VERIFICATION REPORT VEMA S.A.

VERIFICATION OF THE

RECONSTRUCTION AND MODERNIZATION OF MAIN-LINE ELECTRICAL GRIDS OF NPC "UKRENERGO"

First periodic for the period 01/01/2008 – 30/06/2011

REPORT NO. UKRAINE-VER/0348/2011

REVISION NO. 02

BUREAU VERITAS CERTIFICATION

Date of first issue:	Organizational unit:
16/09/2011	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
VEMA S.A.	Fabian Knodel

Summary:

Bureau Veritas Certification has made the first periodic verification for the period from 01 January 2008 to 30 June 2011 of the "Reconstruction and modernization of main-line electrical grids of NPC "Ukrenergo" project of VEMA S.A., located in 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 project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the verification process is a list of Clarification, Corrective Actions Requests, Forward Actions Requests (CL, CAR and FAR), presented in Appendix A.

In summary, Bureau Veritas Certification confirms that the project is implemented as 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 emission reductions totalize 1331242 tons of CO2eq for the monitoring period from 01/01/2008 to 30/06/2011 (389711 tons of CO2eq for the period 01/01/2008-31/12/2008, 350703 tons of CO2eq for the period 01/01/2009-31/12/2009 and 357715 tons of CO2eq for the period 31/12/2010-31/12/2010 and 233113 tons of CO2eq for the period 01/01/2011-30/06/2011).

Our opinion relates to the project's GHG emissions and resulting GHG emission reductions reported and related to the approved project baseline and monitoring, and its associated documents.

Report No.:	Subject Group:
UKRAINE-ver/0348/2011	JI

Project title:
Reconstruction and modernization of main-line electrical grids of NPC "Ukrenergo"

Work carried out by:

Team Leader, Lead Verifier:	Igor Kachan
Team Member, Lead Verifier:	Victoria Legka
Team Member, Lead Verifier:	Oleg Skoblyk

Work reviewed by:
Ivan Sokolov - Internal Technical Reviewer
Daniil Ukhanov - Technical Specialist

Work approved by:
Flavio Gomes – Operational Manager

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Bureau Veritas Certification Holding SAS

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Abbreviations

AIE	Accredited Independent Entity
BVC	Bureau Veritas Certification Holding SAS
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification Request
CO_2	Carbon Dioxide
DFP	Designated Focal Point
DVM	Determination and Verification Manual
FAR	Forward Action Request
GHG	Green House Gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
MP	Monitoring Plan
MR	Monitoring Report
NPC “Ukrenergo”	State Enterprise “National Power Company “Ukrenergo”
PDD	Project Design Document
UNFCCC	United Nations Framework Convention for Climate Change

1 INTRODUCTION

VEMA S.A. has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Reconstruction and modernization of main-line electrical grids of NPC “Ukrenergo” (hereafter called “the project”) located in 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.

The verification covers the period from 1st January 2008 to 30th June 2011.

1.1 Objective

Verification is the periodic independent review and ex post determination by the Accredited Independent Entity (AIE) 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

Verification scope is defined as an independent and objective review and ex post determination by the Accredited Independent Entity of the monitored reductions in GHG emissions. The verification is based on the submitted monitoring report, the determined project design document including the project’s baseline study, 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:

Igor Kachan
Team Leader, Bureau Veritas Certification Climate Change Lead Verifier

Victoria Legka
Team Member, Bureau Veritas Certification Climate Change Lead Verifier

Oleg Skoblyk
Team Member, Bureau Veritas Certification Climate Change Lead 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 VEMA S.A. and additional background documents related to the project design, baseline, and monitoring plan, i.e. country Law, Project Design Document (PDD), Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version 01 of 29 August 2011 and version 02 dated 15 September 2011, and project as described in the determined PDD.

2.2 Follow-up Interviews

On 07/09/2011 Bureau Veritas Certification verification team conducted a visit to the project site, NPC "Ukrenergo", and performed (on-site) interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of VEMA S.A. and NPC "Ukrenergo" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
NPC "Ukrenergo"	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: VEMA S.A.	Baseline methodology Monitoring plan Monitoring report Deviations from PDD.

2.3 Resolution of Clarification, Corrective and Forward Action Requests

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

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

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

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

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

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

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

3 VERIFICATION CONCLUSIONS

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

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

The Clarification and Corrective Action Requests are documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 11 Corrective Action Requests and 2 Clarification Requests.

The number between brackets at the end of each section corresponds to the DVM paragraph.

3.1 Remaining issues and FARs from previous verifications

During the determination process conducted by AIE Bureau Veritas Certification one Forward Action Request was issued (refer to the Determination Report No.UKRAINE-det/0273/2011, rev.02 of 24/06/2011):

FAR01. Please, submit any documented instruction indicating that the data monitored are to be kept for two years after last emission reduction units transfer as per JI Determination and Verification Manual.

In course of the current verification the Clarification Request 02 was raised by the Verification Team in order to clarify how the FAR had been addressed. As a response the project participants provided the Order on storage of data collected within the project's monitoring process. The Order prescribes keeping of data monitored and required for verification for two years after the last transfer of emission reduction units for the project. Therefore, based of the submitted documentation the FAR is considered to be closed.

