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26/04/2012

DETERMINATION REPORT

CARBONTRUST LIMITED

DETERMINATION OF THE
UTILIZATION OF ASSOCIATED
PETROLEUM GAS AT THE FIELDS
OF COMPANIES OF TNK-BP GROUP,
ORENBURG OBLAST

REPORT No. RUSSIA-DET/0282/2012

REVISION No. 01

BUREAU VERITAS CERTIFICATION



Determination Protocol on JI project

Utilization of Associated Petroleum Gas at the fields of companies of TNK-BP group, Orenburg Oblast

Date of first issue: 26/04/2012	Organizational unit: Bureau Veritas Certification Holding SAS
Client: CARBONTRUST LIMITED	Client ref.: Mrs. Jolanta Narmontaite
<p>Summary:</p> <p>Bureau Veritas Certification has made the determination of the “Utilization of associated petroleum gas at the fields of companies of TNK-BP group, Orenburg oblast” project of company CARBONTRUST LIMITED, 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 determination scope is defined as an independent and objective review of the project design document, the project’s baseline study, monitoring plan and other relevant documents, and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final determination report and opinion. The overall determination, from Contract Review to Determination Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.</p> <p>The first output of the determination process is a list of Corrective Actions, Clarification, and Further Actions Requests, presented in Appendix A. Taking into account this output, the project proponent revised its project design document.</p> <p>In summary, it is Bureau Veritas Certification’s opinion that the project applies the appropriate baseline and monitoring methodology and meets the relevant UNFCCC requirements for the JI and the relevant host country criteria.</p>	

Report No.: RUSSIA-det/0282/2012	Subject Group: JI	<input checked="" type="checkbox"/> No distribution without permission from the Client or responsible organizational unit
Project title: “Utilization of associated petroleum gas at the fields of companies of TNK-BP group, Orenburg oblast”		<input type="checkbox"/> Limited distribution
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Work approved by: Leonid Yaskin – Country Operational Manager		
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Abbreviations

AIE	Accredited Independent Entity
APG	Associated Petroleum Gas
BVC	Bureau Veritas Certification
CAR	Corrective Action Request
CL	Clarification Request
CO2	Carbon Dioxide
CS	Compressor Station
DDR	Draft Determination Report
DR	Document Review
EIA	Environmental Impact Assessment
ERU	Emission Reduction Unit
GHG	Greenhouse House Gas(es)
GCS	Gas Compressor Station
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
NG	Natural gas
NGO	Non Governmental Organization
NPV	Net Present Value
PDD	Project Design Document
PP	Project Participant
RF	Russian Federation
tCO2e	Tonnes CO2 equivalent
UNFCCC	United Nations Framework Convention for Climate Change

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1 INTRODUCTION

CARBONTRUST LIMITED on behalf of TNK-BP has commissioned Bureau Veritas Certification to determine JI project "Utilization of associated petroleum gas at the fields of companies of TNK-BP group, Orenburg oblast" (hereafter called "the project") implemented by TNK-BP affiliates in Orenburg Region, Russian Federation.

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

1.1 Objective

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

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

1.2 Scope

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

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

1.3 Determination team

The determination team consists of the following personnel:

Dr. Vladimir Lukin

Bureau Veritas Certification Climate Change Lead Verifier



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Alexey Kulakov –
Bureau Veritas Certification Technical Specialist

This determination report was reviewed by:

Dr. Leonid Yaskin
Bureau Veritas Certification, Internal reviewer

2 METHODOLOGY

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

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

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

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

2.1 Review of Documents

The Project Design Document (PDD) submitted by the project developer CARBONTRUST LIMITED and additional background documents related to the project design and baseline, i.e. country Law, Guidelines for users of the joint implementation project design document form Guidance on criteria for baseline setting and monitoring, Kyoto Protocol, to be checked by an Accredited Independent Entity were reviewed.

To address Bureau Veritas Certification corrective action and clarification requests, CARBONTRUST LIMITED revised the original PDD Version 1.0 dated 10/04/12 and Version 2.0 dd. 26/04/2012.

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The first deliverable of the document review was the Determination Protocol Revision 01 dated 23/04/2012 which contained 12 CARs, 16 CLs and 2 FARs.

The determination findings presented in this Determination Report and its Appendix A relate to the project as described in the PDD Version 01 (submitted for determination) through version 02 (final) dated 26/04/2012.

2.2 Follow-up Interviews

On 25/04/2012 the AIE Lead Verifier Vladimir Lukin performed offsite interviews with the project developer CARBONTRUST LIMITED, and the project participant representatives TNK-BP to confirm the information resented in the PDD and to clarify some issues identified in course of the documents review. The list of the persons interviewed is provided in References. The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Project participant TNK-BP	<ul style="list-style-type: none"> ➤ Project history and Implementation schedule ➤ Technical details of the proposed project ➤ Baseline scenario ➤ Project activity ➤ Input data for investment analysis ➤ Monitoring authority and responsibility ➤ QC & QA procedures of monitoring ➤ Environmental permissions ➤ Environmental Impact Assessment
CONSULTANT CARBONTRUST LIMITED	<ul style="list-style-type: none"> ➤ Theoretical description of baseline scenario ➤ Investment barrier and common practice ➤ Additionality ➤ Monitoring plan ➤ Emission reduction calculation
Stakeholders	➤ N/A

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to raise requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the project design.

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If Bureau Veritas Certification, in assessing the PDD and supporting documents, identifies issues that need to be corrected, clarified or improved with regard to JI project 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 in the published PDD that is not in accordance with the (technical) process used for the project or relevant JI project requirement or that shows any other logical flaw;
- (b) Clarification request (CL), requesting the project participants to provide additional information for Bureau Veritas Certification to assess compliance with the JI project requirement in question;
- (c) Forward action request (FAR), informing the project participants of an issue, relating to project implementation but not project design, that needs to be reviewed during the first verification of the project.

Bureau Veritas Certification should make an objective assessment as to whether the actions taken by the project participants, if any, satisfactorily resolve the issues raised, if any, and should conclude its findings of the determination.

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

3 PROJECT DESCRIPTION (quoted from PDD version 2)

The project activity is carried out at the four groups of fields located at the territory of Orenburg region: Pokrovskaya, Bobrovskaya, West and East ones. The project foresees the construction of a system for collection and transportation of associated petroleum gas at the territories of Buzuluksky, Kurmanaevsky, Pervomaisky, Perevolotsky areas. The development of fields is carried out by OJSC «Orenburgneft» – a subsidiary production unit of TNK-BP.

Situation before the project realization

In accordance with the oil preparation technology the associated petroleum gas (APG) is allocated at the production objects. APG is a by-product during the oil separation before its supply in pipelines. One ton of oil can contain from 1-2 to a few thous. m³. The produced oil comes to the separation station, where it is separated from APG. The separation takes place stepwise. APG of the last separation stages is burned at the flare plants due to the absence of necessary transport infrastructure, insufficient capacity of APG collection system and the absence of customers at the production sites. APG of the first stages of

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separation at some fields is supplied to the gas-processing plants (GPP). At some fields the utilization of APG is completely absent.

The gas utilization at the fields of Pokrovskaya group constitutes less than 60%. The collected APG is realized at the Otradrnensky GPP. The utilization from Pasmurovsky, Ryabinovsky, Gremiachinsky, Pronkinsky, Malakhovsky, Kodiakovsky group of fields is absent.

The structures for APG utilization is practically absent at the objects of oil preparation and transportation of Bobrovskaya group of fields. The existing infrastructure of gas collection is not complete. The collected APG is transported to the Neftegorsky GPP. The level of associated petroleum gas utilization constitutes less than 70%.

Before putting into operation of the first stage of Zaikynsky GPP (ZGPP) at the fields of West group the unstripped gas is supplied to the inlet of gas pipeline "Orenburg-Samara" through the common gas pipeline. Since 2001 the gas has the treatment in the volume of 1.1 billion m³/year at the first turn of ZGPP, but the total gas of last separation stages has flaring. The level of gas utilization is 80%

The practically total APG volume has the flaring at the fields of East group. The level of gas utilization is 10%.

Project objective

The current project is directed for the useful utilization of APG, which could be otherwise burned in the flare plants of the oil production objects of Orenburg region, and therefore for the GHG reduction. The company is waiting that the ERUs sales within the frameworks of joint implementation will improve the project's cost efficiency.

Description of the project

The company TNK-BP with available significant APG resource attempts to increase the level of its useful utilization. The project foresees the construction for this purpose of APG collection system for the consequent gas transportation at GPP of Orenburg region.

The system of APG collection at Pokrovskaya group foresees for this purpose the construction of Pasmurovskaya GCS and two gas pipelines for gas transportation.

System of APG collection at Bobrovskaya Group foresees the construction of Gerasimovskaya, Tananikskaya, Dolgovskaya, Savelovskaya and Kurmanaevskaya GCS's. The five gas pipelines are putting into operation for the APG transportation.

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System of APG collection at Western Group of fields foresees the construction of Rostashinskaya GCS and gas pipelines for gas transportation.

System of APG collection at Eastern Group of fields foresees the construction of Vakhitovskaya GCS and one as pipeline for APG transportation and processing.

Project's history

The project was established in the end of 2005 for solving the problem of associated petroleum gas flaring in Orenburg region. At the stage of decision making of the project's implementation as JI. The project's management group made an assessment of the possibility of use carbon credits in the framework of KP as additional source of project's financing. These decisions were fixed in the TNK-BP Protocol of 21.11.2006. The financial memorandum was approved in 2007. In 2008 the approved variant underwent the changes in connection with increasing volume of works, changing cost of equipment and putting into operation the additional objects. The revised financial memorandum was approved by Committee on Investments of JSC «TNK-BP ».

