VERIFICATION REPORT
PJSC «DTEK DONETSKOBLENERGO»

VERIFICATION OF THE REDUCTION OF PROCESS LOSSES IN POWER LINES PJSC «DONETSKOBLENERGO»

SECOND PERIODIC FOR 01/01/2008-30/06/2012

REPORT NO. UKRAINE-VER/0521/2012

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BUREAU VERITAS CERTIFICATION

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Client: PJSC «DTEK Donetskoblenergo»	Client ref.: Lidia Magera

Summary:
Bureau Veritas Certification has made the 2nd periodic verification of the Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo», project of PJSC «DTEK Donetskoblenergo» located in Donetsk City and Donetsk Region, Ukraine, and applying JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the 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 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 GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 4428571 tonnes of CO2 equivalent for the monitoring period from 01/01/2008 to 30/06/2012 (606066 tonnes of CO2 equivalent for 01/01/2008-31/12/2008, 1035476 tonnes of CO2 equivalent for 01/01/2009-31/12/2009, 1135591 tonnes of CO2 equivalent for 01/01/2010-31/12/2010, 1096591 tonnes of CO2 equivalent for 01/01/2011-31/12/2011, 554847 tonnes of CO2 equivalent for 01/01/2012-30/06/2012).

Report No.: Ukraine-ver/0521/2012	Subject Group: JI
Project title: Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»	
Work carried out by: Oleg Skoblyk – Team Leader, Lead Verifier Vyacheslav Yeriomin – Team Member, Verifier	
Work reviewed by: Ivan Sokolov - Technical Reviewer Daniil Ukhanov – Technical specialist	
Work approved by: Ivan Sokolov - Operational Manager	
Date of this revision: 01/10/2012	Rev. No.: 03 / Number of pages: 30

Bureau Veritas Certification Holding SAS

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1 INTRODUCTION

Dniprooblenergo PJSC has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»" (hereafter called "the project") at Donetsk City and Donetsk Region, Ukraine.

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

Verification covers the period from 01/01/2008 to 30/06/2012.

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:

Oleg Skoblyk 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

Daniil Ukhanov
Bureau Veritas Certification, Technical Specialist

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 PJSC «DTEK Donetskoblenergo» 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 version(s) 03 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 07/09/2011 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 PJSC «DTEK Donetskoblenergo» were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
PJSC «DTEK Donetskoblenergo»	Organizational structure 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 IT management Training of personnel Quality management procedures and technology Internal audits and check-ups
CONSULTANT: "EES" Ltd	Baseline methodology Monitoring plan Monitoring report Excel spreadsheets

2.3 Resolution of Clarification, Corrective and Forward Action Requests

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

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

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

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

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

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

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

3 VERIFICATION CONCLUSIONS

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 6 Corrective Action Requests, 0 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 are pending from determination process provided by Bureau Veritas Certification Holding SAS

3.2 Project approval by Parties involved (90-91)

The project obtained written approval from Ukraine (the Host country) on 03/04/2012 (Letter of Approval № 858/23/7, issued by the State Environmental Investment Agency of Ukraine). The project was also approved by Poland, the country – buyer of GHG emission reductions (Letter of Approval №DZKiOApek-4430-35/47071/11/TK issued by the Minister of Environment of Poland dated 19/10/2011).

The abovementioned written approval is unconditional.

3.3 Project implementation (92-93)

Project implementation status in the reporting period of 01/01/2008 – 30/06/2012, including the project milestones is provided in the following table

