VERIFICATION REPORT

GLOBAL CARBON BV

VERIFICATION OF THE

UTILIZATION OF COKE GAS WITH ELECTRICITY GENERATION

BY TWO 6 MWE CHP AT "ZAPOROZHCOX PLANT"

REPORT NO. UKRAINE -VER/0550/2012

REVISION NO. 02

BUREAU VERITAS CERTIFICATION

Report No: UKRAINE-ver/0550/2012

VERIFICATION REPORT

Date of first issue: 14/11/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Global Carbon BV	Client ref.: Lennard de Klerk

Summary:
Bureau Veritas Certification has made the 3rd periodic verification of the "Utilization of coke gas with electricity generation by two 6 MWe CHP at "ZaporozhCox Plant", JI Registration Reference Number UA2000026, project of ZaporozhCox Plant located in Zaporizhya, 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 (CR, 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 accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 83 437 tons of CO2eq for the monitoring period that covers the period from 01/04/2011 to 31/08/2012.
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/0240/2011	Subject Group: JI	
Project title: Utilization of coke gas with electricity generation by two 6 MWe CHP at "ZaporozhCox Plant"		
Work carried out by: Svitlana Gariyenchyk - Team Leader, Lead verifier Vyacheslav Yeriomin - Team Member, Lead Verifier		
Work reviewed by: Ivan Sokolov – Internal Technical Reviewer		
Work approved by: Ivan Sokolov - Operational Manager		
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1 INTRODUCTION

Global Carbon BV has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project Utilization of coke gas with electricity generation by two 6 MWe CHP at "ZaporozhCox Plant" (hereafter called "the project"), in Zaporizhya, 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, 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:

Svitlana Gariyenchyk
Bureau Veritas Certification Team Leader, Climate Change Lead Verifier

Vycheslav Yeriomin
Bureau Veritas Certification Team Member, Climate Change Lead 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 Global Carbon BV and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD) and Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report versions 2.1 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 25/09/2012 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 Global Carbon BV and PJSC “ZaporozhCox Plant” were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
PJSC "ZaporozhCox Plant"	• Project implementation status • Organizational structure • Responsibilities and authorities • Personnel training • Quality management procedures and technology • Data logging • Data archiving • Data reporting • Records of equipment installation • Control of metering equipment • Metering record keeping system, database • Cross-check of the information provided in the MR with other sources • IT management
Global Carbon BV	• 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 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, Corrective and Forward Action Requests are documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 14 Corrective Action Requests and 4 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

During the previous 2nd periodic verification conducted for the period of 01/01/2010 to 31/03/2011 by BVC one Forward Action Request was issued:

FAR 01: The documents on EIA requested from the PPs by the verifiers refer to the “Reconstruction of the Coke Battery#1bis Complex” Project. Please present the EIA analysis for the project under consideration.

The following explanation was provided by the project participants on this issue: The documents on EIA “Reconstruction of the Coke Battery#1bis Complex” included also relevant information about turbine building. Supporting documents contain EIA with partial information about the technical feasibility of investment”. The abstract from the EIA performed for the project was also submitted (listed under # 184 in the Category 2 Documents of Section 5 References of the present Verification report)

Based on the above explanation and documentary evidence presented by the project participants during the period of current verification FAR 01 is considered closed.

3.2 Project approval by Parties involved (90-91)

Written project approval by Ukraine and the Netherlands have been issued by the DFP of that Parties when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest. They are listed among Category 1 Documents in the Reference section of this report

The abovementioned written approvals are unconditional.

Outstanding issue related to Project approval by Parties involved, PP's response and BV's conclusion are described in Appendix A Table 2 (refer to CAR 02).

3.3 Project implementation (92-93)

The project proposes to make use of excess coke oven gas (COG) to generate electricity by two new steam turbine generators, one backpressure and one condensing, replacing power currently being sourced from the national grid. The installation of the backpressure turbine was completed in February 2008 as it stated in the relevant commissioning act. The completion of the condensing turbine, according to the determined PDD version 5.0, was expected in March 2010 but was postponed from the planned date due to the lack of financing. Now all assembling works are finished and turbine was finally put into operation in June 2010.

It should be noted that in the reported monitoring period the name of the enterprise was changed from Open Joint Stock Company "Zaporozhcoke" to Public Joint Stock Company "Zaporozhcoke". In accordance with Regulations of PJSC "Zaporozhcoke", its new status came into force on 06/07/2012. This change was caused by the requirements of the Law of Ukraine "On Joint Stock Companies" #514-VI dated 17/09/2008. (The documents confirming the present legal status of the plant are listed under #71-74 in Section 5 Category 2 Documents).

Outstanding issue related to project implementation, PP's response and BV's conclusion are described in Appendix A Table 2 (refer to CAR 03).

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

Excluding the issues reported in 3.5 below, 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 and revised monitoring plan.

For calculating the emission reductions key factors influencing the baseline and the activity level of the project and the emissions as well as risks associated with the project were taken into account, among them are the following:

- all electricity generated by the project from the COG is carbon neutral;
- there is no consumption of electricity for cleaning of COG;
- installation of the new equipment or modernization of the existing one can result in an increase in electricity consumption which is considered carbon neutral because it is generated from the waste heat;
- accounting the amount of COG, which would not be supplied to external consumers due to the project activity;
- amount of COG for the project scenario and for the baseline scenario can be assumed to be the same for each year;
- all significant leakages are to be taken into consideration.

Data sources used for calculating emission, such as:

- data of the state company „Zaporozhstandartmetrologiya";
- values obtained through Automatic system for technological process control (ASTPC);
- readings of the meters;
- Order #75 of 12/05/2011 of the National Environmental Investment Agency of Ukraine
- National Inventory Report of Ukraine 1990-2010

are clearly identified, reliable and transparent.

