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Validation Report

Carbon Asset Management Sweden AB

VALIDATION OF THE CDM-PROJECT:
POWER GENERATION (20MW) BY UTILIZING
COKE OVEN GAS OF CHINA COAL AND
COKE JIUXIN LIMITED IN LINGSHI, SHANXI,
P. R. CHINA

REPORT NO. 953330

2008, February 12

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

Validation of the CDM Project:

Power Generation (20MW) by utilizing Coke Oven Gas of China Coal
and Coke Jiuxin Limited in Lingshi, Shanxi, P. R. China



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Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
953330	2007-05-10	3	2008-02-12	-

Subject: Validation of a CDM Project			
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany		TÜV SÜD Contract Partner: Jiangsu TÜV Product Service Beijing Branch Unit 918, Landmark Tower 2 No.8 North Dongsanhuan Road Beijing 100004 P.R. China	
Client: Carbon Asset Management Sweden AB Drottninggatan 92-94, 111 36 Stockholm, Sweden		Project Site(s): Jinzhong city/Lingshi County, Shanxi Province, P.R. China	
Project Title:		Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi, Shanxi, P. R. China	
Applied Methodology / Version:		ACM0004 / version 2	Scope(s): 1, 4
First PDD Version: Date of issuance: 2007-01-04 Version No.: 03 Starting Date of GSP 2007-01-23		Final PDD version: Date of issuance: 2008-02-8 Version No.: 05	
Estimated Annual Emission Reduction:		67 599 tons CO _{2e}	
Assessment Team Leader: Dr. Sven Kolmetz		Further Assessment Team Members: Feng Wan	
Summary of the Validation Opinion: <p><input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.</p> <p><input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.</p>			

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Abbreviations

ACM	Approved Consolidated Methodology
AM	Approved Methodology
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CR	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission reduction
GHG	Greenhouse gas(es)
KP	Kyoto Protocol
MP	Monitoring Plan
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM-EB. The ultimate decision on the registration of a proposed project activity rests at the CDM Executive Board and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title:

Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi, Shanxi, P. R. China

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- The Kyoto Protocol, in particular § 12
- Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 – 8/CMP.1)
- Decisions by the EB published under <http://cdm.unfccc.int>
- Specific guidance by the EB published under <http://cdm.unfccc.int>
- Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- The applied approved methodology
- The technical environment of the project (technical scope)
- Internal and national standards on monitoring and QA/QC
- Technical guideline and information on best practice

The validation 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.

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at TÜV SÜD's webpage as well as on the UNFCCC CDM-webpages for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual, an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed a “cook-book” for methodology-specific checklists and protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

The completed validation protocol is enclosed in Annex 1 to this report.

Validation Protocol Table 1: Conformity of Project Activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.</i>	<i>The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column</i>	<i>Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (✓), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version.</i>

Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.</i>

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body "climate and energy". The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Dr. Sven Kolmetz	ATL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Feng Wan	GHG-A	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>

Dr. Sven Kolmetz is physicist and auditor at the department “TÜV Carbon Management Service” located in the head office of TÜV SÜD Industrie Service GmbH in Munich. Furthermore he is officially authorized expert in the verification of GHG emissions in the framework of the European Emission Trading Scheme. Before entering TÜV SÜD he worked as energy consultant for industrial companies and as consultant for the German Federal Government on instruments for the reduction of GHG emissions.

Feng Wan is an auditor for environmental management systems (according to ISO 14001) at Jiangsu TUV Product Service Ltd. He is based in Beijing. In his position he is responsible for the implementation of validation, verification and certifications audits for management systems. He has received training in the CDM validation process and participated already in several CDM project assessments.

2.2 Review of Documents

The first PDD version submitted by the client and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

In the period of March 20, 2007 TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of this on-site visit.

Name	Organisation
Ms. Lv Xin	Century Safety Technology Co. Ltd.
Mr. Ma Zhuo	China Coal and Coke Holdings Ltd
Mr. Yang Xiang Sheng	China Coal & Coke Jiuxin Ltd.
Mr. Zhang Zhi Jiang	China Coal & Coke Jiuxin Ltd.
Mr. Liang Dong	China Coal & Coke Jiuxin Ltd.
Mr. Shi Zhong Qi	Beijing Keji consulting Co. Ltd.

2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the validation protocol in annex 1.

2.5 Internal Quality Control

As final step of a validation the validation report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a project will be submitted for re-requesting registration by the EB or not.

3 SUMMARY OF FINDINGS

As informed above all findings are summarized in table 2 of the attached validation protocol.

History of the validation process

The audit team has been provided with a draft PDD in January 2007. Based on this documentation a document review and a fact finding mission in form of an on-site audit has taken place. Afterwards the client decided to revise the PDD according to the CARs and CRs indicated in the audit process. The final PDD version submitted in May 2007 serves as the basis for the assessment presented herewith. Additional documents that are necessary for registration (IRR calculation sheet, LoA, MoC, evidences) have been submitted afterwards. Changes are not considered to be significant with respect to the qualification of the project as a CDM project based on the two main objectives of the CDM to achieve a reduction of anthropogenic GHG emissions by sources and to contribute to sustainable development.

Project description

The following description of the project as per the PDD could be verified during the on-site audit.

The purpose of the project activity-- utilizing Coke Oven Gas (COG) for power generation (20MW) -- is to utilize the excess COG of China Coal and Coke Jiuxin Limited (simplified as Jiuxin Coke Plant hereafter) for power generation. The electricity generated by this project will replace the equivalent quantity of electricity from the North China Power Grid which is coal dominated. The generated electric power will be used to fulfil the in-house requirement of Jiuxin Coke Plant. Without the project activity, the same quantity of electricity for the in-house requirement of Jiuxin Coke Plant will be purchased from the North China Power Grid.

The project is located in Lingshi county of Jinzhong city which is in the middle area of Shanxi province of the People's Republic of China. The total installed capacity of the project will be 20 MW (40x500kW). On its implementation, the annual electricity supply of the project activity is estimated to be 68,796 MWh and the ex-ante estimate of the total CO₂ emission reductions from the project

activity will be 675,990 tones of CO₂ in a 10 year crediting period.

The investment to the project activity has been resolved which includes 30% of equity and 70% of Loan from the China Development Bank.

Findings

In total the assessment team expressed 3 Clarification Request and 15 Corrective Action Requests.

Most of the requests addressed formal aspects and inconsistencies between the documents delivered during the audit and the PDD. During the validation process the version of the additionality tool had to be updated. Besides this the project owner had to deliver additional documents regarding the IRR calculation and more detailed information regarding the monitoring of the emission reductions.

Baseline calculation

For the BM calculation the PDD adopts modified methods agreed by the EB for the approved methodologies AM0005 and AMS I.D. because plant specific data are not available in China. The emission factor of the thermal power plants is calculated by the proportion of the emissions of coal, gas and oil times the emission factor of the best available coal, gas and oil power plant as defined and published by the Chinese DNA. The new thermal capacity installation that exceeds 20% in the last years, for which data are available, is finally assessed with this factor. The emission reductions are calculated based on the IPCC1996 values and the Chinese yearbooks 2003 – 2005 as published by the Chinese DNA on December 15th 2006. These were the latest available data at the time of PDD writing. Meanwhile the new yearbooks have been published resulting in higher emission factors. Hence, the more conservative figures used in the PDD have been accepted.

Additionality

The additionality has been evidenced by investment analysis. The benchmark used (IRR) and the IRR calculation will be uploaded together with the PDD.

Since all the open questions have been closed by the revised PDD the project is in compliance with the CDM requirements.

