



VERIFICATION REPORT

CLIMATE PROTECTION

BUREAU LLP

VERIFICATION OF THE REALISATION OF A COMPLEX OF ENERGY SAVING ACTIVITIES AT THE “FERREXPO POLTAVA MINING”

REPORT No. UKRAINE-VER/0496/2012

REVISION No. 02

BUREAU VERITAS CERTIFICATION


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Date of first issue: 12/09/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: Climate Protection Bureau LLP	Client ref.: Viktor Khalabuzar

Summary:

Bureau Veritas Certification has made 5th periodic verification of the "Realisation of a complex of energy saving activities at the Ferrexpo Poltava Mining", project of Climate Protection Bureau LLP located in Komsomolsk city, Poltava Region, Ukraine, and applying JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the 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 emission reductions issued totalize 627593 tonnes of CO₂ 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.: UKRAINE-ver/0496/2012	Subject Group: JI
Project title: "Realisation of a complex of energy saving activities at the Ferrexpo Poltava Mining"	
Work carried out by: Kateryna Zinevych – Team Leader, Lead Verifier Vyacheslav Yeriomin – Team Member, Verifier	
Work reviewed by: Ivan Sokolov – Internal Technical Reviewer	
Work approved by: Ivan Sokolov – Operational Manager	
Date of this revision: 27/09/2012	Rev. No.: 02
Number of pages: 39	

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1 INTRODUCTION

Climate Protection Bureau LLP has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Realisation of a complex of energy saving activities at the Ferrexpo Poltava Mining” (hereafter called “the project”) at Komsomolsk city, Poltava 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, corrective and/or forward actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Verification Team

The verification team consists of the following personnel:

Kateryna Zinevych

Bureau Veritas Certification Team Leader, Climate Change Verifier

Vyacheslav Yeriomin

Bureau Veritas Certification Climate Change Verifier



This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

The Monitoring Report (MR) submitted by Climate Protection Bureau LLP 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, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report versions 01, 02 and 03 project as described in the determined PDD.

2.2 Follow-up Interviews

On 21-22/05/2012 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 Climate Protection Bureau LLP and "Ferrexpo



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Poltava Mining” were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
“Ferrexpo Poltava Mining”	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.
Consultant: Climate Protection Bureau LLP	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,



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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 8 Corrective Action Requests and 2 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

No FARs were raised during previous verifications.

3.2 Project approval by Parties involved (90-91)

Written project approval by Great Britain Letter of Approval EA/CFCarbon/01/2012 dated 22/05/2012 has been issued by the DFP of that Party when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest.

Letter of Approval from Host Parties DFP from State Environmental Investment Agency of Ukraine #3600/23/7 was issued 13/12/2011.

The abovementioned written approval is unconditional.

No outstanding issues relevant to the project approval by the Parties involved were raised during this verification.

3.3 Project implementation (92-93)

Project activity is aimed at improvement in power efficiency of the plant by the implementation of 3 subprojects.



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1. Reduction of diesel fuel specific consumption during mining rock transportation – aimed at the reduction in diesel fuel burnt by dump trucks which transport mining rock. Diesel fuel specific consumption reduction may be achieved due to the replacement of present heavy dump trucks by new dump trucks with more efficient engines. During the project activity it is planned to replace about 150 dump trucks. Reduction in fuel consumption during transportation of mining rock will result in reduction of greenhouse gas emissions. During the period of 2011 following dump trucks were replaced (see Table 1).

Table 1

Name	Quantity, units	Registration year	Fabrication #	Technological #
1	2	3	4	5
CATERPILLAR -785C	13	2011	APX01799	124
			APX01801	126
			APX01800	125
			APX01852	127
			APX01853	128
			APX01849	129
			APX01836	131
			APX01850	132
			APX01875	133
			APX01877	134
			APX01902	135
			APX01900	136
			APX01901	137
Hitachi EH- 3500	5	2011	HCM8R800C0001003 4	440
			HCM8R800T0001003 5	441
			HCM8R800P0001003 6	442
			HCM8R800C0001003 9	443
			HCM8R800K0001004 0	444

2. Modernization of iron ore concentrate production – aimed at establishing of high-efficient equipment and optimization of technological processes, which will allow reducing the consumption of electric energy during the production of iron ore concentrate. Reduction in electric energy consumption will allow to reduce energy consumption from UETG, which will result in decrease in fuel consumption for energy production and, correspondingly,



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reduction in greenhouse gas emissions at the power plants of Ukraine. Please find list of the implemented measures below:

Table 2

Name of the phase	Beginning of work	End of work
<i>Modernization of iron ore concentrate production</i>		
A complex automation of crushed iron ore grinding sections #10-15 using ACS TP on the basis of Mitsubishi company equipment	20/09/2006	01/11/2014
Change in technology of industrial water supply to the concentrating mills #1 and #2	25/06/2008	31/03/2012
Establishment of thickeners on the pumping lines of the pulp from the pulp-pumping stations number 1 and number 2	01/07/2009	25/12/2016

3. Modernization of pellets production – the aim of modernization is the establishment of high-efficient equipment and optimization of technological processes, which will allow to reduce consumption in electric power and natural gas during the pellets production. Reduction in electricity consumption will allow to reduce its consumption from UETG leading to reduction in fuel consumption for the electric power production and, correspondingly, to the decrease in greenhouse emissions by power plants of Ukraine. Reduction in volumes of natural gas consumption during the pellets production will lead to decrease in greenhouse gas emissions. Please find list of the implemented measures below:

Table 3

Name of the phase	Beginning of work	End of work
<i>Modernization of pellets production</i>		
Reconstruction of the seal of the tube furnaces ##1-4 unloading part by establishing the SUPERDEAL seal	09/01/2007	25/12/2014
Modernization of the tube furnaces ##1-4 fuel system by change of present gas burner into Unitherm Cemcon company (Austria) gas burner	05/08/2009	25/12/2013



As per the measures described above project was partly operational for the whole monitoring period of 2011.

At the same time project deviates from the one described in the determined PDD in the issues of the amount of the Emission Reduction Units. The ones stated in the PDD differ from the ERUs calculated in PDD. This difference is caused by the fact that in the PDD calculation of ERUs was performed on the basis of the annual average value of natural gas in accordance with the monthly data provided by the natural gas supplier, and in the MR detailed calculation was performed on the basis of the monthly calculation of ERUs and in accordance with that monthly value of NCV was used according to the defined monitoring plan. Also the numeric value of carbon amount in natural gas was updated due to the publication of the updated version of “National inventory report of anthropogenic emissions by sources and removals by sinks of GHG’s in Ukraine for 1990-2010” dated 13/04/2012 (hereinafter – “National Inventory Report of Ukraine”), which led to the difference in the AAUs amount.