Table 1. Project implementation status

№	Name of activities	Measurement unit	2008	2009	2010	2011	30.06.2012
1	2	3	4	5	6	7	8
1	Reconstruction of PL -0,38 kV of SIP	km					
2	Replacement of overloaded and installation of additional power transformers	pcs.	113	88	104	72	80
3	Construction of PL-10kV; PL-0,38 kV	km km					
4	Replacing the single-phase meters with high accuracy meters	pcs	89765	92901	80320	153662	66 940
5	Replacement of wrecked PL-0,38kV	km	317				
6	Впровадження систем телемеханикі ПС-35-150кВ	pcs.					
7	Change of bare wire inputs into isolated wire inputs	pcs	65700	87550	51229	48 974	19060
8	Construction of unloading substations	pcs	37	18	6	19	0
9	Replacement and installation of meters in front of buildings	pcs	119906	94607	47499	48 974	19060
10	Change of wrecked PL-10kV	km					
11	Change of TP-10/0,38kV	pcs	15				
12	Replacement of worn-out oil switches with vacuum ones	pcs	163	135	171	129	63
13	Change of the cable lines 10- 0,38 kV	km					
14	Installation of 3 –phase multifunctional meters	pcs	960	917	3928	1 113	260
15	Change of inputs of 110kV with rigid insulation	pcs.	3			9	6
16	Introduction of ASKOE	pcs.	24	172	390	95	24
17	Reconstruction of PS 35-150 kV.	pcs.	1		1		

It was assessed by Bureau Veritas verification team during the site visit that the project has been implemented in accordance with the PDD regarding which the determination has been deemed final.

Since the determined PDD version 3.0 contains miscalculated ERUs for the period of 2008 – 2010 years, and the monitoring was conducted at the beginning of 2012, then according to Ltd «EES» there had been conducted calculations of ERUs for the year 30/06/2012 inclusive.

CAR01-CAR03 and their resolution/conclusion on project implementation concerning in the APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL.

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, 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.

The actual amount of emission reductions during the monitoring period differs from values that were indicated in the determinate PDD version 3.0, as a result of using of the differentiated approach to value ratio deterioration of electrical indexes of electrical equipment over time of KP for different billing periods (baseline and current years estimated) while monitoring plan performance, to take account of the effect of improving electrical performance of electrical equipment by introduced measures of TVE reduction and application of the calculated input for 2012.

Key monitoring activities are clearly described in the monitoring report and no deviations from monitoring algorithm were detected. The monitoring points including parameters monitored, monitoring equipment and information concerning its calibration interval are clearly described in the section B of the Monitoring Report and completely corresponds with determined PDD.

Data sources used to calculate emission reductions that i.e. reports according to departmental reporting forms by Ministry of Fuel and Energy of Ukraine (1B-TVE "The structure of electric power balance and technological loss of electric power for transmission in grids" (model 41971), " Electricity and power balance and calculation of technical and economic indexes "(model 8111), 46 energo" Electric power distribution and its calculation "(model 45912) yearly reports on investment programmes realisation are clearly identified, reliable and transparent.

Emission factor for electric energy transportation are selected by carefully balancing Accuracy and reasonableness, and appropriately justified of the choice. Values of Emission Factor for electric power transportation were accepted in compliance with State Environmental Investment Agency of Ukraine Orders.

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

CAR04 and its resolution/conclusion applicable to compliance of the monitoring plan with the monitoring methodology concerning in the APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL

3.5 Revision of monitoring plan (99-100)

When calculating actual emission reductions during the monitoring period, following the principles of a conservative approach, for different billing periods (baseline and current years estimated):

a) coefficient value of electrical equipment deterioration index over time of $КР_N$ for the base year N (N = 0) is taken equal to 1,25, as set out in accordance with Annex A "Report on the scientific and technical work" Assessment of greenhouse gas emissions by technological losses reduction in the distribution networks of Ukraine "(final) under the contract №3/11 of 04.04.2011, the Institute of General Energy of the National Academy of Sciences of Ukraine" value of this ratio can be as high as thirty percent or more of passport values (КР ≥ 1,3) , that is in the beginning of the project implementation in electrical networks it is operated most of the electrical equipment with significant depreciation;

b) coefficient value of electrical equipment deterioration index over time of $КР_{N+1}$ for the current calculated year t, which is the baseline (N = 0, t = 1) is taken equal to 1,15, since the measures implementation of TVE reduction in this year of project realization there has been replaced a part of electrical equipment with the highest level of depreciation;

c) coefficient value of electrical equipment deterioration index over time $КР_{N+t} = КР_{N+1} - 0,01 \cdot t$ for the next calculated years N + t (N = 0, t ≥ 2), ie the coefficient is reduced to 0,01 for each next year in comparison with the previous one, because the share of electrical equipment depreciation, which is operated in networks decreases due to the introduction of measures of TVE reduction;

d) If the calculated value of the coefficient $КР_{N+t} < 1,05$ of ongoing settlement years is N + t (N = 0, t ≥ 2), then for these years, it is taken equal to 1,05, since in electrical networks there will be operated a part of electrical equipment with depreciation.