The following emission factors applied by the project participants

- emission factor for the electricity from the grid in the 2011 year;
- emission factor for natural gas

are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

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

Outstanding issues related to compliance of the monitoring plan with the monitoring methodology, PP's response and BV's conclusion are described in Appendix A Table 2 (CAR 04, CAR 05, CAR 09, CL 04, CAR 13, CAR 01).

3.5 Revision of monitoring plan (99-100)

In accordance with paragraph 41 of Guidance on criteria for baseline setting and monitoring, Version 03 during the current reported period the project participants improved the monitoring process and its results by revising the following aspect of the project:
In the determined PDD as well as in the previous monitoring periods the value of the emission factor for natural gas was set at 56,1 kgCO2/GJ in accordance with IPCC Guidelines for National Greenhouse Gas Inventories, V.2-Energy, Table 1.4;
In the current monitoring period the value of the emission factor for natural gas was determined by calculating method on the basis of the data from National Inventory Report of Ukraine 1990-2010. This parameter is now calculated as follows:

$$EF_{NG} = k^{c}_{NG,y} \cdot OXID_{NG,y} \cdot \frac{44}{12}$$

Respectively, the following new parameters were included to the monitoring plan:
$k^{c}_{NG,y}$ - Carbon content for natural gas, tC/TJ;
$OXID_{NG,y}$ - Carbon oxidation factor;
44/12 - Ratio between molecular mass of CO2 and C. Reflects oxidation of C to CO2.

The values of those parameters were also taken from National Inventory Report of Ukraine 1990-2010.

The project participants provided an appropriate justification for the proposed revision, provided a detailed reference as to where the values used are described, which is the National Inventory Report of Ukraine 1990-2010 mentioned among Category 1Documents of the Reference section of the present Verification Report. The detailed description of the revisions made to the monitoring plan as apposed to the monitoring plan approved in the determined PDD are presented by the project participants in Section A.8.Table 3 of the current monitoring report.

It is confirmed by the Bureau Veritas verification team that the proposed revision improves the accuracy and 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.
Thus, the determination of the verification team concerning the revised monitoring plan submitted by the project participants is positive.

Outstanding issues related to revision of monitoring plan, PP's response and BV's conclusion are described in Appendix A Table 2 (CAR 14).

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 monitoring plan:

- Describes all key characteristics that are monitored, among them:
  - amount of electricity, generated by new turbines under the project activity;
  - amount of electricity consumed by project equipment;
  - amount of COG, which would not be supplied to external consumers due to the project activity;
- Specifies the indicators, constants and variables used (Sections B.2.1. and B.2.2.);
- Describes the methods employed for data monitoring and recording (Sections B.2 and B.3.);
- Presents the quality assurance and control procedures for the monitoring process. This includes information on trainings, involvement of third parties, internal audits and control measures, troubleshooting procedures (Sections C 1.2.; C.2 – C.4);
- Clearly identifies the responsibilities and authority regarding the monitoring activities (Section B.2.; C.1.1.);

On the whole, the procedures applied for monitoring process reflect good monitoring practices.

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.

Outstanding issues related to data management, PP's response and BV's conclusion are described in Appendix A Table 2 (refer to CL 02, CAR 12, CL 01, CAR 06, CAR 07, CAR 08, CAR 10, CAR 11, CL 03).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed 3rd periodic verification of the "Utilization of coke gas with electricity generation by two 6 MWe CHP at "ZaporozhCox Plant" 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 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 verification covers the period from 01/04/2011 to 31/08/2012.

The management of JSC"ZaporozhCox Plant" 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 revised monitoring plan indicated in the Project Monitoring Report version 2.1. 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 2.1 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 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 01/04/2011 to 31/12/2011.

Baseline emissions	: 73705	t CO2 equivalents.
Project emissions	: 0	t CO2 equivalents.
Leakages	: 29817	t CO2 equivalents.
Emission Reductions	: 43888	t CO2 equivalents.

Reporting period: From 01/01/2012 to 31/08/2012.

Baseline emissions	: 67183	t CO2 equivalents.
Project emissions	: 0	t CO2 equivalents.
Leakages	: 27634	t CO2 equivalents.
Emission Reductions	: 39549	t CO2 equivalents.

Total for the period from 01/04/2011 to 31/08/2012:

Baseline emissions	: 140888	t CO2 equivalents.
Project emissions	: 0	t CO2 equivalents.
Leakages	: 57451	t CO2 equivalents.
Emission Reductions	: 83437	t CO2 equivalents.

5 REFERENCES

Category 1 Documents:
Documents provided by Global Carbon BV that relate directly to the GHG components of the project.

/1/ Project Design Document "Utilization of coke gas with electricity generation by two 6 MWe CHP at "ZaporozhCox Plant", version 5.0 dated 27/10/2010
/2/ Monitoring Report version 1.0 dated 14/09/2012
/3/ Monitoring Report version 2.0 dated 18/10/2012
/4/ Monitoring Report version 2.1 dated 09/11/2012
/5/ Calculation of emission reductions Excel spreadsheet version 1.0 dated 14/09/2012
/6/ Calculation of emission reductions Excel spreadsheet version 2.0 dated 18/10/2012
/7/ Calculation of emission reductions Excel spreadsheet version 2.0 dated 09/11/2012
/8/ Letter of Approval ref No 2010JI01 issued on 25 February 2010 by the Netherlands DFP
/9/ Letter of Approval ref No 567/23/7 dated 17.05.2010 issued by the National Environmental Investment Agency of Ukraine
/10/ Order of the National Environmental Investment Agency of Ukraine № 75 dated 12/05/2011
/11/ 2006 IPCC Guidelines, V.2-Energy, Table 1.4, http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf
/12/ National Inventory Report of Ukraine 1990-2010