Outstanding issues relevant to the project implementation are described in the Verification Protocol below (Tables 1 and 2). Please see CAR 01, 02, 03, 04, 05 and CL 01.

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

The monitoring occurred in accordance with the revised monitoring plan included in the Monitoring Report version 02. Determination of the revision to the registered Monitoring Plan is presented below in the Section 3.5.

For calculating the emission reductions, key factors influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions such as plant records, National Inventory of Ukraine, IPCC are clearly identified, reliable and transparent.

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

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



Outstanding issues relevant to the compliance of the monitoring plan with the monitoring methodology are described in the Verification Protocol below (Tables 1 and 2). Please see CAR 06 and CL 02.

3.5 Revision of monitoring plan (99-100)

The project participants provided an appropriate justification for the proposed revision, which is natural gas net calorific value determination. Determination of this parameter for emissions calculation is performed on the basis of monthly Certificates on natural gas quality physical and chemical characteristics, provided by gas supplier. For calculations provided in the PDD the average value of the given parameter was calculated for each year of reported monitoring period, calculations in the PDD were conducted with applying obtained average annual value. In monitoring plan calculation was done separately for each month of the monitoring period in accordance with chosen monitoring plan, as the result more precise data were received, that differ insignificantly from the estimated results provided in the PDD.

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.

No outstanding issues relevant to the revision of monitoring plan were raised during this verification.

3.6 Data management (101)

Key monitoring activities as for all three subprojects are:

- calculation of the vehicles freight turnover during mining rock transportation
- measurement of the quantity of diesel fuel combustion in mining rock transportation;
- calculation of iron ore concentrate amount produced;
- measurement of the quantity of electric energy consumption in the process of iron ore concentrate production;
- measurement of pellets amount produced;
- measurement of the quantity of electric energy consumption in the process of pellets production;
- measurement of the quantity of natural gas combustion in the process of pellets production;
- measurement of the natural gas net calorific value.

Measurement of the quantity of electric energy consumption in the process of iron ore concentrate production and measurement of the



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quantity of electric energy consumption in the process of pellets production is performed by the relevant electricity metering units.

Measurement of the quantity of natural gas combustion in the process of pellets production is taken by the gas metering units.

The calculation of the vehicles freight turnover during mining rock transportation is made according to results of measurement of the mining rock transportation amount and transportation distance. The calculation results are registered in the "Report on materials consumption standard performance".

The measurement of the quantity of diesel fuel is made by the relevant measurement equipment and registered in the "Report on materials consumption standard performance".

The calculation of the produced iron ore concentrate amount is made according to the "Instructions on compiling the average monthly goods turnover balance of the metal in the mining and iron ore processing processes". The calculation results are registered in the "Fact sheet on goods turnover".

The measurement of the produced pellets amount is made by the relevant measurement equipment and registered in the "Fact sheet on goods turnover".

The measurement of the natural gas net calorific value provided the natural gas supplier Ukrtransgas AC Cherkasytransgas RPD monthly. The natural gas net calorific value is given in "Certificate on natural gas quality physical and chemical characteristics".

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

The results measuring and archiving are responsibility of the technical personnel. Technical personnel submit the results of measurements to the monitoring group for work coordination to estimate greenhouse gases emissions reduction. Estimation of emission reduction performing the developer of Joint implementation project. The functions of the monitoring group also include collection of non-measured data which are also subject to the monitoring. The monitoring group must make back-up copy of monitoring data which should be stored apart from the main data to avoid their loss in case of force majeure.

All information about monitoring and corrective measures must be archived for future verification of emissions reduction level. The head of the monitoring group is responsible for preparation and



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archiving of monitoring reports. The Chairman of the Board analyses general monitoring data and relevant documentation on periodic basis.

The implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures. These procedures are mentioned in the section "References" of this report.

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 revised monitoring plan.

The structure of the monitoring group, its functions and obligations identified by order of the General Director of Ferrexpo Poltava Mining #1350 dated 29/12/2003 and by order of the Chairman of the Board of Ferrexpo Poltava Mining #1435 dated 16/06/2011.

The Chairman of the Board of Ferrexpo Poltava Mining appoints personnel responsible for operation and maintenance of technical equipment needed for the project. Their responsibilities also include registration of all data necessary for monitoring. The head of the monitoring group within period from 29/12/2003 till 16/06/2011 was technical director–head of technical department of the Ferrexpo Poltava Mining. The head of the monitoring group from 16/06/2011 is engineer of technical department of the Ferrexpo Poltava Mining. The monitoring will be conducted in close collaboration with technical personnel and will include the monitoring itself and also analysis and archiving of all data indicated in the previous section. The responsibilities of the monitoring group will also include work coordination to estimate emissions reduction level. Emissions reduction calculation shall be performed by the developer of Joint Implementation project. Periodic data on energy resources consumption will be compared to the relevant registered data obtained from the technical personnel to approve data credibility. In case of inconsistency of these data the cause of its appearance must be found in collaboration with the technical personnel. If the discrepancy of monitoring data is found, monitoring system of relevant data must be corrected.

The head of the monitoring group is responsible for preparation and archiving of monitoring reports. The General director analyses



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general monitoring data and relevant documentation on periodic basis.

Collection of operational monitoring data to be measured is covered by responsibilities of technical personnel. Technical personnel make registration of the measuring results in special operational logbooks. The head of monitoring group is responsible for monitoring data collection. Developer of the JI project collects monitoring data that are not to be measured, but are used to calculate emission reduction units. Technical personnel compose corresponding monthly operational reports on the basis of the summarized operational data; these reports are the main source for emission reduction units calculation and monitoring reports composition. Copies of monthly operational reports are transferred to the monitoring group.

The monitoring data is kept during the whole crediting period and 2 year after the last charge of emission reduction unit.

Outstanding issues relevant to the data management plan are described in the Verification Protocol below (Tables 1 and 2). Please see CAR 07, 08.

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed 5th periodic verification of the “Realisation of a complex of energy saving activities at the Ferrexpo Poltava Mining” Project in Komsomolsk city, Poltava Region, Ukraine, which applies JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

The management of name of the company 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



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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 03 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as per determined changes (natural gas net calorific value determination, see Section 3.5 of this report). Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

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

Reporting period: From 01/01/2011 to 31/12/2011

Baseline emissions :2722206 tonnes of CO₂ equivalent.