Corrections

Following a request for review before the EB37 meeting corrections have been required and the validation report has been revised based on the revised PDD and the corrections requested. The revised PDD should

i) select the appropriate baseline in accordance with the methodology, i.e. for those alternatives, including the project activity, which cannot be eliminated due to prohibitive barriers an economic comparison should be conducted to determine the appropriate baseline; and (see issue 5 below)

(ii) ensure that the input values used in this economic comparison are independently validated by the DOE (see issue 2 below)

The required corrections have been mainly addressed in the response to the request for review.

Issue 2

The DOE should provide information regarding how the key input values of the investment analysis have been validated and determined to reflect the true situation facing the underlying project activity?

Response by TÜV SÜD

The key input values below do reflect the true situation of the proposed project investment analysis, and the related documents of their sources are provided by the PP and validated by TÜV SÜD assessment team. They reflect the true situation of this proposed project.

Parameters	value	Sources have been validated
Net electric power supply	68,796MWh/y	According to the Feasibility Study Report (See attached E06), 35 units are in service on average, the project operational hours is assumed to be 7200 hours per year; The lowest actual output of each capacity is 300KW according to the actual operation; The self-consumption rate of the power plants connected to North China Power Grid is 9% according to related documents issued by Shanxi province (See attached E03) and checked by DOE , so owner uses the above Parameters to calculate the electricity generation of this project activity: $300\text{KW} \times 35 \times 7200\text{hours} \times (1-9\%) = 68796\text{MWh}$
Installed Capacity	20MW	According to the Feasibility Study Report of proposed project (See attached E04 and E06))
Equity	RMB 27.336 million Yuan	
Annual operation and maintenance cost	RMB 11.326 million Yuan	
Crediting period	10 年	According to the PDD
Expected CERs price	US\$ 9.5/tCO ₂ e	Signed contract between owner and buyer has been validated by local auditor
The exchange rate	7.7Yuan/US\$	The exchange rate published by Bank of China, on 8 May, 2007. (See attached E12)
Operation guarantee fee	0.12Yuan/kWh	Operation Guarantee Agreement of the Power Generation Plant, and the explanation of this parameter has been given in footnote 4 in the PDD.
Electricity tariff	0.356yuan/kWh	Electricity purchasing invoice of China Coal and Coke Jiuxin Limited which was checked during validation on site (See attached E05)
Benchmark value of IRR	13% (Equity, after income tax)	Economic Evaluation Method and Parameters for Construction Projects/Version 03, p204,China Planning Press

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The above evidences have been assessed and have been found to be appropriate; the translations made in the evidences have been checked and can be verified by TÜV SÜD assessment team.

Issue 5

The DOE shall further clarify how the appropriateness of the baseline was assessed and validated.

Response by TÜV SÜD:

There was no captive generation plant found on-site during the validation conducted by DOE local auditor.

According to “Decision on strictly forbidding the illegal construction of fuel-fired power plant with the capacity 135MW and below” (See attached E07) issued by the General Office of the State Council on April 15, 2002 in china, it is strictly forbidden to build coal/diesel based captive power generation station with the capacity of 20 MW.

Besides, the annual average wind speed is 1.8m/s at the proposed project area, which making it short of wind resource for wind power generation too. (See attached E08)

According to “Eleventh Five-year Plan for Water Resources of Shanxi Province” (See attached E11), Shanxi Province is one of the most water-lacking provinces (Page 2) (See attached E10), and the Fen River basin in the project area has mainly focused on regeneration of small water conservancy works such as power-operated wells, small artesian irrigation area, small pumping irrigation station among others (Page 8). And it is unsuitable to build hydroelectric power station. So it is not realistic for new hydro based captive power generation.

There is no natural gas resource in Shanxi Province. So it is not realistic for new natural gas based captive power generation (See attached E09).

Thus, alternative 3 within the PDD section B.4 can be excluded from the baseline scenarios. The mix of alternatives 2 and 3 can be excluded from the baseline scenarios because alternative 3 is not a baseline scenario.

According to a survey, there are no suitable industrial consumers in the project area. The residential areas are far away from the project site and further be separated by mountains. Hence it is not suitable for supplying COG to residential area. This alternative can be excluded from the baseline scenarios.

It can be concluded from above identified alternatives, that alternative 2: equivalent electricity generation from the grid with flaring of COG would be the baseline scenario, as it complies with all legal and regulatory requirements and faces no prohibitive barrier and is also most economically attractive.

The above evidences have been assessed and have been found to be appropriate; the translations made in the evidences have been checked and can be verified by TÜV SÜD assessment team.

Additional to the explanations above it can be confirmed that the comparison of the two alternatives is correct and has been already checked during the validation process. Only the description has

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been changed and the calculation has been separated into two parts for every alternative. Before the calculation of both alternatives was integrated in one single Excel-sheet. The figures are unchanged as well as the result. We assume the description is more transparent and clear now.

Evidence List

- E01. Cleaner production standard -Coking industry.pdf
- E02. Economical Assessment and Parameters for Construction Project.pdf
- E03. Evidence for self-consumption rate.pdf
- E04. Evidence for the cost of the operation and maintenance.pdf
- E05. Electricity purchasing invoice.pdf
- E06. Feasibility Study Report of power generation.pdf
- E07. Decision on strictly forbidding the illegal construction of fuel-fired power plant with the capacity 135MW and below.pdf
- E08. Evidence for wind speed.pdf
- E09. Natural gas resource in Shanxi.xls
- E10. The distribution of the areas lacking of water.pdf
- E11. Eleventh Five-year Plan for Water Resources of Shanxi Province.pdf
- E12. The exchange rate published by Bank of China.pdf

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4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=2504&Ebene1_ID=26&Ebene2_ID=743&mode=1	
Starting date of the global stakeholder consultation process: 2007-01-23	
Comment submitted by: none	Issues raised: -
Response by TÜV SÜD: -	

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5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi, Shanxi, P. R. China.

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

We herewith confirm that above opinion remains unaltered after consideration of the Executive Boards request for review of December 2007, which was dealt with by EB 37. We like to point out this is also the case for the issue raised in EB's response to the submitted answer for the request for review. A validation opinion on the input values and the baseline determination used in the investment analysis is provided in chapter 3 above. An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 2008 – 02 – 12

Munich, 2008 - 02 - 12

A handwritten signature in black ink, consisting of a large, stylized 'R' followed by a horizontal line.

Certification Body "climate and energy"
TÜV SÜD Industrie Service GmbH

A handwritten signature in blue ink, appearing to read 'Dr. Volk' followed by a horizontal line.

Assessment Team Leader

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ANNEX 1: VALIDATION PROTOCOL

