VERIFICATION REPORT

RME "DONETSKTEPLOCOMUNENERGO"

VERIFICATION OF THE REHABILITATION OF THE DISTRICT HEATING SYSTEM IN DONETSK REGION

FIFTH PERIODIC FOR 2011

(01 JANUARY 2011 – 31 DECEMBER 2011)

REPORT NO. UKRAINE-VER/0227/2011/1

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

Summary:

Bureau Veritas Certification has made the 5th periodic verification of the project "Rehabilitation of the District Heating System in Donetsk Region" project of RME "Donetskteplocomunenergo" located in Donetsk, Ukraine, and applying the 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 monitoring report against 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, Corrective Actions Requests, Forward Actions Requests (CL, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as per determined changes. 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, and the ERUs issued totalize 464426 tonnes of CO_2 equivalent for the monitoring period from 01/01/2011 to 31/12/2011.

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.:	Subject Group:
UKRAINE-ver/0227/2011/1	JI
Project title:	
"Rehabilitation of the District Heating System in Donetsk Region"	
Work carried out by:	
Team Leader, Lead Verifier: Oleg Skoblyk	
Team Member, Verifier: Rostislav Topchiy	
Team Member, Verifier: Vitaliy Minyaylo	
Work reviewed by:	
Ivan Sokolov – Internal Technical Reviewer	
Work approved by:	
Ivan Sokolov – Operational Manger Vyaceslav Yeriomin – Technical Expert	

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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 System in Donetsk Region” (hereafter called “the project”) at Donetsk town and 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 the project design document, the project’s baseline study, monitoring plan and monitoring report, 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 and/or corrective 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:

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

Topchiy Rostislav
Bureau Veritas Certification, Team Member, Climate Change Verifier

Minyaylo Vitaliy
Bureau Veritas Certification, Team Member, Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

Vyaceslav Yeriomin
Bureau Veritas Certification, Technical Expert

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 Institute of Engineering Ecology and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), 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. Answering the AIE's CARs and CLs project participant has issued new version of the Monitoring Report – version 02.

The verification findings presented in this report relate to the Monitoring Report version 02 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 19-20/03/2012 Bureau Veritas Certification performed on-site interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of "Institute of Engineering Ecology" and RME "Donetskteplocomunenergo" and MCE "Donetskmiskteplomerezha" were interviewed during site visit (see References for the list of interviewed persons). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
RME "Donetskteplocomunenergo" MCE "Donetskmiskteplomerezha"	➢ 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.
Institute of Engineering Ecology	➢ Baseline methodology. ➢ 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.

If the Verification Team, in assessing the monitoring report 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 Verification Team 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.

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

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, Corrective 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 03 Corrective Action Requests, 02 Clarification Requests.

The number between brackets at the end of each section corresponds to the DVM paragraph (see references).

3.1 Remaining issues and FARs from previous verifications

It was verified the implementation of corrective action to FAR 01 from the previous verification. Corrective actions were implemented. Issue is closed based on the documentation provided.

3.2 Project approval by Parties involved (90-91)

Written project approvals by Netherlands and Ukraine have 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 approval is unconditional.

3.3 Project implementation (92-93)

The starting date of the project according to PDD is: 01/04/2004.

The project main goal is fuel consumption reduction, in particular reduction of natural gas (which is imported to Ukraine), coal and oil consumption, by means of district heating system rehabilitation in Donetsk Region, including boiler and distribution network equipment replacement and rehabilitation, and installation of combined heat and power production plants. Such reduction of fuel consumption will result in decrease of greenhouse gas emissions (CO_2 and N_2O). The purpose of the project is sustainable development of the region through implementation of energy saving technologies.

Donetsk region's district heating (DH) utility (system of heat supply enterprises) supplies and sells heat energy in forms of heat, hot water and steam, to local consumers, namely households, municipal consumers and state-owned organizations. It is a natural monopolist of heat production in the region. Heat supply market in the region is stable for years.

The project "Rehabilitation of the District Heating System in Donetsk Region" was initiated in 2004 to rehabilitate Donetsk region's district heating system, including boiler and distribution network equipment replacement and rehabilitation, and installation of combined heat and power production plants (CHP). The project "Rehabilitation of the District Heating System in Donetsk Region" consists of two parts: Rehabilitation of Donetsk Region and Rehabilitation of Donetsk City. 286 boiler-houses with 1297 boilers and 1026 km of heat distributing networks are involved in the rehabilitation of Donetsk Region and 39 boiler-houses with 193 boilers and 248 km of heat distributing networks are involved in the rehabilitation of Donetsk City. In total: 325 boiler-houses with 1490 boilers and 1274 km of heat distributing networks are involved in the project. This is the large part of Donetsk regional DH system, and project may be expanded by including the other DH objects in the region.

The project employs the increase in fuel consumption efficiency to reduce greenhouse gas emissions relative to current practice. After complete project implementation over 15 million Nm^3 of natural gas and 50 thousand tonn of coal will be saved annually. Such reduction of fuel consumption is based on increase of the boiler efficiencies, reduction of heat losses in networks and CHP installation. The following activities will ensure fuel saving:

- Replacement of old boilers by the new highly efficient boilers;
- Upgrading of boilers,
- Upgrading of boilers' burners;
- Installation of heat utilizers, including condensation ones;
- Switching of boiler-houses from coal and fuel oil to natural gas;
- Improving of the network organization, application of the new insulation and the pre-insulated pipes;

- Installation of combined heat and power plants;
- Installation of frequency controllers at smoke exhauster and hot water pumps engines.

The actual operation of the proposed project is presented bellow.

Implemented energy saving measures	Volume of performed works (number of boilers, length of network replacement, etc.)		
	2003-2010	2011	Total
RME “Donetskteplocomunenergo”			
Boilers replacement			
KSVa-1,25	101	2	103
KSVa-2,5	59		59
KSVa-0,63	37	1	38
KSVa-1,0	5		5
KVG- 6,5	5		5
KVG-4,65	2		2
KVT - 1	13		13
KOLVI - 500	2		2
KSV-1	1		1
RBI - 3,32	4		4
RBI - 8900	4		4
KST-100	5		5
KOSVD - 0,5	2		2
KSVD-1,25	2	1	3
AOGV-96	9		9
AOGV -100	4		4
P - 0,5 - 0,8 GN	8		8
KVGM - 1,6	1		1
Ferroli-100	6		6
DKVR - 6,5	1		1
Total	276	4	280
Upgrading of boilers		3	3
Rehabilitation of network, m	139929	13879	153808
Frequency controllers installation	186	1	187
Implementation of Individual Heat Supply Stations with new heat exchangers	76		76

Installation of CHP units	1	1	2
Switching of boiler-houses to gas	20		20
Switching of load to the more effective boiler-houses	43	2	45
Implementation of heat utilizers	9	3	12

According to PDD version 08, emission reductions during 2011 monitoring period were expected 183041 tonnes of CO_2 equivalent. According Monitoring Report version 02 emission reductions achieved are 464426 tonnes of CO_2 equivalent.

