



BUREAU
VERITAS

VERIFICATION REPORT

JSC "POBUZHSKIY FERONIKELEVIY KOMBINAT"

VERIFICATION OF THE
"MODERNIZATION OF AN ENTERPRISE
REGARDING FUEL SWITCHING FROM FUEL OIL
TO NATURAL GAS AT PFC, LTD"

THIRD PERIODIC FOR THE PERIOD OF 01.01.2010-
31.08.2010

REPORT No. UKRAINE/0159/2010

REVISION No. 02

BUREAU VERITAS CERTIFICATION



VERIFICATION REPORT

| | |
|---|---|
| Date of first issue: 14/12/2010 | Organizational unit: Bureau Veritas Certification Holding SAS |
| Client: JSC "Pobuzhskiy feronikeleviy kombinat" | Client ref.: Mykyta V. Novikov |
| <p>Summary:</p> <p>Bureau Veritas Certification has made the 3rd periodic for the period of 01.01.2010-31.08.2010 verification of the "Modernization of an enterprise regarding fuel switching from fuel oil to natural gas at PFC, LTD", JI Registration Reference Number UA1000143, project of JSC "Pobuzhskiy feronikeleviy kombinat" located in Urban settlement Pobugskoye, Golovanivskiy District of Kirovohrad region, Ukraine, and applying the methodology ACM0009 "Consolidated methodology for industrial fuel switching from coal or petroleum fuels to natural gas" (Version 3.2), 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.</p> <p>The verification scope is defined as a periodic independent review and ex post determination by the Accredited Entity of the monitored reductions in GHG emissions during defined verification period, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.</p> <p>The first output of the verification process is a list of Clarification, Corrective Actions Requests, Forward Actions Requests (CR, CAR and FAR), presented in Appendix A.</p> <p>In summary, Bureau Veritas Certification confirms that the project is implemented as per determined changes. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project is ready to generate GHG emission reductions. The GHG emission reduction is calculated without material misstatements, and the ERUs issued totalize 87124 tons of CO₂eq for the monitoring period.</p> | |

| | |
|--|----------------------|
| Report No.: UKRAINE/0159/2010 | Subject Group: JI |
| Project title: "Modernization of an enterprise regarding fuel switching from fuel oil to natural gas at PFC, LTD" | |
| Work carried out by: Team Leader, Lead verifier: Kateryna Zinevych Team Member, verifier: Igor Kachan | |
| Work reviewed by: Ivan Sokolov - Internal Technical Reviewer | |
| Work approved by: Ivan Sokolov – Operational Manager | |
| Date of this revision: 19/12/2010 | Rev. No.: 02 |
| Number of pages: 30 | |

- No distribution without permission from the Client or responsible organizational unit
- Limited distribution
- Unrestricted distribution



| Table of Contents | | Page |
|--------------------------|---|-------------|
| 1 | INTRODUCTION | 3 |
| 1.1 | Objective | 3 |
| 1.2 | Scope | 3 |
| 1.3 | Verification Team | 3 |
| 2 | METHODOLOGY | 4 |
| 2.1 | Review of Documents | 4 |
| 2.2 | Follow-up Interviews | 5 |
| 2.3 | Resolution of Clarification, Corrective and Forward Action Requests | 5 |
| 3 | VERIFICATION CONCLUSIONS | 6 |
| 3.1 | Project approval by Parties involved (90-91) | 6 |
| 3.2 | Project implementation (92-93) | 6 |
| 3.3 | Compliance of the monitoring plan with the monitoring methodology (94-98) | 7 |
| 3.4 | Revision of monitoring plan (99-100) | 7 |
| 3.5 | Data management (101) | 8 |
| 3.6 | Verification regarding programmes of activities (102-110) | 10 |
| 4 | VERIFICATION OPINION | 11 |
| 5 | REFERENCES | 13 |

APPENDIX A: COMPANY PROJECT VERIFICATION PROTOCOL



1 INTRODUCTION

JSC “Pobuzhskiy feronikeleviy kombinat” has commissioned Bureau Veritas Certification to verify the emissions reductions of its JI project "Modernization of an enterprise regarding fuel switching from fuel oil to natural gas at PFC, LTD" (hereafter called “the project”) at Urban settlement Pobugskoye, Golovanivskiy District of Kirovohrad region, Ukraine.

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

1.1 Objective

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

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

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

1.2 Scope

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

The verification is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective 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:

Kateryna Zinevych
Bureau Veritas Certification Team Leader, Climate Change Verifier



Igor Kachan
Bureau Veritas Certification Climate Change Verifier

This verification report was reviewed by:

Ivan Sokolov
Bureau Veritas Certification, Internal Technical Reviewer

2 METHODOLOGY

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

In order to ensure transparency, a verification protocol was customized for the project, according to the version 01.1 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 determination protocol is enclosed in Appendix A to this report.