The difference in the calculation of emissions before and after the change of the monitoring plan is presented in the table below

Year	Emission reduction to changes in the monitoring plan	Emission reduction after the change of the monitoring plan
	tCO2eq	tCO2eq
2008	401442	606066
2009	828204	1035476
2010	928887	1135591
2011	890454	1096591
30.06.2012		554847
Total 2008-30.06.2012:	3 048 987	4428571

During the calculation of the actual amount of emission reductions over the monitoring period from 01/01/2012 to 30/06/2012 there was used a balance of payments of electric power for the year 2012 according to the 1B-TVE form, data reporting forms 67-energo as of June 30, 2012 and data on the number of residential consumers as of June 30, 2012. A balance of payments of electric power in 2012 prepared on the basis of the accounting balances of electricity for the months of the year 2012 in the 1B-TVE Form from January to June and balances of payments from July to December, 2012, which adopted the same as reported balances from July to December, 2011 . The actual amount of emission reductions during the monitoring period from 01/01/2012 to 30/06/2012 is equal to 1/2 of the amount of emission reductions for the year 2012, calculated on the electricity balance of payments for the year 2012. The actual amount of emission reductions over the monitoring period from 01/07/2012 to 31/12/2012 for the future will be calculated as the difference between the actual number of emission reductions in 2012, calculated on the basis of the reporting 1B-TVE form for 2012, reporting form 67 -energo for 2012 and reporting data on the number of residential consumers in 2012, and actual amount of emission reductions over the monitoring period from 01/01/2012 to 30/06/2012.

Bureau Veritas confirms that changes in monitoring plan based on Alteration#1 for "The methodology of technical power losses amount determination, in 0,38-150 kV power grids power supply company for the indirect carbon dioxide emissions estimation" is adequately justified and improves accuracy of the monitoring data.

3.6 Data management (101)

The detailed data management system has been implemented on PJSC «DTEK Donetskoblenergo» to record and keeps required information. The monitored data flow for each parameter to be monitored is described in the section C.1 of the Monitoring Report. Operational information and reporting department is responsible to monitoring data preparation.

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

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

The function of the monitoring equipment, including its calibration status, is in order. Metering equipment involved in the project activity are periodically calibrated by State Enterprise "Donetskstandartmetrologiya". Data on electric energy flow are periodically checked by PJSC «DTEK Donetskoblenergo».

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

The data collection and management system for the project is in accordance with the monitoring plan. The data monitored and required for ERUs calculation will be kept during two years after last ERUs transfer.

CAR05, CAR06 and their resolution/conclusion applicable to data management concerning in APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL

3.7 Verification regarding programmes of activities (102-110)

"Not applicable"

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the second periodic verification of the "Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»" Project in Donetsk City and Donetsk Region, Ukraine, which applies JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the 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 PJSC «DTEK Donetskoblenergo» 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 indicated in the final PDD version. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report version 03 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.

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. For ease of calculation of emission reductions in the Excel file «DON-1BTWE-2008-30.06.2012-26-11-2012-Km=1-ok-KP-CO-MR-ENG.xls.», all the values with the quotient of one hundred are rounded to integers. Therefore, when summing the values of ERUs, which are listed in Tables of Monitoring Report there may be minor differences Based on the information we have seen and evaluated, we confirm, with a reasonable level of assurance, the following statement:

Reporting period: From 01/01/2008 to 30/06/2012

Baseline emissions	:	4428571	tonnes of CO2 equivalent.
Project emissions	:	0	tonnes of CO2 equivalent.
Emission Reductions	:	4428571	tonnes of CO2 equivalent.
Emission Reductions (01/01/2008-31.12.2008)	:	606066	tonnes of CO2 equivalent.
Emission Reductions (01/01/2009-31.12.2009)	:	1035476	tonnes of CO2 equivalent.
Emission Reductions (01/01/2010-31.12.2010)	:	1135591	tonnes of CO2 equivalent.
Emission Reductions (01/01/2011-31.12.2011)	:	1096591	tonnes of CO2 equivalent.
Emission Reductions (01/01/2012-30.06.2012)	:	554847	tonnes of CO2 equivalent.

