

VERIFICATION REPORT "SKHIDENERGO" LLC

VERIFICATION OF THE

"RECONSTRUCTION OF THE UNITS AT THE STRUCTURE UNIT "KURAKHOVSKAYA TPP" OF THE "SKHIDENERGO" LTD"

(THIRD PERIODIC FOR 01/04/2011-31/12/2011)

REPORT NO. UKRAINE-VER/0423/2012
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BUREAU VERITAS CERTIFICATION

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29/02/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: "Skhidenergo" Llc	Client ref.: Oleksiy Zayats
structure unit "Kurakhovskaya TPP" of the project of "Skhienergo" Llc located in Kura approach, on the basis of UNFCCC criteria operations, monitoring and reporting. UNFC	e 3 rd periodic verification of the "Reconstruction of the units at the "Skhidenergo" Ltd", JI Registration Reference Number UA1000205 khovo town, Donetsk Region, Ukraine, and applying the JI specific for the JI, as well as criteria given to provide for consistent project CCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and the JI Supervisory Committee, as well as the host country criteria
Entity of the monitored reductions in GHG following three phases: i) desk review of th monitoring plan; ii) follow-up interviews wit issuance of the final verification report	dic independent review and ex post determination by the Accredited emissions during defined verification period, and consisted of the emonitoring report against the project design and the baseline and the project stakeholders; iii) resolution of outstanding issues and the and opinion. The overall verification, from Contract Review to ed using Bureau Veritas Certification internal procedures.
The first output of the verification proces Actions Requests (CR, CAR and FAR), pre	es is a list of Clarification, Corrective Actions Requests, Forward sented in Appendix A.
approved project design documents. Instaruns reliably and is calibrated appropriatel GHG emission reductions. The GHG emis	onfirms that the project is implemented as planned and described in alled equipment being essential for generating emission reduction y. The monitoring system is in place and the project is generating sion reduction is calculated accurately and without material errors ERUs issued totalize 213709 tonnes of CO2 equivalent for the
Report No.: Subject Group: Ukraine-ver/0423/2012	
Project title: "Reconstruction of the units at the strue" "Kurakhovskaya TPP" of the "Skhidenergo"	
Work carried out by: Oleg Skoblyk – Team Leader, Lead Ver Vyacheslav Yeriomin – Team member,	
Work reviewed by:	
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Work approved by: Ivan Sokolov - Operational Manager	Limited distribution
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1 INTRODUCTION

"Skhidenergo" LLC has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Reconstruction of the units at the structure unit "Kurakhovskaya TPP" of the "Skhidenergo" Ltd" (hereafter called "the project") at Kurakhovo town, Donetsk Region, Ukraine.

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

1.1 Objective

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

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

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

1.2 Scope

The verification scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations.

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

1.3 Verification Team

The verification team consists of the following personnel:

Oleg Skoblyk

Bureau Veritas Certification Team Leader, Climate Change Verifier

Vyacheslav Yeriomin

Bureau Veritas Certification Climate Change Verifier

This verification report was reviewed by:





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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 "Elta-Eco" LLc and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology (if applicable) and/or Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version 1.1 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 29/02/2012 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 "Skhidenergo" LLC were interviewed (see References). The main topics of the interviews are summarized in Table 1.



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Table 1 Interview topics

Interviewed organization	Interview topics
"Skhidenergo"	Organizational structure
LLC	Responsibilities and authorities
	Roles and responsibilities for data collection and
	processing
	Installation of equipment
	Data logging, archiving and reporting
	Metering equipment control
	Metering record keeping system, database
	Training of personnel
	Quality management procedures and technology
	Internal audits and check-ups
CONSULTANT	Monitoring plan
"Elta-Eco LLC"	Monitoring report
	Deviations from PDD
	ERUs calculation model

2.3 Resolution of Clarification, Corrective and Forward Action Requests

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

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

- (a) Corrective action request (CAR), requesting the project participants to correct a mistake that is not in accordance with the monitoring plan;
- (b) Clarification request (CL), requesting the project participants to provide additional information for the Verification Team to assess compliance with the monitoring plan;
- (c) Forward action request (FAR), informing the project participants of an issue, relating to the monitoring that needs to be reviewed during the next verification period.

The Verification Team will make an objective assessment as to whether the actions taken by the project participants, if any, satisfactorily resolve



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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 5 Corrective Action Requests, 2 Clarification Requests, and 0 Forward Action 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 have been issued from previous verifications.

3.2 Project approval by Parties involved (90-91)

Written project approval by the Host Party has been issued by the National Environmental Investment Agency of Ukraine (Letter of Approval #753/23/7 dated 09/06/2010) and the second Party (Letter of Approval CFCarbonII/02/2010 issued by the UK Department of Energy and Climate Change 3.12.2010)

The abovementioned written approval is unconditional.

CAR01 and its resolution/conclusion applicable to the project approvals are listed in the APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL (Table 2) below

3.3 Project implementation (92-93)

The main goal of the project is reduction of specific fuel consumption per one MW of electricity supplied to the grid. Kurakhovska Thermal Power Plant supply heat energy to local consumers, project developer excludes thermal energy supply from the project for conservativeness.

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During the monitoring period capital repair of Unit #7 as a part of Project was completed. The AIE obtained relevant complex of acceptance statements during verification. Capacity of power unit #7 was increased from 200 to 225 MW.