Validation Protocol

Project Title: Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi ,

Shanxi, P. R. China

Date of Completion: 12/02/2008

Number of Pages: 39



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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A. General description of project activity				
A.1. Title of the project activity				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	1	Yes, the project title of Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi, Shanxi, P. R. China enables to identify the unique CDM activity clearly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.2. Are there any indication concerning the revision number and the date of the revision?	1	Yes, it has. The existing PDD version number is 02 with date on 10/11/2006. <u>Corrective Action Request 1:</u> A history of the previous PDD versions should be included in the PDD.	CAR1	<input checked="" type="checkbox"/>
A.1.3. Is this consistent with the time line of the project's history?	1	Yes, but see A.1.2., CAR1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2. Description of the project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?	1,7	The project and the project activities have been described partially. The auditor found the electricity generated by this project is replacing the equivalent quantity of electricity from the coal-dominated North China Power Grid. The generated electric power is being used to fulfil most part of the in-house requirement of Jiuxin Coke Plant. Without the project activity, the same quantity of electricity for the in-house requirement of Jiuxin Coke Plant will be purchased from the North China Power Grid But, no generated electricity is being supplied to North		<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		<p>China Power Grid.</p> <p><u>Corrective Action Request 2:</u></p> <p>As all the generated electric power is being used to fulfil most part of the in-house requirement of Jiuxin Coke Plant. No electricity is being feed into the North China Power Grid. All the information in the PDD should be modified accordingly. All the relevant calculation should be changed accordingly.</p> <p><u>Corrective Action Request 3:</u></p> <p>As the project has been implemented, the actual information concerning the financing should be mentioned in the PDD.</p>	<p>CAR2</p> <p>CAR3</p>	
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1,7,9,20,22	<p>The planning is described in the feasibility study. The project activity is the displacement of electricity generated by coal fired power plants with electricity generated by Coke Oven Gas (COG). The following documents are verified on site for the project activity:</p> <ul style="list-style-type: none"> - Feasibility study - EIA - Minutes of meeting, COG generating plant initial design - Bank loan agreement - Purchase Contract of the equipment 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1,7,9,20,22	No, see A.2.1., CAR2		<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	1,7,9,2 0,22	No, see A.2.1., CAR2	See CAR2	<input checked="" type="checkbox"/>
A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?	1	The form is correctly applied by the project participants China Coal and Coke Jiuxin Limited and Carbon Asset Management Sweden AB.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1,12,1 3,14	<u>Open Issue</u> The LoA of the China NDRC is not available right now. The LoA of Sweden has not been presented to the DOE.	Open issue	<input checked="" type="checkbox"/>
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1,12,1 3,14	Yes, especially annex 1 gives the required information.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4. Technical description of the project activity				
<i>A.4.1. Location of the project activity</i>				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1	During the on-site visit, the auditor found the project location is inside China Coal and Coke Jiuxin Limited, but it is not clearly described in the PDD. The geographical coordinates are not given. <u>Corrective Action Request 4:</u> Please describe the project location more precise and the geographical coordinates are necessary to be shown in the PDD. Furthermore, please provide the map (figure A.4-1) in Eng-	CAR4	<input checked="" type="checkbox"/>

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		lish.		
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1,8	As the project has been implemented, the gas generating system is located at the company, more precisely, the system has been producing electricity since more than 1 year. The project proponent owns the site. This can be confirmed by the validator.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2. Category(ies) of project activity				
A.4.2.1. To which category(ies) does the project activity belonging to? Is the category correctly identified and indicated?	1,2	The project falls into Scope 1, Energy Industries (renewable/non-renewable sources). It is correctly identified and indicated in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3. Technology to be employed by the project activity				
A.4.3.1. Does the technical design of the project activity reflect current good practices?	1,2	Yes, the technical design of the project activity reflects current status and the operation of the project activity is approved. The COG gas engine, which is made locally, is operating well.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	1,2	Yes, the project activity comprises the use of waste gas for electricity generation. There is no doubt that this technology will reduce the GHG emissions significantly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?	1,2	There is no technology transfer. The main equipment, the gas engine, is from a local manufacturer, Shengli Power Machinery Works of Shengli Petroleum.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.4. Is the technology implemented by the project activity environmentally safe?	1,2	Yes, the COG gas generation is a clean technology, so the technology implemented by the project activity is environmentally safe.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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A.4.3.5. Is the information provided in compliance with actual situation or planning?	1,8,14,34	Yes, the information provided within the PDD is in compliance with the actual situation and planning.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1,2	The equipment used is the latest model of gas engines from the local manufacturer, Shengli Power Machinery Works of Shengli Petroleum. As this technology is primarily used in a gas engine with coke oven gas (COG) with a lower heat value than natural gas the performance will be significantly higher than any commonly used technology in other coke plants in China.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1,2	This technology is one of the first times being used in China and marks a breakthrough in the use of COG in the coke sector in China. The possibility to be substituted within the project period for such technology is small. The life time of the project is under normal circumstances longer than the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1,34	Yes. Because of the new equipment applied to the project with a new kind of fuel, COG, there is additional training needed to guarantee control of the composition of this gases and safe operation during the life time of the project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	1,34	Although the operation work and maintenance work is being carried out by the engine manufacturer, the project owner also takes part of the operation job. This training has been provided by the engine manufacturer, Shengli Power Machinery Works of Shengli Petroleum. But there is no statement in the PDD.	CAR5	<input checked="" type="checkbox"/>

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		<u>Corrective Action Request 5:</u> Please provide how, and when the training has been performed, as well as the training program for the project activity in the PDD.		
A.4.3.10. Is a schedule available for the implementation of the project and are there any risks for delays?	1,8,11,17,20	The project has been implemented; all 40 sets of gas engines are being used properly. Hence there are no more risks of delay. The time schedule for the implementation of the project in the past should be clearly described by the project owner. <u>Corrective Action Request 6:</u> The time schedule of the implementation of the project, project history, should be included into the PDD.	CAR6	<input checked="" type="checkbox"/>
<i>A.4.4. Estimated amount of emission reductions over the chosen crediting period</i>				
A.4.4.1. Is the form required for the indication of projected emission reductions correctly applied?	1,2	The project emission reductions are shown in table 4-1. of the chapter A.4.4 in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	1,25	<u>Corrective Action Request 7:</u> See A.2.1., CAR2, as 100% generated electricity is being used in-house of the coke plant, instead of 50% inside and 50% fed into power grid, the calculation should be done according to the revision of the electricity generation.	CAR7	<input checked="" type="checkbox"/>
<i>A.4.5. Public funding of the project activity</i>				
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1,22	Yes. There is no public funding necessary; all costs are covered by bank loans and private equity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1	The statements both in this chapter and Annex 2 are consistent with other chapters of the PDD.	☑	☑								
B. Application of a baseline and monitoring methodology												
B.1. Title and reference of the approved baseline and monitoring methodology												
B.1.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1,2,3,4	The approved methodology ACM0004 version02 and related ACM0002 version 06 are used including the Tool for the Demonstration and Assessment of Additionality, version02.	☑	☑								
B.1.1.2. Is the applied version the most recent one and / or is this version still applicable?	1,2,3,4	<u>Corrective Action Request 8:</u> The version 02 of the Tool for the Demonstration and Assessment of Additionality is not the latest one. Please use the version 03.	CAR 8	☑								
B.2. Justification of the choice of the methodology and why it is applicable to the project activity												
B.2.1.1. Is the applied methodology considered the most appropriate one?	1,2	Yes, ACM0004 is the only approved methodology that can be applied.	☑	☑								
B.2.2. Criterion 1: The applicability is limited to project activities that generates electricity from waste heat, waste pressure or the combustion of waste gases in industrial facilities	1,2	<table><tr><th>Applicability checklist</th><th>Yes / No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table> The generated electricity is not being fed into the grid. See A.2.1., CAR2	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Compliance verified?	Yes	See CAR2	☑
Applicability checklist	Yes / No											
Criterion discussed in the PDD?	Yes											
Compliance provable?	Yes											
Compliance verified?	Yes											
B.2.3. Criterion 2: The project activity has to displace electricity	1,2											

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generation with fossil fuel in the electricity grid or captive electricity generation from fossil fuels		Applicability checklist	Yes / No		
		Criterion discussed in the PDD?	Yes		
		Compliance provable?	Yes		
		Compliance verified?	Yes		
B.2.4. Criterion 3: After the implementation of the project activity there has to be done no fuel switch in the process, where the waste heat or pressure or the waste gas is produced.	1,2	Applicability checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Criterion discussed in the PDD?	Yes		
		Compliance provable?	Yes		
		Compliance verified?	Yes		
B.2.5. Criterion 4: If capacity expansion of an existing facility is planned during the crediting period, the added capacity must be treated as a new facility.	1,2	Applicability checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Criterion discussed in the PDD?	N/A		
		Compliance provable?	N/A		
		Compliance verified?	N/A		
B.3. Description of the sources and gases included in the project boundary					
B.3.1. Source: Grid electricity generation Gas(es): CO2 Type: Baseline Emissions	1,2	Boundary checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Source and gas(es) discussed in the PDD?	Yes		
		Inclusion / exclusion justified?	Yes		
		Explanation / Justification sufficient?	Yes		
		Consistency with monitoring plan?	Yes		
B.3.2. Source: Captive electricity generation Gas(es): CO2 Type: Baseline Emissions	1,2	Boundary checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Source and gas(es) discussed in the PDD?	N/A		
		Inclusion / exclusion justified?	N/A		
		Explanation / Justification sufficient?	N/A		

