezha” - Register of gas for April 2010.

/18/ MCE “Mariupolteplomerezha” - Register of gas for May 2010.

/19/ MCE “Mariupolteplomerezha” - Register of gas for June 2010.

/20/ MCE “Mariupolteplomerezha” - Register of gas for July 2010.

/21/ MCE “Mariupolteplomerezha” - Register of gas for August 2010.

/22/ MCE “Mariupolteplomerezha” - Register of gas for September 2010.

/23/ MCE “Mariupolteplomerezha” - Register of gas for October 2010.

/24/ MCE “Mariupolteplomerezha” - Register of gas for November 2010.

/25/ MCE “Mariupolteplomerezha” - Register of gas for December 2010.

/26/ Letter 18-3/2s number of 04.01.2010 about the average air temperature in Mariupol

/27/ Letter 18-594/153s number of 07.10.2010 about the average air temperature in Mariupol

/28/ Register of consumers MCE “Mariupolteplomerezha” for 2005-2010.

/29/ Register heated area of MCE “Mariupolteplomerezha” for 2005-2010.

/30/ Order of Mayor of city Mariupol number 441r of 04.10.2010 about the start of heating season 2010-2011.

/31/ Order of the MCE "Mariupolteplomerezha» № 489 from 04.10.2010 about the start of heating season 2010-2011.

/32/ Order of the MCE "Mariupolteplomerezha» № 494 from 06.10.2010 about the start of heating season 2010-2011. supplemented in order № 489

/33/ Order of Mayor Mariupol number 167r of 12.04.2011 about the end of heating season 2010-2011.

/34/ Report on Air Protection Form 2-TP (air) in 2010.

/35/ Boiler house shift technology logbook

/36/ Repair Plan in 2010.

/37/ Acceptance protocol amount of electricity used in January 2010.

/38/ Acceptance protocol amount of electricity used in February 2010.

/39/ Acceptance protocol amount of electricity used in March 2010.

/40/ Acceptance protocol amount of electricity used in April 2010.

/41/ Acceptance protocol amount of electricity used in May 2010.

/42/ Acceptance protocol amount of electricity used in June 2010.

/43/ Acceptance protocol amount of electricity used in July 2010.

/44/ Acceptance protocol amount of electricity used in August 2010.

/45/ Acceptance protocol amount of electricity used in September 2010.

/46/ Acceptance protocol amount of electricity used in October 2010.

/47/ Acceptance protocol amount of electricity used in November 2010.

/48/ Acceptance protocol amount of electricity used in December 2010.

/49/ Electricity consumption logbook

/50/ Passport of electricity meter SL 7000 Power Smart № 53000612

/51/ Photo electricity meter SL 7000 Smart № 53000612

/52/ Passport of electricity meter SL 7000 Power Smart № 53000611

/53/ Photo electricity meter SL 7000 Smart № 53000611

/54/ Passport of electricity meter SL 7000 Power Smart № 53000609

/55/ Photo electricity meter SL 7000 Smart № 53000609

/56/ Passport of electricity meter SL 7000 Power Smart № 53000610

/57/ Photo electricity meter SL 7000 Smart № 53000610

/58/ Verification certificate of natural gas consumption meter POTOK-DN-03 № 03/39

/59/ Photo POTOK-DN-03 № 03/39

/60/ Passport Pressure sensor "Sapphire M" 5050 number 07124864

/61/ Photo Sensor pressure "Sapphire M" 5050 number 07124864

/62/ Verification certificate Thermoelement TSMU IP-205 number 2846

/63/ Photo TSMU IP-205 number 2846

/64/ Passport Metran-43 number 6799

/65/ Photo Metran-43 number 6799

/66/ Passport Metran-43 number 6621

/67/ Photo Metran-43 number 6621

/68/ Certificate № 60/14 of master Polyakova Y.A.

/69/ Training logbook boiler house 279 kv

/70/ Emergency Situations training logbook boiler house 279 kv

/71/ Instruction for boiler house operators of boiler PTVM-30. Boiler house 279 kv

/72/ Passport boiler PTVM-30m number 079637

/73/ Photo PTVM-30m number 079637

/74/ Acceptance to the operation of the boiler PTVM-30 number 2 boiler 279 kv 2010.