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

/1/ Certificate on Expersion PKS R2xx/3xx Engineer-constructor training course completion, 02/08/2010-13/08/2010 (Oleksii Razborskyi)
/2/ List of personnel undertaken Expersion PKS R2xx/3xx Engineer-constructor training course, 02/08/2010-13/08/2010
/3/ List of measuring equipment in operation to be calibrated in 2012
/4/ List of measuring equipment in operation to be calibrated in 2011
/5/ Card of working conditions # 30-08 (working place # 30.02.255.01, turbine department)
/6/ Card of working conditions # 30-09 (working place # 30.02.257.01, turbine department)
/7/ Card of working conditions # 30-22 (working place # 30.06.413.01, boiler-turbine shop)
/8/ License Series AB # 586179 on providing educational services, issued by the

Ministry of Education, Science, Youth and Sports of Ukraine, valid from 10/03/2011 till 10/03/2014

/9/ Technical report of boiler-turbine shop for 12 months 2010

/10/ Technical report of boiler-turbine shop and power department for August 2010

/11/ Technical report of boiler-turbine shop and power department for April 2010

/12/ Technical report of boiler-turbine shop and power department for December 2010

/13/ Technical report of boiler-turbine shop and power department for July 2010

/14/ Technical report of boiler-turbine shop and power department for June 2010

/15/ Technical report of boiler-turbine shop and power department for May 2010

/16/ Technical report of boiler-turbine shop and power department for March 2010

/17/ Technical report of boiler-turbine shop and power department for November 2010

/18/ Technical report of boiler-turbine shop and power department for October 2010

/19/ Technical report of boiler-turbine shop and power department for September 2010

/20/ Technical report of boiler-turbine shop and power department for February 2010

/21/ Technical report of power department for January 2010

/22/ Technical report of boiler-turbine shop for January 2010

/23/ Technical report of boiler-turbine shop and power department for 12 months 2011

/24/ Technical report of boiler-turbine shop and power department for August 2012

/25/ Technical report of boiler-turbine shop and power department for April 2012

/26/ Technical report of boiler-turbine shop and power department for December 2012

/27/ Technical report of boiler-turbine shop and power department for July 2012

/28/ Technical report of boiler-turbine shop and power department for June 2012

/29/ Technical report of boiler-turbine shop and power department for May 2012

/30/ Technical report of boiler-turbine shop and power department for March 2012

/31/ Technical report of boiler-turbine shop and power department for November 2012

/32/ Technical report of boiler-turbine shop and power department for October 2012

/33/ Technical report of boiler-turbine shop and power department for September 2012

/34/ Technical report of boiler-turbine shop and power department for February 2012

/35/ Technical report of boiler-turbine shop and power department for January 2012

/36/ Agreement # 47/12/1330 dated 01/06/2012 between PJSC “ZaporozhCox” and South-Eastern Regional Centre of Documentation Insurance Fund on project design

/37/ Passport # 403 on temperature transducer type ТНК-1-3, fabrication # 336 (last calibration date – 10/04/2012)

/38/ Passport # 405 on temperature transducer type ТНК-1-1, fabrication # 2688 (last calibration date – 10/04/2012)

/39/ Passport # 565 on pressure sensor type Metran-100, fabrication # 459619 (last calibration date – 08/05/2012)

