**Response to the request for review for the CDM project activity**

1128 Shandong Weihai 69 MW Wind Power Project

To: Mr. Hans Jurgen Stehr, Chairman
CDM Executive Board to Kyoto Protocol

From: Huaneng Zhongdian Weihai Wind Power Co. Ltd.

Re: 1128 Shangdong Weihai 69 MW Wind Power Project

Date: 04 October 2007

Dear Mr. Chairman,

As the *1128 Shandong Weihai 69 MW Wind Power Project* was requested for review by the CDM Executive Board on the 26 September 2007, we therefore would like to take this opportunity to answer the questions by clarifying the issues and providing additional information for your considerations and final acceptance. Our answer to the questions is provided as follows:

## Issue 1:

Version 3 of the "Tool for the demonstration and assessment of additionality" should be correctly applied.

***Our clarifications:***

Yes, we accepted the advices made by your EB reviewer, and in the revised PDD, the additionality of the Project was demonstrated and assessed by using the *Tool for the Demonstration and Assessment of Additionality* (Version 3)

## Issue 2:

The start date of the project activity should be revised in the PDD to the earliest of the dates at which the implementation or construction or real action of the project activity began. Further, in accordance with section B5 of the PDD Guidelines, *"If the starting date of the project activity is before the date of validation, provide evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available at, or prior to, the start of the project activity."*

***Our clarifications:***

In the PDD, we revised the starting date of the project activity with the 16 July 2005 as the completion date of the FSR, to replace the date the 30 April 2007 initially stated in the PDD serving as the starting date of project fully operation.

| Item | Date | Data source |
|---|---|---|
| Starting date of the project activities | 16 July 2005 | The completion of the Feasibility Study Report for the proposed project |
| Starting date of Project fully operation | 30 April 2007 | Evidence of the first turbine is operational |
| Starting date of Project | The date of final | |

| | |
|---|---|
| crediting period | completion of EB registration (the 1 Oct 2007 selected in the PDD was only indicative for CERs calculations) |

For this proposed project, the CDM revenue was fully considered by the project owner in the early development stages due to the apparent financial obstacles the Project faced. As showed in the Feasibility Study Report (as dated at July 2005), as well as the government approval (as dated as the 7 September 2005), the proposed project was planned as a CDM project for project implementation and operation. And it is very much expected that with an additional income to be generated from the CDM activities, the Project is able to achieve a sustainable investment objective (Both Feasibility Study Report and the Government Approval, as the evidence were provided to the DOE).

## Issue 3:

The annual average emission reductions are 130,300 tCO2 however, the PDD and project view page state that they are 145,704 tCO2. Clarification is requested.

***Our clarifications:***

Thank you very much for the comments made by your EB reviewer, we accepted the advices and revised the annual average emission reductions for the first crediting period of the proposed project as 135,920 tCO2 in PDD (the amount of 130,300 tCO2e initially stated in the question of EB reviewer was miscalculated).

The crediting period of the proposed project activity is 7×3 years, with the first crediting period starting from date of 1 October 2007 to 30 September 2014. It, however, the proposed project currently is under construction and will be fully operational by June of 2008, resulted in a reduced amount of annual power output for the year of 2007 and 2008, so that the annual average emission reductions for year of 2007 and 2008 are reduced in the total amount, about 20,395 tCO2e and 93,248tCO2 respectively.

It is estimated that the net amount of annual electricity output generated from the proposed project is about 140,033MWh when the project is fully operational, resulting the annual GHG emission reductions about 145,704t$CO_2$e/a. so the total amount of reduction for the year of 2014 is 109,278tCO2.

Based on the above analysis, total estimated reduction for the first crediting period is about 951,441 tCO2e, and therefore the annual average estimated reductions over the first crediting period is about 135,920 tCO2e.

## *Issue 4:*

The PP/DOE shall further substantiate the financial analysis and the projection that the project IRR amounts to an IRR of 6.59%, which demonstrates that the project is less financially attractive than a baseline scenario defined by the benchmark: as with an increase in the tariff by 10% the project IRR will be higher than the benchmark IRR, as shown by the sensitivity analysis. There is no substantiation of how unlikely the tariff increase by 10% might be.

***Our clarifications:***

As stated in the financial analysis of the PDD, the FIRR was calculated about 6.72% (*not the 6.59% as mentioned in the question arising from your EB reviewer*), which demonstrates that the project is less financially attractive than a baseline scenario defined by the benchmark FIRR of 8%. We very much agreed with the EB reviewer that with an assumption of increasing in the tariff by 10%, the project IRR will be higher than the benchmark IRR as shown by the sensitivity analysis.

However, the assumption of 10% increasing in tariff of wind power will most unlikely to happen for this proposed project because that the tariff of this project has been fixed, by a Letter of Approval endorsed by Shandong Provincial Pricing Bureau, for about one year starting from the date of the project fully operational. It stated in the Letter of Approval, this fixed tariff will be adjusted in accordance with relevant national policy after the expiry of the tariff. A copy of the official Letter of Approval endorsed by Shandong province price bureau for the tariff of the proposed project was provided to DOE.