Project emissions :2094613 tonnes of CO₂ equivalent.

Emission Reductions :627593 tonnes of CO₂ equivalent.

Emission Reductions achieved during the monitoring period slightly differ from the ones assumed in the determined PDD version 07. Please see the table below:

Table 4

	PDD	MR
2011	610726	627593

First of all this difference is caused by the fact that in the PDD calculation of ERUs was performed on the basis of the annual average value of natural gas in accordance with the monthly data provided by the natural gas supplier, and in the MR detailed calculation was performed on the basis of the monthly calculation of ERUs and in accordance with that monthly value of NCV was used according to the defined monitoring plan. Also the numeric value of carbon amount in natural gas was updated due to the



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publication of the updated version of “National inventory report of anthropogenic emissions by sources and removals by sinks of GHG’s in Ukraine for 1990-2010” dated 13/04/2012 (hereinafter – “National Inventory Report of Ukraine”), which led to the difference in the ERUs amount.



5 REFERENCES

Category 1 Documents:

Documents provided by Climate Protection Bureau LLP that relate directly to the GHG components of the project.

- /1/ MR «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining», version 01.
- /2/ MR «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining», version 02.
- /3/ MR «Realization of a complex of energy saving activities at Ferrexpo Poltava Mining», version 03.
- /4/ Determination and Verification Manual, version 01
- /5/ Calculations of Emission Reductions, version 01
- /6/ Calculations of Emission Reductions, version 02
- /7/ Letter of Approval from State Environmental Investment Agency of Ukraine #3600/23/7 dated 13/12/2011
- /8/ Letter of Approval from Environment Agency EA/CFCarbon/01/2012 dated 22/05/2012

Category 2 Documents:

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

1. Passport on carriage scales type 17,120/127 "OWA" (Germany), fabrication # 980378
2. Passport on carriage scales type 17,120/127 "OWA" (Germany), fabrication # 980379
3. Passport on carriage scales type EpMax BB-200-2-50 (Germany), fabrication # 935
4. Passports on measurement equipment of gas metering unit GMU-1
5. Passport on constriction flowmeter type PY, fabrication # 2709 (last calibration date–16/12/2010)
6. Passport on constriction type ДК, fabrication # 2709 (last calibration date–04/06/2009)
7. Passport on pressure difference transducer type PR-54, fabrication # 08100796 (last calibration date–05/11/2010)
8. Passport on pressure transducer type PC-28, fabrication # 08100315 (last calibration date–05/11/2010)
9. Passport on resistive temperature transducer type TCM 0890, fabrication # 395 (last calibration date–25/05/2010)
10. Passport on constriction flowmeter type PY, fabrication # 2710 (last calibration date–12/07/2011)
11. Passport on constriction type ДК, fabrication # 2710 (last calibration date–21/12/2009)
12. Passport on pressure transducer type PR-506, fabrication # 08100252 (last calibration date–05/11/2010)
13. Passport on pressure transducer type PC-28, fabrication # 08100316



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- (last calibration date–05/11/2010)
14. Passport on resistive temperature transducer type TCM 0890, without serial # (last calibration date–25/05/2010)
 15. Passport on constriction type ДК, fabrication # 2708 (last calibration date–15/12/2011)
 16. Passport on initial transducer type dTRANS p02DL, fabrication # 0088-0005 (last calibration date–05/11/2010)
 17. Passport on initial transducer type dTRANS p02, fabrication # 0087-0005 (last calibration date–05/11/2010)
 18. Passport on resistive temperature transducer type TCM 1088, fabrication # 026-01 (last calibration date–25/05/2010)
 19. Passport on constriction type ДК, fabrication # 2707 (3408495) (last calibration date–28/01/2010)
 20. Passport on initial transducer type dTRANS p02Lt, fabrication # 0088-0001 (last calibration date–26/08/2010)
 21. Passport on initial transducer type dTRANS p02, fabrication # 0087-0023 (last calibration date–26/08/2010)
 22. Passport on resistive temperature transducer type TCM 0879, fabrication # 430-38 (last calibration date–25/05/2010)
 23. Passport on constriction type ДК, fabrication # 2706 (last calibration date–24/06/2010)
 24. Passport on pressure transducer type PC-28, fabrication # 10070658 (last calibration date–24/06/2010)
 25. Passport on pressure difference transducer type PR-54, fabrication # 01084090 (last calibration date–27/06/2010)
 26. Passport on resistive temperature transducer type TCM 1088, fabrication # 086-83 (last calibration date–25/05/2010)
 27. Passport on pressure transducer type PC-28, fabrication # 10070657 (last calibration date–12/07/2011)
 28. Passport on pressure difference transducer type PR-54, fabrication # 01084091 (last calibration date–12/07/2011)
 29. Passport on resistive temperature transducer type TCM 1088, without serial # (last calibration date–25/05/2010)
 30. Passport on constriction type PY, fabrication # 2705 (last calibration date–26/03/2009)
 31. Calibration certificate on tacheometer type Trimble 3603DR, fabrication # 503365
 32. Calibration certificate on tacheometer type Trimble 3605DR, fabrication # 610448A
 33. Calibration certificate on GPS receivers type ATX1230, fabrication ## 164623, 164625
 34. Calibration certificate on GPS receivers type ATX1230, fabrication ## 182739, 194759
 35. Calibration certificate on tacheometer type TC 1610, fabrication # 370600
 36. Calibration certificate on GPS receivers type ATX1230, fabrication ## 182755, 182774
 37. Calibration certificate on laser distance sensor type Trimble 150 HD,