Next works were provided on TPP's Units during the monitoring period:

Generating Unit #3

Boiler Equipment:

- 1. The replacement of the fittings of the feeding system;
- 2. The replacement of the pipelines of the boiler aerodynamic ledge;
- 3. The replacement of the 3 Steam overheater loops;
- 4. The replacement of the boiler constant blowdown regulator fittings;
- 5. The replacement of the side screens pipelines of the boiler;
- 6. The replacement of the exhaust front armor;
- 7. The replacement of the oil cooler and the oil heater of the oilstation ShBM-3A;
- 8. The repairs of the dust feeder ULPP-2;
- 9. The replacement of the separators return pipelines between the marks 21 and 35 m;
- 10. The repairs of the boiler brickwork;
- 11. The replacement of the lubricant electric motors;

Turbine Equipment:

- 1. The repairs of the low-pressure heater casing #4;
- 2. The replacement of the turbine oil cooler #4;
- 3. The evaporation system repairs;
- 4. The repairs of the vibration equipment and the vibrators of the turbine;

Generating Unit #4

Boiler Equipment:

- 1. The replacement of the fittings of the feeding system;
- 2. The replacement of the pipelines of the boiler aerodynamic ledge;
- 3. The replacement of the boiler constant blowdown regulator fittings:
- 4. The replacement of the boiler cold overheating pipelines collectors;
- 5. The replacement of the radiation steam overheater drenaige pipeline;
- 6. The replacement of the water economizer drenaige pipeline;
- 7. The replacement of the oil cooler and the oil heater of the oilstation ShBM-3A;
- 8. The replacement of the bearings;
- 9. The repairs of the dust dispenser;
- 10. The repairs of the boiler brickwork:

Turbine Equipment:

1. The repairs of the steam superheaters recirculation system;

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- 2. The inspection and replacement or repairs of the steam pipelines holding system;
- 3. The replacement of the high-pressure heater drainage pipelines;
- 4. The bearings replacement;

Electric Equipment:

- 1. The repairs of the 4T transformer;
- 2. The repairs of the electric filters;
- 3. The replacement of the electric motors at the Power Generator;

Generating Unit #5

Boiler Equipment:

- 1. The replacement of the radiation steam overheater drenaige pipeline;
- 2. The replacement of the water economizer drainage pipeline;
- 3. The replacement of the pipelines of the boiler aerodynamic ledge;
- 4. The replacement of the dust pipelines from the distribution box to the burners;
- 5. The replacement of the oil cooler and the oil heater of the oilstation ShBM-5A, B;
- 6. The replacement of the ShBM-5A, B bearings;
- 7. The replacement of the separator backups;
- 8. The replacement of the exhaust front armor;
- 9. The repairs of the boiler brickwork;

Turbine Equipment:

- 1. The replacement of the bronze gears;
- 2. The replacement of the recirculation valve at the High-Pressure Cylinder;
- 3. The overhaul and repairs of the chimney seals of the Low-Pressure Cylinder:
- 4. The replacement of the turbine oil cooler # 4;
- 5. The repairs of the electric pump 5A;
- 6. The bearings repairs;

Generating Unit #6

Boiler Equipment:

- 1. The replacement of the fittings of the feeding system;
- 2. The replacement of the radiation steam overheater drainage pipeline:
- 3. The replacement of the water economizer drainage pipeline;
- 4. The replacement of the dust pipelines from the distribution box to the burners;
- 5. The repairs of the dust feeder ULPP-2;
- 6. The replacement of the oil cooler and the oil heater of the oilstation ShBM-5A, B;
- 7. The bearings repairs:
- 8. The replacement of the exhaust front armor;

Turbine Equipment:

1. The replacement of the lubricant electric motors;

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2. The stator winding repairs;

Generating Unit #7

Boiler Equipment:

- 1. The replacement of the oil cooler and the oil heater of the oilstation ShBM-7A, B:
- 2. The repairs of the dust feeder ULPP-2;

Turbine Equipment:

1. The replacement of the turbine oil cooler # 4;

Generating Unit #8

Boiler Equipment:

- 1. The replacement of the steam pipelines;
- 2. The replacement of the oil cooler and the oil heater of the oilstation ShBM-8A, B;
- 3. The replacement of the separator casings;

Generating Unit #9

Boiler Equipment:

- 1. The replacement of the boiler constant blowdown regulator fittings;
- 2. The replacement of the radiation steam overheater drenaige pipeline;
- 3. The replacement of the water economizer drainaige pipeline;
- 4. The repairs of the dust feeder ULPP-2;
- 5. The replacement of the oil cooler and the oil heater of the oilstation ShBM-9A, B;
- 6. The bearings repairs;

Turbine Equipment:

- 1. The inspection and replacement or repairs of the steam pipelines holding system;
- 2. The replacement of the turbine oil cooler #4;
- 3. The bearings repairs;

Electric Equipment:

1. The repairs of the 9T and 29T electricity transformers.

Mid repairs, capital and permanent repairs a common practice in Ukraine energetic industry. Time schedule of routine maintenance was provided by the project developer in the monitoring report. The Skhidenergo documents dividing project and routine repair works was provided to AIE and indicated in the section 5 REFERENCES in table Category 2 documents.



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The difference between ERUs indicated in the PDD and in the Monitoring Report was explained in the next way: calculation of ERUs was made on factual data, which is different from annual data indicated in the PDD.

CAR02-03, CL01-02 and their resolutions/conclusions applicable to the project implementation status are listed in the APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL (Table 2) below

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

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

For calculating the emission reductions or enhancements of net removals, key factors, such as total electric energy output, quantity of each fuel used in electricity production, emission factors, oxidation factors, net calorific values for each kind of fuel, 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.

Data sources used for calculating emission reductions or enhancements of net removals, such as TPPs statistic report 3-tech forms, laboratory reports on coal and heavy fuel oil NCV, reports of fuel-transport departments are clearly identified, reliable and transparent.

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

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

3.5 Revision of monitoring plan (99-100)

"Not applicable"

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.



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The function of the monitoring equipment, including its calibration status, is in order.

Power meters are within the calibration interval. During the monitoring period power meters were replaced by operating personnel Kurakhovska TPP Electric Department and representatives of State Enterprise Donetsk State Centre of Standardization and Metrology. Replacement of power meters type A1R-4-AL-C8-T to power meters Actaris SL 7000 will improve applicability of automatic system for commercial accounting of power consumption of Skhidenergo LLC. Replacement of power meters is a part of automatic system for commercial accounting of power consumption updating, provided on Skhidenergo LLC TPPs (Zyevska, Luhanska, Kurakhovska) in 2011 year. Main part of power meters are calibrated by Donetsk SCSM. Kurakhovska TPP has outgoing lines which is supply electric energy to Ukraine National grid, Donetsk and Odessa Regions local grids and Russian National grid. Duplicate power meters on these lines are calibrated by relevant accredited metrological enterprises, such as Ukrainian Centre of Standardization and Metrology, Donetsk State Centre of Standardization and Metrology, Odessa State Centre of Standardization and Metrology.