The main reasons of the difference between the prognosis estimation of emission reductions in the PDD and the actual emission reductions in the Monitoring Report are:

1) Impossibility of taking into account in the PDD of the actual conditions in reported period;

2) Application of the strictly conservative approach for estimation of emission reductions in the PDD: the minimum assured (on the basis of the known results of similar measures) effect from implementation of all energy saving measures was accepted, and in some cases, when it was impossible to define it concretely in numbers, was not taken into account in the calculations in the PDD, although it obviously must be positive;

3) Application in course of calculations in the Monitoring Report of the values of the carbon emission factors for electricity generation and consumption in Ukraine according to the valid Order of the National Environmental Investment Agency of Ukraine, which are substantially higher than used in the PDD according to the normative documents valid before.

New value of EF is set National Environmental Investment Agency of Ukraine for the purpose of establishing a unified approach to the estimation of anthropogenic emissions of greenhouse gases and is recommended for use in the preparation of annual reports with the calculation of the volume of emission reductions.

4) In connection with participation in the JI project, in the course of the project realization the system of responsibility of every employee from an operator to the technical director for optimum consumption of fuel and energy resources at the enterprise was established, as a result of which the off-scheduled monitoring of all key parameters of work of the system as a whole is conducted at the objects of the enterprise, in particular the

gas-air correlation during fuel combustion, compliance of temperature conditions of the heat carrier, optimization of partition of load by the boilers at boiler-houses, as well as additional and concomitant measures for emission reduction are implemented.

Thus, the actually achieved GHG emission reductions, under compliance with all proper conditions of the heat supply services, necessarily should be larger than the prognostic estimations.

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).

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

For calculating the emission reductions, key factors, such as Fuel consumption by a boiler house (for Natural Gas, Coal, Heavy oil and Light oil), Average calorific value of a fuel (for Natural Gas, Coal, Heavy oil and Light oil), 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), Averaged heat transfer factor of heated buildings in the base year, Heated area of buildings (previously existed in the base year) with the renewed (improved) heat insulation in the reported year, Heated area of newly connected buildings (assumed with the new (improved) heat insulation) in the reported year, Heat transfer factor of buildings with the new heat insulation, Duration of the heating period, Duration of the hot water supply period, 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, Carbon emission factor (for Natural Gas, Coal, Heavy oil, Light oil, Electricity consumption in Ukraine and Electricity generation in Ukraine), Fuel consumption by cogeneration units at a boiler-house, Scheduled electricity generation by the new CHP units and electricity generation by the installed CHP units in the reported year, Scheduled heat energy generation by the new CHP units and heat energy generation by the installed CHP units in the reported year, Electricity consumption, influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

The records are maintained on daily and annually basis, the boiler operation is statutory, so the chances of misstatement in the records are hereby low. In fact records are taken every 2 hours (manually) or semi-continuously where correctors are present (electronically), and after that

manual daily summarizing record is performed. In both cases (manual or semi-continuous) monitoring is within the PDD version 8 where records are required every 2 hours.

Monitoring equipment of this project is sections of relating energy resources measurements. The main element of the measurement section is a primary transducer (meter) that is subject to periodic inspection or calibration. Donetsk center of standardization, metrology and certification, Laboratory HES, Gorlovskiy CSM, Enakievskiy Gosstandart, Kramatorsk branch of Donetsk-standart-metrology, Makeevskiy branch of Donetsk-standart-metrology authorized body's, entitled to conduct inspection and calibration of measuring equipment is third party involved.

Data sources used for calculating emission reductions or enhancements of net removals, such as (logbook records, reports of Metrological Centre, Statistics of RME "Donetskteplocomunenergo" and MCE "Donetsk-miskteplomerezha", SNiP 2-3-79 (1998), State Buildings Norms B.2.6-31:2006, KTM 204 Ukraine 244-94, "National inventory report of Ukraine for 1990 – 2009", Order of the National Environmental Investment Agency of Ukraine #75 dated 12/05/2011) 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 identified areas of concern as to Compliance of the monitoring plan with the monitoring methodology, project participants response and BV Certification's conclusion are described in Appendix A Table 2 (refer to CL 01).

3.5 Revision of monitoring plan (99-100)

The project participants provided an appropriate justification for the proposed revision.

In order to improve the accuracy and applicability of data and calculations the following revisions were made to the registered monitoring plan:
The newly developed officially approved valid country-specific values of Carbon emission factor were used for calculations:

- For all types of fuels – according to the "National inventory report of Ukraine for 1990 – 2009";
- For electricity generation and consumption in Ukraine – the values according to the Order of the National Environmental Investment Agency of Ukraine #75 dated 12/05/2011.

The proposed revision improves the 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.

3.6 Data management (101)

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

The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures.

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.

Registration of natural gas consumption at boiler houses of RME "Donetskteplocomunenergo" and MCE "Donetskmiskteplomerezha 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 gas 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 transfer values of gas consumption to calculating centers of the Generation Branches of RME "Donetskteplocomunenergo" and MCE "Donetskmiskteplomerezha". The united server is installed at the

MCE “Donetskmiskteplomerezha” account center. It allows taking values of all controlled parameters for every day of monitoring period.

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

Data monitored and required for emission reductions calculation and verification, according to paragraph 37 of the JI guidelines, are to be kept for two years after the last transfer of ERUs for the project. In accordance with this, the General director of RME “Donetskteplocomunenergo” has issued the Order No. 149 dated 22/04/2011 “On creation of the operation team and period of storage of documents”, in which the personnel of the created operation team is established, and keeping of the primary documentation for two years after the last transfer of ERUs for the project is appointed.

Scheme of data collection is shown in for Monitoring Report at the Fig. 9.

The Director General of the RME “Donetskteplocomunenergo”, Mr. Vasyl Vorotyntsev, appointed a responsible person, Ms. Victoriya Kucherenko, Deputy director on investments and strategic development of RME “Donetskteplokomunenergo”, for the implementation and management of the monitoring process at the RME “Donetskteplocomunenergo”. Ms. Kateryna Pahomova, senior engineer of perspective development department of RME “Donetskteplokomunenergo”, is responsible for data collection, measurements, calibration, data recording and storage.
The Director of the MCE “Donetskmiskteplomerezha” Mr. Viktor Rogachev appointed a responsible person, Ms. Valentyna Skoryk, engineer of generation department, for the implementation and management of the monitoring process at the MCE “Donetskmiskteplomerezha”. Mrs. Valentyna Skoryk is responsible for supervising data collection, measurements, calibration, data recording and storage.
Dr. Vladimir Gomon, Managing Engineer of the European Institute for safety, security, insurance and environmental technics, is responsible for baseline and monitoring JI project specific approach development.
Dr. Dmytro Paderno, Deputy director of the Institute of Engineering Ecology, is responsible for baseline and monitoring JI project specific approach development.
Ms. Kateryna Korinchuk, scientific researcher of the Institute of Engineering Ecology, is responsible for data processing.

