#### Scope a:

A review to determine the additionality of the project activity through an assessment of the investment analysis, in particular, the tariff applied as there are concerns whether the applied tariff can be considered appropriate to assess the additionality of the proposed CDM project activity. Additional information will therefore be sought regarding the tariffs applicable to similar projects, based on available information sources such as national or local guide prices and tariff notifications, and the reasons for the reductions in tariff where reductions have occurred, in particular, whether any reduction reflects a change in the costs of investing in and operating such projects and other changes or whether it impacts the economic viability of such projects.

1. The DOE is requested to provide information on the total number of wind power project exporting electricity to the same grid as this project activity (both CDM and non CDM projects), and the commissioning dates of these projects.

### **Response:**

The proposed project is located in western part of Inner Mongolia. Electricity generated by the proposed project will be transferred to NCPG through Western Inner Mongolia Power Grid. North China Power Grid (NCPG) is consisted of several provincial grids, including Beijing Power Grid, Tianjin Power Grid, Hebei Power Grid, Shanxi Power Grid, Shandong Power Grid and Power Grid of Western Inner Mongolia Autonomous Region. Since the tariff differs a lot in different provincial administration area, only the projects connected with the same provincial Power Grid are comparable.

There was a significant reform in 2002 on the electric power sector approved by the State Council1. After 2002 the power generation enterprises and power grid companies are separated and private capital providers were allowed to invest in power plants. The investment climate was different compared to the situation before the reform. So wind power projects commissioned after 2002 are chosen to be listed here for comparison.

No.	Project Name	Approved Tariff (RMB/kWh, incl. VAT)	Tariff approval time	Data Source	Commissioning date <sup>2</sup>	Is it CDM project or apply for CDM?
1	Huitengxile Wind farm Project	0.55	Jun 2004	[2004]1093	2004	Yes
2	Huadian Inner Mongolia Huitengxile 100.25MW Wind Farm Project (Huadian	0.382	Sep 2004	China wind power report 2008 <sup>3</sup>	2006	Yes

So all the projects located in Western Inner Mongolia Autonomous Region, started after 2002, including CDM and non CDM projects are listed below:

http://www.chinapower.com.cn/article/1000/art1000014.asp

<sup>&</sup>lt;sup>2</sup> All the data about commissioning data is from *Statistics on Installed Capacity of Wind Power Projects* 2004 to 2008.

	Dadonggou)					
3	Inner Mongolia Huitengxile Jingneng 100MW Wind Power Project	0.382	Sep 2004	China wind power report 2008	2006	Yes
4	Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project	0.579	D 22 <sup>nd</sup>	[2006]2908 <sup>4</sup>	N/A	Yes
5	Inner Mongolia Wulatezhongqi Wind farm	0.5497	Dec 22 <sup>nd</sup> 2006		2007	Yes
6	Inner Mongolia Bailingmiao Wind-farm	0.548			2007	GS-VER <sup>5</sup>
7	Inner Mongolia Huitengliang Wind Farm Project (North Longyuan Huitengliang 300MW)	0.4058		China wind power report 2008	N/A	Yes
8	CGN Inner Mongolia Huitengliang 300MW Wind Power Project	0.4056	2006		N/A	Yes
9	Inner Mongolia Bayin Wind Farm Project (201MW)	0.4656			N/A	Yes
10	Inner Mongolia Datang Zhuozi Wind Farm (49.5MW)	0.51	Jun 9 <sup>th</sup> 2007	[2007]1260 <sup>6</sup>	2006	Yes
11	Inner Mongolia Bayannaoer Wulanyiligeng Wind Farm Project (300MW)	0.468	Aug. 2007	China wind power report 2008	N/A	Yes
12	Inner Mongolia Bayannaoer Chuanjingsumu 49.3MW Wind Power Project				2007	Yes
13	Expansion Project of Huadian Inner Mongolia Huitengxile Wind Farm		D and	[2007]3303 <sup>7</sup>	2007	Yes
14	Guohua Inner Mongolia Huitengliang West Wind Farm Project	0.51	Dec 3 <sup>rd</sup> 2007		2007	Yes
15	Goldwind Damao Wind Farm Project				N/A	Yes
16	Fuhui Inner Mongolia Tugurige Wind Farm Project				2007	Yes

 <sup>&</sup>lt;sup>3</sup> Published in Oct 2008, by Li Junfeng.
<sup>4</sup> http://www.xlgl.gov.cn/ggfw/tzz/tscy/dian/200705/t20070525\_11554.html
<sup>5</sup> Evidence will be supplied to DOE for check.
<sup>6</sup> http://www.hebwj.gov.cn/upfiles/xy\_col32gjc\_\_\_20070718164220007126.htm
<sup>7</sup> http://www.chinapower.com.cn/article/1133/art1133293.asp