3.2 Project approval by Parties involved (90-91)

The project was approved by the host Party, Ukraine, which is confirmed by the Letter of Approval No. 1961/23/7 dated 27/07/2011 issued by State Environmental Investment Agency of Ukraine. The written project approval by Switzerland, the other Party involved, has also been issued by the DFP of that Party (Letter of Approval #J294-0485 issued by the Federal Office for the Environment FOEN of Switzerland dated 28/06/2011).

The abovementioned written approvals are unconditional.

The identified areas of concern as to the project approval by Parties involved, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR01).

3.3 Project implementation (92-93)

The project which is being implemented at the National Power Company "Ukrenergo" envisages the implementation of the program on the technical improvement of electrical networks and equipment, advanced technologies implementation, the transition to a higher level of organization of transmission and distribution of electric energy which are

aimed at improvement of the reliability and efficiency of electricity transmission main-lines of NPC “Ukrenergo”. This, in turn, facilitates the reduction of the electricity amount that is lost during its transportation to the distribution electrical grids, so the production of electricity at power plants decreases causing the corresponding reduction of fossil fuels used to produce electric power and, hence, decreases of the GHG emissions in comparison to the situation that would exist without project implementation.

The project scenario provides for implementation of new energy efficient equipment and complex of organizational and technical measures aimed at reduction of process losses of electricity which include modernization and rehabilitation works in electrical grids; improvement of the reliability of electricity supply to consumers; introduction of automated system of electricity consumption commercial recording within the framework of the power supply company, consumers and sub-plants etc. that are directed at power losses reduction during electric power transmission through main-line electrical grids to the distribution electrical grids.

Implementation of project activities started in May 2004, as provided for in the determined PDD, version 02. However, emission reductions generated in 2004 are conservatively excluded from the calculation. Therefore, 01/01/2005 was taken as a starting date of the crediting period.

Project implementation status in the reporting period of 01/01/2008 – 30/06/2011 is provided in the Table 2 below.

Table 2. Information about equipment installed under the project during the monitoring period of 01/01/2008-30/06/2011

Transformers		**Switches**		**Insulators**	
Type	**Quan-tity**	**Type**	**Quan-tity**	**Type**	**Quan-tity**
2008					
АТДТН-200000/330/110/35	1	3AP1FG126	1	YuS	8953
		3AP1FG145	11		
		3AP2F1-420	1		
		LTB-420E2	1		
		3AP1FG-170	6		
		Siemens 3API DT-126	2		
		3AP1FG-245-2000-40	2		
		3AP1FG Siemens	5		
		GL312F1P	4		
		GL312F1P/VR	1		
		GL312F1/4031P/V	13		

		R			
		GL-312AREVA	5		
		GL-315	1		
		3AP2F1-363	1		
		3AP1FG-245	4		
		LTB-170D1/B-3150-40	4		
		LTB-420E2-4000-40	2		
		GL-314	1		
2009					
РОМ-110000/750 У1	1	GL-315	1	YuS	8767
РОМ-110000/750 У1	3	GL314FK3-1	1		
АТДТН-200000/330	1	GL312F1P	4		
АТДЦТН-125000/330/110	1	3AP1FG-145	3		
АОДЦТН-333000/750/330	1	LTB-420E2	5		
ТРДН-160000/220	1	LTB 145 D1/B	4		
РОМ-110000/750	1	GL312F1P	1		
АТДТН-200000/330/110-У1	2	LTB 145 D1	3		
АТДЦТН-125000/330/110/6 У1	1	LTB-420E2-4000-40	2		
АТДТН-125000/220/110/35	1	3AP1FG-145-2000-31,5	1		
2010					
		GL312F1P	4	YuS	8171
		ABBLTB 145D1/B	3		
		ABB LTB420E2	5		
		3AP2F1-420	2		
		3AP1FG-245	2		
		GL312F1/4031P/VR	8		
		3AP1FG-145	2		
		HBL420B2	2		
		LTB 123 D1/B	7		
		3AP2F1-420-4000-40	2		
		GL312F1	4		
		3AP1FG-145 Siemens	1		

Status of project activity implementation during the considered monitoring period complies with the determined PDD version 02.

The verification team can confirm, through the visual inspection and document review, that all physical features of the proposed JI project activity including data collecting and storage systems have been implemented according to the PDD.

The identified areas of concern as to the project implementation, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR02, CAR03, CL01).

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

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

For calculating the emission reductions, key factors, such as net volume of electricity that came into the main-line electrical grid in the monitoring period, net volume of electricity that came into the distribution electrical grid, total volume of electricity that came into the main-line electrical grid, and total volume of electricity corona losses in the main-line electricity grid, 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.

Data sources used for calculating emission reductions such as appropriately calibrated measuring devices (electric power meters), special approved reporting forms 1B-TVE, official data for Ukrainian power grid published by National Environmental Agency of Ukraine and other, are clearly identified, reliable and transparent.

