DETERMINATION REPORT
LLC "PRIMLIGHT"

DETERMINATION OF THE DISTRIBUTION OF ENERGY EFFICIENT LIGHT BULBS IN PUBLIC AND PRIVATE SECTORS OF UKRAINE

REPORT NO. UKRAINE-DET/0279/2011

REVISION NO. 03

BUREAU VERITAS CERTIFICATION

Date of first issue: 15/08/2011	Organizational unit: Bureau Veritas Certification Holding SAS
Client: LLC "PRIMLIGHT"	Client ref.: Mykola Tonkovyda

Summary:

Bureau Veritas Certification has made the determination of the "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" project of LLC "PRIMLIGHT" located in all regions of Ukraine 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 determination scope is defined as an independent and objective review of the project design document, the project's baseline study, monitoring plan and other relevant documents, 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 determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the determination process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in Appendix A. Taking into account this output, the project proponent revised its project design document.

In summary, it is Bureau Veritas Certification's opinion that the project correctly applies Guidance on criteria for baseline setting and monitoring and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

Report No.: UKRAINE-det/0279/2011	Subject Group: JI	
Project title: Distribution of energy efficient light bulbs in public and private sectors of Ukraine		
Work carried out by: Oleg Skoblyk – Team leader, Lead Verifier Iuliia Pylnova – Team member, Verifier Denys Pishchalov - Financial Specialist		☒ No distribution without permission from the Client or responsible organizational unit
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Bureau Veritas Certification Holding SAS

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1 INTRODUCTION

LLC “PRIMLIGHT” has commissioned Bureau Veritas Certification to determine its JI project “Distribution of energy efficient light bulbs in public and private sectors of Ukraine” (hereafter called “the project”) in all regions of Ukraine.

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

1.1 Objective

The determination serves as project design verification and is a requirement of all projects. The determination is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project’s compliance with relevant UNFCCC and host country criteria are determined in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria. Determination is a requirement for all JI projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emissions reductions units (ERUs).

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

The determination is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

1.3 Determination team

The determination team consists of the following personnel:

Oleg Skoblyk
Bureau Veritas Certification Team Leader, Climate Change Verifier

Iuliia Pylnova
Bureau Veritas Certification Climate Change Verifier

Denys Pishchalov

Bureau Vertas Certification Financial Specialist

This determination report was reviewed by:

Ivan Sokolov

Bureau Veritas Certification, Internal reviewer

2 METHODOLOGY

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

In order to ensure transparency, a determination 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 determination and the results from determining the identified criteria. The determination protocol serves the following purposes:

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

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

2.1 Review of Documents

The Project Design Document (PDD) submitted by PRIMLIGHT LLC and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint implementation project design document form, Approved CDM methodology and/or Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, Clarifications on Determination Requirements to be Checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, PRIMLIGHT LLC revised the PDD and resubmitted it on 05/2011.

The determination findings presented in this report relate to the project as described in the PDD versions 01.2, 01.3, and 01.5.

2.2 Follow-up Interviews

On 12/07/2011 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 LLC "PRIMLIGHT" were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
LLC "PRIMLIGHT"	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-up Baseline methodology Revised monitoring plan Monitoring report

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination 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 project design.

If the determination team, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to JI project requirements, it will 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 in the published PDD that is not in accordance with the (technical) process used for the project or relevant JI project requirement or that shows any other logical flaw;

(b) Clarification request (CL), requesting the project participants to

provide additional information for the determination team to assess compliance with the JI project requirement in question;

(c) Forward action request (FAR), informing the project participants of an issue, relating to project implementation but not project design, that needs to be reviewed during the first verification of the project.

The determination 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 determination.

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

3 PROJECT DESCRIPTION

The proposed joint implementation (JI) project involves distribution of energy efficient light bulbs to various customers from public and private sectors. The project will be conducted within the geographical boundaries of Ukraine and it will be implemented and managed by PRIMLIGHT, LLC The goal of the project is to enhance the energy efficiency of Ukraine's lighting stock by distributing over a period of 14 years up to 210 926 791 compact fluorescent lamps (CFLs) to Ukrainian customers from private, as well as from public sectors. By doing so, the project will abate greenhouse gas (GHG) emissions through avoided electricity usage, significantly reduce national electricity demand and stress on energy infrastructure, and save customer's money on their electricity bills.
Although CFLs were introduced to the Ukrainian market as early as 2004, they have failed to replace incandescent lamps as the largest component of the Ukrainian lighting stock. Moreover, the sales of incandescent lamps accelerated during 2009 and 2010. The ubiquity of incandescent lamps is attributed to their low cost combined with the relatively low wealth level of an average Ukrainian citizen (in 2010, the average consolidated financial wealth per Ukrainian adult was equal to 947 USD).
Under the proposed JI project scheme, quality self-ballasted CFLs would be distributed to residential households, as well as to industrial, commercial and government organizations. Once the CFLs have reached their end of life, or any CFLs which have failed prematurely during the project period, the project team would arrange for the collection and disposal of CFLs as per applicable environmental norms.

In order to create a rapid uptake of CFL use, the proposed JI project will utilise one of two types of incentives or their combination:
1) Discount;

The customers receive CFLs free of charge or at a heavily discounted price.
2) Rebate;

The customers pay full price of CFLs upfront and then are reimbursed gradually after certain time periods in several instalments.
To bridge the cost differential between the market price of the CFLs and the price at which they are distributed to the consumers, the JI mechanisms of Kyoto Protocol are harnessed. The project owner would cover the project cost through sale of GHG emission reductions.
Apart from the direct financial benefit to the project participants in terms of savings on their electricity bills each year, the proposed JI project activity will also generate a range of less tangible social outcomes in education, awareness and collateral energy saving measures. This energy efficiency project will create an opportunity for collective action on climate change, enhancing a sense of responsibility for the future of our planet.

The identified areas of concern as to Project Description, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL 01, CL 02, CAR 01, CL 03, CAR 02, CL 04, CAR 03, CL 13).

4 DETERMINATION CONCLUSIONS

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

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

The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A. The determination of the Project resulted in 12 Corrective Action Requests, 13 Clarification Requests, and 2 Forward Action Requests.

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

4.1 Project approvals by Parties involved (19-20)

The National Environmental Investment Agency of Ukraine has issued the Letter of Endorsement for the JI Project (#2519/23/7 of 13.12.2011).

The LoAs by Parties involved are expected to be issued after the project determination.

The identified areas of concern as to Project approvals by Parties involved, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL 07, CAR 11).

4.2 Authorization of project participants by Parties involved (21)

The official authorization of each legal entity listed as project participant in the PDD by Parties involved will be provided in the written project approvals (refer to 4.1 above).

4.3 Baseline setting (22-26)

The PDD explicitly indicates that using a methodology for baseline setting and monitoring developed in accordance with appendix B of the JI guidelines (hereinafter referred to as JI specific approach) was the selected approach for identifying the baseline.

The PDD provides a detailed theoretical description in a complete and transparent manner, as well as justification, that the baseline is established:

(a) By listing and describing the following plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one.

Three alternatives to the JI project scenario have been identified.

1. The activity could occur without being registered as a JI project activity through government or private sector support. In such a scenario the Ukrainian government or private sector sponsor would purchase CFLs and pay for their distribution at no or little cost to consumers. There are significant barriers to this alternative scenario. Most importantly, there is currently no budget allocated by the Ukrainian government for such an undertaking. In addition, there are no documented projects of the same scale in government project planning. Whilst in 2008 there was a guideline (#1337-p, 16/10/2008) by the Cabinet of Ministers promoting energy efficient lighting devices in government buildings, there has not been any finances allocated in support of this guideline. Consequently, this document has not achieved any results.

2. Individual or collaborative efforts by Ukrainian retailers to promote rapid uptake of energy efficient lighting technology by consumers in Ukraine. This scenario would entail consumers to responding to increased marketing or promotion of efficient lighting alternatives and purchasing CFLs. The capacity of Ukrainian consumers to purchase CFLs at retail prices is a significant barrier to this alternative. Based on national income data, for an average employed person, purchasing

5 CFLs (at a cost of US$5 per bulb) would require spending about 35% of his weekly earnings, which place relatively high strain on household budgets. On the other hand, recession squeezed budgets of government and commercial organisations allocate no or little capital for investment in energy efficiency. Consequently, the relatively high upfront cost of CFLs compared to incandescent lamps is a major barrier to consumer uptake.

3. Continuation of the current situation is also a possible alternative scenario. The baseline alternatives include either continued use of existing lighting, or autonomous replacement of current lights with new technologies or measures of either the same of greater efficiency. Achieving the same outcome as the proposed project would entail large-scale autonomous uptake of CFLs by consumers. As discussed above, autonomous uptake of CFLs is hampered by their cost, and as such the most likely outcome of a continuation of the current situation would be the provision of light mainly through the use of less expensive incandescent lamps.