	Fuhui Inner Mongolia
17	Narenbaolige Wind Farm
	Project
	Inner Mongolia
8	Bayinhanggai 49.5MW Wind
	Farm Project
	Guohua Inner Mongolia
9	Huitengliang Wind Farm
	Project
	Inner Mongolia Huitengliang
)	49.5MW Wind Power
	Project (Caoduozi)
	Inner Mongolia North
	Longyuan Huitengxile
	WindFarm Project (North
	Inner Mongolia)
	Xilinguole Huitengliang
,	Wind Power Project Phase I
	Inner Mongolia North
;	Longyuan Zhurihe
	WindFarm Project
	Inner Mongolia Bayannaoer
	Chuanjingsumu Wind Power
	Project
	Inner Mongolia Siziwangqi
	Bayin'aobao Wind Power
	Project
	Sinohydro Inner Mongolia
	Ximeng Honggeer Wind
	Power Project
	Inner Mongolia Goldwind
7	Damao Wind Farm Phase II
	Project
3	Inner Mongolia Bayinxile
	Wind Power Project
_	Inner Mongolia Ximeng
	Zheligentu Wind Farm Phase
	I Project
	Inner Mongolia Hangjin
	Yihewusu Wind Power
	Project
-	Inner Mongolia Zhuozi II
	Wind Power Project

32	Inner Mongolia Bayin'aobao 49.5MW Wind Farm Project (Phase I)				N/A	Yes
33	Inner Mongolia Saiwusu I Wind Power Project				N/A	Yes
34	Beijing Energy Huitengxile 49.5MW Wind Power Project				N/A	Yes
35	Baiyun Ebo Wind Farm Inner Mongolia				N/A	Yes
36	Alashan Bayannuoergong Wind Farm Project				N/A	Yes
37	Bayannaoer Wulatehou Qi Hailisu Wind Farm Project				N/A	Yes
38	Xilinguole Huang Qi Huawei Wind Farm Project				N/A	Yes
39	Chuanjing Wind Farm Inner Mongolia Luneng PhaseII				N/A	Yes
40	Inner Mongolia Duolun Daxishan 30.6MW Wind Power Project				N/A	Yes
41	Inner Mongolia Taipusi Gongbaolage Wind Farm Project	0.51			N/A	Yes
42	Inner Mongolia Ximeng Huitengliang Area Phase I Wind Power Project		Jul 23 <sup>rd</sup> 2008	[2008]1876 <sup>8</sup>	N/A	Yes
43	Inner Mongolia Huitengliang Phase II Wind Power Project				N/A	Yes
44	Inner Mongolia Bayannaoer Chuanjingsumu III Wind Power Project				N/A	Yes
45	Inner Mongolia Erlianhaote Phase I Wind Farm Project				2007	Yes

2. Where available the DOE should indicate the tariff applicable to each of these project activities. Where not available, the DOE should explain how it exercised due diligence in following up the request of the Board, e.g. by including written evidence from regulators on the unavailability of data.

# **Response:**

. Since the promulgation of Electric Power Industry Reform by the State Council in February 2002, reform in China's electric power industry has been making steady

<sup>&</sup>lt;sup>8</sup> http://jgs.ndrc.gov.cn/zcfg/t20080813\_230722.htm

progress and the separation of generation from the grid started. And in 2006, the *Renewable Energy Law* came into force which brought great boost to the development of clean energy industry. The wind farm tariff mechanism was defined in the Law that "The electricity tariff for wind power project shall be subject to government guiding price." Since then, NDRC or local DRC started to approve the tariff of wind farms and made it public available. This means before 2006, the tariff for wind farm projects is almost not public available besides those biding projects and those undertaken as CDM projects.

- . Public available tariff of the wind farm projects connected with Western Inner Mongolia Power Grid have already been listed in the table of response to question 1. Please refer to that table.
- 3. If not already provided in the original validation report or in answer to the request for review the DOE should describe how the proposed tariff for this project activity was determined. In case it has been determined via a tendering process the PP and DOE should explain if the bid was based on an assumption of CDM revenues.

## Response:

The proposed tariff of this project was not determined though tendering process.

The reason about how the tariff applied in the proposed project activity was determined has been explained in PDD and the response to request for review as below:

- . During performing the project investment analysis in project FSR, the Inner Mongolia Power Exploration and Design Institute had to refer to the tariff of the projects with very similar condition and recent constructed near the project site. Before applying approval of the project, board of the investor queried about the tariff to the grid company and Grid Company issued an official letter<sup>9</sup> on 15th Oct. 2007 to inform that the tariff would not exceed 0.47RMB/kWh. What's more, the approval of FSR issued by NDRC on 14th Dec 2007 also indicated what is said about the tariff mechanism in above official letter.
- . Based on the above explanation, it's clear that the determination of the tariff is transparent and reasonable.
- 4. Where previous tariffs are higher than the tariff applicable to this project activity the DOE should explain the reasons for this and provide an opinion as to whether the net return to the investor has been reduced as a result of the reduction in tariffs, or whether the net return has been unaffected as a result of other changes such as investment costs.

