

PP's response:

***Issue 1: The DOE is requested to confirm the appropriateness of the electricity tariff assumed in the FSR/PDD, in comparison with previous tariff notifications since 2002 in the same region and whether such information was available at the time the FSR was prepared.***

PP' response:

1. The tariff of 0.47 RMB/kWh applied in the PDD is from the project FSR, which is carried out by the authorized third party, i.e. Inner Mongolia Power Exploration and Design Institute, in August 2007. On 14<sup>th</sup> Dec 2007, this project was approved by National Development and Reform Commission (NDRC). In the approval, the tariff mechanism is defined as "Before the operating hour reach 30,000 hours<sup>11</sup>, tariff should be in line with latest approved tariff of concession projects. When operating hour reach 30,000 hours, tariff of the electricity generated afterwards shall be in line with average tariff of wind farm projects in local area at that time"
2. The tariff of wind farm project in Inner Mongolia differs very huge case by case (The lowest tariff is 0.3820 RMB/kWh<sup>1</sup>, some got the same tariff of 0.47RMB/kWh<sup>2</sup> and higher one could reach 0.579RMB/kWh<sup>3</sup>) during 2002 to 2007. What's more, even in the same year different project could get the different tariff, e.g. in 2006, the tariff of Bayin project and Duolun project is 0.4656 RMB/kWh<sup>4,5</sup> but the Huitengliang project's tariff is just 0.4200 RMB/kWh<sup>6</sup>.
3. So during performing the FSR, Inner Mongolia Power Exploration and Design Institute consulted the grid company and local DRC to try to find the applicable tariff for investment analysis of the proposed project and got clearly feedback, saying that the tariff of the proposed project should be similar to Bayin project (Project 2153, same installed capacity with the proposed project, approved tariff is 0.4656 RMB/kWh) and would not exceed 0.47RMB/kWh. Then 0.47RMB/kWh was used to conduct the investment analysis. Due to the requirement of project's board meeting held on 17<sup>th</sup> Oct. 2007, the grid company issued an official letter<sup>7</sup> on 15<sup>th</sup> Oct. 2007 to inform that the tariff would not exceed 0.47RMB/kWh. What's more, the NDRC approval on 14<sup>th</sup> Dec 2007 also indicated what is said about the tariff mechanism in the official letter. During validation, the evidences, i.e. the official letter and NDRC approval, has been provided to DOE for checking and verifying.

Based on the analysis above, tariff in the PDD of proposed project is reasonable and transparent.

***Issue 2: The DOE is requested to explain the differences in the input values between this project activity and a similar CDM project (PA 2153) of the same capacity that it has validated, in particular, the assumed O&M cost and residual value at the end of the operational lifetime of the project.***

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<sup>1</sup> Registered, <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1166704457.57/view>

<sup>2</sup> Registered, <http://cdm.unfccc.int/Projects/DB/BVQI1212749503.45/view>

<sup>3</sup> Registered, <http://cdm.unfccc.int/Projects/DB/RWTUV1218614638.67/view>

<sup>4</sup> Registered, <http://cdm.unfccc.int/Projects/DB/DNV-CUK1218624488.68/view>

<sup>5</sup> Registered, <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1209564561.97/view>

<sup>6</sup> Registered, <http://cdm.unfccc.int/Projects/DB/RWTUV1218614638.67/view>

<sup>7</sup> Evidence will be supplied to DOE for check.

PP's response:

The all input parameters used in the financial analysis of this proposed project in PDD are taken from the feasibility study report (FSR) developed by Inner Mongolia Power Exploration and Design Institute in August 2007 and approved by National Development and Reform Commission (NDRC) on 14<sup>th</sup> Dec. 2007.

The FSR was approved on 14<sup>th</sup> Dec 2007, thus it is earlier prior to the date when the investment decision was made on 25<sup>th</sup> Dec 2007. Given this relative short period of time between approval of the FSR 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. Thus, it is suitable to apply the values in FSR to make the investment decision to implement the project according to the requirements of EB 38 paragraph 54(c) guidance,

The detail analysis about the main difference between the input of the proposed project and that of 2135 project is as below,

1. Static investment

The static investment of the proposed project and 2135 project is 178,661 $\times 10^4$ RMB and 159,008 $\times 10^4$ RMB respectively. The breakdown investment of the two projects is list in below table.

Item	PA 2153/ $10^4$ RMB	Proposed project/ $10^4$ RMB
static investment	159,088	178,661
Equipment	128,815	145,580.04
Installation	11,950	14587
Construction	7,246	8,213
the rest investment	11,077	10,280.96

It is found that the equipment investment of the two projects **both** reach 81% of their total static investment and the main difference of static investment is from the difference of equipment investment. For the proposed project, the key equipment investment is 140,917.65 $\times 10^4$ RMB, i.e. 97% of equipment investment and 79% of total static investment. But the key equipment fee in contract is 140,257 $\times 10^4$ RMB as below table, nearly same with the value in FSR and PDD. So the investment in PDD is reasonable.