The only plausible scenario that is not prevented by any barriers is continuation of the current situation (status quo) and according to the tool is identified as the baseline scenario.

(b) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. In this context, the key factors that affect a baseline are taken into account.

The identified areas of concern as to Baseline setting, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL 05, CL 08, CAR 10).

4.4 Additionality (27-31)

The baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to reductions of anthropogenic emissions by sources of GHGs was provided.
Traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances (same GHG mitigation measure, same country, similar technology, similar scale) would result in a reduction of anthropogenic emissions by sources or an enhancement of net anthropogenic removals by sinks that is additional to any that would otherwise occur and a justification why this determination is relevant for the project at hand was provided.

The latest version (03.0.0 by 15/04/2011) of UNFCCC's "Combined tool to identify the baseline scenario and demonstrate additionality" is used as the basis for the determination of the additionality.

The PDD provides a justification of the applicability of the approach with a clear and transparent description, as per item 4.3 above.

Additionality proofs are provided.

Additionality is demonstrated appropriately as a result of the analysis using the approach chosen.

The identified areas of concern as to Additionality, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR 08, CAR 09, CL 12).

4.5 Project boundary (32-33)

The project boundary defined in the PDD (section B.3) encompasses all anthropogenic emissions by sources of greenhouse gases (GHGs) that are:

(i) Under the control of the project participants;

(ii) Reasonably attributable to the project; and

(iii) Significant, i.e., as a rule of thumb, would by each source account on average per year over the crediting period for more than 1 per cent of the annual average anthropogenic emissions by sources of GHGs, or exceed an amount of 2,000 tonnes of CO_2 equivalent, whichever is lower.

The delineation of the project boundary and the gases and sources included are appropriately described and justified in the PDD.

The identified areas of concern as to Project boundary, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL 09).

4.6 Crediting period (34)

The PDD states the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began, and the starting date is 26/11/2007, which is after the beginning of

2000.

The PDD states the expected operational lifetime of the project in years and months, which is 24 years and 00 months.

The PDD states the length of the crediting period in years and months, which is 24 years and 00 months, and its starting date as 01/01/2008, which is after the date the first emission reductions or enhancements of net removals are generated by the project.

The PDD states that the crediting period for the issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project.

The PDD states that the extension of its crediting period beyond 2012 is subject to the host Party approval, and the estimates of emission reductions are presented separately for those until 2012 and those after 2012 in all relevant sections of the PDD.

The identified areas of concern as to Crediting period, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR 04, CAR 05, CL 06).

4.7 Monitoring plan (35-39)

The PDD, in its monitoring plan section, explicitly indicates that JI specific approach was selected.

The monitoring plan describes all relevant factors and key characteristics that will be monitored, and the period in which they will be monitored, in particular also all decisive factors for the control and reporting of project performance, such as statistics reporting forms; quality control (QC) and quality assurance (QA) procedures; the operational and management structure that will be applied in implementing the monitoring plan.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions to be monitored such as total number of CFLs distributed, average operating hours, the number of operational CFLs, and wattage difference between CFL and corresponding incandescent lamps.

The monitoring plan provides differentiation between data and parameters:

(i) Data and parameters that are not monitored throughout the crediting

period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination.

(ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination.

(iii) Data and parameters that are monitored throughout the crediting period, such as total number of CFLs distributed, average operating hours, the number of operational CFLs, and wattage difference between CFL and corresponding incandescent lamps.

The monitoring plan describes the methods employed for data monitoring (including its frequency) and recording.

The monitoring plan elaborates direct monitoring of emission reductions from the project.

The monitoring plan presents the quality assurance and control procedures for the monitoring process. This includes, as appropriate, information on calibration and on how records on data and or method validity and accuracy are kept and made available on request.

The monitoring plan clearly identifies the responsibilities and the authority regarding the monitoring activities.

On the whole, the monitoring report reflects good monitoring practices appropriate to the project type.

The monitoring plan provides, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations

The monitoring plan indicates that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project.

The identified areas of concern as to Monitoring plan, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL 10, CAR 07, CL 11, FAR 01, FAR 02).

4.8 Leakage (40-41)

Based on the estimations made, leakage is not expected for this project. The identified areas of concern as to Leakage, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR 12).

4.9 Estimation of emission reductions or enhancements of net removals (42-47)

The PDD indicates direct assessment of emission reductions as the approach chosen to estimate the emission reductions or enhancement of net removals generated by the project.

The PDD provides the ex ante estimates of:

(a) Emission reductions from the project (within the project boundary), which are 149 434 561 tons of CO_2eq;

(b) Leakage (not applicable);

(c) Emission reductions adjusted by leakage, which are 149 434 561tons of CO_2eq.

The estimates referred to above are given:

(a) On an annual basis;

(b) From 01/01/2008 to 31/12/2031, covering the whole crediting period;

(c) On a source-by-source basis;

(d) For each GHG gas (CO_2)

(e) In tonnes of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol;

The formulas used for calculating the estimates are consistent throughout the PDD.

For calculating the estimates referred to above, key factors (total number of CFLs distributed, average operating hours, the number of operational CFLs, and wattage difference between CFL and corresponding incandescent lamps) 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 the estimates of emission reductions are clearly identified, reliable and transparent.

Emission factors (such as carbon emission factor) were selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice.

The estimation referred to above is based on conservative assumptions and the most plausible scenarios in a transparent manner.

The estimates referred to above are consistent throughout the PDD.

The annual average of estimated emission reductions over the crediting period is calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period, and multiplying by twelve.

The identified areas of concern as to Estimation of emission reductions or enhancements of net removals, project participants response and BV Certification's conclusion are described in Appendix A (refer to CL 10, CAR 07).

4.10 Environmental impacts (48)

The PDD provides information on environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party.
The Ukrainian Government does not require that environmental impact assessment be undertaken for activities included in the project.

The identified areas of concern as to Environmental impacts, project participants response and BV Certification's conclusion are described in Appendix A (refer to CAR 06).

4.11 Stakeholder consultation (49)

No stakeholder consultation process for the JI projects is required by the host party.
Current stakeholder comments collected during the time of this PDD publication during determination process are presented in Addendum 1 of the PDD.

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO

PARAGRAPH 32 OF THE JI GUIDELINES

According to the modalities for the Determination of JI projects, the AIE shall make publicly available the project design document and receive, within 30 days, comments from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available.

Bureau Veritas Certification published the project documents on the website (http://ji.unfccc.int/JI_Projects/DB/43B3P0QM63RS0DNZ31Y5503SAFA89W/PublicPDD/GL6IQO7R8TN4HDNQCJYFSSKBIXH7OC/view.html) and invited comments from 06/07/2011 to 04/08/2011 by Parties, stakeholders and non-governmental organizations.
Comments for the JI project "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" were received from Maxim Bobrov, General Director "ALT Energo Co.Ltd", and from Joachim Schnurr, Managing Director GFA ENVEST GmbH.
Summary on the comments and response of LLC "PRIMLIGHT", and conclusions of Bureau Veritas Certification are presented below in tabular format.

№.	Comments from Maxim Bobrov	Response by LLC "PRIMLIGHT"	Conclusion by Bureau Veritas Certification
1	The PDD states that CFLs will be distributed to households and small businesses with "discounts and rebates" but does not indicate the values of these "discounts and rebates". Without such specification the project scenario may be in fact commercially viable and hence not additional based on JI additionality rules. This deficiency can be overcome by	Investment analysis that shows insufficient investment attractiveness of the project without ERUs has been presented. The incentives can vary for different types of consumers according to the marketing policies of the project, and can be up to 50% or free of charge.	Similar remark was arisen by the Bureau Veritas Certification determination team. After the project developer corrections, investment analysis made was examined by Bureau Veritas Certification financial specialist and found satisfactory.

	including the investment analysis of the baseline and project scenarios. However, such analysis is not provided in PDD, which makes one doubt the project additionality.	In any case, the average (of all CFLs distributed within the project for any given year) incentive will be no less than 20% of the average market price of a CFL for that particular year. If in the future this condition is not met, the project owner will re-evaluate the additionality of the project.	
2	The process for "distribution to households and legal entities" is not well described in Section A 4.2. Without such detailed description, specifying who will manage the process and how the data will be processed and archived and who and how will be issuing "discounts and rebates" the PDD lacks clarity and project additionality becomes questionable.	This is now reflected in the PDD.	The information provided were reviewed by the determination team and found sufficient to clarify the project additionality.

