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Ref: Response to request for review “Zhejiang Provincial Energy Group Zhenhai Natural Gas Power Generation Co., Ltd.’s NG Power Generation Project” with the Reference Number 1344

7 January 2007

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

Attention: CDM Executive Board

Dear Sir or Madam,  
We were informed that our project “*Zhejiang Provincial Energy Group Zhenhai Natural Gas Power Generation Co., Ltd.’s NG Power Generation Project*” (reference number 1344) was requested for review by CDM Executive Board. As required by the Executive Board and on behalf of the project participants, we would like to answer the questions and clarify the issues raised in the requests for review as follows:

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| <p>1. Further information is required on the steps taken by the DOE to validate the evidence of prior consideration of the CDM to undertake the project activity and how that evidence was cross checked and validated.</p> |
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Besides the response from our DOE, we’d like to clarify as follows:

Based on the natural gas price for power industry<sup>1</sup> and the data in the feasibility study report, the project IRR without the revenues of CDM has been calculated as 6.34%, which is lower than the 8% benchmark IRR derived from the “*Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects*”, which is widely used as the sector benchmark rate for all kinds of electricity generation projects including natural gas power generation projects in China. The investment analysis shows the project is financially unattractive thus the project owner started seeking help from the clean develop mechanism (CDM) since it realized the potential of the proposed project as a CDM project.

In B.5 of the PDD submitted for registration, we described the evidence from the *Letter of Confirmation and Reply to the Submission of supplementary Loan Evaluation Materials* by the Industrial and Commercial Bank of China, Ningbo City

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<sup>1</sup> Notice regarding the price of natural gas, National Development and Reform Commission, 28 September 2003, [2003] No. 1323

Branch on 18 September 2004<sup>2</sup>. In the document the Industrial and Commercial Bank of China, Ningbo City Branch states it has evaluated the incentives provided by the CDM and considered to grant loans to the proposed project based in part upon the contribution of the CERs revenues to the financial attractiveness of the project activity. The bank and supports the development of the project under the rules of the CDM. After successfully securing financing on the back of the incentives from the CDM, the project started construction on 9 May 2005.

Additional evidence can be found at:

<http://iptv.zjol.com.cn/05iptv/system/2005/08/12/006268645.shtml>. It is the news reporting the foundation laying ceremony of the proposed project, showing that the project owner had considered CDM before the project start.

2. Further clarification is required on the nature of incentives availed of by a multinational corporation that invested in a project similar to the project activity without CDM.

In the common practice analysis, Fujian Xiamendongbu CCGT power project has been identified as the similar CCGT project to the proposed project. This project has been developed without CDM support as there are essential distinctions between it and the proposed project. Fujian Xiamendongbu CCGT power project is a Foreign Direct Investment enterprise<sup>3</sup> located in Special Economic Zone, Xiamen City, Fujian Province. Foreign Direct Investment (FDI) in China enjoys quite a lot of policy preferences and benefits, more information can be found at <http://www.fdi.gov.cn/pub/FDI/zcfg/default.jsp?type=49>.

As a project invested by a foreign corporation in Xiamen City, Fujian Xiamendongbu CCGT power project enjoyed the following detailed benefits (can be found on the website of Xiamen Municipal Government, P.R. China<sup>4</sup>) that rendered it financially attractive:

- a. The income tax is 15% .
- b. No income tax for the first two years and half income tax for the next three years after the first two years. This policy is applied from the year when the project has incomes.
- c. Tax free for importation of technology (equipments).

The proposed project activity is fully invested by domestic companies, and as such does not enjoy any of the above policy preference and benefits. It must pay income tax at a rate of 33%.

3. Further clarification is required as to whether and how all relevant power plant technologies that have recently been constructed or are under construction or are being planned, including those of other investors, were considered as additional baseline scenario candidates.

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<sup>2</sup> This document was supplied to DOE for verifying during the validation.

<sup>3</sup> <http://ctixm.smexm.gov.cn/2006-12/2006122313041.htm>

<sup>4</sup> [http://www.xm.gov.cn/ts/zcfg/yhzc/200709/t20070901\\_176664.htm](http://www.xm.gov.cn/ts/zcfg/yhzc/200709/t20070901_176664.htm)

As per AM00029 the identification of baseline scenario should include all possible realistic and credible alternatives that provide outputs or services comparable with the proposed CDM project activity within the grid boundary as defined in ACM0002, i.e. East China Power Grid for the proposed project. In the PDD submitted for registration the alternative baseline scenarios analyzed include:

- 1) The project activity not implemented as a CDM project;
- 2) Power generation using natural gas, but technologies other than the project activity;
- 3) Power generation technologies using energy sources other than natural gas;
- 4) Import of electricity from connected grids, including the possibility of new interconnections.