5 REFERENCES

Category 1 Documents:
Documents provided by PJSC «DTEK Donetskoblenergo» that relate directly to the GHG components of the project.

/1/ PDD "Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»" version 3.0 dated 01/11/2011
/2/ Monitoring Report "Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»" version 01 dated 19/10/2011
/3/ Monitoring Report "Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»" version 02 dated 31/01/2012
/4/ Monitoring Report "Reduction of Process Losses in Power Lines PJSC «Donetskoblenergo»" version 03 dated 01/10/2012
/5/ ERUs calculation Excel-file «DON-1BTWE-2008-30.06.2012-26-11-2012-Km=1-ok-KP-CO-MR-ENG.xls.»
/6/ Letter of Approval #№ 858/23/7, issued by the State Environmental Investment Agency of Ukraine dated 03/04/2012
/7/ Letter of Approval #DZKiOA pek–4430–35/47071/11/TK dated 19/10/2011 issued by Poland Ministry of Environment

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

/1/ Decree of Cabinet of Ministers of Ukraine #206, dated 22/02/2006
/2/ Joint Implementation Project Design Document Form, version 01
/3/ Guidelines for Users of the Joint Implementation Project Design Document Form/Version 04, JISC.
/4/ JISC Guidance on criteria for baseline setting and monitoring. Version 02.
/5/ "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 03.0.0)
/6/ Glossary of Joint Implementation Terms, Version 03.
/7/ Decree #43 on approval of indexes of specific carbon dioxide emissions in the year 2010 issued by NEIA dated 28/03/2011.
/8/ Decree #62 on approval of indexes of specific carbon dioxide emissions in the year 2008 issued by NEIA dated 15/04/2011.
/9/ Decree #63 on approval of indexes of specific carbon dioxide emissions in the year 2009 issued by NEIA dated 15/04/2011.
/10/ Decree #75 on approval of indexes of specific carbon dioxide emissions in the year 2011 issued by NEIA dated 12/05/2011.
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/64/ Order #757 of 17/12/2003 on approval of "Methods of balance structure preparation of power in electrical networks of 0,38-150kV analysis of its components and regulation of technical power consumption"
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/81/ Control of electricity meter exploitation of type ZE6803V
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/94/ Form 68 energy for 2011
/95/ Annex №1 to Electricity supply agreement #4559 of 01/12/2009
/96/ Annex №2 to Electricity supply agreement #4559 of 01/12/2009
/97/ Service rendering agreement of 10/06/2009
/98/ Recording journal of meters of subscriber service of Gorlivska REM for year 2009
/99/ Recording journal of meters of subscriber service of Gorlivska REM for year 2010

/100/ Recording journal #2 of meters of subscriber service of Gorlivska REM for year 2008
/101/ Order on replacement of an electricity meter of 11/02/2010
/102/ Certificate about reception of the meter NIK2102-02 fabrication #0195857
/103/ Act of preservation of a closed complex registration of electrical power #016003109 of 11/02/2010
/104/ Order about replacement of an electricity meter of 27/02/2009
/105/ Act of preservation of a closed complex registration of electrical power 27/02/2009
/106/ Certificate of reception of the meter NIK2102-02 fabrication #1180233 of 11/02/2009
/107/ Task of the production works of removing and installing a single-phase electricity meters of 31/01/2008
/108/ Order about replacement of an electricity meter of 31/01/2008
/109/ Certificate of acceptance and commissioning of a single-phase electricity meter fabrication #445885 of 05/12/2007
/110/ Act of a recording control #163290 of 29/09/2009
/111/ Act of a recording control #163346 of 28/09/2009
/112/ Act of a recording control #302029 of 23/09/2009
/113/ Act of a recording control #302037 of 21/09/2009
/114/ Act of a recording control #172989 of 18/09/2009
/115/ Act of a control index recording of electricity meter of 18/09/2009
/116/ Journal of a control recording for October, 2010
/117/ Corporative newspaper OJSC "Donetskoblenergo" November 2008
/118/ Corporative newspaper OJSC "Donetskoblenergo" March 2009
/119/ Corporative newspaper OJSC "Donetskoblenergo" April 2009
/120/ Corporative newspaper OJSC "Donetskoblenergo" January 2008.
/121/ License #500373 Series AG for electrical power transferring by local electrical networks
/122/ License #500372 Series AG for electrical power supply by regulated tariffs
/123/ License #220560 Series AB for electrical power transferring by local electrical networks
/124/ License #220561 Series AB for electrical power supply by regulated tariffs
/125/ Report on atmospheric air protection for year 2008
/126/ The requirement of violations of environmental Law of 17/09/2008
/127/ Report on atmospheric air protection for year 2009
/128/ Report on atmospheric air protection for year 2010
/129/ Waste management for 2012
/130/ Act of environmental regulation check of 21/07/2010