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		Consistency with monitoring plan?	N/A													
B.3.3. Source: On-site fossil fuel consumption due to the project activity Gas(es): CO2 Type: Project Emissions	1,2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed in the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table>			Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No															
Source and gas(es) discussed in the PDD?	Yes															
Inclusion / exclusion justified?	Yes															
Explanation / Justification sufficient?	Yes															
Consistency with monitoring plan?	Yes															
B.3.4. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1,7	The project boundary for the proposed project is verified on site by the validator.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario																
B.4.1. Have all technically feasible baseline scenario alternatives (a) - (f) to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?	1,7	All technically feasible options for waste gas to the project activity have been identified and discussed by the PDD. It is considered as being complete because the discussion within the PDD is following the procedures described within Methodology ACM0004 version 02. Alternative 1: The project activity is not undertaken as an CDM project activity; Alternative 2: Equivalent electricity import from the grid with flaring of COG; Alternative 3: New coal/diesel/natural gas/hydro/wind based captive power generation with flaring of COG; Alternative 4: A mix of alternative 2 and 3; Alternative 5: Other uses of the waste COG.				<input checked="" type="checkbox"/>										

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		<u>Clarification Request 1:</u> Please provide hardcopies of the source documents for all foot notes including data from various websites.	CR 1	
B.4.2. Does the project identify correctly and excludes those options not in line with regulatory or legal requirements?	1,27,2 8,29,3 0,31,3 2	Yes, project participants provide evidence and supporting documents to exclude those options not in line with regulatory and legal requirements. Above Alternatives 3 is excluded because : Alternative 3 is against the Chinese power regulation. Alternative 1, 4, 5 are also excluded. It is clearly described in B.4 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.3. Have applicable regulatory or legal requirements been identified?	1,27,2 8,29,3 0,31,3 2	Yes, the following regulation and legal requirements have been identified: - Chinese power regulations; - "Emission Standard of Air Pollutants for Coke Oven (GB16171-1996) ", it is stipulated that the excess COG must be flared to the atmosphere and no direct discharge is allowed.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.4. If baseline scenario is captive power generation (Option 1), is the estimated boiler efficiency determined due to Option A or B?	1,2	The baseline scenario has no captive power generation. It is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.5. If the baseline scenario is grid power imports (Option 2), is the Emission Factor calculated according to ACM0002?	1,2,3	Yes, the baseline scenario is grid power imports and the Emission Factor is calculated according to ACM0002.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.4.6. If the baseline scenario includes both captive and imported power (Option 3), is the emission factor weighted correctly?	1,2	The baseline scenario does not include captive power, this is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):				
B.5.1. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	1,2	Yes, 3 analysis methods are identified appropriately in the PDD and only Option III is applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.2. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.3. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.4. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1,2	Yes, the IRR is identified clearly as the most suitable financial indicator. <u>Corrective Action Request 9:</u> According to the additionality tool the equity IRR has to be used instead of the project IRR. The IRR calculation has to be delivered for uploading it together with the PDD if the investment analysis is considered to be the most convincing barrier. The Excel sheet of the IRR calculation has to be uploaded as well.	CAR9	<input checked="" type="checkbox"/>
B.5.5. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	1,2	Yes, for Option III in table B.5-1 of the PDD the major parameters are listed and a calculation of the financial figures under consideration of O&M costs, tariff and static total investment, and etc. is done	CAR10	<input checked="" type="checkbox"/>

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		<u>Corrective Action Request 10:</u> Please delete the "Power price of grid sale", see A.2.1., CAR2 <u>Clarification Request 2:</u> The evidence of the "Power price of grid purchase" needs to be provided and be verified by the DOE.	CR2	
B.5.6. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	1,2	Yes, it is. Most of the parameters are from FSR.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.7. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1,2	No, step 3 has not been applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.8. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.9. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1,2	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.10. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1,2,7	Yes, 3 similar project activities have been identified and appropriately analyzed by the PDD: between the years 2003-2006, nine power generation projects with COG by using a combustion engine have been installed in Shanxi province. But there are only two projects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		(including the project activity) with an installed capacity above 10MW. The project activity is the only one with the installed capacity above 15MW. In other words, this project activity is the first of its kind in Shanxi province between 2003-2006. No new projects have been set up in 2006 because of the shrinking coke market in these two years.		
B.5.11. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1,2	Yes, it demonstrates clearly that the project activity would not be implemented without a CDM component, because the project activity is the biggest one as well as the unique one of its type. In other words, no similar projects that could occur have been observed.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.12. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?	1,2	Yes, it is appropriately explained that the approval of the project activity would obvious help to overcome the economic and financial hurdles and other identified barriers, such as, improving the main financial indicator. It also would improve the project IRR by selling CERs.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6. Emissions reductions				
<i>B.6.1. Explanation of methodological choices</i>				
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1,2	<p>The calculation of the emission reductions is applied according to the steps described in ACM0004:</p> <ul style="list-style-type: none"> - Calculation of the Operating Margin Emission Factor - Calculation of the Build Margin Emission Factor - Calculation of the Combined Baseline Emission Factor <p>These steps are described in a transparent manner. The EF factors published by NDRC have been used.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	1,2	Yes, every selection of options offered by the methodology was justified and option 3 of captive power and grid power imports has been used and verified on site. The methodology offers 3 options to calculate the emission reductions: Option 1: captive power Option 2: grid power import Option 3: a mixture of option 1 and 2.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.3. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1,2,26	Yes, the formulae to calculate the project emissions are correctly presented. The project emissions do not have to be considered in this project activity because there is no additional gas needed, the project emission is zero.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.4. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1,2,26	Yes, it uses the baseline emission formulae and enables to use and monitor the parameters.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.5. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1,2	No leakage is considered according to the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.6. Are the formulae required for the determination of emission reductions correctly presented?	1,2,26	Yes. The emission reductions are equivalent to the baseline emissions.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.2. Data and parameters that are available at validation				

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B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	1,2	A list of all parameters is needed and clearly presented according to ACM0004 and ACM0002 in the PDD. <u>Corrective Action Request 11:</u> Please add all external parameters in the section B.6.2 of the PDD according to B6.2.7 to B.6.2.11 of the protocol.	CAR11	<input checked="" type="checkbox"/>																		
B.6.2.2. Parameter Title: EF _i Carbon emissions factor of fuel (estimation of project emissions)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table> <u>Corrective Action Request 12:</u> Data unit should be tCO2/MWH instead of tC/TJ.	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	No	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	CAR12	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.3. Parameter Title: Hr Average plant efficiency	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N/A</td></tr><tr><td>Data unit correctly expressed?</td><td>N/A</td></tr><tr><td>Appropriate description of parameter?</td><td>N/A</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N/A	Data unit correctly expressed?	N/A	Appropriate description of parameter?	N/A	Source clearly referenced?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
Data Checklist	Yes / No																					
Title in line with methodology?	N/A																					
Data unit correctly expressed?	N/A																					
Appropriate description of parameter?	N/A																					
Source clearly referenced?	N/A																					

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			PPD in GSP	Final PDD																		
		Correct value provided?	N/A																					
		Has this value been verified?	N/A																					
		Choice of data correctly justified?	N/A																					
		Measurement method correctly described?	N/A																					
B.6.2.4. Parameter Title: EF _y CO2 emission factor of the grid	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table>			Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																							
Title in line with methodology?	No																							
Data unit correctly expressed?	No																							
Appropriate description of parameter?	No																							
Source clearly referenced?	No																							
Correct value provided?	No																							
Has this value been verified?	No																							
Choice of data correctly justified?	No																							
Measurement method correctly described?	N/A																							