According to the feasibility study report of the proposed project, it provides peak load electricity service to the region, thus the baseline alternatives should provide similar services, i.e. peak load regulating. Analysis of the four alternatives is as follows.

- 1) The proposed project not implemented as a CDM project;  
The project IRR for the project activity not implemented as a CDM project is 6.34%, lower than the benchmark IRR (8%) which is minimum requirement of investment in the power industry in China, showing that the project activity is not financially attractive if not being implemented as a CDM project. Therefore alternative 1) is not the baseline scenario.
- 2) Power generation using natural gas, but technologies other than the project activity;  
Natural gas for power generation using technologies other than the project activity, i.e. simple cycle gas turbine, has lower thermal efficiency of 32%-35%<sup>5</sup> compared to the higher efficiency of more than 50%<sup>6</sup> for gas-steam combined cycle technology for power generation. Simple cycle gas turbine is rarely used now<sup>7</sup> and is not economical for capacities as high as 700MW thus the alternative is not a realistic baseline scenario.
- 3) Power generation technologies using energy sources other than natural gas;  
Relevant power plant technologies that have recently been constructed or are under construction or are being planned include hydro power, wind power, fossil fuel-fired power, nuclear power, biomass power and solar power technologies.

Nuclear power station usually provide base load and is rarely involved in the peak load regulation<sup>8</sup> thus it does not provide similar services compared with the proposed project.

According to the “*Supervision regulation that the Grid Company should purchase all the electricity generation by renewable energy*” issued by State Electricity Regulation Committee<sup>9</sup>, the full amount electricity generated by hydro, wind, biomass, solar, geo-thermal, tidal resources should be accepted and purchased by the grid the power plant is connected to. Therefore the power plant using hydro power, wind power, solar and biomass resources can not provide similar services, i.e. peak load regulation as the proposed project. Furthermore,

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<sup>5</sup> <http://www.bjx.com.cn/files/wx/ahdl/2001-1/2.htm>

<sup>6</sup> <http://www.chinapower.com.cn/article/1025/art1025680.asp>

<sup>7</sup> <http://www.hdrqw.com/news/20060505-31.htm>

<sup>8</sup>“Strategically Approach on Speeding up Nuclear Power Development in China”

<http://www.jjbk.cn/qyjj/ShowArticle.asp?ArticleID=7907>

<sup>9</sup> [http://www.law-lib.com/law/law\\_view.asp?id=207263](http://www.law-lib.com/law/law_view.asp?id=207263)

according to China's latest survey on hydro resources<sup>10</sup>, 70.6% of hydro resources are located in the southwest region while only 4% exist in the eastern region. Moreover, 56.3% of exploitable hydro resource in east China has already been developed. The hydro sources based on large rivers within the project's boundary were developed many years ago, such as Xin'anjiang Hydro Station, Fuchunjiang Hydro Station, etc.. The remaining limited hydro sources have low utilization hours, small installed capacity and are difficult to be developed<sup>11</sup>.

Above analysis demonstrated that power plants using hydro power, wind power, nuclear power, biomass power and solar resources are not baseline scenario.

Fossil fuel power plants except natural gas fired power plants include coal and oil power plant. According to *Policy Outlines of China Energy Conservation Technologies*<sup>12</sup> issued by Chinese National Development and Reform Commission and Ministry of Science and Technology, the development of new oil-fired power plant is prohibited. Therefore oil-fired power plant is cannot be the baseline scenario.

According to the statistics published by the China DNA, of the new thermal power plants built between 2000-2005, 21% of the new units are 600MW, 60% of the new units are 300MW and above and the remaining have a unit capacity of less than 300MW unit<sup>13</sup>. Coal-fired power plant can be operated as peak load regulation and medium load power with comparable capacity or electricity generation with the proposed project. Considering the power units existing and development trend in future, 300MW and 600MW coal-fired power unit is selected as realistic and credible baseline alternatives.

- 4) Import of electricity from connected grids, including the possibility of new interconnections.

The connected grid of the East China Power Grid (ECPG) is the Central China Power Grid (CCPG). The imported electricity from the CCPG is through a long distance transmission line and usually provides base load to the ECPG<sup>14</sup>, which is not similar to the proposed project. So scenario 4) is not a realistic and credible baseline alternative.