3	It is established that the project has started on 01/01/2008 and since 2008 ERUs are claimed, however, it is not described on how the JI consideration was used to make a decision for a project start and there is no evidence that JI was "seriously considered" before the project activity was initiated. Also, the specific starting date is not justified or documentary proven.	Accordant corrections have been made and relevant correspondence has been presented (Protocol of Intent #26/1, dated by the 26th of November, 2007).	The issue can be closed based on the documentation provided by the LLC "PRIMLIGHT".
4	In "Sub-step 1a: Definition of alternative scenarios to the proposed project activity" it is stated that retailers may step up their marketing efforts to sell more CFLs instead of ICLs. This may lead to an increase of CFL uptake in the baseline scenario. At the same time it is stated that "continuation of the current situation would be the provision of light mainly through the use of less expensive	ICLs have been phased out in EU and partially in Russia by banning them. There is no such ban in Ukraine.	Based on information provided by the project developer, only ICLs will be replaced by CFLs within the framework of the project. Hence, the determination team can conclude that the baseline for the project is correctly calculated.

	incandescent lamps." It should be noted that ICL manufacturing and use is being phased out completely in EU, Russia and some other NIS countries. Thus the "baseline scenario" will likely include more CFLs every year, thus overlapping with "project" scenario. The separation of 2 scenarios must be done in a more accurate way to prove additionality.		
5	The "barrier" on Page 12 states that: "Time lag between energy consumption and payment of energy bills. Energy price information is divorced from the time at which it is consumed. This time lag can impact the efficacy of price information in influencing consumer awareness and behaviour with regard to energy use." This needs to be further explained. Ukrainian consumers pay energy bills just as	From formal logic: If statement A (aggregated energy prices may limit…) is true, then an additional condition that statement B (elsewhere in EU…) is also true does not automatically lead to statement A being false. In other words, this barrier might exist elsewhere including EU.	This issue was reviewed by Bureau Veritas Certification financial specialist; after this, also some corrections were made by the project developer in the PDD. Now, the issue can be closed.

	other EU/NIS consumers, who are very concerned about rising energy costs.		
6	It is stated (p. 12) that barriers to project implementation can be overcome by "registering the proposed project as a JI activity financial barriers such as access to capital and discount rates are overcome due to the fact that the carbon finance delivered by the project enables CFLs to be provided with strong financial incentives i.e. discounts and compensations. Similarly, information barriers and high transaction costs will be ameliorated through the media and promotional activities which will direct consumers to distribution centres with clear instructions and information regarding CFL benefits." Yet the PDD does not explain in detail how this will be achieved. Without	Corresponding corrections have been made to the PDD.	Necessary information was added to the PDD. Explanation provided is considered sufficient to resolve this issue.

	such explanation it is not possible to ascertain the project additionality.		
7	The ex-post estimation of ERUs will be based on the following procedure: "The procedure to determine the sample of CFLs will ensure that they adequately represent the broader population, minimising sampling error. Given that participation in the project is voluntary, determination of the exact population of participating consumers prior to establishment of the PSG is not possible. In addition, because the project coordinator cannot force consumers to participate in sample groups, the devices monitored in the resulting sample will be to a degree, self-selected rather than purely random. Despite these limitations, the project coordinator will	Corresponding corrections have been made.	Similar remark was arisen by the Bureau Veritas Certification determination team (CL 10). Information added to the PDD in response to CL 10 is found sufficient.

	work hard to ensure that devices sampled are representative of the broader population of measures in participating consumers." This procedure is not sufficient for justification of the estimation approach. The technology and selection process are not described in sufficient details.		
8	The management structure that the project operator will apply in implementing the monitoring plan does not explain how the CFLs will be distributed (e.g., for free, with discount, with rebate, etc.). If the distribution is not "for free", a separate monitoring of the financial conditions must be introduced to ensure the project additionality. For instance, in some cases the consumer may be charged a market price for a CFL, in which case the corresponding emission	The investment analysis clearly shows that without ERUs project is unattractive from investor point of view. The situation when consumers can be charged the full price for CFLs is excluded and it is reflected in the PDD.	The investment analysis provided to the Bureau Veritas Certification specialist after some corrections were found satisfactory.

	reductions cannot be accepted as additional.		
9	On Page 26, it is stated that "The project involves direct estimation of emission reductions (option 2, section D.1.2.), rather than project and baseline emissions." This approach contradicts Ukrainian JI regulations, which require the both baseline and project emissions are calculated.	The JI PDD form requires calculations of one of two: • Baseline and project estimates and their difference (Option 1), • Direct estimates of reductions (Option 2). Option #2 has been chosen.	The project provides direct assessment of emission reductions, hence the option is correctly chosen. The formula for emission reduction calculation is $ER_y = EB_y - EP_y = NES_y \cdot EF_{CO2,ELEC,y}$
10	Annexes 2 and 3 need to be provided. Baseline and Monitoring information as presented in PDD is not sufficient.	Relevant corrections have been made to the PDD.	This remark is just CAR 10 of the determination protocol. Due to the amendments made by the project developer, the issue is closed.
№.	**Comments from Joachim Schnurr**	**Response by LLC "PRIMLIGHT"**	**Conclusion by Bureau Veritas Certification**
1	The project proponent shall outline the approach and show clear evidence how the carbon right ownership is transferred from the owner/buyer of the CFLs the project proponent.	All legal contracts and agreements on the right transferring have been presented to the AIE on the basis of confidentiality.	The contracts and agreements were reviewed by the Bureau Veritas Certification determination team. The right transferring is documentary claimed.

	In its current design the PDD does not demonstrate that double counting is excluded.		
2	It is not clear whether the proposed project ensures that leakage does not occur. Following the guidance of AMS II.Jv4 CFLs distributed shall have a minimum output of lumen per W. The PDD does not demonstrate that the CFL distributed meet these requirements. If these requirements are not met, the light output of a CFL may be lower than that of the incandescent bulb installed before. In that case the householder may turn on an additional bulb in order to reach the same amount of light. This would result in additional electricity consumption and in related emission.	The reductions are calculated for ICLs and CFLs of comparable light outputs. The conversion table between ICLs and CFLs presented in PDD (page 8, table 2) is based solely on this characteristic.	The explanation provided by the project developer can be considered as appropriate response to the remark arisen.
3	The proposed project shall demonstrate that leakage does not occur. How is it	If a particular ICL is not destroyed, the most likely	Analysis of LLC "PRIMLIGHT" response on this comment shows that it is sufficient and reasonable.

	ensured that the replaced ICLs are destroyed and cannot be used somewhere else?	outcome is that it replaces another ICL somewhere else, but the fixture that has been initially occupied by the ICL would be revamped with a CFL increasing the number of fixtures occupied by CFLs and consequently reducing emissions.	

4	The proposed project neglects the approaches of AMS II.Jv4 towards conservativeness, i.e. the calculation and consideration of the Lamp Faliure Rate (LFR) as well as the consideration of the Net to Gross adjustments factor (NTG). The project shall clarify why and how its approach is conservative.	The mentioned methodology AMS II.J,v4 – "Demand-side activities for efficient lighting technologies" involves conservative default parameters such as 3,5 hour per day of CFL use, NTG = 0,95, etc. These parameters are used for ex post calculations. The proposed project involves ex post calculations reductions on the basis of direct measurements similar to AM0046, v.2.0. – "Distribution of efficient light bulbs to households". Additionally, AMS II.J,v4 is designed only for small scale projects, while the proposed project is of large scale.	Review of the project developer response on this comment demonstrates that the response is sufficient and reasonable.

5	According to our knowledge there are rules for some types of public buildings which require the instalment of CFLs once the existing ICLs become in-operational. The project proponent shall clarify why these regulations are not reflected in the additionality proof and why the proposed project activity still is additional.	This is discussed in the PDD (first paragraph, page 11).	Explanation provided by the project developer is sufficient to resolve the issue.
6	The annual operating hours of the CFL is indicated in Annex 4. It is deviating (higher) from the default value proposed in AMS IIJv4. In order to demonstrate the accuracy of this value, the project proponent should outline in detail how this value will be measured. For how many seasons will the measurements be done? What measurements devices will be applied? Proof that the measurements will/can be done continuously in order to come up with a reliable	As discussed above, methodology AMS II.J,v4 employs default 3,5 hour per day as ex post. Our value (3,7 hour) is for ex ante only. This value obtained in silico based on national illuminance norms for different activities, and daylight factors for different buildings. For ex post calculations, we apply direct measurements -	As JI specific approach used for the project (not strictly the methodology AMS IIJv4), project developer can use default value taken not necessarily from this methodology. Review of the project developer response on this comment showed that it is sufficient and reasonable.

	value for operating hours per annum.	average values based on metering equipment readings installed at the CFLs of the representative group.	

All the comments are responded by the project developer (PRIMLIGHT LLC). Bureau Veritas Certification has analyzed PRIMLIGHT LLC responses on comments, and found them sufficient and reasonable.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" Project in Ukraine. The determination 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 determination consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

Project participants used the latest version (03.0.0 by 15.04.2011) of UNFCCC's "Combined tool to identify the baseline scenario and demonstrate additionality".
The PDD provides barrier analysis and investment analysis, and common practice analysis, to determine that the project activity itself is not the baseline scenario.

Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The determination revealed the pending issue related to the current determination stage of the project (the issue of the written approval of the project and the authorization of the project participant by the host Party). If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 01.5 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

The review of the project design documentation (version 01.5) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the project correctly applies and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.

The determination is based on the information made available to us and the engagement conditions detailed in this report.

7 REFERENCES

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

/1/	PDD "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" version 01.2 of 21.05.2011.
/2/	PDD "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" version 01.3 of 21.05.2011.
/3/	PDD "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" version 01.5 of 21.05.2011.
/4/	Excel files "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" with ER calculations_2011.
/5/	Letter of Endorsement of the State Environmental Investment Agency of Ukraine for the project "Distribution of energy efficient light bulbs in public and private sectors of Ukraine" #2519/23/7 dated by 13.09.2011.

Category 2 Documents:
Background documents related to the design and other reference documents.

/1/ Certificate dated 29/01/2007 of Conformity, Low Voltage Directive 2006/95/EC (evaluation of self-ballasted lamps for general lighting services), report #28203037001, issued by TÜV Rheinland InterCert kft.

/2/ Certificate #S60017063 dated 30/01/2007, valid till 29/01/2012 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH

/3/ Certificate #V60017068 dated 30/01/2007 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH

/4/ Certificate dated 26/04/2007 of Conformity to Low Voltage Directive 2006/95/EC (evaluation of self-ballasted lamps for general lighting services), report #28203037002, issued by TÜV Rheinland InterCert kft.

/5/ Certificate #S60017063 dated 26/04/2007, valid till 29/01/2012 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH

/6/ Certificate #V60017068 dated 26/04/2007 (energy saving lamp), issued by TÜV Rheinland Product Safety GmbH

/7/ Certificate dated 28/06/2007 of Conformity to Low Voltage Directive 2006/95/EC (evaluation of self-ballasted lamps for general lighting services), report #28203037003, issued by TÜV Rheinland InterCert kft.

/8/ Certificate #S60017063 dated 28/06/2007, valid till 29/01/2012

(evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH

/9/ Certificate #V60017068 dated 29/06/2007 (evaluation of self-ballasted lamps for general lighting services), issued by TÜV Rheinland Product Safety GmbH

/10/ Certificate of conformity #UA1.035.0080031-11, Series BB, valid 21/06/2011-20/06/2012, issued by the State Committee of Ukraine for technical regulation and consumer policy

/11/ Certificate of conformity #UA1.035.0112774-10, Series BB, valid 14/09/2010-29/09/2015, issued by the State Committee of Ukraine for technical regulation and consumer policy

/12/ Certificate #UA.2.039.05078-10, dated 30/08/2010 on quality control system, valid till 29/08/2015

/13/ Certificate of conformity # POCC UA.ME64.BO9357, valid from 29/10/2010 till 29/10/2013

/14/ Statement dated 10/04/2008 on compact fluorescent lamps marking

/15/ Statement dated 03/02/2011 on compact fluorescent lamps utilization

/16/ Statement dated 31/08/2009 on compact fluorescent lamps recording and exploitation rules

/17/ Contract #06-КП-080110/2 dated 10/01/2008 on purchase-sale of energy efficient light bulbs

/18/ Additional agreement #1 dated 31/03/2008 to the Contract #06-КП-080110/2 dated 10/01/2008 on purchase-sale of energy efficient light bulbs

/19/ Additional agreement #2 dated 17/08/2009 to the Contract #06-КП-080110/2 dated 10/01/2008 on purchase-sale of energy efficient light bulbs

/20/ Agreement dated 17/08/2009 on change of the Party to the agreement

/21/ Certificate of conformity # BY/112 03.03.002 15428, series A, valid from 02/12/2010 till 29/08/2015

/22/ License #564600 dated 22/03/2011, series AB, valid 14/03/2011 – 14/03/2016, issued by the Ministry of Environmental Protection of Ukraine

/23/ Conclusion of state sanitary and epidemiological expert examination #03.02-22/388/7555 dated 11/10/2006, issued by the Rivne Region Sanitary and Epidemiological Station

/24/ Conclusion of state sanitary and epidemiological expert examination #03.01-25/48/1519 dated 18/02/2011, issued by the State Sanitary and Epidemiological Service

/25/ Contract #247 dated 05/07/2011, valid from 05/07/2011 till 31/12/2013

/26/ Fax #80577544277 dated 17/02/2011 on services cost on handling different types of wastes as of 20/01/2011, Ekosfera Scientific and Production Enterprise LLC

/27/ License #361301, series AB, dated 21/08/2007, valid 16/08/2007 – 16/08/2012, issued by the Ministry of Environmental Protection of Ukraine
/28/ License #487720, series AB, dated 22/12/2009, valid 23/12/2009 – 23/12/2014, issued by the Ministry of Environmental Protection of Ukraine
/29/ Contract #02/0203-11 dated 02/03/2011, valid from 05/07/2011 till 31/12/2014
/30/ Installed equipment registry
/31/ Photo - Mercury tablet
/32/ Photo – Cabinet for energy efficient lamps
/33/ Photo – Installation of energy efficient lamps at Marzan State Enterprise (CO_2 JI Primlight, Not for resale 000000066)
/34/ Certificate on state metrology attestation #11-00/206 dated 08.07.2011 (lighting logger, #LL10070209), issued by the Scientific and Production Institute of Metrological Assurance of Electromagnetic Units.
/35/ Photo - Lighting logger, #LL10070209
/36/ Protocol of Intent #26/1, dated by the 26th of November, 2007.
/37/ Directive on “Primlight” operating group” #9 dated 02/07/2009.
/38/ Excel-file “Investment analysis” dated 15/08/2011.
/39/ “Program of internal audits of quality management system” dated 15/08/2011.
/40/ “Utilization process documented procedure” dated 15/08/2011.

Persons interviewed:

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

/1/ V. Vezhnin – project manager
/2/ O. Tymenko – Lummax Trading Company sales director
/3/ H.Tykhonov – Gazotron-Lux OJSC commercial director
/4/ V. Koptyn – Gazotron-Lux OJSC technical director
/5/ M. Kryvyi – Gazotron-Lux OJSC general director
/6/ M. Tudych - Gazotron-Lux OJSC financial director
/7/ S. Patyichuk – Primlight OJSC deputy general director
/8/ A. Alexandrov – Primlight head analyst

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DETERMINATION PROTOCOL

Check list for determination, according JOINT IMPLEMENTATION DETERMINATION AND VERIFICATION MANUAL (Version 01)

