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Request for review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 2511. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Thomas Kleiser
Carbon Management Service

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**Response to the request for review for the CDM project activity
"The Waste Heat Recovery Based Coke Dry Quenching Power Generation Project of
Xingang Company" (Ref. no. 2511)**

Issue 1:

Further clarification is required on how the DOE has validated the suitability of the input values to the investment analysis in particular, the: a) investment costs; b) the tariff and c) O&M costs and its components as per EB 38, para 54(c).

Response from TÜV SÜD and Project Participant

- a) According to the publically available information as attached in Annex 1, the total cost for similar projects in China ranged from RMB 130 million to RMB 200 million. The total investment of the project as estimated in the FSR was RMB 161 million, which represented the average level of investment cost of similar projects in China and therefore should be seen as quite reasonable.
Furthermore the final investment costs have been much higher than initially estimated. The final number of total investment is RMB 240 million, which is almost 50% higher than the estimation in the FSR. The attached document 'Total investment evidence' (Annex 4) can be used as the evidence.
- b) The power tariff used for the investment analysis was quoted from the power supply agreement (see IRL 23) signed between the project owner and the local grid company. According to the agreement, the tariff approved by the local government would apply. The tariff used for the investment analysis was consistent with the tariff approved by the Development and Reform Commission of Jiangxi Province in the document with number of Gan Fa Gai Shang Jia Zi (2006) No. 677, as attached (Annex 2) and with the tariff that can be seen in the monthly report of electricity consumption from June 2006 (Annex 5).
- c) According to the FSR, the O&M costs were estimated as per the "Economical Evaluation Method and Parameters for Construction Projects" published by the National Development and Reform Commission and the Ministry of Construction in 2006, which represented the latest national guidance at the time of FSR preparation. Since the project is still in the commissioning phase, there are currently no actual data that we can use to justify the FSR data. Therefore, the O&M costs were estimated in a conservative manner according to the available data at that time. See attached the excel file with the break-down of the O&M costs (Annex 3).

Issue 2:

The means of calculation of fcap is not in accordance with ACM0012 version 2. The DOE is requested to clarify why a Corrective Action Request was not raised during the validation.

Response from TÜV SÜD

The ACM0012 version-2 methodology requires the capping of emission reductions through the parameter fcap for which two methods are described.

Method (1) is applicable to projects utilizing waste gas/heat at facilities for which data is available while Method (2) applies to projects at new facilities or projects that utilize waste pressure.

Method-1: From the first sentence of Method 1 it is clear that fcap applies to both waste gas and waste heat. However in the description of the parameters only reference is made to waste gas and a unit is provided (Nm³) that is relevant to waste gas.

Method-2: This method is described as being applicable to projects involving waste gas, heat and pressure but also here there are a number of inconsistencies regarding reference to waste gas only and the applicable unit.

Monitoring Section: In the monitoring section the methodology only refers to the monitoring of waste gas (not waste pressure or heat). The monitoring of waste heat is very complex.

- Waste heat is a relative value (as opposed to volume of waste gas) and should always be measured relative to a certain temperature, as absolute energy has no relevance in the context of waste heat utilization;
- Gases coming from industry processes are aggressive and would easily damage the instruments;
- To properly monitor the waste heat, instruments would need to be installed at several points, which would require a substantial investment.

The proposed project is a Waste Heat Recovery Project. Hence the above described difficulties apply for this project.

TÜV SÜD was aware of these difficulties of fcap calculation under version 2 which can be seen in Corrective Action Request No. 11, chapter B.6.1.3 of submitted validation protocol attached as Annex 1 in submitted validation report.

Seeking for clarification on this issue, a request for clarification has been submitted to the Meth panel.¹ (21/05/2008)

On 25/08/2008 the clarification has been answered, referring to the following²:

“The Meth Panel suggests the project participant to refer to the revised version (version 3.0) of the methodology, approved by EB41. The revised methodology addresses all the issues raised above.

The specific details on how above issues are addressed, are given as follows:

(1) Method-1: In the revised version now fcap is calculated using the energy contained in the Waste Energy Containing Medium (WECM), and not only waste gas. The equations are updated accordingly to truly represent waste heat and waste pressure. The equation for estimation of fcap based on only waste pressure is also added. The monitoring section now represents the monitoring of all the parameters required to estimate the waste heat in the baseline and crediting period.

(2) Method-2: This method will also apply the similar approaches as Method-1.

(3) The Method-3 is added to cover scenarios where it is demonstrated by project proponents that it is technically difficult to monitor the waste heat generated. In these cases fcap can be defined based on the ratio of theoretical energy production in baseline to the actual energy content of WECM".

The clarification has furthermore been approved in EB 42.

It is TÜV SÜDs understanding that the Meth Panel suggests to revise the fcap calculation part of the PDD refer to the version 3.0 of the method, while the rest of the PDD could still use version 2.

Further TÜV SÜD would like to refer to project 1878, which got registered on 15/12/2008.

• 24/11/2008 Request for review project 1878³;

Minor issue: The DOE should explain how it has validated that (a) the PDD complies with Method 2 for estimating the baseline emissions cap which requires using manufacturers' data or independent experts' analysis for estimating the values of the parameters QBL, product and Qwg, product.

The referred project uses waste heat from a Cement Plant, applying ACM0012 version 2 while referring to method 3 in the part for fcap calculation, which is only used in version 3 of the methodology.

Furthermore the validation report refers to version 3 of the methodology.

Summary:

In the proposed project TÜV SÜD used ACM0012 version 2, referring to version 3 in the fcap calculation part following guidance from the Meth Panel as well as the indications of the Board (registration of project 1878 after RfR on the fcap calculation).

TÜV SÜD would like to apologize that a direct reference to the above named clarification AM_CL0101 has not been given in the Validation Report, which might have caused confusion during the review of the project.

Footnotes mentioned in the answer for Question 2:

¹ <http://cdm.unfccc.int/UserManagement/FileStorage/U4D3OE8YFY03XXH4M8HXKNSJ6COF0>

² http://cdm.unfccc.int/UserManagement/FileStorage/AM_CLAR_F2E9IGIK9QBGSMXOSWO5YXTN0KMMM

³ <http://cdm.unfccc.int/Projects/DB/DNV-CUK1213872634.6/Review/VD9EBN4GFVMGPY9C8JNPCX6BKRS359/display>

Issue 3:

The DOE is requested to clarify how it has validated that the waste heat was released to the atmosphere prior to start of the project activity, in line with the requirements of the methodology.

Response from TÜV SÜD

During the on-site visit of the DOE, it was checked that no equipment for waste heat recovery was installed prior to the implementation of the CDM project. This approach complies with point 5 of methodology ACM0012, version 2, page 3, regarding the ways to check if waste heat utilized in the project activity was flared or released into the atmosphere in the absence of the project activity at existing facility.

TÜV SÜD would like to apologize that a direct reference to the above question was not given in the Validation Report and protocol.

The project participants agreed to the DOE's response.