The commercial account of consumed coal is performed on wagon scales VVET-75. The amount of coal consumed in project frames is measured by coal belt scales VK-230-1400 production ##197, 198 installed between coal warehouse and coal mills. VK-230-1400 scales are calibrated by Production Measuring Laboratory of Kurakhovska TPP each quarter. Belt scales VAK 1202 production #406, 421 are installed in parallel to scales VK-230-1400 and may be use for account of coal consumption in case of technical disasters with main scales VK-230-1400.

The amount of heavy fuel oil consumed by TPP is measured by measuring line three times each day; the daily consumption is recalculated into the mass units.

The natural gas consumption is measured by gas meter Flowtec-2, which is a property of gas Supply Company "Donetskoblgaz" and calibrated by Ukrainian Centre for Standardization and Metrology in Donetsk Region.

The NCV of coal and heavy fuel oil is measured by TPPs Chemical Laboratory. The samples of coal and heavy fuel oil are analysed each five days. The data on natural gas NCV is indicated in monthly certificates of gas supplying company. The examples of analysis protocols are provided to the verification team.

Production Measuring Laboratory and Chemical Laboratory of Kurakhovska TPP is certified by SE Donetsk State Centre of Standardization and Metrology. Accreditation certificates on TPPs



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laboratory valid during the monitoring period was provided to the verification team.

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

The difference between emissions of CO2 indicated in the 2-tp form and emission reduction calculations is explained by amount of fuel used for electricity production in project activity not include amount of fuel used for thermal energy supply.

The data collection and management system for the project is in accordance with the monitoring plan. The data flow scheme provided in the monitoring report is objective and functional.

CAR04, CAR05 and their resolutions/conclusions applicable to the project data management are listed in the APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL (Table 2) below

3.7 Verification regarding programmes of activities (102-110)

"Not applicable"

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 3rd periodic verification of the "Reconstruction of the units at the structure unit "Kurakhovskaya TPP" of the "Skhidenergo" Ltd" Project in Kurakhovo town, Donetsk Region, Ukraine, which applies the JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the monitoring report against 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 "Skhidenergo" LLC is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring and Verification Plan indicated in the final PDD version 2.2.1. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of



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GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 1.1 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The key difference between the estimates and the actual values is that the average fuel consumption per 1 unit of produced energy is much higher than anticipated. In 2011 the value was 0.3873 ton of equivalent fuel per 1 MW compared to 0.3731 ton of equivalent fuel per 1 MW that was estimated at the time of PDD completion. Since non-modernised blocks continue to operate, the average fuel consumption is higher than anticipated.

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 : 4363192 tonnes of CO2 equivalent.
Project emissions : 4149483 tonnes of CO2 equivalent.
Emission Reductions : 213709 tonnes of CO2 equivalent.

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5 REFERENCES

Category 1 Documents:

Documents provided by "Elta-Eco" LLC that relate directly to the GHG components of the project.

- /1/ Project Design Document "Reconstruction of the units at the structure unit "Kurakhovskaya TPP" of the "Skhidenergo" Ltd" version 2.2.1 dated 12/02/2010
- /2/ Monitoring Report "Reconstruction of the units at the structure unit "Kurakhovskaya TPP" of the "Skhidenergo" Ltd" version 1.0 dated 28/02/2012
- /3/ "Reconstruction of the units at the structure unit "Kurakhovskaya TPP" of the "Skhidenergo" Ltd" version 1.1 dated 08/04/2012
- /4/ Letter of Approval №753/23/07 issued by the National Environmental Investment Agency of Ukraine 09/06/2010
- /5/ Letter of Approval CFCarbonII/02/2010 issued by the UK Department of Energy and Climate Change 03/12/2010
- /6/ ERUs calculation file "calculations _Reconstruction _Kurakhovskaya TPP_ of the _Skhidenergo_ ltd._ (01.04-31.12.2011).xls"

Category 2 Documents:

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

- /1/ Power meter SL7000 #53101036 Krasnoarmeyskaya (main)
- /2/ Power meter SL7000 #53115798 Kotlyarevska 2 (secondary)
- /3/ Power meter SL7000 #53115810 Prodmash (secondary)
- /4/ Power meter SL7000 #53101101 Prodmash (main)
- /5/ Power meter SL7000 #53101086 Kotlyarevska 2 (main)
- /6/ Power meter SL7000 #53101071 Smolyanka 1 (main)
- /7/ Power meter SL7000 #53115803 Krasnoarmeyska (main)
- /8/ Power meter SL7000 #53115811 Smolyanka 1 (secondary)
- /9/ Power meter SL7000 #53115833 Kotlyarevska 1 (secondary)
- /10/ Power meter SL7000 #№53115809 Kotlyarevska 1 (main)
- /11/ Power meter SL7000 #53101060 Smolyanka 2 (main)
- /12/ Power meter SL7000 #53115807 Smolyanka 2 (secondary)
- /13/ Power meter SL7000 #53115808 Trudovskaya 5BIS (secondary)
- /14/ Power meter SL7000 #53115812 Novosyolka (secondary)
- /15/ Power meter SL7000 #53115806 Lisovska (secondary)
- /16/ Power meter SL7000 #53101080 Lisovska (main)
- /17/ Power meter SL7000 #53101048 Novosyolka (main)
- /18/ Power meter SL7000 #53101031 Trudovskaya 5BIS (main)
- /19/ Power meter SL7000 #53115824 Vuhledar (secondary)
- /20/ Power meter SL7000 #53115800 Mezheva (secondary)
- /21/ Power meter SL7000 #53101056 Vuhledar (main)
- /22/ Power meter SL7000 #53101068 Mezheva (main)
- /23/ Power meter SL7000 #53101051 Electrostal (main)
- /24/ Power meter SL7000 #53115821 Electrostal (secondary)



