VERIFICATION REPORT

INSTITUTE FOR ENVIRONMENT AND ENERGY CONSERVATION

VERIFICATION OF THE

TECHNICAL UPGRADE OF OJSC DNIPROVSKY INTEGRATED IRON AND STEEL WORKS NAMED AFTER DZERZHYNSKY BY INSTALLATION OF TWO BILLET CONTINUOUS CASTING MACHINES AND TWO LADLE FURNACES

THIRD PERIODIC
(01 JANUARY 2012 – 31 MARCH 2012)

REPORT NO. UKRAINE-VER/0499/2012

REVISION NO. 01

BUREAU VERITAS CERTIFICATION

Date of first issue:	Organizational unit:
06/06/2012	Bureau Veritas Certification Holding SAS
Client:	**Client ref.:**
Institute for Environment and Energy Conservation	Vasyl Vovchak

Summary:

Bureau Veritas Certification has made the 3rd periodic verification of the JI project "Technical Upgrade of OJSC Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky by Installation of Two Billet Continuous Casting Machines and Two Ladle Furnaces", ITL project ID UA1000280, the project of Institute for Environment and Energy Conservation located in the town of Dniprodzerzhynsk, Dnipropetrovsk region, Ukraine, and applying the JI specific approach, on the basis of UNFCCC criteria for the JI, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI rules and modalities and the subsequent decisions by the JI Supervisory Committee, as well as the host country criteria.

The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the monitoring report against project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

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

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reduction is calculated accurately and without material errors, omissions, or misstatements, and the ERUs issued totalize 351450 tonnes of CO_2 equivalent for the monitoring period from 01/01/2012 to 31/03/2012.

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

Report No.:	Subject Group:
UKRAINE-ver/0499/2012	JI
Project title:	
Technical Upgrade of OJSC Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky by Installation of Two Billet Continuous Casting Machines and Two Ladle Furnaces	
Work carried out by:	
Rostislav Topchiy – Team Leader, Lead Verifier Igor Alekseenko – Team Member, Technical expert	
Work reviewed by:	
Ivan Sokolov – Internal Technical Reviewer Elena Mazlova – Technical expert	
Work approved by:	
Ivan Sokolov – Operational Manager	
Date of this revision: 06/06/2012	**Rev. No.:** 01
Number of pages: 32	

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Abbreviations

AIE	Accredited Independent Entity
BVC	Bureau Veritas Certification Holding SAS
CAR	Corrective Action Request
CCM	Continuous Casting Machines
CDM	Clean Development Mechanism
CL	Clarification Request
CO_2	Carbon Dioxide
DFP	Designated Focal Point
DIISW	PJSC "Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky"
DVM	Determination and Verification Manual
ERU	Emission Reduction Unit
FAR	Forward Action Request
GHG	Green House Gas(es)
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
LF	Ladle Furnace
MP	Monitoring Plan
MR	Monitoring Report
PDD	Project Design Document
UNFCCC	United Nations Framework Convention on Climate Change

1 INTRODUCTION

Institute for Environment and Energy Conservation has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project “Technical Upgrade of OJSC Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky by Installation of Two Billet Continuous Casting Machines and Two Ladle Furnaces” (hereafter called “the project”) at the at 18-B Kirova Street, Dniprodzerzhynsk, Dnipropetrovsk region, Ukraine.

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

The verification covers the period from the 1st January 2012 to 31st March 2012.

1.1 Objective

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

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

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

1.2 Scope

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

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

1.3 Verification Team

The verification team consists of the following personnel:

Rostislav Topchiy
Bureau Veritas Certification, Team Leader, Climate Change Lead Verifier

Igor Alekseenko
Bureau Veritas Certification, Team Member, Technical Expert

This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

Elena Mazlova
Bureau Veritas Certification Technical Expert

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

The Monitoring Report (MR) submitted by Institute for Environment and Energy Conservation and additional background documents related to the project design, baseline, and monitoring plan, i.e. country Law, Project Design Document (PDD), Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version 1 of 15/05/2012, version 2 of 05/06/2012 and project as described in the determined PDD.