/40/ Passport # 401 on pressure sensor type Metran-100, fabrication # 460897 (last calibration date – 10/04/2012)
/41/ Passport # 396 on pressure sensor type Metran-100, fabrication # 412710 (last calibration date – 10/04/2012)
/42/ Passport # 397 on pressure sensor type Metran-100, fabrication # 173372 (last calibration date – 10/04/2012)
/43/ Attestation certificate # MC 06-10, valid till 06/10/2012, on OJSC "ZaporozhCox" Metrological Service, issued 06/10/2010 by Zaporizhzhia Scientific and Research Centre for Standardization, Metrology and Certification State Enterprise
/44/ Agreement # 190м-2012/38 dated 23/12/2011 between PJSC "ZaporozhCox" and Zaporizhzhia Scientific and Research Centre for Standardization, Metrology and Certification State Enterprise on providing metrological services
/45/ Passport on power meter type A1140RAL-B-41, fabrication # 05002014 (last calibration date–14/04/2008)
/46/ Passport on power meter type STK3-10AIT3-K4, fabrication # 54809 (last calibration date–12/04/2012)
/47/ Contract # 178 dated 10/01/2012 between PJSC "ZaporozhCox" and Traffic Private Enterprise
/48/ Protocol on results of air pollution sampling (dated 17/10/2011, boiler-turbine shop), issued by the Laboratory of Environmental Protection
/49/ Protocol on results of air pollution sampling (dated 02/08/2012, boiler-turbine shop), issued by the Laboratory of Environmental Protection
/50/ Certificate # 44100061329, valid till 02/08/2014, on conformity to the quality management system as per ISO 9001:2008, issued by TÜV NORD CERT GmbH
/51/ Certificate # 44116061329, valid till 02/08/2014, on conformity to the quality management system as per BS OHSAS 18001:2007, issued by TÜV NORD CERT GmbH
/52/ Power balance sheet, power equipment and report on power station operation (power generation units) for 2011. Form # 24-power generation (annual)
/53/ Report on results of fuel, heat and electricity consumption for 2011. Form # 11-МТП (annual)
/54/ Report on fuel consumption by OJSC "ZaporozhCox" energy production licensee for April 2011
/55/ Report on fuel consumption by OJSC "ZaporozhCox" energy production licensee for May 2011
/56/ Report on fuel consumption by OJSC "ZaporozhCox" energy production licensee for June 2011
/57/ Report on fuel consumption by OJSC "ZaporozhCox" energy production licensee for July 2011
/58/ Report on fuel consumption by OJSC "ZaporozhCox" energy production licensee for August 2011
/59/ Report on fuel consumption by OJSC "ZaporozhCox" energy production licensee for September 2011
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/62/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for December 2011
/63/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for January 2012
/64/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for February 2012
/65/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for March 2012
/66/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for April 2012
/67/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for May 2012
/68/ Report on fuel consumption by OJSC “ZaporozhCox” energy production licensee for June 2012
/69/ Report on fuel consumption by PJSC “ZaporozhCox” energy production licensee for July 2012
/70/ Report on fuel consumption by PJSC “ZaporozhCox” energy production licensee for August 2012
/71/ Minutes dated 19/04/2011 of PJSC “ZaporozhCox” stakeholders general meeting
/72/ Inquiry Series AA # 557120 from the Unified State Register of Enterprises and Organizations of Ukraine, PJSC “ZaporozhCox”, issued by the Zaporizhzhia Region Central Administration of Statistics
/73/ Certificate Series A01 # 029703 on legal entity registration PJSC “ZaporozhCox”
/74/ Statute of PJSC “ZaporozhCox”, 2011
/75/ Schedule of turbine-boiler shop equipment state calibration for 2011
/76/ Logbook on initial data input
/77/ Technical report of boiler-turbine shop and power department for April 2011
/78/ Technical report of boiler-turbine shop and power department for May 2011
/79/ Technical report of boiler-turbine shop and power department for June 2011
/80/ Technical report of boiler-turbine shop and power department for July 2011
/81/ Technical report of boiler-turbine shop and power department for August 2011
/82/ Technical report of boiler-turbine shop and power department for September 2011
/83/ Technical report of boiler-turbine shop and power department for October 2011
/84/ Technical report of boiler-turbine shop and power department for November 2011
/85/ Technical report of boiler-turbine shop and power department for December 2011
/86/ Report on heat and technical characteristics of boiler-turbine turbine department turbine generator # 2 operation for August 2012
/87/ Report on heat and technical characteristics of boiler-turbine boiler department turbine generators БКЗ-75 and РК-85 operation. Average data per hour for August 2012

/88/ Report on heat and technical characteristics of boiler-turbine turbine department turbine generator # 2 operation for April 2012
/89/ Report on heat and technical characteristics of boiler-turbine boiler department turbine generators БКЗ-75 and РК-85 operation. Average data per hour for April 2012
/90/ Daily sheet dated 01/08/2012 on G1 and G2 generators operation
/91/ Daily sheet dated 31/08/2012 on G1 and G2 generators operation
/92/ Daily sheet dated 01/04/2012 on G1 and G2 generators operation
/93/ Daily sheet dated 30/04/2012 on G1 and G2 generators operation
/94/ Logbook with daily data on turbine generator # 1 operation
/95/ Photo–generator G1
/96/ Photo–power meter type A1140RAL-B-41, fabrication # 05002014
/97/ Photo–transformer on own needs ТСН # 1 (КТП-27)
/98/ Photo–power meter type STK3-02Q2T3Mt, fabrication # 26711
/99/ Photo–circulating water pump # 1
/100/ Photo–power meter type STK3-10A1T3.K4, fabrication # 54809
/101/ Photo–power meter type A1805RAL-P4G-DW-4, fabrication # 01191079
/102/ Photo–transformer # 2 on own needs (КТП-27)
/103/ Photo–power meter type STK3-02Q2T3Mt, fabrication # 50111
/104/ Photo–power meter type STK3-10Q2T3.K4, fabrication # 11409
/105/ Photo–circulating water pump # 2
/106/ Photo–temperature transducer type ТНК-1-3, fabrication # 336
/107/ Photo–pressure sensor type Metran-100, fabrication # 459619
/108/ Photo–generator G2 type ТПС-6-2ЕУ3, fabrication # 128467
/109/ Photo–pressure sensor type Metran-100, fabrication # 412710
/110/ Photo–on temperature transducer type ТНК-1-1, fabrication # 2688
/111/ Photo–pressure sensor type Metran-100, fabrication # 173372
/112/ Photo–pressure sensor type Metran-100, fabrication # 460897
/113/ Attestation certificate # E01-12 dated 03/01/2012, valid till 03/01/2014, on PJSC “ZaporozhCox” electrotechnical laboratory, issued by Zaporizhzhia Scientific and Research Centre for Standardization, Metrology and Certification State Enterprise
/114/ Permit # 1504.10.30-74.30.0 on continuation of high risk works execution, valid from 17/05/2010 till 17/05/2015, issued by the State Committee of Ukraine on Industrial Safety, Labour Protection and Mining Supervision
/115/ Logbook on coke and coke-pitch gas, started 03/01/2006
/116/ Technical conditions on purified coke gas ТУ У 322-00190443-101-99, approved of 23/11/1999
/117/ Statement dated 16/05/2012 on replacement of Elster meter, fabrication # 05002024, by Energiya-9 meter, fabrication # 54809
/118/ Statement dated 20/08/2012 on replacement of Energiya-9 meter, fabrication # 19467, by Energiya-9 meter, fabrication # 11409
/119/ License Series АГ # 500361 on power generation issued to PJSC “ZaporozhCox” by the National Electricity Regulation Commission of Ukraine (NERC), valid from 27/03/2008 till 26/03/2018
/120/ License Series АГ # 500407 on heat generation at heat power grids and alternative/renewable energy units issued to PJSC “ZaporozhCox” by the

National Electricity Regulation Commission of Ukraine (NERC), valid from 27/03/2008 till 26/03/2018