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- fabrication # 219889
38. Calibration certificate on laser level type Rugby 280DG, fabrication # 10956
 39. Calibration certificate on laser level type LR 501, fabrication # RA 0512061
 40. Calibration certificate on GPS receivers type ATX1230, fabrication ## 182780, 182732
 41. Calibration certificate on GPS receivers type ATX1230, fabrication ## 1503237, 352656146
 42. Calibration certificate on tacheometer type TCP 1202, fabrication # 226738
 43. Calibration certificate on tacheometer type TCP 1202, fabrication # 226733
 44. Calibration certificate on tacheometer type TCP 405, fabrication # 834329
 45. Calibration certificate on tacheometer type TCP 405, fabrication # 834350
 46. Calibration certificate on tacheometer type TCP 405, fabrication # 34518
 47. Calibration certificate on tacheometer type TCP 405, fabrication # 834519
 48. Passport on fuel meter type ППО-40-0,6 СУ, fabrication # 01003 (fuel servicing truck # 248)
 49. Passport on fuel servicing truck # 248
 50. Photo-fuel meter type ППО-40-0,6 СУ, fabrication # 01003 (fuel servicing truck # 248)
 51. Photo-fuel servicing truck # 248
 52. Passport on fuel meter type ППО-40-0,6 СУ, fabrication # 01002 (fuel servicing truck # 249)
 53. Passport on fuel servicing truck # 249
 54. Photo-fuel meter type ППО-40-0,6 СУ, fabrication # 01002 (fuel servicing truck # 249)
 55. Photo-fuel servicing truck # 249
 56. Passport on fuel meter type ППО-40-0,6 СУ, fabrication # 01004 (fuel servicing truck # 250)
 57. Passport on fuel servicing truck # 250
 58. Photo-fuel meter type ППО-40-0,6 СУ, fabrication # 01004 (fuel servicing truck # 250)
 59. Photo-fuel servicing truck # 250
 60. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819648 (EMU-1)
 61. Calibration protocol # 11 dated 12/01/2011 on current transformer type ТШВ-15, without serial # (EMU-1)
 62. Calibration protocol # 12 dated 12/01/2011 on current transformer type ТШВ-15, without serial # (EMU-1)
 63. Calibration protocol # 1-092 dated 16/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 1393 (EMU-1)
 64. Calibration protocol dated 29/07/2008 on power meter type PM 130-



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- PLUS-EH, fabrication # 819798 (EMU-2)
65. Calibration protocol # 9 dated 11/01/2011 on current transformer type ТШВ-15, without serial # (EMU-2)
 66. Calibration protocol # 10 dated 11/01/2011 on current transformer type ТШВ-15, without serial # (EMU-2)
 67. Calibration protocol # 1-091 dated 13/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 9518 (EMU-2)
 68. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819814 (EMU-3)
 69. Calibration protocol # 5 dated 10/01/2011 on current transformer type ТПОЛ-10, fabrication # 5989 (EMU-3)
 70. Calibration protocol # 6 dated 10/01/2011 on current transformer type ТПОЛ-10, fabrication # 4102 (EMU-3)
 71. Calibration protocol # 1-092 dated 16/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 1393 (EMU-3)
 72. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819708 (EMU-4)
 73. Calibration protocol # 13 dated 13/01/2011 on current transformer type ТПОЛ-10, fabrication # 18854 (EMU-4)
 74. Calibration protocol # 14 dated 13/01/2011 on current transformer type ТПОЛ-10, fabrication # 18942 (EMU-4)
 75. Calibration protocol # 1-091 dated 13/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 9518 (EMU-4)
 76. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819776 (EMU-5)
 77. Calibration protocol # 7 dated 10/01/2011 on current transformer type ТПОЛ-10, fabrication # 47599 (EMU-5)
 78. Calibration protocol # 8 dated 10/01/2011 on current transformer type ТПОЛ-10, fabrication # 42674 (EMU-5)
 79. Calibration protocol # 1-092 dated 16/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 1393 (EMU-5)
 80. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819792 (EMU-6)
 81. Calibration protocol # 15 dated 13/01/2011 on current transformer type ТПЛ-10, fabrication # 40751 (EMU-6)
 82. Calibration protocol # 16 dated 13/01/2011 on current transformer type ТПЛ-10, fabrication # 40733 (EMU-6)
 83. Calibration protocol # 1-091 dated 13/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 9518 (EMU-6)
 84. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819685 (EMU-7)
 85. Calibration protocol # 3 dated 04/01/2011 on current transformer type ТПЛ-10, fabrication # 1704 (EMU-7)
 86. Calibration protocol # 4 dated 04/01/2011 on current transformer type ТПЛ-10, fabrication # 17059 (EMU-7)
 87. Calibration protocol # 1-092 dated 16/05/2011 on voltage transformer type НТМИ6-66У3, fabrication # 1393 (EMU-7)
 88. Calibration protocol dated 29/07/2008 on power meter type PM 130-



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- PLUS-EH, fabrication # 819770 (EMU-8)
89. Calibration protocol # 25 dated 20/01/2011 on current transformer type ТПОЛ-10, fabrication # 1175 (EMU-8)
 90. Calibration protocol # 26 dated 20/01/2011 on current transformer type ТПЛ-10, fabrication # 971 (EMU-8)
 91. Calibration protocol # 93 dated 18/04/2011 on voltage transformer type НТМИ-6-6, without serial # (EMU-8)
 92. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819806 (EMU-9)
 93. Calibration protocol # 23 dated 19/01/2011 on current transformer type ТПОЛ-10, fabrication # 1518 (EMU-9)
 94. Calibration protocol # 24 dated 19/01/2011 on current transformer type ТПОЛ-10, fabrication # 817 (EMU-9)
 95. Calibration protocol # 94 dated 18/04/2011 on voltage transformer type НТМИ-6-6, fabrication # 4353 (EMU-9)
 96. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819713 (EMU-10)
 97. Calibration protocol # 17 dated 14/01/2011 on current transformer type ТПОЛ-10, fabrication # 6574 (EMU-10)
 98. Calibration protocol # 18 dated 14/01/2011 on current transformer type ТПОЛ-10, fabrication # 11341 (EMU-10)
 99. Calibration protocol # 87/2 dated 09/04/2011 on voltage transformer type НТМИ-6, fabrication # 2137 (EMU-10)
 100. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819614 (EMU-11)
 101. Calibration protocol # 19 dated 17/01/2011 on current transformer type ТПОЛ-10, fabrication # 11250 (EMU-11)
 102. Calibration protocol # 20 dated 17/01/2011 on current transformer type ТПОЛ-10, fabrication # 16785 (EMU-11)
 103. Calibration protocol # 87 dated 09/04/2011 on voltage transformer type НТМИ-6, fabrication # 2107 (EMU-11)
 104. Calibration protocol # 87 dated 09/04/2011 on voltage transformer type НТМИ-6, fabrication # 2107 (EMU-12)
 105. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-EH, fabrication # 819725 (EMU-14)
 106. Calibration protocol # 27 dated 25/01/2011 on current transformer type ТШВ-15, without serial # (EMU-14)
 107. Calibration protocol # 28 dated 25/01/2011 on current transformer type ТШВ-15, without serial # (EMU-14)
 108. Calibration protocol # 99 dated 20/04/2011 on voltage transformer type НТМИ-6, fabrication # 3678 (EMU-14)
 109. Passport on power meter type САЗУ-И687, fabrication # 663965 (EMU-15), last calibration date–17/08/2007
 110. Calibration protocol # 33 dated 02/02/2011 on current transformer type ТШВ-15, without serial # (EMU-15)
 111. Calibration protocol # 34 dated 02/02/2011 on current transformer type ТШВ-15, without serial # (EMU-15)
 112. Calibration protocol # 100 dated 20/04/2011 on voltage transformer