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B.6.2.5. Parameter Title: EF _{OM,y} CO2 operating margin emission factor of the grid	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	No																					
Source clearly referenced?	No																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	N/A																					
B.6.2.6. Parameter Title: EF _{BM,y} CO2 build margin emission factor of the grid	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	No																					
Source clearly referenced?	No																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	N/A																					

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B.6.2.7. Parameter Title: F _{i,j,y} Amount of each fossil fuel consumed by each power source / plant	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr></table> <p>See B.6.2.1., CAR11, please add this parameter to the list in B.6.2 of the PDD</p>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	No	See CAR11	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	No																					
Source clearly referenced?	No																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	No																					
B.6.2.8. Parameter Title: COEF _{i,k} CO2 emission factor of each fuel type and each power source / plant	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table> <p>See B.6.2.1., CAR11, please add this parameter to the list in B.6.2 of the PDD</p>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	N/A	See CAR11	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	No																					
Source clearly referenced?	No																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	N/A																					

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B.6.2.9. Parameter Title: GEN _{j,y} Electricity generation of each power source / plant	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.2.10. Parameter Title: EF _{CO2,i} CO2 emission factor of fuel used for captive power generation	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table> <p>See B.6.2.2., CAR12: Data unit should be tCO2/MWH instead of tC/TJ.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	No	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	See CAR12	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					

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B.6.2.11. Parameter Title: Eff _{captive} Energy efficiency of captive power plant (estimation of baseline emissions factor in case of captive power)	1,2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	N/A																					
B.6.3. Ex-ante calculation of emission reductions																						
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1,2,3	Yes, it based on the same procedures are used for future monitoring which only considers the baseline emissions and no project emissions or leakage emissions. The projection is achieved by multiplication of the baseline emission factor of the regional power grid of China times the estimated net electricity generation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1,2	Yes, BEy=EGy*EFy; EFy=0.9826.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.3.3. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1,2	Yes, EGy=68,796MWh/y; BEy=67,599tCO2e/y.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		
B.6.4. Summary of the ex-ante estimation of emission reductions																						

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B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1,2	Yes, the project will result in fewer GHG emissions than the baseline scenario calculated by the formula of $ER_y = BE_y - PE_y$ where PE_y is considered as zero in this project activity. The emission reductions equals to baseline emissions, the project will result in fewer GHG emissions than the baseline scenario.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1,2	Yes, the project emission reduction is zero.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1,2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.6.4.4. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	1,2	Yes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.7. Application of the monitoring methodology and description of the monitoring plan						
B.7.1. Data and parameters monitored						
B.7.1.1. Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1,2	Yes. The EG is the parameter that shall be monitored and recorded.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
B.7.1.2. Parameter Title: Q_i Volume of the auxiliary fuel used by project activity (estimation of project emissions)	1,2			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
		Monitoring Checklist				Yes / No
		Title in line with methodology?				N/A
		Data unit correctly expressed?				N/A
Appropriate description of parameter?		N/A				

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		Source clearly referenced?	N/A		
		Correct value provided for estimation?	N/A		
		Has this value been verified?	N/A		
		Measurement method correctly described?	N/A		
		Correct reference to standards?	N/A		
		Indication of accuracy provided?	N/A		
		QA/QC procedures described?	N/A		
		QA/QC procedures appropriate?	N/A		
B.7.1.3. Parameter Title: NCV _f Net Calorific Value of fuel (estimation of project emissions)	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	N/A		
		Data unit correctly expressed?	N/A		
		Appropriate description of parameter?	N/A		
		Source clearly referenced?	N/A		
		Correct value provided for estimation?	N/A		
		Has this value been verified?	N/A		
		Measurement method correctly described?	N/A		
		Correct reference to standards?	N/A		
		Indication of accuracy provided?	N/A		
		QA/QC procedures described?	N/A		
		QA/QC procedures appropriate?	N/A		
B.7.1.4. Parameter Title: EG _{Gen} Total electricity generated (estimation of electricity generation by project activity)	1,2	Monitoring Checklist	Yes / No		<input checked="" type="checkbox"/>
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	no		

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		<table><tr><td>Has this value been verified?</td><td>no</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Has this value been verified?	no	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes		CAR13														
Has this value been verified?	no																													
Measurement method correctly described?	Yes																													
Correct reference to standards?	Yes																													
Indication of accuracy provided?	Yes																													
QA/QC procedures described?	Yes																													
QA/QC procedures appropriate?	Yes																													
		<u>Corrective Action Request 13:</u> This parameter is required to be measured according to the methodology. The value in the PDD is not correct, it needs to be recalculated.																												
B.7.1.5. Parameter Title: EG _{AUX} Auxiliary electricity (including electrical energy utilized by the power generating equipment in the project boundary)	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>no</td></tr><tr><td>Has this value been verified?</td><td>no</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>		Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	no	Has this value been verified?	no	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes		CAR14	☑
Monitoring Checklist	Yes / No																													
Title in line with methodology?	No																													
Data unit correctly expressed?	Yes																													
Appropriate description of parameter?	Yes																													
Source clearly referenced?	Yes																													
Correct value provided for estimation?	no																													
Has this value been verified?	no																													
Measurement method correctly described?	Yes																													
Correct reference to standards?	Yes																													
Indication of accuracy provided?	Yes																													
QA/QC procedures described?	Yes																													
QA/QC procedures appropriate?	Yes																													

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		<u>Corrective Action Request 14:</u> This parameter is required to be measured according to the methodology. The value in the PDD is not correct, it needs to be recalculated.																										
B.7.1.6. Parameter Title: EG _y Net electricity supplied to facility	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>N/A</td></tr><tr><td>Correct reference to standards?</td><td>N/A</td></tr><tr><td>Indication of accuracy provided?</td><td>N/A</td></tr><tr><td>QA/QC procedures described?</td><td>N/A</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N/A</td></tr></table> See B.7.1.4./B.7.1.5., CAR13/14: This parameter has to be calculated and cannot be measured directly.	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	N/A	Correct reference to standards?	N/A	Indication of accuracy provided?	N/A	QA/QC procedures described?	N/A	QA/QC procedures appropriate?	N/A	See CAR13 and CAR14	☑
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	Yes																											
Measurement method correctly described?	N/A																											
Correct reference to standards?	N/A																											
Indication of accuracy provided?	N/A																											
QA/QC procedures described?	N/A																											
QA/QC procedures appropriate?	N/A																											
B.7.1.7. Parameter Title: Q _{WG} Flow rate of waste gas	1,2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N/A</td></tr><tr><td>Data unit correctly expressed?</td><td>N/A</td></tr><tr><td>Appropriate description of parameter?</td><td>N/A</td></tr><tr><td>Source clearly referenced?</td><td>N/A</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N/A	Data unit correctly expressed?	N/A	Appropriate description of parameter?	N/A	Source clearly referenced?	N/A	☑	☑														
Monitoring Checklist	Yes / No																											
Title in line with methodology?	N/A																											
Data unit correctly expressed?	N/A																											
Appropriate description of parameter?	N/A																											
Source clearly referenced?	N/A																											