2.1 Review of Documents

The Monitoring Report (MR) submitted by “Centre-TEST” LLC and additional background documents related to the project design and baseline, i.e. country Law, Project Design Document (PDD), Approved CDM methodology (if applicable) and/or Guidance on criteria for baseline setting and monitoring, Host party criteria, Kyoto Protocol, Clarifications on Verification Requirements to be Checked by an Accredited Independent Entity were reviewed.

The verification findings presented in this report relate to the Monitoring Report version(s) 04 and project as described in the determined PDD.



2.2 Follow-up Interviews

On 19/10/2010 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 LTD “Pobuzhskiy feronikeleviy kombinat”, “Centre-TEST” LLC were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

| Interviewed organization | Interview topics |
|---|--|
| LTD “Pobuzhskiy feronikeleviy kombinat” | Organizational structure. Responsibilities and authorities. Training of personnel. Quality management procedures and technology. Implementation of equipment (records). Metering equipment control. Metering record keeping system, database. Social impacts. Environmental impacts. |
| Consultant: LLC “Centre TEST” | 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 AIE 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.

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 1 Corrective Action Request, 1 Clarification Request.

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

3.1 Project approval by Parties involved (90-91)

Written project approval by Ukraine and the Netherlands has been issued by the NFP of that Party when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest. (see Reference)

The abovementioned written approval is unconditional.

3.2 Project implementation (92-93)

The implementation status of the project is fully operational during the whole monitoring period, which is 01/01/2010 – 31/08/2010, and the starting date of operation is 05/07/2005.



The main project purpose is to reduce greenhouse gas (GHG) emission due to fuel switching from fuel oil to natural gas. GHG emission reduction can be achieved by modernization of a fuel system.

To fulfill this project the enterprise constructed a gas pipeline connected to the public gas transmission system, which provided use of natural gas instead of fuel oil for combustion in the respective production. Also, in order to increase efficiency of natural gas using the enterprise replaced gas burners.

Due to the absence of the project for production at the enterprise fuel oil was used as fuel, and the main greenhouse gas emissions from fuel combustion are CO₂ emissions. The proposed project allowed the enterprise to switch from oil fuel to another one – natural gas. Greenhouse gas emissions will be reduced at the expense of the fact that carbon content in fuel oil is much higher than in natural gas, and the lower combustion value of fuel oil is much higher compared to natural gas.

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

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

For calculating the emission reductions or enhancements of net removals, key factors, influencing the baseline emissions or net removals and the activity level of the project and the emissions or removals as well as risks associated with the project were taken into account, as appropriate.

Data sources used for calculating emission reductions or enhancements of net removals are clearly identified, reliable and transparent.

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

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

3.4 Revision of monitoring plan (99-100)



The project participants provided an appropriate justification for the proposed revision, which considers the NCV estimation. “National Cadastre of Anthropogenic Emissions and Greenhouse Gas Absorption of Ukraine for 1990-2008” (from now on – “National Cadastre of Ukraine”) was used to estimate this parameter during previous monitoring periods but in order to increase level of accuracy data from SE “Ukrtransgas” and UMG “Cherkasytransgas”, which is gas provider for PFC, LTD, were used. Renewed version of the “National Cadastre of Ukraine” does not identify parameter of emission factor for the burning fuels, which is why for the estimation of this parameter the data from IPCC 1996 was taken.

The proposed revision improves the accuracy and applicability of information collected compared to the original monitoring plan since the data for NCV is estimated each month, which increases level of accuracy, without changing conformity with the relevant rules and regulations for the establishment of monitoring plans.

3.5 Data management (101)

Key monitoring activities are:

- measurement of fuel consumption (natural gas) of the PFC LTD fuel system for the production needs;
- estimation of energy efficiency of the system working on the natural gas.

Natural gas consumption is measured directly with the help of gas flue meters. Gas flue meter is connected to the gas pipeline and is providing the measurement of natural gas consumption entering the system. The estimation of energy efficiency is performed on the basis of the meters data, passport data of the burners, and ГООТ 21204.

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. These procedures are mentioned in the section “References” of this report.

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

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

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



saved in a paper way. Measurement performance and data archiving is envisaged to the exploitation team. The measurement results are given to the monitoring team for the estimation of GHG emissions reductions. The monitoring team responsibilities are collection of the data that can not be measured, but need to be monitored. The Chief Engineer is responsible for preparation and archiving of monitoring reports.

Third parties involved

SE "Ukrmetrteststandart" is authorized to conduct of verification and calibration of the measurement devices.

SE "Western expert-technical centre of the national research-scientific institute of the production and labour safety" performs the calculations of the energy efficiency of the system. SE Western expert-technical center of the national research-scientific institute of the production and labor safety" is authorized to perform this kind of work and posses all the required licenses.

Calculation of efficiency of the system working on fuel oil was performed by LTD "Ukr TEST", which posses all required licenses.