#### **Response:**

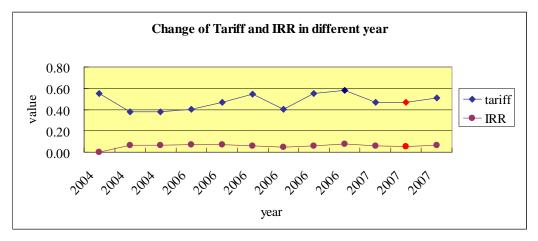
All the projects with the public available information previous the proposed project activity are listed as below:

		Time of	Tariff			
No.	Project name	tariff	(VAT	Data source	IRR	Data Source
		approved	included)			

1	Huitengxile Wind farm Project	2004	0.55	[2004]1093	N/A <sup>10</sup>	Registered CDM project (0064)
2	Huadian Inner Mongolia Huitengxile 100.25MW Wind Farm Project (Huadian Dadonggou)	2004	0.382	China wind power report 2008	6.36%	Registered CDM project (0823)
3	Inner Mongolia Huitengxile Jingneng 100MW Wind Power Project	2004	0.382	China wind power report 2008	6.46%	Registered CDM project (0870)
4	Inner Mongolia Wulatezhongqi Wind farm	2006	0.5497		6.1%	CDM project (Under validation)
5	Inner Mongolia Bailingmiao Wind-farm	2006	0.548	[2006]2908	6.06%	VER project <sup>11</sup>
6	Inner-Mongolia Ximeng Abag 49.5MW Wind Power Project	2006	0.579		7.53%	Registered CDM project (2135)
7	Inner Mongolia Huitengliang Wind Farm Project (North Longyuan Huitengliang)	2006	0.4058		6.84%	CDM project (Under validation)
8	CGN Inner Mongolia Huitengliang 300MW Wind Power Project	2006	0.4056	China wind power report 2008	4.77%	Registered CDM project (2113)
9	Inner Mongolia Bayin Wind Farm Project	2006	0.4656		7.18%	Registered CDM project (2153)
10	Inner Mongolia Datang Zhuozi Wind Farm	2007	0.51	[2007]1260	6.44%	Registered CDM project (1327)
11	Inner Mongolia Bayannaoer Wulanyiligeng Wind Farm Project	2007	0.468	China wind power report 2008	6.08%	CDM project (Under validation)

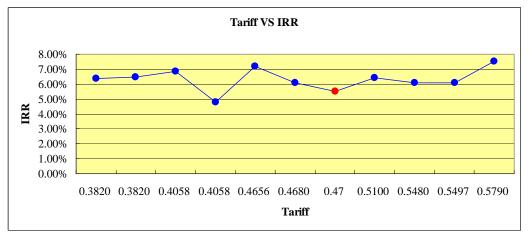
Table above shows the tariff of wind farm projects connected with western Inner Mongolia Power Grid from 2004 to 2007 when FSR of proposed project is finished. During the 11 projects, 5 projects enjoyed the tariff higher than proposed project while the tariff of rest 6 projects is lower. Tariff is determined by the government and it's impossible for the project owner to know the reason for the difference. But we illustrated the graph according to data from the table above and analyze the trend of tariff and IRR with different years.

 <sup>&</sup>lt;sup>10</sup> No IRR calculation in the registered PDD.
<sup>11</sup> Evidence will be supplied to DOE.



(The red spots stand by the proposed project)

From 2004 to 2007 when FSR of proposed project is finished, tariff of western Inner Mongolia area ranges from 0.382 RMB/kW to 0.579 RMB/kW. The trend is not simply decrease or increase but fluctuated in different year with different project. But the trend of IRR is almost keep stable. To get a better view on the change of IRR VS tariff, we also illustrated the graph according to the data both IRR and tariff are available in the table as below:



(Red spot stand for the proposed project)

In this graph, we didn't consider about the 1<sup>st</sup> project (Huitengxile Wind farm Project) because the IRR is not available in the registered PDD. It shows the trend of IRR of the rest 10 projects together with the proposed project. This graph didn't show the result that low tariff lead to low IRR. Net internal return of most projects is around 6% and trend line is relatively smooth. Among the 6 projects whose tariff is lower than proposed project, 5 of which has higher IRR, e.g. tariff of PA 2153 is 0.4656 RMB/kW, but its IRR is higher than the IRR of projects with higher tariff (PA 1327 and Bailingmiao wind farm project). So it can be indicated that even a project get a higher tariff than the other one, it dose not mean it will get higher net return than the other one.