- /25/ Power meter SL7000 #53115820 KuTES-1 (secondary)
- /26/ Power meter SL7000 #53101045 KuTES-1 (main)
- /27/ Power meter SL7000 #53101050 KuTES-2 (main)
- /28/ Power meter SL7000 #53115834 KuTES-2 (secondary)
- /29/ Power meter SL7000 #53115826 2ShSOV (secondary)
- /30/ Power meter SL7000 #53115832 2ShSOV (main)
- /31/ Power meter SL7000 #53115813 1ShSOV (secondary)
- /32/ Power meter SL7000 #53115816 1ShSOV (main)
- /33/ Power meter SL7000 #53115796 AT1-2 110 KV (secondary)
- /34/ Power meter SL7000 #53115822 AT1-2 110 KV (main)
- /35/ Power meter SL7000 #53115818 BRU-SMU
- /36/ Power meter SL7000 #53100306 AT-330 (secondary)
- /37/ Power meter SL7000 #53100286 AT-330 (main)
- /38/ Power meter SL7000 #53100309 Zaporozhskaya 2 (secondary)
- /39/ Power meter SL7000 #53100290 Zaporozhskaya 2 (main)
- /40/ Power meter SL7000 #53100298 Zaporozhskaya 1 (secondary)
- /41/ Power meter SL7000 #53100291 Zaporozhskaya 1 (main)
- /42/ Power meter SL7000 #53100280 Ivanovka (main)
- /43/ Power meter SL7000 #53100278 Ivanovka (secondary)
- /44/ Power meter SL7000 #53100300 Chaykino 1 (main)
- /45/ Power meter SL7000 #53100310 Chaykino 1 (secondary)
- /46/ Power meter SL7000 #53100299 Chaykino 2 (secondary)
- /47/ Power meter SL7000 #53100270 Chaykino 2 (main)
- /48/ Power meter SL7000 #53115817 1TR-RA
- /49/ Power meter SL7000 #53115831 1TR-RB
- /50/ Power meter SL7000 #53115806 2TR-RB
- /51/ Power meter SL7000 #53115801 2TP-PA
- /52/ Power meter SL7000 #53115809 G-9 (main)
- /53/ Power meter SL7000 #5310801 G-9 (secondary)
- /54/ Power meter SL7000 #5310208 G-7 (main)
- /55/ Power meter SL7000 #53101800 G-7 (secondary)
- /56/ Power meter SL7000 #53101796 G-8 (secondary)
- /57/ Power meter SL7000 #53101783 G-8 (main)
- /58/ Power meter SL7000 #53101799 G-6 (secondary)
- /59/ Power meter SL7000 #53118199 G-6 (main)
- /60/ Power meter SL7000 #53101798 G-5 (main)
- /61/ Power meter SL7000 #53101790 G-5 (secondary)
- /62/ Power meter SL7000 #53101773 G-4 (secondary)
- /63/ Power meter SL7000 #53118189 G-3 (main)
- /64/ Power meter SL7000 #53101789 G-3 (secondary)
- /65/ Statement #2 dated 15/08/2011 on "Unit #7 of Kurakhovska TPF reconstruction" rediness to work
- /66/ Statement on equipment acceptance after the complex test
- /67/ Expert conclusion #11B07002500.000443 Π dated 05/12/2011 on "Unit #8 of Kurakhovska TPP reconstruction project"
- /68/ Scientific Report on the results of work performed for State Sanitary and Epidemiological Study #22.6320 dated 07/12/2011 "Technical and Economical

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- Substantiation of Kurakhovska TPP Unit #8 Reconstruction Project"
- /69/ Annex to Expert conclusion #00-1960-11/PB on review of Unit#8 of Kurakhovska TPP Reconstruction project documentation
- /70/ Form #1 wastes for 2011 year
- /71/ Permit on building works #DC11412018580 dated 06/02/2011 on Unit#8 of Kurakhovska TPP Reconstruction project
- /72/ Expert conclusion on review #00-1960-11/PB of Kurakhovska TPP Unit#8 Reconstruction project documentation
- /73/ Permit on building works #DU11411007901 dated 20/06/2011 on Unit#7 of Kurakhovska TPP Reconstruction project
- /74/ Certificate DC#16411031311 on conformity of finished by building Unit#7 of Kurakhovska TPP Reconstruction to project documentation
- /75/ Positive conclusion #345-2010/ΠБ dated 23/12/2010 on Unit#7 of Kurakhovska TPP Reconstruction project
- /76/ Positive conclusion #05.03.02-07/76381 dated 14/10/2010 of State Sanitary-Epidemiological Expertise on Unit#7 of Kurakhovska TPP Reconstruction
- /77/ Expert conclusion #36/216552 dated 06/10/10 of State Department of Fire Safety on Unit#7 of Kurakhovska TPP Reconstruction
- /78/ Expert conclusion #10B07002500.000639P dated 14/10/10 of State Department of Energy Safing on Unit#7 of Kurakhovska TPP Reconstruction
- /79/ 6tp form Report on TPPs work for 2011 year
- /80/ Form 11mtp, Report on fuel, heat and electric energy use for 2011
- /81/ Fuel consumption logbook for 2011 year
- /82/ Attestation certificate #ВЛ-223.09 on producing chemical laboratory of Kurakhovska TPP valid 12/10/2009-12/10/2012
- /83/ Annex to Attestation certificate #ВЛ-223.09 attestation scope
- /84/ Coal control logbook
- /85/ Heavy fuel oil control logbook
- /86/ Acceptance-transmittance act on natural gas, April 2011
- /87/ Acceptance-transmittance act on natural gas, May 2011
- /88/ Acceptance-transmittance act on natural gas, June 2011
- /89/ Acceptance-transmittance act on natural gas, July 2011
- /90/ Acceptance-transmittance act on natural gas, August 2011
- /91/ Acceptance-transmittance act on natural gas, September 2011
- /92/ Acceptance-transmittance act on natural gas, October 2011
- /93/ Acceptance-transmittance act on natural gas, November 2011
- /94/ Acceptance-transmittance act on natural gas. December 2011
- /95/ Passport on physical and chemical characteristics of natural gas, March 2011
- /96/ Passport on physical and chemical characteristics of natural gas, April 2011
- /97/ Passport on physical and chemical characteristics of natural gas, May 2011
- /98/ Passport on physical and chemical characteristics of natural gas, June 2011
- /99/ Passport on physical and chemical characteristics of natural gas, July 2011
- /100/ Passport on physical and chemical characteristics of natural gas, August 2011
- /101/ Passport on physical and chemical characteristics of natural gas, September 2011
- /102/ Passport on physical and chemical characteristics of natural gas, October 2011



