



Industrie Service

**Choose certainty.  
Add value.**

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

## CDM Team



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 Werner Betzenbichler	+49 89 5791-2170 Werner.Betzenbichler@tuev-sued.de	+49 89 5791-2756	2008-01-11	1 of 6

## Request for Review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 1365. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Werner Betzenbichler  
Carbon Management Service

Headquarters: Munich  
Trade Register: Munich HRB 96 869

Supervisory Board:  
Dr. Axel Stepken (Chairman)  
Board of Management:  
Dr. Manfred Bayerlein (Spokesman)  
Dr. Udo Heisel

Telefon: +49 89 5791-  
Telefax: +49 89 5791-  
[www.tuev-sued.de](http://www.tuev-sued.de)  
**TÜV**®

TÜV SÜD Industrie Service GmbH  
Niederlassung München  
Umwelt Service  
Westendstraße 199  
Westendstrasse 199  
80686 Munich  
Germany

## **Response to the CDM Executive Board**

### **Issue 1**

Further clarification is required on how the DOE has validated the investment analysis, in particular why the utilization hours was not considered as a parameter in the sensitivity analysis since it was claimed to be a major factor why other similar projects have higher IRRs.

### **Response by TÜV SÜD**

1. Referring to “How the DOE has validated the investment analysis”: Chapters 2.2 to 2.5 of the validation report clarify that both a desk review and follow up interviews were performed to validate that all validation requirements, amongst them additionality (argued for by an investment analysis) were fulfilled. We have confirmed in chapter 3, part B.5 and CARs 4 to 6 of our validation report and protocol and would like to reconfirm at this point one more time that TÜV SÜD
  - a. Validated the appropriate analysis method (as required by sub-step 2.a),
  - b. Validated the appropriateness of the selected benchmark (as required by sub-step 2.b),
  - c. Reviewed all documents mentioned in the PDD under sub-step 2.c of the additionality tool as well as in the IRR calculation spreadsheet and confirmed their completeness and relevance for evidencing the economic situation at CDM decision-making context. The assessment is based on official sources and further verification of these sources is considered being out of the scope of the CDM validation. For most parameters, the Preliminary Design Report (PDR) provides the most realistic values, except for the following items:
    - i. Electricity tariff: the values provided by the Hunan Provincial Price Bureau’s document (XiangJiaZhong[2004] 90) are more accurate,
    - ii. The residual value and operation period have been taken from the document SL 16-95 as the values in the PDR are less conservative,
    - iii. Welfare, insurance and housing fund rate: The PDR stipulates 40% for simplification, however the value of 41% from national financial policies is more accurate,
    - iv. Support funds of later stage for reservoir region: [Xiangzhengfa (2001) No.19], as the PDR does not include the costs which should be accounted according to national policy,
    - v. VAT: Proof from Taxation Bureau as the value in the PDR is 6%, which is not in accordance with the actual situation at the time of CDM decision,
    - vi. For all other values where other official evidences are mentioned, the values do not differ between these evidences and the PDR.
  - d. Confirmed that the sensitivity analysis has been performed appropriately varying key parameters and that the resulting IRR is still below the benchmark (as required by sub-step 2.d).
2. Regarding the consideration of the operating hours in the sensitivity analysis, this has the same impact on the IRR than the variation of the electricity tariff, considered in table

6. TÜV SÜD confirms however that neither the increase in electricity tariff, nor the increase in operating hours by 10 % is a realistic scenario.

## **Issue 2**

The sensitivity analysis includes variation in three variables and the resulting IRRs are still below the benchmark. However, there is no calculation on the combination of those variations that might result in an IRR above the benchmark. Further clarification and substantiation is required.

### **Response by PP**

The sensitivity analysis includes three variables, namely

- the total investment,
- electricity tariff and
- annual O & M costs.

It has been explained and confirmed during validation that the total investment has already increased and the electricity tariff has already decreased. Thus, a combined improvement is unrealistic.

### **Response by TÜV SÜD**

We confirm the answer by the PP. Further, it has always been the understanding of the DOE that the purpose of the sensitivity analysis is to assess the effect the individually considered main parameters have on the economic evaluation to proof whether the assumption are robust against variations. Further in many registered projects the sensitivity analysis was done the very same way. We request EB to provide more guidance on this issue in case our interpretation is wrong. The variations are considered adequately as there is no correlation in the likelihood of any individual occurrence.

## **Issue 3**

The PDD states that “the proposed project has poor natural conditions: firstly, the water head of the project is lower and the annual utilization is only 3033 hours which are obviously less than that of the projects in Table 7; secondly, the area where the proposed project is located belongs to topical karst topography, the geographical condition is much more complicated, the costs for the foundation treatment is higher; thirdly, the equipments of hydropower generation were just the most expensive in China at the stages of the feasibility study and preliminary design of the proposed project”. These conditions indicate that the project might not be technically and economically feasible. Further evidence is required on the feasibility of the project to ensure sustainable emission reductions.