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

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

The identified areas of concern as to the compliance of the monitoring plan with the monitoring methodology, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR04, CAR05, CAR06, CAR07, CAR08).

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. The project monitoring is conducted according to standard operational practices established at NPC “Ukrenergo” within the existing system of the data collection, accounting and reporting. Detailed operational and management structure in presented on the figure 2 in the section C.1 of the Monitoring Report. The scheme of data collection using automated system of electricity consumption commercial recording within the framework of the energy supply company is provided on the figure 3 in the Monitoring Report. Scheme of data collection prior to implementation of the automated system of electricity consumption commercial accounting is shown on the figure 4.
To arrange data collection process as well as to account the amount of electricity transmitted by the main electric transmission line of NPC “Ukrenergo”, the company has the automated system of electricity consumption commercial accounting (ASECCA) which was made on the basis of electronic and computative complex DGC-500 (produced by "Landis & Gyr", Switzerland). Collection of data from meters is performed by using pulse output of meter that is connected to this system. Data collection at the sub-stations which were not equipped with the automated system was carried out by duty shift staff manually. These data were then transferred by telephone to the headquarters of the energy system for further calculations. The automated system of electricity consumption commercial accounting is arranged as hierarchical three-level system and has local level, regional level and central level. Commissioning of the system was carried out in a phase-wise manner. The list of certificates on system’s commissioning is provided in the Annex # 4 to the Monitoring Report (Excel file).

The function of the monitoring equipment, including its calibration status, is in order. The measurement equipment used for project monitoring is serviced, calibrated and maintained in accordance with the original manufacturer’s instructions and industry standards; relevant records on measuring devices are kept as required. In addition to the mandatory meters’ calibration procedure, in accordance with the Instruction on the procedure of commercial accounting of electric power, additional meter performance control measures are applied such as scheduled official

verification of meters. For commercial meters installed at power plants annual inspections with a purpose of control over their metrological characteristics are performed. The personnel of NPC "Ukrenergo" regularly take part in such scheduled power meters' verifications.

The evidence and records used for the monitoring are maintained in a traceable manner. All necessary information for monitoring of GHGs emission reductions are stored in paper or/and electronic formats.

The data collection and management system for the project is in accordance with the monitoring plan.

The Monitoring Report provides sufficient information on the assigning roles, responsibilities and authorities for implementation and maintenance of monitoring procedures including control of data. The verification team confirms effectiveness of the existing management and operational systems and found them eligible for reliable project monitoring.

The identified areas of concern as to the data management, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR09, CAR10, CAR11, CL02).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the first periodic verification for the period from 01 January 2008 to 30 June 2011 of the "Reconstruction and modernization of main-line electrical grids of NPC "Ukrenergo" project in 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 monitoring reports, 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 VEMA S.A. 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 02. The development and maintenance of records and reporting procedures are in accordance with

that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report, version 02, for the reporting period from 01/01/2008 to 30/06/2011 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. 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 30/06/2011

For the period from 01/01/2008 to 31/12/2008
Baseline emissions : 4574926 t CO2 equivalents;
Project emissions : 4185215 t CO2 equivalents;
Emission Reductions : 389711 t CO_2 equivalents.

For the period from 01/01/2009 to 31/12/2009
Baseline emissions : 4125969 t CO2 equivalents;
Project emissions : 3775266 t CO2 equivalents;
Emission Reductions : 350703 t CO2 equivalents.

For the period from 01/01/2010 to 31/12/2010
Baseline emissions : 4465805 t CO2 equivalents;
Project emissions : 4108090 t CO2 equivalents;
Emission Reductions : 357715 t CO_2 equivalents.

For the period from 01/01/2011 to 30/06/2011
Baseline emissions : 2217986 t CO_2 equivalents;
Project emissions : 1984873 t CO_2 equivalents;
Emission Reductions : 233113 t CO_2 equivalents.

Total for the period from 01/01/2008 to 30/06/2011:

Baseline emissions : 15384686 t CO_2 equivalents;
Project emissions : 14053444 t CO_2 equivalents;
Emission Reductions : 1331242 t CO_2 equivalents.

5 REFERENCES

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

/1/ Monitoring Report for the period from 01/01/2008 till 30/06/2011 version 01 dated 29/08/2011

/2/ Monitoring Report for the period from 01/01/2008 till 30/06/2011 version 02 dated 15/09/2011

/3/ Annex 1 to the Monitoring Report for the period 01/01/2008-30/06/2011. Information about implementation of new and reconstruction of existing elements of the electrical grid in the monitoring period (Excel file)

/4/ Annex 2 to the Monitoring Report for the period 01/01/2008-30/06/2011: List of metering equipment (Excel file)

/5/ Annex 3 to the Monitoring Report for the period 01/01/2008-30/06/2011: Calculation of GHG emission reductions (Excel file)

/6/ Annex 4 to the Monitoring Report for the period 01/01/2008-30/06/2011: List of Operational acceptance certificates of automated system of electricity consumption commercial recording (Excel file)

/7/ Project Design Document of the project “Reconstruction and modernization of main-line electrical grids of NPC “Ukrenergo”, version 02 dated 15/06/2011

