TÜV SÜD Industrie Service GmbH · Westendstrasse 199 · 80686 Munich · Germany

Industrie Service

Choose certainty.
Add value.

CDM Team

Deutscher Akkreditierungs Rat

DAP-PL-2885.99
DAP-IS-2886.00
DAP-PL-3089.00
DAP-PL-2722
DAP-IS-3516.01
DPT-ZE-3510.02
ZLS-ZE-219/99
ZLS-ZE-246/99

Your reference/letter of	Our reference/name	Tel. extension/E-mail	Fax extension	Date/Document	Page
	IS-CMS-MUC/Bb	+49 89 5791-2170	+49 89 5791-2756	2007-10-26	1 of 5
	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 1244. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Werner Betzenbichler
Carbon Management Service

Industrie Service

Response to the CDM Executive Board

Issue 1:

Further demonstration of the additionality of the project activity is required.

Response by TÜV SÜD:

According to the CDM PDD guidelines the consideration of the project before starting the project activity has been evidenced by the PP and validated by the DOE.

At the time of preparing the feasibility study report, the CDM revenue has been considered. As stated in the approved feasibility report, the project is approved because the project owner could get the financial supports from the CDM. The feasibility report and the approval letter from the bank have been validated during the on-site visit. For clarification the documents are attached to this response.
In our opinion the additionality has been demonstrated sufficiently as the additionality tool version 3 has been applied. The alternatives have been identified and the exclusion of unreasonable alternatives has been justified and evidenced (step 1, see further questions below). The investment analysis has been chosen including the required sub-steps. The benchmark has been chosen, justified and evidenced (see further question below). The barrier analysis has been applied as well despite it could be skipped as the investment analysis delivers sufficient evidence for the additionality.

Regarding the IRR calculation, the basic figures used are quoted from the approved Feasibility Study Report. Pls. kindly refer to the attached feasibility study report (cover page, the investment plan and total cost expenditure in Chinese and English in PDF). The sensitivity analysis has been applied (see further question below).

The common practice analysis (step 4) is included in the PDD as well and has been validated (see further question below). Hence, the additionality discussion can be considered to be complete.

Issue 2:

The PP/DOE shall further clarify if the “temporary regulation to the small scale thermal-fired power station” issued by the former Ministry of Electric Power Industry, 1997” is still enforceable given its temporary nature and the fact that it is a regulation established in 1997. As this is the regulatory framework that makes thermal fired power plants not a valid alternative the PP/DOE shall further substantiate the selection of the project alternative.

Response by TÜV SÜD:

“The temporary regulation to the small scale fossil fuel fired thermal power station” was issued by the Ministry of Electric Power Industry on Aug. 07, 1997, which required to control strictly the construction of fossil fuel fired thermal power plants with unit capacity of 100 MW and less. On April 14, 2002, a stricter regulation entitled “Notice on strictly prohibiting of install-

Industrie Service

ing fossil fuel fired power generators with the capacity of 135 MW or less" was issued by the State Council Office, decree No. Guobanfamingdian [2002]6. However, there's no declaration released by the Chinese Government on debating or displacing the 1997 regulation with the 2002 one. Hence, the "The temporary regulation to the small scale fossil fuel fired thermal power station" is still valid in China. Both documents show the same result.

Issue 3:

The DOE shall further clarify how they have validated that the "Interim Measures for Economic Evaluation on Electric Power Technical Reconstruction Project", issued by State Power Corporation, dated on Sept. 10th, 2002, Document No. GuoDianFa [2002]623, apply to this project, taking into account that the project activity is a new facility.

Response by TÜV SÜD:
The document entitled with "Interim Measures for Economic Evaluation on Electric Power Technical Reconstruction Project", issued by State Power Corporation, dated on Sept. 10th, 2002, Document No. GuoDianFa [2002]623 is generally adopted for all new facilities although the document refers to "reconstruction". And the "Economical Assessment and Parameters for Construction Project, 3rd edition" issued by Ministry of Construction and NDRC in 2006, also set the 8% as the benchmark for wind power project, regardless it's a new facility or a reconstruction project. The related page from the "Economical Assessment and Parameters for Construction Project" has been translated into English and attached.

Issue 4:

The PP shall further clarify the reference to "the price volatility, fluctuating exchange rate and other uncertainties/risks, this project is practically not feasible to potential investors" in page 11 of 53 of the PDD.

Response by PP:
"The price volatility" means that the price of material such as steel is under the pressure of going higher as a common sense now, so the material fee has a big possibility of going higher.

"Fluctuating exchange rate" means that now the exchange rate from EURO to RMB is going up, and the maintenance service supplier believes it will be the same in the future. They will purchase components from Europe, and they believe they will pay more RMB to purchase components. So they show some clarification to PP to say they are under pressure of increasing the maintenance fee. Such evidence has been provided to DOE.

"Other uncertainties/risks" means that any risk that will take PP more O&M cost such as bad weather.

Response by TÜV SÜD:
The answer of the PP is common sense and reasonable.

Issue 5:

The PP shall further clarify their statement in page 12 of 53 of the PDD that the "possibility of rising in the bus-bar electricity tariff and reducing in the total investments does almost not exist, considering that the electricity tariff for connecting to the power grid was approved by the

NDRC, fixed at the current level and the trends of price rising for raw materials and equipments" as against their reference to volatility of prices. Does volatility of prices exclude tariffs? Is it possible to have prices continuously rising and tariffs fixed for the next 21 years? In addition the DOE shall clarify how they have validated the sensitivity analysis and the underlying assumptions as well as the feasibility study.