- /103/ Passport on physical and chemical characteristics of natural gas, November 2011
- /104/ Passport on physical and chemical characteristics of natural gas, December 2011
- /105/ Statement on unconsumed fuel distribution for March 2011
- /106/ Statement on unconsumed fuel distribution for April 2011
- /107/ Statement on unconsumed fuel distribution for May 2011
- /108/ Statement on unconsumed fuel distribution for June 2011
- /109/ Statement on unconsumed fuel distribution for July 2011
- /110/ Statement on unconsumed fuel distribution for August 2011
- /111/ Statement on unconsumed fuel distribution for September 2011
- /112/ Statement on unconsumed fuel distribution for October 2011
- /113/ Statement on unconsumed fuel distribution for November 2011
- /114/ Statement on unconsumed fuel distribution for December 2011
- /115/ 3-tech form for December 2011
- /116/ 3-tech form for November 2011
- /117/ 3-tech form for October 2011
- /118/ 3-tech form for September 2011
- /119/ 3-tech form for August 2011
- /120/ 3-tech form for July 2011
- /121/ 3-tech form for June 2011
- /122/ 3-tech form for May 2011
- /123/ 3-tech form for April 2011
- /124/ 3-tech form for March 2011
- /125/ 2tp form (water consumption) for 2011
- /126/ 2tp form (air pollutant) for 2011
- /127/ Passport and calibration certificate on power meter SL7000 #53101056 connection Uhledar main
- /128/ Passport and calibration certificate on power meter SL7000 #53115824 connection Uhledar duplicate
- /129/ Passport and calibration certificate on power meter SL7000 #53101056 connection Uhledar main
- /130/ Passport and calibration certificate on power meter EA02RAL-C-4 #01147029 connection Uhledar
- /131/ Passport and calibration certificate on power meter SL7000 #53118189 connection Generator 3 main
- /132/ Passport and calibration certificate on power meter SL7000 #53101789 connection Generator 3 duplicate
- /133/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006113 connection Generator 3
- /134/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36056 connection Generator 3 duplicate
- /135/ Passport and calibration certificate on power meter SL7000 #53101794 connection Generator 4 main
- /136/ Passport and calibration certificate on power meter SL7000 #53101773 connection Generator 4 duplicate
- /137/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006115



- connection Generator 4
- /138/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36061 connection Generator 4
- /139/ Passport and calibration certificate on power meter SL7000 #53101798 connection Generator 5 main
- /140/ Passport and calibration certificate on power meter SL7000 #5310170 connection Generator 5 duplicate
- /141/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006118 connection Generator 5
- /142/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36060 connection Generator 5
- /143/ Passport and calibration certificate on power meter SL7000 #53118199 connection Generator 6 main
- /144/ Passport and calibration certificate on power meter SL7000 #53101799 connection Generator 6 duplicate
- /145/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006112 connection Generator 6
- /146/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36059 connection Generator 6
- /147/ Passport and calibration certificate on power meter SL7000 #53101783 connection Generator 8 main
- /148/ Passport and calibration certificate on power meter SL7000 #53101795 connection Generator 8 duplicate
- /149/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006111 connection Generator 8
- /150/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36055 connection Generator 8 duplicate
- /151/ Passport and calibration certificate on power meter SL7000 #53118208 connection Generator 7 main
- /152/ Passport and calibration certificate on power meter SL7000 #53101800 connection Generator 7 duplicate
- /153/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006117 connection Generator 7
- /154/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36058 connection Generator 7 duplicate
- /155/ Passport and calibration certificate on power meter SL7000 #53118209 connection Generator 9 main
- /156/ Passport and calibration certificate on power meter SL7000 #53101801 connection Generator 9 duplicate
- /157/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006114 connection Generator 9
- /158/ Passport and calibration certificate on power meter Enehria-9 O2Q2T3Mt #36057 connection Generator 9 duplicate
- /159/ Passport and calibration certificate on power meter SL7000 #53100270 connection Chaykino2 main
- /160/ Passport and calibration certificate on power meter SL7000 #53100299 connection Chaykino2 duplicate

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- /161/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006187 connection Chaykino2
- /162/ Passport and calibration certificate on power meter 02RAL-C-4 #01150411 connection Chaykino2 duplicate
- /163/ Passport and calibration certificate on power meter SL7000 #53115806 connection 2TR-RB
- /164/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006147 connection 2TR-RB
- /165/ Passport and calibration certificate on power meter SL7000 #53115817 connection 1TR-RA
- /166/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006148 connection 1TR-RA
- /167/ Passport and calibration certificate on power meter SL7000 #53115831 connection 1TR-RB
- /168/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006150 connection 1TR-RB
- /169/ Passport and calibration certificate on power meter SL7000 #53115801 connection 2TR-RA
- /170/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006151 connection 2TR-RA
- /171/ Passport and calibration certificate on power meter SL7000 #53100300 connection Chaykino1 main
- /172/ Passport and calibration certificate on power meter SL7000 #53100310 connection Chaykino1 duplicate
- /173/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006190 connection Chaykino1
- /174/ Passport and calibration certificate on power meter 02RAL-C-4 #01150406 connection Chaykino1 duplicate
- /175/ Passport and calibration certificate on power meter SL7000 #53100280 connection Ivanovka main
- /176/ Passport and calibration certificate on power meter SL7000 #53100276 connection Ivanovka duplicate
- /177/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006189 connection Ivanovka
- /178/ Passport and calibration certificate on power meter 02RAL-C-4 #01150407 connection Ivanovka
- /179/ Passport and calibration certificate on power meter SL7000 #53100291 connection Zaporizhska1 main
- /180/ Passport and calibration certificate on power meter SL7000 #53100296 connection Zaporizhska1 duplicate
- /181/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006188 connection Zaporizhska1
- /182/ Passport and calibration certificate on power meter 02RAL-C-4 #01150412 connection Zaporizhska1
- /183/ Passport and calibration certificate on power meter SL7000 #53100290 connection Zaporizhska2 main
- /184/ Passport and calibration certificate on power meter SL7000 #53100309