2.2 Follow-up Interviews

On 30/05/2012 Bureau Veritas Certification verification team conducted a visit to the project site (PJSC "Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky") and performed (on-site) interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Institute for Environment and Energy Conservation and PJSC "Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky" were interviewed (see References). The main topics of the interviews are summarized in Table1.

Table 1 Interview topics

Interviewed organization	Interview topics
PJSC "Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky"	Organizational structure Responsibilities and authorities Roles and responsibilities for data collection and processing Installation of equipment Data logging, archiving and reporting Metering equipment control Metering record keeping system, database IT management Training of personnel Quality management procedures and technology Internal audits and check-ups
Consultant: Institute for Environment and Energy Conservation Ltd.	Baseline methodology Monitoring plan Monitoring report Deviations from PDD

2.3 Resolution of Clarification, Corrective and Forward Action Requests

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

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

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

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

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

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

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

3 VERIFICATION CONCLUSIONS

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

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

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 06 Corrective Action Requests, 03 Clarification Requests.

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

3.1 Remaining issues and FARs from previous verifications

Remaining issues and FARs from previous verification are absent.

3.2 Project approval by Parties involved (90-91)

The project was approved by the host Party, Ukraine, which is confirmed by the Letter of Approval No. 2077/23/7 dated 08/08/2011 issued by State Environmental Investment Agency of Ukraine. As to the other Party involved, although the PDD indicates it as Spain with "Endesa Carbono" company being a legal entity project participant, the written approval for the current JI project was issued by the Netherlands authorizing Endesa Carbono to participate in this Project for the purpose of article 6 of the Kyoto Protocol (Declaration of Approval ref. No 2011JI28 dated 05/07/2011 issued by NL Agency, implementing agency of the Ministry of Economic Affairs, Agriculture and Innovation of the Netherlands). This happened because of the fact that the Spanish company Endesa Carbono has its accounts in national registries of both Spain and the Netherlands.

Bureau Veritas Certification received written approvals from the project participants and does not doubt their authenticity.

The abovementioned written approvals are unconditional.

3.3 Project implementation (92-93)

The project which is being implemented at the PJSC "Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky" (DIISW), is strengthen competitiveness of steelmaking process and reduce load on the environment, including through reduction of greenhouse gas (GHG) emissions into atmosphere, management of DIISW and ISD decided to upgrade the Plant's process cycle by introducing two ladle furnaces (LF 1 and LF 2) and two new seven-strand billet continuous casting machines (CCM 1 and CCM 3).

The project technology envisages that steel molten in converters are dressed in the new two LFs where ferroalloys and other required additives are fed. LFs additionally consume electricity compared to the baseline scenario, however they allow for shorten Furnace Process time and lower temperatures LD-Converters. Generally, energy saving in LD-Converters, as the result of LFs implementation, leads to reduction of overall energy intensity and stabilization of the furnace process. Thus, out-of-furnace treatment (secondary steelmaking) of steel at LFs saves time, energy, and produces higher quality steel on a consistent basis.

The project technology also envisages that steel treated at LFs are fed into new seven-strand billet CCMs allowing direct square billet production. This, compared to the baseline scenario, leads to lower amount of clippings and energy saving.

Construction of CCM 1 was started in August 2007 and was completed in November 2008. First commissioning casting processes on CCM 1 had been conducted during August-September and commercial operation of equipment started from the 1-st of October 2008, thereafter first volumes of square billets were produced in the fourth quarter of 2008. According to the State Committee Protocol acceptance of finished object into operation is dated 16/12/2008.

Implementation of LF 1 was started in April 2007 and was completed in June 2009 (according to the Protocol on object readiness for setting into operation dated 07/09/2009).

Implementation of CCM 3 was started in May 2009 (according to the Protocol on object readiness for setting into operation dated 28.01.2011) and was completed in January 2011.