Baseline scenario

The volume of APG utilized by the project in accordance to basic scenario could be burned in the flares that could result in the considerable GHG emissions: CO₂ and CH₄ (as a result of incomplete flaring). The continuation of APG flaring for this scenario is connected with the restrictions for increasing the useful usage of APG that is confirmed by the following facts:

- the policy in this industry and legislation don't provide the real mechanisms of efficient APG utilization for the moment of making a decision on the project realization;
- the considerable capital costs for the creation of infrastructure for the efficient usage of APG and the low prices for APG.

Emission reduction

This project will result in the prevention of APG flaring in the volume of 1.205 billion m³ in the period of 2008-2012. In this case the GHG emission reduction will constitute 3 852 922 tonnes of CO₂-equivalent for the pointed period.

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4 DETERMINATION CONCLUSIONS

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

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

The Corrective Action Requests (CAR) and Clarification Requests (CL) are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A. The determination of the Project resulted in 12 CARs 16 CLs and 2 FARs.

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

Outstanding issues related to Project Description, PP's response and the AIE conclusion are summarized in Appendix A (refer to CARs 01-03 and CLs 01-02).

The issued requests concern:

- The history of JI component was not described appropriately in PDD v.1 (CAR 01);
- The name of legal entity from the Host party was not provided consistently in PDD v.1 (CAR 02);
- Improper interpretation of the legal environmental requirements applicable to the oil&gas sector (CAR 03);
- Clarification of the APG utilization capacity existing prior the project (CL 01);
- Request of documentary evidence to support the technical specification of the project equipment (CL 02).

4.1 Project approvals by Parties involved (19-20)

The project did not receive approvals from the Parties involved therefore CAR 04 was raised and remains pending.

A Party involved other than the Host Party was not identified at the time of determination. It will be identified afterwards.

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4.2 Authorization of project participants by Parties involved (21)

The participation of TNK-BP, which is listed as project participant in the PDD, is not authorized by the Host Party because the project approval by the Host Party was not received.

The authorization will be provided with the issuance of the project approval.

4.3 Baseline setting (22-26)

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

JI specific approach

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

- a) By identification of plausible future scenarios and selecting the most plausible one. Two APG handling alternatives were selected and then the most plausible combination was identified as the baseline scenario. APG management alternatives are the following:

Alternative scenario A1: Flaring of APG at Orenburg region deposits;

Alternative Scenario A2: Project itself (the proposed project activity undertaken without being registered as a JI project activity) that is expressed in the useful APG utilization, i.e. the construction of GCS and gas pipelines for gas compression and further transportation.

Based on alternatives analysis with taking into account the key factors the conclusion is made that Alternative represents the most plausible baseline scenario.

- b) By taking into account key factors that affect a baseline, such as

- sectoral reform policies and legislation,
- economic situation in oil&gas sector in terms of APG utilization,
- availability of capital (including investment analysis),
- APG prices.

The analysis of key factors explicitly demonstrates that they would negatively affect the implementation of the project without being

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registered as JI and would be neutral or favouring the continuation of the situation had been taking place before the project start.

- c) Basically in a transparent manner with regard to the choice of the JI specific approach, assumptions, parameters, data sources and key factors. The key information and data used to establish the baseline are provided in the required tabular forms.
- d) Taking into account of uncertainties and using conservative assumptions. Key assumptions applied for the baseline emission calculation as fixed parameters were applied conservatively.
- e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure. It was explicitly demonstrated that the proposed project activity will not lead to decrease in the level of APG utilization from another oilfields supplying the APG to the GPPs.
- f) By drawing of the list of standard variables contained in appendix B to Guidance on criteria for baseline and monitoring.

Outstanding issues related to Baseline setting (22-26), PP's response and the AIE conclusion are summarized in Appendix A (refer to CARs 05 – 07, CLs 04-05, and FAR 01).

The issues requests concern:

- Justification of the option selected to establish baseline according to "Guidance on criteria for baseline setting and monitoring" v.3.0 (CAR 05);
- Justification on how the uncertainty and imperfection of APG prognosis may affect the baseline selection (CAR 06);
- Justification of the application of standard variables and transparency in the Baseline theoretical description (CAR 07);
- Clarification of the inclusion of transient calculated values in the list of the baseline parameters presented in the tabular form in sec.B.1 (CL 04);
- Clarification of the reason of rejection of other options such as power generation, processing and injection (CL 05).

At the stage of verification PP are requested to provide, and AIE shall assess all testing results for the each year and use the most conservative composition for the annual ER calculation. The results

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of “soot combustion” criterion shall be reconsidered as well using the most conservative APG composition (FAR 01).

4.4 Additionality (27-31)

JI specific approach

The approach prescribed in paragraph 44 (a) of Annex 1 to the “Guidance on criteria for baseline setting and monitoring” Version 03 - Provision of traceable and transparent information showing that the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to reductions of anthropogenic emissions by sources or enhancements of net anthropogenic removals by sinks of GHGs; - was selected to demonstrate that the reductions of greenhouse gas emissions from sources achieved due to the project implementation are additional to those that would have otherwise.

Within the framework of the selected approach the project additionality was proved using the project alternatives analysis, the investment analysis and the common practice analysis.

The Benchmark analysis was chosen as the appropriate method to demonstrate that the project is not economically feasible without JI revenues. The investment analysis was based on calculation of NPV for the Project, taking into account investment costs, operation costs, amortization and other parameters referring to expenses (project expenditures), as well as project associated revenues from water injection savings and avoided environmental fees.

Discount rate was selected to be equal to 12% that is corresponds to the internal company’s discount rate determined by the internal financial viability assessment procedure and confirmed through the onsite interview with PP. Other input values such as capital and operation expenditures, APG cost and environmental fees were positively determined on the basis of reliable evidence.

The calculations of the basic variant supplemented by the sensitivity analysis showed that $NPV < 0$. The variation range of 10% was selected as usually used by TNK-BP and prescribed by the investment analysis procedure hence the project is not economically attractive for TNK-BP.

Outstanding issues related to Additionality (28-30), PP’s response and the AIE conclusion are summarized in Appendix A (refer to CARs 08-10 and CLs 06-07).

The issued CARs and CLs concern:

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- The lack of transparency in the additionality description in PDD v.1. PP was requested to provide all assumptions used in the investment analysis (CAR 08);
- Justification of the information provided to support the common practice analysis, in particular the total APG flaring rate in Russia (CAR 09);
- Justification of the common practice: PP was requested to specify the similar activities occurred in Russia (CAR 10);
- Clarification of the application of option (a) instead of others in terms of its solely applicability or conservativeness (CL 06);
- Request PP to provide the documentary evidence to support the key investment assumptions (capital costs, operational costs, maintenance, power tariff, operation lifetime, residual value) (CL 07).

4.5 Project boundary (32-33)

JI specific approach

The project boundary defined in the PDD encompasses all anthropogenic emissions by sources of GHGs that are (i) under the control of the project participants, (ii) reasonably attributable to the project, and (iii) significant.

Project boundary is defined on the basis of case-by-case assessment of different emission sources. The identified GHGs emissions and their sources are as follows:

(a) CO₂ and CH₄ emissions due to APG flaring in the baseline scenario; (b) CO₂ emissions due to combustion of fossil fuels at the grid connected power plants to supply the electricity consumed by the project; (c) and (d) CH₄ emissions due to methane leaks from AG compression and transportation to the GPP. It was explicitly demonstrated that N₂O emissions (for the project activity) are negligible and hence excluded from consideration.

Outstanding issue related to Project Boundary (32-33), PP's response and the AIE conclusion are summarized in Appendix A (refer to CL 08).

- PP was requested to clarify if there are any fossil fuel consumption at the GCS and respective electricity consumption at the GPPs in the downstream (CL 08).

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4.6 Crediting period (34)

Starting date of the project is defined in PDD as 15/12/2006 being the date when the contract for the predesigning and design development was signed.

Expected operational lifetime of the project is 20 years that was confirmed through the review of held with the technical specialists and the review of technical specification held on site. The length of crediting period is defined as 5 years (60 months) from 01/01/2008 – 31/12/2012. The starting date of crediting period falls on the date when the first emission reductions were generated by the project.

Outstanding issue related to Crediting period (34), PP's response and the AIE conclusion are summarized in Appendix A (refer to CLs 09 -11).

- PP was requested to clarify the selection of starting date and provide the documentarily evidence (CL 09);
- Clarification was issued to request the evidence to support the operation lifetime (CL 10);
- PP was requested to support with documentary evidence the project commissioning date before the start of crediting period (CL 11).

4.7 Monitoring plan (35-39)

JI specific approach

The PDD indicates that JI specific approach was selected to establish the monitoring plan.

The monitoring plan specifies the indicators, constants and variables that are reliable (i.e. provide consistent and accurate values), valid (i.e. be clearly connected with the effect to be measured), and that provide a transparent picture of the emission reductions to be monitored such those listed in the PDD, Sections D.1.1.1, D.1.1.3 and D.1.3.