/75/ Acceptance to the operation of the frequency transducer in boiler house 279 kv 2010.

/76/ Accidents and emergencies logbook. Boilerhouse 138kv

/77/ Emergency Situations training logbook boiler house 138kv

/78/ Boiler house shift technology logbook boiler house138kv

/79/ Verification certificate of natural gas consumption meter POTOK-DN-03 № 03/37

/80/ Photo POTOK-DN-03 № 03/37

/81/ Verification certificate Thermoelement TSMU IP-205 number 4088

/82/ Photo TSMU IP-205 number 4088

/83/ Passport Metran-43 number 138

/84/ Photo Metran-43 number 6462

/85/ Passport Metran-43 number 6764

/86/ Photo Metran-43 number 6764

/87/ Passport gas meter LG-K-200 number 7094

/88/ Photo LG-K-200 number 7094

/89/ Passport gas volume calculator "Universal-02» № 649

/90/ Photo "Universal-02» № 649

/91/ Passport Absolute pressure sensor number 01139416

/92/ Photo absolute pressure sensor number 01139416

/93/ Verification certificate The transducer measuring temperature PVT-01-1 number 507

/94/ Photo PVT-01-1 number 507

/95/ Passport electricity meter SL 7000 Power Smart № 53000606

/96/ Photo electricity meter SL 7000 Smart № 53000606

/97/ Passport electricity meter SL 7000 Power Smart № 53000604

/98/ Photo electricity meter SL 7000 Smart № 53000604

/99/ Repair plan in 2010.

/100/ Certificate №90/7 of master Temerbek I.K.

/101/ Training logbook boiler house boiler house 138kv

/102/ Occupational Health Instructions number 43 for chemical water treatment boiler 138kv

/103/ Work instruction for operators of boilers PTVM-30m boilerhouse 138kv

/104/ Passport boiler TVG-8M number 079446

/105/ Photo TVG-8M number 079446

/106/ Passport boiler PTVM-30m number 079622

/107/ Photo PTVM-30m number 079622

/108/ Passport boiler PTVM-30m number 079621

/109/ Photo PTVM-30m number 079621

/110/ Photo PTVM-30m number 079621

/111/ Acceptance to the operation of boiler plate heat exchangers in boilerhouse 138 kv 2010.

/112/ Gas consumption logbook of boilerhouse "Kubanskaya"

/113/ Passport electricity meter SL 7000 Power Smart № 53000613

/114/ Photo SL 7000 Smart № 53000613

/115/ Passport electricity meter SL 7000 Power Smart № 53000618

/116/ Photo SL 7000 Smart № 53000618

/117/ Passport gas consumption meter LG-K-200 number 7102

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/119/ Passport gas meter number 9429

/120/ Photo gas meter number 9429

/121/ Verification certificate work measuring instrument number 743. The transducer measuring temperature PVT-01-1 number 548

/122/ Photo PVT-01-1 number 548

/123/ Passport Absolute pressure sensor number 01138992 boilerhouse "Kubanskaya"

/124/ Photo absolute pressure sensor number 01138992

/125/ Passport gas volume calculator "Universal-02» № 670

/126/ Photo "Universal-02» № 670

/127/ Emergency Situations training logbook boiler house "Kubanskaya"

/128/ Training logbook boiler house "Kubanskaya"

/129/ Certificate number 183 / 6 of master Shukshina S.V.

/130/ Acceptance to the operation of the transducer frequency. Boilerhouse "Kubanskaya" in 2010.

/131/ Acceptance to the operation of heating at Azov array 2 from boilerhouse "Kubanskaya" in 2010.

/132/ Acceptance to the operation of heating at Azov array 6 of the boilerhouse "Kubanskaya" in 2010.

/133/ Acceptance for use in heating Latysheva str, 39 from boilerhouse "Kubanskaya" in 2010.

/134/ Schedule planned preventive maintenance on equipment Primorskoye in 2010.

