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	Werner Betzenbichler	Werner.Betzenbichler@tuev-sued.de			

Request for Review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 1375. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Werner Betzenbichler
Carbon Management Service

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Response to the CDM Executive Board

Issue 1:

Further clarification is required on how all the input values of the investment analysis have been validated; in particular the sales revenue and the operating costs. In doing so it should be clarified why the expected revenues applied in the analysis are less than the revenue obtained using the tariff and net generation cited in the PDD.

Response by PP:
As stated in the Validation Report, "the basic figures of the calculation have been evidenced by the Feasibility report". We would like to clarify that this Feasibility report, which we indeed provided to the DOE for validation, included the information on all the input values of the investment analysis, including the sales revenue and the operating costs.
About the project IRR calculation, we would like to clarify that all the detailed calculations submitted to the DOE have been validated. This process enabled to cross-check that the calculations actually use the input values cited in the PDD and that they are carried out accurately. In particular, the estimated annual revenue is correctly calculated and actually uses the tariff and the net generation cited in the PDD. For information, the detailed calculation of the estimated annual revenue is the following:

- from 1st to 15th year of operation:

$$\underbrace{165\,GWh/year}_{\text{Gross annual electricity generated}} \cdot \left(1 - \underbrace{12\%}_{\text{Electricity consumption rate for power generation}}\right) \times \frac{\overbrace{594\,RMB/MWh}^{\text{Feed-in-tarrif (including VAT)}}}{1+\underbrace{17\%}_{\text{VAT}}} = 73{,}72 \cdot 10^6\,RMB/year$$

- from 16th to 20th year of operation:

$$\underbrace{165\,GWh/year}_{\text{Gross annual electricity generated}} \cdot \left(1 - \underbrace{12\%}_{\text{Electricity consumption rate for power generation}}\right) \times \frac{\overbrace{344\,RMB/MWh}^{\text{Feed-in-tarrif (including VAT)}}}{1+\underbrace{17\%}_{\text{VAT}}} = 42{,}69 \cdot 10^6\,RMB/year$$

Nota: the calculated figures uploaded to CDM website were expressed in tens of thousands of RMB. The Electricity consumption rate for power generation accounts for the power consumption of the biomass plant itself. The above calculations are actually carried out correctly in accordance to the Chinese VAT system.

Response by TÜV SÜD:
The IRR analysis has been verified by cross-checking the figures used with the feasibility report. The feasibility report has been approved by the Chinese authorities (see ref. 7 of the annex 2 of the validation report). Hence, no further investigation needs to be accomplished. The calculation has been checked as well. No mistake has been found.
Regarding the main parameters of the IRR analysis we have made an evaluation of the biomass projects under validation and registered. The investment costs and the operational costs

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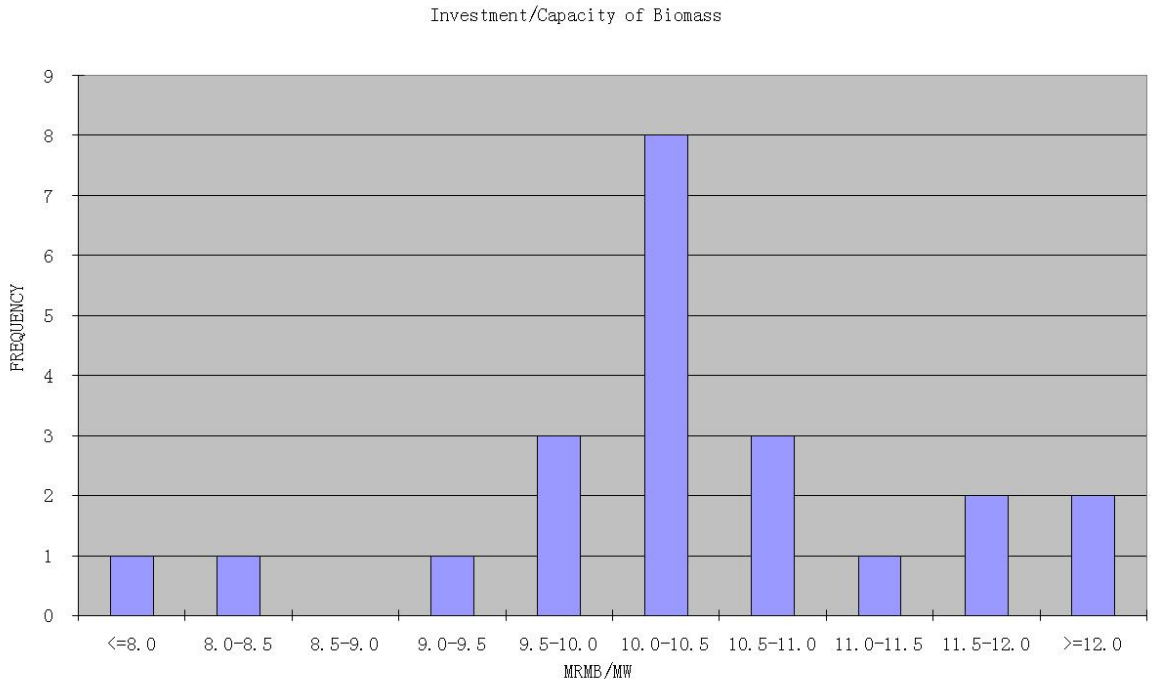
are below the average of other biomass projects in China (24 projects are included in this TÜV SÜD statistics, the project 1375 has specific investment costs of 9.7 Mio. RMB/MW and specific operational costs of 1.53 Mio. RMB/MW). The grid tariff is in the range of the grid tariff of other projects. The same can be stated for the gross electricity generation: the operational hours are above the average of the evaluated biomass power plants in China.