Response by PP:
The price volatility stated in PDD means the price increasing of material, not including the electricity tariff. The electricity tariff of Xinjiang power grid has never been changed in the period of 1999-2005. In 2006, a new tariff was released and the price is decreased. Even the price might be changed by local Price Bureau in future, the tariff of the proposed project is fixed by Power Purchase Agreement (PPA) according to the price policy at the time of countersigning the PPA, so the tariff may be fixed within the valid period for a quite long period. PP can't judge whether the tariff will be fixed for 21 years, but PP also doesn't know when the tariff will be adjusted and whether the tariff will increase or decrease. PP can just make his decision whether to invest this project based on what he can expect now. So based on current tariff, this project has a quite low finance attractive to potential investor. Furthermore, the possible annual operation hours stated in the Feasibility Study Report (FSR) is based on the long-term wind resource analysis. During the time of preparing FSR, the operation hours of each alternative of turbines and the expected power generation are calculated and the chosen wind turbine is the one that could fit local wind resource the best. The price policy during the period of 1999-2005 has been attached.

Response by TÜV SÜD:
The answer from the client can be confirmed by the DOE. According to the existing documents an increasing bus-bar tariff can not be expected. Of course, a change in the policy may happen in the future but the PP has to make an investment decision at the beginning of the project based on the existing facts during that time. Moreover, it is common sense that the steel prices are increasing due to the worldwide economic growth and no acknowledged analyst is expecting decreasing steel prices in the near future. Moreover, afterwards there is a re-validation in 7 years, the assumptions have to be considered for 7 years and not for 21 years. For the period of 7 years the assumptions can be considered to be valid, for the rest of the renewable crediting periods nobody can make senseful assumptions.
The feasibility study has been approved by the local authorities. Hence, no further validation is needed for this official document. For the plausibility of the costs we have created a database where all Chinese wind projects are listed and we compare during the validation process if the costs of the specific project is unreasonable high. Regarding the sensitivity analysis, it has been valued and analyzed in the feasibility study report which has been approved by the Chinese government. The impacts of most sensitive parameters, electricity tariff, operation cost and total investment are demonstrated in the approved report. Same parameters are quoted in the PDD and checked by the audit team.

Issue 6:

The following technology barrier statement -used as a demonstration of current barriers- "the Wulabo wind farm project will adopt the 1.5MW FD70B-1500/13 turbines which are manufactured domestically by Dongfang turbine factory by using imported advanced technologies. Although there are operation records already for such products, the capability of long time continuous operation by such domestically manufactured equipment is lack to be proven against real operation practice under atrocious weather environment, especially in the Gobi Desert area in the northwest part of China" as stated in page 13 of 53 of the PDD is completely contradic-

tory with the DOE Validation Protocol (page 17 of 53 of the Validation report) that states that "In this project, 20 turbines with capacity of 1,500 kW each are planed to be installed. The supplier, Dongfang Steam Turbine Company, is one of the biggest Chinese wind turbines manufacturer. With the technology introduced by German Repower, Dongfang has successfully developed and implemented 1,500 kW turbines at wind power plants, such as, Shandong Rongcheng, Guohua Hulunbeier, etc.. There's no doubt that the project activity reflect current good practices". The DOE shall further clarify how they have validated these technology barriers and whether they are real and verifiable.

Response by TÜV SÜD:
The descriptions from the PDD and validation protocol demonstrate the different aspects of implementing the project activity. The technology applied for the turbine design and manufacturing is transferred from German Repower and until now, the domestic design of wind turbines at the same level is still not mature. The turbine type used at the project activity has been successfully implemented at other Wind farms, such as Shandong Rongcheng and Guohua Hulunberier. However, these two wind power projects are in East China and North China where the weather environment is better than in Xinjiang. For this case, as stated in the PDD, the operational environment in Xinjiang is different. Being a project located in Western China, the turbines will be installed at the Gobi Desert area where extreme weather condition is expected such as sand storms etc. Therefore the barrier is explained and the comment in the validation report is referring to the equipment in general, not to the specific situation.

Issue 7:

The DOE shall further clarify how they have validated the common practice analysis and its consistency.

Response by DOE:
The survey reports named "statistics report of installed capacity in China" issued in 2004 and 2006 respectively are the most professional documents to demonstrate the latest status of wind power projects in China. The related information from these two reports is used to assess the description from Step 4 of PDD. All the contents are consistent. They are available only in Chinese and confirmed on-site by our Chinese team.

Issue 8:

As it is unclear if the net electricity generated is measured or calculated, further clarification is required as to whether the monitoring plan is in accordance with the methodology.

Response by PP:
The electricity supplied to grid is measured by the gateway meter installed in the 220kV substation continuously and recorded monthly by Xinjiang Power Grid Company. So the monitoring plan of this project is fully in accordance with the monitoring methodology. Because this electricity is measured together with other projects, the power grid company will record the electricity and open receipts for this project based on some agreement.

Response by TÜV SÜD:
The net electricity is measured according to the methodology for every wind farm separately and the result of this measurement is used for the separation of the three wind farms. The invoice for all three wind farms can be considered as an additional plausibility check.