## To: UNFCCC Secretariat

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

February9<sup>th</sup> 2009

Dear Members of the CDM Executive Board,

Please find below our response to the issue raised by request for correction of the "Inner Mongolia Siziwangqi Bayin'aobao Wind Power Project (2053)".

Issue 1: Further clarification is required on how the DOE has validated the appropriateness of the investment analysis, in particular:

a)the basis for the assumed tariff, taking into account that all input data for IRR calculations are sourced from the FSR, approved February 28, 2007, and showing a tariff of 0.5597 RMB/kWh, resulting in an IRR of 8,33%, which is above the benchmark. The actually used input data for the IRR calculation however is the tariff of 0.51 RMB/kWh, which is lower than the one considered in the FSR and was taken from the Propositional Letter on the Expected Grid Electricity Tariff, issued on 20 April 2007, only two months later. The lower electricity tariff was the basis to apply CDM.

- b) the basis for the assumed tariff in the FSR and whether the change in tariff is not considered to be an E+ policy, according to EB 22, Annex 3, para. 6;
- c) the IRR calculation, as replication of the calculations in the spreadsheet provided indicates that applying the tariff used in the FSR yields an IRR that is different IRR from what was obtained in the same document.

### **Response:**

a) The FSR is completed by the design company of Zhongshui Beifang Reconnaissance Design and Research Co.,Ltd that is a qualified and professional wind power designer for making FSR. According to the compiling method of the FSR for wind power project issued by NDRC1 on 30th sept.2003, the design company for the FSR assumed the tariff in the FSR following two principles. First, under the condition of the determinate investment of the project, the assumed tariff must enable the IRR to exceed the industrial benchmark. Second, it must cover the cost and ensure a certain level of profit2. It is highlighted that the tariff in the FSR, i.e., 0.5597 RMB/kWh (including. VAT) is not an approved or implied tariff in any official sense.

<sup>2</sup> http://www.sdpc.gov.cn/nyit/nyzywx/t20050810\_41378.htm

<sup>1</sup> http://www.whdpc.gov.cn/dispxxnr.asp?id=103283

Instead it is only an estimated price estimated by the FSR designer in FSR based on the region local economic development environment, national policy regulations and the specific condition circumstances of the proposed project made by the feasibility study institution. Actually the tariff will be subject to separate government approval<sup>3</sup>. Therefore, the project owner consults the local government whether the assumed tariff in the FSR was reasonable. After that, the Official Letter about the tariff of the proposed project issued by the Development and Reform Bureau of Siziwangqi County in Inner Mongolia Autonomous Region on 20th Apr.2007 proposed the tariff as no more than 0.5100 Yuan/kWh (including VAT). The tariff proposed by the local DRC should be seemed as the fundamental basis of approval tariff for the proposed project by the project owner, which could affect the financial attractive of the proposed project for the project owner and the feasibility of the proposed project. Therefore, In the PPD, the project owner use the proposed tariff to reappraise the financial analysis instead of the tariff assumed in the FSR.

b) The change in tariff is not considered to be an E+ policy, for the following reasons. First, the final tariff of the proposed Project is 0.5100RMB/kWh (including VAT), 91.80% higher than the benchmark thermal power tariff in Inner Mongolia Autonomous Region grid 0.2659 RMB/kWh (including VAT)4. It gives a significant comparative advantage to the low-emission wind farm project over more emission intensive technologies, as it effectively grants a premium for the wind farm above the electricity tariff for thermal power plants. Second, the change in tariff is basically not a policy, as the initial tariff was nothing more than a calculated and estimated desired valued by the Project owner and was not a tariff in any official sense, while the later tariff was a proposed value by local DRC, which was of instructive sense but no approval sense. The fact that both the initial tariff 0.5597 RMB/kWh and the final tariff 0.5100 RMB/kWh were of no approval sense means that the change itself in tariff has little official sense either, and should not be regarded as a policy. Third, the change in tariff showed in this case is only for the proposed project. It is case-specific and inapplicable to other projects. Moreover, with the mature of commercial process for wind power plants in China, the subsidy for wind power plant still is implemented. Therefore, from this perspective it should not be regarded as a policy either. Therefore, the change in tariff has no E+ effect either. With the three points above combined, the change in tariff is not considered as an E+ policy.

c) When replicating the project IRR in the spreadsheet provided in the PDD using the tariff in the FSR, i.e., 0.5597 RMB/kWh (including VAT), the resulted IRR is 8.41%, which is different from the value in the FSR, i.e., 8.33%. Compared with the FSR Cash flow Table and the PDD Cash flow Table, it is shown that the minor difference of 0.08% is solely caused by the treatment of loan interests in the calculation of Project IRR.