/8/ Determination Report “Reconstruction and modernization of main-line electrical grids of NPC “Ukrenergo” No. UKRAINE-det/0273/2011, rev.02 of 24/06/2011 issued by Bureau Veritas Certification

/9/ Letter of Approval of the Joint Implementation project “Reconstruction and modernization of main-line electrical grids of NPC “Ukrenergo” #1961/23/7 of 27/07/2011 issued by State Environmental Investment Agency of Ukraine

/10/ Letter of Approval of the project under article 6 of Kyoto protocol (JI) “Reconstruction and modernization of main-line electrical grids of NPC “Ukrenergo” # J294-0485 issued by the Federal Office for the Environment of Switzerland dated 28/06/2011

Category 2 Documents:

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

/1/ Guidance on Criteria for Baseline Setting and Monitoring, version 02, JISC

/2/ Order of the National Environmental Investment Agency of Ukraine (NEIA) № 62 of 15/04/2011 on approval of specific carbon dioxide emission indicators for 2008

/3/ Order of the National Environmental Investment Agency of Ukraine (NEIA) № 63 of 15/04/2011 on approval of specific carbon dioxide emission indicators for 2009

/4/ Order of the National Environmental Investment Agency of Ukraine (NEIA) № 43 of 28/03/2011 on approval of specific carbon dioxide emission indicators for 2010

/5/ Order of the National Environmental Investment Agency of Ukraine (NEIA) № 75 of 12/05/2011 on approval of specific carbon dioxide emission indicators for 2011

/6/ Act of Technical Commission on the operating readiness of automated control systems of electric energy substation 330 kW quality parameters (ACSEESQP Kotovska) of 21/12/2010, Odesa city

/7/ Act on the operating readiness of facilities dated 31/12/2010, Kharkiv city. Facility: Automated system of control of electric power parameters' quality at the sub-station 330 kV, Losyevo, Northern Power System

/8/ Act # 108 Kr 44 of Technical Commission of 28/12/2008 on the operating readiness of modernized parts of operating voltage electric networks 220-750 kW, Kryvyi Rih. Facilities: Modernization of accounting chains, overlapping meters and backup power units, SS "Kirovska-330" located at: Dnipropetrovsk region, Krivyi Rih city, Bykova Str., 30

/9/ Act # 33 Zal 44 of Technical Commission of 12/10/2009 on the operating readiness of modernized parts of operating voltage electric networks 220-750 kW, Zaporizzya. Facilities: Modernization of measuring systems of electric power substation 330 kW "Melitopolska", OPU, Melitopol city, Khahovske Highway, 6

/10/ Acceptance certificate # 3 of carried out via economic process concerning (current, overhaul repair, reconstruction, modernization) for April 2011 of 29/04/2011

/11/ Acceptance certificate # 1 of carried out via economic process concerning (current, overhaul repair, reconstruction, modernization) for April 2011 of 29/04/2011

/12/ Acceptance certificate # 2 of carried out via economic process concerning (current, overhaul repair, reconstruction, modernization) for April 2011 of 29/04/2011

/13/ Act of Technical Commission on the operating readiness of facilities within SS-330 kW "Pivdenna" of Lvivski MEM completed after reconstruction and modernization

/14/ Act of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks

220-750 kW, Mariupol city. Facilities: SS "Azovska-220 kW" add. 220 kW, 110 kW

/15/ Act of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks 220-750 kW, Mariupol city. Facilities: SS "Myrna-330 kW" add. 330 kW, 110 kW, 0,4 kW

/16/ Act of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks 220-750 kW, Mariupol city. Facilities: SS "Zoria-330 kW" add. 330 kW, 110 kW

/17/ Act of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks 220-750 kW, Luhansk city. Facilities: Luhanski MEM, SS "Cherkaska 220 kW", modernization of accounting chains VRP-kW (installation TS 110 kW type TGFK 110 II) connections Slovianoserbska-1, Slovianoserbska-2, Slovianoserbska-3, Slovianoserbska-4, Raivodoprovod # 1, Raivodoprovod # 2, VL-26, Sovhoz, VL-59 Boiler, VL-75 Selyshche, Rodakovo-Yuriivska, Sboika, Gromovo (installation 8 units, TS 6 kW type TPL-10 M) connections TSN # 1, TSN # 2, TSN # 1 with DGK, TSN # 2 with DGK

/18/ Act of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks 220-750 kW, Luhansk city. Facilities: Luhanski MEM, SS "Cherkaska 220 kW", modernization of accounting chains VRP-kW (installation TS 110 kW type TGFK 110 II) connections Kommunarska-1, Kommunarska-2, OVV, Rodakovo

/19/ Act of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks 220-750 kW, Luhansk city. Facilities: Luhanski MEM, SS "Cherkaska 220 kW", modernization of accounting chains VRP-kW (installation TS 110 kW type TGFK 110 II) connections Metalurgichna-1, Metalurgichna-2

/20/ Act of Technical Commission on the operating readiness of the part of electric energy measuring accounting complex at SS 330 kW Kotovska