Operational team

PFC, LTD general director assigns the responsible personnel, who are obliged to provide exploitation and maintenance of the fuel system as well as providing stability and effectiveness of system work. These functions are as well foreseeing all necessary for monitoring data registration. Personnel are also responsible for maintaining optimal exploitation level.

Functions and responsibilities of monitoring team determined by the Order of General Director of PFC, LTD #294 dated 23.11.2009. Monitoring staff identified by the Order of General Director of PFC, LTD #300 dated 30.11.2009.

The fuel system performance monitoring group is headed by Chief Engineer of PFC, LTD. Monitoring is conducted in close contact with the exploitation team and include monitoring, as well as analysis and archiving of all monitoring data. Calculation of the emission reduction volume is also an obligation of the monitoring team. Periodical data on natural gas consumption is analyzed in respect of the respective registered factors provided by the exploitation team to confirm their consistency. In case of discrepancies between the data their origin may be established in cooperation with the exploitation team. If any discrepancy is detected in monitoring data, respective adjustment shall be made in the monitoring system of a respective factor or the monitoring system of the fuel system.



The Chief Engineer is responsible for preparation and archiving of monitoring reports. The General Director regularly analyses the consolidated monitoring data and respective documentation.

Measurement performance and measurement data archiving is envisaged to the exploitation team.

The measurement results are given to the monitoring team for the estimation of emission reductions. The monitoring team responsibilities are collection of the data that can not be measured, but need to be monitored. Measurement results of natural gas consumption are registered as Statement of transferring-acceptance of services of natural gas transportation that signed by representatives of PFC, LTD and an enterprise that supplies natural gas. Estimation results of energy efficiency of the system working fired with natural gas are registered as a regime card.

Monitoring data is kept during all crediting period and for 2 years after the last estimation of emissions reduction units.

Environmental impact

The proposed interference into the existing production scheme has a positive environmental impact owing to switching of PFC, LTD from fuel oil to natural gas and will correspondingly lead to greenhouse gas emissions reduction into the air.

Emissions reduction will occur as a result of realization of this project, namely: at the expense of the fact that carbon content in fuel oil is much higher than in natural gas, and lower calorific value of fuel oil is higher than in natural gas.

Emissions reduction, achieved as a result of implementation of this project, has environmental impact in Ukraine and does not impact greenhouse gas emissions abroad Ukraine.

Environment Impact Assessment (EIA) has been conducted for the proposed JI project. The environmental characteristics and impact evaluation in compliance with EIA has been presented in the PDD version 05. According to the EIA opinion, fuel switch on the enterprise will lead to the significant pollutant emissions reductions of the fuel system that will have positive effect on the population of the nearby area.

3.6 Verification regarding programs of activities (102-110)

Not applicable.



4 VERIFICATION OPINION

Bureau Veritas Certification has performed the 3rd periodic for the period of 01.01.2010-31.08.2010 verification of the "Modernization of an enterprise regarding fuel switching from fuel oil to natural gas at PFC, LTD", JI Registration Reference Number UA1000143, project of JSC "Pobuzhskiy feronikeleviy kombinat" located in Urban settlement Pobugskoye, Golovanivskyi District of Kirovohrad region, Ukraine, which applies the methodology ACM009 "Consolidated methodology for industrial fuel switching from coal or petroleum fuels to natural gas" (Version 3.2). 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 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 PFC, LTD is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the project on the basis set out within the project Monitoring and Verification Plan indicated in the final PDD version 05. 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 04 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as per determined changes. 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 calculated without material misstatements. Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the approved project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period: From 01/01/2010 to 31/08/2010

| | | |
|--------------------|----------|--------------------------------|
| Baseline emissions | :194 681 | t CO ₂ equivalents. |
| Project emissions | :107557 | t CO ₂ equivalents. |



Emission Reductions : 87124 t CO₂ equivalents.



5 REFERENCES

Category 1 Documents:

Documents provided by PFC, LTD that relate directly to the GHG components of the project.

- /1/ Project Design Document, version 05 dated 27/01/2010
- /2/ Monitoring Report version 01
- /3/ Monitoring Report version 03
- /4/ Monitoring Report version 04
- /5/ Emission reductions calculations excel spreadsheet version 04
- /6/ Determination Report by Bureau Veritas Certification Holding SAS No UKRAINE/0068/2009 of 15/02/2010
- /7/ Verification Report by Bureau Veritas Certification Holding SAS No UKRAINE/0091/2010 of 21/03/2010
- /8/ Verification Report by Bureau Veritas Certification Holding SAS No UKRAINE/0106/2010 of 21/03/2010
- /9/ Letter of Approval of National Environmental Investment Agency of Ukraine No 188/23/7 of 05/03/2010
- /10/ Letter of Approval of the Ministry of Economic Affairs of the Netherlands No 2010JI08 of 13/04/2010

Category 2 Documents:

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

1. Statement on acceptance-transferring of services of natural gas transportation dated 31.01.2009.
2. Statement on acceptance-transferring of natural gas dated 18.02.2009.
3. Statement on acceptance-transferring of natural gas dated 31.03.2009.
4. Statement on acceptance-transferring of natural gas dated 30.04.2009.
5. Statement on acceptance-transferring of natural gas dated 31.05.2009.
6. Statement on acceptance-transferring of natural gas dated 30.06.2009.
7. Statement on acceptance-transferring of natural gas dated 31.07.2009.
8. Statement on acceptance-transferring of natural gas dated 31.08.2009.
9. Statement on acceptance-transferring of natural gas dated 30.09.2009.
10. Statement on acceptance-transferring of natural gas dated 31.10.2009.
11. Statement on acceptance-transferring of natural gas dated 30.11.2009.
12. Statement on acceptance-transferring of natural gas dated 31.12.2009.
13. Statements on implementation of services of natural gas transportation



VERIFICATION REPORT

- dated 31.01.2008.
14. Statements on implementation of services of natural gas transportation dated 29.02.2008.
 15. Statements on implementation of services of natural gas transportation dated 31.03.2008.
 16. Statements on implementation of services of natural gas transportation dated 30.04.2008.
 17. Statements on implementation of services of natural gas transportation dated 31.05.2008.
 18. Statements on implementation of services of natural gas transportation dated 30.06.2008.
 19. Statements on implementation of services of natural gas transportation dated 31.07.2008.
 20. Statemennt on acceptance-transferring of natural gas transportation dated 31.08.2008.
 21. Statement on acceptance-transferring of natural gas dated 31.08.2008.
 22. Statement #1 on acceptance-transferring of natural gas according to the contract dated 01.07.2008 #П-01/913-ПГ 2008.
 23. Statement #440/09-08 on acceptance-transferring of natural gas dated 30.09.2008.
 24. Statement of acceptance-transferring of natural gas dated 30.09.2008.
 25. Statement of transferring-acceptance of naturalt gas dated 30.09.2008.
 26. Statements of acceptance-transferring of natural gas dated 31.10.2008.
 27. Statement of transferring-acceptance of naturalt gas dated 31.10.2008.
 28. Statement of acceptance-transferring of natural gas dated 30.11.2008.
 29. Statement of acceptance-transferring of natural gas dated 31.12.2008.
 30. Statement on acceptance-transferring of services of natural gas transportation dated 31.12.2008.
 31. Information letter of mazut consumption for 2004.
 32. Information letter #572 dated 28.12.2009.
 33. Statement on implementation of services of natural gas transportation dated 31.06.2005.
 34. Statement on implementation of services of gas transportation dated 31.07.2005.
 35. Statement on implementation of services of natural gas transportation dated 31.08.2005.
 36. Statement on implementation of services of natural gas transportation dated 01.10.2005.
 37. Statement on implementation of services of natural gas transportation dated 01.11.2005.
 38. Statement on implementation of services of natural gas transportation dated 01.12.2005.



VERIFICATION REPORT

39. Statement on implementation of services of natural gas transportation dated 31.12.2005.
40. Statement of implementation of services for transportation of natural gas dated 10.10.2006.
41. Statement of implementation of services for transportation of natural gas dated 12.03.2007.
42. Statement of implementation of services for transportation of natural gas dated 12.02.2007.
43. Statement of implementation of services for transportation of natural gas dated 12.02.2007 according to the Contract # П-01/3505-ПГ/2006.
44. Statement of implementation of services for transportation of natural gas dated 20.02.2006.
45. Statement of implementation of services for transportation of natural gas dated 20.08.2006.
46. Statement of implementation of services for transportation of natural gas dated 28.02.2006.
47. Statement of implementation of services for transportation of natural gas dated 28.02.2007.
48. Statement of implementation of services for transportation of natural gas dated 30.02.2006.
49. Statement of implementation of services for transportation of natural gas dated 30.09.2007 according to the Contract # П-01/3505-ПГ/2006.
50. Statement of implementation of services for transportation of natural gas dated 30.09.2007 according to the Contract # 45/07-Г-К.
51. Statement of implementation of services for transportation of natural gas dated 30.04.2006 according to the Contract # 15-16725/05 dated 11.05.2005 SC "Gas of Ukraine".
52. Statement of implementation of services for transportation of natural gas dated 30.04.2006 according to the Contract # 15-16725/05 dated 11.05.2005 LLC "Fiesta".
53. Statement of implementation of services for transportation of natural gas dated 30.04.2007 according to the Contract # 01-K/07.
54. Statement of implementation of services for transportation of natural gas dated 30.11.2006 according to the Contract # П-007-ПГ/06-1224.
55. Statement of implementation of services for transportation of natural gas dated 30.11.2006 according to the Contract # П-01/3505-ПГ/2006.
56. Statement of implementation of services for transportation of natural gas dated 30.11.2007 according to the Contract # П-01/3505-ПГ/2006.
57. Statement of implementation of services for transportation of natural gas dated 30.11.2007 according to the Contract # 308/07.
58. Statement of implementation of services for transportation of natural gas dated 30.11.2007 according to the Contract # 45/07-Г-К.
59. Statement of implementation of services for transportation of natural gas dated 30.11.2007 according to the Contract # 90/07.
60. Statement of implementation of services for transportation of natural gas dated 30.06.2006 according to the Contract # 15-16725/05 dated 19.12.2005 LLC "Fiesta".