Implementation of LF 2 was started in August 2008 (according to the Permit for construction works # 76 dated 22.08.2008) and is at the stage of commercial tests from the beginning of 2012.

During the considered monitoring period such facilities as CCM 1, CCM 3 and LF 1 were operational.

During the 3rd monitoring period some deviations of actual emission reductions from emission reductions estimated in PDD were observed.

According to PDD version 08, emission reductions for the monitoring period from 01/01/2012 to 31/03/2012 were expected 444950 tonnes of CO_2 equivalent. According Monitoring Report version 2 emission reductions achieved are 351 450 tonnes of CO_2 equivalent.

The reason for this is that baseline and project line scenarios were developed according to the scenario of perspective plan of steel production growth, which unfortunately has not justified due to the crisis of 2008-2011.

The identified areas of concern as to the project implementation, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR 01).

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

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

For calculating the emission reductions, key factors, such as actual amount of total steel output in the project scenario, specific fuel and energy resources consumption in production processes, specific electricity consumption etc., influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions, such as appropriately calibrated measuring equipment, enterprise's records, national officially approved data on the emission factor for Ukrainian power grid published by National Environmental Agency of Ukraine, IPCC guidelines are clearly identified, reliable and transparent.

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

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

The identified areas of concern as to the compliance of the monitoring plan with the monitoring methodology, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR 02, CAR 03, CAR 04, CAR 05).

3.5 Revision of monitoring plan (99-100)

Not applicable.

3.6 Data management (101)

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

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

The monitoring of JI project indicators at DIISW is realized on regular basis where the system of data collection on fuel and energy resources consumption is being used. The data needed for the monitoring of the project is collected during the process of normal equipment use. The monitoring of the project is carried out according to standard operational practices established at the enterprise. The scheme of data collection is provided in the section 6 of the Monitoring Report.

The quality assurance procedures are based on the Plant's quality management system certified against the requirements of ISO 9001:2008 international standard. Moreover, the occupational health and safety management system in accordance with OHSAS 18001 standard and environmental management system in accordance with ISO 14001 were implemented at the Plant in 2009.

The roles and obligation within the project monitoring are presented under the section 9 of the Monitoring Report.

The function of the monitoring equipment, including its calibration status, is in order. The measurement equipment used for project monitoring is serviced, calibrated and maintained in accordance with the original manufacturer's instructions, industry standards and internal procedures; relevant records are kept as required. As to the internal procedures, the calibration and verification are regulated by internal standards of DIISW such as STP 230-35-07 Metrological Support of Measuring Equipment and Guideline on Plant's Metrology Department.

The evidence and records used for the monitoring are maintained in a traceable manner. Data is collected into electronic database of DIISW as well as in paper format. Data is further compiled in day-to-day records, quarterly records, and annual records. All records are finally stored in Planning-economic department. All necessary information for monitoring of GHGs emission reductions are stored in paper and electronic formats and will be saved till the end of the crediting period and for two years after the last operation with ERUs from the project.

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

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

The identified areas of concern as to the data management, project participants response and BVC's conclusion are described in Appendix A, Table 2 (refer to CAR 06, CL 01, CL 02, CL 03).

3.7 Verification regarding programmes of activities (102-110)

Not applicable.

4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 3rd verification of the "Technical Upgrade of OJSC Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky by Installation of Two Billet Continuous Casting Machines and Two Ladle Furnaces" Project in Ukraine, which applies JI specific approach. The verification was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

The management of the Institute for Environment and Energy Conservation is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring Plan indicated in the final PDD version 08. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification verified the Project Monitoring Report, version 2 for the reporting period indicated below. Bureau Veritas Certification confirms that the project is implemented is implemented as planned and described in approved project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions.

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

Reporting period: From 01/01/2012 to 31/03/2012

Baseline emissions	: 2 005 506	tonnes of CO_2 equivalent.
Project emissions	: 1 654 056	tonnes of CO_2 equivalent.
Emission Reductions	: 351 450	tonnes of CO_2 equivalent.