/121/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for August 2012
/122/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for July 2012
/123/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for June 2012
/124/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for May 2012
/125/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for April 2012
/126/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for March 2012
/127/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for February 2012
/128/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for January 2012
/129/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for December 2011
/130/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for November 2011
/131/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for October 2011
/132/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for September 2011
/133/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for August 2011
/134/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for July 2011
/135/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for June 2011
/136/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for April 2011
/137/ Inquiry on coke gas purification at PJSC “ZaporozhCox” for May 2011
/138/ Passport on power meter type STK3-10Q2T3.K4, fabrication # 11409 (last calibration date–15/08/2007)
/139/ Report # 24 dated 29/07/2011 on internal audit (integrated management system as per ISO 9001, ISO 14001, OHSAS 18001)
/140/ Schedule of PJSC “ZaporozhCox” integrated management system internal audits for 2011
/141/ Report # 24 dated 17/07/2012 on internal audit (integrated management system as per ISO 9001, ISO 14001, OHSAS 18001)
/142/ Certificate Series КТЦ # 366-04/09 on professional training (Valentyna Sholokhova)
/143/ Certificate Series КТЦ # 287/07 dated 05/01/2011 on professional training (Vitalii Navozenko)
/144/ Certificate Series КТЦ # 310/07 dated 05/01/2011 on professional training (Dmytro Volzhyn)
/145/ Certificate # 135-КТЦ dated 10/06/2011 on health and safety training course completion (Oleksandr Pavliatenko)
/146/ Certificate dated 22/11/2007 on health and safety training course completion (Anna Stadnik)
/147/ Certificate dated 22/11/2007 on health and safety training course completion (Oleksandr Tkachenko)
/148/ Certificate dated 22/11/2007 on health and safety training course completion (Hennadii Husak)
/149/ Certificate dated 04/12/2007 on health and safety training course completion (Andrii Chumak)
/150/ Certificate dated 04/12/2007 on health and safety training course completion (Volodymyr Nosov)
/151/ Certificate dated 27/06/2008 on health and safety training course completion (Svitlana Huseva)

/152/ Certificate dated 22/11/2007 on health and safety training course completion (Vitalii Lezhebokov)
/153/ Certificate dated 04/12/2007 on health and safety training course completion (Oleksii Yakovenko)
/154/ Certificate # 255-01/08 dated 27/06/2008 on health and safety training course completion (Inesa Yakovleva)
/155/ Certificate dated 04/12/2007 on health and safety training course completion (Maryna Kryzhevska)
/156/ Certificate # 118-4/08 dated 03/04/2008 on completion of training course on steam turbines operation using PC (Maryna Kryzhevska)
/157/ Certificate # 118-2/08 dated 03/04/2008 on completion of training course on steam turbines operation using PC (Inesa Yakovleva)
/158/ Certificate # 118-1/08 dated 03/04/2008 on completion of training course on steam turbines operation using PC (Vitalii Lezhebokov)
/159/ Certificate # 89-2/08 dated 12/03/2008 on completion of training course on steam turbines operation using PC (Anna Stadnik)
/160/ Certificate # 89-4/08 dated 12/03/2008 on completion of training course on steam turbines operation using PC (Svitlana Huseva)
/161/ Report on power plant operation for 2011. Form # 6-тп (ec) (annual)
/162/ Report on air condition on the boundary of sanitary protection zone of OJSC "ZaporozhCox" for the period from 01/01/2012 till 25/09/2012
/163/ Report on air condition on the boundary of sanitary protection zone of OJSC "ZaporozhCox" for the period from 01/01/2011 till 31/12/2011
/164/ Generated by the plant electricity accounting for 2011
/165/ Generated by the plant electricity accounting for 2012
/166/ Report on electricity consumption for 2011
/167/ Report on electricity consumption for 2010
/168/ Schedule of turbine-boiler shop meters calibration, approved 16/05/2012
/169/ Protocol # 9 dated 11/06/2012 on inhabited areas air sampling. Form # 329/0
/170/ Protocol # 16 dated 07/09/2012 on inhabited areas air sampling. Form # 329/0
/171/ Protocol # 17 dated 17/09/2012 on inhabited areas air sampling. Form # 329/0
/172/ Protocol # 10 dated 02/07/2012 on inhabited areas air sampling. Form # 329/0
/173/ Certificate # 06544-2-4-11/3 ГОМС dated 12/02/2010, valid till 12/02/2013, on OJSC "ZaporozhCox" Laboratory of Environmental Protection, issued by the Ministry of Industrial Policy of Ukraine
/174/ Contract # 1258 of 01/06/2012 on supply of coke gas to OJSC "МК "Zaporozhstal", valid till 31/05/2013
/175/ Contract # 1712 of 01/09/2010 on supply of coke gas to PJSC "Zaporozhstekloflus", valid till 01/09/2011
/176/ Contract # 2356 of 01/09/2011 on supply of coke gas to PJSC "Zaporozhstekloflus", valid till 01/09/2012
/177/ Contract #1100203211/109/ of 20/04/2011 with TUV Nord Cert. Gmbh
/178/ SE "Zaporozhstandartmetrologiya" Contract #190m-2012/38 of 23/12/2011 SE "Zaporozhstandartmetrologiya"
/179/ Passport on electricity meter "Energia" # 11409
/180/ Passport on electricity mater "Energia" #54809
/181/ Passport on electricity meter "Energia – 9" # 50111

/182/ Passport on electricity meter Alpha A1800 #011191079
/183/ EIA performed by OJSC “Ukrenergochermet” (Kharkov)