According to all the analysis above, it can be concluded that:

1) There're 11 projects in total prior to the proposed project, of which 5 enjoyed higher tariff while the rest 6 projects' tariff is lower. There's no increasing higher or lower trend

of the tariff in the grid.

- 2) For different projects, it can not be concluded that higher tariff means higher IRR. And the net return to the investor has not been significantly affected as a result of tariff change.
- 5. The DOE should state the tariff value at which the IRR of the project activity would reach the benchmark.

## **Response:**

- . In the PDD, tariff mechanism has already been clearly determined as below:
- . tariff mechanism of the proposed project is defined clearly in the approval of FSR that tariff shall be divided into two stages through the whole life time. Before the operating hour reach 30,000 hours, tariff should refer to the similar project in local area. Once the tariff is determined, it should not be changed within the 30,000 hours. For the proposed project, operate 12 years as designed can reach 30,000 hours. When operating hour reach 30,000 hours, tariff of the electricity generated afterwards shall refer to the average tariff of wind farm projects in local area at that time.
- . As for the tariff before 30,000 hours will be determined as 0.47 RMB/kW while this value will not be changed, we will fix the tariff as 0.47 in the first 12 years. According to the IRR calculation spreadsheet, in case the tariff after 30,000 hours can reach to 0.75 RMB/kW which is a 60% increase, IRR of the project activity would reach benchmark.
- . If tariff though all life time is expected to be fixed and no change, IRR of the project activity would reach the benchmark when the tariff reach to 0.572 RMB/kWh (VAT included).

#### Scope b:

A review to assess the additionality of the project activity through an assessment of the investment analysis, in particular, the method of income tax calculation used, as it has not been substantiated that the treatment of loan interest complies with the national guidance on income tax calculation. The treatment of tax could impact the project IRR in accordance with the guidance of the Executive Board.

3. The DOE should confirm that the method of income tax calculation used, in particular the treatment of loan interest, complies with the national guidance on income tax calculation. In addressing this question, the DOE should provide evidence that actual income tax payments in China exclude interest as an expense.

#### **Response:**

- . The project is a new built project, so the project FSR was carried out before the construction. The purpose of the project IRR calculation before the investment decision is to determine the viability of the project to service debt<sup>12</sup>. Before the project started, a perspective view of the net return of this project shall to be assessed by authorized third party to help the PO make the final decision whether the investment is feasible or not.
- . When the project FSR was carried out, the PO want to be informed the real picture of the project financial attractiveness without considering the financial structure. Then the PO will

<sup>&</sup>lt;sup>12</sup> <u>http://www.allexperts.com/user.cgi?m=6&catID=2301&qID=4791030</u>

make a decision whether to proceed with the project or not based on the FSR and consider the further financial action.

- The calculation method applied for the project shows the result without any financing cost. It is in line with the national guidance on income tax calculation for new built project, i.e. Economic Assessment Method and Parameters for Capital Construction Project (version 3), in which there is a clear definition about the investment analysis for new built project named full investment analysis and the net return calculated based on it is called project IRR. It means that during performing the investment analysis, the investment capital was regarded totally from the PO by default<sup>13</sup>. For the income tax used in cash flow sheet, the guidance has well stated in page 51: the income tax used should be calculated with the profit before interest. So it is reasonable and transparent to calculate about the income tax without considering the loan interest in the PDD and FSR.
- But for the actual income tax, it will happen during the project operation. So it has to be calculated and determined according to national relevant tax law<sup>14</sup>. At that time the finance was closed, i.e. the loan and the loan interest rate information was available. So the loan interest has to be considered.
- Furthermore, even the loan interest was considered now for the income tax calculation, the . project IRR was calculated as 6.56%, still less than the benchmark of 8%. So the project will still be additional.

Hence, the method of income tax calculation used in the project activity complies with the national guidance on income tax calculation during project design stage.

If the method of determining income tax payable differs from the method for estimating 4. income tax as described in the Economic Assessment Method and Parameters for Capital Construction Project, the DOE should explain the reasons for this difference and provide details of when this difference was first introduced.

## **Response:**

As per the analysis above, it was found that the method of determining income tax payable differ from the method for estimating income tax as described in the Economic Assessment Method and Parameters for Capital Construction Project (version 3). The difference is due to that one calculation happen during project operation stage and the other one happened during the project design and decision stage. Both calculations are in line with national relevant guidance and law. This difference was first introduced on Jul 3rd 2006<sup>15</sup>, when the Economic Assessment Method and Parameters for Capital Construction Project (version 3) was issued and come into force.

<sup>&</sup>lt;sup>13</sup> <u>http://q.sohu.com/forum/6/topic/2850380</u>, paragraph 2 <u>http://www.gov.cn/flfg/2007-03/19/content\_554243.htm</u>

<sup>&</sup>lt;sup>15</sup> http://www.bhi.com.cn/fangfa/xgwj.htm