5 REFERENCES

Category 1 Documents:

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

/1/ Monitoring Report for the period from 01/01/2012 till 31/03/2012 version 1 dated 15/05/2012

/2/ Monitoring Report for the period from 01/01/2012 till 31/03/2012 version 2 dated 05/06/2012

/3/ Calculation of emission reductions for the period 01/01/2012 till 31/03/2012, Excel file

/4/ PDD "Technical Upgrade of OJSC Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky by Installation of Two Billet Continuous Casting Machines and Two Ladle Furnaces", version 8 dated 12/07/2011

/5/ Determination Report "Technical Upgrade of OJSC Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky by Installation of Two Billet Continuous Casting Machines and Two Ladle Furnaces" No.UKRAINE-det/0170/2010, rev.05 of 12/07/2011 issued by Bureau Veritas Certification

/6/ Letter of Approval No. 2077/23/7 dated 08/08/2011 issued by State Environmental Investment Agency of Ukraine

/7/ Declaration of Approval ref. No 2011JI28 dated 05/07/2011 issued by NL Agency, implementing agency of the Ministry of Economic Affairs, Agriculture and Innovation of the Netherlands

Category 2 Documents:

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

№	Name of the document
1.	Certificate of Metrology Laboratory PJSC «Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky» № 06544-5-1-7-KL 31/02/2013
2.	License number 585747 on professionally-technical training PJSC «Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky»
3.	Certificate of OHSAS management system BS OHSAS 18001:2007 № TIS 15116 1020 2 PJSC «Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky»

4.	Certificate of EMS management system EN ISO 14001:2004 № TIS 15 104 1069 7 PJSC «Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky»
5.	Schedule of internal audit at the requirement standards of OHSAS 18001 and ISO 14001 in 2012
6.	Report on internal audit on 01 January 2012
7.	Book of the account of electricity consumption for 2011-2012
8.	Operating logbook DRZ-7 for 1 quarter of 2012
9.	Operating logbook DRZ-10 for 1 quarter of 2012
10.	Electricity substation logbook AF-23 for 1 quarter of 2012
11.	Technical report of converter plant. January 2012.
12.	Consumption of powders and mass. Converter plant. January 2012.
13.	Consumption of charge metal. Converter plant. January 2012.
14.	Consumption of scrap metal. Converter plant. January 2012.
15.	Semifinished products in converter plant for January 2012.
16.	The balance of coke and natural gases from the gas plant for January 2012.
17.	Natural gas consumption for January 2012.
18.	Report to the reception and distribution of electricity for January 2012.
19.	Electricity distribution statement from January 2012.
20.	The balance of electricity for January 2012.
21.	The result of the consumption of electricity for January 2012.
22.	Fuel consumption report for January 2012.
23.	Coke oven gas consumption for January 2012.
24.	Blast furnace gas consumption for January 2012.

25. Natural gas consumption for January 2012.
26. Report on the development of oxygen-compressor plant for January 2012.
27. Technical report on the oxygen compressor plant for January 2012.
28. Report of CHP for January 2012.
29. Report of water supply plant for January 2012.
30. Electronic database of consumption of raw materials and resources in 2012
31. Technical report of converter plant. February 2012.
32. Consumption of powders and mass. Converter plant. February 2012.
33. Consumption of scrap metal. Converter plant. February 2012.
34. Consumption of charge metal. Converter plant. February 2012.
35. Semifinished products in converter plant for February 2012.
36. The balance of coke and natural gas from the gas plant for February 2012.
37. Natural gas consumption for February 2012.
38. Report to the reception and distribution of electricity for February 2012.
39. Electricity distribution statement from February 2012.
40. The balance of electricity for February 2012.
41. The result of the consumption of electricity for February 2012.
42. Fuel consumption report for February 2012.
43. Coke oven gas consumption for February 2012.
44. Blast furnace gas consumption for February 2012.
45. Natural gas consumption for February 2012.