/21/ Act of 29/12/2009 of Technical Commission on the operating readiness of modernized parts of operating facilities of voltage electric networks 220-750 kW, Mariupol city. Facilities: Mariupolski MEM, SS "Myrna-330 kW", modernization of accounting chains. Installation of TN-110 kW type NOG-110-II-II-U1 connections TN1SSH-110 kW, TN2SSH-110 kW, TS type TGFM-110 P connections 110 kW "AT#1, SS-35 # 1,2, Zoria, Azovska # 1,2, Sartana, illich, OPV, SSHPV

/22/ Act of Technical Commission on the operating readiness of electric energy measuring complex at SS 330 kW "Novo-Odeska", Odesa city

/23/ Act of Technical Commission of 29/05/2009 on the operating readiness of facilities within SS 750 kW "Zakhidnoukraiinska" completed after reconstruction and modernization, Lviv region, Zhydachivsky district, c. Zhyrova

/24/ Act of Technical Commission # 1 Dn 15 of 30/06/2009 on the operating readiness of parts of operating voltage electric networks 330-750 kW, Dnipropetrovsk city

/25/ Act of Technical Commission of 30/11/2009 on the operating readiness of modernized parts of operating voltage electric networks 220-750 kW, Makiivka city

/26/ Act of Technical Commission on the operating readiness of parts of operating voltage electric networks 220-750 kW. Reconstruction at SS 330/110/35/10 kW "Zhytomurska". Replacement of compensator AT-1

/27/ Act of Technical Commission of 10/10/2009 on the operating readiness of parts of operating voltage electric networks 330-750 kW, Vinnytsia city

/28/ Act of Technical Commission of 30/09/2009 on the operating readiness of parts of operating voltage electric networks 220-750 kW, Luhansk city

/29/ Act of Technical Commission of 12/2008 on the operating readiness of parts of operating voltage electric networks 220-750 kW, Chernihiv city

/30/ Act of Technical Commission of on the operating readiness of parts of operating voltage electric networks 220-750 kW. Reconstruction od SS 330/110/35/10 kW "Zhytomyrska". Completion of construction works at AT-1

/31/ Acceptance Certificate # 222/1 (domestic premises) of fixed assets. Chernihivski MEM

/32/ Act of Technical Commission of 2008 on the operating readiness of parts of operating voltage electric networks 220-750 kW, C. Novi Petrivtsi. Reconstruction of SS 330/110/35/10 kW "Northern". Replacement of compensator AT-2

/33/ Act of Technical Commission of 20/06/2009 on the operating readiness of parts of operating voltage electric networks 220-750 kW, Khmelnytskyi city

/34/ List of gas-insulated switches voltage 110-750 kW at SS 220-750 kW of NPC"Ukrenergo" installed during 2004-2010

/35/ Act # 6/08 p of Technical Commission on the operation readiness of automated electricity accounting system of 20/05/2008, Artemivsk city

/36/ Act # 4/08 p of Technical Commission on the operation readiness of automated electricity accounting system of 15/05/2008, Mariupol city

/37/ Act # 9 of 17/07/2008 on the operating readiness of ASCEA SS 220 kW Volovets of Zakhidna SS NPC "Ukrenergo"

/38/ Act # 12 of 22/07/2008 on the operating readiness of ASCEA SS 220 kW Kalush of Zakhidna SS NPC "Ukrenergo"

/39/ Act # 8 ASCEA of Technical Commision on the operating readiness SS 400 kW "Mukachevo" of Zakhidna SS NPC "Ukrenergo" of 10/03/2008, Lviv city

/40/ Act on the operating readiness of Automated system of commercial accounting of electricity of Krymska SS of 15/07/2009, Simferopol city

/41/ Act of Technical Commission of 20/06/2009 on the operating readiness of parts of operating voltage electric networks 220-750 kW, SS Marianivka, Simferopol city

/42/ Act # 1 of Technical Commission of 20/02/2008 on the operating readiness of separate facilities (buildings, structures) within existing facilities (substations, VL, industrial base) completed after modernization, Kharkiv city

/43/ Act # 5 of Technical Commission of 20/02/2008 on the operating readiness of separate facilities (buildings, structures) within existing facilities (substations, VL, industrial base) completed after modernization, Kharkiv city

/44/ Admission State Act on the operating readiness of Automated system of commercial accounting of electricity of NPC "Ukrenergo" (ASCAE NPC "Ukrenergo") of 05/08/2009, Kyiv city

/45/ The balance of production and electricity distribution in 2010

/46/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in December 2010, ths. kW*h

/47/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for December, 2008. Central electric energy system

/48/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks for December, 2009. Central electric energy system

/49/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 220-0,38 kW for December, 2008. Kyiv city

/50/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for December, 2008 Kyivoblenergo

/51/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for December, 2009 Zhytomyroblenergo

/52/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for December, 2009 Cherkasyoblenergo

/53/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for December, 2009 Chernihivoblenergo

/54/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for December, 2008. Southwestern railway

/55/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in November 2010, ths. kW*h

/56/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for November, 2010. Central electric energy system