- connection Zaporizhska2 duplicate
- /185/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006191 connection Zaporizhska2
- /186/ Passport and calibration certificate on power meter 02RAL-C-4 #01150409 connection Zaporizhska2
- /187/ Passport and calibration certificate on power meter SL7000 #53100286 connection AT-330 main
- /188/ Passport and calibration certificate on power meter SL7000 #53100306 connection AT-330 duplicate
- /189/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006192 connection AT-330
- /190/ Passport and calibration certificate on power meter SL7000 #53115818 connection BRU-SMU
- /191/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006127 connection BRU-SMU
- /192/ Passport and calibration certificate on power meter SL7000 #53115822 connection AT-110 main
- /193/ Passport and calibration certificate on power meter SL7000 #53115796 connection AT-110 duplicate
- /194/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006170 connection AT-110
- /195/ Passport and calibration certificate on power meter SL7000 #53101045 connection KuTES-1 main
- /196/ Passport and calibration certificate on power meter SL7000 #53115820 connection KuTES-1 duplicate
- /197/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006152 connection KuTES-1
- /198/ Passport and calibration certificate on power meter 02RAL-C-4 #01147081 connection KuTES-1
- /199/ Passport and calibration certificate on power meter SL7000 #53115816 connection ShSOV-1 main
- /200/ Passport and calibration certificate on power meter SL7000 #53115813 connection ShSOV-1 duplicate
- /201/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006164 connection ShSOV-1
- /202/ Passport and calibration certificate on power meter 02RAL-C-4 #01147062 connection ShSOV-1
- /203/ Passport and calibration certificate on power meter SL7000 #53101050 connection KuTES-2 main
- /204/ Passport and calibration certificate on power meter SL7000 #53115834 connection KuTES-2 duplicate
- /205/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006153 connection KuTES-2
- /206/ Passport and calibration certificate on power meter 02RAL-C-4 #01147058 connection KuTES-2
- /207/ Passport and calibration certificate on power meter SL7000 #53115832 connection ShSOV-2 main

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- /208/ Passport and calibration certificate on power meter SL7000 #53115826 connection ShSOV-2 duplicate
- /209/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006167 connection ShSOV-2
- /210/ Passport and calibration certificate on power meter 02RAL-C-4 #01147069 connection ShSOV-2
- /211/ Passport and calibration certificate on power meter SL7000 #53101051 connection Electrostal main
- /212/ Passport and calibration certificate on power meter SL7000 #53115821 connection Electrostal duplicate
- /213/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01004794 connection Electrostal
- /214/ Passport and calibration certificate on power meter 02RAL-C-4 #01154793 connection Electrostal
- /215/ Passport and calibration certificate on power meter SL7000 #53101065 connection Mezheva main
- /216/ Passport and calibration certificate on power meter SL7000 #53115800 connection Mezheva duplicate
- /217/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006162 connection Mezheva
- /218/ Passport and calibration certificate on power meter 02RAL-C-4 #01147085 connection Mezheva
- /219/ Passport and calibration certificate on power meter SL7000 #53101031 connection Trudovska-5BIS main
- /220/ Passport and calibration certificate on power meter SL7000 #53115808 connection Trudovska-5BIS duplicate
- /221/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006159 connection Trudovska-5BIS
- /222/ Passport and calibration certificate on power meter 02RAL-C-4 #01147082 connection Trudovska-5BIS
- /223/ Passport and calibration certificate on power meter SL7000 #53101046 connection Novoselka main
- /224/ Passport and calibration certificate on power meter SL7000 #53115812 connection Novoselka duplicate
- /225/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006171 connection Novoselka
- /226/ Passport and calibration certificate on power meter 02RAL-C-4 #01147072 connection Novoselka
- /227/ Passport and calibration certificate on power meter SL7000 #53101080 connection Lesovska main
- /228/ Passport and calibration certificate on power meter SL7000 #53115805 connection Lesovska duplicate
- /229/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006172 connection Lesovska
- /230/ Passport and calibration certificate on power meter 02RAL-C-4 #01147035 connection Lesovska
- /231/ Passport and calibration certificate on power meter SL7000 #53101060



- connection Smolyanka2 main
- /232/ Passport and calibration certificate on power meter SL7000 #53115807 connection Smolyanka2 duplicate
- /233/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006169 connection Smolyanka2
- /234/ Passport and calibration certificate on power meter 02RAL-C-4 #01147032 connection Smolyanka2
- /235/ Passport and calibration certificate on power meter SL7000 #53101071 connection Smolyanka1 main
- /236/ Passport and calibration certificate on power meter SL7000 #53115811 connection Smolyanka1 duplicate
- /237/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006168 connection Smolyanka1
- /238/ Passport and calibration certificate on power meter 02RAL-C-4 #01147067 connection Smolyanka1
- /239/ Passport and calibration certificate on power meter SL7000 #53101086 connection Kotlyarevska2 main
- /240/ Passport and calibration certificate on power meter SL7000 #53115798 connection Kotlyarevska2 duplicate
- /241/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006158 connection Kotlyarevska2
- /242/ Passport and calibration certificate on power meter 02RAL-C-4 #01147077 connection Kotlyarevska2
- /243/ Passport and calibration certificate on power meter SL7000 #53115809 connection Kotlyarevska1 main
- /244/ Passport and calibration certificate on power meter SL7000 #53115833 connection Kotlyarevska1 duplicate
- /245/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006165 connection Kotlyarevska1
- /246/ Passport and calibration certificate on power meter 02RAL-C-4 #01147084 connection Kotlyarevska1
- /247/ Passport and calibration certificate on power meter SL7000 #53101036 connection Krasnoarmeyska main
- /248/ Passport and calibration certificate on power meter SL7000 #53115803 connection Krasnoarmeyska duplicate
- /249/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006177 connection Krasnoarmeyska
- /250/ Passport and calibration certificate on power meter 02RAL-C-4 #011470744 connection Krasnoarmevska
- /251/ Passport and calibration certificate on power meter SL7000 #53101101 connection Prodmash main
- /252/ Passport and calibration certificate on power meter SL7000 #53115810 connection Prodmash duplicate
- /253/ Passport and calibration certificate on power meter A1R-4-02-C4-T #01006173 connection Prodmash
- /254/ Passport and calibration certificate on power meter 02RAL-C-4 #01147076 connection Prodmash