46. Report on the development of oxygen-compressor plant for February 2012.
47. Technical report on the oxygen compressor plant for February 2012.
48. Report of CHP for February 2012.
49. Report of water supply plant for February 2012.
50. Technical report of converter plant. March 2012.
51. Consumption of powders and mass. Converter plant. March 2012.
52. Consumption of charge metal. Converter plant. March 2012.
53. Consumption of scrap metal. Converter plant. March 2012.
54. Semifinished products in converter plant for March 2012.
55. The balance of coke and natural gases from the gas plant for March 2012.
56. Natural gas consumption for March 2012.
57. Report to the reception and distribution of electricity for March 2012.
58. Electricity distribution statement from March 2012.
59. The balance of electricity for March 2012.
60. The result of the consumption of electricity for March 2012.
61. Fuel consumption report for March 2012.
62. Coke oven gas consumption for March 2012.
63. Blast furnace gas consumption for March 2012.
64. Natural gas consumption for March 2012.
65. Report on the development of oxygen-compressor plant for March 2012.
66. Technical report on the oxygen compressor plant for March 2012.

67. Report of CHP for March 2012.

68. Report of water supply plant for March 2012.

69. Certificate number DP001081 on project documentation "Gradual reconstruction of converter plant for the construction of two CCM and "ladle furnace".

70. Passport physic-chemical parameters of gas for the period from 01.03.2012 to 31.03.2012

71. Passport physic-chemical parameters of gas for the period from 01.02.2012 to 29.02.2012

72. Passport physic-chemical parameters of gas for the period from 01.01.2012 to 31.01.2012

73. Report on air protection form number 2-TP (air) for 1 quarter of 2012

74. Certificate number 06544-5-1-26/3-HOMS (20.08.2010-20.08.2013). Ecological Laboratory of PJSC «Dniprovsky Integrated Iron and Steel Works named after Dzerzhynsky»

75. Electronic Register of measuring equipment

76. OHSAS and EMS Management review for 11 months in 2011

77. Schedule of QMS Internal Audit for 2012

78. Certificate of Quality management system ISO 9001:2008. TUV THURINGEN (31.01.2012-30.01.2015)

79. Certificate of Quality management system ISO 9001:2009. UkrSEPRO (21.06.2011-05.04.2014)

80. Report #7 on the Internal Audit (05/03/2012)

81. Report #3 on the Internal Audit (04/01/2012)

82. Order № 908 dated 26.09.2011 on making changes in the organizational structure of DIISW

83. Order № 327 dated 23.03.2012 on the preparation and storage of data on the Joint Implementation projects under the Kyoto Protocol.

84. Training plan on DIISW in 2012
85. Passport. Natural gas consumption meter Safir-M-5120 #02800644
86. Passport. Natural gas consumption meter Safir-M #0339381
87. Passport. Natural gas consumption meter Metran #65430
88. Passport. Natural gas consumption meter Safir-M #03831731
89. Passport. Natural gas consumption meter Metran #66737
90. Passport. Natural gas consumption meter Safir-M #02619588
91. Passport. Natural gas consumption meter Safir-M #03981694
92. Passport. Natural gas consumption meter Sapfir-22M #33822
93. Passport. Natural gas consumption meter Safir-M #08397518
94. Passport. Natural gas consumption meter Safir-M #03639990
95. The protocol of the qualifying examinations in the converter shop dated 30/03/2012
96. The protocol of the qualifying examinations in the converter shop dated 12/03/2012
97. The protocol of the qualifying examinations in the converter shop dated 15/03/2012
98. Passport. Electricity meter EvroAlfa #01132785
99. Meter card: type И670, factory № 672417
100. Meter card: type И670, factory № 919610
101. Meter card: type И670, factory № 649492
102. Meter card: type И670, factory № 350258
103. Meter card: type И670, factory № 374202
104. Meter card: type И670, factory № 062944
105. Meter card: type И670М, factory № 036772