In addition, the assumption of 10% increasing in tariff of wind power will most unlikely to happen in the RPC power market in the foreseeable future giving the facts of that:

1. **China will continue to use the scheme of tendering for the wind power pricing.** Just recently, the 4th of September 2007, in a press conference held by the State Council Information Office, Chen Deming, vice minister of National Development and Reform Commission, stated that China will continue to use the scheme of tendering for the wind power pricing, because "only in this way can the wind power generation prices to gradually lowering down." (for detailed information please refer to the news report at http://finance.sina.com.cn/china/hgjj/20070905/11043948808.shtml)

2. **The tendering tariff of the wind power project is remaining at the lower end.** The average tendering tariff of the wind projects currently existing in the PRC power market is about RMB0.52/kwh[1].

3. **China will not increase the tariff of wind power at present.** 19 May 2007，Li Junfeng, deputy director of Energy Research Institute of China's National Development and Reform Commission participated in the "International Summits for Alternative Energy and the Power" said China's wind power tariff will remain stable for a period of time unchanged, the State does not plan to the introduction of a more active policy to support the development of wind power[2].

Base on above analysis, the assumption of 10% increasing of the wind power tariff will not be a case in the reality of the PRC power market. And we would like to believe that with additional information provided, the conclusion draw from the financial sensitive analysis in the PDD will be strongly supported and therefore be acceptable to your executive board.

## Issue 5:

The technical and investment barriers analysis is weak and should be further substantiated.

***Our clarifications:***

After carefully review the comments made by your EB reviewer as well as the *Tool for the Demonstration and Assessment of Additionality (Version 03),* though the comment made by your EB reviewer is likely to be acceptable, we would like to remain the Sept 3 of the Barrier Analysis unchanged, and our clarification and explanation with this regard is as follows:

1. In the PDD, the additionality of the proposed project is demonstrate and assessed in the Sept 2, Investment Analysis. With additional information provided (for more detailed information please refer to the Sub-step 2d, Sensitivity analysis, in the Section B5 of the PDD) , a conclusion is made from the Sept 2 of Investment Analysis —— the proposed project is unlikely to be financially attractive. Hence a clear additionality of the proposed project is assessed and demonstrated by the investment analysis as described in the Step 2;

2. As the result, in this PDD, Step 3 of Barrier Analysis (as an optional) is used as a

[1] *Data source: Wind Power Projects and the Issue of Price--by Shi Pengfei, the Chinese national wind expert, and the document (in ppt) is provided to the DOE.*
[2] *Data source: China will not Increase the Tariff of Wind Power at Present. http://politics.people.com.cn/GB/5752740.html*

complementary statement to further support the additionality of the proposed project activity by identify some of real investment barriers the project faces. Though the comment made by your EB reviewer is likely to be acceptable, that is *the technical and investment barriers analysis in the Step 3 should e further substantiated*, we would like to remain the Sept 3 of the Barrier Analysis unchanged, this is because of the Investment Analysis of the Step 2 is already demonstrated the apparent additionality of the project.

*3.* We however would like to take this opportunity to emphasize the Step 3 a bit further in details as follows:

*1)* ***Wind investment project has much higher per kw investment cost.*** At present, the 600KW model of wind turbine are most popular in the market of China[3], and it however still has to relay on the core technology traded from abroad, resulting a higher per kW investment cost and a lower IRR when it compares with the benchmark IRR of the total investment in Chinese Power Industries.;

*2)* ***There no preferential financing policies to support the wind project investment project in China.*** Considering the loan application, the wind investment project neither has preferential interest rates to apply, nor giving the reasonable loan repayment period as same as the conventional power investment projects, yet it has to compete with the conventional power investment projects as well as other fixed asset investment projects in the PRC market for the bank's approval; and

3) ***The proposed project, with a higher per kW investment cost, had faced the obstacles in its investment finance.*** The investment cost of the proposed project with 1500 kW turbine is about 10,059 RMB/kW, resulting a set of less attractive financial indicators of the investment when it compares with the benchmark IRR of the total investment in Chinese power investment market. As a result, project owner was unable to achieve the 20/80 of equity/debt ratio that normally acceptable by the commercial bank in fixed assets investment projects (*Notification by the State Council on Trying out Capital Mechanism for Fixed Assets Investment Projects* (Guofa [1996]35)[4], but only achieved the 40/60 of the equity/debt finance ratio in stead.

It is believed that using the Step 3 of barrier analysis as the supplementary statement to the Step 2 of investment analysis is allowable by the Version 3 of the "Tool for the demonstration and assessment of additionality". We therefore would like to hope that with the clarification and additional information provided above, our intention to remain our current barrier analysis level of the Sept 3 in the PDD unchanged will be acceptable by your executive board.

## Issue 6:

The DOE shall explain under which contractual arrangements the personnel of DNV Beijing were participating in the assessment.

***Our clarifications:***

We would like to invite our DOE to address this issue separately.

With the above clarification, explanation and additional information, we sincerely hope that the CDM Executive Board will be satisfied with the proposed revised PDD and further approve our request for registration of the proposed project activity shortly.

[3] *Data source: China's wind power equipment manufacturing technology and the development recommendations* http://www.xsinfo.gov.cn/ReadNews.asp?NewsID=4234

[4] *http://tzs.ndrc.gov.cn/xkxmql/xkxmyj/t20060802_78919.htm*

Sincerely yours

Huaneng Zhongdian Weihai Wind Power Co. Ltd.