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

The monitoring plan describes the relevant factors that will be monitored:

- Volume of associated petroleum gas pumped by each compressor station to the GPP;
- Volume of associated petroleum gas which is to be consumed by gas running compressor engines at each GCS;
- Electricity consumption by each compressor station in the year;

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- Volumetric fraction of hydrocarbons in associated petroleum gas pumped by each compressor station;
- all decisive factors for the control and reporting of project performance: quality control (QC) and quality assurance (QA) procedures; emergency procedures; the operational and management structure that will be applied in implementing the monitoring plan.

Constants used are the default values of the parameters as follows:

- Density of methane (CH₄) under standard conditions: 20 °C, 101.325 kPa - 0.668 kg/m³
- Density of carbon dioxide (CO₂) under standard conditions: 20 °C, 101.325 kPa - 1.842 kg/m³
- Global warming potential of methane - 21 tCO₂/tCH₄
- A share of unburned APG in flare under “soot combustion” - 0.035
- Default emission factors for fugitive emissions (Gas Transmission) 0.0011 GgCH₄/mln. m³
- Default emission factors for fugitive emissions (Gas Processing) 0.0011 GgCH₄/mln. m³
- CO₂ emission factor of UES Ural grid (demand-side carbon emission factor, i.e. transmission and distribution losses in the grid were taken into account).
- 2008 – 0.631 tCO₂/MWh
- 2009 – 0.631 tCO₂/MWh
- 2010 – 0.638 tCO₂/MWh
- 2011 – 0,668 tCO₂/MWh
- 2012 – 0,712 tCO₂/MWh
- Average leaks due to processing and compressing of APG at GPP - 0.2%
- Average specific APG consumption per ths. cubic meter of processing/compressing APG at GPP – 47 m³/ths.m³

The defaults values originate from recognizable sources as indicated above and are presented in a transparent manner.

Where applicable the monitoring plan is drawn upon the list of standard variables contained in appendix B of “Guidance on criteria for baseline setting and monitoring” developed by the JISC.

The monitoring plan explicitly and clearly distinguishes:

- data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination such as the default data used;

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- data and parameters that are monitored throughout the crediting period, such as those presented in Section D.1.1.1 for the project and Section D.1.1.3 for the baseline.

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

The monitoring plan elaborates all algorithms and formulae used for the estimation/calculation of baseline emissions and project emissions, as appropriate, such as Formulae in Section D.1.1.2 - for the project emissions, in Section D.1.1.3 - for leakage, and in Section D.1.1.4 - for the baseline emissions.

The monitoring plan follows the standard routines applied by TNK-BP's affiliates and is in line with the national standards usually applied in the oil and gas sector.

The monitoring plan clearly describes the operational and management structure regarding the monitoring activities. The responsibility for the JI project implementation is assigned according the national guidance and internal procedures applied by TNK-BP for the Monitoring routines. On the whole, the monitoring report reflects good monitoring practices appropriate to the project type.

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

Outstanding issues related to Monitoring plan (35-39), PP's response and the AIE conclusion are summarized in Appendix A (refer to CARs 11-12, CL 12 and FAR 01).

The issued requests concern:

- The emergency procedure (CAR 11);
- The monitoring data storage time (CAR 12);
- The request to provide the documentary evidence for the average leaks due to processing and compressing of APG at GPP and average specific APG consumption per ths. cubic meter of processing/compressing APG at GPP (CL 12);
- the national standards (CL 13).

As the calibration records for the Monitoring equipment employed were not available for the whole monitoring period they are to be provided and checked at the stage of verification (FAR 01).

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4.8 Leakage (40-41)

JI specific approach

The leakage effect is net change of anthropogenic GHG emissions attributable to the proposed project activity and occur outside the project boundary.

In the PDD the leakage effect includes the following sources:

1/ emissions associated with the APG consumption by GPP, and
2/ fugitive leaks determined as the processing losses from the APG processing at GPP.

The project leakage was estimated conservatively on the basis of APG delivery to the GPP, specific APG consumption by GPP and the specific fugitive losses at GPP (based on the official statistical reports provided by the company /12/)

No outstanding issues related to Leakage (40-41) were raised.

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

JI specific approach

The PDD indicates assessment of emissions in the baseline, project scenario as the approach chosen to estimate the emission reductions of the project.

The PDD provides the ex ante estimates of:

- (a) Emissions for the project scenario (within the project boundary), which are 154 947 tCO₂e for the whole crediting period;
- (b) Emissions for the baseline scenario (within the project boundary), which are 4 208 774 tCO₂e for the whole crediting period;
- (c) Leakage (outside the project boundary), which are 200 905 tCO₂e for the whole crediting period;

The resulting emission reductions (based on (a), (b) and (c) above), are estimated as 3 852 922 t CO₂e for the whole crediting period.

The formulae used for calculating the estimates are referred in the PDD, Sections D.1.1.2, D.1.1.4, D.1.2.2, and D.1.4. The illustrative emission reduction model in form of excel sheet /2/ was provided to represent the calculation in traceable mode.

The PDD Section E includes an illustrative ex ante emissions calculation.

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For calculating the estimates referred to above, key factors defined in the monitoring plan influencing the project and baseline emissions were taken into account, as appropriate. The estimation referred to above is based on conservative assumptions and the most plausible scenario in a transparent manner. The estimates referred to above are consistent throughout the PDD.

Outstanding issue related to Estimation of emission reductions or enhancements of net removals (42-47), PP's response and the AIE conclusion are summarized in Appendix A (refer to CL 14)

Under CL 14 PP was requested to provide AIE with the reliable documentary evidence to support the assumptions used for the emission reduction calculation.

4.10 Environmental impacts (48)

The PDD sec. F demonstrates that no significant environmental impacts attributable to the project are expected to be beyond the legally established norms. The project will not lead to increase in emission rate of air pollutants due to shift from APG flaring to its compression.

The environmental licenses (air pollutant norms) were provided to AIE to support the legal compliance of the project.

Outstanding issues related to Environmental impacts (48), PP's response and the AIE conclusion are summarized in Appendix A (refer to CL 15 and FAR 02).

The issues concern

- Request PP to provide the EIA and its positive approval (CL 15);

The legal compliance shall be verified at the stage of verification for all GCSs comprising the project.

4.11 Stakeholder consultation (49)

This type of project is not liable to arrangement of stakeholders' consultation in form of public hearing. Stakeholder comments were invited and collected in form of official conclusions issued by the local authorities and through the publications in the local medias as the part of State Expertise process.

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Outstanding issues related to Stakeholders' consultation (48), PP's response and the AIE conclusion are summarized in Appendix A (refer to CAR 16).

The issued CL 16 concerns incorrect interpretation of legal requirements related to the stakeholder process given in the first version of PDD.

4.12 Determination regarding small scale projects (50-57)

Not applicable.

4.13 Determination regarding land use, land-use change and forestry (LULUCF) projects (58-64)

Not applicable.

4.14 Determination regarding programmes of activities (65-73)

Not applicable.

5 SUMMARY AND REPORT OF HOW DUE ACCOUNT WAS TAKEN OF COMMENTS RECEIVED PURSUANT TO PARAGRAPH 32 OF THE JI GUIDELINES

No comments, pursuant to paragraph 32 of the JI Guidelines, were received.

6 DETERMINATION OPINION

Bureau Veritas Certification has performed a determination of the "Utilization of associated petroleum gas at the fields of companies of TNK-BP group, Orenburg oblast" project. The determination was performed on the basis of UNFCCC criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting.

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

Project participant used the JI specific approach for the demonstration of additionality. In line with this approach, the PDD provides investment analysis and common practice analysis to determine that the project activity itself is not the baseline scenario.

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

The review of the project design documentation and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfilment of stated criteria.

The determination revealed two pending issues related to the current determination stage of the project: the issue of the written approval of the project and the authorization of the project participant by the host Party. If the written approval and the authorization by the host Party are awarded, it is our opinion that the project as described in the Project Design Document, Version 02 dated 26/04/2012 meets all the relevant UNFCCC requirements for the determination stage and the relevant host Party criteria.

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

7 REFERENCES

Category 1 Documents:

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

- /1/ PDD "Utilization of associated petroleum gas in Orenburg region, TNK-BP, Russian Federation."
 - a/ Version 1.0 dd. 10.04.2012
 - b/ Version 2.0 dd. 26.04.2012
- /2/ ER Calculation Excel spreadsheet
 - a/ Version 1.0 dd. 10.04.2012
 - b/ Version 2.0 dd. 26.04.2012
- /3/ Investment Analysis Excel spreadsheet

Category 2 Documents:

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

- /4/ Guidelines for the implementation of Article 6 of the Kyoto Protocol
<http://unfccc.int/resource/docs/2005/cmp1/eng/08a02.pdf#page=2>
- /5/ Guidance on criteria for baseline setting and monitoring Version 03

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http://ji.unfccc.int/Ref/Documents/Baseline_setting_and_monitoring.pdf

- /6/ "Guidelines for Calculation of Air Pollutant Emissions from APG Flaring" developed by the Scientific Research Institute for Atmospheric Air Protection in Saint-Petersburg (approved by the Order of the National Environmental Protection Committee of the Russian Federation dd. 08.04.98 №199)
- /7/ The minutes of meeting of TNK-BP integrated steering project group 21/11/2006
- /8/ The investment breakdown and financial costs for the project
- /9/ Vakhitovskaya GCS Technical specification
- /10/ Technical specification for the compressor 7VKG-57
- /11/ Daily regime cards for the APG supplied to GCSs
- /12/ Statistical forms ДН-6 for 2008-2012
- /13/ APG testing results for 2008-2012
- /14/ Power supply agreement #01-12/OD 06/07/2011 concluded with Joint Energy Supply Company
- /15/ Technical specification of Zaikinskoe GCS
- /16/ Construction permit for the GCSs
- /17/ Acceptance certificate dd. 31/12/2006
- /18/ The predesign and design service agreement dd/ 15/12/2006
- /19/ "Assessment of the Grid Emission Factor Calculation Model for Russia"
http://www.ebrd.com/downloads/sector/eccc/Baseline_Study_Russia.pdf (page 5.3, table 5.2);
http://www.ebrd.com/downloads/sector/eccc/Validation_report_Russia.pdf
- /20/ IPCC 2006 volume 2.