/57/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for November, 2010 Zhytomyroblenergo

/58/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in October 2010, ths. kW*h

/59/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for October, 2010. Central electric energy system

/60/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks for October, 2010. Central electric energy system

/61/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for October, 2010 Zhytomyroblenergo

/62/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in July 2010, ths. kW*h

/63/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for July, 2010 Zhytomyroblenergo

/64/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in May 2010, ths. kW*h

/65/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks for May, 2010. Central electric energy system

/66/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for May, 2010. Central electric energy system

/67/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for May, 2010 Zhytomyroblenergo

/68/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in March 2010, ths. kW*h

/69/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for May, 2011. Central electric energy system

/70/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks for March, 2011. Central electric energy system

/71/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for March, 2011 Zhytomyroblenergo

/72/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in November 2009, ths. kW*h

/73/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for November, 2009. Central electric energy system

/74/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for November, 2009 Zhytomyroblenergo

/75/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in August 2009, ths. kW*h

/76/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for August, 2009. Central electric energy system

/77/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for August, 2009 Zhytomyroblenergo

/78/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in April 2009, ths. kW*h

/79/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for April, 2009. Central electric energy system

/80/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 154-0,38 kW for April, 2009 Zhytomyroblenergo

/81/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in February 2009, ths. kW*h

/82/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for February, 2009. Central electric energy system

/83/ The balance of revenue, distribution and energy losses in DAEK, Z.S.M. Central RDTS in January 2009, ths. kW*h

/84/ Balance structure of electricity and technological electricity expenses (ETE) for transmission within electrical networks 800-0,38 kW for January, 2009. Central electric energy system

/85/ Acts of electricity output and tempering Trypilska TES 014-20/5

/86/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 02/12/2010 # 04-3

/87/ Acts of electricity output and tempering Trypilska TES, December 2010

/88/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 04/01/2010 # 04-8463

/89/ Acts of electricity output and tempering Tri Trypilska poli TES, November 2010

/90/ Act of meter's bearings recording at Trypilska TES for November 2010

/91/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 01/11/2010 # 04-7599

/92/ Acts of electricity output and tempering Trypilska TES, October 2010

/93/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 01/10/2010 # 04-6834

/94/ Acts of electricity output and tempering Trypilska TES, September 2010

/95/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 02/09/2010 # 04-6838

/96/ Acts of electricity output and tempering Trypilska TES, August 2010

/97/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 02/08/2010 # 04-5349

/98/ Acts of electricity output and tempering Trypilska TES, July 2010

/99/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 02/08/2010 # 04-5349

/100/ Act of departmental verification of electricity meters at Trypilska TES of 14/06/2010

/101/ Acts of electricity output and tempering Trypilska TES, June 2010

/102/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 01/06/2010 # 04-3697

/103/ Acts of electricity output and tempering Trypilska TES, May 2010

/104/ Act of replaement and verification of electricity accounting equipment Trypilska TES for 11/05/2010

/105/ Acts of electricity output and tempering Trypilska TES, April 2010

/106/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. of 05/05/2010 # 04-3033

/107/ Act of replaement and verification of electricity accounting equipment Trypilska TES for 29/04/2010

/108/ Act of replaement and verification of electricity accounting equipment Trypilska TES for 26/04/2010

/109/ Act of replaement and verification of electricity accounting equipment Trypilska TES for 27/04/2010

/110/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. 0 # 04-2101

/111/ Acts of electricity output and tempering Trypilska TES, June 2011

/112/ Letter Ukraine OJSC "State Energy Generating Company "Tsentrenergo" Trypilska TES. To Director of Central ES NPC "Ukrenergo" Bondarenko O.M. 0 # 04-1995

Persons interviewed:

List of persons interviewed during the verification or persons that contributed with other information that are not included in the documents listed above.

/1/ Timchenko V. – Acting director of NPC “Ukrenergo”

/2/ Kravchuk V. – Head of the electric technical department of NPC “Ukrenergo”

/3/ Ushchapovskyy K. – Deputy director, chief dispatcher NPC “Ukrenergo”

/4/ Sologub O. – Head of the line service NPC “Ukrenergo”

/5/ Kovalenko I. – Head of the PS 33- kW “Zhovtneva”, Tsentralna power system NPC “Ukrenergo”

/6/ Kulemza S. – First deputy director on capital construction, economics and purchasing of the Tsentralna power system NPC “Ukrenergo”

/7/ Galushka V. – Head of the equipment and accounting system automation department of the Tsentralna power system NPC “Ukrenergo”

/8/ Palamarchuk D. – JI project consultant of VEMA S.A.

/9/ Vorobyov E. – JI project consultant of VEMA S.A.