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- type НТМИ-6, without serial # (EMU-15)
113. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819605 (EMU-16)
 114. Calibration protocol # 37 dated 04/02/2011 on current transformer type ТПОЛ-10, fabrication # 3675 (EMU-16)
 115. Calibration protocol # 38 dated 02/02/2011 on current transformer type ТПОЛ-10, fabrication # 744 (EMU-16)
 116. Calibration protocol # 95 dated 19/04/2011 on voltage transformer type НТМИ-6, fabrication # 2711 (EMU-16)
 117. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819802 (EMU-17)
 118. Calibration protocol # 39 dated 07/02/2011 on current transformer type ТПОЛ-10, fabrication # 226 (EMU-17)
 119. Calibration protocol # 40 dated 07/02/2011 on current transformer type ТПОЛ-10, fabrication # 667 (EMU-17)
 120. Calibration protocol # 96 dated 19/04/2011 on voltage transformer type НТМИ-6, without serial # (EMU-17)
 121. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819622 (EMU-18)
 122. Calibration protocol # 31 dated 01/02/2011 on current transformer type ТПЛ-10, fabrication # 11696 (EMU-18)
 123. Calibration protocol # 32 dated 01/02/2011 on current transformer type ТПЛ-10, fabrication # 11692 (EMU-18)
 124. Calibration protocol # 95 dated 19/04/2011 on voltage transformer type НТМИ-6, fabrication # 2711 (EMU-18)
 125. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819788 (EMU-19)
 126. Calibration protocol # 41 dated 08/02/2011 on current transformer type ТПЛ-10, fabrication # 106/5 (EMU-19)
 127. Calibration protocol # 42 dated 08/02/2011 on current transformer type ТПЛ-10, fabrication # 11913 (EMU-19)
 128. Calibration protocol # 96 dated 19/04/2011 on voltage transformer type НТМИ-6, without serial # (EMU-19)
 129. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819703 (EMU-20)
 130. Calibration protocol # 47 dated 11/02/2011 on current transformer type ТПОЛ-10, fabrication # 10636 (EMU-20)
 131. Calibration protocol # 48 dated 11/02/2011 on current transformer type ТПОЛ-10, fabrication # 10693 (EMU-20)
 132. Calibration protocol # 95 dated 19/04/2011 on voltage transformer type НТМИ-6, fabrication # 2711 (EMU-20)
 133. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819621 (EMU-21)
 134. Calibration protocol # 35 dated 03/02/2011 on current transformer type ТПОЛ-10, fabrication # 4798 (EMU-21)
 135. Calibration protocol # 36 dated 03/02/2011 on current transformer type ТПОЛ-10, fabrication # 4969 (EMU-21)
 136. Calibration protocol # 96 dated 19/04/2011 on voltage transformer



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- type НТМИ-6, without serial # (EMU-21)
137. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819665 (EMU-22)
 138. Calibration protocol # 45 dated 10/02/2011 on current transformer type ТПЛ-10, fabrication # 10910 (EMU-22)
 139. Calibration protocol # 46 dated 10/02/2011 on current transformer type ТПЛ-10, fabrication # 07253 (EMU-22)
 140. Calibration protocol # 95 dated 19/04/2011 on voltage transformer type НТМИ-6, fabrication # 2711 (EMU-22)
 141. Calibration protocol dated 28/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819631 (EMU-23)
 142. Calibration protocol # 55 dated 21/02/2011 on current transformer type ТПЛ-10, fabrication # 445 (EMU-23)
 143. Calibration protocol # 56 dated 21/02/2011 on current transformer type ТПЛ-10, fabrication # 439 (EMU-23)
 144. Calibration protocol # 96 dated 19/04/2011 on voltage transformer type НТМИ-6, without serial # (EMU-23)
 145. Passport on power meter type СА3У-И670М, fabrication # 658038 (EMU-24), last calibration date–11/10/2007
 146. Calibration protocol # 43 dated 09/02/2011 on current transformer type ТПШПМ-10, without serial # (EMU-24)
 147. Calibration protocol # 44 dated 09/02/2011 on current transformer type ТПШПМ-10, without serial # (EMU-24)
 148. Calibration protocol # 95 dated 19/04/2011 on voltage transformer type НТМИ-6, fabrication # 2711 (EMU-24)
 149. Passport on power meter type СА3У-И670М, fabrication # 661641 (EMU-25), last calibration date–13/10/2007
 150. Calibration protocol # 53 dated 18/02/2011 on current transformer type ТПШПМ-10, without serial # (EMU-25)
 151. Calibration protocol # 54 dated 18/02/2011 on current transformer type ТПШПМ-10, without serial # (EMU-25)
 152. Calibration protocol # 96 dated 19/04/2011 on voltage transformer type НТМИ-6, without serial # (EMU-25)
 153. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819754 (EMU-26)
 154. Calibration protocol # 49 dated 15/02/2011 on current transformer type ТПЛ-10, fabrication # 1300 (EMU-26)
 155. Calibration protocol # 50 dated 15/02/2011 on current transformer type ТПЛ-10, fabrication # 313 (EMU-26)
 156. Calibration protocol # 89 dated 14/04/2011 on voltage transformer type НТМИ-6, fabrication # 4294 (EMU-26)
 157. Calibration protocol dated 29/07/2008 on power meter type PM 130-PLUS-ЕН, fabrication # 819799 (EMU-27)
 158. Calibration protocol # 51 dated 15/02/2011 on current transformer type ТПОЛ-10, fabrication # 21754 (EMU-27)
 159. Calibration protocol # 52 dated 15/02/2011 on current transformer type ТПОЛ-10, fabrication # 21489 (EMU-27)
 160. Calibration protocol # 90 dated 14/04/2011 on voltage transformer