/135/ Shift technology logbook. Boiler house ZHMR-3

/136/ Passport boiler TVG-8 number 035715. Boiler house ZHMR-3

/137/ TVG-8 photo number 035715

/138/ Passport boiler PTVM-30m number 079318. Boiler house ZHMR-3

/139/ Photo PTVM-30m number 079318

/140/ Passport boiler TVG-8 number 038716. Boiler house ZHMR-3

/141/ TVG-8 photo number 038716

/142/ Passport electricity meter SL 7000 Power Smart № 53001907

/143/ Photo SL 7000 Smart № 53001907

/144/ Passport electricity meter SL 7000 Power Smart № 53001897

/145/ Photo SL 7000 Smart № 53001897

/146/ Verification certificate of natural gas consumption meter POTOK-DN-03 № 03/03

/147/ Photo POTOK-DN-03 № 03/03

/148/ Verification certificate. Thermoelement TSMU IP-205 number 1723

/149/ Photo TSMU IP-205 number 1723

/150/ Passport Metran-43 number 8325

/151/ Photo Metran-43 number 8325

/152/ Passport Metran-43 number 6936

/153/ Photo Metran-43 number 6936

/154/ Passport Pressure sensor "Sapphire M" 5050 number 07123866

/155/ Photo "Sapphire M" 5050 number 07123866

/156/ Certificate number 82 / 1 of master Tsumbek E.L.

/157/ Training logbook.Boiler house ZHMR-3

/158/ Emergency Situations training logbook ZHMR-3

/159/ Acceptance to the operation of the boiler TVG-8M number 3 boilerhouse ZHMR-3 in 2010.

/160/ Photo. Burner Gas SNG-33 number 002326

/161/ The power consumption of "Artemivsk-Energy" Ltd in 2010.

/162/ Information about the number of consumers of hot water for "Artemivsk-Energy" ltd for 2010. (Boiler house number 7 Artema, 10)

/163/ Register heated area of "Artemivsk-Energy" ltd for 2010.

/164/ The decision of the Executive Committee of Artyomovsk City Council number 454 from 30.09.2010 about the start of the heating period 2010-2011.

/165/ Order of the "Artemivsk-Energy" Ltd № 149 from 06.10.2010 about the start of the heating period 2010-2011.

/166/ Report on Air Protection Form 2-TP (air) in 2010. "Artemivsk-Energy" ltd

/167/ Shift Logbook. Boiler house Artema, 10

/168/ Consumption of fuel and energy resources logbook "Artemivsk-Energy" ltd.

/169/ Acceptance Certificate (internal displacement) of fixed assets from 30.10.2010r. № 1030084

/170/ Passport Water boiler KV-G-0,63-95 SN number 139

/171/ Passport Water boiler KV-G-0,63-95 SN number 164

/172/ Passport Water boiler KV-G-0,63-95 SN number 165

/173/ Passport Water boiler KV-GM-1,6-95 SN № 012

/174/ Passport Water boiler KV-GM-1,25-95 SN № 071

/175/ Passport Water boiler KV-GM-1,25-95 SN № 070

/176/ Boiler KV-G-0,63 number 2 repair logbook

/177/ Passport gas meter LTK-100 number 5885

/178/ LTK-100 photo number 5885

/179/ Passport electricity meter Delta - 8010 № 18156

/180/ Photo Delta - 8010 № 18156

/181/ Plan localization and liquidation of emergencies and accidents. Boiler house number 7

/182/ Journal of the training sessions. Boiler house number 7

/183/ Work Instructions TB-124 for boiler operators such as KB-G-0,63

/184/ Certificate number 25 / 7 of boiler operator Volchkova I.S.

/185/ Certificate № 28/30 of boiler operator Rodnyana S.M.

/186/ Schedule planned preventive maintenance of equipment. Boiler house number 11.

/187/ Regime charts of boiler number 2 KV-GM-1,6

/188/ Regime charts of boiler number 1 KV-GM-1,25

/189/ Regime charts of boiler number 3 KV-GM-1,25

/190/ Regime charts of boiler number 1 KV-GM-1, 25 boiler number 11, Artema, 65

/191/ Regime charts of boiler number 3 KV-GM-1, 25 boiler number 11, Artema, 65

/192/ Acceptance Certificate (internal displacement) of fixed assets from 30.04.2010 № 103062

/193/ Technical report regime-type boilers up works KV-GM-1,25-95 CH boiler number 11, Artema, 65

/194/ Certificate of accreditation number 2 of 02.02.2010. Measurement laboratory on control of emissions into the atmosphere "Artemivsk-Energy" ltd.