VERIFICATION REPORT

61. Statement of implementation of services for transportation of natural gas dated 30.06.2007 according to the Contract # 308/07.
62. Statement of implementation of services for transportation of natural gas dated 30.06.2007 according to the Contract # П-01/3505-ПГ/2006.
63. Statement of implementation of services for transportation of natural gas dated 31.03.2006 according to the Contract # 15-16725/05 dated 11.05.2005 SC "Gas of Ukraine".
64. Statement of implementation of services for transportation of natural gas dated 31.05.2006 according to the Contract # 15-16725/05 dated 11.05.2005 LLC "Fiesta".
65. Statement of implementation of services for transportation of natural gas dated 31.12.2006.
66. Statement of implementation of services for transportation of natural gas dated 31.12.2007 according to the Contract # 1/3505-ПГ/2006.
67. Statement of implementation of services for transportation of natural gas dated 31.12.2007 according to the Contract # 308/07.
68. Statement of implementation of services for transportation of natural gas dated 30.12.2007 according to the Contract # 90/07.
69. Statement of implementation of services for transportation of natural gas dated 31.10.2006.
70. Statement of implementation of services for transportation of natural gas dated 31.10.2007 according to the Contract # 1/3505-ПГ/2006.
71. Statement of implementation of services for transportation of natural gas dated 30.10.2007 according to the Contract # 45/07-Г-К.
72. Statement of implementation of services for transportation of natural gas dated 31.10.2007 according to the Contract # 90/07.
73. Statement of implementation of services for transportation of natural gas dated 31.07.2006.
74. Statement of implementation of services for transportation of natural gas dated 31.07.2007.
75. Statement of implementation of services for transportation of natural gas dated 31.08.2006.
76. Statement of implementation of services for transportation of natural gas dated 31.08.2007.
77. Statement of implementation of services for transportation of natural gas dated 31.01.2006.
78. Statement on implementation of services of natural gas transportation dated 31.01.2007.
79. Statement on implementation of services of natural gas transportation dated 31.05.2006 in compliance with Contract #15-16725/05 dated 11.05.2005 LLC "Fiesta".
80. Statement on implementation of services of natural gas transportation dated 31.05.2007 in compliance with Contract #90/07-г.
81. Statement on implementation of services of natural gas transportation dated 31.05.2007 in compliance with Contract #П-01/3505-ПГ/2006.
82. Statement of state commission of built facility readiness for presentation to the state entrance examination dated 05.07.2006.



VERIFICATION REPORT

83. Statement of acceptance of equipment to assemblage according to the facility. Replacement of burner devices CHГ-54 at ТВП #1.
84. Statement of acceptance of equipment to assemblage according to the facility. Replacement of burner devices CHГ-54 at ТВП #2.
85. Statement of acceptance of equipment to assemblage according to the facility. Replacement of burner devices CHГ-54 at ТВП #3.
86. Statement of acceptance of equipment to assemblage according to the facility. Replacement of burner devices CHГ-54 at ТВП #4.
87. Statement of job acceptance of repaired, reconstructed, and modernized facilities. Burning shop ТВП #1.
88. Statement of job acceptance of repaired, reconstructed, and modernized facilities. Burning shop ТВП #2.
89. Statement of job acceptance of repaired, reconstructed, and modernized facilities. Burning shop ТВП #3.
90. Statement of job acceptance of repaired, reconstructed, and modernized facilities. Burning shop ТВП #4.
91. Newspaper of Golovanivsk district council and working complex of editorial office "Visnyk Golovanivshzhyny" #43 (8914) dated 11.08.2007.
92. Order of Ministry of Fuel and Energy of Ukraine #293 dated 04.07.2005 on appointment of the state commission.
93. Project of nickel production plan for 2010 (working РТП№1и2+PK3-4,5).
94. Protocol #30 of meeting of commission of verification of knowledge of engineer and technical workers of LLC "Pobuzhsky Feronokelevyi Kombinat" dated 11.03.2005.
95. Protocol of LLC "Uchbovo-kursovyi kombinat" #66 dated 03.06.2005.
96. Design of nickel production for August 2009.
97. Design of nickel production for April 2009.
98. Design of nickel production for December 2009.
99. Design of nickel production for July 2009.
100. Design of nickel production for June 2009.
101. Design of nickel production for May 2009.
102. Design of nickel production for March 2009.
103. Design of nickel production for November 2009.
104. Design of nickel production for October 2009.
105. Design of nickel production for September 2009.
106. Design of nickel production for January 2009.
107. Resolution of Pobuzka Local Council #230 dated 10.10.2007 On concession of the permission for construction of gas supply network of the industrial area of LLC "Pobuzkyi ferronickel plant".
108. Resolution of Pobuzka Local Council #237 dated 10.10.2007 On concession of the permission for allocation of land from the location of