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- type НТМИ-6-66, fabrication # 4457 (EMU-27)
161. Passport on power meter type СА3У-И670М, fabrication # 072737 (EMU-31), last calibration date–04/06/2008
 162. Calibration protocol # 65 dated 02/03/2011 on current transformer type ТПЛ-10, fabrication # 14230 (EMU-31)
 163. Calibration protocol # 66 dated 02/03/2011 on current transformer type ТПЛ-10, fabrication # 14237 (EMU-31)
 164. Calibration protocol # 1-094 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 1349 (EMU-31)
 165. Passport on power meter type СА3У-И670М, fabrication # 008229 (EMU-32), last calibration date–04/06/2008
 166. Calibration protocol # 67 dated 02/03/2011 on current transformer type ТПОЛ-10, fabrication # 16416 (EMU-32)
 167. Calibration protocol # 68 dated 02/03/2011 on current transformer type ТПОЛ-10, fabrication # 16412 (EMU-32)
 168. Calibration protocol # 1-097 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 2797 (EMU-32)
 169. Passport on power meter type СА3У-И670М, fabrication # 907789 (EMU-33), last calibration date–10/08/2007
 170. Calibration protocol # 63 dated 01/03/2011 on current transformer type ТПЛМ-10, fabrication # 14230 (EMU-33)
 171. Calibration protocol # 64 dated 01/03/2011 on current transformer type ТПЛМ-10, fabrication # 14237 (EMU-33)
 172. Calibration protocol # 1-094 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 1349 (EMU-33)
 173. Passport on power meter type СА3У-И670М, fabrication # 598488 (EMU-34), last calibration date–06/08/2007
 174. Calibration protocol # 69 dated 04/03/2011 on current transformer type ТПОЛ-10, fabrication # 16416 (EMU-34)
 175. Calibration protocol # 70 dated 04/03/2011 on current transformer type ТПОЛ-10, fabrication # 16412 (EMU-34)
 176. Calibration protocol # 1-097 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 2797 (EMU-34)
 177. Passport on power meter type EA05RAL-B-3, fabrication # 01058982 (EMU-35), last calibration date–21/05/2009
 178. Calibration protocol # 1-116T dated 20/05/2011 on current transformer type ТПЛМ-10, fabrication # 59325 (EMU-35)
 179. Calibration protocol # 1-117T dated 20/05/2011 on current transformer type ТПЛМ-10, fabrication # 58382 (EMU-35)
 180. Calibration protocol # 1-094 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 1349 (EMU-35)
 181. Passport on power meter type EA05RAL-B-3, fabrication # 01059003 (EMU-36), last calibration date–21/05/2009
 182. Calibration protocol # 1-122T dated 23/05/2011 on current transformer type ТПЛМ-10, fabrication # 23927 (EMU-36)
 183. Calibration protocol # 1-123T dated 23/05/2011 on current transformer type ТПЛМ-10, fabrication # 48985 (EMU-36)
 184. Calibration protocol # 1-097 dated 16/05/2011 on voltage transformer



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- type НТМИ-6-66У3, fabrication # 2797 (EMU-36)
185. Passport on power meter type ЦЭ6805В, fabrication # 1318601 (EMU-37), last calibration date–05/09/2007
 186. Calibration protocol # 71 dated 10/03/2011 on current transformer type ТПЛМ-10, fabrication # 52606 (EMU-37)
 187. Calibration protocol # 72 dated 10/03/2011 on current transformer type ТПЛМ-10, fabrication # 52607 (EMU-37)
 188. Calibration protocol # 1-094 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 1349 (EMU-37)
 189. Passport on power meter type ЦЭ6805В, fabrication # 1318562 (EMU-38), last calibration date–07/08/2007
 190. Calibration protocol # 73 dated 11/03/2011 on current transformer type ТПЛМ-10, fabrication # 20185 (EMU-38)
 191. Calibration protocol # 74 dated 11/03/2011 on current transformer type ТПЛМ-10, fabrication # 20173 (EMU-38)
 192. Calibration protocol # 1-097 dated 16/05/2011 on voltage transformer type НТМИ-6-66У3, fabrication # 2797 (EMU-38)
 193. Passport on power meter type СА3У-И670М, fabrication # 907789 (EMU-39), last calibration date–25/02/2003
 194. Passport on power meter type ЦЭ6805В, fabrication # 1318562 (EMU-39), last calibration date–07/08/2007
 195. Calibration protocol # 77 dated 17/03/2011 on current transformer type ТПЛМ-10, fabrication # 25401 (EMU-39)
 196. Calibration protocol # 78 dated 17/03/2011 on current transformer type ТПЛМ-10, fabrication # 23428 (EMU-39)
 197. Calibration protocol # 97 dated 19/04/2011 on voltage transformer type НТМИ-6-66, fabrication # 10381 (EMU-39)
 198. Acceptance certificate dated 12/2004 on power meter type ЦЭ6805В, fabrication # 49015523 (EMU-39)
 199. Passport on power meter type ЦЭ6805В, fabrication # 49014684 (EMU-40), last calibration date–04/02/2006
 200. Calibration protocol # 75 dated 16/03/2011 on current transformer type ТПОЛ-10, fabrication # 17487 (EMU-40)
 201. Calibration protocol # 76 dated 16/03/2011 on current transformer type ТПОЛ-10, fabrication # 17674 (EMU-40)
 202. Calibration protocol # 98 dated 19/04/2011 on voltage transformer type НТМИ-6-66, fabrication # 5369 (EMU-40)
 203. Acceptance certificate dated 12/2004 on power meter type ЦЭ6805В, fabrication # 4Д038013 (EMU-41)
 204. Calibration protocol # 79 dated 18/03/2011 on current transformer type ТПОЛ-10, fabrication # 25401 (EMU-41)
 205. Calibration protocol # 80 dated 18/03/2011 on current transformer type ТПОЛ-10, fabrication # 25428 (EMU-41)
 206. Calibration protocol # 97 dated 19/04/2011 on voltage transformer type НТМИ-6-66, fabrication # 10381 (EMU-41)
 207. Passport on power meter type СА3У-И670М, fabrication # 072737 (EMU-42), last calibration date–09/01/2003
 208. Acceptance certificate dated 09/2004 on power meter type ЦЭ6805В,