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- /255/ Statement on replacement of power meters connection Zaporizhska1, Zaporizhska2 dated 11/08/2011
- /256/ Statement on replacement of power meters connection Ivanovka dated 10/08/2011
- /257/ Statement on replacement of power meters connection Chaykino1, Chaykino2 dated 10/08/2011
- /258/ Statement on replacement of power meters connection Ivanovka dated 26/07/2011
- /259/ Statement on replacement of power meters connection Zaporizhska1, Zaporizhska2 dated 25/07/2011
- /260/ Statement on replacement of power meters connection Chaykino1, Chaykino2 dated 25/07/2011
- /261/ Statement №015166 on replacement of power meters connection ShSOV-2, Mezheva duplicate dated 13/07/2011
- /262/ Statement №015172 on replacement of power meters connection ShSOV-2, Kotlyarevska1 dated 09/08/2011
- /263/ Statement on replacement of power meters connection G-4, dated 10/08/2011
- /264/ Statement on replacement of power meters connection 1TR-RA, 1TR-RB, dated 18/07/2011
- /265/ Statement on replacement of power meters connection 2TR-RA, 1TR-RB, dated 19/07/2011
- /266/ Statement on replacement of power meters connection G-5, dated 19/07/2011
- /267/ Statement on replacement of power meters connection G-3, G-6, dated 01/09/2011
- /268/ Statement on replacement of power meters connection G-7, dated 27/08/2011
- /269/ Statement on replacement of power meters connection G-9, dated 24/08/2011
- /270/ Statement on replacement of power meters connection G-8, dated 12/08/2011
- /271/ Statement on replacement of power meters connection AT-330, dated 25/07/2011
- /272/ Statement on replacement of power meters connection AT-330, G-5, dated 05/08/2011
- /273/ Statement on replacement of power meters connection AT-110, dated 04/08/2011
- /274/ Statement on replacement of power meters connection G-5, 23T-3RA, 23T-3RB, 2RV dated 01/06/2011
- /275/ Statement on replacement of power meters connection G-6 duplicate, dated 25/05/2011
- /276/ Statement on replacement of power meters connection G-7 duplicate, dated 26/05/2011
- /277/ Statement on replacement of power meters connection G-3 duplicate, dated 31/05/2011
- /278/ Statement on replacement of power meters connection G-9 duplicate, dated 20/05/2011
- /279/ Statement on replacement of power meters connection AT-110, dated 25/06/2011
- /280/ Statement on replacement of power meters connection 24T-4RA, 24T-4RB dated 02/06/2011

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VERITAS

VERIFICATION REPORT "RECONSTRUCTION OF THE UNITS AT THE STRUCTURE UNIT "KURAKHOVSKAYA TPP" OF THE "SKHIDENERGO" LTD"

- /281/ Statement on replacement of power meters connection 25T-5RA, 25T-5RB dated 03/06/2011
- /282/ Statement on replacement of power meters connection 26T-6RA, 26T-6RB dated 10/06/2011
- /283/ Statement on replacement of power meters connection 27T-7RA, 27T-7RB dated 15/06/2011
- /284/ Statement on replacement of power meters connection 29T-9RA, 29T-9RB dated 17/06/2011
- /285/ Statement #002495 on replacement of power meters dated 05/07/2011
- /286/ Statement #015171 on replacement of power meters connection Trudovskaya -5BIS Lisovska2 dated August 2011
- /287/ Statement #002503 on replacement of power meters connection KuTES-1, KuTES-2, Electrostal, Novosyolka dated 15/08/2011
- /288/ Statement #015169 on replacement of power meters dated 09/08/2011 connections Kotlyarevska-2, Prodmash
- /289/ Statement #015168 on replacement of power meters dated 09/08/2011 connections Krasnoarmeyska, Smolyanka-1
- /290/ Statement #015170 on replacement of power meters dated 09/08/2011 connections Mezheva, Smolyanka-2
- /291/ Statement #015165 on replacement of power meters dated 12/07/2011 connections Trudovskaya -5BIS duplicate, Lisovska dupl..
- /292/ Statement #015143 on replacement of power meters dated 11/07/2011 connections Krasnoarmeyska duplicate, Smolyanka1 dupl.
- /293/ Statement #015144 on replacement of power meters dated 11/07/2011 connections Kotlyarevska2 duplicate, Prodmash duplicate.
- /294/ Statement #002493 on replacement of power meters connection Electrostal main and dupl, Novosyolka main and dupl dated 05/07/2011
- /295/ Statement #002494 on replacement of power meters connection ShSOV-1, ShSOV-2 main and dupl dated 05/07/2011
- /296/ Statement #015164 on replacement of power meters dated 12/07/2011 connections Kotlyarevska dupl, Smolyanka2 dupl.
 - /297/ Statement #015173 on replacement of power meter dated 09/08/2011 connection ShSOV-1
 - /298/ Statement #002499 on replacement of power meters dated 14/07/2011 connections BRU-SMU, Novosyolka
 - /299/ Statement on replacement of power meters dated 15/07/2011 connection Uhledar
 - /300/ Statement on replacement of power meters dated 09/08/2011 connection Uhledar

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/ Yevgen Mazurov Head of Production-Technical Department of Kurakhovo TPP
- /2/ Pavlo Titarenko Head of Transport-Fuel Department of Kurakhovo TPP
- /3/ Serhiy Kostin Head of Boiler-Turbine Department of Kurakhovo TPP



- /4/ Ihor Chaban Head of Electric Department of Kurakhovo TPP
- /5/ Natalya Pilyhina Head of Chemical Laboratory of Kurakhovo TPP



VERIFICATION REPORT "RECONSTRUCTION OF THE UNITS AT THE STRUCTURE UNIT "KURAKHOVSKAYA TPP" OF THE "SKHIDENERGO" LTD"

APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL VERIFICATION PROTOCOL

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

DVM	Check Item	Initial finding	Draft	Final	
Paragra			Conclusio	Conclusio	
ph			n	n	
Project ap	provals 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 National Environment Investment Agency of Ukraine (Letter of Approval #753/23/07 dated 09/06/2010) and UK Department of Energy and Climate Change (Letter of Approval #CFCarbonII/02/2010 dated 3/12/2010) CAR01 Please indicate correct number and date for Ukraine Letter of Approval	CAR01	OK	
91	Are all the written project approvals by Parties involved unconditional?	All written project approvals are unconditional	OK	OK	
Project im	plementation				
92	Has the project been implemented in accordance with the PDD regarding	<u>CAR02</u> Please explain difference between:	CAR02		
	which the determination has been deemed final and is so listed on the	 value of electric energy supplied to the grid and specific fuel rate in ERUs calculations 	CL01		
	UNFCCC JI website?	 and 11-mtp form ERUs value indicated in the PDD and in the Monitoring Report values of CO2 indicated in the monitoring 	CL01		



DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
93	What is the status of operation of the project during the monitoring period?	report and in the 2tp form CL01 Please indicate in the Monitoring Report if power units were remarked with change of capacity during the monitoring period. CL02 The permanent repairs, mid repairs, capital repairs are common practice on Ukraine power plants. Please indicate in the Monitoring Report data on repair periods for each Block CAR03 The PDD version 2.2 indicates that reconstruction of Power Unit #7 must be implemented in 2009-2010 years. But, this reconstruction has been finished in 2011 year. Please explain this mismatch	CAR03	
Complian	ce with monitoring plan	moment		
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?	The monitoring was occurred in accordance with the monitoring plan included in the determined PDD which has been deemed final	OK	OK
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b)	For the calculating emission reduction, key factors influencing the baseline emission and the activity level of the project and the risks associated with	OK	OK



DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
	(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?	the project has been taken into account		
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	The data sources used for emission reduction calculations are clearly identified, reliable and transparent	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?	The emission factors used for calculating GHG emission reduction is in line with "National GHG Inventory Report" adopted by State Environment Investment Agency of Ukraine.	OK	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The calculations of emission reduction are based on conservative assumptions and the most plausible future scenario. Calculations are made in appropriate way with essential accuracy	ОК	OK
Applicabl 96	e to JI SSC projects only Is the relevant threshold to be classified as JI SSC project not exceeded during	Not applicable	Not applicable	Not applicable



a II n e p	the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?			
Applicable t	to bundled II CCC projects only			
	to bundled JI SSC projects only			
	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	Not applicable	Not applicable
tl h	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	Not applicable	Not applicable	Not applicable
98 If n control of the state of	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?	Not applicable	Not applicable	Not applicable



DVM Paragra ph	Check Item	Initial finding	Draft Conclusio n	Final Conclusio n
Applicable	e only if monitoring plan is revised by p	project participant		
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	The monitoring plan has not been revised during the proposed monitoring period	OK	OK
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?		ОК	OK
Data mana	agement			
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 described in the monitoring plan	ОК	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, in order?	<u>CAR04</u> Please provide in the monitoring report actual information on power meters with indication of serial number, date of installation/replacement and name of power connection	CAR04	
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?		OK	OK



DVM	Check Item	Initial finding	Draft	Final
Paragra			Conclusio	Conclusio
ph			n	n
101 (d)	Is the data collection and management	<u>CAR05</u>	CAR05	
	system for the project in accordance	Please note in the monitoring report that the data		
	with the monitoring plan?	monitored and required for ERUs calculation will		
		be kept two years after the last ERUs transfer with		
Marification		reference on relevant order of Vostokenergo		
	on regarding programmes of activities (<u> </u>	N	N. 1
102	Is any JPA that has not been added to	Not applicable	Not	Not
	the JI PoA not verified?		applicable	applicable
103	Is the verification based on the	Not applicable	Not	Not
	monitoring reports of all JPAs to be		applicable	applicable
	verified?			
103	Does the verification ensure the	Not applicable	Not	Not
	accuracy and conservativeness of the		applicable	applicable
	emission reductions or enhancements			
404	of removals generated by each JPA?		N	.
104	Does the monitoring period not overlap	Not applicable	Not	Not
40=	with previous monitoring periods?		applicable	applicable
105	If the AIE learns of an erroneously	Not applicable	Not	Not
	included JPA, has the AIE informed the		applicable	applicable
	JISC of its findings in writing?			
	e to sample-based approach only			
106	Does the sampling plan prepared by	Not applicable	Not	Not
	the AIE:		applicable	applicable
	(a) Describe its sample selection,			
	taking into			



DVM	Check Item	Initial finding	Draft	Final
Paragra ph			Conclusio n	Conclusio n
	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?			



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



Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarification and corrective action requests by verification team	Ref. to checklis t questio n in table 1	Summary of project participant response	Verification team conclusion
<u>CAR01</u> Please indicate correct number and date for Ukraine Letter of Approval	90	Correct number and date for Ukraine LoA are indicated in the section A.2 of the Monitoring Report version 1.1	The issue is closed based on project developer correction.
 CAR02 Also please explain difference between: value of electric energy supplied to the grid and specific fuel rate in ERUs calculations and 11-mtp form ERUs value indicated in the PDD and in the Monitoring Report values of CO2 indicated in the monitoring report and in the 2tp form 	92	 The ERUs calculations were made on the monthly basis and the 11-mtp form is an annual one, so there could be the difference. Explanation is provided in the section A.8 of the Monitoring Report The calculation of CO2 emissions in the 2-tp form covers all the fuel combusted at the TPP and the ERUs calculation covers only the fuel consumption for the electricity production (the heat is excluded) 	The issues are closed based on explanations provided by the project developer



CAR03 The PDD version 2.2 indicates that reconstruction of Power Unit #7 must be implemented in 2009-2010 years. But, this reconstruction has been finished in 2011 year. Please explain this mismatch	93	Explanation for non-conformance between planned and implemented project measures is provided in the chapter A.3 of the Monitoring Report	The issue is closed based on information provided by project owner and developer.
CAR04 Please provide in the monitoring report actual information on power meters with indication of serial number, date of installation/replacement and name of power connection	101(b)	The data on power meters are provided in the chapter B.2.1	The provided information is found adequate. The issue is closed.
CAR05 Please note in the monitoring report that the data monitored and required for ERUs calculation will be kept two years after the last ERUs transfer with reference on relevant order of Vostokenergo	101(d)	Relevant order is mentioned in the section B of the Monitoring Report	The issue is closed.
<u>CL01</u> Please indicate in the Monitoring Report if power units were remarked with change of capacity during the monitoring period.	92	Clarification on power units remarking is provided in the section A.3 of the Monitoring Report	The issue is closed based on information, provided by the project developer



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