

RESPONSE TO THE REVIEW REQUEST

Bureau Veritas Certification (formerly BVQI) had performed the validation of the CDM Project 2774- "Heilongjiang Mudanjiang Xiaoguokui Wind Power Project". Subsequently, there was one request for review.

Our response to the review request raised is given below:

Issue 1 for request for review

The DOE is requested to further explain how the proposed tariff has been determined for the project activity and provide an assessment as to whether the net return to the investor has been reduced as a result of any reduction in tariffs over recent years, or whether the net return has been unaffected as a result of other changes such as investment costs.

This question is relevant since it is noticed that the highest historical tariff for similar wind projects with 0.85 MW wind turbines in Heilongjiang Province is 0.6636 RMB/kWh excl. VAT (as per the wind data base maintained by the UNFCCC secretariat on registered wind projects as of EB 49); the project IRR with the highest historical tariff would be 8.97%, crossing the benchmark of 8%.

Bureau Veritas Certification's response:

The proposed tariff of 0.5622RMB/kWh (Excl. VAT) in the PDD is derived from the FSR of the Project, Heilongjiang Mudanjiang Xiaoguokui Wind Power Project. The FSR was completed by a qualified 3rd party of China Fulin Wind Power Development Corporation in Oct. 2007, after the implementation of *Law of the People's Republic of China on Renewable Energies and Trial Measures for the Administration of Renewable Energy Power Price and Cost-sharing* (Document No. Fa Gai Jia Ge [2006]7). The FSR referred to the tariff letter issued by DRC of Heilongjiang province in September 2007 (Hei Jia Ge Zi [2007]194), which indicated that the tariff was 0.61RMB/kWh (incl. VAT) (0.5622RMB/kWh, excl. VAT). Therefore, given that 0.5622RMB/kWh (excl. VAT) was the most recent tariff approved at the time of writing the FSR, it is appropriate and reasonable to use this value.

BVC has checked the information on wind power projects exporting electricity to Heilongjiang Provincial Grid and the tariff documents for wind power projects issued by China's government, the tariff for wind power projects exporting electricity to Heilongjiang Provincial Grid are summarized in the following table 1:

Table 1 Tariff for wind power projects in Heilongjiang Province

No	Project	Tariff (RMB/kWh, Excl. VAT)	Document No.	Tariff determined time	Commissioning date	CDM projec t or Not?
1	Heilongjiang Mulan Wind Power Project	0.7189	Hei Jia Ge Zi [2004]233	2004	Dec. 2003	No
2	Heilongjiang Fujin Wind Power Project	0.7281	Hei Jia Ge Zi [2004]226	2004	Sep. 2004	No
3	Yichun Daqingshan Wind Power Project	0.6636	Hei Jia Ge Zi [2005]270	2005	Dec. 2005	Yes



	(UNFCCC Ref. No. 0829)					
4	Heilongjiang Huafu Muling Wind Farm (UNFCCC Ref. No. 0906)	0.6636	Hei Jia Ge Zi [2005]267	2005	Dec. 2005	Yes
5	Yichun Shimaodingzi Wind Power Project (UNFCCC Ref. No. 1147)	0.6636	Hei Jia Ge Zi [2005]270	2005	Nov. 2006	Yes
6	Yichun Erduoyan Wind Power Project (UNFCCC Ref. No. 0969)	0.6636	Hei Jia Ge Zi [2005]270	2005	May 2007	Yes
7	Heilongjiang Muling Daimagou Wind farm Project (under validation)	0.5622	Hei Jia Ge Zi [2007]194	Sep. 2007	Dec. 2006	Yes
8	Heilongjiang Muling Ganmianshi Wind farm Project (under validation)	0.5622	Hei Jia Ge Zi [2007]194	Sep. 2007	Dec. 2006	Yes
9	Wuerguli 30 MW Wind Power Project (UNFCCC Ref. No. 1209, the Project)	0.5622	Fa Gai Jia ge [2007]3303	Dec. 2007	Nov. 2007	Yes
10	Yichun Xiaochengshan Wind Power Project (UNFCCC Ref. No. 2312)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2007	Yes
11	Heilongjiang Yilan Maanshan Wind Power Project (UNFCCC Ref. No. 2035)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2007	Yes
12	Heilongjiang Fujin Phase II 18MW Wind	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2007	Yes