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Persons interviewed:

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

- /1/ Mr. Mesropov Andrias The Head of Dept. of Normative Support, Regulation and Tariffs Establishing in TNK-BP
- /2/ Mr. Marat Latypov – The Head of the Project Development Dept. in CARBONTRUST LIMITED
- /3/ Mr. Vsevolod Chastnov – Expert of the Project Development Department in CARBONTRUST LIMITED;



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DETERMINATION PROTOCOL

Table 1

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

Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
Guidelines for JI PDD Form Users				
Section A General description of the project				
A.1. Title of the project				
A.1	Is the title of the project presented? Is the sectoral scope to which project pertains presented? Is the current version number of the document presented? Is the date when the document was completed presented?	The title of the project is: "Utilization of associated petroleum gas in Orenburg region, TNK-BP, Russian Federation". The sectoral scopes are: 10. Fugitive emissions from fuels (solids, oil and gas). The version: 1.0 10/04/2012		OK
A.2 Description of the project				
A.2	Is the purpose of the project included with a concise, summarizing explanation (max. 1-2 pages) of the: a) Situation existing prior to the starting date of the project; b) Baseline scenario; and	The purpose of the proposed project activity is <i>the useful utilization of APG, which could be otherwise burned in the flare plants of the oil production objects of Orenburg region.</i> (a) Situation, existing prior the project is described explicitly in sec. A.2. It is characterized with the absence of necessary	CL 01 CAR 01	OK OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	<p>c) Project scenario (expected outcome, including a technical description). Is the history of the project (incl. its JI component) briefly summarized?</p>	<p>transport infrastructure, insufficient capacity of APG collection system and the absence of customers at the production sites. The level of utilization existing prior the project was</p> <ul style="list-style-type: none"> • less than 60% at the fields of Pokrovskaya group (supply to Otradnensky GPP) • less than 70% at Bobrovskaya group of fields (supply to Neftegorsky GPP) • 80% at the fields of West group (supply to the Zaikynsky GPP) • 10% at the fields of East group. <p>CL 01 Please, provide the historical evidence to confirm the rate and the means of APG utilization existing prior the project and describe the constraints that would prevent its extensive enhancement for each group of fields (lack of infrastructure/transportation/intake capacity).</p> <p>(b) The baseline scenario is described explicitly: It is the flaring of the volume of gas proposed to be utilized due to the project.</p> <p>(c) The project history is briefly described as the start of project in the end of 2005, financial memorandum approval in 2007 and its revision in 2008 due to enhanced investments. The Project implementation timetable is provided in table 4.2.2</p> <p>CAR 01 Description of project does not include its JI component.</p>		



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
A.3	Are project participants and Party(ies) involved in the project listed? Is contact information provided in Annex 1 of the PDD?	Party A - Russian Federation (Host party) Legal Entity - TNK-BP CAR 02 Please, ensure consistency in the name of Legal entity – TNK-BP in sec. A.3, but JSC “TNK-BP Management” in annex 1.	CAR 02	OK
A.4 Technical description of the project				
A.4.1	Location of the project	Refer to A.4.1.1-A.4.1.4.		OK
A.4.1.1	Host Party(ies)	The Russian Federation.		OK
A.4.1.2	Region/State/Province etc.	Russian Federation, Volga Federal District, Orenburg region		OK
A.4.1.3	City/Town/Community etc.	Buzuluk, village Kurmanaevka, regional center Pervomaisky,		OK
A.4.1.4	Detail of the physical location, including information allowing the unique identification of the project. (This section should not exceed one page)	Geographical Coordinates are provided in A.4.1.3.		OK
A.4.2. Technologies to be employed, or measures, operations or actions to be implemented by the project				
A.4.2	Are the technology(ies) to be employed, or measures, operations or actions to be implemented by the project, including all relevant technical data and the implementation schedule described?	Section A.4.2 PDD provides detailed description of technology and measures to be implemented to achieve the emission reduction. Table 4.2.1 provides technical specification of the compressor equipment for eight GCS comprised by the project. CL 02 Please, provide the equipment certificates to confirm the technical specification as presented in sec. A.4.2.	CL 02	OK
A.4.3. Brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed JI project, including why the emission reductions would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
A.4.3	Is it explained briefly how anthropogenic GHG emission reductions are to be achieved? (This section should not exceed one page.)	The following emission reduction sources are determined in sec.A.4.3: <ul style="list-style-type: none"> Reduction of CO2 emission due to useful utilization of the 	CAR 03	OK

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		<p>significant volume of APG.</p> <ul style="list-style-type: none"> Reduction of CH4 emission from incomplete combustion of APG. <p>CAR 03</p> <p>i/ Sec. A.4.3 states that <i>It is necessary to compensate the consumption of natural resources by means of payments in the budgets of different level.</i> Neither is this statement contained in the legal regulations (which the verifier is aware of), nor is it followed from them indirectly. The precise justification with reliable reference is required here</p> <p>ii/ The declared in sec. A.4.3 increase of APG flaring from 24.4% in 2006 up to 64.3% 2009 is improper. Nothing is stated in the referred sources, but the huge variation in the estimates of APG flaring volume.</p>		
A.4.3.1. Estimated amount of emission reductions over the crediting period				
A.4.3.1	Is the length of the crediting period Indicated? Are estimates of total as well as annual and average annual emission reductions in tonnes of CO2 equivalent provided?	The length of the crediting period is determined as 5 years in sec. A.4.3.1. Total as well as annual and average annual emission reductions in tonnes of CO2 equivalent are provided.		OK
A.5. Project approval by the Parties involved				
A.5	Are written project approvals by the Parties involved attached?	CAR 04. The project has no approvals by the Parties involved. The project approval by the Host Party will be provided after the determination statement is issued by the AIE. CL 03 Please, ensure correct reference to the governmental decry # 780	CAR 04 CL 03	Pending OK
19	Have the DFPs of all Parties listed as "Parties involved" in the PDD provided written project approvals?	No, pending a response to CAR 04.	Pending	Pending

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
19	Does the PDD identify at least the host Party as a "Party involved"?	The Russian Federation.		
19	Has the DFP of the host Party issued a written project approval?	No, pending a response to CAR 04.	Pending	Pending
20	Are all the written project approvals by Parties involved unconditional?	No, approvals from parties involved will be requested after the Host party approval will be issued. Pending a response to CAR 04.	Pending	Pending
Authorization of project participants by Parties involved				
21	Is each of the legal entities listed as project participants in the PDD authorized by a Party involved, which is also listed in the PDD, through: - A written project approval by a Party involved, explicitly indicating the name of the legal entity? or - Any other form of project participant authorization in writing, explicitly indicating the name of the legal entity?	Project participantis "TNK-BP" The authorization will be provided along with LoA. Pending a response to CAR 04 and CAR 02	Pending	Pending
Baseline setting				
	Does the PDD explicitly indicate which of the following approaches is used for identifying the baseline? - JI specific approach - Approved CDM methodology approach	CAR 05 Please, justify it precisely which approach is chosen to establish the baseline. Please, refer to the latest version of the guidance and identify the respective paragraph.	CAR 05	OK
JI specific approach only				
23	Does the PDD provide a detailed theoretical description in a complete and transparent manner?	The Detailed Theoretical description of the baseline including the formulae to calculate the baseline emission is provided in sec. B.1.	CL 04	FAR 01