Manager of the JI project, Deputy General director on investments and strategic development Ms. Victoriya Kucherenko controls and checks up the adequacy of the data collection mechanism and the reliability of parameters of the Monitoring plan and other information on project implementation.

Any problem occurring that concerns this project is to be reported immediately to the project manager, who takes the appropriate measures.

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 CAR 03, CL 02).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 5th periodic verification of the project "Rehabilitation of the District Heating System in Donetsk Region" Project in Ukraine, which applies the 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 monitoring report against 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.

According to PDD version 08, emission reductions during 2011 monitoring period were expected 183041 tonnes of CO_2 equivalent. According Monitoring Report version 02 emission reductions achieved are 464426 tonnes of CO_2 equivalent. The reasons of the difference between the prognostic estimation of emission reductions in the PDD and the actual emission reductions are explained in section D.3 of Monitoring Report.

The management of Institute of Engineering Ecology 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 Plan as per determined changes. 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 Report version 02 for the reporting period as indicated below. Bureau Veritas

Certification confirms that the project is implemented as per determined changes. 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 approved 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 01/01/2011 to 31/12/2011

Baseline emissions	: 1473631	tonnes of CO_2 equivalent.
Project emissions	: 1009205	tonnes of CO_2 equivalent.
Emission Reductions	: 464426	tonnes of CO_2 equivalent.

5 REFERENCES

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

/1/ Monitoring Report, version 01, dated 29 February 2012

/2/ Monitoring Report, version 02, dated 22 March 2012

/3/ Project Design Document, version 8, dated 28 of March 2008

/4/ Letter of Approval from Ministry of Environmental Protection of Ukraine № 8883/10/10-07 dated 10/08/2007

/5/ Letter of Approval from Ministry of Economic Affairs of Netherlands 2007JI03 dated 25 October 2007

/6/ Excel spreadsheet of the emission reductions calculation

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

№	Name of the document
1.	License №345064. Heat production, its transportation by trunk and local (distributing) heating networks, heat supply (except certain kinds of business activities in the area of heat supply, in case if heat is produced by cogeneration plants and plants using alternative or renewable energy sources) (12/06/2007-12/06/2012). MCE "Donetskmiskteplomerezha"
2.	License №559413. Economic activities associated with the creation of objects of architecture (20/07/2010-20/07/2015). MCE "Donetskmiskteplomerezha"
3.	The conclusion of the state ecological expertise № 10.10.276 dated 05/10/2010. The working project "Technical re-equipment of the boilerhouse, located at 35, Pushkin blvd and heat networks in block 292 to eliminate a boiler house in block 292, located at 17, Maryinska Str, Donetsk, Voroshylivskyi district"
4.	The conclusion of the state sanitary and epidemiological expertise 28.09.2010 № 05.03.02-04/70406. "Technical re-equipment of the boiler house, located in Pushkin boulevard, 35 and heat networks in block 292 to eliminate the boiler house in block 292, located in Maryinska Str., 17, Donetsk, Voroshylivskyi district"
5.	A working project. Impacts on the environment. "Technical re-equipment of the boiler house, located at 35, Pushkin blvd and heat networks in block 292 to eliminate the boiler house in block 292, located at 17, Maryinska Str Donetsk, Voroshylivskyi district" JV "DonKonTerm." Donetsk. 2010
6.	A working project. Drawings. "Technical re-equipment of the boiler house,

	located in Pushkin boulevard, 35 and heat networks in block 292 to eliminate the boiler house in block 292, located in at 17, Maryinska Str Donetsk, Voroshylivskyi district" Donetsk. 2010
7.	Technical report on commissioning and integrated environmental and heat engineering testing of Boilers of type «Vitoplex-100" installed in the boiler house at 35, Pushkin blvd Donetsk. LLC "Donetsk - Ecology"
8.	The test report of the working committee about the acceptance of the equipment after the integrated testing "Technical re-equipment of the boiler house, located at 35, Pushkin blvd and heat networks in block 292 to eliminate the boiler house in block 292, located at 17, Maryinska Str, Donetsk, Voroshylivskyi district" in 2010
9.	The act of the working committee about the acceptance to the operation of the object after the technical modernization 26/12/2010 "The boiler house, located at 35, Pushkin blvd and heat networks in block 292 to eliminate the boiler house in block 292, located at Maryinska Str, Donetsk, Voroshylivskyi district"
10.	Permission № 1410136300-9 on pollutants emissions into the atmosphere from stationary sources CLC "Donetskgorteploseti" (18/12/2007-18/12/2012)
11.	Permission №1410136300-9a amending the permission № 1410136300-9 on pollutants emissions into the atmosphere from stationary sources MCE "Donetskmiskteplomerezha" (23/06/2010-18/12/2012)
12.	The report on air protection form 2-TP "air" in 2011 MCE "Donetskmiskteplomerezha"
13.	Certificate №29 of the station about the emission control (28/04/2008-28/04/2013) MCE "Donetskmiskteplomerezha"
14.	Protocol №3/07, 14 February 2011, measuring of the content of pollutants in organized emissions from stationary sources. State Environmental Inspectorate of the Donetsk region
15.	The act of checking compliance with environmental legislation 24/01/2012-13/02/2012. State Environmental Inspectorate of the Donetsk region
16.	Permission for continuation of high hazard performance № 0550.09.14-40.30.0 (21/05/2009-21/05/2014)
17.	Plan of environmental activities in 2011
18.	Register of the executed measures to protect air
19.	Passports of air samples in 2011
20.	Register of results of measurements of temperature inside the heating space in Voroshylivskyi heating district in January 2011
21.	Register of results of measurements of temperature inside the heating space Voroshylivskyi heating district in February 2011
22.	Register of results of measurements of temperature inside the heating space Voroshylivskyi heating district in March 2011
23.	Register of results of measurements of temperature inside the heating space Proletarian heating district in January 2011
24.	Register of results of measurements of temperature inside the heating space Proletarian heating district in February 2011
25.	Register of results of measurements of temperature inside the heating space Proletarian heating district in March 2011