106. Meter card: type И670, factory № 233755
107. Meter card: type И670, factory № 566577
108. Meter card: type И670, factory № 156892
109. Meter card: type И670, factory № 306034
110. Meter card: type И670, factory № 367107
111. Meter card: type И670, factory № 626945
112. Meter card: type И670, factory № 365024
113. Meter card: type И670, factory № 193791
114. Photo: type И670, factory № 672417
115. Photo: type И670, factory № 919610
116. Photo: type И670, factory № 649492
117. Photo: type И670, factory № 350258
118. Photo: type И670, factory № 374202
119. Photo: type И670, factory № 062944
120. Photo: type И670М, factory № 036772
121. Photo: type И670, factory № 233755
122. Photo: type И670, factory № 566577
123. Photo: type И670, factory № 156892
124. Photo: type И670, factory № 306034
125. Photo: type И670, factory № 367107
126. Photo: type И670, factory № 626945
127. Photo: type И670, factory № 365024
128. Photo: type И670, factory № 193791

Persons interviewed:

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

/1/ Zolotarevskaya I.G. - Acting head of the environmental protection service of DIISW

/2/ Motsnyi V. V. – Head of the technical department of DIISW

/3/ Turkyn M. B. – Deputy chief power engineer of DIISW

/4/ Filipov A.V. – Acting deputy chief power engineer of DIISW

/5/ Sinelnikov N.A. - Representative of electrical laboratory

/6/ Bogdanovich I.N. - Representative of the laboratory of metrology

/7/ Chayun O.N. - Acting head of the personnel technical education and training department of DIISW

/8/ Ivanov G.B. - Head of the Office for Standardization and Certification

/9/ Honcharenko S. G. – Head of the technical department of DIISW

/10/ Seredyuk V.V. – Ecology department manager of Institute for Environment and Energy Conservation Ltd.

/11/ Linnyk Y. - leading specialist of ecology department of Institute for Environment and Energy Conservation Ltd.