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		<p>CL 04 Please, clarify why the EFs are indicated among the baseline parameters. They are just transient parameters to be calculated with formulae – neither to be monitored, nor fixed.</p> <p>Please provide the evidence on which basis the values applied for the baseline estimation can be verified. (FC, APG composition, calculation of compliance to the soot combustion criterion as per NII Atmosphere's methodology)</p>		
23	<p>Does the PDD provide justification that the baseline is established:</p> <p>(a) By listing and describing plausible future scenarios on the basis of conservative assumptions and selecting the most plausible one?</p> <p>(b) Taking into account relevant national and/or sectoral policies and circumstance?</p> <p>– Are key factors that affect a baseline taken into account?</p> <p>(c) In a transparent manner with regard to the choice of approaches, assumptions, methodologies, parameters, data sources and key factors?</p> <p>(d) Taking into account of uncertainties and using conservative assumptions?</p> <p>(e) In such a way that ERUs cannot be earned for decreases in activity levels outside the project or due to force majeure?</p> <p>(f) By drawing on the list of standard variables contained in appendix B to "Guidance on criteria</p>	<p>(a) PDD states the baseline is established by listing the plausible future scenarios and selecting the most plausible through the consideration of the factors affecting each scenario.</p> <p>Following scenarios were considered:</p> <p>Alternative scenario 1. Flaring of APG at Orenburg region deposits;</p> <p>Alternative scenario 2. Project itself (the proposed project activity undertaken without being registered as a JI project activity) that is expressed in the useful APG utilization, i.e. the construction of GCS and gas pipelines for gas compression and further transportation.</p> <p>CL 05 Please, clarify if the rejection of the alternative of APG injection is technically impossible. The advantage of the continuation of water pumping is not self-evident.</p> <p>(b) Relevant National policies and circumstances were considered as the factors affecting the baseline. It is stipulated that none of the alternatives contradict the current legislation. It is in particular stated that the flaring is not</p>	CAR 06 CAR 07 CL 05	OK OK OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	<p>for baseline setting and monitoring”, as appropriate?</p>	<p>utterly forbidden by Russian Legislation. There is the enhanced fee for the air pollutant emissions associated with flaring, which nonetheless does not constitute serious constraint that may prevent continuous APG flaring.</p> <p>Besides analysis of policies Following key factors’ effects are discussed in alternative analysis.</p> <p>Besides the legal compliance following aspects are deemed to be key factors:</p> <ul style="list-style-type: none"> • Economic situation in oil and gas industry as to APG utilization; • Availability of capital (including the investment barrier); • Costs for APG. <p>While discussing the Economic situation following aspects were considered:</p> <ul style="list-style-type: none"> • Imperfection of oil and APG recovery forecasts • Lack of necessary infrastructure • Limited access to the gas transportation infrastructure. <p>Availability of capital, referring to sec. B.2. it was demonstrated that project is not financially attractive.</p> <p>APG prices are considered in the investment analysis.</p> <p>(c) description is not transparent.</p> <p>CAR 06 the statement of imperfection of the APG and oil recovery prognosis looks irrelevant or needs to be properly justified.</p> <p>(d) No uncertainties or conservativeness is applied in the baseline selection.</p>		

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		(e) The APG will substitute the other fossil fuel, such as Natural gas. It does not lead to decrease in any activity outside the project boundary. (f) Following CAR 07 CAR 07 Theoretical description is not drawn upon Appendix B to guidance for Baseline setting and monitoring. Please, apply the standard variables: Oxidation factor for fuel combustion – $OXID_{xx}$ Flare efficiency $\eta_{flare,t}$ Weight fraction or weight concentration - $W_{GHG,xx}$ (volume or mass %)		
24	If selected elements or combinations of approved CDM methodologies or methodological tools for baseline setting are used, are the selected elements or combinations together with the elements supplementary developed by the project participants in line with 23 above?	N/A		
25	If a multi-project emission factor is used, does the PDD provide appropriate justification?	N/A		
Approved CDM methodology approach only_Paragraphs 26(a) – 26(d)_Not applicable				
Additionality				
JI specific approach only				
28	Does the PDD indicate which of the following approaches for demonstrating additionality is used?	PDD explicitly indicates that the additionality of the project is demonstrated using JI-specific approach. Approach (a) in paragraph 2 of the Annex I to the “Guidance on Criteria for Baseline Setting and	CAR 08 CAR 09 CAR 10	OK OK OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	<p>(a) Provision of traceable and transparent information showing the baseline was identified on the basis of conservative assumptions, that the project scenario is not part of the identified baseline scenario and that the project will lead to emission reductions or enhancements of removals;</p> <p>(b) Provision of traceable and transparent information that an AIE has already positively determined that a comparable project (to be) implemented under comparable circumstances has additionality;</p> <p>(c) Application of the most recent version of the "Tool for the demonstration and assessment of additionality. (allowing for a two-month grace period) or any other method for proving additionality approved by the CDM Executive Board".</p>	<p>Monitoring (Version 2)" has been selected.</p> <p>Financial attractiveness of the project without being registered as JI was evaluated to demonstrate that the project faces overwhelming financial barrier and could not be implemented without additional incomes that would be attributable to the JI status (ERU selling). Thus it is demonstrated that the project itself could not be the baseline scenario and hence the emission reduction achieved as a result of its implementation is additional to that otherwise occurred.</p> <p>Common practice analysis was applied to strengthen the outcome from investment analysis.</p> <p>CAR 08 Investment analysis is presented in the PDD in untraceable manner. No information is provided in the PDD to assure that the baseline is identified on the basis of conservative assumptions. Please substantiate the input values</p> <p>CAR 09 False statement: The level of APG flared has increased over a three-year period of 2006-2009 from 14,1 bln m3 in 2006 till 19,96 m3 in 2009 . Thereby, a share of APG flaring in 2006 was at 24,4% and by 2010 it rose up to 64,3%. Please, remove it from sec. B.2.</p> <p>CAR 10 Common practice analysis is not representative as it discusses the theoretical constraints to implement the activities related to the APG supply to the NG mains. Instead of this a common practice shall demonstrate either the absence of similar activities or if such activities occur, they are implemented under dissimilar</p>		



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		conditions and hence could not call into question the claim of additionality.		
29 (a)	Does the PDD provide a justification of the applicability of the approach with a clear and transparent description?	It is justified in the PDD that the approach chosen for additionality proof was selected in accordance with requirement 2(a) of Annex 1 of JI Guidance on criteria for baseline setting and monitoring, version 03 CL 06 Please clarify the application of option (a) instead of others in terms of its solely applicability or conservativeness.	CL06	OK
29 (b)	Are additionality proofs provided?	The additionality is substantiated by using an investment analysis supporting the financial barrier. CL 07 Please provide the evidence for the capital costs, operational costs, maintenance, power tariff, operation lifetime, residual value (assumed to be zero) and other investment parameters.	CL 07	OK
29 (c)	Is the additionality demonstrated appropriately as a result?	Pending a response to the CARs 10-17 and CLs 03-04	Pending	OK
30	If the approach 28 (c) is chosen, are all explanations, descriptions and analyses made in accordance with the selected tool or method?	N/A		
Approved CDM methodology approach only_ Paragraphs 31(a) – 31(e)_Not applicable				
Project boundary (applicable except for JI LULUCF projects				
JI specific approach only				
32 (a)	Does the project boundary defined in the PDD encompass all anthropogenic emissions by sources of GHGs that are: (i) Under the control of the project participants? (ii) Reasonably attributable to the project? (iii) Significant?	Project boundary includes the following significant emission sources: - Consumption of electricity by GCS - Combustion of APG in gas engines of GCS - Methane leaks with compressing APG at GCS - Methane leaks with transportation of APG	CL 08	OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
		CL 08 Please clarify and substantiate with relevant docs: i/ that fact that all gas compressors inside the project consumes the electricity from the grid, and there are no any back-up fossil fuel based electricity generating facilities. ii/ No electricity consumption at GPPs (for leakage)		
32 (b)	Is the project boundary defined on the basis of a case-by-case assessment with regard to the criteria referred to in 32 (a) above?	Project boundary is defined on the basis of case-by-case analysis (not always quantitative) of emission sources.		OK
32 (c)	Are the delineation of the project boundary and the gases and sources included appropriately described and justified in the PDD by using a figure or flow chart as appropriate?	Yes, referring to figure B.3.1		OK
32 (d)	Are all gases and sources included explicitly stated, and the exclusions of any sources related to the baseline or the project are appropriately justified?	Pending a response to CL 08.	Pending	
Approved CDM methodology approach only_ Paragraph 33_ Not applicable				
Crediting period				
34 (a)	Does the PDD state the starting date of the project as the date on which the implementation or construction or real action of the project will begin or began?	Starting date is indicated as 15.01.2007 CL 09 Please, provide the evidence to support that the date 15.01.2007 was the date of the earliest real action to implement the project.	CL 09	OK
34 (a)	Is the starting date after the beginning of 2000?	The project started after 2000 y.		OK
34 (b)	Does the PDD state the expected operational lifetime of the project in years and months?	Operational lifetime is defined as 20 years. CL 10 please, clarify the operation life and provide the docs.	CL 10	OK
34 (c)	Does the PDD state the length of the crediting	The length of crediting period is defined as 5 years / 60 months.		OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	period in years and months?	Starting from January 1, 2008.		
34 (c)	Is the starting date of the crediting period on or after the date of the first emission reductions or enhancements of net removals generated by the project?	CL 11 Please provide the commissioning certificate to support that emission reduction was started on or before 01/01/2008.	CL 11	OK
34 (d)	Does the PDD state that the crediting period for issuance of ERUs starts only after the beginning of 2008 and does not extend beyond the operational lifetime of the project?	yes		OK
34 (d)	If the crediting period extends beyond 2012, does the PDD state that the extension is subject to the host Party approval? Are the estimates of emission reductions or enhancements of net removals presented separately for those until 2012 and those after 2012?	N/A		
Monitoring plan				
35	Does the PDD explicitly indicate which of the following approaches is used? - JI specific approach; - Approved CDM methodology approach.	It is explicitly indicated that a JI specific approach based on Paragraph 9 (a) of the "Guidance on criteria for baseline setting and monitoring" is chosen.		OK
JI specific approach only				

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
36 (a)	Does the monitoring plan describe: – All relevant factors and key characteristics that will be monitored? – The period in which they will be monitored? – All decisive factors for the control and reporting of project performance?	The monitoring plan describes the factors and parameters affecting both the project and the baseline emissions. Project performance can be assessed on the basis of the parameters of APG delivery. CL 12 Please provide the documentary evidence for <ul style="list-style-type: none"> • Average leaks due to processing and compressing of APG at GPP • Average specific APG consumption per ths. cubic meter of processing/compressing APG at GPP 	CL 12	OK
36 (b)	Does the monitoring plan specify the indicators, constants and variables used that are reliable, valid and provide transparent picture of the emission reductions or enhancements of net removals to be monitored?	Pending a response to CL 12	Pending	OK
36 (b)	If default values are used: – Are accuracy and reasonableness carefully balanced in their selection? – Do the default values originate from recognized sources? – Are the default values supported by statistical analyses providing reasonable confidence levels? – Are the default values presented in a transparent manner?	Default values are used from recognizable sources All emissions are accurate and reasonably applied. Pending a response to CL 12 Default values presented in transparent manner.	Pending	OK
36 (b) (i)	For those values that are to be provided by the project participants, does the monitoring plan	Following parameters are to be monitored: EC GCS,i – consumption of electricity by GCSi		OK