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		Correct value provided for estimation?	N/A		
		Has this value been verified?	N/A		
		Measurement method correctly described?	N/A		
		Correct reference to standards?	N/A		
		Indication of accuracy provided?	N/A		
		QA/QC procedures described?	N/A		
		QA/QC procedures appropriate?	N/A		
B.7.1.8. Parameter Title: NCV _{WG} Net Calorific Value of the waste gas	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	N/A		
		Data unit correctly expressed?	N/A		
		Appropriate description of parameter?	N/A		
		Source clearly referenced?	N/A		
		Correct value provided for estimation?	N/A		
		Has this value been verified?	N/A		
		Measurement method correctly described?	N/A		
		Correct reference to standards?	N/A		
		Indication of accuracy provided?	N/A		
		QA/QC procedures described?	N/A		
		QA/QC procedures appropriate?	N/A		
B.7.1.9. Parameter Title: Q _i Flow rate of fuel i	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	N/A		
		Data unit correctly expressed?	N/A		
		Appropriate description of parameter?	N/A		
		Source clearly referenced?	N/A		
		Correct value provided for estimation?	N/A		
		Has this value been verified?	N/A		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
		Measurement method correctly described?	N/A		
		Correct reference to standards?	N/A		
		Indication of accuracy provided?	N/A		
		QA/QC procedures described?	N/A		
		QA/QC procedures appropriate?	N/A		
B.7.1.10. Parameter Title: NCV _i Net calorific value of fuel i	1,2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	N/A		
		Data unit correctly expressed?	N/A		
		Appropriate description of parameter?	N/A		
		Source clearly referenced?	N/A		
		Correct value provided for estimation?	N/A		
		Has this value been verified?	N/A		
		Measurement method correctly described?	N/A		
		Correct reference to standards?	N/A		
		Indication of accuracy provided?	N/A		
		QA/QC procedures described?	N/A		
		QA/QC procedures appropriate?	N/A		
B.7.1.11. Parameter Title: Use the latest approved version of ACM0002 to calculate the grid emission factor. If the power generation capacity of the project plant is less or equal to 15 MW, project participants may use the average CO2 emission factor of the electricity system, as referred to in option (d) in step 1 of the baseline determination in ACM0002.	1,2	Yes, it uses the latest approved version of ACM002 to calculate the grid emission factor. The power generation capacity of the proposed project plant is 20 MW.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
EF _{grid,y}				
B.7.2. Description of the monitoring plan				
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	1,34,36,37	Yes, the operational and management structure is clearly described in figure B.7-1 of the PDD and the Monitoring & Quality Control Manual which are in compliance with the envisioned situation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1,34	Yes, the responsibilities and institutional arrangements for data collection and archiving are clearly described in the PDD and Operation Manual, it was verified on site.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1,34	No, there is no further monitoring plan information on the Annex 4. <u>Corrective Action Request 15:</u> There is not sufficient information of the monitoring plan, especially how many measuring meters, how is the measuring range of the meters, and etc. Please provide a sketch describing the arrangement of the meters, as well as a list to show all the technical information of the monitoring plan.	CAR15	<input checked="" type="checkbox"/>
B.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1	No, there is not any information provided on the Annex 4 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1.1. Is there any indication of a date when the baseline was determined?	1	Yes, the baseline was determined on 15/08/2006	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
B.8.1.2. Is this consistent with the time line of the PDD history?	1	See A.1.2., CAR1:	See CAR 1	<input checked="" type="checkbox"/>
B.8.1.3. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1	Yes, the information on the entity responsible for the application of the baseline and monitoring methodology provided is consistent with the actual situation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.1.4. Is information provided whether this person / entity is also considered a project participant?	1	No, the entity is not a project participant.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C. Duration of the project activity / crediting period				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1	Yes, the project's starting date is 01/01/2006 and 18 years of operation lifetime at least has been clearly defined. This is reasonable. <u>Clarification Request 3:</u> Please provide the evidence for the starting date of the project and please specify the starting date of the project activity in the PDD.	CR3	<input checked="" type="checkbox"/>
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1	Yes, the assumed crediting time is clearly defined and reasonable (fixed crediting period of 10 years).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
D. Environmental impacts				
D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
D.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1,10,11	Yes, there is an environmental impact analysis, such as air pollution control, noise pollution control, water pollution control, ecological environment control, land use and its impacts to local residents are discussed in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	1,10,11	Yes, the host party requires an EIA. The EIA has been done and approved.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3. Will the project create any adverse environmental effects?	1,10,11	No. There are not any adverse environmental effects from the project activity expected	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.4. Were transboundary environmental impacts identified in the analysis?	1,10,11	No transboundary environmental impacts were identified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
D.2.1. Have the identified environmental impacts been addressed in the project design sufficiently?	1	Yes, it has.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2. Does the project comply with environmental legislation in the host country?	1,10,11	Yes, it does.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
E. Stakeholders' comments				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant stakeholders been consulted?	1,24	The validator has checked the survey table of questionnaires collected from stakeholders. The stakeholder groups are: 1. Local government 2. Local Electricity Distribution Company 3. Local residents 4. Local economy and trade committee, 5. Local environmental protection, 6. Local price bureau 7. etc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	1,24	No media has been used to invite comments by local stakeholders. Comments have been gathered through formal written questionnaires.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1,24	There are no regulations/laws in China for carrying out the stakeholder consultation process for this project activity.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1,24	A survey table with questionnaires has been sent to the stakeholders according to the groups mentioned above, and residents who live near to the project activity. All the identified stakeholders have been consulted and all of them had the opportunity to give comments.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
E.2. Summary of the comments received				
E.2.1. Is a summary of the received stakeholder comments provided?	1,24	Yes, there is a summary of the received stakeholder comments and a statistical analysis of the answers.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.3. Report on how due account was taken of any comments received				
E.3.1. Has due account been taken of any stakeholder comments received?	1,24	No adjustments were necessary because no adverse comments have been received.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F. Annexes 1 – 4				
F.1. Annex 1: Contact Information				
F.1.1. Is the information provided consistent with the one given under section A.3?	1	Yes, it is consistent with the information given under section A3.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.2. Is the information on all private participants and directly involved Parties presented?	1	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.2. Annex 2: Information regarding public funding				
F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1	Yes, there is no public funding in this project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.2.2. If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
F.3. Annex 3: Baseline information				
F.3.1. If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1,2,26	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.3.2. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	1,2,26	Yes, it has.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.3.3. Does the additional information substantiate / support statements given in other sections of the PDD?	1,2,26	Yes, it is.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.4. Annex 4: Monitoring information				
F.4.1. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1	There is no additional information provided.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.4.2. Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1	Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.4.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1	Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action re-quests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<p>Yes, it has. The existing PDD version number is 02 with date on 10/11/2006.</p> <p><u>Corrective Action Request 1:</u></p> <p>A history of the previous PDD versions should be included in the PDD.</p>	A.1.2	The history of the previous PDD versions has been included in A.1 of the PDD.	<input checked="" type="checkbox"/>
<p>The project and the project activities have been described partially.</p> <p>The auditor found the electricity generated by this project is replacing the equivalent quantity of electricity from the coal – dominated North China Power Grid. The generated electric power is being used to fulfil most part of the in-house requirement of Jiuxin Coke Plant. Without the project activity, the same quantity of electricity for the in-house requirement of Jiuxin Coke Plant will be purchased from the North China Power Grid. But, no generated electricity is being supplied to North China Power Grid.</p> <p><u>Corrective Action Request 2:</u></p> <p>As all the generated electric power is being used to fulfil most part of the in-house requirement of Jiuxin Coke Plant. No electricity is being feed into the North China Power Grid. All the information in the PDD should be modified accordingly. All the relevant calculation should be changed accordingly.</p>	A.2.1	The relevant parts of the PDD have been modified accordingly.	<input checked="" type="checkbox"/>