APPENDIX A: VERIFICATION PROTOCOL

BUREAU VERITAS CERTIFICATION HOLDING SAS

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
Project approvals by Parties involved				
90	Has the DFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest?	As to the other Party involved, although the PDD indicates it as Spain with "Endesa Carbono" company being a legal entity project participant, the written approval for the current JI project was issued by the Netherlands authorizing Endesa Carbono to participate in this Project for the purpose of article 6 of the Kyoto Protocol (Declaration of Approval ref. No 2011JI28 dated 05/07/2011 issued by NL Agency, implementing agency of the Ministry of Economic Affairs, Agriculture and Innovation of the Netherlands). This happened because of the fact that the Spanish company Endesa Carbono has its accounts in national registries of both Spain and the Netherlands.	OK	OK
91	Are all the written project approvals by Parties involved unconditional?	Yes, all the written project approvals by Parties involved are unconditional.	OK	OK
Project implementation				
92	Has the project been implemented in	Implementation of LF 1 was started in April 2007 and	CAR 01	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	was completed in June 2009 (according to the Protocol on object readiness for setting into operation dated 07/09/2009). Implementation of CCM 3 was started in May 2009 (according to the Protocol on object readiness for setting into operation dated 28/01/2011) and was completed in January 2011. Implementation of LF 2 was started in August 2008 (according to the Permit for construction works # 76 dated 22/08/2008) and is at the stage of commercial tests from the beginning of 2012. **CAR 01.** Please specify in section 7 the exact values provided in PDD for the indicated monitoring period.		
93	What is the status of operation of the project during the monitoring period?	Monitoring report indicated the current status of the project activity implementation. Based on provided materials, there is known that all project equipments were operational in the reporting period.	OK	OK
Compliance with monitoring plan				
94	Did the monitoring occur in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website?	Yes, monitoring occurs in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and verified changes and is so listed on the UNFCCC JI website.	OK	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
95 (a)	For calculating the emission reductions or enhancements of net removals, were key factors, e.g. those listed in 23 (b) (i)-(vii) above, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project taken into account, as appropriate?	Key factors, such as actual amount of total steel output in the project scenario, specific fuel and energy resources consumption in production processes, specific electricity consumption etc., influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project were taken into account, as appropriate.	OK	OK
95 (b)	Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent?	The data sources used for calculating emission reductions are clearly identified, reliable and transparent. Data sources include calibrated measuring equipment, enterprise's records, IPCC guidelines (1996 and 2006) etc. **CAR 02.** Numbering of references in the report has failures, please make corrections.	CAR 02	OK
95 (c)	Are emission factors, including default emission factors, if used for calculating the emission reductions or enhancements of net removals, selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?	Emission factors used for calculating the emission reduction by the project, such as CO_2 emission factors for each fuel, reducing agent (coke, anthracite, coal electrodes), other input (limestone, dolomite, pellets) and electricity consumption, are selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice. **CAR 03.** According to the PDD default emission factor for coke is 3,66 tonnes CO2e/tonne, and in the MR is	CAR 03	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		indicated 3,73. Please explain these changes in the MR.		
95 (d)	Is the calculation of emission reductions or enhancements of net removals based on conservative assumptions and the most plausible scenarios in a transparent manner?	The performed calculation of emission reductions is based on conservative assumptions and the most plausible scenarios in accordance with the methodology and formulas provided in the approved monitoring plan. **CAR 04.** In the provided file with calculations is indicated year 2011. Please, make correspondent changes. **CAR 05.** Please, for more accurate identification, add to the file with calculations information concerning the title of the project and the monitoring period.	CAR 04 CAR 05	OK OK
Applicable to JI SSC projects only				
96	Is the relevant threshold to be classified as JI SSC project not exceeded during the monitoring period on an annual average basis? If the threshold is exceeded, is the maximum emission reduction level estimated in the PDD for the JI SSC project or the bundle for the monitoring period determined?	N/a	N/a	N/a
Applicable to bundled JI SSC projects only				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
97 (a)	Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE?	N/a	N/a	N/a
97 (b)	If the determination was conducted on the basis of an overall monitoring plan, have the project participants submitted a common monitoring report?	N/a	N/a	N/a
98	If the monitoring is based on a monitoring plan that provides for overlapping monitoring periods, are the monitoring periods per component of the project clearly specified in the monitoring report? Do the monitoring periods not overlap with those for which verifications were already deemed final in the past?	N/a	N/a	N/a
Revision of monitoring plan				
Applicable only if monitoring plan is revised by project participant				
99 (a)	Did the project participants provide an appropriate justification for the proposed revision?	The approved monitoring plan in the determined PDD ver.8 was not revised by the project participants.	N/a	N/a
99 (b)	Does the proposed revision improve the accuracy and/or applicability of information collected compared to the original monitoring plan without changing conformity with the relevant rules and regulations for the establishment of monitoring plans?	N/a	N/a	N/a
Data management				

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
101 (a)	Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures?	The implementation of data collection procedures is in accordance with the monitoring plan. The monitoring of JI project indicators at DIISW is realized on regular basis where the system of data collection on fuel and energy resources consumption is being used. The data needed for the monitoring of the project is collected during the process of normal equipment use. The monitoring of the project is carried out according to standard operational practices established at the enterprise. The quality assurance procedures are based on the Plant's quality management system certified against the requirements of ISO 9001:2008 international standard. Moreover, the occupational health and safety management system in accordance with OHSAS 18001 standard and environmental management system in accordance with ISO 14001 were implemented at the Plant in 2009. **CAR 06.** According to the PDD general responsibility for the project realization is assigned to Chief engineer, and in the MR is indicated Technical director. Please, explain these changes.	CAR 06	OK
101 (b)	Is the function of the monitoring equipment, including its calibration status, is in order?	The monitoring equipment used for project monitoring is in order; its calibration status complies with the requirements.	CL 01 CL 02	OK