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	clearly indicate how the values are to be selected and justified?	FCAPG_PJ,i – volume of APG supplied to GCSi FCAPG_GCS,i – combustion of APG in gas engines of GCSi yCO ₂ , yCH ₄ yVOC – volumetric fraction of component in APG the methods to be employed in the monitoring are clearly defined. They are standard and normally used in the routine operation practice.		
36 (b) (ii)	For other values, – Does the monitoring plan clearly indicate the precise references from which these values are taken? – Is the conservativeness of the values provided justified?	Pending a response to CL 12 The conservativeness of the most of values taken from the recognizable sources is confirmed by the IPCC recommendations.	Pending	OK
36 (b) (iii)	For all data sources, does the monitoring plan specify the procedures to be followed if expected data are unavailable?	CAR 11 The emergency procedure should be elaborated to ensure the presence of double registration of key monitoring parameters e.g.: <ul style="list-style-type: none"> • most conservative value among historical data, • State statistical observation forms (1-TEK нефть) etc. The Gas Accountancy Rules issued by Ministry of Fuel and Energy on 15/11/1996 may be used as reference to the monitoring emergency procedure.	CAR11	OK
36 (b) (iv)	Are International System Unit (SI units) used?	International System Units (SI units) are used.		OK
36 (b) (v)	Does the monitoring plan note any parameters, coefficients, variables, etc. that are used to calculate baseline emissions or net removals but are obtained through monitoring?	Yes, all parameters are clearly identified		OK
36 (b) (v)	Is the use of parameters, coefficients, variables,	yes		OK

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	etc. consistent between the baseline and monitoring plan?			
36 (c)	Does the monitoring plan draw on the list of standard variables contained in appendix B of "Guidance on criteria for baseline setting and monitoring"?	Pending a response to CAR 07	Pending	OK
36 (d)	Does the monitoring plan explicitly and clearly distinguish: (i) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), and that are available already at the stage of determination? (ii) Data and parameters that are not monitored throughout the crediting period, but are determined only once (and thus remain fixed throughout the crediting period), but that are not already available at the stage of determination? (iii) Data and parameters that are monitored throughout the crediting period?	The fixed parameters are provided in table D.1.1 All of them are clearly identified and available at the stage of determination. The parameters to be monitored are provided and explicitly justified. Pending a response to CL 12	Pending	OK
36 (e)	Does the monitoring plan describe the methods employed for data monitoring (including its frequency) and recording?	The methods used and data collection frequency and recording are identified in the monitoring plan tables D 1.1.1 D.1.1.3.and D.1.3.1		OK
36 (f)	Does the monitoring plan elaborate all algorithms and formulae used for the estimation/calculation of baseline emissions/removals and project emissions/removals or direct monitoring of emission	Yes all formulae are clearly justified. Pending a response to the CAR with regard to the leakage related to power consumption outside the project boundary.	Pending	OK

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	reductions from the project, leakage, as appropriate?			
36 (f) (i)	Is the underlying rationale for the algorithms/formulae explained?	The rationale of formulae is explained and theoretical description of the approach to baseline estimation is presented in sec. B.1. and D.		OK
36 (f) (ii)	Are consistent variables, equation formats, subscripts etc. used?	Yes		OK
36 (f) (iii)	Are all equations numbered?	Yes.		OK
36 (f) (iv)	Are all variables, with units indicated defined?	Yes.		OK
36 (f) (v)	Is the conservativeness of the algorithms/procedures justified?	Yes.		OK
36 (f) (v)	To the extent possible, are methods to quantitatively account for uncertainty in key parameters included?	The level of uncertainty is identified as low. This is confirmed through the review of national standards for measuring of gas, electricity and gas composition. All these method are characterized with low uncertainty (lower than 5%).		OK
36 (f) (vi)	Is consistency between the elaboration of the baseline scenario and the procedure for calculating the emissions or net removals of the baseline ensured?	The elaboration on the baseline scenario is consistent to the method of the baseline emission calculating in the spreadsheet.		OK
36 (f) (vii)	Are any parts of the algorithms or formulae that are not self-evident explained?	N/A		OK
36 (f) (vii)	Is it justified that the procedure is consistent with standard technical procedures in the relevant sector?	All monitoring parameters (gas flow rate, power consumption, gas composition) are to be monitored with standard routines.		OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
36 (f) (vii)	Are references provided as necessary?	Pending a response to CI 12	Pending	OK
36 (f) (vii)	Are implicit and explicit key assumptions explained in a transparent manner?	Pending a response to CI 12	Pending	OK
36 (f) (vii)	Is it clearly stated which assumptions and procedures have significant uncertainty associated with them, and how such uncertainty is to be addressed?	N/A		
36 (f) (vii)	Is the uncertainty of key parameters described and, where possible, is an uncertainty range at 95% confidence level for key parameters for the calculation of emission reductions or enhancements of net removals provided?	The uncertainty is assessed in Table D.2 The low level of uncertainty is prescribed by the national standards ruling the Monitoring processes		OK
36 (g)	Does the monitoring plan identify a national or international monitoring standard if such standard has to be and/or is applied to certain aspects of the project? Does the monitoring plan provide a reference as to where a detailed description of the standard can be found?	CL 13 Please identify the national standards which PP follows to.	CL 13	OK
36 (h)	Does the monitoring plan document statistical techniques, if used for monitoring, and that they are used in a conservative manner?	N/A		
36 (i)	Does the monitoring plan present the quality assurance and control procedures for the monitoring process, including, as appropriate, information on calibration and on how records on data and/or method validity and accuracy are kept and made available upon request?	QC/QA procedures are specified in PDD Section D.2. These are the timely calibration of the meters employed in the Monitoring. They are to be done as required by the law #102 On the measurements uniformity assurance.		OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
36 (j)	Does the monitoring plan clearly identify the responsibilities and the authority regarding the monitoring activities?	The authority/responsibility distribution is explicitly specified in table D.3.1		OK
36 (k)	Does the monitoring plan, on the whole, reflect good monitoring practices appropriate to the project type? If it is a JI LULUCF project, is the good practice guidance developed by IPCC applied?	The monitoring plan follows the standard monitoring techniques		OK
36 (l)	Does the monitoring plan provide, in tabular form, a complete compilation of the data that need to be collected for its application, including data that are measured or sampled and data that are collected from other sources but not including data that are calculated with equations?	Ref. to tables D.1.1.1, and D.1.1.3		OK
36 (m)	Does the monitoring plan indicate that the data monitored and required for verification are to be kept for two years after the last transfer of ERUs for the project?	CAR 12 Please identify the data storage time	CAR 12	OK
37	If selected elements or combinations of approved CDM methodologies or methodological tools are used for establishing the monitoring plan, are the selected elements or combination, together with elements supplementary developed by the project participants in line with 36 above?	N/A		
Approved CDM methodology approach only_Paragraphs 38(a) – 38(d)_Not applicable				
Applicable to both JI specific approach and approved CDM methodology approach_Paragraph 39_Not applicable				

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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
Leakage				
JI specific approach only				
40 (a)	Does the PDD appropriately describe an assessment of the potential leakage of the project and appropriately explain which sources of leakage are to be calculated and which can be neglected?	Potential leaks are associated to the processing/transportation of APG to GPPs Pending a response to CL 08	Pending	OK
40 (b)	Does the PDD provide a procedure for an ex ante estimate of leakage?	N/A		
Approved CDM methodology approach only Paragraph 41 Not applicable				
Estimation of emission reductions or enhancements of net removals				
42	Does the PDD indicate which of the following approaches it chooses? (a) Assessment of emissions or net removals in the baseline scenario and in the project scenario (b) Direct assessment of emission reductions	Segregated assessment of baseline emissions and project emissions (Option 1) is chosen.		OK
43	If the approach (a) in 42 is chosen, does the PDD provide ex ante estimates of: (a) Emissions or net removals for the project scenario (within the project boundary)? (b) Leakage, as applicable? (c) Emissions or net removals for the baseline scenario (within the project boundary)? (d) Emission reductions or enhancements of net removals adjusted by leakage?	PDD provides ex ante estimates of: Emissions for the project scenario; Emissions for the baseline scenario; Leakage effect Emission reductions.		OK
44	If the approach (b) in 42 is chosen, does the PDD provide ex ante estimates of:	N/A		OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	(a) Emission reductions or enhancements of net removals (within the project boundary)? (b) Leakage, as applicable? (c) Emission reductions or enhancements of net removals adjusted by leakage?			
45	For both approaches in 42 (a) Are the estimates in 43 or 44 given: (i) On a periodic basis? (ii) At least from the beginning until the end of the crediting period? (iii) On a source-by-source/sink-by-sink basis? (iv) For each GHG? (v) In tones of CO2 equivalent, using global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Article 5 of the Kyoto Protocol? (b) Are the formula used for calculating the estimates in 43 or 44 consistent throughout the PDD? (c) For calculating estimates in 43 or 44, are key factors influencing the baseline emissions or removals and the activity level of the project and the emissions or net removals as well as risks associated with the project taken into account, as appropriate? (d) Are data sources used for calculating the estimates in 43 or 44 clearly identified, reliable	ER estimates are given on the periodic basis, from the beginning till the end of the crediting period, in tones of CO2 equivalent. The formulae used in PDD are consistent. Key factors influencing the baseline emissions and the activity level of the project and the emissions as well as risks associated with the project are taken into account. CL 14 Please provide the documentary evidence to support the assumptions used for the ER calculation	CL 14	OK