/195/ Shift logbook of boiler house number 4

/196/ Electricity consumption logbook

/197/ Passport natural gas meter LG-K-150-1/30-0,63-1-Ex number 10540

/198/ Photo LG-K-150-1/30-0,63-1-Ex number 10540

/199/ Passport electricity meter Delta - 8010 number 18372

/200/ Photo Delta - 8010 № 18372

/201/ Boiler repairs logbook . Boiler house number 11

/202/ Plan localization and liquidation of emergencies and accidents. Boiler house number 11

/203/ Training sessions in Emergency Situations logbook. Boiler house number 11.

/204/ Certificate № 27/14 of boiler operator Nogin V.M.

/205/ Certificate number 23 / 9 of boiler operator Ivanova E.S.

/206/ Certificate № 55/13 of master Minenko A.S.

/207/ Work instruction number 1 for boiler operators KVG-7,56

/208/ Passport boiler VITOMAX 200-LW M62A004 №737329800104

/209/ Work instruction for operators of boiler type VITOMAX 200-LW M62A

/210/ Passport natural gas meter LG-K-150-650-1,6-01-Ex number 6116

/211/ Photo LG-K-150-650-1,6-01-Ex number 6116

/212/ Passport electricity meter Delta - 8010 number 18454

/213/ Photo Delta - 8010 № 18454

/214/ Shift logbook boiler house number 3, Karpynskoho str., 10a

/215/ Regime charts of boiler number 2 VITOMAX 200-LW

/216/ Photo. WILO Pump number 104153

/217/ Photo. Kolmeks pump number 104127

/218/ Photo. Boiler VIESSMANN VITOMAX 200-LW № 104229

/219/ Photo. Boiler VIESSMANN VITOMAX 200-LW № 104230

/220/ Photo. Gas volume corrector number B25 2876

/221/ Photo. WILO Pump number 104153

/222/ Photo. Gas volume corrector number B25 6793

/223/ Photo. Gas meter GMS-G 160-80-1,0 № 490

/224/ Photo. Kolvy-1300 boiler number 0430

/225/ Plan localization and liquidation of emergencies and accidents. ME “Makiivteplomerezha”

/226/ Regime charts boiler hospital № 7, Oborona str.

/227/ Photo. WILO Pump with motor number 104153

/228/ Photo. Corrector gas volume number B25 6793

/229/ Photo. Gas meter GMS-G 160-80-1,0 № 490

/230/ Photo. Kolvy boiler number 0430-1300

/231/ Plan localization and liquidation of emergencies and accidents. ME "Makiyivteplomerezha"

/232/ Regime charts boiler hospital № 7, Oborona str.

/233/ Calculating caloric ratio of natural gas in 2010.

/234/ Calculating calorie of solid fuel in 2010.

/235/ Letter № 11.24/65 from 03.02.2010. The Regional Centre for Hydrometeorology. The average temperature of air in Makiyivka in January 2010.

/236/ Letter № 11.24/146 from 03.03.2010. The Regional Centre for Hydrometeorology. The average temperature of air in Makiyivka for February 2010.

/237/ Letter № 11.24/210 from 06.04.2010. The Regional Centre for Hydrometeorology. The average temperature of air in Makiyivka in March 2010.

/238/ Letter № 11.24/235 from 19.04.2010. The Regional Centre for Hydrometeorology. The average temperature of air in Makiyivka in April 2010.

/239/ Average air temperature in city Makyiyivka

/240/ Heating area ME “Makiivteplomerezha” in 2010.

/241/ The decision of the Executive Committee Makeyevka City Council number 1097 on 22.09.2010 about the start of the heating period 2010-2011.

/242/ The decision of the Executive Committee Makeyevka City Council № 1106 from 06.10.2010 On amending the Decision of the Executive Committee Makeyevka City Council number 1097 on 22.09.2010 about the start of the heating period 2010-2011.

/243/ The decision of the Executive Committee Makeyevka City Council number 264 from 24.03.2010 about the end of heating period 2009-2010.