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<p>Corrective Action Request 3:</p> <p>As the project has been implemented, the actual information concerning the financing should be mentioned in the PDD.</p>	A.2.1	The financing of the project has been mentioned in A.2 of the PDD.	<input checked="" type="checkbox"/>
<p>During the on-site visit, the auditor found the project location is inside China Coal and Coke Jiuxin Limited, but it is not clearly described in the PDD. The geographical coordinates are not given.</p> <p>Corrective Action Request 4:</p> <p>Please describe the project location more precise and the geographical coordinates are necessary to be shown in the PDD. Furthermore, please provide the map (figure A.4-1) in English.</p>	A.4.1.1	<p>The relevant parts have been revised accordingly. The precise project location and the geographical coordinates have been added in A.4.1.4 and a map in English has been included.</p> <p>Comment of the DOE:</p> <p>Please add the seconds as well. If you check the project location with Google earth it is in a mountainous region.</p> <p>Answer of the PP:</p> <p>The coordinates of the project location are: east longitude 111°38'49", north latitude 36°48'52"</p>	<input checked="" type="checkbox"/> Verified
<p>Although the operation work and maintenance work is being carried out by the engine manufacturer, the project owner also takes part of the operation job. This training has been provided by the engine manufacturer, Shengli Power Machinery Works of Shengli Petroleum. But there is no statement in the PDD.</p> <p>Corrective Action Request 5:</p> <p>Please provide how, and when the training has been performed, as well as the training program for the project activity in the PDD.</p>	A.4.3.9	The training activities have been included in A.4.3 of the PDD.	<input checked="" type="checkbox"/>
The project has been implemented; all 40 sets of gas engines are being used properly. Hence there are no more risks of de-	A.4.3.10	The time schedule of the project activity has been added in A.4.3 of the PDD.	<input checked="" type="checkbox"/>

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<p>lay.</p> <p>The time schedule for the implementation of the project in the past should be clearly described by the project owner.</p> <p><u>Corrective Action Request 6:</u></p> <p>The time schedule of the implementation of the project, project history, should be included into the PDD.</p>		<p><u>Comment of the DOE:</u></p> <p>The evidence for considering CDM dated on March 2004 according to the table A.4.-1 has to be delivered (including translation). The starting date according to Annex 2 of the protocol is 1/1/2006, according to A.4.-1 18/2/2005.</p> <p><u>Answer of the PP:</u></p> <p>The English translation of “Resolution regarding CDM issue of China Coal and Coke Limited” dated on March 18, 2004 has been provided</p> <p>The construction start-up date is regarded to be the starting date of the project activity, which is February 25, 2005. The relevant part in section C of the PDD has been revised accordingly.</p>	Verified.
<p><u>Corrective Action Request 7:</u></p> <p>See A.2.1., CAR2, as 100% generated electricity is being used in-house of the coke plant, instead of 50% inside and 50% fed into power grid, the calculation should be done according to the revision of the electricity generation.</p>	A.4.4.2	The calculation has been revised accordingly.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 8:</u></p> <p>The version 02 of the Tool for the Demonstration and Assessment of Additionality is not the latest one. Please use the version 03.</p>	B.1.1.2	The version 3 of “Tool for the demonstration and assessment of additionality” has been used in this version of PDD.	<input checked="" type="checkbox"/>
<p>Yes, the IRR is identified clearly as the most suitable financial indicator.</p>	B.5.4	It has been revised accordingly in B.5 and Annex 3 of the PDD.	<input checked="" type="checkbox"/> Verified.

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<p><u>Corrective Action Request 9:</u></p> <p>According to the additionality tool the equity IRR has to be used instead of the project IRR. The IRR calculation has to be delivered for uploading it together with the PDD if the investment analysis is considered to be the most convincing barrier. The Excel sheet of the IRR calculation has to be uploaded as well.</p>		<p><u>Comment of the DOE:</u></p> <p>The benchmark evidence has to be delivered (translated).</p> <p>Common practise: as the other projects are smaller they have specifically higher costs. Hence, the project activity may be economically more attractive than the smaller projects. Please explain.</p> <p><u>Answer of the PP:</u></p> <p>The translation of the benchmark evidence has been provided.</p> <p>As the first of its kind project with the largest scale in Shanxi province, it is in lack of management experiences, skilled workers and related experts for the successful operation of the project activity. In fact, the equipment supplier is responsible for the operation and maintenance of the project at the initial stage and it is paid accordingly by the project owner thereof. The cost of the project activity therefore becomes higher. As stated in B.5 of the PDD, the equity IRR of the project activity is lower than the benchmark value and hence the project is not financially attractive without the CDM revenues. So it could be concluded that the project activity can not be a common practice in Shanxi Province.</p> <p>The relevant parts (Step 4a in Part B.5.) of the PDD have been modified accordingly</p>	
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Yes, for Option III in table B.5-1 of the PDD the major parameters are listed and a calculation of the financial figures under consideration of O&M costs, tariff and static total investment, and etc. is done <u>Corrective Action Request 10:</u> Please delete the "Power price of grid sale", see A.2.1., CAR2	B.5.5	It has been deleted accordingly.	<input checked="" type="checkbox"/>
A list of all parameters is needed and clearly presented according to ACM0004 and ACM0002 in the PDD. <u>Corrective Action Request 11:</u> Please add all external parameters in the section B.6.2 of the PDD according to B6.2.7 to B.6.2.11 of the protocol.	B.6.2.1	All the necessary external parameters required by the Validation Protocol have been added accordingly in section B.6.2 of the PDD.	<input checked="" type="checkbox"/>
<u>Corrective Action Request 12:</u> Data unit should be tCO ₂ /MWH instead of tC/TJ.	B.6.2.2	Unlike the EF _y -the CO ₂ baseline emission factor of the grid, the EF _{CO₂,i} is the CO ₂ emission factor per unit of energy of the fuel i. The correct data unit should be tC/TJ as stated in equation (1) on page 4 of methodology ACM0004/version 02.	<input checked="" type="checkbox"/>
<u>Corrective Action Request 13:</u> This parameter is required to be measured according to the methodology. The value in the PDD is not correct, it needs to be recalculated.	B.7.1.4	The EG _{Gen,y} will be monitored and the correct data has been applied in B.7.1 of the PDD.	<input checked="" type="checkbox"/>
<u>Corrective Action Request 14:</u> This parameter is required to be measured according to the methodology. The value in the PDD is not correct, it needs to be recalculated.	B.7.1.5	The EG _{Aux,y} will be monitored and the correct data has been applied in B.7.1 of the PDD.	<input checked="" type="checkbox"/>
No, there is no further monitoring plan information on the Annex 4.	B.7.2.3	The monitoring diagram and the technical specifications of the meters have been	<input checked="" type="checkbox"/>

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<p><u>Corrective Action Request 15:</u></p> <p>There is not sufficient information of the monitoring plan, especially how many measuring meters, how is the measuring range of the meters, and etc.</p> <p>Please provide a sketch describing the arrangement of the meters, as well as a list to show all the technical information of the monitoring plan.</p>		<p>added in Annex 4 of the PDD.</p>	
<p>All technically feasible options for waste gas to the project activity have been identified and discussed by the PDD.</p> <p>It is considered as being complete because the discussion within the PDD is following the procedures described within Methodology ACM0004 version 02.</p> <p>Alternative 1: The project activity is not undertaken as an CDM project activity;</p> <p>Alternative 2: Equivalent electricity import from the grid with flaring of COG;</p> <p>Alternative 3: New coal/diesel/natural gas/hydro/wind based captive power generation with flaring of COG;</p> <p>Alternative 4: A mix of alternative 2 and 3;</p> <p>Alternative 5: Other uses of the waste COG.</p> <p><u>Clarification Request 1:</u></p> <p>Please provide hardcopies of the source documents for all foot notes including data from various websites.</p>	<p>B.4.1</p>	<p>All the relevant documents have been submitted already.</p>	<p><input checked="" type="checkbox"/></p> <p>This has been confirmed by Mr. Wan, Feng, the local auditor.</p>
<p>Yes, for Option III in table B.5-1 of the PDD the major parameters are listed and a calculation of the financial figures under consideration of O&M costs, tariff and static total investment, and etc. is done</p> <p><u>Clarification Request 2:</u></p> <p>The evidence of the "Power price of grid purchase" needs to be</p>	<p>B.5.5</p>	<p>The evidence has been submitted already.</p>	<p><input checked="" type="checkbox"/></p> <p>This has been confirmed by Mr. Wan, Feng, the local auditor.</p>

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provided and be verified by the DOE.			
<p>Yes, the project's starting date is 01/01/2006 and 18 years of operation lifetime at least has been clearly defined. This is reasonable.</p> <p><u>Clarification Request 3:</u></p> <p>Please provide the evidence for the starting date of the project and please specify the starting date of the project activity in the PDD.</p>	C.1.1	The evidence has been submitted already.	<input checked="" type="checkbox"/> This has been confirmed by Mr. Wan, Feng, the local auditor.