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/ Alyoshyn N.S. – Technical Director

/2/ Kozhuharj O.V – Technical Director assistant

/3/ Trygub V.O. – Main Engineer for energy sales

/4/ Kalmykova M.N. – Director's assistant of Manufacturing Technical Services

/5/ Shapovalov N.L. – Head of Manufacturing Services

/6/ Malzev O.S. – Head of Substations' Group

/7/ Philipova O.Y. – Electrician of Ruchenkovska Substation

/8/ Zhukov D.V. – Head of Donetsk Electrical Networks

/9/ Gunkin Y.V. – Head of Informative Counselling Center

/10/ Smirnyi A.Y. – Main Engineer of Donetsk Electrical Networks

/11/ Medvediva V.D. – I-st category craftsman

/12/ Shtakina O.S. – Head's assistant REM for sales

/13/ Roman Prots – representative of "EES" Ltd.

APPENDIX A: VERIFICATION PROTOCOL

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals by Parties involved				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	The project has been approved by both Party involved. Letter of Approval #858/23/7dated 03.04.2012p issued by State Environmental Investment Agency of Ukraine. Letter of Approval #DZKiOApek-4430-35/47071/11/TK issued by the Minister of Environment of Poland dated 19/10/2011	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	All the written project approvals 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?	*CAR01* Please indicate correct date and valid version of PDD throw all Monitoring Report *CAR02* The monitoring report indicates project implementation status in the *Table 1* in the section A.6. The determined PDD doesn't contain list of proposed measures. Please provide in the Monitoring Report reference to reliable and transparent source of these data. Also please explain if planned actions for 2008-30/06/2012 years are different from implemented measures. *CAR03*	CAR01 CAR02	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		Please provide an explanation of the difference between the number of reduction units as indicated in the PDD and monitoring report for the reporting period		
93	What is the status of operation of the project during the monitoring period?	The project equipment is in operation during the monitoring period.	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?	The monitoring has been occurred in accordance with the monitoring plan provided in the PDD which the determination has been deemed final and is available on the UNFCCC website.	OK	OK
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	Key factors influencing the baseline emissions and risks associated with the project activity level have been taken into account for emission reduction calculation.	OK	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	*CAR04* Please provide to AIE next sources to prove calculations reliability: - the number of residential consumers - the number of single and three phase electricity	CAR04	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		meters - the number of electricity meters with different accuracy - the number of induction and electricity meters -		
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	Emission factor for electric power transmission is used for emission reduction calculation. Value of Emission factor is accepted from year to year by National Environmental Investment Agency Orders.	OK	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in a transparent manner.	OK	OK
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	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	period determined?			
Applicable to bundled JI SSC projects only				
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	Not applicable	Not applicable	Not applicable
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	Not applicable	Not applicable	Not applicable
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring 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
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	The monitoring plan has not been revised by project participants	Not applicable	Not applicable
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?			
Data management				
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	The implementation of data collection procedures are in accordance with the monitoring plan contains in the determined PDD. *CAR05* Please provide in the section C.1 transparent scheme of data collection with indication of monitored parameters and responsible persons	CAR05	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	The function of monitoring equipment including its calibration status is in order. Electric measuring equipment are calibrated by State Enterprise "Donetskstandartmetrologiya" under approved plan	OK	OK
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidences and records are used for the monitoring maintained in a traceable manner.	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	*CAR06* Please indicate that the data monitored and required to ERUs calculation will be kept two years after the last ERUs transfer. Also please provide to AIE relevant order	CAR06	OK
Verification regarding programs of activities (additional elements for assessment)				