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- fabrication # 49013147 (EMU-42)
209. Calibration protocol # 81 dated 22/03/2011 on current transformer type ТПОЛ-10, fabrication # 25456 (EMU-42)
 210. Calibration protocol # 82 dated 22/03/2011 on current transformer type ТПОЛ-10, fabrication # 25477 (EMU-42)
 211. Calibration protocol # 98 dated 19/04/2011 on voltage transformer type НТМИ-6-66, fabrication # 5369 (EMU-42)
 212. Acceptance certificate dated 12/2004 on power meter type ЦЭ6805В, fabrication # 49015766 (EMU-43)
 213. Calibration protocol # 83 dated 25/03/2011 on current transformer type ТПЛ-10, fabrication # 77609 (EMU-43)
 214. Calibration protocol # 84 dated 25/03/2011 on current transformer type ТПЛ-10, fabrication # 73782 (EMU-43)
 215. Calibration protocol # 98 dated 19/04/2011 on voltage transformer type НТМИ-6-66, fabrication # 5369 (EMU-43)
 216. Acceptance certificate dated 12/2004 on power meter type ЦЭ6805В, fabrication # 49013140 (EMU-44)
 217. Calibration protocol # 85 dated 30/03/2011 on current transformer type ТПОЛ-10, fabrication # 13694 (EMU-44)
 218. Calibration protocol # 86 dated 30/03/2011 on current transformer type ТПОЛ-10, fabrication # 13652 (EMU-44)
 219. Calibration protocol # 97 dated 19/04/2011 on voltage transformer type НТМИ-6-66, fabrication # 10381 (EMU-44)
 220. Certificates on state registration of CATERPILLAR-785С dump trucks for 2011
 221. Technical passports on CATERPILLAR-785С dump trucks for 2011
 222. Certificate on state registration of Hitachi EH-3500 dump trucks for 2011
 223. Technical passports on Hitachi EH-3500 dump trucks for 2011
 224. Permit # 5310200000-58 on stationary sources air pollution
 225. Permit # 5310200000-59 on stationary sources air pollution
 226. Permit # 5310200000-60 on stationary sources air pollution
 227. Permit # 5310200000-74 on stationary sources air pollution
 228. Certificates allowing to conduct calibration issued to O. Brynza
 229. Certificates allowing to conduct calibration issued to I. Krokhmaliiov
 230. Certificates allowing to conduct calibration issued to H. Maryniak
 231. Form 2-ТП (air). Report on air protection for 2011
 232. Form 4-МТП (annual). Report on energy materials and oil processed products consumption for 2011
 233. Order # 1350 dated 29/12/2003 on monitoring team
 234. Order # 1435 dated 16/06/2011 on monitoring team
 235. Certificate # 0295КФ on Laboratory attestation, valid from 25/01/2010 till 24/01/2013
 236. Report on materials consumption (at Mining Transport Shop) standards fulfillment for 2011 (monthly data)
 237. Report on natural gas consumption for 2011 (monthly data)
 238. Natural gas quality certificates for 2011 (monthly data)
 239. Report on energy production shop services for 2011 (monthly data)



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240. Finished product turnover note for 2011
241. Protocols on working committee meeting for 2011
242. Photo-tacheometer type Trimble 3305DR, fabrication # 610448A
243. Permit # 2877 data 22/02/2010 on special water consumption (valid till 22/02/2015)
244. Photo-GPS receiver type ATX1230, fabrication # 164625
245. Photo-GPS receiver type ATX1230, fabrication # 164623
246. Photo-GPS receiver type ATX1230, fabrication # 182774
247. Photo-GPS receiver type ATX1230, fabrication # 182755
248. Photo-GPS receiver type ATX1230, fabrication # 194759
249. Photo-GPS receiver type ATX1230, fabrication # 182739
250. Photo-tacheometer type TCP 1202, fabrication # 226733
251. Photo-tacheometer type TCP 1202, fabrication # 226738
252. Photo-tacheometer type TC 1610, fabrication # 370600
253. Photo-GPS receiver type ATX1230, fabrication # 182732
254. Photo-GPS receiver type ATX1230, fabrication # 182780
255. Photo-CATERPILLAR-785C dump trucks (# 128)
256. Photo-CATERPILLAR-785C dump trucks (# 132)
257. Photo-CATERPILLAR-785C dump trucks (# 137)
258. Photo-CATERPILLAR-785C dump trucks (# 135)
259. Photo-CATERPILLAR-785C dump trucks (# 127)
260. Photo-CATERPILLAR-785C dump trucks (# 131)
261. Photo-CATERPILLAR-785C dump trucks (# 136)
262. Photo-CATERPILLAR-785C dump trucks (# 134)
263. Photo-CATERPILLAR-785C dump trucks (# 129)
264. Photo-CATERPILLAR-785C dump trucks (# 133)
265. Agreement # 06/11-626 dated 06/11-626 dated 30/08/2011 on natural gas supply
266. Agreement # 06/10-1924-1508/4603 dated 20/12/2010 on natural gas supply
267. Agreement # 1664/4603 dated 29/09/2011 on natural gas supply

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/ Krasulya Oleksandr Sergiyovych – Deputy Head of the Board on technical issues
- /2/ Kirnosov Oleksandr Oleksandrovysh – Head of the monitoring group, engineer of technical department
- /3/ Tsymbal Volodymyr Andriyovych – Chief energetic of Ferrexpo Poltava Mining
- /4/ Sennik Oleksandr Vasylovych – Chief environmental specialist
- /5/ Brynza Oleksandr Mykhaylovych – Chief metrologist
- /6/ Zazymko Oleksandr Oleksandrovysh – Chief engineer of technical department crushing-and-preparation workshop
- /7/ Kovalenko Kostyantyn Mykolayovysh – Chief engineer of solid slurry household



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- /8/ Paleha Serhiy Serhiyovych – Chief technologist of pellets production workshop
- /9/ Lyashenko Mykola Ivanovych – Deputy chief of mountainous transport workshop
- /10/ Khalabuzar Viktor – Managing partner of Climate Protection Bureau LLP company



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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?	Yes, DFP of UK, which is not the host Party, has issued written project approval (see Letter of Approval from Environment Agency EA/CFCarbon/01/2012 dated 22/05/2012). DFP of the Host Party has also issued LoA when submitting the first verification report to registration (see Letter of Approval from State Environmental Investment Agency of Ukraine #3600/23/7 dated 13/12/2011).	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	All 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?	Yes, project has been implemented in accordance with the PDD regarding which the determination has been deemed final. Status of the project implementation during monitoring period corresponds to the list of the measures to be implemented in PDD version 07. CAR 01. Please add measure "A complex automation of crushed iron ore grinding sections #10-15 using ACS TP on the basis of Mitsubishi company equipment" to the section of the measures implemented during 2011. CAR 02. Please add measure "Change in technology of industrial water supply to the concentrating mills #1	CAR 01, 02, 03, 04, 05, CL 01	