APPENDIX A: PROJECT VERIFICATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

VERIFICATION PROTOCOL

Table 1. Check list for verification, according to the JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals by Parties involved				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	**CAR01** Please, submit the written project approval by the sponsor Party. Please, add the relevant information concerning project approval to the respective section of the Monitoring Report.	**CAR01**	OK
91	Are all the written project approvals by Parties involved unconditional?	Conclusion is pending a response to CAR01.	Pending	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project implementation				
92	Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	The implementation of the measures under the project during the period of monitoring was carried out according to the determined PDD version 02. The detailed information about implementation of new and reconstruction of existing elements of the electrical grid in the monitoring period is provided in the Annex 1 - supporting Excel file. **CAR02** Please, indicate in the MR if the actual amount of emission reductions, achieved during the monitoring period, differs form the amount foreseen and specified in the determined PDD. If yes, please, indicate the reason for this. **CAR03** The amount of GHG emission reductions indicated in the MR version 01 is not equal to the one specified in the supplementary Excel file. Please, make corrections in the MR. **CL01**	**CAR02** **CAR03** **CL01**	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		The various abbreviations are used in the MR to identify the automated system of electricity consumption commercial accounting (ASECA and ASECCA). Please, provide any explanation or make corresponding corrections.		
93	What is the status of operation of the project during the monitoring period?	The project's measures were implemented without any deviations form the implementation plan included in the determined PDD version 02.	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 occurred in accordance with the monitoring plan included in the determined PDD regarding which the determination has been deemed final. **CAR04** Please, indicate in the section B.2.2 of the MR only the parameters that are controlled during the monitoring period and are used to calculate baseline emissions in accordance with the monitoring plan, included in the determined PDD version 02. **CAR05** Please, specify in the Table "Fixed	**CAR04** **CAR05**	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		parameters that are not controlled during the monitoring period" for each parameter the period of time during which it was determined.		
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) of the DVM, 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?	For calculating the emission reductions, such key factors as net volume of electricity that came into the main-line electrical grid, net volume of electricity that came into the distribution electrical grid, total volume of electricity that came into the main-line electrical grid, and total volume of electricity corona losses in the main-line electricity grid, 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. **CAR06** Please, in the Table "Fixed parameters that are not controlled during the monitoring period" specify for each parameter the values used to calculate emission reductions for the monitoring period.	**CAR06**	OK
95 (b)	Are data sources used for	**CAR07**	**CAR07**	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	Please, adjust the MR in accordance with the monitoring plan provided in the PDD version 02. Please, add to the section B the information concerning data sources and actual monitoring frequency for each parameter used for baseline and project emissions calculation.		
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?	**CAR08** Please, in the section B of the MR provide clear and traceable references to the data sources for the following parameters: - total volume of electricity corona losses in the main-line electricity grid in the monitoring period; - total volume of electricity corona losses in the main-line electricity grid in the baseline period; - CO_2 emission factor for the unified power grid of Ukraine for the monitoring period.	**CAR08**	OK
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on	Yes, the calculation of emission reductions is based on conservative assumptions and the most plausible	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	conservative assumptions and the most plausible scenarios in a transparent manner?	scenarios in a transparent manner		
Applicable to JI SSC projects only				
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?	Not applicable	Not applicable	Not applicable
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	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	monitoring report?			
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?	There were no deviations and changes of the approved monitoring plan.	Not applicable	Not applicable
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	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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, including the quality control and quality assurance procedures, are in accordance with the PDD and the determined monitoring plan. **CAR09** Please, in the section B.3 of the MR provide the description of all abbreviations and abridgements when first mentioned. **CAR10** Please, add to the MR information concerning involvement of the third parties in the monitoring in the framework of the project.	**CAR09** **CAR10**	OK OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	All the equipment, involved in the project monitoring, operated, was calibrated and maintained according to manufacturer's instructions and standards of the industry. **CAR11** The information provided in the section	**CAR11**	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		C.3 is irrelevant for involvement of the third parties in the monitoring in the framework of the project. Please, add the information concerning measuring equipment to the corresponding section of the MR.		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	All the information that is necessary for GHG emission reductions monitoring is stored in paper and/or electronic formats. During the determination process AIE issued the Forward Action Request concerning issuing of documented instruction/order about storage of the data necessary for monitoring and calculation of emission reductions during 2 years after last transfer of emission reductions. To clarify this, CL was issued: **CL02** Please, submit the documented instruction/order about data storage to AIE for review.	**CL02**	OK
101 (d)	Is the data collection and management system for the project in accordance with the	The data collection and management system for the project is in accordance with the PDD and the monitoring plan.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	monitoring plan?	The verification team confirms the effectiveness of the existing management and operating systems and considers them suitable for reliable monitoring of the project.		
Verification regarding programs of activities (additional elements for assessment)				
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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Applicable to sample-based approach only				
106	Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into account that: (i) For each verification that uses a sample-based approach, the sample selection shall be sufficiently representative of the JPAs in the JI PoA such extrapolation to all JPAs identified for that verification is reasonable, taking into account differences among the characteristics of JPAs, such as: − The types of JPAs; − The complexity of the applicable technologies and/or measures used; − The geographical location of each JPA;	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− 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 inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the	Not applicable	Not applicable	Not applicable