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
General description of the project				
Title of the project				
-	Is the title of the project presented?	The title of the project is "Distribution of energy efficient light bulbs in public and private sectors of Ukraine".	OK	OK
-	Is the sectoral scope to which the project pertains presented?	Sectoral scope: Energy demand.	OK	OK
-	Is the current version number of the document presented?	The current version number of the document is presented.	OK	OK
-	Is the date when the document was completed presented?	The date when the document was completed is presented.	OK	OK
Description of the project				
-	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and c) Project scenario (expected outcome, including a technical	The purpose of the project is indicated in the PDD. See section A.2 of the PDD. **CL 01.** Please, revise the name unified Ukrainian power grid ("Pan Ukrainian Power Grid" is not official name for the grid).	CL 01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	description)?	**CL 02.** Please, clarify procedure of reimbursement mentioned in the PDD section A.2.	CL 02	OK
-	Is the history of the project (incl. its JI component) briefly summarized?	The history of the project is briefly summarized.	OK	OK
Project participants				
-	Are project participants and Party(ies) involved in the project listed?	Project participants and Parties involved in the project are listed in the PDD section A.3.	OK	OK
-	Is the data of the project participants presented in tabular format?	Yes. See section A.3 of the PDD.	OK	OK
-	Is contact information provided in Annex 1 of the PDD?	Yes. See Annex 1 of the PDD.	OK	OK
-	Is it indicated, if it is the case, if the Party involved is a host Party?	Ukraine (Party involved) is a host Party.	OK	OK
Technical description of the project				
Location of the project				
-	Host Party(ies)	Ukraine is a host Party.	OK	OK
-	Region/State/Province etc.	All regions of Ukraine. **CAR 01.** Please, correct a spelling mistake (in the name of the city with special status) in the PDD section A.4.1. **CL 03.** Please, correct the geographical	CAR 01 CL 03	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		boundary of the project by deleting the improper phrase "without exclusion" (please, see PDD section A.4.1.2, A.4.1.3, and A.4.1.4).		
-	City/Town/Community etc.	All Ukrainian cities, towns and villages.	OK	OK
-	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	See section A.4.1.4 of the PDD.	OK	OK
Technologies to be employed, or measures, operations or actions to be implemented by the project				
-	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	See section A.4.2 of the PDD. **CL 04**. Please, clarify why the maximum number of lamps that one household can receive is 5 items (PDD section A.4.2). **CAR 02.** Please, revise the length of crediting period (the diagram of the PDD section A.4.2 envisages that the year 2030 – the end of the crediting period; this is in contrary to the A.4.3.1 table of the PDD). **CL 13.** Please, explain how the money will be returned/reimbursed to those who have already bought the lamps for the full cost (or with small discount) within the project. How it is provided in the contracts of sale	CL 04 CAR 02 CL 13	OK OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		of CFLs that have already been signed?		
Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
-	Is it stated how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page)	Yes. See section A.4.3 of the PDD.	OK	OK
-	Is it provided the estimation of emission reductions over the crediting period?	See section A.4.3.1 of the PDD. **CAR 03.** Please, revise the length of crediting period in the PDD sections A.4.3.1 and C.3. Take into consideration that the whole crediting period includes not only the first commitment period, but also the post-Kyoto period. Thus, please, at first indicate the length of the whole crediting period, than the length of particular parts of the crediting period. **CL 06.** Please, at the very end of the PDD sections A.4.3.1 and E.6, indicate the total estimated emission reductions and annual average of estimated emission reductions for the whole crediting period.	CAR 03 CL 06	OK OK
-	Is it provided the estimated annual reduction for the chosen	See section A.4.3.1 of the PDD.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	credit period in tCO_2e?			
-	Are the data from questions above presented in tabular format?	See section A.4.3.1 of the PDD.	OK	OK
Estimated amount of emission reductions over the crediting period				
-	Is the length of the crediting period Indicated?	See CAR 03 of this table.	See CAR 03	OK
-	Are estimates of total as well as annual and average annual emission reductions in tonnes of CO_2 equivalent provided?	See CL 06 of this table.	See CL 06	OK
Project approvals by Parties				
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	See the PDD section A.5. **CAR 11.** There is no LoA from a host Party. **CL 07.** Please, indicate the number and date of Letter of Endorsement issued for the project.	CAR 11 CL 07	Pending OK
19	Does the PDD identify at least the host Party as a "Party involved"?	Yes. The PDD identifies at least the host Party as a Party involved.	OK	OK
19	Has the DFP of the host Party issued a written project approval?	See CAR 11 of this table.	See CAR 11	Pending
20	Are all the written project approvals by Parties involved	All the written project approvals by Parties involved are unconditional.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	unconditional?			
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: − A written project approval by a Party involved, explicitly indicating the name of the legal entity? or − Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	See sections A.3 and A.5 of the PDD.	OK	OK
Baseline setting				
22	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? − JI specific approach − Approved CDM methodology approach	The PDD explicitly indicates that JI specific approach is used for identifying the baseline.	OK	OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	See section B of the PDD. **CAR 10.** Annexes 2 and 3 should contain Baseline and Monitoring information	CAR 10	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		respectively. Please, fill the Annexes with necessary information (the information provided just in the PDD is not sufficient).		
23	Does the PDD provide justification that the baseline is established: (a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one? (b) Taking into account relevant national and/or sectoral policies and circumstance? − Are key factors that affect a baseline taken into account? (c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, date sources and key factors? (d) Taking into account of uncertainties and using conservative assumptions? (e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure?	**CL 08.** Please, explain why the baseline scenario is considered as continuation of the use of incandescent lamps only (even in the absence of the project some electricity consumers could use energy efficient lamps). Also, please, indicate which year is considered as the base year.	CL 08	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria for baseline setting and monitoring", as appropriate?			
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	See section B of the PDD.	OK	OK
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	PDD provides appropriate justification for the emission factor used.	OK	OK
Approved CDM methodology approach only				
26 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	N/A	N/A
26 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	grace period (was the methodology revised to a newer version in the past two months)?			
26 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	N/A	N/A
26 (c)	Are all explanations, descriptions and analyses pertaining to the baseline in the PDD made in accordance with the referenced approved CDM methodology?	N/A	N/A	N/A
26 (d)	Is the baseline identified appropriately as a result?	N/A	N/A	N/A
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used? (a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to	**CL 05.** Please, indicate the version and the date of the "Combined tool to identify the baseline scenario and demonstrate additionality".	CL 05	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	emission reductions or enhancements of removals; (b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality; (c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".			
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	Yes. Justification is provided.	OK	OK
29 (b)	Are additionality proofs provided?	**CAR 08.** Please, provide more exact information regarding the share of the CFL value that is discounted or reimbursed as it heavily impacts the additionality of the project. **CAR 09.** The data provided in the PDD	CAR 08 CAR 09	OK OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		(section B.2) can not serve as the prove of the additionality of the project as it does not contain the specific barriers which prevent just the particular project activity i.e. distribution of the CFL at very low price or free of charge at all. It could be more fruitful and simple to resort to investment analysis following the procedure described by the "Tool for the demonstration and assessment of additonality"(version 05.2).		
29 (c)	Is the additionality demonstrated appropriately as a result?	**CL 12.** Assuming that CFL are distributed at the price which is less than the costs of manufacturing and delivery thereby the project generates no financial or economic benefits other than CDM related income so that additionality can be easily proved using the simple cost analysis (step 2a option I). It will be sufficient just to list the expenses (net losses) associated with project implementation.	CL 12	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	See section 29 (c) of the PDD.	OK	OK
Approved CDM methodology approach only				
31 (a)	Does the PDD provide the title,	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	reference number and version of the approved CDM methodology used?			
31 (b)	Does the PDD provide a description of why and how the referenced approved CDM methodology is applicable to the project?	N/A	N/A	N/A
31 ©	Are all explanations, descriptions and analyses with regard to additionality made in accordance with the selected methodology?	N/A	N/A	N/A
31 (d)	Are additionality proofs provided?	N/A	N/A	N/A
31 (e)	Is the additionality demonstrated appropriately as a result?	N/A	N/A	N/A
Project boundary (applicable except for JI LULUCF projects				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	See section B.3 of the PDD.	OK	OK
32 (b)	Is the project boundary defined	See section 32 (b) of this table.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?			
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	See Figure 4 of PDD section B.3.	OK	OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	**CL 09.** Please, provide justification of the exclusion of emission sources from the project boundary (Table 6 of the PDD section B.3).	CL 09	OK
Approved CDM methodology approach only				
33	Is the project boundary defined in accordance with the approved CDM methodology?	N/A	N/A	N/A
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	**CAR 04.** Is the starting date of the project is the start of the crediting period? Revise the date and prove it (by providing documentary justification of the project starting date).	CAR 04	OK
34 (a)	Is the starting date after the beginning of 2000?	The starting date is after the beginning of 2000.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	See section C.2 of the PDD. **CAR 05.** Please, provide justification of the length of expected project operational lifetime in the PDD section C.2.	CAR 05	OK
34 (c)	Does the PDD state the length of the crediting period in years and months?	See the PDD section C.3.	OK	OK
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	The starting date of the crediting period is after the date of the first emission reductions generated by the project.	OK	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	See section C.3 of the PDD.	OK	OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented	Yes. The estimates of emission reductions are presented separately for those until 2012 and those after 2012.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	separately for those until 2012 and those after 2012?			
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? − JI specific approach − Approved CDM methodology approach	The PDD explicitly indicates that JI specific approach is used for the project.	OK	OK
JI specific approach only				
36 (a)	Does the monitoring plan describe: − All relevant factors and key characteristics that will be monitored? − The period in which they will be monitored? − All decisive factors for the control and reporting of project performance?	**CL 10.** Please, indicate in the PDD section D.1, how representative the project sample described in this section. Also, please, state the certainty level of the approach used for calculations/estimations within the project. See CAR 10 of this table.	CL 10 See CAR 10	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	The monitoring plan specifies the indicators, constants and variables used are reliable and transparent.	OK	OK
36 (b)	If default values are used:	See section D of the PDD.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− Are accuracy and reasonableness carefully balanced in their selection? − Do the default values originate from recognized sources? − Are the default values supported by statistical analyses providing reasonable confidence levels? − Are the default values presented in a transparent manner?			
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan clearly indicate how the values are to be selected and justified?	The monitoring plan clearly indicates how the values are selected and justified.	OK	OK
36 (b) (ii)	For other values, − Does the monitoring plan clearly indicate the precise references from which these values are taken? − Is the conservativeness of the values provided justified?	Yes. See section D of the PDD.	OK	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if	See section 36 (b) (iii) of this table.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	expected data are unavailable?			
36 (b) (iv)	Are International System Unit (SI units) used?	In most cases SI units are used.	OK	OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	See the PDD section D.	OK	OK
36 (b) (v)	Is the use of parameters, coefficients, variables, etc. consistent between the baseline and monitoring plan?	Yes. The use of parameters, coefficients and variables is consistent between the baseline and monitoring plan. **CAR 12.** Please, consider carbon emission factor as parameter to be monitored for emission reductions monitoring and include this in the PDD table D.1.2.1 indicating the information “As soon as any other developed baseline emission factor of the Ukrainian electricity system will be approved, the project developer will make appropriate modifications of emission reduction calculations at the stage of monitoring repot development”.	CAR 12	OK
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of “Guidance on criteria for baseline	The monitoring plan draws on the list of standard variables contained in the “Guidance on criteria for baseline setting and monitoring”.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	setting and monitoring"?			
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	See section D of the PDD.	OK	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	The monitoring plan describes the methods employed for data monitoring and recording. **FAR 01.** The data to be monitored and required for determination are to be kept	FAR 01	Pending