### **Response by PP**

1. According to the Modalities and Procedures for a Clean Development Mechanism (MOP), validation is an assessment of the design only against a set of criteria (see decision 3 CMP1, articles 35ff.). Evidence of the technical and economical feasibility of a

- project as such is not always available at the validation stage and therefore not part of the validation criteria.
2. Each project faces barriers, which is why the CDM is needed. The additionality tool requires only one barrier to be evidenced which is the financial barrier (step 2) in the case of this project. The above-mentioned difficulties have a direct impact on the IRR and TÜV SÜD has received and validated sufficient evidence to confirm the existence of these difficulties and their impact on the IRR. It has thus been demonstrated sufficiently and in line with the criteria and requirements contained in the MOP and the additionality tool as well as further guidance provided by the EB that the project faced relevant barriers that would have prevented its implementation without the CDM.
  3. However, the prospect of the contribution of the CDM has allowed the Guanmenyan project to overcome above-mentioned difficulties and the project has been operational since 2007. See the sales records as evidence. These show that the project is technically feasible and the sustainable emission reductions can be ensured.

#### Response by TÜV SÜD

The above mentioned evidence was checked by the assessment team and found to be correct.

#### **Issue 4**

In addition, the PDD states “But the proposed project has poorer financial indicators and isn’t financially attractive, it would be very difficult for the developer of the proposed project to obtain a bank’s loan without CDM support. Therefore, there is a severe financing difficulty for the proposed project, moreover, the developer of the proposed project doesn’t have enough capital...”. Further clarification is required on how the project is to be finalized.

#### Response by PP

Please see our answer to Issue 3.

#### Response by TÜV SÜD

Please see our answer to Issue 3.

#### **Issue 5**

The DOE is requested to provide further clarification on how the sustainability of the project activity was assessed and validated.

#### Response by PP

May we kindly refer to the CMP’s reaffirmation “... that it is the host Party’s prerogative to confirm whether a clean development mechanism project activity assists it in achieving sustainable development” (see document “Further guidance relating to the clean development mechanism” on [http://unfccc.int/meetings/cop\\_13/items/4049.php](http://unfccc.int/meetings/cop_13/items/4049.php)).

### Response by TÜV SÜD

We agree on the above answer by the PP and like to add: the sustainability of the project was assessed by checking compliance of the host country LoA which was submitted to the board with request for registration.

### Issue 6

The DOE is requested to provide further details and evidence to support its validation of the common practice analysis, in particular, the difference in utilization hours between the project activity and similar hydro projects, and whether such distinction is appropriate to the requirements of sub-step 4b of the Tool for the demonstration and assessment of additionality.

AND

### Issue 7

The PDD states that “Other activities implemented previously or currently underway that are similar to the proposed project activity are listed in Table 7. These projects are in the same region (Hunan Province), rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing”. Further clarification is required on why the IRR of the project activity is below the IRR of those projects taking into account the above mentioned similarities and why all of them have been implemented without CDM support while the project activity does require CDM benefits to be implemented.

### Response by TÜV SÜD

1. Additionality tool sub-step 4b of the additionality tool is described in the PDD and has been confirmed in the validation protocol B.5.
2. Table 7 in the PDD, and the corresponding source of the values was carefully checked by the DOE and found to be complete in regard to the requirements laid out in the additionality tool. Three indicators including the utilization hours, investment per kWh and IRR are used to analyze the distinction of the natural conditions between the proposed project and similar projects in the common practice analysis:
  - a. The utilization hours is a technical indicator reflecting the distinction of the natural conditions,
  - b. The investment per kWh is an economic indicator reflecting the distinction of the natural conditions,
  - c. The IRR is a comprehensive indicator reflecting the distinction of the natural conditions.

Thus, all details and evidence to support the validation are contained in the PDD and TÜV SÜD has sufficiently confirmed in the validation report, chapter 2, 3 and the protocol part B.5 that these details and documentary evidence are complete and relevant to confirm the requirements of sub-step 4.b of the additionality tool; namely that the projects in table 7 are similar but have “essential distinctions” i.e. the difference in natural conditions is “fundamental and verifiable”.



### **Issue 8**

Further information is requested on how the surface area of the reservoir at full reservoir level will be monitored during the implementation of the project activity.

#### **Response by PP**

1. According to the methodology ACM0002 (Version 6) used in the PDD, the surface area of the reservoir at full reservoir level should be monitored only once, at start of the project activity.
2. At start of the project activity, the project owner had entrusted the Institute of Yangtze River Water Resources Protection to estimate the surface area of the reservoir at full reservoir level through an engineering survey, based on the forecast water level and the topographical map. According to the engineering survey, the surface area of the reservoir at full reservoir level is 2.5 km<sup>2</sup> listed in the PDD. This evidence has been validated by TÜV SÜD, it is indicated in the EIA of the proposed project. The evidence has been validated by TÜV SÜD (Refer to IRL No. 13)
3. During the implementation of the project activity, the project owner has monitored the water level every day, the water level has been equal to or below the full reservoir level all the time, the corresponding surface area of the reservoir has been equal to or below 2.5 km<sup>2</sup>. However, this evidence has not been provided to the DOE as it is not part of the validation requirement, which – again – is an assessment of a project design only, against the criteria as contained in the MOP and further guidance by the EB.

### **Issue 9**

The Validation Report states on page 10 under “project description” that the project is a new run of river hydro plant whereas PDD mentioned it as a new hydro power project with a reservoir. Further clarification and correction is required.

#### **Answer by TÜV SÜD**

The expression run of river is a typo, we regret any inconvenience caused. The project has always been considered as new hydropower project with a reservoir. The issue has been corrected in the revised validation report.