Item	Budget from FSR	Price from Contracts
Key Equipment	140,917.65 $\times 10^4$ RMB Data source: Page 13-6 of FSR	140,257 $\times 10^4$ RMB Data source <sup>8</sup> : Contracts of 134 sets of turbines, pylons and transformers. The contracts have

<sup>8</sup> 1 contract for turbine, signed in Dec 2007; 5 contracts for transformer, signed from Dec 2007 to Aug 2008; 6 contracts for pylon, signed from Mar 2008 to Nov 2008. The 12 contracts consisted the total 134 sets of turbines, pylons and transformers.

		been supplied to DOE for validation
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Since it is impossible for the project owner to find the investment information of 2153 project from his competitor, we listed the static investment per kWh of 9 similar **registered** projects (including 2153 project) in the same region in below table.

Project No.	Installed cap.	Equipment purchase agreement	Static investment	static investment per kW (RMB/kW)
2100 (proposed project)	1500kWh×134	Dec 2007	178,661 × 10 <sup>4</sup> RMB	8888
2153 (project for comparison)	1500kWh×134	Apr 2007	159,088 × 10 <sup>4</sup> RMB	7915
2406	1500kWh×33	April 2008	49,814×10 <sup>4</sup> RMB	10063
1815	1500kWh×33	August 2007	45,479×10 <sup>4</sup> RMB	9188
2113	1500kWh×200	Year 2007	291,083 × 10 <sup>4</sup> RMB	9703
1621	850kWh×58	N/A	48,686×10 <sup>4</sup> RMB	9875
2135	1500kWh×33	August 2007	56,941×10 <sup>4</sup> RMB	11503
1992	850kWh×25	N/A	17,866×10 <sup>4</sup> RMB	8310
1865	750kWh×66	N/A	45979×10 <sup>4</sup> RMB	9289

It is found that the average static investment of the 9 registered wind farm projects is 9414.889RMB/kWh. However, the static investment per kW of proposed project is 8888 RMB/kWh, 6% lower than the average one. So the static investment of the proposed project applied in PDD is reasonable and transparent.

## 2. Tariff

The tariff of the proposed project is 0.47 RMB/kWh (including tax), higher than that of 2153 project, i.e. 0.4291 RMB/kWh (excluding tax, i.e. 0.4656 RMB/kWh (including tax)). As per the analysis in the response for question 1, the tariff of 0.47 RMB/kWh applied in PDD is reasonable and transparent.

## 3. O&M cost

Both the O&M cost of the proposed project and 2153 project applied in PDDs are from project FSRs. Normally during the FSR designing stage, the O&M cost is determined according to the project static investment and the **experience of the design entity**. Since both FSRs are approved by government, it is indicated that the chose of both O&M costs are reasonable.

As per the spreadsheet<sup>9</sup> of IRR calculation of 2153 project, the yearly O&M cost is not fixed and contains 2 parts (operating cost and staff's bonus and welfare), the O&M cost for the last 5 years are higher than  $5310 \times 10^4$  RMB. So we averaged the O&M cost for 22 normal years as  $4202.4 \times 10^4$  RMB. The annual O&M cost of the proposed project is  $5120 \times 10^4$  RMB.

To get more information on O&M cost of 9 similar projects (including the proposed projects and 2153 project) at same region, a table is listed below for comparison.

Project No.	average O&M cost ( $10^4$ RMB)	O&M cost per kWh (RMB/kWh)
2100 (proposed project)	5120	0.103
2153 (project for comparison)	4202.4	0.09
2406	1027	0.09
2113	6826	0.084
1621	1234	0.110
2135	1166	0.09
1992	415.58	0.071
1865	1359.15	0.103
2109	1170.86	0.098

The table above shows that O&M cost of wind farm projects in Inner Mongolia ranges from 0.071 to 0.110 RMB/kWh, and the average value is 0.093 RMB/kWh. The O&M cost of the proposed is 0.103 kWh, 10% higher than average one.

However, the difference of O&M cost between the proposed project and 2153 project will not significantly impact project IRR and additionality. Because even O&M cost of the project decreased to average level and keep same as that of 2153 project, the IRR would reach 5.81% and 6.09% respectively. The sensitivity analysis in PDD has clearly indicated that only the O&M cost of the proposed project decrease 85%, the project could reach the benchmark.

So as per the analysis above, it is indicated that the difference for the O&M cost between the 2 project will not significantly impact the project IRR and the additionality of the proposed project always keep valid even with the lower O&M cost from 2153 project.

#### 4. Depreciation, especially for residue value

10% of residue rate is chosen in 2153 project.