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		for two years after the last transfer of emission reductions units for the project. The order concerning the procedure for keeping monitoring data should be issued (The information on this should be indicated in the PDD).		
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission reductions from the project, leakage, as appropriate?	The monitoring plan elaborates direct monitoring of emission reductions from the project.	OK	OK
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	Yes. See section D.1.2 of the PDD.	OK	OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Consistent variables, equation formats are used.	OK	OK
36 (f) (iii)	Are all equations numbered?	All equations are correctly numbered.	OK	OK
36 (f) (iv)	Are all variables, with units indicated defined?	All variables are defined with units indicated.	OK	OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	The conservativeness of the procedures are justified.	OK	OK
36 (f) (v)	To the extent possible, are methods to quantitatively	The uncertainty level of data is reasonably low.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	account for uncertainty in key parameters included?			
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	Consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions of the baseline are ensured.	OK	OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	All parts of the formulae are explained.	OK	OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	See section D of the PDD.	OK	OK
36 (f) (vii)	Are references provided as necessary?	Necessary references are provided.	OK	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	All key factors are explained in a transparent manner.	OK	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	See section 36 (f) (v) of this table.	OK	OK
36 (f) (vii)	Is the uncertainty of key parameters described and, where	See the previous section of this table.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?			
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	-	OK	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	See section D of the PDD.	OK	OK
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity	See section D.2 of the PDD. **CAR 07.** Please, correct the D.2 table of the PDD by providing information on quality control and quality assurance procedures.	CAR 07	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	and accuracy are kept and made available upon request?	**CL 11**. Please, describe the internal auditing procedures mentioned in the PDD section D.3.	CL 11	OK
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	**FAR 02.** The order concerning indication of the names of the personnel involved in the monitoring should be issued (The information on this should be indicated in the PDD).	FAR 02	Pending
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	The monitoring plan reflects good monitoring practices appropriate to the project type.	OK	OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	The monitoring plan provides a complete compilation of the data that need to be collected for its application.	OK	OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are	FAR 01 of the table is related to this section.	See FAR 01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	to be kept for two years after the last transfer of ERUs for the project?			
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	See section D of the PDD.	OK	OK
Approved CDM methodology approach only				
38 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	N/A	N/A
38 (a)	Is the approved CDM methodology the most recent valid version when the PDD is submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?	N/A	N/A	N/A
38 (b)	Does the PDD provide a	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	description of why the approved CDM methodology is applicable to the project?			
38 (c)	Are all explanations, descriptions and analyses pertaining to monitoring in the PDD made in accordance with the referenced approved CDM methodology?	N/A	N/A	N/A
38 (d)	Is the monitoring plan established appropriately as a result?	N/A	N/A	N/A
Applicable to both JI specific approach and approved CDM methodology approach				
39	If the monitoring plan indicates overlapping monitoring periods during the crediting period: (a) Is the underlying project composed of clearly identifiable components for which emission reductions or enhancements of removals can be calculated independently? (b) Can monitoring be performed independently for each of these components (i.e. the data/parameters monitored for one component are not dependent on/effect data/parameters to be monitored	The monitoring plan identifies no overlapping monitoring periods during the crediting period.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	for another component)? (c) Does the monitoring plan ensure that monitoring is performed for all components and that in these cases all the requirements of the JI guidelines and further guidance by the JISC regarding monitoring are met? (d) Does the monitoring plan explicitly provide for overlapping monitoring periods of clearly defined project components, justify its need and state how the conditions mentioned in (a)-(c) are met?			
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	Leakage is not expected for this project.	OK	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	-	OK	OK
Approved CDM methodology approach only				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
41	Are the leakage and the procedure for its estimation defined in accordance with the approved CDM methodology?	N/A	N/A	N/A
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	The PDD indicates that the direct assessment of emission reductions is chosen for the project.	OK	OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? © Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	N/A	N/A	N/A
44	If the approach (b) in 42 is	The PDD section E provides ex ante	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	chosen, does the PDD provide ex ante estimates of: (a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?	estimates of emission reductions.		
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the	The estimates are given on a periodic basis. The estimates are given on a source-by-source basis in tones of CO_2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol. The formula used for calculating the estimates in 43 or 44 consistent throughout the PDD.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable and transparent? (e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice? (f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?	Data sources used for calculating the estimates are reliable and transparent. The estimation is based on conservative assumptions. The annual average of estimated emission reductions are calculated by dividing the total estimated emission reductions over the crediting period by the total months of the crediting period and multiplying by twelve.		

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(g) Are the estimates in 43 or 44 consistent throughout the PDD? (h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	See section B of the PDD.	OK	OK
Approved CDM methodology approach only				
47 (a)	Is the estimation of emission reductions or enhancements of net removals made in accordance with the approved CDM methodology?	N/A	N/A	N/A
47 (b)	Is the estimation of emission reductions or enhancements of net removals presented in the PDD: − On a periodic basis?	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− At least from the beginning until the end of the crediting period? − On a source-by-source/sink-by-sink basis? − For each GHG? − In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? − Are the formula used for calculating the estimates consistent throughout the PDD? − Are the estimates consistent throughout the PDD? − Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?			
Environmental impacts				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by the host Party?	See section F.1 of the PDD. **CAR 06.** Please, accurately describe the procedure of the end-of-life CFLs utilization (in the section D.1 and F.1 of the PDD).	CAR 06	OK
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	See the previous section of this table.	OK	OK
Environmental impacts				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments?	No stakeholder consultation process for the JI projects is required by the host party. Stakeholder comments are collected during the time of this PDD publication on the internet during the determination procedure.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(c) A description on whether and how the comments have been addressed?			
Determination regarding small-scale projects (additional elements for assessment)				
50	Does the PDD appropriately specify and justify the SSC project type(s) and category(ies) that fall under: (a) One of the types and thresholds of JI SSC projects as defined in .Provisions for joint implementation small-scale projects.? If the project contains more than one JI SSC project type component, does each component meet the relevant threshold criterion? (b) One of the SSC project categories defined in the most recent version of appendix B of annex II to decision 4/CMP.1, or an additional project category approved by the JISC in accordance with the relevant provision in “Provisions for joint implementation small-scale projects”?	N/A	N/A	N/A
51	Does the SSC PDD confirms and	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	shows that the proposed JI SSC project is not a debundled component of a large project by explaining that there does not exist a JI (SSC) project with a publicly available determination in accordance with paragraph 34 of the JI guidelines: (a) Which has the same project participants; and (b) Which applies the same technology/measure and pertains to the same project category; and (c) Whose determination has been made publicly available in accordance with paragraph 34 of the JI guidelines within the previous 2 years; and (d) Whose project boundary is within 1 km of the project boundary of the proposed JI SSC project at the closest point?			
Applicable to bundled JI SSC projects only				
52 (a)	Do all projects in the bundle: (i) Have the same crediting period? (ii) Comply with the provisions	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	for JI SSC projects defined in "Provisions for joint implementation small-scale projects", in particular the thresholds referred to in 50 (a) above? (iii) Retain their distinctive characteristics (i.e. location, technology/measure etc.)?			
52 (b)	Does the composition of the bundle not change over time?	N/A	N/A	N/A
52 (c)	Has the AIE received (from the project participants): (i) Information on the bundle using the form developed by the JISC (F-JI-SSCBUNDLE)? (ii) A written statement signed by all project participants indicating that they agree that their individual projects are part of the bundle and nominating one project participant to represent all project participants in communicating with the JISC? (iii) Indication by the Parties involved that they are aware of the bundle in their project approvals referred to in 19	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	above?			
53	If the project participants prepared a single SSC PDD for the bundled JI SSC projects, do(are) all the projects: (a) Pertain to the same JI SSC project category? (b) Apply the same technology or measure? (c) Located in the territory of the same host Party?	N/A	N/A	N/A
54	If the project participants prepared separate SSC PDDs for the bundled JI SSC projects, do(are) all the projects: (a) Have SSC PDDs been prepared for all JI SSC projects in the bundle? (b) Does each SSC PDD contain a single JI SCC project in the bundle?	N/A	N/A	N/A
55	If the projects in the bundle use the same baseline, does the F-JI-SSC-BUNDLE provide an appropriate justification for the use of the same baseline considering the particular situation of each project in the	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	bundle?			
56	Does the PDD indicate which of the following approaches is used for establishing a monitoring plan? (a) By preparing a separate monitoring plan for each of the constituent projects; (b) By preparing an overall monitoring plan including a proposal of monitoring of performance of the constituent projects on a sample basis, as appropriate.	N/A	N/A	N/A
56 (b)	If the approach 57 (b) above is used, (i) Are all the JI SSC projects located in the territory of the same host Party? (ii) Do all the JI SSC projects pertain to the same project category? (iii) Do all the JI SSC projects apply the same technology or measure? (iv) Does the overall monitoring plan reflect good monitoring practice appropriate to the	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	bundled JI SSC projects and provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled projects?			
Applicable to all JI SSC projects				
57	Is the leakage only within the boundaries of non-Annex I Parties considered?	N/A	N/A	N/A
Determination regarding land use, land-use change and forestry projects (additional/alternative elements for assessment)				
58	Does the PDD appropriately specify how the LULUCF project conforms to: (a) The definitions of LULUCF activities included in paragraph 1 of the annex to decision 16/CMP.1, applying good practice guidance for LULUCF as decided by the CMP, as appropriate? (b) In the case of afforestation, reforestation and/or forest management projects, the definition of "forest" selected by the host Party, which specifies: (i) A single minimum tree crown	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	cover value (between 10 and 30 per cent)? and (ii) A single minimum land area value (between 0.05 and 1 hectare)? and (iii) A single minimum tree height value (between 2 and 5 metres)?			
JI specific approach only				
59	Baseline setting - in addition to 22-26 above Does the PDD provide an explanation how the baseline chosen: − Takes into account the good practice guidance for LULUCF, developed by the IPCC? − Ensures conformity with the definitions, accounting rules, modalities and guidelines under Article 3, paragraphs 3 and 4, of the Kyoto Protocol?	N/A	N/A	N/A
60	Project boundary - alternative to 32-33 (a) Does the project boundary geographically delineate the JI LULUCF project under the control of the project participants? (a) If the JI LULUCF project	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	contains more than one discrete area of land, (i) Does each discrete area of land have a unique geographical identification? (ii) Is the boundary defined for each discrete area? (ii) Does the boundary not include the areas in between these discrete areas of land? (b) Does the project boundary encompass all anthropogenic emissions by sources and removals by sinks of GHGs which are: (i) Under the control of the project participants; (ii) Reasonably attributable to the project; and (iii) Significant? (c) Does the project boundary account for all changes in the following carbon pools: − Above-ground biomass; − Below-ground biomass; − Litter; − Dead wood; and − Soil organic carbon?			