Validation of the CDM Project:


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ANNEX 2: INFORMATION REFERENCE LIST

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Reference No.	Document or Type of Information																				
1	Project Design Document for CDM project “Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi , Shanxi, P. R. China “ version 3																				
2	Consolidated baseline and monitoring methodology for waste gas and/or heat and/or pressure for power generation, ACM0004, version 02																				
3	Consolidated baseline methodology for grid-connected electricity generation from renewable sources, ACM0002/Version06																				
4	Tool for the demonstration and assessment of additionality, version 03																				
5	Validation audit participant list of on-site interview, signed on 20/03/2007																				
6	<p>On-site interviews and inspection at the office conducted on 20/03/2007 by validators of TÜV SÜD.</p> <p>Validation team:</p> <table><tr><td>Mr. Wan Feng</td><td>TÜV SÜD China, Jiangsu TUV Product Service Ltd. Beijing Branch</td></tr></table> <p>Interviewed persons:</p> <table><tr><td>Ms. Lv Xin</td><td>Century Safety Technology Co. Ltd.</td><td>CDM project Manager</td></tr><tr><td>Mr. Ma Zhuo</td><td>China Coal and Coke Holdings Ltd</td><td>Assistant</td></tr><tr><td>Mr. Yang Xiang Sheng</td><td>China Coal & Coke Jiuxin Ltd.</td><td>Manager</td></tr><tr><td>Mr. Zhang Zhi Jiang</td><td>China Coal & Coke Jiuxin Ltd.</td><td>Department Manager</td></tr><tr><td>Mr. Liang Dong</td><td>China Coal & Coke Jiuxin Ltd.</td><td>Engineer</td></tr><tr><td>Mr. Shi Zhong Qi</td><td>Beijing Keji consulting Co. Ltd.</td><td>Project Manager</td></tr></table>	Mr. Wan Feng	TÜV SÜD China, Jiangsu TUV Product Service Ltd. Beijing Branch	Ms. Lv Xin	Century Safety Technology Co. Ltd.	CDM project Manager	Mr. Ma Zhuo	China Coal and Coke Holdings Ltd	Assistant	Mr. Yang Xiang Sheng	China Coal & Coke Jiuxin Ltd.	Manager	Mr. Zhang Zhi Jiang	China Coal & Coke Jiuxin Ltd.	Department Manager	Mr. Liang Dong	China Coal & Coke Jiuxin Ltd.	Engineer	Mr. Shi Zhong Qi	Beijing Keji consulting Co. Ltd.	Project Manager
Mr. Wan Feng	TÜV SÜD China, Jiangsu TUV Product Service Ltd. Beijing Branch																				
Ms. Lv Xin	Century Safety Technology Co. Ltd.	CDM project Manager																			
Mr. Ma Zhuo	China Coal and Coke Holdings Ltd	Assistant																			
Mr. Yang Xiang Sheng	China Coal & Coke Jiuxin Ltd.	Manager																			
Mr. Zhang Zhi Jiang	China Coal & Coke Jiuxin Ltd.	Department Manager																			
Mr. Liang Dong	China Coal & Coke Jiuxin Ltd.	Engineer																			
Mr. Shi Zhong Qi	Beijing Keji consulting Co. Ltd.	Project Manager																			
7	Feasibility study of Power Generation (20MW) by utilizing Coke Oven Gas of China Coal and Coke Jiuxin Limited in Lingshi ,																				

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Reference No.	Document or Type of Information
	Shanxi, P. R. China on 08/2004. Shengli Oil Field Design & consult Co. Ltd., submitted on 20/03/2007
8	Approval of feasibility report of Lingshi Jiuxin 600,000 t/y Coke plant project, dated on 10/10/2003, Shanxi Economic & Trading Commission, submitted on 20/03/2007
9	Minutes of evaluation meeting for the initial design of the Jiuxin coke plant. Date 27/04/2006, submitted on 20/03/2007.
10	EIA of the proposed project, dated on 09/2003, Shanxi Coal Bureau Environmental Protection Research Institute, B(1309), submitted on 20/03/2007
11	Approval of EIA, date on 14/10/2003, Shanxi Environment Protection Bureau (2003)346, submitted on 20/03/2007
12	Letter of Approval of NDRC,
13	Letter of Approval of Sweden,
14	Modalities of communication, date on 04/2007, submitted on 10/05/2007
15	Cooperation Agreement between project owner and project developer, dated on 12/04/2004, submitted on 20/03/2007
16	Evidence of CDM has been considered in the early stage of the project, date 18/03/2004, China coal and Coke Jiuxin Limited, submitted on 20/03/2007
17	Evidence of starting construction, dated on 01/01/2006, Shanxi newspaper, submitted on 29/03/2007
18	Invoice of electricity purchasing, date on 26/01/2007, Lingshi Power supply Subsidiary of Shanxi Power Company, submitted on 20/03/2007
19	Map of the power station and engine installation sketch.
20	Contract of purchasing equipment, as well as the power generation system, dated on 04/2004, submitted on 20/03/2007
21	The author of the financial source, China Coal Shareholder Co. Ltd.
22	Loan Agreement between China Coal Shareholder Co. Ltd. and China Coal and Coke Jiuxin Limited, date 17/08/2005,

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Reference No.	Document or Type of Information
	submitted on 20/03/2007.
23	Evidence of Benchmark submitted on 20/03/2007
24	Stakeholders participant List, minutes of stakeholders meeting, stakeholders comments, submitted on 20/03/2007
25	IRR and NPV calculation sheet
26	EFy and ERY calculation sheet
27	All copies of foot notes
28	The State Electric Industry Yearbook 2005
29	Notice on Strictly Prohibiting the Installation of Fuel-fired Generators with the Capacity of 135MW or below issued by the General Office of the State Council, decree no. 2002-6
30	Interim Rules on the Installation and Management of Small-scale Fuel-fired Generators (issued in Aug. 1997)
31	China Energy Statistical Yearbook 2005
32	The statement for the power consumption load in China Coal and Coke Jiuxin Limited, date 26/04/2007, China metallurgical coke engineering technical Co. Ltd.
33	COG gas content analysis report
34	Operation Manuel of Coke Oven Gas Power Generation (20MW) plant, China Coal and Coke Jiuxin Limited.
35	Emission standard of air pollutions for coke oven, GB16171-1996
36	China National Calibration and Inspection Regulation, JJG596-1999
37	Technical Manuel of the monitoring meter
38	Revised PDD, dated 18/05/2007
39	Cleaner production standard -Coking industry

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Reference No.	Document or Type of Information
40	Economical Assessment and Parameters for Construction Project 3rd edition page 204
41	Evidence for self-consumption rate
42	The exchange rate published by Bank of China
43	Evidence for the cost of the operation and maintenance
44	Evidence for wind speed
45	Eleventh Five-year Plan for Water Resources of Shanxi Province
46	The distribution of the areas lacking of water