Based on the above analysis, all possible realistic and credible alternatives that provide outputs or services comparable with the proposed CDM project activity have been discussed and the plausible baseline scenarios are 300MW and 600MW coal-fired power units. These are selected as realistic and credible baseline alternatives. The levelized cost of electricity production in RMB/kWh has been calculated for the two plausible baseline scenarios and the economically most attractive baseline scenario alternative, i.e. 600MW coal-fired power unit is identified through investment analysis in the PDD.

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<sup>10</sup> <http://www.shp.com.cn/zhwx/showcontent.asp?id=18090>

<sup>11</sup> White Book on Energy of Zhejiang, the People's Government of Zhejiang Province, Zhejiang Daily, 09 December, 2004,

<sup>12</sup> [http://www.moc.gov.cn/zizhan/siju/tifasi/zhengceguiding/200709/t20070924\\_407538.html](http://www.moc.gov.cn/zizhan/siju/tifasi/zhengceguiding/200709/t20070924_407538.html)

<sup>13</sup> <http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1374.pdf>

<sup>14</sup> [http://engine.cqvip.com/content/tv/95255x/1998/016/003/gc23\\_tv1\\_3203139.pdf](http://engine.cqvip.com/content/tv/95255x/1998/016/003/gc23_tv1_3203139.pdf)

An official explanation letter by Zhejiang Province Electricity Distribution Centre confirms the above analysis, that the current situation is and in the foreseeable future is likely to remain that coal fired power plants will play the key role of providing the peak load in Zhejiang province, and all other alternatives are unlikely to replace it. It also confirms that there is no simple cycle gas turbine technology used in Zhejiang province, and the imported electricity from CCPG provides base load.

4. According to the applicability condition of the AM0029/ver.01 (19 May 2006), condition 2 establishes that “.and information pertaining to the grid and estimating baseline emissions is publicly available”. As far as plant specific fuel consumption and electricity generation data are not publicly available in China, the PP/DOE shall further substantiate the application of this methodology beyond the explanation given by the PPs/DOE referring to the deviation accepted by the EB with regard to the application of methodology AM0005 later replaced by ACM0002. Accordingly the statement on page 8 (top) of PDD that “...the information pertaining to the East China Power Grid and estimating baseline emissions is publicly available” is not adequate.

This concern was raised by RIT member for the projects - Saihanba East 45.05 (ref. 0561) and Saihanba North (ref. 0576) Wind farm projects in China on 26 October 2006. EB accept the explanation by the DOE – DNV, and accepted to register the above projects as CDM projects on 15 December 2006. Detailed history information can be found at: <http://cdm.unfccc.int/Projects/DB/DNV-CUK1155680126.47/history>.

The abstract of the response by DOE related to this concern is as follows:

On 7 October 2005, DNV submitted a request for deviation to the Board titled “Application of AM0005 and AMS-I.D in China”. The Board’s response stated the following:

*“The Board took notice of the request for deviation in use of methodology AM0005 by several project activities in China, which were as follows:*

- 1) Use of average efficiency of existing power plants in the grid as proxy for estimating fuel consumption.*
- 2) Use of capacity additions during last 1 - 3 years for estimating the build margin emission factor for grid electricity.*
- 3) Use of weights estimated using installed capacity in place of annual electricity generation.*

*The Board did not accept deviation listed in 1) above. The Board while rejecting the suggested deviation from the suggested method in AM0005, suggested that the project participants use the following alternative solutions in absence of data:*

- (i) For small-scale project activities, use the average emission factor of the grid as described in the AMS-I.D,*

(ii) Use the efficiency level of the best technology commercially available in the provincial/regional or national grid of China, as a conservative proxy, for each fuel type in estimating the .

The Board agreed to accept the proposed deviations in 2) and 3) above.”

From the above EB guidance, it can be seen that Board accepted the proposed method used for calculation of the BM emission coefficient.

It is true that the request for deviation was submitted relating to AM0005 and AMS-I.D only. However, in DNV’s opinion the deviation clearly also applies to ACM0002 due to the following:

- AM0005 was valid from 14 April 2004 to 2 March 2006 and after this period, it was replaced by ACM0002.
- The calculation procedure of OM and BM in ACM0002 is the same as described in AM0005.

As EB accepted the deviation to calculate the emission factor in China, the grid emission factor can be calculated based on the data from the publicly available *China Electric Power Yearbook* and *China Energy Statistic Yearbook*, which are published annually and contain the information on Chinese power grids, such as the installed capacity and electricity generation from various types of resources, various fuel consumptions, Calorific Values of various fuels, etc. These data are used by all registered Chinese CDM projects to calculate the OM and BM emission factors of Chinese grids. Therefore, there were publicly available information pertaining to the grid and estimating baseline emissions at the time of PDD submission. Furthermore, Chinese DNA, the National Development and Reform Commission (NDRC) publishes *Baseline emission factors for Chinese regional grids* in 2006 and 2007, which publishes the OM and BM emission factors for every regional electricity grids in China. Therefore, the applicability of condition 2 “the information pertaining to the East China Power Grid and estimating baseline emissions is publicly available” is justified.