VERIFICATION REPORT

- HRP, pipeline and crane units in the area of Pobuzkoyi Local Council.
109. Resolution of Pobuzka Local Council #417 dated 15.08.2008 On acceptance and transmission of gas-distributing point and a suitable gas-tap of high and medium pressure to village Pobuzke.
 110. Order of Cabinet of Ministers of Ukraine dated 25/12/2002 #723-p On gasification of settlements of Gaivoronskyi, Ulianovskyi and Golovanivskyi districts of Kirovogradska region
 111. Attestation certificate #1933. Issued from 25.09.2006., valid to 20.09.2010.
 112. Gas turbine meter TZ/FLUXI №6459706001. Pasport. Date of last verification: 24.03.09.
 113. Gas turbine meter TZ/FLUXI №6459706002. Pasport. Date of last verification: 26.08.09.
 114. Photo. Actaris/ TZ/Fluxi 2150. G1000.
 115. Statement on acceptance-transferring of services of natural gas transportation dated 31.01.2009.
 116. LLC "PFP". Case from 01.01.2010. Natural gase assessment
 117. Report about ambient air protection in 1st quarter 2010.
 118. Explanation note to report 2 ТП (air) in 1st quarter 2010.
 119. Report about ambient air protection in 2nd quarter 2010.
 120. Explanation note to report 2 ТП (air) in 2nd quarter 2010.
 121. Permission № 3521455500-24 on emmision of contaminants to ambient air by stationary sources from 31.12.2008. Valid up to 31.12.2013.
 122. Permission on special usage of water from 22.01.2010. № 10747
 123. Permission on special usage of water from 22.05.2010. № 10077. Valid to 22.05.2013.
 124. LLC "PFP" Project "Enterprice modernization concerning substitution of fuel from black oil to natural gas at LLC "PFP"". List of expenditures for natural gas.
 125. Statement of acceptance and transfer of natural gas. Kyiv from 31.08.2010
 126. Statement of acceptance and transfer of natural gas. Kyiv from 31.07.2010
 127. Statement of acceptance and transfer of natural gas. Kyiv from 30.06.2010
 128. Statement of acceptance and transfer of natural gas. Kyiv from 31.05.2010
 129. Statement of acceptance and transfer of natural gas. Kyiv from 30.04.2010
 130. Statement of acceptance and transfer of natural gas. Kyiv from 31.03.2010
 131. Statement of acceptance and transfer of natural gas. Kyiv from 28.02.2010



VERIFICATION REPORT

132. Statement of acceptance and transfer of natural gas. Kyiv from 31.01.2010
133. Working card of technical and production department in a august 2010.
134. Working card of technical and production department in a july 2010.
135. Working card of technical and production department in a july 2010.
136. Working card of technical and production department in a may 2010.
137. Working card of technical and production department in a april 2010.
138. Working card of technical and production department in a march 2010.
139. Working card of technical and production department in a february 2010.
140. Working card of technical and production department in a january 2010.
141. Permission for operation starting № 8 OS from 12.01.1996. Issued by State Committee of Supervision for labour protection.
142. Permission for continuation of operation performance for danger increase № 1634.09.30-74.30.0. Permission is valid from 05.06.2009 to 05.06.2014. Issued by State Committee of Ukraine on industrial safety, labour protection and mining supervision.
143. Annex to permission № 1634.09.30-74.30.0. Date of issue 05.06.2009.
144. Accreditation certificate № 2H436 from 18.08.2008. Valid to 17.08.2011. Issued by National Agency of Accreditation of Ukraine.
145. Report of commission of experts on labour protection and industrial safety. № 6307.10.46.40.30.0/7342 from 13.10. 2010. Issued by Westering expert-technical center of national research institute of industrial safety and labour protection.
146. Mode card of TPD №1 LLC "PFP" with two burners ЧГ-55, fuel natural gas. Approved 03.01.2010.
147. Mode card of gas burners operation TPD №2, fuel natural gas. Approved 03.01.2010.
148. Mode card of gas burners operation TPD №3, fuel natural gas. Approved 03.01.2010.
149. Mode card of TPD №4 LLC "PFP" with two burners ВРАД PFP-4, fuel natural gas. Approved 03.01.2010.
150. Certification of attestation № 2608. Issued 10.06.2010. Valid to 09.06.2015. Issued by State Committee on technical regulation and consumer's policy.
151. Report № 5 of meeting of commission on examination of labour protection. From 14.10.2010.
152. Report № 139 of meeting of commission on examination of labour protection. From 10.12.2010.
153. Report № 137 of meeting of commission on examination of labour protection. From 07.12.2009.
154. Order № 300 from 30.11.2009. About formation of monitoring group.
155. Order № 294 LLC "PFP" from 23.11.2009. About formation of



monitoring group.