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/ Yevgeniy Altukhov – Global Carbon, Head of Company Representation in South-East Ukraine
/2/ Galina Fedkova – Head of Investment Department, PJSC “Zaporizhcoke”
/3/ Andrey Boyko – Deputy Chief Power Engineer, PJSC “Zaporizhcoke”
/4/ Yuriy Strykalo – Chief Metrologist, Deputy Head of Automation Processes Shop, PJSC “Zaporizhcoke”
/5/ Nataliya Mikitenko – Metrologist, PJSC “Zaporizhcoke”
/6/ Maksim Yakovlev – Deputy Head of Boiler and Turbine Shop, PJSC “Zaporizhcoke”
/7/ Aleksander Balagura– Electrician of Boiler and Turbine Shop, PJSC “Zaporizhcoke”
/8/ Konstantyn Kyrycheck – Mechanic of Instrumentation Shop, PJSC “Zaporizhcoke”
/9/ Vytaliy Lezhebokov – Chief Machinist of Turbine Department, Boiler and Turbine Shop, PJSC “Zaporizhcoke”
/10/ Sergey Starintsev - Chief Electrical Equipment Repair Foreman, PJSC “Zaporizhcoke”
/11/ Svetlana Ovchinnikova – Chief of the Plant Chemical Laboratory, PJSC “Zaporizhcoke”
/12/ Daryna Kryvoruchko – Company Lawyer, PJSC “Zaporizhcoke”

BUREAU VERITAS CERTIFICATION HOLDING SAS

VERIFICATION PROTOCOL

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?	The project has been approved by both Host Party (Ukraine) and sponsor party (The Netherlands). The written project approvals were issued by NFPs of both Parties involved (see chapter 5 References in the verification report). **CAR 02.** It is not depicted in the MR that the legal status and the name of the enterprise has been changed in the reported monitoring period. Please make respective amendments and corrections to the MR.	CAR02	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?	The project has been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website	OK	OK
93	What is the status of operation of the	The project has been completely implemented since	CAR03	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	project during the monitoring period?	the previous monitoring period and is currently fully operational. **CAR 03.** It is stated in Section A.9. of the MR that the condensing turbine #2 has been established since the last inspection. As a matter of fact, it was installed and put into operation in the previous monitoring period. Please correct this.		
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?	Monitoring of GHG emission reductions occurred as per revised monitoring plan. **CAR 04.** Dmytro Morozov is mentioned in the MR as a Head of investment department. Please make appropriate corrections. **CAR 05.** A special event presented in Section B.4. of the MR refers to the previous monitoring period and shouldn't have been described in the current MR. Instead the PPs are requested to describe the replacements of the project monitoring equipment that occurred in the reported monitoring period.	CAR04 CAR05	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	Key factors influencing the baseline and the activity level of the project and the emissions as well as risks associated with the project were taken into account, among them are the following: • all electricity generated by the project from the	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	taken into account, as appropriate?	COG is carbon neutral; • there is no consumption of electricity for cleaning of COG; • installation of the new equipment or modernization of the existing one can result in an increase in electricity consumption which is considered carbon neutral because it is generated from the waste heat; • accounting the amount of COG, which would not be supplied to external consumers due to the project activity; • amount of COG for the project scenario and for the baseline scenario can be assumed to be the same for each year; • all significant leakages are to be taken into consideration		
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and	Data sources used for calculating emission reductions are clearly identified, reliable and transparent, among them are as follows:	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	transparent?	• data of the state company „Zaporozhstandartmetrologiya"; • values obtained through Automatic system for technological process control (ASTPC); • readings of the meters; • orders of the Ukrainian DFP on the approval of the emission factor for the national electricity grid		
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, such as: • emission factor for the electricity from the grid in the 2010 year; • emission factor for the electricity from the grid in the 2011 year; • emission factor for natural gas are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice **CAR 09.** It is mentioned in Section A.5.2. of the MR that the most recent available value of specific carbon dioxide emissions refers to "this project design document". In fact that value was used for the current monitoring period and it refers to the monitoring report not the PDD. Please correct this. **CL 04.** According to the documents presented to the verification team during the site visit, steam produced is	CAR09 CL04	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		measured in Gcal while this parameter in the MR is presented in GJ. It is not transparently presented how the recalculations were done in the ERs spreadsheet. Please make it clear. **CL 04.** According to the documents presented to the verification team during the site visit, steam produced is measured in Gcal while this parameter in the MR is presented in GJ. It is not transparently presented how the recalculations were done in the ERs spreadsheet. Please make it clear.		
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 **CAR 13.** According to the technical report of the plant for August 2012, electricity consumed by the project equipment in 2012 differs from the one presented in Table 7 of the MR, the total amount for the monitoring period differs accordingly. Please make due corrections to the MR and the ERs calculation spreadsheets. scenarios in a transparent manner **CAR 01.** Please describe in more detail the origin and calculation of leakages that took place in the current monitoring period.	CAR13 CAR 01	OK OK
Applicable to JI SSC projects only				
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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 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. It goes in line with the provisions of paragraph 36 of the Guidance on	CAR14	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		criteria for baseline setting and monitoring Version 03. **CAR 14.** It is stated in the MR Section B.2.5. that the value of EF_{NG} is taken as the IPCC data. Instead this value should be taken from the latest National Inventory Report issued by Ukraine. Please note that this change will lead to the revision of the original monitoring plan.		
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 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	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?	The implementation of data collection procedures is in accordance with the revised monitoring plan	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	The function of the monitoring equipment, including its calibration status, is in order **CL 02.** Please provide passports for Metran 100 # 459619; Alpha A 1800 # 01191079; Energia-9 # 50111. **CAR 12.** The last and next check dates for the meters # 3, 6-12 indicated in Section B.1.2. of the MR don't	CL02 CAR12	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		coincide with the ones contained in their passports that were presented to the verification team on site. Please, make them consistent.		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidence and records used for the monitoring maintained in a traceable manner **CL 01.** Please specify in MR Section C1.2. the organizations providing trainings of the personnel involved in the project. **CAR 06.** Please list in MR Section C.2. the external consumers of COG, as well as organization providing metrological and training services. **CAR 07.** It was evidenced by the verification team during the site visit that several internal audits had been carried out in the boiler and turbine shop. Please depict this in the respective section of the MR. **CAR 08.** Do the Tables 7, 9, 10, 11 comprise the data for the whole 2011 and 2012 year period? Please make it clear in the MR what exactly periods are taken into account? **CAR 10.** Please make it clear in Section A.3. of the MR what the abbreviation COG stands for. **CAR 11.** The incorrect use of modal verbs through out	CL01 CAR06 CAR07 CAR 08 CAR10 CAR11 CL03	OK OK OK OK OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		the text of the MR (e.g. in “should” and “can” in Section A.5.1.; “have to” in Section B.) leads to its misunderstanding and misinterpretation. Please make the appropriate corrections. **CL 03.** Please explain the reason why electricity consumed by the project equipment makes one and the same amount up to April 2012		
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 monitoring plan revised in the current monitoring period.	OK	OK
Verification regarding programmes 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
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	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
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	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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?			
109	Is the sampling plan available for submission to the secretariat for the JISC 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 clarification and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
FAR 01 (from previous verification). The documents on EIA requested from the PPs by the verifiers refer to the "Reconstruction of the Coke Battery#1bis Complex" Project Please present the EIA analysis for the project under consideration.		The documents on EIA "Reconstruction of the Coke Battery#1bis Complex" included also relevant information about turbine building. Supporting documents contain EIA with partial information about the technical feasibility of investment Relevant document was provided. Please, see supporting documents.	The PPs submitted the required document. It was examined by the verifiers and found appropriate. FAR 01 from the previous verification is closed.