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	<p>and transparent?</p> <p>(e) Are emission factors (including default emission factors) if used for calculating the estimates in 43 or 44 selected by carefully balancing accuracy and reasonableness, and appropriately justified of the choice?</p> <p>(f) Is the estimation in 43 or 44 based on conservative assumptions and the most plausible scenarios in a transparent manner?</p> <p>(g) Are the estimates in 43 or 44 consistent throughout the PDD?</p> <p>(h) Is the annual average of estimated emission reductions or enhancements of net removals calculated by dividing the total estimated emission reductions or enhancements of net removals over the crediting period by the total months of the crediting period and multiplying by twelve?</p>			
46	If the calculation of the baseline emissions or net removals is to be performed ex post, does the PDD include an illustrative ex ante emissions or net removals calculation?	Illustrative ex-ante estimation of baseline emissions is made in the excel spreadsheet.		OK
Approved CDM methodology approach only Paragraphs 47(a) – 47(b) Not applicable				
Environmental impacts				
48 (a)	Does the PDD list and attach documentation on the analysis of the environmental impacts of the project, including transboundary impacts, in accordance with procedures as determined by	CL 15 Please provide the EIA and its approval	CL 15	FAR 02



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Section A Paragraph or DVM Paragraph	Check Item	Initial finding	Draft Concl.	Final Concl.
	the host Party?			
48 (b)	If the analysis in 48 (a) indicates that the environmental impacts are considered significant by the project participants or the host Party, does the PDD provide conclusion and all references to supporting documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party?	No significant impacts is declared in the PDD Pending a response to CL 14	Pending	OK
Stakeholder consultation				
49	If stakeholder consultation was undertaken in accordance with the procedure as required by the host Party, does the PDD provide: (a) A list of stakeholders from whom comments on the projects have been received, if any? (b) The nature of the comments? (c) A description on whether and how the comments have been addressed?	CL 16 Russian Federal Law 7-FZ "On Environmental Protection" cl. 13 para 2 requires stakeholders' comments to be considered in decision making process to start any activity potentially causing adverse environmental effect. Please clarify how the comments were invited and how they were taken into account if any. Information on the proposed project activity was made publicly available through the public medias. Comments were invited through the web. Open public hearing may be optional.	CAR 16	OK
Determination regarding small-scale projects (additional elements for assessment) Paragraphs 50 - 57 Not applicable				
Determination regarding land use, land-use change and forestry projects Paragraphs 58 – 64(d) Not applicable				
Determination regarding programmes of activities Paragraphs 66 – 73 Not applicable				



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Table 2 Resolution of Corrective Action Requests and Requests for Information

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
CAR 01 Description of project does not include its JI component.	A.2.	Response 1 dd.27/04 At the stage of decision making of the project's implementation as JI. The project's management group made an assessment of the possibility of use carbon credits in the framework of KP as additional source of project's financing. These decisions were fixed in the TNK-BP Protocol of 21.11.2006.	Conclusion on the response 1. OK closed upon the review of PDD v.2 and the review of /7/
CAR 02 Please, ensure consistency in the name of Legal entity – TNK-BP in sec. A.3, but JSC “TNK-BP Management” in annex 1.	A.3	Response 1 dd. Corrected, please see annex 1 in new version of PDD, version 02	Conclusion on the response 1. OK closed upon the review of PDD v.2
CAR 03 i/ Sec. A.4.3 states that <i>It is necessary to compensate the consumption of natural resources by means of payments in the budgets of different level.</i> Neither is this statement contained in the legal regulations (which the verifier is aware of), nor is it followed from them indirectly. The precise justification with reliable reference is required here ii/ The declared in sec. A.4.3 increase of APG flaring from 24.4% in 2006 up to 64.3% 2009 is improper. Nothing is stated in the referred sources, but the huge variation in the estimates of APG flaring volume.	A.4.3	Response 1 dd. i/ Corrected on: “At the same time, the negative of impact on the environment has to be compensated with environmental payments in the various budgets and with provision of polluting substances in surface layer of air below MAC-level.” Please see pages 10,14 in new version of PDD, version 02. ii/ Corrected, please see sec. A.4.3. in new version of PDD, version 02	Conclusion on the response 1. i/accepted ii/ OK closed upon the review of PDD v.2



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
CAR 04. The project has no approvals by the Parties involved.	A.5	Response 1 dd. According to the national JI procedure, the project will be approved after, inter alia, the issuance of a positive determination opinion.	Conclusion on the response 1. Left open.
CAR 05 Please, justify it precisely which approach is chosen to establish the baseline. Please, refer to the latest version of the guidance and identify the respective paragraph.	22	Response 1 dd. Corrected, please see sec B.1 in new version of PDD, version 02	Conclusion on the response 1. OK closed upon the review of PDD v.2
CAR 06 the statement of imperfection of the APG and oil recovery prognosis looks irrelevant or needs to be properly justified.	23	Response 1 dd. Corrected, please see sec B.1 in new version of PDD, version 02	Conclusion on the response 1. OK closed upon the review of PDD v.2
CAR 07 Theoretical description is not drawn upon Appendix B to guidance for Baseline setting and monitoring. Please, apply the standard variables: Oxidation factor for fuel combustion – $OXID_{xx}$ Flare efficiency $\eta_{flare,t}$ Weight fraction or weight concentration - $w_{GHG,xx}$ (volume or mass %)	23	Response 1 dd. Corrected, please see sec B.1 in new version of PDD, version 02	Conclusion on the response 1. OK closed upon the review of PDD v.2
CAR 08 Investment analysis is presented in the PDD in untraceable manner. No information is provided in the PDD to assure that the baseline is identified on the basis of conservative assumptions. Please substantiate the input values	28	Response 1 dd. Assessment of project's investment attractiveness was executed by TNK-BP specialists. In the process of the project's investment analysis the following data was used: <ul style="list-style-type: none"> • capital investments constitutes 213.8 million USD 	<ul style="list-style-type: none"> • Conclusion on the response 1. capital investments constitutes 213.8 million USD /8/ • projects lifetime is 20 years • the project's output product is APG with an average price of 24

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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
		<ul style="list-style-type: none"> • projects lifetime is 20 years • the project's output product is APG with an average price of 24 \$/ths.m³ • discount rate is defined in accordance with the approved economic conditions for operational business planning of oil output: 12% <p>For calculation of project's economic efficiency TNK-BP macro-parameters were used, including discount rate, inflation rate, hard currency exchange rate, netbacks for gas products, preconditions of electricity prices increase, etc.</p> <p>Assessment of operational expenses was done by analogs with the existing facilities of OAO "Orenburgneft".</p> <p>Project's terminal cost over the calculation horizon with expenses for liquidation is assumed zero and is not taken into account in calculation of money.</p>	<p>\$/ths.m³ /8/</p> <ul style="list-style-type: none"> • discount rate is defined in accordance with the approved economic conditions for operational business planning of oil output: 12% /8/ • The residual costs are not considered as the assets will be fully depreciated according to the the National accountant depreciation procedure <p>OK closed upon the amendments made in the PDD v.2 and the documents provided.</p>
<p>CAR 09 False statement: The level of APG flared has increased over a three-year period of 2006-2009 from 14,1 bln m3 in 2006 till 19,96 m3 in 2009 . Thereby, a share of APG flaring in 2006 was at 24,4% and by 2010 it rose up to 64,3%. Please, remove it from sec. B.2.</p>	28	<p>Response 1 dd. Corrected, please see sec B.1 in new version of PDD, version 02</p>	<p>Conclusion on the response 1. OK closed upon the review of PDD v.2</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
<p>CAR 10 Common practice analysis is not representative as it discusses the theoretical constraints to implement the activities related to the APG supply to the NG mains. Instead of this a common practice shall demonstrate either the absence of similar activities or if such activities occur, they are implemented under dissimilar conditions and hence could not call into question the claim of addionality.</p>	28	<p>Response 1 dd. Corrected, please see sec B.2 in new version of PDD, version 02</p>	<p>Conclusion on the response 1. OK closed upon the review of PDD v.2</p>
<p>CAR 11 The emergency procedure should be elaborated to ensure the presence of double registration of key monitoring parameters e.g.:</p> <ul style="list-style-type: none"> • most conservative value among historical data, • State statistical observation forms (1-TEK neft') etc. <p>The Gas Accountancy Rules issued by Ministry of Fuel and Energy on 15/11/1996 may be used as reference to the monitoring emergency procedure.</p>	36 (b) (iii)	<p>Response 1 dd. According to Instructions on operation of measuring units there are two APG flow lines at the outlet of GCS (working Line 1 and back-up Line 2). In the case when Line 1 is under repair, then AGP volume is supplied from GCS to GGP through Line 2 Please see sec D.2 in new version of PDD, version 02</p>	<p>Conclusion on the response 1. OK closed upon the updates provided in PDD v.2</p>
<p>CAR 12 Please identify the monitoring data storage time</p>	36 (m)	<p>Response 1 dd. All relevant data for monitoring will be stored during two years after the last transfer of ERUs under this Project. Please see sec D.3 in new version of PDD, version 02</p>	<p>Conclusion on the response 1. OK closed upon the review of PDD v.2</p>
<p>CL 01 Please, provide the historical evidence to confirm the rate and the means of APG utilization</p>	A.2.	<p>Response 1 dd.</p> <ul style="list-style-type: none"> • APG utilization at Pokrovsky group 	<p>Conclusion on the response 1.</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
<p>existing prior the project and describe the constraints that would prevent its extensive enhancement for each group of fields (lack of infrastructure/transportation/intake capacity).</p>		<p>of oil-fields is provided by Pokrovsky gas compressing station, (commissioned in 1971). The capacity of the station cannot provide projected additional APG utilization from Pasmurovsky and Riabinovsky oil-fields. Besides, there is no gas transportation connection between these oil-fields and Pokrovsky compressing station.</p> <ul style="list-style-type: none"> • APG utilization at Bobrovsky group of oil-fields is provided by Bobrovsky gas compressing station (commissioned in 1975). Absence of gas pipelines and not sufficient capacity of this station does not permit to utilize projected additional APG ammount. • At Western group of oil-fields compressing stations are absent. This leads to utilization of only high pressure APG at Zaikinsky gas processing plant. • At Eastern group of oil-fields situation is the same. Absence of compressing stations and appropriate gas pipelines makes it possible to utilize only high pressure APG from Vakhitovsky oil-field. <p>Data on the level of APG utilization at the</p>	<p>OK closed upon the review of information provided</p>