For proposed project: When preparing FSR, the design institute referred to the Notification on the execution date of Adjustment of Residual Value Rate of Fixed Asset for Enterprises issued by State Administration of Taxation on Sep. 14th 2005<sup>10</sup>, in which the 5% of residual value rate is considered to be reasonable. Selection of 5% in the FSR and PDD is in line with national regulation and it is reasonable that 5% was adopted in PDD and FSR as the residual value rate.

#### 5. Income Tax rate

FSR of PA 2153 was finished in 2006, when the tax rate was 33% and a "The Notification on Tax Preferential Policy for Development of the West Regions"<sup>11</sup> was still in effect. For the enterprises

<sup>9</sup> <http://cdm.unfccc.int/UserManagement/FileStorage/G0VCYBFU18T9ZAH4WKN2QRED3PIO7L>

<sup>10</sup> File number: GuoShuiHan[2005] No.883.

<http://www.chinatax.gov.cn/n480462/n480513/n481024/n576326/n822337/n822492/n826156/1023400.html>

<sup>11</sup> [http://www.cdlocaltax.chengdu.gov.cn/CMS/read.go?template=54&CONTENT\\_ID=4297](http://www.cdlocaltax.chengdu.gov.cn/CMS/read.go?template=54&CONTENT_ID=4297)

located in west regions who is investing in the industries encouraged by the government, income tax rate is 15%.

On 16<sup>th</sup> Mar 2007, the *Enterprise Income Tax Law of the People's Republic of China* was published. In Chapter 1, Article 4: All enterprise income tax shall be levied at the rate of 25%<sup>12</sup>. When preparing the FSR in August 2007, design institute adopted 25% according to the real situation of proposed project.

Conclusion: Adoption of residual value rate for proposed is strictly in line with national regulation which is reasonable and transparent.

***Issue 3: The DOE is requested to explain how it has validated that the income tax calculation reflects the projection for the actual cash flow of the project activity.***

PP's response:

According to the page 51 of *the Economic Assessment Method and Parameters for Capital Construction Project (version)* issued by NDRC and Construction department on 3<sup>rd</sup> July 2006, which clearly described the method to calculate the income tax: The income tax calculation in cash flow should based on the total profit before interest. The Calculation formula of income tax could be expressed as:

$$\text{Income Tax} = \text{Income Tax Rate} \times \text{Total profit before interest}$$

$$= \text{Income Tax Rate} \times (\text{electricity sales revenue} - \text{VAT and surplus tax} - \text{O\&M cost-depreciation})$$

A break down list of indicators that may affect income tax is shown below:

(1) Electricity sales revenue

$$\text{The electricity sales revenue} = \text{power generation} \times \text{tariff}$$

The calculation reflects the projection for the actual cash flow of the project activity.

(2) VAT and surplus tax

$$\text{VAT} = \text{Electricity sales revenue} \times \text{VAT rate}$$

Surplus Tax = VAT depreciation rate (City maintenance & construction tax rate + Surtax for education expenses rate)

The rate of VAT, City maintenance & construction tax and Surtax for education expenses are 8.5%<sup>13</sup>, 5%<sup>14</sup>, 3%<sup>15</sup>, respectively, consistent with relevant regulations and real situation.

(3) Depreciation

$$\text{Depreciation} = \text{fixed asset value} \times (1 - \text{residue value rate}) / \text{depreciation years}$$

As indicated in Issue 2, the way to define residual value and depreciation rate reflect the

<sup>12</sup> [http://www.gov.cn/flfg/2007-03/19/content\\_554243.htm](http://www.gov.cn/flfg/2007-03/19/content_554243.htm)

<sup>13</sup> Evidence will be supplied to DOE.

[http://www.he-n-tax.gov.cn/hbgswwww/gsz/t/jgxjs/xyhzc/disilei/200904/t20090421\\_202089.htm](http://www.he-n-tax.gov.cn/hbgswwww/gsz/t/jgxjs/xyhzc/disilei/200904/t20090421_202089.htm)

<sup>14</sup> [http://www.gov.cn/banshi/2005-08/19/content\\_24817.htm](http://www.gov.cn/banshi/2005-08/19/content_24817.htm) Article 4

<sup>15</sup> <http://edu.people.com.cn/GB/1053/3724129.html>

projection of actual situation.

(4) O&M cost

According to the description in Issue 2, O&M cost calculation is reasonable and reflects the projection for the actual cash flow of project activity.

(5) Income Tax

According to the description in Issue 2, income tax rate of 25% is consistent with real situation.

What's more, the calculation method is totally same with registered similar projects<sup>16</sup> (including 2153 project).

Based on the above description, the income tax calculation of proposed project is consistent with China regulations and the actual situation of the project activity.

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<sup>16</sup> PA 2153, PA 2406, PA1816, PA 2113, etc.