CAR 01. Please describe in more detail the origin and calculation of leakages that took place in the current monitoring period.	95 (d)	*Response #1:* Appropriate description was provided. Please, see Section B.2.5 of this MR. *Response #2:* Relevant agreements were provided. Please, see supporting documents. *Response #3:* Provided contract No. 1258 dated 01/06/2012 is the first and the last one on the supply of coke oven gas to JSC "Zaporozhstal". Until 01/06/2012 the only external consumer of coke oven gas was JSC "Zaporozhstekloflyus"	*Conclusion on Response #1:* Issue is not closed. Please provide the mentioned agreements with the external consumers of coke gas. *Conclusion on Response #2:* Issue is not closed as there is no proves of coke gas supply to "Zaporozhstal" for the monitoring period from 01/04/2011 to 01/06/2012 *Final conclusion:* CAR 01 is closed based on the explanation provided by the PPs.
CAR 02. It is not depicted in the MR that the legal status and the name of the enterprise has been changed in the reported monitoring period. Please make respective amendments and corrections to the MR.	90	*Response #1:* Respective amendments and corrections are performed. Please, see Section A.7 of this MR and supporting documents (Statute, certificate of registration #029703, certification #557120). *Response #2:* Relevant corrections concerning status of enterprise were done. Please see Sections A.10 and A.11 of this MR.	*Conclusion on Response #1:* Further corrections are required throughout the text of the MR. Please, refer to Sections A.10. and A.11. for making corrections. *Final conclusion:* CAR 02 is closed based on the due corrections made to the MR.

CAR 03. It is stated in Section A.9. of the MR that the condensing turbine #2 has been established since the last inspection. As a matter of fact, it was installed and put into operation in the previous monitoring period. Please correct this.	93	Appropriate correction is provided. Please, see Section A.9 of this MR.	CAR 03 is closed based on the correction made to the MR.
CAR 04. Dmytro Morozov is mentioned in the MR as a Head of investment department. Please make appropriate corrections.	94	Relevant corrections were performed. Please, see Section A.10 of this MR.	CAR 04 is closed based on the correction made to the MR.
CAR 05. A special event presented in Section B.4. of the MR refers to the previous monitoring period and shouldn't have been described in the current MR. Instead the PPs are requested to describe the replacements of the project monitoring equipment that occurred in the reported monitoring period.	94	Relevant description of replacement of the project monitoring equipment was provided. Please, see Section B.4. of this MR.	The replacement statements (listed under # 117 and 118 in Section 5 Category 2 Documents of the present Verification report) were provided to the verification team during the site visit. It was evidenced by the verifiers that the replacements were performed according to the internal procedure of the plant. The MR was amended with the required descriptions of the replacements occurred during the monitoring period under consideration. CAR 05 is closed.

CL 01. Please specify in MR Section C1.2. the organizations providing trainings of the personnel involved in the project.	101 (c)	*Response #1:* Appropriate information was specified. Please, see Section C.1.2 of this MR. *Response #2:* Appropriate information was provided. Please, see Section C.2. of this MR and supporting documents.	*Conclusion on Response #1:* CL 01 is not closed. Please amend the respective section of the MR with the information about organisations mentioned, such as the availability of appropriate licences and scopes for providing trainings; the references of the agreements, etc *Final conclusion:* CL 01 is closed based on the required amendments made to the MR.
CAR 06. Please list in MR Section C.2. the external consumers of COG, as well as organization providing metrological and training services.	101 (c)	*Response #1:* Appropriate information was provided. Please, see Section C.2 of this MR. *Response #2:* Respective references of the agreements were provided. Honeywell is not related to the project activity. It performs training in other department of the enterprise. Please, see Section C.2 of this MR and supporting documents.	*Conclusion on Response #1:* CAR 06 is not closed. Please amend Section C.2 with the respective references of the agreements concluded with the third Parties involved. Please provide those agreements for verification. *Final conclusion:* CAR 06 is closed based on the required amendments made to the MR.