	Power Project (UNFCCC Ref. No. 1866)					
13	Heilongjiang Yilan Hezuolinchang Wind Power Project (UNFCCC Ref. No. 2062)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2007	Yes
14	Guohua Qiqihaer Fuyu 1st Stage Wind Farm Project (UNFCCC Ref. No. 1310)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2007	Yes
15	Heilongjiang Huanan Hengdaishan East Wind Power Project (UNFCCC Ref. No. 2056)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Mar. 2008	Yes
16	Heilongjiang Huanan Hengdaishan West Wind Power Project (UNFCCC Ref. No. 2200)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Jul. 2008	Yes
17	Heilongjiang Yilan Hezuolinchang Phase II Wind Power Project (UNFCCC Ref. No. 2117)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Oct. 2008	Yes
18	Heilongjiang Dajiazishan 49.5MW Wind Power Project (UNFCCC Ref. No. 2032)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2008	Yes
19	Heilongjiang Beiantun 49.5MW Wind Power Project (UNFCCC Ref. No. 2049)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2008	Yes



20	Heilongjiang Fujin 48MW Wind Power Project (UNFCCC Ref. No. 2573)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2008	Yes
21	Heilongjiang Daqing Ruihao Wind Farm Project (UNFCCC Ref. No. 2776)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Dec. 2008	Yes
22	Heilongjiang Fuyuan Wind Power Project (UNFCCC Ref. No. 2775)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Mar. 2009	Yes
23	Heilongjiang Huanan Hengdaishan East (II) Wind Power Project (UNFCCC Ref. No. 2124)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	May 2009	Yes
24	Heilongjiang Mudanjiang Xiaoguokui Wind Power Project (UNFCCC Ref. No. 2774, the Project)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	May 2009	Yes
25	Heilongjiang Shaobaishan Wind Power Project (UNFCCC Ref. No. 2777)	0.5622	Fa Gai Jia ge [2008] 1876	Jul. 2008	Under construction	Yes
26	Heilongjiang Dabaishan Wind Power Project (UNFCCC Ref. No. 2776)	0.5622	Fa Gai Jia Ge [2008] 1876	Jul. 2008	Under construction	Yes
27	Heilongjiang Wuerguli Wind Power Project (UNFCCC Ref. No. 2152)	0.5622	Fa Gai Jia Ge [2009] 1906	Jul. 2009	Oct. 2008	Yes
28	Heilongjiang Dongning	0.5622	Fa Gai Jia Ge	Jul. 2009	Under construction	Yes



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	Dajiazishan and Xidagang Wind Farm Project (under validation)		[2009]1906			
29	Heilongjiang Shiwenzi Wind Farm Project (UNFCCC Ref. No. 1816)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
30	Heilongjiang Yilan Jiguanlazishan Wind Farm Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
31	Heilongjiang Yilan Fuqiang Wind Power Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
32	Heilongjiang Yilan Chenguang Wind Power Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
33	Heilongjiang Hailin Weihushan Wind Power Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
34	Heilongjiang Hailin Weihushan Phase II Wind Power Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
35	Heilongjiang Huachuan Sujiadian Wind Power Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
36	Heilongjiang Huanan Yimashan Wind Power Project (under validation)	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes
37	Heilongjiang Yilan Maoyangou Changjiangtun Wind Power	0.5622	Fa Gai Jia Ge [2009]1906	Jul. 2009	Under construction	Yes



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	Project (under validation)					
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With the available data source, BVC can find there are total 37 wind power projects exporting electricity to Heilongjiang Provincial Grid since 2002.

The determination of tariffs in China is a result of sovereign government decision-making. The project participants cannot impact Chinese government policy regarding tariffs and they can only make decision on whether to invest on the Project or not based on the tariff guided by government.

To make the explanation on tariff more clearly, BVC has studied on the information on wind power project and here illustrates the wind power development process as follows:

- In 1999, a Notice on Further Accelerate Renewable Energy Development published by NDRC, Ministry of Science and Technology regulated that the tariff of renewable energy grid power generation project should be determined by "Repayment of Capital and Interest plus profit" during repayment period, i.e. the tariff during the repayment period is different from the one after repayment period, and the length of repayment period impacts on tariff.

In other words, tariff equals generation cost plus tax plus profit; where, generation cost contains depreciation fee, maintenance fee, salary and welfare, insurance, material fee, amortize and interest, and others.

- In Dec. 2001, Notice of the Ministry of Finance and the State Administration of Taxation about Policies regarding the Value Added Tax (VAT) on Products Made through Comprehensive Utilization of Resources and Other Products was published, in the notice, it is clearly stated that the VAT of wind power project should be 50% off; as discussed above, the tax is also a parameter considered to determine tariff;

--The repayment period for wind power projects was changed from 7 years to 15years at the front of 2006. When the repayment period changes from 7years to 15years, the repayment of capital and interest paid for each year would be down accordingly, thus the tariff was reduced.