5. Third condition of applicability of methodology requires demonstration that natural gas is sufficiently available in the region, country, etc. Table B1 (on page 8 of PDD) is submitted as an evidence of availability trying to prove this requirement. According to this table supply of NG to this region in 2005 was  $8.78 \times 10^8 \text{ Nm}^3/\text{a}$ , while the project feasibility study expects  $5.3354 \times 10^8 \text{ Nm}^3$  annual consumption (60.7% of supplied to the region NG) of NG. Figure for 2010 is ten times more, but the first crediting period will start after the project registration and therefore the current (2006-2007) situation should clearly show the real perspective of increase in natural gas supply. Statement in Validation Report (page 13) that the project annual consumption is very small comparing the NG available in the region thus is not directly deducted from table B1. Future plans on perspective constructions should be also analyzed with regard to the NG consumption.

The natural gas supply and distribution are responsible and operated by Zhejiang Provincial Natural Gas Development Co., Ltd. (ZPNGD)<sup>15</sup>. According to the *Natural*

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<sup>15</sup> Approval Letter of the Establishing of Zhejiang Provincial Natural Gas Development Co., Ltd., By Zhejiang Provincial Development and Plan Commission, [2001]758

*Gas Pipeline Net Planning of Zhejiang Province* (Gui-497, September of 2005) which has been approved by Zhejiang Provincial Government, the natural gas supply of Zhejiang Province comes from three sources: natural gas transferred from west, East China Sea gas field and imported LNG. In the PDD submitted for registration there is a table showing the natural gas supply for future decades in Zhejiang Province. And in the first row of the table, the year 2010 stands for the period of 2006 to 2010, the year 2015 stands for the period of 2011 to 2015, and the year 2020 stands for the period 2016 to 2020, i.e.,

Table B1 Natural Gas Supply in Zhejiang Province (unit:  $10^8\text{Nm}^3/\text{a}$ )

	Natural Gas source	2005	2006-2010	2011-2015	2016-2020
		$\text{Nm}^3/\text{a}$	$\text{Nm}^3/\text{a}$	$\text{Nm}^3/\text{a}$	$\text{Nm}^3/\text{a}$
1	Natural gas transferred from west	7.98	14.5	18	19.2
2	East China Sea gas field	0.8	23.3	23.3	23.3
3	Imported LNG	0	44.18	88.36	132.54
Total supply		8.78	81.98	129.66	175.04

An official explanation letter by Zhejiang Provincial Natural Gas Development Co., Ltd. has been submitted to DOE and confirms the above data. The project activity has been fully commissioned since July 2007<sup>16</sup>. According to the feasibility study report of the project, the expected consumption of natural gas by the proposed project is  $5.3354 \times 10^8 \text{ Nm}^3/\text{a}$ , which is very small amount (6.51%) compared with the annual natural gas available during the years 2006 to 2010 in Zhejiang Province.

It has also been indicated in the *Natural Gas Pipeline Net Planning of Zhejiang Province* (Gui-497, September of 2005) that the Kuche-Tabei gas field, which provides the natural gas from west to east, has a potential capacity of gas supply of  $200 \times 10^8 \text{ Nm}^3/\text{a}$  for 30 years; among East China Sea gas field, the Chunxiao gas field, which provides natural gas to Zhejiang Province, has a capacity of  $25 \times 10^8 \text{ Nm}^3/\text{a}$ ; besides, LNG terminals are being built in Ningbo City of Zhejiang Province to import great amount of liquid natural gas to fulfill the demand in the region.

Therefore sufficient availability of the natural gas in the region has been demonstrated. The project activity is paying the standard price for natural gas in the market and will not displace natural gas that would otherwise be used elsewhere in an economy. Thus the third condition of applicability of methodology is satisfied.

6. When identifying plausible alternatives, among others, the “import of electricity from connected grids, including the possibility of new interconnections” is mentioned and excluded. The argument provided in the PDD is that “interconnected Central China Power Grid (CCPG) usually provides base load power to the East China Power Grid (ECPG) which is in project boundary. Further clarification is required as the CCPG could supply peak electricity to the ECPG in future. Moreover the project activity might provide both base and peak load electricity and not only peak load electricity. Even more, there is not information in the PDD what is the share of peak load electricity and what is the base load

<sup>16</sup> <http://www.ztpc.com/Article/ShowArticle.asp?ArticleID=6575>

electricity share from annual 3,500 hours.