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	(c) Does the PDD provide: (i) The information of which carbon pools are selected? (ii) If one or more carbon pools are not selected, transparent and verifiable information that indicates, based on conservative assumptions, that the pool is not a source? (d) Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria in (b) above?			
61 (a)	Project boundary - alternative to 32-33 (cont.) Are the delineation of the project boundary and the gases and sources/sinks included appropriately described and justified in the PDD?	N/A	N/A	N/A
61 (b)	Project boundary - alternative to 32-33 (cont.) Are all gases and sources/sinks included explicitly stated, and the exclusions of any sources/sinks related to the baseline or the LULUCF project appropriately justified?	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
62	Monitoring plan - in addition to 35-39 Does the PDD provide an appropriate description of the sampling design that will be used for the calculation of the net anthropogenic removals by sinks occurring within the project boundary in the project scenario and, in case the baseline is monitored, in the baseline scenario, including, inter alia, stratification, determination of number of plots and plot distribution etc.?	N/A	N/A	N/A
63	Does the PDD take into account only the increased anthropogenic emissions by sources and/or reduced anthropogenic removals by sinks of GHGs outside the project boundary?	N/A	N/A	N/A
Approved CDM methodology approach only				
64 (a)	Does the PDD provide the title, reference number and version of the approved CDM methodology used?	N/A	N/A	N/A
64 (a)	Is the approved CDM methodology the most recent valid version when the PDD is	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	submitted for publication? If not, is the methodology still within the grace period (was the methodology revised to a newer version in the past two months)?			
64 (b)	Does the PDD provide a description of why the approved CDM methodology is applicable to the project?	N/A	N/A	N/A
64 (c)	Are all explanations, descriptions and analyses made in accordance with the referenced approved CDM methodology?	N/A	N/A	N/A
64 (d)	Are the baseline, additionality, project boundary, monitoring plan, estimation of enhancements of net removals and leakage established appropriately as a result?	N/A	N/A	N/A
Determination regarding programmes of activities (additional/alternative elements for assessment)				
66	Does the PDD include: (a) A description of the policy or goal that the JI PoA seeks to promote? (b) A geographical boundary for the JI PoA (e.g. municipality, region within a country, country or several countries) within which	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	all JPAs included in the JI PoA will be implemented? (c) A description of the operational and management arrangements established by the coordinating entity for the implementation of the JI PoA, including: − The maintenance of records for each JPA? − A system/procedure to avoid double counting (e.g. to avoid including a new JPA that has already been determined)? − Provisions to ensure that persons operating JPAs are aware and have agreed to their activity being added to the JI PoA? (d) A description of each type of JPAs that will be included in the JI PoA, including the technology or measures to be used? (e) The eligibility criteria for inclusion of JPAs to the JI PoA for each type of JPA in the JI PoA?			
67	*Project approvals by Parties*	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	involved - additional to 19-20 Are all Parties partly or entirely within the geographical boundary for the JI PoA listed as "Parties involved" and indicated as host Parties in the PDD?			
68	*Authorization of project participants by Parties involved - additional to 21* Is the coordinating entity presented in the PDD authorized by all host Parties to coordinate and manage the JI PoA?	N/A	N/A	N/A
69	*Baseline setting - additional to 22-26* Is the baseline established for each type of JPA?	N/A	N/A	N/A
70	*Additionality - additional to 27-31* Does the PDD indicate at which of the following levels that additionality is demonstrated? (a) For the JI PoA (b) For each type of JPA	N/A	N/A	N/A
71	*Crediting period - additional to 34* Is the starting date of the JI PoA after the beginning of 2006 (instead of 2000)?	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
72	*Monitoring plan - additional to 35-39* Is the monitoring plan established for each technology and/or measure under each type of JPA included in the JI PoA?	N/A	N/A	N/A
73	Does the PDD include a table listing at least one real JPA for each type of JPA?	N/A	N/A	N/A
73	For each real JPA listed, does the PDD provide the information of: (a) Name and brief summary of the JPA? (b) The type of JPA? (c) A geographical reference or other means of identification? (d) The name and contact details of the entity/individual responsible for the operation of the JPA? (e) The host Party(ies)? (f) The starting date of the JPA? (g) The length of the crediting period of the JPA? (h) Confirmation that the JPA meets all the eligibility requirements for its type,	N/A	N/A	N/A

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	including a description of how these requirements are met? (i) Confirmation that the JPA has not been determined as a single JI project or determined under a different JI PoA?			

Draft report clarifications and corrective action requests by determination team		Summary of project participant response	Determination team conclusion
CL 01. Please, revise the name unified Ukrainian power grid ("Pan Ukrainian Power Grid" is not official name for the grid).	-	Corresponding corrections have been made.	The issue is closed based on the correction made.
CL 02. Please, clarify procedure of reimbursement mentioned in the PDD section A.2.	-	Corresponding corrections have been made.	Due to the amendments made, CL 02 is closed.
CAR 01. Please, correct a spelling mistake (in the name of the city with special status) in the PDD section A.4.1	-	Corresponding corrections have been made.	Based on the correction made, CAR 01 is closed.
CL 03. Please, correct the geographical boundary of the project by deleting the improper phrase "without exclusion" (please, see PDD section A.4.1.2, A.4.1.3, and A.4.1.4).	-	Corresponding corrections have been provided.	The issue is closed due to the amendments made.

CL 04. Please, clarify why the maximum number of lamps that one household can receive is 5 items (PDD section A.4.2).	-	Accordant corrections have been made.	Based on the modifications made in the PDD, the issue is closed.
CAR 02. Please, revise the length of crediting period (the diagram of the PDD section A.4.2 envisages that the year 2030 – the end of the crediting period; this is in contrary to the A.4.3.1 table of the PDD).	-	Corresponding amendments have been made.	CAR 02 is closed due to the amendments made in the PDD.
CL 05. Please, indicate the version and the date of the "Combined tool to identify the baseline scenario and demonstrate additionality".	28	Corresponding corrections have been made.	The issue is closed based on the information added to the PDD.

CAR 03. Please, revise the length of crediting period in the PDD sections A.4.3.1 and C.3. Take into consideration that the whole crediting period includes not only the first commitment period, but also the post-Kyoto period. Thus, please, at first indicate the length of the whole crediting period, than the length of particular parts of the crediting period.	-	Response #1. Relevant corrections have been made. Response #2. Relevant corrections have been made on page 15.	Conclusion on response #1. Please, state in the PDD section C.3 not only the length of the whole crediting period, but also separately the length of the first commitment period and the post-Kyoto period length. Conclusion on response #2. The issue is closed based on the amendments made in the PDD.
CL 06. Please, at the very end of the PDD sections A.4.3.1 and E.6, indicate the total estimated emission reductions and annual average of estimated emission reductions for the whole crediting period.	-	Corresponding corrections have been made.	CL 06 is closed due to the amendments made in the PDD.