/244/ Report on Air Protection Form 2-TP (air) in 2010. ME “Makiivteplomerezha”

/245/ Passport boiler Kolvi-1300 № 0431

/246/ Photo Kolvi -1300 number 0431

/247/ Passport boiler Kolvi-1300 № 0430

/248/ Kolvi Photo-1300 number 0430

/249/ Passport natural gas meter LG-K-Ex G160-80-1/20-1,6-1 № 4522

/250/ Photo LG-K-Ex G160-80-1/20-1,6-1 № 4522

/251/ Passport gas volume calculator "Universal» № 2883

/252/ Photo «Universal» № 2883

/253/ Passport electricity meter EMS 134.10.1 № 228465

/254/ Photo EMS 134.10.1 № 228465

/255/ The act of acceptance and transfer of output (electricity) ME "Makiyivteplomerezha" in December 2010.

/256/ Passport rotary gas meter GMS-G40.40.1.0 № 039973

/257/ Photo GMS-G40.40.1.0 № 039973

/258/ Passport corrector B25 gas number 081 073

/259/ Photo B25 number 081 073

/260/ Work instruction. Water boilers Superac.

/261/ Passport rotary gas meter GMS-G160.80.1.0 № 059549.

/262/ Photo GMS-G160.80.1.0 № 059549

/263/ Passport corrector gas B25 № 02262

/264/ Photo B25 Photo № 02262

/265/ Passport electricity meter EMS 134.10.1 № 228070

/266/ Photo EMS 134.10.1 № 228070

/267/ Certificate of master Yalovytskyy O.V.

/268/ Certificate of master Makalysh A.O.

/269/ Schedule of emergency training ME “Makiivteplomerezha”

/270/ Emergency training logbook ME “Makiivteplomerezha”

/271/ Calculating calorie solid fuel for the ME “Makiivteplomerezha” for 2010.

/272/ The procedure of recalculation of hot water and central heating ME “Makiivteplomerezha”

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

/1/ Kucherenko V.M. - Deputy General director on investments and strategic development, RME “Donetskteplocomunenergo”

/2/ Pakhomova E.I. - Leading engineer of the Prospective development department, RME “Donetskteplocomunenergo”

/3/ Klimenko I.G. - Acting director, chief electrician, MCE “Mariupolteplomerezha”

/4/ Shamsheev I.O. - Chief Engineer, MCE “Mariupolteplomerezha”

/5/ Klochko O.O. - head of the Production-Technical Department, MCE “Mariupolteplomerezha”

/6/ Valanchius Albertas – Director of “Artemivsk-Energy”, Ltd.

/7/ Kravtsova L.M. - head of the Production-Technical Department, “Artemivsk-Energy”, Ltd.

/8/ Zaletov L.M. - Chief Engineer, “Artemivsk-Energy”, Ltd.

/9/ Menchov E.M. - Chief electrician, “Artemivsk-Energy”, Ltd.

/10/ Ryazantseva L.O. – Director of ME “Makiivteplomerezha”

/11/ Shevchenko O.E. - Acting chief Engineer, ME “Makiivteplomerezha”

/12/ Moiseyeva N.A. - Acting Deputy Director of Production, ME “Makiivteplomerezha”

/13/ Indenko V.M. - Head of the Fuel and energy resources department, ME “Makiivteplomerezha”

/14/ Panchenko L.I. - Acting head of the Production-Technical Department, ME “Makiivteplomerezha”

/15/ Ryazantseva N.P. - senior engineer of exploitation service, ME “Makiivteplomerezha”

APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals by Parties involved				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	DFP of the Netherlands has issued written project approval (LoA) when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines.	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	Yes, all the written project approvals by Parties involved are unconditional.	OK	OK
Project implementation				
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	Implementation of the project activity was realized according to the project implementation schedule described in the project design document. CAR 01. The project start date is listed incorrectly in sections A.4, A.6 MR. According to the PDD the beginning of the project is on 01/10/2006. Make the appropriate corrections.	CAR 01 CL 01-02	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 01. Please explain the difference between the estimated reduction are indicated in the PDD and actual values are indicated in the MR (Sections A.3 and D.3). CL 02. Please provide information on the implementation of cogeneration in 2010.		
93	What is the status of operation of the project during the monitoring period?	Monitoring report indicated the current status of the project activity implementation. Based on provided materials, there is known that all project equipments were operational in the reporting period. CAR 02. Please specify which sectoral scope project applies to. CAR 03. Table 1 and tables of section D.3 should indicate the year in the format DD / MM / YY. CAR 04. Section D.2 is absent in MR. Make the appropriate corrections.	CAR 02-04	OK
Compliance with monitoring plan				
94	Did the monitoring occur in	Data used for calculation of emissions	CAR 05	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	reduction based on information that confirmed by ME "Makiivteplo-merezha", MCE "Mariupolteplo-merezha", "Artemivsk-Energy", Ltd documents. CAR 05. Please specify the current version of the PDD in section A.7, and bring a detailed explanation deviation calculated values.		
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	All key factors influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project were taken into account, as appropriate for calculating the emission reductions or enhancements of net removals. CAR 06. Please specify in detail section and a table that contains the value on the link 11.	CAR 06	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Data sources used for calculating emission reductions are clearly identified, reliable and transparent. On site responsible persons register data from the measurement equipments and fixed monitoring data to logbooks, monthly data collected to the technical reports. All roles and responsibilities are described in details in the Monitoring report.	CAR 07-08	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 07. Link (5) hths.tp: / / oscill.com/files/27082006.pdf crashes. Please make the appropriate correction. CAR 08. Please specify more detailed placement of Annexes 1-6.		
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	Emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice	OK	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner. As a result of documents revision, all data connected with estimation of emission reduction are consistent through the Monitoring report and excel spreadsheets with calculation.	OK	OK
Applicable to JI SSC projects only				
96	Is the relevant threshold to be	Not applicable	Not	Not

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	classified as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?		applicable	applicable
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	Not applicable	Not applicable
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring reports?	Not applicable	Not applicable	Not applicable
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring reports? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	Not applicable	Not applicable	Not applicable
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?	Not applicable	Not applicable	Not applicable
Data management				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	Procedures of data collection are implemented in compliance with the approved monitoring plan. Monitoring data of the project is monitored in compliance with scheduled frequency approved in the developed monitoring plan and monitoring procedure. The quality control and quality assurance procedures realised due to performing of internal audits and checking measures, participation of third parties, and carrying out of procedures of emergencies finding.	CL 03	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 03. Please provide information about EIA of the project and the conclusion of state ecological expertise.		
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	All monitoring equipments have calibration. It is calibrated with periodic frequency (passport states the calibration frequency for every device) according to the national regulations. During site visit verifiers received and reviewed passports and/or certificates on calibration of all measurement equipments. CL 04. Please provide the documents confirming the right of PE Umantsev A.P. to conduct verification of equipment.	CL 04	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidence and records used for the monitoring are maintained on site of some devices and in responsible departments in a traceable manner.	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system for the project is in accordance with the approved monitoring plan. Implementation of monitoring system was checked through site visit, and concluded that monitoring system is completely in accordance with the monitoring plan. This fact is also confirmed by the	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		documents.		
Verification regarding programs of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	Not applicable	Not applicable	Not applicable
103	Is the verification based on the monitoring reports of all JPAs to be verified?	Not applicable	Not applicable	Not applicable
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	Not applicable	Not applicable	Not applicable
104	Does the monitoring period not overlap with previous monitoring periods?	Not applicable	Not applicable	Not applicable
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	Not applicable	Not applicable	Not applicable
Applicable to sample-based approach only				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that: (i) For each verification that uses	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	a sample-based approach, the sample selection shall be sufficiently representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that verification is reasonable, taking into account differences among the characteristics of JPAs, such as: – The types of JPAs; – The complexity of the applicable technologies and/or measures used; – The geographical location of each JPA; – The amounts of expected emission reductions of the JPAs being verified; – The number of JPAs for which emission reductions are being verified; – The length of monitoring periods of the JPAs being verified; and – The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for	Not applicable	Not	Not

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	publication through the secretariat along with the verification report and supporting documentation?		applicable	applicable
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?	Not applicable	Not applicable	Not applicable
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	Not applicable	Not applicable	Not applicable
110	If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?	Not applicable	Not applicable	Not applicable

