



UNFCCC Secretariat  
 Martin-Luther-King-Strasse 8  
 D-53153 Bonn  
 Germany

DET NORSKE VERITAS  
 CERTIFICATION AS

*International Climate Change Services*  
 Veritasveien 1  
 NO-1322 Høvik  
 Norway  
 Tel: +47-6757 9900  
 Fax: +47-6757 9911  
 http://www.dnv.com  
 NO 945 748 931 MVA

Att: CDM Executive Board

Your ref.:  
 CDM Ref 1539

Our ref.:  
 MLEH

Date:  
 9 April 2008

## **Response to request for review Liyutang Small Hydropower Project (1539)**

Dear Members of the CDM Executive Board:

We refer to the requests for review raised by three Board members concerning DNV's request for registration of project activity 1539 "Liyutang Small Hydropower Project" and would like to provide the below initial response to the issues raised in the requests.

1. *Further details are required regarding how the DOE has undertaken an independent assessment to confirm that the input values used in the investment and sensitivity analyses adequately reflect the true economic situation of the project activity.*

### **DNV response:**

In assessing the input values used in the investment and sensitivity analyses, DNV has followed a 4-step approach:

#### Step 1: Assessment of the sources of the input parameters used in the investment and sensitivity analyses:

- a) All the input parameters used in the financial analysis except for those mentioned in the following paragraph b) are taken from the feasibility study report (FSR) developed by *the Mid-South Design and Research Institute of the National Electricity Corporation* and approved by the National Development and Reform Committee on 5 April 2002. The input parameters used in the financial analysis can thus be considered information provided by an independent and recognized source.
- b) The remaining input parameters include electricity tariff taken from Power Purchase Agreement (PPA) – from the grid company, Chongqing Kai County Power Supply Co. Ltd (confirmed on 17 September 2005); and water cost taken from Water Purchase Contract - signed between the reservoir development company and the developer (signed on 28 February 2005). The tariff and water cost were taken from these documents as they contained the most current and pertinent values.
- c) All the above input parameters were available at the time when the decision to proceed with the project was made (the start date of the project was 12 July 2006, the date of the construction permit) and was thus likely to be considered in the decision.

Step 2: Confirmation of the values used in the PDD and investment analysis are fully consistent with the FSR, PPA and the Water Purchase Contract:

DNV compared the input parameters for the financial analysis included in the PDD and investment analysis with the parameters stated in the FSR, PPA and the Water Purchase Contract and was able to confirm that the values applied are consistent with the value stated in the FSR PPA and the Water Purchase Contract.

Step 3: Assessment of the period of time between the finalization of the FSR, PPA the Water Purchase Contract and the investment decision:

- a) The PPA was confirmed on 17 September 2005 and the Water Purchase Contract was signed on 28 February 2005, thus only seven and sixteen months prior to the decision to proceed with the project activity (i.e. the start date of the project) which was on 12 July 2006. Also, both PPA and the Water Purchase Contract are legally binding contracts and thus need to be followed.
- b) Although the FSR was approved on 5 April 2002, *i.e.* several years prior to the investment decision, a written confirmation dated 7 April 2008 by *Mid-South Design and Research Institute of the National Electricity Corporation*, who carried out the FSR confirms that the input parameters used to develop the FSR have not materially changed between the finalization of the FSR and the investment decision. The confirmation also clarified that the investment and the operation cost may have increased some, which would make the IRR even lower. Thus it is reasonable to assume that the FSR has been the basis of the decision to proceed with the investment in the project.

Step 4: Cross-check of the parameters used in the financial analysis with the parameters used by other similar projects

The input parameters used in the financial analyses were compared with the data reported for other similar proposed CDM projects in the region, i.e. four other small-hydro power projects in the Sichuan province, by comparing investment costs per MW, electricity tariff, percentage of O&M costs relative to total investment costs. By additionally applying our sectoral competence, DNV was able to confirm that the input parameters used in the financial analysis are reasonable and adequately represent the economic situation of the project.

2. *The investment and sensitivity analyses should be presented in a transparent manner to allow reproducing the analyses and obtaining the same results as provided for in paragraph 6 of the additionality tool.*

**DNV response:**

DNV refers to the response by the project participants. In our opinion, the investment and sensitivity analyses are presented in a transparent manner, i.e., all the sources for input value, the calculation processes, and the assumptions are clearly presented in the PDD and a snapshot of the analysis is included in Annex 5 of the PDD.

3. *Further clarification is required on how the electricity generation from each of the hydropower plants is to be monitored.*

**DNV response:**

DNV refers to the response by the project participants. DNV was able to confirm that the monitoring arrangement for each of the hydropower plants is appropriate and in accordance with AMS I.D., version 10 (the applicable version at the time of submitting for registration).

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully  
for DET NORSKE VERITAS CERTIFICATION AS

A handwritten signature in blue ink that reads "Michael Lehmann". The signature is written in a cursive style.

**Michael Lehmann**  
*Technical Director*  
International Climate Change Services