26. Summary tables of amount of gas use in districts of Donetsk
27. Summary tables of electricity consumption MCE “Donetskmiskteplomerezha”
28. Additional agreement to Contract on electric power supply № 5258 dated 01/07/2005. JSC “Donetskoblenergo”
29. Contract № 06/10-2271 TE-7, 12/20/2010, The purchase of natural gas “Naftogaz of Ukraine”
30. Contract № 06/10-2272 BU-7, 12/20/2010, The purchase of natural gas “Naftogaz of Ukraine”
31. The contract on coal products supply № 274-04, 25/12/2012
32. Certificate 351 on quality of coal
33. Operational Plan of localization and liquidation of emergency situations at municipal facilities businesses “Donetskmiskteplomerezha” 02/02/2010
34. Act of perception-handing over of repaired, renovated and modernized objects on 13.01.2010. Insulation of pipes - 122 pm, 12, Shevchenko Blvd. Voroshylivskyi district
35. Act of perception-handing over of repaired, renovated and modernized objects on 03/02/2011. Insulation of pipes - 8 pm, near the boiler, Voroshylivskyi district
36. Act of perception-handing over of repaired, renovated and modernized objects on 15/02/2011. Insulation of pipes - 14 pm, 35, Pushkin Blvd. Voroshylivskyi district
37. Act of perception-handing over of repaired, renovated and modernized objects on 09/06/2011. Insulation of pipes - 46 pm, 69,Tsusymska str., Kalyninskyi district
38. Act of perception-handing over of repaired, renovated and modernized objects on 01/07/2011. Insulation of pipes - 8 pm, TP-58, Kalyninskyi district
39. Act of perception-handing over of repaired, renovated and modernized objects on 05/07/2011. Insulation of pipes - 12 pm, boiler house BPZ, Kalyninskyi district
40. Act of perception-handing over of repaired, renovated and modernized objects on 21/03/2011. Insulation of pipes - 16 pm, boiler house, block 287, Kyivskyi district
41. Act of perception-handing over of repaired, renovated and modernized objects on 22/12/2011. Insulation of pipes - 120 pm, boiler house, block 287, Kyivskyi district
42. Act of perception-handing over of repaired, renovated and modernized objects on 12/12/2011. Insulation of pipes - 22 pm, boiler house, block 287, Kyivskyi district
43. Act of perception-handing over of repaired, renovated and modernized objects on 14/01/2011. Recovery of heating insulation of external heat networks, 123A, Petrovskoho str, Kirovskyi district
44. Act of perception-handing over of repaired, renovated and modernized objects on 01.03.2011. Recovery of heating insulation of external heat networks, 2, Lyashenko str., Kirovskyi district
45. Act of perception-handing over of repaired, renovated and modernized objects on 01.03.2011. Recovery of heating insulation of external heat networks, 38,41,57,Biryuzova str, development of infrastructure, Kirovskyi

district

46. Act of perception-handing over of repaired, renovated and modernized objects on 07/04/2011. Insulation of pipes - 13 pm, near the heat exchangers, Kuibyshevskyi district
47. Act of perception-handing over of repaired, renovated and modernized objects on 11/04/2011. Insulation of pipes - 48 pm, boiler house, block 605, Kuibyshevskyi district
48. Act of perception-handing over of repaired, renovated and modernized objects on 15/06/2011. Insulation of pipes – 10,5 pm, Kuibyshevskyi district
49. Act of perception-handing over of repaired, renovated and modernized objects on 29/04/2011. Insulation of pipes - 80 pm, boiler house OTSKB, Leninskyi district
50. Act of perception-handing over of repaired, renovated and modernized objects on 15/03/2011. Insulation of pipes - 25 pm, boiler house OTSKB, Leninskyi district
51. Act of perception-handing over of repaired, renovated and modernized objects on 11/11/2011. Insulation of pipes - 65 pm, boiler house 578, Leninskyi district
52. Act of perception-handing over of repaired, renovated and modernized objects on 30/11/2011. Insulation of pipes - 440 pm, boiler house UESS, Budionivskyi district
53. Act of perception-handing over of repaired, renovated and modernized objects on 27/05/2011. Insulation of pipes - 185 pm, boiler house UESS, Budionivskyi district
54. Act of perception-handing over of repaired, renovated and modernized objects on 23/09/2011. Insulation of pipes - 160 pm, boiler house UESS, Budonivskyi district
55. Act of perception-handing over of repaired, renovated and modernized objects on 04.11.2011. Insulation of pipes - 4 pm, TP 11/60, Proletarskyi District
56. Act of perception-handing over of repaired, renovated and modernized objects on 02/11/2011. Insulation of pipes - 20 pm, TC 11/60, Proletarskyi District
57. Act of perception-handing over of repaired, renovated and modernized objects on 08/12/2011. Insulation of pipes - 4 pm, 6, Paladina str, Proletarskyi district
58. Characteristics of objects of Heat Supply MCE “Donetskmiskteplomerezha” in 2011
59. The list of consumers of hot water MCE “Donetskmiskteplomerezha” in 2011
60. Electricity consumption of objects MCE “Donetskmiskteplomerezha” in 2011
61. Letter from Donetsk Center of Hydrometeorology dated 03/02/2011 №11.24/53 on the average daily temperature in Donetsk in January 2011
62. Letter from Donetsk Center of Hydrometeorology dated 01/03/2011 № 11.24/97 on the average daily temperature in Donetsk in February 2011
63. Letter from Donetsk Center of Hydrometeorology dated 04/04/2011 № 11.24/137 on the average daily temperature in Donetsk in March 2011
64. Letter from Donetsk Center of Hydrometeorology dated 06/05/2011 №