<sup>4</sup>http://www.mysteel.com/gc/zhzx/zcfg/2006/07/04/000000,0,0,669906.html

<sup>3</sup> http://law.lawtime.cn/d334192339286.html/pos=0

Specifically, a comparison between the replicated Project IRR cashflow table using the tariff in the FSR (Referred to as "Replicated Cashflow Table") and the Project IRR cashflow table in the FSR (Referred to as "FSR Cashflow Table") shows that the difference in the project IRR is derived from the different values of three factors, i.e., Fix Assets Residual Value, Operating Cost, and Income Tax, of which the differences are all solely caused by the treatment of loan interests. In more detail, loan interests are excluded in the Replicated Cashflow Table, but are included in the FSR Cashflow Table.

As is known to all, project IRR as a pre-financing analysis should exclude the loan interests from the calculation, as required by the Methodology and Parameters of Economic Evaluation on Construction Projects (third edition) and consistent with the Guidance on the Assessment of Investment Analysis provided by CDM EB. Therefore, the Replicated Cashflow Table is done excluding the loan interests.

In summary, the exclusion of the loan interests in the Replicated Cashflow Table, against their inclusion in the FSR Cashflow Table, caused the differences in the three factors, i.e., Fix Assets Residual Value, Operating Cost, and Income tax, and in turn caused the difference in the Replicated project IRR and FSR project IRR. Below is the specification of how the treatment of loan interests impacts the three factors, and thus impacts IRR.

The different calculation between the Replicated Cashflow Table and the FSR Cashflow Table

Cashilow Table						
	Replicated Cashflow Table	FSR Cashflow Table				
Fix Assets	original value of fixed assets $\times$	(original value of fixed assets + loan				
Residual	rate of fixed assets residual	interest in the construction period) $\times$				
Value	value	rate of fixed assets residual value				
Operating	annual salary per capita	annual salary per capita ×employee				
Cost	$\times$ employee population $\times$ (1+	population $\times$ (1+ rate of welfares) +				
	rate of welfares) + (original	(original value of fixed assets + loan				
	value of fixed assets× (rate of	interest in the construction period) $\times$				
	maintenance + rate of insurance	(rate of maintenance + rate of				
	premium) + (fixed amount of	insurance premium) + (fixed amount				
	material cost+ fixed amount of	of material cost+ fixed amount of				
	other costs) × installed capacity	other costs) × installed capacity				
Income Tax	(sales revenue- sales tax and	(sales revenue- sales tax and extra				
	extra charges - operating cost -	charges - operating cost - (original				
	original value of fixed assets ×	value of fixed assets + loan interest				
	(1- expected rate of residual	in the construction period)× (1-				
	value) ÷ expected depreciable	expected rate of residual value) ÷				
	life) × rate of income tax	expected depreciable life) - loan				
		interest expenses)× rate of income				
		tax				

The relevant evidences have been provided to and verified by DOE.

# 2. The DOE should further clarify how it has validated the suitability of the total investment assumed, i.e., whether it was checked against actual invoices or the equipment purchase contract.

Re: The total investment used in the investment analysis in the PDD is sourced from the FSR which is approved by Inner Mongolia Development and Reform Committee. The FSR and the approval by Inner Mongolia DRC were have already been provided to DOE during validation. As per the guidance of EB 38 para. 54(c), the consistency between the total investment in the PDD and the data from the FSR and the validity of the total investment had been seriously checked by DOE before the final validation report finished.

#### Total investment

It is presumed to be 438.43million RMB in the FSR. The investment per MW was calculated about 8.857 million RMB/MW. For wind farms, most of the total investment is for purchasing and installing the wind turbines, and constructing the foundation work for wind turbines. In the FSR of the proposed project, the sum of the cost for the above mentioned issues are 356.8352 Million Yuan about 81.39% of the total investment in the FSR and this cost has been cross-checked with the actual price in the relevant purchase contract and constructed contracts, which had been signed by the project owner. The actual price is 390.2549 million Yuan in the contract, about 9.37% higher than the value in the FSR, as shown in the table below. The relevant contracts have been provided to DOE for cross-checking.

Compared table for part of total investment between the FSR and implemental contracts (unit: 10000yuan)

	Wind turbines	wind turbine- towers	Installation works for wind turbines	Foundation work for wind turbines	Sub-total
Budget in the FSR	29205.00	5227.20	264.00	987.32	35683.52
Actual investment in the contracts	31451.55	5564.0	521.41	1488.53	39025.49

Best regards,

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