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

Att: CDM Executive Board

DET NORSKE VERITAS
Certification AS
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

Your ref.:	Our ref.:	Date:
CDM Ref 2109	BRINKS/VRI/DUDAG	13 February 2009

Response to request for review
Project 2109 "CGN Gansu Anxi Daliang 49.5 MW Wind Power Project"

Dear Members of the CDM Executive Board,

We refer to the requests for review by three Board members concerning DNV's request for registration of the project activity "CGN Gansu Anxi Daliang 49.5 MW Wind Power Project**"** (2109) and would like to provide the following response to the issues raised.

Question 1: The DOE should clarify how it has validated the investment analysis, in particular, the increase in the total investment and whether the turbines cost reflects the general market trend at the time.

DNV Response:

The resulting project-IRR in the investment analysis is 5.95%, which is lower than the benchmark of 8%. DNV has validated the input parameters used according to the "*Guidance of EB38 paragraph 54(c)*". The following steps have been followed to assess the investment analysis:

Step 1: Assessment of the sources and input parameters used.

All the input parameters used in the financial analysis are taken from a) the Feasibility Study Report (FSR) developed in September 2006 by the China Northwest Design Institute CHECC[1] and b) the wind power project purchase draft contract[2], which stated that this agreement would be legally effective after and the approval by the Board of Directors[3]. The FSR input parameters were verified and approved by the Gansu Development and Reform Commission on 5 February 2007[4] and can thus be considered as information provided by an independent and recognized source, and the purchase contract is also a reliable information source as it is legally binding.

Step 2: Confirmation that the values used in the PDD and investment analysis are fully consistent with the FSR.

DNV compared the input parameters for the financial analysis included in the PDD with the parameters stated in the FSR and the wind power project equipment purchase contract[2], and was

[1] Feasibility Study Report of CGN Gansu Anxi Daliang 49.5 MW Wind Power (FSR), prepared by the China Northwest Design Institute CHECC, dated September 2006.
[2] Wind Power equipment purchase contract between the project owner and Oriental Turbine Factory – 17 September 2006.
[3] CGN Wind Power Co. Ltd Board Meeting minute – 5 March 2007
[4] Letter of Approval of the Feasibility Study Report issued by the Gansu Development and Reform Commission, dated 5 February 2007.

able to confirm that the values applied are consistent with the values stated in the FSR and in the purchase contract.

Step 3: Assessment of the period of time between the finalization of the FSR and the investment decision.
The FSR was approved on 5 February 2007, thus only one month prior to the decision to proceed with the project activity made on 5 March 2007[3] (the project starting date). The wind power project equipment purchase draft contract was dated 17 September 2006, six months prior to the decision to proceed with the project activity. Given this relative short period of time between the approval of the FSR, the equipment purchase contract and the decision to proceed with the project activity, it is unlikely in the context of the project that the input values would have materially changed. The actual investment cost, as confirmed by a Finance Audit Report issued on October 2008 by an independent and recognized source[5], accounted to RMB 494,84 million Yuan which is higher than the investment estimated and considered in the financial analysis (RMB 463,61 million Yuan). Furthermore, with the material price increasing, the unit cost of the turbines was about 7000 RMB/kW in 2006[6], from 9700 RMB/kW in 2007 to 9850 RMB/kW in 2008[6]. The purchasing equipment contract became legally binding on 5 March 2007 when the Board approved it and decided to go ahead with the CDM, hence it is reasonable to assume that the turbines costs reflects the general market trend at the time of the validation of the investment analysis.

Step 4: Cross-check the main input parameters used in the financial analysis with the parameters used by other similar projects.
The input parameters used in the financial analysis were cross-checked with the data reported for other similar proposed CDM projects in the Northwest and in the Gansu Province by comparing investment costs per MW and the percentage of O&M costs relative to total investment.
A project has been considered similar to the proposed project activity if situated in the same province, even though it could be of different capacity. The investment cost per MW and the percentage of operation and maintenance costs relative to total investment costs of the proposed project activity were found to be in line with similar projects. In addition, DNV requested the project participant to submit a further breakdown of investment costs, where the values have been taken from the FSR and increased of the wind turbine cost from the wind power equipment purchase contract. The breakdown of total investment showed that mechanical and electrical equipment accounted for 86%, construction work accounted for 4%, preparation cost accounted for 2%, loan interests in construction period accounted for 2%, and other costs (including land, management, production preparation, survey and design) accounted for 6%. The turbine acquisition cost is evidenced by the Letter of Intent for Equipment Purchase P44-NO.3 (101.92194 million RMB per turbine set)[7]. This cost was much higher than what was mentioned in the FSR Table 13.3 (79.5 million RMB per turbine set).
Consequently, DNV confirms that the input parameters used in the financial analysis are reasonable and adequately represent the economic situation of the project.

Question 2: The data used to calculate the grid emission factor in the PDD submitted for registration was not available at the commencement of validation (May 2007). The PP and

[5] Finance Audit Report Gansu Anxi Dailiang 49,5 MW Wind Power Project Investment Statistics, prepared by Supervisory Department Jilin Ji'neng Electric Power Supervisory Company, dated October 2008.
[6] http://www.cecm.gov.cn/news/Elec/2008/11/4130.html
[7] The agreement of purchasing equipments for Gansu Anxi Daliang windfarm 49.5MW project signed by CGN Energy Development Co. Ltd. and Oriental Turbine Factory dated 17 September 2006 (non-binding – preliminary agreement) and 5/03/2007 (final).

DOE are therefore requested to amend the grid emission factor using data which was available at this date.

The PDD published for the global stakeholder's consultation was dated 20 April 2007 and was inserted on DNV's webpage on 20 July 2007. This date is defined as the commencement of the validation. On 20 July 2007, the following sources for calculating the grid emission factor for the project were available and the most recent:

- China Electric Power Yearbook 2004 – 2006 (published December 2006)
- China Energy Statistical Yearbook 2004 – 2006 (published March 2007)
- 2006 IPCC guidelines (final version published end of 2006)

The yearbooks of 2006 use data from 2005. In the PDD published on 20 July 2007, data from 2005 were not included. DNV requested the project proponent to update the calculation to the most recent data, as per the methodology. The PDD sent for registration was hence per DNV's request, using the most recent data available at the time of the commencement of validation.

We sincerely hope that the Board find our elaboration on the above satisfactory.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION AS

Hendrik W. Brinks
Technical Director for CDM
Climate Change Services

Rita Valoroso
Project Manager
Climate Change Services