	11.24/194 on the average daily temperature in Donetsk in April 2011
65.	Letter Donetsk Center of Hydrometeorology dated 02/11/2011 № 11.24/451 on the average daily temperature in Donetsk in October 2011
66.	Letter Donetsk Center of Hydrometeorology dated 01/12/2011 № 11.24/482 on the average daily temperature in Donetsk in November 2011
67.	Letter Donetsk Center of Hydrometeorology dated 03/01/2012 № 23/11.24/4 of average daily temperature in Donetsk in December 2011
68.	Passport of physical and chemical parameters of natural gas transferred to JSC “Donetskmishaz” in 2011
69.	Order MCE “Donetskmiskteplomerezha” № 214 dated 12/04/2011 “About the end of heating period 2011-2012”
70.	Order MCE “Donetskmiskteplomerezha” № 553 dated 30/09/2011 “About the beginning of the heating period 2010-2011”
71.	Passport. Water heating boiler “Vitoplex-100” № 1, serial №7192489000009. Boiler in Pushkin blvd, 35
72.	Passport. Water heating boiler “Vitoplex-100” № 2, serial №7192489000010
73.	Passport. Water heating boiler “Vitoplex-100” № 3, serial №7184649000055
74.	Passport. Electricity supply meter NIK 2303 ARP1 №0036220
75.	Passport. Electricity supply meter NIK 2303 ARP1 №0054830
76.	Passport. Gas supply rotary meter GSM G 40-40-1,6 №032548
77.	Passport. Gas supply rotary meter GSM G 250-80-1,0 №129319
78.	Passport. Measuring converter of temperature CVP-01-1 №9580
79.	Passport. Gas volume calculator “Universal-02“ №8910
80.	Register of energy resources (fuel and energy resources)
81.	Log-book of boiler house
82.	Photo. Water heating boiler “Vitoplex-100” №1, serial №7192489000009
83.	Photo. Water heating boiler “Vitoplex-100” №2, serial №7192489000010
84.	Photo. Water heating boiler “Vitoplex-100” №3, serial №7184649000055
85.	Passport. Water heating boiler PTVM-30M-4, serial №1951, boiler peace
86.	Passport. Water heating boiler PTVM-30M-4, serial №1898, boiler peace
87.	Passport. Gas volume calculator “Universal-01” №7468, boiler peace
88.	Passport. Measuring converter of temperature PVT-01-1 №5037, boiler Myrnyi
89.	Passport. Pressure sensor “Safyr M 5430” №12677430
90.	Passport. Pressure sensor ”Safyr M 5415” №07925657
91.	Passport. Pressure sensor “Safyr M 5050” №02177247
92.	Passport. Gas supply meter G160LHK80 1/20 Ex №5861
93.	Passport. Gas volume calculator “Universal-02” №7468, boiler Myrnyi
94.	Passport. Measuring converter of temperature PVT-01-1 №5674, boiler Myrnyi
95.	Certificate of verification of the working measuring instrument №1073 valid until 11/07/2012. Absolute pressure sensor MIDA-GA-13P 01 Ex №06420811
96.	Passport. Electricity supply meter multi SL 7000 Smart №53118758
97.	Passport. Electricity supply meter multi SL 7000 Smart №53118757
98.	Passport. Current transformer ТШ-0,66-2 №80026

99. Register of repairs of accessories
100. Register of repairs of boilers
101. Register of energy resources (fuel and energy resources)
102. The certificate №86/4 Stepchenko G.A - Boiler room operator
103. Certificate №177/3 Linnik N.V. - Boiler room operator
104. Photo. Water heating boiler PTVM-30M-4, serial №1951
105. Photo. Water heating boiler PTVM-30M-4, serial №1898
106. Photo. Gas volume calculator “Universal-02” №7468
107. Photo. Gas supply meter G160LHK80 1/20 Ex № 5861
108. Photo. Heat exchanger PNV 113-412
109. Passport. Water heating boiler PTVM-30M-4, №1, serial №3784, boiler room Kryvozubova
110. Passport. Water heating boiler PTVM-30M-4, № 2, serial №4295, boiler room Kryvozubova
111. Passport. Water heating boiler PTVM-30M-4, № 3, serial №7631, boiler room Kryvozubova
112. Technical report №130 of eco-boiler heating testing №1
113. Regime card of boiler room №1
114. Technical report №223 of eco-boiler room heating testing №2
115. Technical report №136 of eco-boiler heating testing №3
116. Passport. Gas volume calculator “Universal-01» №2263, boiler Kryvozubova
117. Passport. Measuring converter of temperature CVP-01-1 №6877, boiler room Kryvozubova
118. Passport. Pressure sensor “Safyr M 5050” №12144851
119. Passport. Pressure sensor “Safyr M 5050” №08034858
120. Passport. Pressure sensor “Safyr M 5415” №07914656
121. Certificate of verification of the working measuring instrument № 02/03-208 valid until 16/04/2012. Current transformer TPL-10U №3086, 3143, 3081, 3171
122. Log-book of boiler house
123. Register of repairs of boilers
124. Register of emergency training
125. Schedule of emergency training
126. Schedule of planned repair of equipment in 2012
127. Photo. Water heating boiler PTVM-30M-4, №1, serial №3784
128. Photo. Water heating boiler PTVM-30M-4, №2, serial №4295
129. Photo. Water heating boiler PTVM-30M-4, №3, serial №7631
130. Photo. Gas volume calculator “Universal-01” №2263
131. Passport. Contact Water Heater KVN-0,29, serial №187, boiler at 2a,Donbas str,
132. Passport. Contact Water Heater KVN-0,29, serial №189, boiler room at 2a,Donbas str,
133. Regime card of boiler №1
134. Regime card of boiler №2
135. Passport. Gas supply rotary meter GSM G 40-40-1,0 № 129255, boiler room at 2a,Donbas str,

136. Passport. Gas volume corrector B25 №081076, boiler at 2a,Donbas str,
137. Certificate №1482 on the verification of work of the measuring instrument. Gas volume corrector B25 №081076, boiler room at 2a,Donbas str, The certificate № 02/04-835 verification work of the measuring instrument.
138. Electricity supply electronic meter ЦЭ 6803B in №53003349, boiler room in at 2a,Donbas str,
139. Register of energy resources (fuel and energy resources)
140. Shift log-book
141. Log-book of boiler house
142. Operating register
143. Certificate №35 Konstantinova N.S. - Boiler room operator
144. The certificate №22a-67/2 Usova V.V. – Boiler room operator
145. Photo. Contact Water Heater KVN-0,29, serial №187
146. Photo. Contact Water Heater KVN-0,29, serial №189
147. Photo. Gas supply rotary meter GSM G 40-40-1,0 №129255
148. Photo. Gas volume corrector B25 №081076
149. Passport. Boiler-water PTVM-30M-4 №3, serial №2493, boiler MR-2
150. Passport. Boiler-water PTVM-30M-4 №4, serial №3299, boiler MR-2
151. Passport. Boiler-water PTVM-30M-4 №5, serial №5258, boiler MR-2
152. Technical report number 218 eco-heating testing of boilers №3,4,5
153. Regime card of boilers № 3,4,5
154. Passport. Gas volume calculator “Universal-01” №6461, boiler room MR-2
155. Passport. Measuring converter of temperature CVP-01-1 №6765, boiler room MR-2
156. Passport. Pressure sensor “Safyr M 5420” №11359156
157. Passport. Pressure sensor “Safyr M 5415” №10514751
158. Passport. Pressure sensor “Safyr M 5050” №01161103
159. Act №001263, 11.10.2010 on the replacement and testing of energy supply meters
160. Act №11387,11.10.2010, technical inspection of meters
161. Act №12505, 15.06.2011 technical inspection of meters
162. Act №12558, 20.10.2011 technical inspection of meters
163. Register of energy resources (fuel and energy resources)
164. Shift log-book
165. Log-book of boiler house
166. Operating register
167. Register of heating meter data in the heat exchanger water heating disposal TUV-30-14-695
168. Certificate №122/13 Prischepa V.E. - Boiler room operator
169. CertificateNo C-8119 Maliyeva E.M. - Boiler room operator
170. Certificate №503885 Bystrova L.M. - Boiler room operator
171. Certificate №142/19 Berman T.F. - Boiler room operator
172. Certificate №C-7321 Spravnykova O.M. - Boiler room operator
173. Schedule of emergency training facilities in Proletarskyi heating district in 2011
174. Photo. Water heating boiler PTVM-30M-4 №3, serial №2493