CL 07. Please, indicate the number and date of Letter of Endorsement issued for the project.	19	Response #1. Accordant corrections have been made. Response #2. The replacement has been made on page 9.	Conclusion on response #1. Please, replace the phrase "Support Letter" by more appropriate the "Letter of Endorsement". Conclusion on response #2. Due to the corrections made in the PDD, the issue is closed.

CL 08. Please, explain why the baseline scenario is considered as continuation of the use of incandescent lamps only (even in the absence of the project some electricity consumers could use energy efficient lamps). Also, please, indicate which year is considered as the base year.	23	Response #1. Necessary corrections have been made. Response #2. The explanation for this issue is provided in the PDD.	Conclusion on response #1. Please, explain how baseline emission calculations reflect that the baseline is not only the use of standard incandescent lamps? Conclusion on response #2. The explanation for the issue arisen is received.

CL 09. Please, provide justification of the exclusion of emission sources from the project boundary (Table 6 of the PDD section B.3).	32 (d)	Response #1. Necessary corrections have been made. Response #2. The reference to guideline #75 is merely used as an additional point to reflect the fact that other GHGs apart	Conclusion on response #1. - Please, explain the fact of referring to The Order of State Environmental Investment Agency #75 on approving specific CO2 emission factor for the year 2011. Which paragraph of this order includes information that only CO_2 should be considered? Please, indicate not only minor sources, but also major ones in the Table 6 of the PDD section B.3. Conclusion on response #2. The issue is closed.

		from CO_2 hardly ever considered in this context. Additional corrections have been made on page 11.	
CAR 04. Is the starting date of the project is the start of the crediting period? Revise the date and prove it (by providing documentary justification of the project starting date).	34 (a)	Response #1. Accordant corrections have been made and relevant correspondence has been presented (Protocol of Intent #26/1, dated by the 26th of November, 2007). Response #2. A copy of the protocol has been presented to the determination team.	Conclusion on response #1. Please, provide the copy of Protocol of Intent #26/1 to the determination team. Conclusion on response #2. CAR 04 is closed.
CAR 05. Please, provide justification of the length of expected project operational lifetime in the PDD section C.2.	34 (b)	Corresponding corrections have been made.	CAR 05 is closed based on the necessary information added to the PDD.
CL 10. Please, indicate in the PDD section D.1, how representative the project sample described in this section. Also, please, state the certainty level of the approach used for calculations/estimations within the project.	36 (a)	Response #1. Concerning representativeness, the same selection procedure and minimum sample size requirement are used as in AM0046, v.2. The same confidence level of 95% are also used. Concerning certainty, we ought to say	Conclusion on response #1. Please, explain the fact of referring to the methodology AM0046 as there is no indication in the PDD that the approach used

		the following. The total approximation error will consist of a measurement error and a statistical error. The measurement error will depend on the accuracy of metering devices. The statistical error: $\Delta = t \cdot \sigma / n1/2$ will depend on • standard deviation (σ) of the data collected from the metering devices, • confidence interval (t =1,96 for 95% confidence), • sample size n (number of CFLs in PSG, or in other words, corresponding number of the metering devices). The total error will be calculated for each monitoring period and presented in the corresponding monitoring report. Corresponding corrections have been made. Response #2. The answer is rephrased in the	within this project is based the methodology AM0046. Conclusion on response #2. The issue is closed based on the

		following way: Concerning representativeness, we use the standard to statistical analysis random selection procedure and minimum sample size requirement. Concerning certainty, we ought to say the following. The total approximation error will consist of a measurement error and a statistical error. The measurement error will depend on the accuracy of metering devices. The statistical error: $\Delta = t \cdot \sigma / n1/2$ will depend on • standard deviation (σ) of the data collected from the metering devices, • confidence interval (t =1,96 for 95% confidence), • sample size n (number of CFLs in PSG, or in other words, corresponding number of the metering devices). The total error will be calculated for each monitoring period and presented in the corresponding monitoring	amendments made.

		report. Corresponding corrections have been made.	
CAR 06. Please, accurately describe the procedure of the end-of-life CFLs utilization (in the section D.1 and F.1 of the PDD).	48 (a)	Response #1. Accurate description of the procedure of the end-of-life CFL utilization is described in Addendum 4 (attached). Response #2. Translation has been made. Corresponding corrections have been made on page 19.	Conclusion on response #1. Addendum 4 and other Addendums provided to the determination team are not the integral part of the PDD. Please, translate the information of the Addendums into English and draw up the PDD Annexes with this information. Conclusion on response #2. CAR 06 is closed.

CAR 07. Please, correct the D.2 table of the PDD by providing information on quality control and quality assurance procedures.	36 (i)	Response #1. The project owner have adopted quality control management system (QCMS) that has been successfully certified on compliance to international standards ISO 9001:2000, ISO 9001:2008 and national standards DSTU 9001-2001. Full description of quality control and quality assurance procedures is attached as Addendum 3. Response #2. Additional information has been provided on page 24.	Conclusion on response #1. There are no necessary corrections made in the PDD (see the D.2 table of the PDD). Also, see conclusion on response #1 to CAR 06. Conclusion on response #2. Due to the explanation provided, the issue is closed.

CL 11. Please, describe the internal auditing procedures mentioned in the PDD section D.3.	36 (i)	Response #1. Description of the internal auditing procedures is described in Addendum 3 (attached). Response #2. Corresponding clarifications have been added on page 24.	Conclusion on response #1. There are no necessary corrections made in the PDD section D.3. Also, see conclusions on response #1 to CARs 06 and 07. Conclusion on response #2. The issue is closed based on the clarifications received.
FAR 01. The data to be monitored and required for determination are to be kept for two years after the last transfer of emission reductions units for the project. The order concerning the procedure for keeping monitoring data should be issued (The information on this should be indicated in the PDD).	36 (e)	This information will be included in "Directive on "Primlight" operating group".	To be checked at 1st verification.

FAR 02. The order concerning indication of the names of the personnel involved in the monitoring should be issued (The information on this should be indicated in the PDD).	36 (j)	This information will be included in "Directive on "Primlight" operating group".	To be checked at 1st verification.
CAR 08. Please, provide more exact information regarding the share of the CFL value that is discounted or reimbursed as it heavily impacts the additionality of the project.	29 (b)	Corresponding amendments are made the issue is closed.	CAR 08 is closed.
CAR 09. The data provided in the PDD (section B.2) can not serve as the proof of the additionality of the project as it does not contain the specific barriers which prevent just the particular project activity i.e. distribution of the CFL at very low price or free of charge at all. It could be more fruitful and simple to resort to investment analysis following the procedure described by the "Tool for the demonstration and assessment of additonality"(version 05.2).	29 (b)	Response #1. Investment analysis (benchmark option) has been attached. Response #2. Corresponding information has been added.	Conclusion on response #1. Please, add to the paragraph devoted to description of the financial barrier (High initial price of CFLs) the information that the project activity foresees the sale of the CFL at the price substantially lower than the costs i.e. generates net loss without ERU sales. Conclusion on response #2. Based on the

			corrections made, the issue is closed.
CL 12. Assuming that CFL are distributed at the price which is less than the costs of manufacturing and delivery thereby the project generates no financial or economic benefits other than CDM related income so that additionality can be easily proved using the simple cost analysis (step 2a option I). It will be sufficient just to list the expenses (net losses) associated with project implementation.	29 (c)	Response #1. An investment analysis has been attached. It unambiguously shows that without ERUs project is unattractive from investor point of view. Response #2. Corresponding translation has been made and corrected analysis has been attached.	Conclusion on response #1. Please note that Excel financial model shall be supplied in English as well with all formulas visible. Conclusion on response #2. CL 12 is closed.
CAR 10. Annexes 2 and 3 should contain Baseline and Monitoring information respectively. Please, fill the Annexes with necessary information (the information provided just in the PDD is not sufficient).	23	All necessary corrections have been made.	CAR 10 is closed due to the necessary information added to the PDD.
CL 13. Please, explain how the money will be returned/reimbursed to those who have already bought the lamps for the full cost (or with small discount) within the project. How it is provided in the contracts of sale of CFLs that have already been signed?	-	Corresponding amendments are made the issue is closed.	The issue is closed.

CAR 11. Please provide evidence of the project approval by the Host Party	19	LoA from the Host Party will be received after determination presentation to the Ukrainian DFP.	Pending
CAR 12. Please, consider carbon emission factor as parameter to be monitored for emission reductions monitoring and include this in the PDD table D.1.2.1 indicating the information "As soon as any other developed baseline emission factor of the Ukrainian electricity system will be approved, the project developer will make appropriate modifications of emission reduction calculations at the stage of monitoring repot development".	36 (b) (v)	Necessary amendments are made.	The issue is closed.