

TÜV SÜD Industrie Service GmbH  $\cdot$  80684 Munich  $\cdot$  Germany





Your reference/letter of

Our reference/name IS-CMS-MUC/TK Thomas Kleiser Date/Document 2009-01-20

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#### **Request for Review**

Dear Sirs,

Please find below the response to the review formulated for the CDM project "Tianquan Qieshan Hydro Power Project" with the registration number 2189. In case you have any further inquiries please let us know how we can kindly assist you.

Yours sincerely,

Thomas Kleiser Carbon Management Service

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# Response to the CDM Executive Board

## Request 1:

Further clarification is required on how the DOE has validated the source of benchmark as the DOE has previously validated the benchmark from the same source as 10%

## **Response by DOE:**

The applied benchmark for the proposed project is 8% which is referred to the benchmark as specified in chapter 13.1.2.3 of the approved Feasibility Study Report (FSR)

10% benchmark as specified by "Economic evaluation code for small hydropower projects" (SL16-95) issued in 1995 is common practice in China for the small hydropower projects with installed capacity of less than 25MW (all newly-built, expansion, modification or retrofit projects). Besides, projects with a capacity of less than 50MW in rural areas can refer to this code too." (Article 1.2).

However, in the approved FSR, 8% is applied as the benchmark which is lower than 10%. For the purpose of conservativeness, the validation team agreed with the PP to use the lower benchmark (8%).

In summary, TÜV SÜD confirmed that the benchmark applied in the proposed project was more conservative and suitable for the underlying project activity.

## Request 2:

The DOE is requested to clarify how it has validated the common practice analysis, in particular, the selection criteria of similar project activities and the lack of public available information, thereby taking into consideration that it would have been more appropriate to compare to similar projects in the capacity range +/ 50%, which approximately equals 10 - 30 MW.

### **Response by DOE**

The project participant selected the similar project activities in common practice analysis according to the following criteria:

**1. Choose similar technology:** all hydropower projects, including reservoir based and run-of-river projects, were considered as the similar projects.

**2. Choose geographical scope:** as for the selected geographical scope, the whole provinces in Central China power grid or whole China are not appropriate, for they are so large and also the policy on investment, power tariff and taxes are different in different provinces. The Sichuan provincial government is responsible for making the policy on taxes, power tariff, loan and investment for any hydropower projects which are developed in Sichuan province. So the hydropower projects in Sichuan province can be considered as similar to the proposed project.



## 3. Choose year of commissioning:

Hydropower projects that started operation after 2002 were considered similar to the proposed Project. In year 2002, the China State Power Corporation was split into five separate regional grids which can be evidenced by *State Council Notification on the Power System Reform (Document No.: GuoFa [2002] No.5.)* issued on 10/02/2002. As the result, the existing power tariff decision mechanisms, allowable amounts of power supplied to the grid were changed, and a tariff competition policy was introduced as the consequence of the reform. As a result, the investment environment of power production projects changed significantly in 2002 and projects developed before this reform hence had more favourable conditions.

### 4. Choose similar installed capacity

#### Clarification of the 50MW upper limit:

- a. The classification based on the installed capacity of hydropower projects in China from *Almanac of China's Water Power (2005, page 141)* is as follows:
  - Large scale hydropower stations include hydropower stations with an installed capacity larger than 300 MW (•300MW);
  - Medium scale hydropower stations include hydropower stations with an installed capacity between 50 MW and 300 MW (•50 MW &€300 MW);
  - Small scale hydropower stations include hydropower stations with an installed capacity between 50 MW and 0.5 MW (•0.5 MW&€50 MW).
- b. The "Standard for Classification and Flood Control of Water Resources and Hydroelectric Project (SL252-2000)", issued by the Ministry of Water Resources of the People's Republic of China; and The "Classification & design safety standard of hydropower projects (DL5180-2003)" issued by the State Economic and Trade Commission of People's Republic of China are consistent with the above classification and **Projects below 50MW are deemed to be small scale hydropower projects.** The "Economic evaluation code for small hydropower projects (SL16-95)" issued by the Ministry of Water Resources of the People's Republic of China also applies to hydropower projects as having an installed capacity lower than 50MW.

This demonstrates that projects with an installed capacity of less than 50MW share similar technical requirements in design and construction as well as similar economic policies in China.

TÜV SÜD can confirm that the authoritative official statistics and yearbooks, such as *the Yearbooks of China Water Resources published by* China Water Power Press, *Almanacs of China's Water Power published by China Electrical Power Press* and *China Electric Power Yearbooks* published by China Electrical Power Press, do not have the information about hydropower projects with an installed capacity less than 15MW.

In compliance with the additionality tool, which states that *"If necessary data/information of some similar projects are not accessible for PPs to conduct this analysis, such projects can be excluded from this analysis*, hydropower projects with an installed capacity lower than 15MW can be excluded in the common practice analysis.



Finally, TÜV SÜD can confirm that the projects chosen for the common practice analysis are appropriate and in accordance with the requirements of the "Tool for the demonstration and assessment of additionality" (Version 05).