175. Photo. Water heating boiler PTVM-30M-4 №4, serial №3299
176. Photo. Water heating boiler PTVM-30M-4 №5, serial №5258
177. Photo. Water Heat exchanger Tuv-30-14-695
178. Photo. Gas volume calculator “Universal-01” № 6461

RME “Donetskteplocomunenergo” “Shahtarskteplomerezha”

179. License №345052 Heat production, its transportation by trunk and local (distributing) heating networks, heat supply (except certain kinds of business activities in the area of heat supply, in case if heat is produced by cogeneration plants and plants using alternative or renewable energy sources) (12/06/2007-12/06/2012). MCE “Donetskteplokomunenergo”
180. Endorsement of a comprehensive state examination №05-00755-10, 26/11/2010, working project “Reconstruction of the boiler room №1 in Shahtarsk with installing of the heat exchanger”
181. Order of the Mayor №238 of 29/09/2011 “ On the beginning of the heating season 2011-2012”
182. Resolution №1415300000-18 on emissions of pollutants into the atmosphere from stationary sources “Shahtarskteplomerezha” MCE “Donetskteplokomunenergo” (15.07.2009-15.07.2014)
183. Report about the inventory of sources of emission of pollutants into the atmosphere for “Shahtarskteplomerezha” MCE ”Donetskteplokomunenergo”LLC “NPP Rotor” Donetsk. 2009
184. Report about the air protection, form 2-TP “air” in 2011. “Shahtarskteplomerezha”
185. Register of measures for the protection of atmospheric air. POD-2
186. Report on the monitoring of standards of instrumental and laboratory methods according to the schedule. LLC “NPP Rotor” Donetsk. 2012
187. Report on the monitoring of standards of instrumental and laboratory methods according to the schedule. LLC “NPP Rotor” Donetsk. 2011
188. Contract № 06/10-2463 TE-6, 20/12/2010, the purchase of natural gas “Naftogaz of Ukraine”
189. Contract № 06/10-2464 BU-6, 20.12.2010, the purchase of natural gas “Naftogaz of Ukraine”
190. Contract № 14/2487/11, 30/09/2011, the sale of natural gas “Naftogaz of Ukraine”
191. Contract № 14/2412/11, 30/09/2011, the sale of natural gas “Naftogaz of Ukraine”
192. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in January 2011
193. Act of Acceptance and Transfer of natural gas “Naftogaz Ukraine” in February 2011
194. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in March 2011
195. Act of Acceptance and Transfer of natural gas “Naftogaz Ukraine” in April 2011
196. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in May 2011

197. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in June 2011
198. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in July 2011
199. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine» August 2011
200. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in September 2011
201. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in October 2011
202. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in November 2011
203. Act of Acceptance and Transfer of natural gas “Naftogaz of Ukraine” in December 2011
204. Plan of elimination of possible accidents in boiler rooms of “Shahtarskteplomerezha”
205. Plan-schedule of planned repair of equipment for boiler room №1 MKP-7 Shahtarsk in 2011
206. Plan-schedule of planned repair of equipment for boiler room №10 Shahtarsk in 2011
207. Protocol №13/11 dated 26/02/2011 commission meeting on safety issues testing
208. Protocol №09/11 on 17/05/2011 commission meeting on safety issues testing
209. Protocol №20/11 on 29/11/2011 commission meeting on safety issues testing
210. Protocol №04/11 on 03/03/2011 commission meeting on safety issues testing
211. Protocol №12/11 on 20/09/2011 commission meeting on safety issues testing
212. Protocol №08/11 on 17/05/2011 commission meeting on safety issues testing
213. Protocol №05/11 on 28/03/2011 commission meeting on safety issues testing
214. Information about the temperature of air per a month in 2011, Shahtarsk
215. Information about gas calorie per month in 2011
216. Information about the area of heating
217. Act of Acceptance and Transfer of installed equipment on 24/12/2010 №1 “Reconstruction of boiler room №1”
218. Passport. Condensing heat exchanger UTK 15 №4
219. Passport. -Water heating boiler №8211, boiler №10
220. Passport. -Water heating boiler №8210, boiler №10
221. Passport. TVG-water heating boiler-8M №1761, boiler №1
222. Passport. TVG-water heating boiler №3116-8M, boiler №1
223. Certificate of verification of the working measuring instrument №2112.

Complex of the commercial metering of natural gas “Potok-DH-03” №03/17

boiler room №10

224. Passport. Gas meter LG-K-200-1000Ex №7089, boiler room №1
225. Passport. Gas volume calculator “Universal” №639, boiler room №1
226. Passport. Meter of active and reactive electric power three-phase CE 302 №006891040371233
227. Passport. Meter of active and reactive electric power three-phase CE 302 №0689180200008295
228. The certificate №10883 Polshkova N.M. - Boiler room operator
229. Register of energy resources (fuel and energy resources), boiler room №1
230. Shift log-book of boilers operators, boiler room №1
231. Log-book of boiler house №1
232. Register of electricity consumption, boiler room №1
233. Register of repairs of boilers TVG-8M, boiler room №1
234. Temperature Chart
235. Plan of elimination of possible accidents in boiler rooms
236. Photo. Condensing heat exchanger UTK 15 №4
237. Photo. TVG-water heating boiler № 1761-8M
238. Photo. TVG-water heating boiler № 3116-8M
239. Photo. Gas meter LG-K-200-1000Ex №7089

RME “Donetskteplocomunenergo” “Yenakiyevoteplomerezha”

240. Resolution of Yenakiyevo city council №652 on 21/09/2011 “About the beginning of the heating season 2011-2012 “
241. Order №300/1 dated 07/10/2010 “About the beginning of the heating season 2010-2011” “Yenakiyevoteplomerezha”
242. Order №335 dated 03/10/2011 “About the beginning of the heating season 2011-2012” “Yenakiyevoteplomerezha”
243. Resolution №1411200000-39 on emissions of pollutants into the atmosphere from stationary sources RME “Donetskteplocomunenergo” (14/10/2009-14/10/2014)
244. Resolution № 1411200000-39a Amendments to the Resolution №1411200000-39 on emissions of pollutants into the atmosphere from stationary sources RME “Donetskteplocomunenergo” (14/10/2009-14/10/2014)
245. Report about the inventory of sources of pollutants in the air RME “Donetskteplocomunenergo” “Yenakiyevoteplomerezha” (Vatutin district), Donets’k, 2009
246. Report about the inventory of sources of pollutants in the air RME “Donetskteplocomunenergo” “Yenakiyevoteplomerezha” (Central Station). Donets’k. 2009
247. Report about the air protection, form 2-TP “air” in 2011. “Yenakiyevoteplomerezha”
248. Register POD-1
249. Endorsement of the comprehensive state examination №05-00591-10 dated