- On 16/03/2007, the new income tax law was published, in which the income tax was changed from 33% to 25%, which is also a reason of tariff reduction.

- Since 2006, China's government issued the *Law of the People's Republic of China on Renewable Energies and Tentative Management Measures for Price and Sharing of Expenses for Electricity Generation from Renewable Energy* (Document No. Fa Gai Jia Ge [2006]7), so that increase the domestic rate of wind power equipment, reduce wind power generation cost and stimulate the investment incentives.

At the early stage of wind development, most of the wind turbines were imported and the technology in domestic was comparatively dropped behind, thus at that time the investment for wind equipment imported abroad was comparatively higher than that of the domestic-made; furthermore, the technology for operation and maintenance of wind turbines was not very advanced at that time thus the relevant cost was higher.

However, in recent years, with the development of wind power, the overseas manufacturer began to set up factory in China; furthermore encouraged by favorable policies, the Chinese domestic wind turbine manufacturers contributes their efforts in the technology developing, the wind power technology and equipment maintenance becomes more and more mature, and domestic wind turbines have been introduced more and more to some extent, e.g. the market share addition for domestic manufacturers from 2004 to 2007 was 25%, 29.4%, 41.3%, and 55.9% respectively; according to Mr. Luo Zhihong, from China Renewable Energy System Project (CRESP), the price of domestic wind turbine is 20% less than that of the imported wind turbine, the price of wind turbine manufactured in China for overseas manufacturer is 10% less than that of manufactured abroad. Besides, the after service of domestic service is more convenient than abroad manufacture.

Almost all of the projects are CDM projects except for Project No. 1 and No. 2 listed in table 1. However, there are significant distinctions among these two projects and the proposed project activity, as analyzed in the common practice of the PDD, i.e. both projects are demonstration projects, benefited from more favorable financial policy, which were funded by national soft loan and international low interest loan respectively, while the proposed project activity does not enjoy these favorable policies. Thus these two projects are not comparable to the proposed project.

We also exclude the projects with same tariff for further analysis. Therefore, the projects used in this analysis are listed as follows:

Table 2 Information for projects with higher tariff

No.	Project	Tariff RMB /kWh (excl. VAT)	Investment RMB/kW	Annual O&M cost RMB/kWh
1	Yichun Daqingshan Wind Power Project	0.6636	10176	0.217
2	Heilongjiang Huafu Muling Wind Farm	0.6636	11186	0.138
3	Yichun Shimaodingzi Wind Power Project	0.6636	9834	0.221
4	Yichun Erduoyan Wind Power Project	0.6636	9231	0.225
Average		0.6636	10107	0.2002
5	The Project	0.5622	9718	0.1224

As shown in above table, both the investment and annual O&M cost of the Project are less than the average one of those four projects with higher tariffs.

BVC here would like to point out that we can not only use the highest historical tariff for similar wind projects of 0.6636 RMB/kWh excl. VAT to calculate the project IRR, but need to take all the factors impact on project IRR simultaneous.

If using the higher tariff (0.72RMB/kWh), the average investment per installed capacity (10,107RMB/kW), and the average annual O&M cost (0.2002RMB/kWh) to calculate the IRR, it is calculated as 6.66%, close the IRR of the proposed project (6.52%) submitted for request for registration, and less than the benchmark of 8%. So although the net return to the investor will be reduced as a result of the reduction in tariffs, the net return will be unaffected as a result of other changes such as investment costs, O&M cost and revenue tax etc.

Therefore, BVC is of the opinion that the net return to the investors has been unaffected due to other changes discussed above. On the contrary, the incentives on investment of wind power projects have been increased and there is a large quantity of wind power projects have gone ahead in the most recent years.

The tariff employed in the PDD had been crosschecked with the latest tariff notifications issued by national government in 2008 (Fa Gai Jia Ge [2008]1876), the tariff for the proposed project would be 0.5622RMB/kWh (excl. VAT) for the first power generation of 30,000hours, after that, the tariff will be down to the average tariff that refers the tariff for dominant thermal power plants in Heilongjiang Province. Therefore, BVC is of the opinion that the tariff of 0.5622RMB/kWh (excl. VAT) for the whole operating period applied in the investment analysis is appropriate.

Hope the above responses given clarify the queries raised. In case you have any further inquiries please let us know as we kindly assist you.

Yours faithfully,
Bureau Veritas Certification Holding SAS



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