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
		CL 01. Please provide information concerning verification of the electricity meter И670 factory number 143541. **CL 02.** Monitoring period is indicated in the report as the first quarter of 2012 and Annex 1 contains monitoring equipment verified during the second quarter of 2012. Please explain it.		
101 (c)	Are the evidence and records used for the monitoring maintained in a traceable manner?	The evidence and records used for the monitoring are maintained in a traceable manner. Data is collected into electronic database of DIISW as well as in paper format. Data is further compiled in day-to-day records, quarterly records, and annual records. All records are finally stored in Planning-economic department. The interviews conducted during site visit demonstrated that monitoring records storage time is not clearly established and known by all responsible personnel.	OK	OK
101 (d)	Is the data collection and management system for the project in accordance with the monitoring plan?	The data collection and management system for the project is in accordance with the monitoring plan. **CL 03.** Please, provide certificates indicated in section 8 as “other”.	CL 03	OK
Verification regarding programs of activities (additional elements for assessment)				

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

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	− The complexity of the applicable technologies and/or measures used; − The geographical location of each JPA; − The amounts of expected emission reductions of the JPAs being verified; − The number of JPAs for which emission reductions are being verified; − The length of monitoring periods of the JPAs being verified; and − The samples selected for prior verifications, if any?			
107	Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation?	N/a	N/a	N/a
108	Has the AIE made site inspections of at least the square root of the number of total JPAs, rounded to the upper whole number? If the AIE makes no site inspections or fewer site inspections than the square root of the number of total JPAs, rounded to the upper whole number, then does the AIE provide a reasonable explanation and justification?	N/a	N/a	N/a
109	Is the sampling plan available for submission to the secretariat for the JISC.s ex ante assessment? (Optional)	N/a	N/a	N/a
110	If the AIE learns of a fraudulently included	N/a	N/a	N/a

DVM Paragraph	Check Item	Initial finding	Draft Conclusion	Final Conclusion
	JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing?			

Table 2 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR 01. Please specify in section 7 the exact values provided in PDD for the indicated monitoring period.	92	Information concerning estimated emission reductions for the first quarter of 2012 is now included in the monitoring report (MR). See MR version 2.	CAR 01 is closed.
CAR 02. Numbering of references in the report has failures, please make corrections.	95 (b)	Correspondent changes are provided in the MR. See MR version 2.	CAR 02 is closed due to the amendments made in the MR.

CAR 03. According to the PDD default emission factor for coke is 3,66 tonnes CO_{2e}/tonne, and in the MR is indicated 3,73. Please explain these changes in the MR.	95 (c)	It's provided in the PDD that at the stage of monitoring in emission reductions calculations has to be applied emission factor for coke based on the actual carbon content, in case if this data is available. Therefore, emission factor for coke was calculated, which is 3,754.	Based on the explanation received, CAR 03 is closed.
CAR 04. In the provided file with calculations is indicated year 2011. Please, make correspondent changes.	95 (d)	Correspondent changes are now provided in the file with calculations. See modified Excel-file.	CAR 04 is closed.
CAR 05. Please, for more accurate identification, add to the file with calculations information concerning the title of the project and the monitoring period.	95 (d)	Correspondent changes are now provided in the file with calculations. See modified Excel-file.	CAR 05 is closed.
CAR 06. According to the PDD general responsibility for the project realization is assigned to Chief engineer, and in the MR is indicated Technical director. Please, explain these changes.	101 (a)	Due to the reorganization at the plant, position of Chief engineer was abolished and now instead is Technical director position.	Based on the information received, CAR 06 is closed.

CL 01. Please provide information concerning verification of the electricity meter И670 factory number 143541.	101 (b)	Information concerning verification of the meter is now provided to the verifier.	Based on the information received, CL 01 is closed.
CL 02. Monitoring period is indicated in the report as the first quarter of 2012 and Annex 1 contains monitoring equipment verified during the second quarter of 2012. Please explain it.	101 (b)	List of monitoring equipment was reviewed and updated. See modified list of MR version 2.	Based on the explanation received, CL 02 is closed.
CL 03. Please, provide certificates indicated in section 8 as “other”.	101 (d)	Certificates are now provided to the verifier.	Due to the information provided, the issue is closed.