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		<p>and #2” to the section of the measures implemented during 2011.</p> <p>CAR 03. Please add measure “Establishment of thickeners on the pumping lines of the pulp from the pulp-pumping stations number 1 and number 2” to the section of the measures implemented during 2011.</p> <p>CAR 04. Please add measure “Reconstruction of the seal of the tube furnaces ##1-4 unloading part by establishing the SUPERDEAL seal” to the section of the measures implemented during 2011.</p> <p>CAR 05. Please add measure “Modernization of the tube furnaces ##1-4 fuel system by change of present gas burner into Unitherm Cemcon company (Austria) gas burner” to the section of the measures implemented during 2011.</p> <p>CL 01. Please clarify the reason for the difference between emission reductions in MR and PDD for the respected period.</p>		
93	What is the status of operation of the project during the monitoring period?	Project implementation has started in 2000, which means that during the monitoring period project has started its operation (as per Table 1 of the Monitoring Report version 01).	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?	CL 02. Monitoring Report version 01 section A.7. states “ERUs in PDD was based on the average annual net calorific value of the natural gas in accordance with data provided monthly by natural gas supplier to the enterprise”, please clarify on which basis annual or	CL 02	OK



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DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		monthly calculation of NCV is made.		
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?	Yes, for calculating the emission reductions 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 were taken into account, as appropriate.		
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	The results measuring and archiving are responsibility of the technical personnel. Technical personnel submit the results of measurements to the monitoring group for work coordination to estimate greenhouse gases emissions reduction.	OK	OK
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?	Yes, all emission factors, including default emission factors, used for calculating the emission reductions, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.	OK	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	Yes, the calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner. CAR 06. Site visit revealed that the data for the NCV of natural gas for the project scenario stated in the MR version 01 differs from the one stated in the plant records for April, May and October 2011. Please	CAR 06	OK



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		correct.		
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				



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	No revision is foreseen as per the monitoring report version 01. Please also refer to CL 02.	-	-
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?	N/a	N/a	N/a
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?	Yes, the implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures.	OK	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	CAR 07. Please provide agreements with the third parties involved. CAR 08. Please translate the name of the section B.1.3.	CAR 07, 08	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The results measuring and archiving are responsibility of the technical personnel. Technical personnel submit the results of measurements to the monitoring group for work coordination to estimate greenhouse gases emissions reduction. The functions of the monitoring group also include collection of non-measured data which are also subject to the monitoring. The monitoring group makes back-up copy of monitoring	OK	OK



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		data which is stored (at the office of the Engineer of technical department) apart from the main data to avoid their loss in case of force majeure. All information about monitoring and corrective measures must be archived for future verification of emissions reduction level. The head of the monitoring group is responsible for preparation and archiving of monitoring reports. The Chairman of the Board analyses general monitoring data and relevant documentation on periodic basis.		
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	Yes, the data collection and management system for the project is in accordance with the monitoring plan.	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				



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
106	<p>Does the sampling plan prepared by the AIE:</p> <p>(a) Describe its sample selection, taking into account that:</p> <p>(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:</p> <ul style="list-style-type: none"> - 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	N/a	N/a	N/a



VERIFICATION REPORT

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	verification report and supporting documentation?			
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?	N/a	N/a	N/a
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



VERIFICATION REPORT

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
CAR 01. Please add measure “A complex automation of crushed iron ore grinding sections #10-15 using ACS TP on the basis of Mitsubishi company equipment” to the section of the measures implemented during 2011.	92	Corrected in the second version of the Monitoring report	Issue is closed.
CAR 02. Please add measure “Change in technology of industrial water supply to the concentrating mills #1 and #2” to the section of the measures implemented during 2011.	92	Corrected in the second version of the Monitoring report	Issue is closed.
CAR 03. Please add measure “Establishment of thickeners on the pumping lines of the pulp from the pulp-pumping stations number 1 and number 2” to the section of the measures implemented during 2011.	92	Corrected in the second version of the Monitoring report	Issue is closed.
CAR 04. Please add measure “Reconstruction of the seal of the tube furnaces ##1-4 unloading part by establishing the SUPERDEAL seal” to the section of the measures implemented during 2011.	92	Corrected in the second version of the Monitoring report	Issue is closed.
CAR 05. Please add measure “Modernization of the tube furnaces ##1-4 fuel system by change of present gas burner into Unitherm Cemcon company (Austria) gas burner” to the section of the measures implemented during 2011.	92	Corrected in the second version of the Monitoring report	Issue is closed.



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<p>CL 01. Please clarify the reason for the difference between emission reductions in MR and PDD for the respected period.</p>	92	<p>This difference is caused by the fact that in the PDD calculation of ERUs was performed on the basis of the annual average value of natural gas in accordance with the monthly data provided by the natural gas supplier, and in the MR detailed calculation was performed on the basis of the monthly calculation of ERUs and in accordance with that monthly value of NCV was used according to the defined monitoring plan.</p>	Issue is closed.
<p>CL 02. Monitoring Report version 01 section A.7. states "ERUs in PDD was based on the average annual net calorific value of the natural gas in accordance with data provided monthly by natural gas supplier to the enterprise", please clarify on which basis annual or monthly calculation of NCV is made.</p>	94	<p>On the basis of the monthly "Certificates of the physical-chemical data of natural gas quality", which are provided by the natural gas supplier, average value of this parameter was calculated for each monitoring period, calculation in PDD was performed using average annual value. In the MR calculation was performed separately for each month of the monitoring period in accordance to the chosen monitoring plan, which caused obtaining of the more accurate data that are slightly different that the ones presented in PDD.</p> <p>Corrected in the second version of the Monitoring report</p>	Issue is closed.



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CAR 06. Site visit revealed that the data for the NCV of natural gas for the project scenario stated in the MR version 01 differs from the one stated in the plant records for April, May and October 2011. Please correct.	95 (d)	Corrected in the second version of the Monitoring report	Issue is closed.
CAR 07. Please provide agreements with the third parties involved.	101 (b)	Corrected in the second version of the Monitoring report KZ: Please provide the documents to the verifier.	
CAR 08. Please translate the name of the section B.1.3.	101 (b)	Corrected in the second version of the Monitoring report	Issue is closed.