Table 2 Resolution of Corrective Action Requests and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR 01. The project start date is listed incorrectly in sections A.4, A.6 MR. According to the PDD the beginning of the project is on 01/10/2006. Make the appropriate corrections.	92	According to the determined PDD version 04 dated August 2, 2011, the starting date of the project is 15/03/2006 (see Section C.1. of PDD). 01/10/2006 is the starting date of the first monitoring period (see Section C.3. of PDD).	CAR 01 is closed based on the explanation provided.
CL 01. Please explain the difference between the estimated reduction are indicated in the PDD and actual values are indicated in the MR (Sections A.3 and D.3).	92	The explanation is given in Section D.3. of MR.	CL 01 is closed based on the explanation provided.
CL 02. Please provide information on the implementation of cogeneration in 2010.	92	It is added in MR #4 version 02.	CL 02 is closed based on due corrections made to the MR.
CAR 02. Please specify which sectoral scope project applies to.	93	This information is added in MR version 02.	CAR 02 is closed based on due corrections made to the MR.

CAR 03. Table 1 and tables of section D.3 should indicate the year in the format DD / MM / YY.	93	Currently there are no rules regulating the form of a Monitoring Report, including the format for specifying dates. Taking into account this CAR, the proposed format of data is used in MRs version 02, but only for 2006. The other periods (2007, 2008, 2009 and 2010) cover the entire calendar year from January, 1st till December, 31st.	CAR 03 is closed based on due corrections made to the MR.
CAR 04. Section D.2 is absent in MR. Make the appropriate corrections.	93	It is corrected in MR version 02.	CAR 04 is closed based on due corrections made to the MR.
CAR 05. Please specify the current version of the PDD in section A.7, and bring a detailed explanation deviation calculated values.	94	The actual version of PDD is provided in MR version 02. The relevant explanation is given in Section D.3. of MR.	CAR 05 is closed based on the explanation provided.
CAR 06. Please specify in detail section and a table that contains the value on the link 11.	95 (a)	This information is added in MR version 02.	CAR 06 is closed based on due corrections made to the MR.
CAR 07. Link (5) hths.tp: / / oscill.com/files/27082006.pdf crashes. Please make the appropriate correction.	95 (b)	The link is changed to http://oscill.com/files/27082006.pdf in MR version 02.	CAR 07 is closed based on due corrections made to the MR.

CAR 08. Please specify more detailed placement of Annexes 1-6.	95 (b)	It is provided in MR version 02.	CAR 08 is closed based on due corrections made to the MR.
CL 03. Please provide information about EIA of the project and the conclusion of state ecological expertise.	101 (a)	As it is mentioned in Section F.1. of the PDD, the district heating enterprises that implement the project make the necessary Environmental Impact Assessment (EIA) for elements of this activity according to Ukrainian legislation, For example, the EIA for reconstruction of boiler-house #33 Uvileyna str.,117 Artemivsk City (#152 in the Project) has been fulfilled. In this EIA the following points are mentioned: impact on vegetative and animal world is not present, the project activity will not lead to changes in use of land, emissions will not exceed the emission limit level, and the project activity in general will not lead to worsening of environment conditions. The summary indicator of air pollution extent is 0.125, that is less than 1.0, which corresponds to allowable pollution level and safe level of danger.	CL 03 is closed based on the explanation provided.

CL 04. Please provide the documents confirming the right of PE Umantsev A.P. to conduct verification of equipment.	101 (b)	The certificate on attestation is provided.	CL 04 is closed based on the explanation provided.

APPENDIX B: VERIFICATION TEAM

Rostislav Topchiy (chemical and ecological engineering)
Team Leader, Climate Change Verifier
Bureau Veritas Ukraine Health, Safety and Environment Project Manager

He is a Lead auditor of Bureau Veritas Certification for Environment Management System, Quality Management System, Occupational Health and Safety Management System. He performed over 180 audits since 2004. He has successfully completed Climate Change Verifier Training Course and he participated as verifier in the verification of 20 JI projects.

Vitaliy Minyaylo (chemical and ecological engineering)
Team member, Climate Change Verifier
Bureau Veritas Ukraine,
Health, Safety and Environment Department Project Manager

He has successfully completed IRCA registered Lead Auditor Training Course for Environment Management Systems, Quality Management Systems, Occupational Health and Safety Management System. He has successfully completed Climate Change Verifier Training Course and he participated as verifier in the verification of 10 JI projects.

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

Acting CEO Bureau Veritas Black Sea District

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 60 JI/CDM projects.