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	reasonable, taking into account differences among the characteristics of JPAs, such as: − The types of JPAs; − The complexity of the applicable technologies and/or measures used; − The geographical location of each JPA; − The amounts of expected emission reductions of the JPAs being verified; − The number of JPAs for which emission reductions are being verified; − The length of monitoring periods of the JPAs being verified; and − The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	Not applicable	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	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?			
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	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 clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR01 Please indicate correct date and valid version of PDD throw all Monitoring Report	92	The correct date and version of the determined PDD has been indicated throw all Monitoring Report version 02 dated 31/01/2012	The corrections of Monitoring Report were provided by the project developer. The issue is closed
CAR02 The monitoring report indicates project implementation status in the *Table 1* in the section A.6. The determined PDD doesn't contain list of proposed measures. Please provide in the Monitoring Report reference to reliable and transparent source of these data. Also please explain, if planned actions for 2008-30/06/2012 years are different from implemented measures.	92	All information on project implementation was provided from official and approved sources such as Reports on investment programs realization for relevant year. These Reports have been sent to National energetic Regulatory Commission of Ukraine (NERC), NJSC "Energy Company of Ukraine", Ministry of Fuel and Power of Ukraine. Soft copies of Reports were provided to AIE.	The information concerning in Reports is in line with the ERUs calculation Excel file. The issue is closed.

CAR03 Please provide an explanation of the difference between the number of reduction units as indicated in the PDD and monitoring report for the reporting period	92	Since the determined PDD version 3.0 contains miscalculated ERUs for the period of 2008 – 2010 years, and the monitoring was conducted at the beginning of 2012, then according to Ltd «EES» there had been conducted calculations of ERUs for the year 30/06/2012 inclusive. The actual amount of emission reductions during the monitoring period differs from values that were indicated in the determinate PDD version 3.0, as a result of using of the differentiated approach to value ratio deterioration of electrical indexes of electrical equipment over time of KP for different billing periods (baseline and current years estimated) while monitoring plan performance, to take account of the effect of improving electrical performance of electrical equipment by introduced measures of TVE reduction and application of the calculated input for 2012. The calculation results for 2008 to 30/06/2012 contained in the fileExcel «DON-1BTWE-2008-30.06.2012-26-11-2012-Km = 1-ok-KP-CO-MR-ENG.xls»	Corrections were found satisfactory. The issue is closed.

CAR04 Please provide to AIE next sources to prove calculations reliability: - the number of residential consumers - the number of single and three phase electricity meters - the number of electricity meters with different accuracy - the number of induction and electricity meters	95(b)	The sources of abovementioned parameters such as Reports on investment programs realization for relevant year, reports on power metering system implementation (67 Form) " A report on the organization of accounting systems of active electrical energy for consumers and installing in electrical grids for consumers and electricity supplying organizations the automated electricity metering and local equipment for data collection and processing (LUZOD)	These data sources were found satisfactory. Concerning in *CAR04* data is in line with ERUs calculation Excel file. The issue is closed.
CAR05 Please provide in the section C.1 transparent scheme of data collection with indication of monitored parameters and responsible persons	101 (a)	Corrections of monitoring scheme were provided. The data flow and responsible persons were indicated in the section C of Monitoring Report version 02 dated 31/01/2012.	Corrections were found satisfactory. The issue is closed.
CAR06 Please indicate that the data monitored and required to ERUs calculation will be kept two years after the last ERUs transfer. Also please provide to AIE relevant order	101(d)	The Monitoring Report version 02 dated 31/01/2012 indicates that the data monitored and required for ERUs calculation will be kept during two years after the last ERUs transfer. Order on data keeping issued by DTEK Donetskoblenergo PJSC has been provided to AIE	Correction of the monitoring report has been provided. The AIE obtained relevant order issued by DTEK Donetskoblenergo PJSC. The issue is closed