02/12/2010 about the working project «Reconstruction of boiler room with installation of the heat exchanger», district № 16, Braylyana str., Enakievo

250. Expert report №14.-02.-11.-2412.10 dated 07/07/2010 about the working project “Reconstruction of a boiler room with installation of the heat exchanger”, district №16, Braylyana str., Enakievo

251. Declaration of readiness to use the object “Reconstruction of the boiler room “EMZ” with the installation of a cogeneration plant in Yenakiyeve” on 14/09/2011

252. Information about the work of boiler rooms “Yenakiyevoteplomerezha” in 2011

253. Information about the temperature of air per month in 2011, Yenakiyeve

254. Information of natural gas consumption in 2011

255. The act of temperature measurements 03/02/2012

256. Acts of acceptance and transfer of natural gas “Naftogaz of Ukraine” in 2011 (each month)

257. Information about the quality of gas per month in 2011

258. Act of reception-handing over of repaired, renovated and modernized objects № 1 dated 30/09/2011. Reconstruction of boiler room, MR №16, Yenakiyeve

259. Act of reception-handing over of repaired, renovated and modernized objects № 266 dated 30/11/2011. Reconstruction of the heating main, boiler room, block 72

260. Act of reception-handing over of repaired, renovated and modernized objects №328 dated 30/11/2011. Reconstruction of the heating main, boiler room, district “G”

261. Act of reception-handing over of repaired, renovated and modernized objects №260 dated 30/11/2011. Reconstruction of the heating main, boiler room №17

262. Act of reception-handing over of repaired, renovated and modernized objects №370 dated 30/11/2011. Reconstruction of the heating main, boiler room “Lenin 100”

263. Act of reception-handing over of repaired, renovated and modernized objects №303 dated 30/11/2011. Reconstruction of the heating main, boiler room, Block 75

264. Act of reception-handing over of repaired, renovated and modernized objects № 298 dated 30/11/2011. Reconstruction of the heating main, boiler room, Block 75

265. Act of reception-handing over of repaired, renovated and modernized objects №329 dated 30/11/2011. Reconstruction of the heating main, boiler room, district “D”

266. Act of reception-handing over of repaired, renovated and modernized objects №327 dated 30/11/2011. Reconstruction of the heating main, boiler room, block 314

267. Act of reception-handing over of repaired, renovated and modernized objects №297 dated 30/11/2011. Reconstruction of the heating main, boiler room, district №15

268. Act of reception-handing over of repaired, renovated and modernized objects №371 dated 30/11/2011. Reconstruction of the heating main, boiler room,

block 428

269. Act of reception-handing over of repaired, renovated and modernized objects №304 dated 30/11/2011. Reconstruction of heating main, boiler room, microdistrict №16

270. Act of reception-handing over of repaired, renovated and modernized objects №301 dated 30/11/2011. Reconstruction of heating main, boiler room, microdistrict №15

271. Act of reception-handing over of repaired, renovated and modernized objects № 2 dated 30/12/2011. Reconstruction of boiler “EMZ” with the installation of cogeneration plant

272. Passport. Condensing heat exchanger UTK 15 №14

273. Act of acceptance of electricity output between JSC “Donetskoblenergo” and RME “Donetskteplokomunenergo” “Yenakiyevoteplomerezha” per months in 2011

274. Schedule of planned and preventive repair in 2011. “Yenakiyevoteplomerezha”

275. Protocol №2 dated 04/04/2011 Commission meeting on the safety issues testing

276. Certificate № 1376 Vlasova N.V. – Boiler room operator

277. Register of energy resources (fuel and energy resources), boiler room, district 16

278. Register of amount of used gas and electricity, boiler house, MCR 16

279. Regime cards of boiler houses №1,2,3

280. Passport. Differential pressure transducer “Metran 43 F-DD” №18312

281. Passport. Differential pressure transducer “Metran 100-DD” №334676

282. Passport. Differential pressure transducer “Metran 22 DA 2051” №10693

283. Photo. Water heating boiler TVG-8 №1 №68558

284. Photo. Water heating boiler TVG-8 №2 №68559

285. Photo. Water heating boiler TVG-8 №3 №68731

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/ Kucherenko V.M. – deputy director on investments and strategic development of RME "Donetskteplokomunenergo"

/2/ Pakhomova K.I. - engineer of generation department of RME "Donetskteplokomunenergo"

/3/ Rogachev V.S. – director of MCE “Donetskmiskteplomerezha”

/4/ Ohremenko VS - chief engineer of MCE “Donetskmiskteplomerezha”

/5/ Borovskii V.V. - head of generation department of MCE “Donetskmisk-teplomerezha”

/6/ Skoryk V.A. - engineer of generation department of MCE “Donetskmisk-teplomerezha”

/7/ Lysenko P.A. - senior master of Voroshylivskogo heating district of MCE “Donetskmiskteplomerezha”

/8/ Savenkov O.Y. - master of the boiler room Pushkin blvd, 35 of MCE “Donetskmiskteplomerezha”

/9/ Kilymenyi A.A. - head of Kirov heating district of MCE “Donetskmiskteplomerezha”

/10/ Pimonov P.I. - master of the boiler room MR Mirniy of MCE “Donetskmisk-teplomerezha”

/11/ Zolin M.I. - master of Kryvozubova boiler room of MCE “Donetskmisk-teplomerezha”

/12/ Malykhina O.V. - chief engineer of Kalyninskogo heating district of MCE “Donetskmiskteplomerezha”

/13/ Laktionov V.A. - master of Donbas boiler, 2b of MCE “Donetskmisk-teplomerezha”

/14/ Zhorov M.I. - head of Proletarian heating district of MCE “Donetskmisk-teplomerezha”

/15/ Horonko S.M. – master of boiler room MR-2 of MCE “Donetskmisk-teplomerezha”

/16/ Konstantinova N.S. - boiler room operator of MCE “Donetskmiskteplomerezha”

/17/ Usova V.V. - boiler room operator of MCE “Donetskmiskteplomerezha”

/18/ Prishchepa V.E. - boiler room operator of MCE “Donetskmiskteplomerezha”

/19/ Maliieva E.M. - boiler room operator of MCE “Donetskmiskteplomerezha”