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	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 verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR01 Please, submit the written project approval by the sponsor Party. Please, add the relevant information concerning project approval to the respective section of the Monitoring Report.	90	The project was approved by the sponsor Party which is Switzerland with Letter of Approval № J294-0485, issued by the Federal Office for the Environment (FOEN) dated 28/06/2011. The respective letter of approval was submitted to the verification team for review.	The project approval by the sponsor Party was reviewed. The issue is closed on the basis of the documentation provided and corresponding corrections made in the MR.
CAR02 Please, indicate in the MR if the actual amount of emission reductions, achieved during the monitoring period, differs form the amount foreseen and specified in the determined PDD. If yes, please, indicate the reason for this.	92	The actual amount of emission reductions in the monitoring period does not differ from values that were indicated in the determined PDD, version 02. This information was also added to the MR 02.	The issue is closed on the basis of the information provided and the corrections made in the MR version 02.
CAR03 The amount of GHG emission reductions indicated in the MR	92	The value of emission reductions indicated the MR and the supplementary Excel files were	The issue is closed taking into account the corrections made in the

version 01 is not equal to the one specified in the supplementary Excel file. Please, make corrections in the MR.		checked. The necessary corrections were made in the MR version 02.	MR.
CAR04 Please, indicate in the section B.2.2 of the MR only the parameters that are controlled during the monitoring period and are used to calculate baseline emissions in accordance with the monitoring plan, included in the determined PDD version 02.	94	According to the monitoring plan, included in the determined PDD version 02, the following parameters, that are controlled during the monitoring period and are used to calculate baseline emissions, must be monitored: - net volume of electricity coming into the main-line electrical grid in the monitoring period; - CO_2 emission factor for the unified power grid of Ukraine for the monitoring period. The necessary corrections were made in the MR version 02.	The issue is closed on the basis of the explanations provided and the corrections made in the MR version 02.
CAR05 Please, specify in the Table "Fixed parameters that are not controlled during the monitoring period" for each parameter the period of time during which it was determined.	94	The issue was addressed in the MR version 02. The Table "Fixed parameters that are not controlled during the monitoring period" now contains the information concerning period of time during which each parameter was determined.	The issue is closed based on the corrections made in the MR version 02.

CAR06 Please, in the Table "Fixed parameters that are not controlled during the monitoring period" specify for each parameter the values used to calculate emission reductions for the monitoring period.	95 (a)	The necessary corrections were made in the MR version 02. The values of each parameter used to calculate emission reductions for the monitoring period .were added to the Table "Fixed parameters that are not controlled during the monitoring period".	The MR version 02 was checked. The issue is closed on the basis of the correction provided.
CAR07 Please, adjust the MR in accordance with the monitoring plan provided in the PDD version 02. Please, add to the section B the information concerning data sources and actual monitoring frequency for each parameter used for baseline and project emissions calculation. .	95 (b)	The issue was addressed in the MR version 02. The information concerning data sources and actual monitoring frequency for each parameter used for baseline and project emissions calculation, in accordance with the monitoring plan specified in the PDD version 02 was provided.	The MR version 02 was checked. The issue is closed on the basis of the correction provided.
CAR08 Please, in the section B of the MR provide clear and traceable references to the data sources for the following parameters: - total volume of electricity corona losses in the main-line electricity grid in the monitoring period; - total volume of electricity corona	95 (c)	The necessary references to the data sources for total volume of electricity corona losses in the main-line electricity grid in the monitoring period, total volume of electricity corona losses in the main-line electricity grid in the baseline period; CO_2 emission factor for the unified power grid	The MR version 02 was checked. The issue is closed on the basis of the correction provided.

losses in the main-line electricity grid in the baseline period; - CO_2 emission factor for the unified power grid of Ukraine for the monitoring period.		of Ukraine for the monitoring period were added to the MR version 02.	
CAR09 Please, in the section B.3 of the MR provide the description of all abbreviations and abridgements when first mentioned. .	101 (a)	The necessary description for all abbreviations and abridgements was added to the MR version 02.	The MR version 02 was checked. The issue is closed on the basis of the correction provided.
CAR10 Please, add to the MR information concerning involvement of the third parties in the monitoring in the framework of the project.	101 (a)	The issue was addressed in the MR version 02. The required information concerning involvement of the third parties in the monitoring in the framework of the project was added to the section C.3. of the MR version 02.	The issue is closed on the basis of the corrections made in the MR.
CAR11 The information provided in the section C.3 is irrelevant for involvement of the third parties in the monitoring in the framework of the project. Please, add the information concerning measuring equipment to the corresponding	101 (b)	The section C.3 was amended taking into account the issue raised. The information concerning measuring equipment was provided in the section B of the MR version 02.	The issue is closed on the basis of the corrections made in the MR.

section of the MR.			
CL01 The various abbreviations are used in the MR to identify the automated system of electricity consumption commercial accounting (ASECA and ASECCA). Please, provide any explanation or make corresponding corrections.	92	The identification of the automated system of electricity consumption commercial accounting was corrected in the MR version 02.	The MR version 02 was checked. The issue is closed.
CL02 Please, submit the documented instruction/order about data storage to AIE for review.	101 (c)	The order on storage of data, which are collected within the project's monitoring process, was submitted to the verification team for review.	The issue is closed based on the documentation provided.