156. Pasport.Turbine gas counters. Serial number 6459706001

157. Pasport.Turbine gas counters. Serial number 6459706002

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/ Khalabuzar Victor – financial management
- /2/ Kolesnikov Victor – consultant-specialist JSC “Centre TEST”
- /3/ Victor Romanenko – Chief engineer PFK
- /4/ Aleksandr Lisnevskiy – Head of the gas service PFK
- /5/ Inna Sokolova – engineer ecologist PFK
- /6/ Lidiia Linishevskaya – Head of the training department PFK
- /7/ Lyudmila Moroz – Human Resources PFK
- /8/ Oleg Sergeyev – Head energetic PFK
- /9/ Ivan Kapran – Head of the professional technical department PFK



VERIFICATION REPORT

VERIFICATION PROTOCOL

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

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|--|---|---|--|--|------------|
| Project approvals by Parties involved | | | | | |
| 90 | Has the NFPs of at least one Party involved, other than the host Party, issued a written project approval when submitting the first verification report to the secretariat for publication in accordance with paragraph 38 of the JI guidelines, at the latest? | The project has been approved by both NFPs. The Letters of Approval were presented to the verification team. Letters of Approval by both Parties were submitted to the secretariat on the final determination stage. | N/a | N/a | OK |
| 91 | Are all the written project approvals by Parties involved unconditional? | Yes, all the written project approvals by Parties involved are unconditional. | N/a | N/a | OK |
| Project implementation | | | | | |
| 92 | Has the project been implemented in accordance with the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website? | To fulfill this project the enterprise constructed a gas pipeline connected to the public gas transmission system, which provided use of natural gas instead of fuel oil for combustion in the respective production. Also, in order to increase efficiency of natural gas using the enterprise | N/a | N/a | OK |



VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|--|--|---|--|--|------------|
| | | replaced gas burners. | | | |
| 93 | What is the status of operation of the project during the monitoring period? | Project has been operational for the whole monitoring period, which is 01.01.2010 – 31.08.2010. | N/a | N/a | 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? | <p>Yes, the monitoring occurred in accordance with the monitoring plan included in the PDD regarding which the determination has been deemed final and is so listed on the UNFCCC JI website.</p> <p>CAR 1. According to determined PDD version 5 ERUs for the monitoring period were supposed to be 66505 tCO₂e but MR version 1 showed ERUs amount as 88 954 tCO₂e. Clarify the difference.</p> | <p>CAR 1. The main reason of the ERUs amount increasing is increasing of the productional volumes, which was the cause for the increasing of natural gas combustion level (in the baseline scenario it would led to increase of fuel oil combustion level). At the moment of PDD creation it was difficult to estimate the production volumes, which were hardly influenced by world</p> | The issue is closed. | OK |



VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|---------------|---|--|--|--|------------|
| | | | economic crisis. | | |
| 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? | Yes, for calculating the emission reductions or enhancements of net removals, 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 were taken into account, as appropriate. | N/a | N/a | OK |
| 95 (b) | Are data sources used for calculating emission reductions or enhancements of net removals clearly identified, reliable and transparent? | Yes, data sources used for calculating emission reductions or enhancements of net removals are clearly identified, reliable and transparent | N/a | N/a | 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? | Yes, emission factors, including default emission factors, that are used for calculating the emission reductions or enhancements of net removals, are selected by carefully balancing accuracy and reasonableness, and | N/a | N/a | OK |



BUREAU
VERITAS

VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|---|--|---|--|--|------------|
| | | appropriately justified of the choice. | | | |
| 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 | N/a |
| Applicable to bundled JI SSC projects only | | | | | |
| 97 (a) | Has the composition of the bundle not changed from that is stated in F-JI-SSCBUNDLE? | N/a | 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 | 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 | 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 | Yes, project participants provided an appropriate | N/a | N/a | N/a |



VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|------------------------|---|--|---|--|------------|
| | revision? | justification for the proposed revision, which was fully described in the MR version 3. | | | |
| 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 | N/a |
| Data management | | | | | |
| 101 (a) | Is the implementation of data collection procedures in accordance with the monitoring plan, including the quality control and quality assurance procedures? | Yes, the implementation of data collection procedures is in accordance with the monitoring plan, including the quality control and quality assurance procedures. CL 1. Please clarify why gas meter №6459706001 was calibrated 16.03.2010, while this meter should be calibrated every 2 years and last calibration date is 24.03.2009. | CL 1. According to the passport data of the indicated meter calibration interval is 2 years but as it is indicated in the Table 3 of the MR version 1 procedure and method of calibration is defined by SE "Ukrmetrtest-standart". This meters calibration was performed earlier on the request of this | The issue is closed. | OK |



VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|---|--|--|--|--|------------|
| | | | entity. | | |
| 101 (b) | Is the function of the monitoring equipment, including its calibration status, is in order? | Yes, the function of the monitoring equipment, including its calibration status is in order. | N/a | N/a | OK |
| 101 (c) | Are the evidence and records used for the monitoring maintained in a traceable manner? | Yes, the evidence and records used for the monitoring are maintained in a traceable manner | N/a | N/a | OK |
| 101 (d) | Is the data collection and management system for the project in accordance with the monitoring plan? | Yes, the data collection and management system for the project is in accordance with the monitoring plan | N/a | N/a | OK |
| Verification regarding programs of activities (additional elements for assessment) | | | | | |
| 102 | Is any JPA that has not been added to the JI PoA not verified? | N/a | 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 | 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 | N/a |
| 104 | Does the monitoring period not overlap with previous monitoring periods? | N/a | 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 | N/a |
| Applicable to sample-based approach only | | | | | |
| 106 | Does the sampling plan prepared by the AIE: (a) Describe its sample selection, taking into | N/a | N/a | N/a | N/a |



BUREAU
VERITAS

VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|---------------|--|-----------------|--|--|------------|
| | 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: <ul style="list-style-type: none"> - The types of JPAs; - The complexity of the applicable technologies and/or measures used; - The geographical location of each JPA; - The amounts of expected emission reductions of the JPAs being verified; - The number of JPAs for which emission reductions are being verified; - The length of monitoring periods of the JPAs being verified; and - The samples selected for prior verifications, if any? | | | | |
| 107 | Is the sampling plan ready for publication through the secretariat along with the verification report and supporting documentation? | N/a | 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 | N/a |



VERIFICATION REPORT

| DVM Paragraph | Check Item | Initial finding | Action requested to project participants | Review of project Participants' action | Conclusion |
|---------------|---|-----------------|--|--|------------|
| 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 | N/a |
| 110 | If the AIE learns of a fraudulently included JPA, a fraudulently monitored JPA or an inflated number of emission reductions claimed in a JI PoA, has the AIE informed the JISC of the fraud in writing? | N/a | N/a | N/a | N/a |



VERIFICATION REPORT

APPENDIX B: VERIFICATION TEAM

The verification team consists of the following personnel:

Kateryna Zinevych, M.Sci. (environmental science)

Team Leader, Climate Change Lead Verifier
Bureau Veritas Ukraine Health, Safety and Environment Department Project Manager

Kateryna Zinevych has graduated from National University of Kyiv-Mohyla Academy with the Master Degree in Environmental Science. She has experience at working in a professional position (analytics) involving the exercise of judgment, problem solving and communication with other professional and managerial personnel as well as customers and other interested parties at analytical centre “Dergzovnishinform” and “Bureau Veritas Ukraine” LLC. She has successfully completed IRCA registered Lead Auditor Training Course for Environment Management Systems and Quality Management Systems. She has successfully completed Climate Change Verifier Training Course and she participated as verifier in the determination/verification of 26 JI projects.

Igor Kachan, Ph.D. (chemistry)

Team member, Climate Change Verifier
Bureau Veritas Ukraine,
Health, Safety and Environment Department Project Manager

Igor Kachan has graduated from Kyiv National Taras Shevchenko University and took the Ph.D. degree in the analytical chemistry speciality. He has successfully completed IRCA registered Lead Auditor Training Course for Environment Management Systems and Quality Management Systems. Igor Kachan has undergone a training course on Clean Development Mechanism/Joint Implementation and participated in determination/verification of more than 20 JI projects.

The verification report was reviewed by:



VERIFICATION REPORT

Ivan G. Sokolov, Dr. Sci. (biology, microbiology)

Internal Technical Reviewer, Climate Change Lead Verifier, Bureau Veritas Certification Holding SAS Local Climate Change Product Manager for Ukraine

Acting CEO Bureau Veritas Ukraine

He has over 25 years of experience in Research Institute in the field of biochemistry, biotechnology, and microbiology. He is a Lead auditor of Bureau Veritas Certification for Environment Management System (IRCA registered), Quality Management System (IRCA registered), Occupational Health and Safety Management System, and Food Safety Management System. He performed over 140 audits since 1999. Also he is Lead Tutor of the IRCA registered ISO 14000 EMS Lead Auditor Training Course, and Lead Tutor of the IRCA registered ISO 9000 QMS Lead Auditor Training Course. He is Lead Tutor of the Clean Development Mechanism /Joint Implementation Lead Verifier Training Course and he was involved in the determination/verification over 60 JI/CDM projects.