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
		related oil-fields are in statistical reports ДН-6.	
CL 02 Please, provide the equipment certificates to confirm the technical specification as presented in sec. A.4.2.	A.4.2	Response 1 dd. Please see compressor's documentation in files: «CL02-Вахитовская ГКС.pdf» «CL02-ТАКАТ (7ВКГ).pdf»	Conclusion on the response 1. Confirmed through the review of /9/ and /10/
CL 03 Please, ensure correct reference to the governmental decry # 780	A.5	Response 1 dd. Corrected, please see sec B.1 in new version of PDD, version 02	Conclusion on the response 1. OK closed upon the review of PDD v.2
CL 04 Please, clarify why the EFs are indicated among the baseline parameters. They are just transient parameters to be calculated with formulae – neither to be monitored, nor fixed. Please provide the evidence on which basis the values applied for the baseline estimation can be verified. (FC, APG composition, calculation of compliance to the soot combustion criterion as per NII Atmosphere's methodology)	23	Response 1 dd. EFs are deleted from the list of parameters for BL setting. APG amounts used for calculation of emissions from soot type flaring are based on statistical reports ДН-6 and data from protocols of APG component content analysis. APG amounts from flaring for BL emissions are calculated as a sum of actual amounts of APG flared (from ДН-6) and APG amounts utilized by means of projected compressing stations (operational sheets of the stations).	Conclusion on the response 1. The total volume of APG supplied to GCS was verified against the APG balance-sheets (Regime Cards) /11/. The volumes of APG would have been flared under the baseline (Total recovery - utilization outside the project + supply to GCS) were verified on the basis of the company's reporting form ДН-6 /12/. The APG composition was verified through the review of APG chromatograph tests /13/. ER is calculated on the basis of only one composition test in each year, whereas the MP states composition to be the APG composition to be tested quarterly. Other tests were not available at the stage of PDD



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
			<p>development. FAR 01 At the stage of verification PP are requested to provide, and AIE shall assess all testing results for the each year and use the most conservative composition for the annual ER calculation. The results of "soot combustion" criterion shall be reconsidered as well using the most conservative APG composition.</p> <p>Please provide the evidence to substantiate that the company possess enough capacity to continue the flaring during the whole crediting period, taking into account the number, technical capacity, and the lifetime of each flaring device.</p>
<p>CL 05 Please, clarify if the rejection of the alternative of APG injection is technically impossible. The advantage of the continuation of water pumping is not self-evident.</p>	23	<p>Response 1 dd. APG fanning to increase pressure in drills is not possible because of specific conditions of reservoirs.</p>	<p>Conclusion on the response 1. Ok, Closed upon the review of PDD v.2</p>
<p>CL 06 Please clarify the application of option (a) instead of others in terms of its solely applicability or conservativeness</p>	29 (a)	<p>Response 1 dd. There is not appropriate CDM methodology for the project under</p>	<p>Conclusion on the response 1. Acceptable due to complexity and unordinary of the monitoring plan</p>

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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
		consideration.	Ok, Closed upon the review of PDD v.2
CL 07 Please provide the evidence for the capital costs, operational costs, maintenance, power tariff, operation lifetime, residual value (assumed to be zero) and other investment parameters.	29 (b)	Response 1 dd. Справка ТК	Conclusion on the response 1. Closed upon the review of /8/.
CL 08 Please clarify and substantiate with relevant docs: i/ that fact that all gas compressors inside the project consumes the electricity from the grid, and there are no any back-up fossil fuel based electricity generating facilities. ii/ No electricity consumption at GPPs (for leakage)	32 (a)	Response 1 dd. i/ Power consumed by compressors of compressing stations is delivered from Orenburg power system. Copy of the Agreement with power supplier is presented in file: «CL08-Договор №_0797 от 06.07.2011 с ЗАО _ЕЭСНК.pdf» ii/ For assessment of leakage data from Zaikinsky GPP (TNK-BP) was used. This is an assumption for assessment of leakage since APG is delivered to other gas processing plants (Otradnensky and Neftegorsky). These plants do not belong to TNK-BP and data from them is not available . Zaikinskoe GPP uses gas driven engines for processing operations, i.e. the main energy resource is APG. Electrical engines for gas processing are not used. Related list of equipment is presented at site «CL08-Оборудование Зайкинского ГПП.pdf»	Conclusion on the response 1. Verified on the basis of /14/ Diesel consumption is to be discussed with PP The typical GPP uses the APG running equipment for the main technological processes (as demonstrated with /15/), hence electricity consumption, if any, would be negligibly small and does not depend on the APG supply. Closed.
CL 09 Please, provide the evidence to support that the	34 (a)	Response 1 dd.	Conclusion on the response 1.

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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
date 15.01.2007 was the date of the earliest real action to implement the project.		Please see file: «CL09-Разр на строительство_Курманаевская ГКС.pdf»	15/01/07 is indicated in /16/, but the January 2006 is indicated in /17/. Please use the earliest date and substantiate it properly. The service contract for the predesign and design work was provided /18/ ok
CL 10 please, clarify the operation life and provide the docs.	34 (b)	Response 1 dd. Operation lifetime was set based on a 20-year lifespan of compressor equipment. Please see compressor's documentation in file «CL10 Вахитовская ГКС.pdf» (page 8)	Conclusion on the response 1. Confirmed through the review of /9/ ok
CL 11 Please provide the commissioning certificate to support that emission reduction was started on or before 01/01/2008.	34 (c)	Response 1 dd. Please see file «CL11-Акт приемки.pdf»	Conclusion on the response 1. Ok confirmed through the review of /17/
CL 12 Please provide the documentary evidence for <ul style="list-style-type: none"> • Average leaks due to processing and compressing of APG at GPP • Average specific APG consumption per ths. cubic meter of processing/compressing APG at GPP 	36 (a)	Response 1 dd. Please see file «Форма ДН-6.rar»	Conclusion on the response 1. Ok verified on the basis of th review of /12/
CL 13 Please identify the national standards which PP follows to.	36 (g)	Response 1 dd. The Monitoring plan is based on the national standard GOST R "State system for ensuring the uniformity of measurements.	Conclusion on the response 1. Ok accepted.
CL 14 Please provide the documentary evidence to	45	Response 1 dd.	Conclusion on the response 1.

Determination Protocol on JI project

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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
support the assumptions used for the ER calculation		Please see files: «Объем компримированного ПНГ.rar» «Состав ПНГ.rar» «Форма ДН-6.rar»	Closed upon the review of /11/-/13/
CL 15 Please provide the EIA and its approval	48 (a)	Response 1 dd. Please see files: «CL15-Разрешения на выбросы.pdf» «CL15-Санитарно-эпидем заключение.pdf» «CL15-Экологическая экспертиза.pdf»	Conclusion on the response 1. Legal compliance was not verified for the part of objects as the environmental licenses were not available.. FAR 02 At the stage of verification the air pollutant emission permits shall be verified to confirm the legal compliance for all project sites.
CL 16 Russian Federal Law 7-FZ "On Environmental Protection" cl. 13 para 2 requires stakeholders' comments to be considered in decision making process to start any activity potentially causing adverse environmental effect. Please clarify how the comments were invited and how they were taken into account if any.	49	Response 1 dd. Please see sec G.1 in new version of PDD, version 02	Conclusion on the response 1. OK, closed upon the review of PDD v.2.
FAR 01 At the stage of verification PP are requested to provide, and AIE shall assess all testing results for the each year and use the most conservative composition for the annual ER calculation. The results of "soot combustion" criterion shall be reconsidered as well using the most conservative APG composition.	23		



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Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1	Summary of project participant response	Determination team conclusion
<p>FAR 02 At the stage of verification the air pollutant emission permits shall be verified to confirm the legal compliance for all project sites.</p>			

Dr. Vladimir Lukin - Lead Verifier
 Dr. Alexey Kulakov -Specialist