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Issue 2:
Further clarification is required on how the benchmark selected was assessed and validated by the DOE.

Response by PP:
The relevant benchmark for the after-tax internal rate of return (IRR) for new build power projects in China is 8% of the total investment. As stated in the PDD, this benchmark is consistent with the *Interim Rules on Economic Assessment of Electric Engineering Retrofit Projects* issued in 2002 by the State Power Corporation of China which was uploaded to UNFCCC website for the request for registration.

This benchmark is very widely applied in China. In particular, all new-build biomass projects developed in China (see the PDDs of the registered CDM projects 778, 811, 819, 820, 825, 1032, 1263 and 1293 in particular) apply this same benchmark.

Response by TÜV SÜD:
The response from the project participant can be confirmed. Further on, there is another benchmark source, the "financial evaluation of construction projects, method and parameter, version3; other fuels, item No. 0816", where the project IRR benchmark is indicated as 8% as well (see annex). There is no difference between retrofit or newly built projects for this benchmark source. As the benchmark quoted herewith has been published in 2006 it was not available during the preparation of the PDD and the elder benchmark source has been accepted during validation.

Issue 3:

Further clarification is required on how the common practice analysis has been validated.

Response by PP:

All evidences supporting the common practice analysis were provided in the PDD (information available from UNFCCC and Chinese CDM websites + Internet press articles). We believe the PDD common practice analysis was carried out in compliance with the methodology. This common practice analysis fully confirmed the additionality of the project.

Response by TÜV SÜD:
The common practice analysis has been verified by the Chinese New Energy website, http://www.newenergy.org.cn.
China New Energy Network (CNE) is a non-profit professional information network system installed by the Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences, under the joint direction of the State Ministry of Science & Technology, the State Economic & Trade Commission and the Chinese Academy of Sciences.

Shandong Shiliquan biomass project quoted in the PDD is verified by the above mentioned website (referred to in footnote No.10 of the PDD); where it is mentioned that Shiliquan is the first biomass-coal fired power plant in China, put into operation on 16th of Dec, 2005. Hence, it is not similar to the project activity because it is a dual fuel fired power plant.

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The second mentioned similar project is Shanxian biomass project (see footnote No.12 of the PDD). The Chinese web page
http://cdm.ccchina.gov.cn/web/NewsInfo.asp?NewsId=1394
indicates that the Shanxian project is the first Chinese biomass project registered at the UNFCCC. The Shanxian power plant was put into operation on 18th Nov, 2006.
As the Chinese provinces are very large and have their own authorities approving power projects in this scale it has been considered sufficient to concentrate on the provincial level. In general the use of biomass for power generation is not very common in China until now.

Issue 4:
As per the methodology, the monitoring plan should include the monitoring of the number of truck trips for biomass transportation and type and quantity of fuel consumption by these trucks.

Response by PP:
We believe Gaotang project monitoring plan is fully compliant with the methodology. Indeed, according to the version 4 of ACM0006 which was used for the Gaotang PDD, the monitoring of the fuel consumption of fuel type *i* in trucks for transportation of biomass residues during the year *y* ($FC_{tr,i,y}$) is "applicable if option 2 is chosen to estimate CO_2 emissions from transportation". Given we chose option 1 to estimate CO_2 emissions for transportation, the type and quantity of fuel consumption by these trucks should indeed not be monitored.

Extract from version 4 of ACM0006, page 51

Data / parameter:	**$FC_{TR,i,y}$**
Data unit:	Mass or volume unit[9]
Description:	Fuel consumption of fuel type *i* in trucks for transportation of biomass residues during the year *y*
Source of data:	Fuel purchase receipts or fuel consumptions meters in the trucks
Measurement procedures (if any):	
Monitoring frequency:	Continuously, aggregated annually
QA/QC procedures:	Cross-checked the resulting CO_2 emissions for plausibility with a simple calculation based on the distance approach (option 1).
Any comment:	Applicable if option 2 is chosen to estimate CO_2 emissions from transportation.

Similarly, concerning, the monitoring of the number of truck trips for the transportation of biomass, the methodology states that "project participants have to monitor either this parameter or the average truck load TL_y." Since we have chosen to monitor the average truck load, the monitoring of the number of trucks is not required.

Extract from version 4 of ACM0006, page 50

Data / Parameter:	**N_y**
Data unit:	-
Description:	Number of truck trips for the transportation of biomass.
Source of data:	On-site measurements
Measurement procedures (if any):	-
Monitoring frequency:	Continuously
QA/QC procedures:	Check consistency of the number of truck trips with the quantity of biomass combusted, e.g. by the relation with previous years.
Any comment:	Applicable if option 1 is chosen to estimate CO_2 emissions from transportation. Project participants have to monitor either this parameter or the average truck load TL_y.

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Response by TÜV SÜD:
Option 1 has been chosen for the calculation of the transport emissions. All relevant parameters for this option will be monitored as described in the PDD.