CAR 07. It was evidenced by the verification team during the site visit that several internal audits had been carried out in the boiler and turbine shop. Please depict this in the respective section of the MR.	101 (c)	*Response #1:* At the enterprise PJSC "Zaporozhkoks" internal integrated management system is introduced, which conducts an audit of divisions in compliance with the standards ISO 9001:2008, ISO 84001:2009 and OHSAS 18001:2007. Relevant explanation was provided. Please, see Section C.3. of this MR *Response #2:* Relevant internal audit was presented. Please, see Section C.3 and supporting documents	*Conclusion on Response #1:* CAR 07 is not closed. Information provided is irrelevant to the project and confusing in respect of the language. There was another internal audit conducted in the boiler and turbine shop on 17/07/2012. Please make it more understandable. *Final conclusion:* Information on internal audits conducted during the monitoring period was provided by the PPs. MR was amended respectively. Issue is closed.
CAR 08. Do the Tables 7, 9, 10, 11 comprise the data for the whole 2011 and 2012 year period? Please make it clear in the MR what exactly periods are taken into account?	101 (c)	Period from 01.04.2011 till 31.12.2011. Hereinafter in this report in tables values for 2011 are referring to this period Period from 01.01.2012 till 31.08.2012. Hereinafter in this report in tables values for 2012 are referring to this period Relevant explanation was provided. Please, see Section B.2.4. of this MR.	CAR 08 is closed base on the clarifications made to the MR.

CAR 09. It is mentioned in Section A.5.2. of the MR that the most recent available value of specific carbon dioxide emissions refers to "this project design document". In fact that value was used for the current monitoring period and it refers to the monitoring report not the PDD. Please correct this.	95 (c)	Appropriate correction is performed. Please, see Section A.5.2 of this MR.	CAR 09 is closed base on the clarifications made to the MR.
CAR 10. Please make it clear in Section A.3. of the MR what the abbreviation COG stands for.	101 (c)	Relevant explanation was provided. Please, see Section A.3, of this MR.	CAR 10 is closed base on the clarifications made to the MR.
CAR 11. The incorrect use of modal verbs through out the text of the MR (e.g. in "should" and "can" in Section A.5.1.; "have to" in Section B.) leads to its misunderstanding and misinterpretation. Please make the appropriate corrections.	101 (c)	*Response #1:* Appropriate corrections were performed. Please, see Section A.5.1 and B of this MR. *Response #2:* Appropriate changes were done. Please. See revised version of MR.	*Conclusion on Response #1:* CAR 11 is not closed. The information provided in section A.5.1. is still confusing. It concerns the depiction of facts and needs no modality. *Final conclusion:* Issue is closed based on the appropriate corrections made to the MR.
CL 02. Please provide passports for Metran 100 # 459619; Alpha A 1800 # 01191079; Energia-9 # 50111.	101 (b)	Relevant information was provided. Please, see supporting documents (Technical passports of electricity meters #50111, 459619, 01191079).	Passports for the project monitoring equipment were provided for verification. Calibration status was checked by the verifiers and recognised valid. CL 02 is closed.

CAR 12. The last and next check dates for the meters # 3, 6-12 indicated in Section B.1.2. of the MR don't coincide with the ones contained in their passports that were presented to the verification team on site. Please, make them consistent.	101 (b)	Appropriate corrections were performed. Please, see Section B.1.2 of this MR.	CAR 12 is closed based on the corrections made to the calibration status of the monitoring equipment.
CL 03. Please explain the reason why electricity consumed by the project equipment makes one and the same amount up to April 2012	101 (c)	Electricity consumption of project equipment was calculated on the basis of its technical characteristics that`s why estimated project readings were used until April 2012. Integrated system of accounting was implemented in order to obtain reliable and accurate data. Data of integrated system of accounting are used since April 2012.	CL 03 is closed based on the explanation provided.
CAR 13. According to the technical report of the plant for August 2012, electricity consumed by the project equipment in 2012 differs from the one presented in Table 7 of the MR, the total amount for the monitoring period differs accordingly. Please make due corrections to the MR and the ERs calculation spreadsheets.	95 (d)	Relevant corrections were provided. Please, see MR.	The required corrections were made to the MR. CAR 13 is closed.

CL 04. According to the documents presented to the verification team during the site visit, steam produced is measured in Gcal while this parameter in the MR is presented in GJ. It is not transparently presented how the recalculations were done in the ERs spreadsheet. Please make it clear.	95 (c)	*Response #1:* Relevant link and explanation were provided. Please, see Section B.2.2 of this MR. *Response #2:* Appropriate explanation was added. Please, see revised MR and supporting documents.	*Conclusion on Response #1:* The explanation for the value used was checked by the verifiers and found correct, though the source of data it was taken from is to be presented more specifically. *Final conclusion:* The MR was amended with the appropriate explanation taken from the recognized and adequate data sources. CL 04 is closed.

CAR 14. It is stated in the MR Section B.2.5. that the value of EF_{NG} is taken as the IPCC data. Instead this value should be taken from the latest National Inventory Report issued by Ukraine. Please note that this change will lead to the revision of the original monitoring plan.	99 (a)	Relevant changes were done. Please, see Section B.2.5 of this MR	The value of the EF_{NG} parameter was changed by the PPs in accordance with the latest National Inventory Report of Ukraine 1990-2010 which has lead to the revision the original monitoring plan approved in the determined PDD. The verification team confirms that the proposed revision improves the accuracy and 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 Based on the above information CAR 14 is closed.