/20/ Bystrov L.M. - boiler room operator of MCE “Donetskmiskteplomerezha”

/21/ Yefremov S.M. - director of "Shahtarskteplomerezha"

/22/ Volyntsev V.M. - head of generation department "Shahtarskteplomerezha"

/23/ Melnikova N.O. – master of boiler room №1 "Shahtarskteplomerezha"

/24/ Polshkova N.M. - operator of boiler room №1 "Shahtarskteplomerezha"

/25/ Popov V.P. - director of "Yenakiyevoteplomerezha"

/26/ Bondarenko V.V. - head of generation department "Yenakiyevoteplomerezha"

/27/ Ivanov G.I. - senior master of station №2 "Yenakiyevoteplomerezha"

/28/ Vlasova N.V. - boiler room operator MR-16 "Yenakiyevoteplomerezha"

/29/ Korinchuk Kateryna - engineer of the Institute of Engineering Ecology

APPENDIX A: VERIFICATION PROTOCOL

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 Netherlands have issued written project approvals (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 boiler houses equipment rehabilitation and network rehabilitation are realized mainly according to project plan with some deviations (delay) 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. CME “Artemivskteplomerezha” refused to participate in this project. Implementation of CHP units at RME “Donetskteplocomunenergo” and MCE “Donetskmiskteplomerezha” is postponed because of lack of financing. Installation of CHP units at EMZ, 1, Sadova str. in Enakieve t. and Himik, №24 Sovremenna str. in Slov’yansk t. is finished, but these CHPs are not commissioned yet. Installation of CHP unit at the 21, Adygeyska str. in Donetsk city was finished in the end of 2007, and it was put in operation in January, 2008.	CAR 01 CAR 02	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CAR 01. The rounding doesn't correct for calculated emission reductions during the monitoring period in 2011. Please make the appropriate corrections. CAR 02. The rounding doesn't correct for total emission reductions during the monitoring period in 2011. Please make the appropriate corrections.		
93	What is the status of operation of the project during the monitoring period?	On the whole project has been implemented as defined in the PDD and the implementation is evidenced by statements of work completion (see list of verified documents).	OK	OK
Compliance with monitoring plan				
94	Did the monitoring occur 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?	In order to improve the accuracy and applicability of data and calculations, in accordance to the "Guidance on criteria for baseline setting and monitoring" (version 03) the revisions were made to the registered monitoring plan.	OK	OK
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 as well as risks associated with the project were taken into account, as appropriate for calculating the emission reductions.	OK	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Registration of natural gas consumption at boiler houses of RME "Donetskteplocomunenergo" and MCE "Donetskmiskteplomerezha 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	CL 01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		with gas flow meters. 2. The majority of boiler-houses are equipped with automatic correctors for gas 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 transfer values of gas consumption to calculating centers of the Generation Branches of RME "Donetskteplocomunenergo" and MCE "Donetskmiskteplomerezha". The united server is installed at the MCE "Donetskmiskteplomerezha" account center (Fig. 8). It allows taking values of all controlled parameters for every day of monitoring period. 5. Every month the account centers transfer data to gas suppliers. CL 01. Please add to PDD names of normative documents (Table B.2.1)		
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 are presented in Section B.2.1 and Annex 1 of the MR.	OK	OK
95 (d)	Is the calculation of emission reductions or	Yes, the calculation of emission reductions or enhancements	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	of net removals are based on conservative assumptions and the most plausible scenarios in a transparent manner.		
Applicable to JI SSC projects only				
96	Is the relevant threshold to be 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?	N/a	N/a	N/a
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?	N/a	N/a	N/a
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	N/a	N/a	N/a
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 report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	N/a	N/a	N/a
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?	The project participants provided an appropriate justification for the proposed revision. In order to improve the accuracy and applicability of data and calculations the following revisions were made to the	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		registered monitoring plan: The newly developed officially approved valid country-specific values of Carbon emission factor were used for calculations: For all types of fuels – according to the "National inventory report of Ukraine for 1990 – 2009"; For electricity generation and consumption in Ukraine – the values according to the Order of the National Environmental Investment Agency of Ukraine #75 dated 12/05/2011.		
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?	The proposed revision improves the 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.	OK	OK
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?	All data necessary for the CO_2 emission reductions calculation is collected. The scheme of data flow and a description of reporting procedures introduced in Monitoring report. Training logbook and Results of operator training were presented to the verification team during the site visit. Position and roles of person in the GHG data management process are defined in the monitoring report and are implemented on-site.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	All monitoring equipment has 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	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		equipments.		
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. CAR 03. There is no information about measures to reduce pollutant emissions and greenhouse gases in the air in statements form 2-TP "air" in 2011.	CAR 03	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 documents. CL 02. Please provide the Order № 149 dated 22/04/2011.	CL 02	OK
Verification regarding programs of activities (additional elements for assessment)				
102	Is any JPA that has not been added to the JI PoA not verified?	N/A	N/A	N/A
103	Is the verification based on the monitoring reports of all JPAs to be verified?	N/A	N/A	N/A
103	Does the verification ensure the accuracy and conservativeness of the emission reductions or enhancements of removals generated by each JPA?	N/A	N/A	N/A
104	Does the monitoring period not overlap with previous monitoring periods?	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
105	If the AIE learns of an erroneously included JPA, has the AIE informed the JISC of its findings in writing?	N/A	N/A	N/A
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 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?	N/A	N/A	N/A
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	N/A	N/A	N/A
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	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	N/A	N/A	N/A
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?	N/A	N/A	N/A

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR 01. The rounding doesn't correct for calculated emission reductions during the monitoring period in 2011. Please make the appropriate corrections.	92	This is corrected in MR version 02.	CAR 01 is closed due to the amendments made in the PDD.

CAR 02. The rounding doesn't correct for total emission reductions during the monitoring period in 2011. Please make the appropriate corrections.	92	This is corrected in MR version 02.	CAR 02 is closed due to the amendments made in the PDD.
CAR 03. There is no information about measures to reduce pollutant emissions and greenhouse gases in the air in statements form 2-TP "air" in 2011.	101 (c)	The telephone message about ensuring proper reporting documentation management has been sent to the Generation Branches of RME "Donetskteplocomunenergo".	Due to the information provided, the issue is closed.
CL 01. Please add to PDD names of normative documents (Table B.2.1)	95 (b)	Normative documents, data from which were used for determination of parameters 7, 10, 15, 16, are listed in Annex 1 "Data" in detailed description of these parameters with respective links.	CL 01 is closed due to the amendments made in the PDD.
CL 02. Please provide the Order № 149 dated 22/04/2011.	101 (d)	The Order No. 149 dated 22/04/2011 "On creation of the operation team and period of storage of documents" is provided.	Due to the information provided, the issue is closed.