The baseline alternative of importing of electricity from connected grid is excluded as the fact that imported electricity from the connected grid - CCPG does provide the base load power to the ECPG<sup>17</sup>, and it is unlikely to be changed due to the much higher cost if providing the peak load and the technical barriers of long distance electricity transmission.

Regarding the proposed project, it was designed to mainly provide peak load regulation, which has been shown in the project feasibility study report and has been approved by National Development & Reform Commission. If the project owner would like to change it as base load power plant, it needs to re-conduct the project feasibility study and seek approval by the relevant authority. The official explanation letter by Zhejiang Province Electricity Distribution Centre confirms above statement.

7. For the calculation of the baseline emission factor of baseline (calculation and selection of BM of ECPG when capacity addition is not publicly available in China) the PPs introduced alternative formulae for calculation of BM. Further clarification is required. In addition, the DOE shall further clarify how they substantiate that the new formula applied can be considered a follow up (or application) of deviation accepted for AM0005.

This is a related concern of issues 4 of the request for review, please refer to below web site to see more information. <http://cdm.unfccc.int/Projects/DB/DNV-CUK1155680126.47/history>.

Regarding the BM emission factor calculation, as we explained in Issue 4 of the request for review, EB accepted the following deviation for the calculation of the BM in China:

- Use of capacity additions during last 1 - 3 years for estimating the build margin emission factor for grid electricity;
- Use the efficiency level of the best technology commercially available in the provincial/regional or national grid of China, as a conservative proxy, for each fuel type in estimating the fuel consumption to estimate the build margin (BM).

Therefore, the formula of calculating  $EF_{BM,y}$  is:

$$EF_{BM,y} = \left[ EF_{BTCA\_fire,y} \times CAP_{fire,y-n,y} \right] / \left[ \sum_j CAP_{j,y-n,y} \right]$$

Where  $CAP_{fire,y-n,y}$  is the incremental installed capacity of fuel-fired power (MW) in y year compared to that of y-n year;

$\sum_j CAP_{j,y-n,y}$  is the total incremental installed capacity of various power sources in the grid during the years from y to y-n year;

$\left[ CAP_{fire,y-n,y} \right] / \left[ \sum_j CAP_{j,y-n,y} \right]$  represents the share of incremental installed capacity of fuel-fired power in the whole incremental installed capacity.

<sup>17</sup> [http://engine.cqvip.com/content/tv/95255x/1998/016/003/gc23\\_tv1\\_3203139.pdf](http://engine.cqvip.com/content/tv/95255x/1998/016/003/gc23_tv1_3203139.pdf)

where,  $n$  is fixed by:

Starting from  $y$  year, the differences of installed capacity between  $y$  year and  $y-1$  year,  $y$  year and  $y-2$  year, ...  $y$  year and  $y-n$  year,  $y$  year and  $y-n-1$  year, ... are calculated respectively, and then divided by the installed capacity of  $y$  year. The year that can make the left-hand side of the following formula greater than 20% will be regarded as  $n$ . The formula is as follows:

$$\frac{\sum_j CAP_{j,y-n}}{\sum_j CAP_{j,y}} \geq 20\%$$

(10)

$EF_{BTCA\_fire,y}$  is the emission factor of fuel-fired power with best technology commercially available (BTCA). It represents the trend of increased efficiency in coal consumption in the fuel-fired power generation brought by technology advancement in the coming years. Compared with the method for  $EF_{BM,y}$  provided by ACM0002 Methodology, the value of  $EF_{BTCA\_fire,y}$  is lower than that of other types of fuel-fired power plants to be built in the grid, because the emission factor of the alternative method reflects the fuel efficiency of the fuel-fired power plants which use the best technology commercially available. Therefore, the build margin factor calculated through this method is conservative.

Following EB's guidance on DNV deviation request for the BM calculation, all Chinese CDM projects use above calculation method to calculate BM emission factor and are accepted and registered by EB.

8. Data for calculation of OM for the years 2002, 2003, 2004 is provided in Annex 3 to the PDD. Quantity of imported electricity is in relevant tables, but EF of imports is not clear. Further clarification is required.

According to ACM0002 version 06, for the purpose of determining the Operating Margin (OM) emission factor, use one of the following options to determine the CO<sub>2</sub> emission factor(s) for net electricity imports ( $COEF_{i,j,imports}$ ) from a connected electricity system within the same host country(ies):

- (a) 0 tCO<sub>2</sub>/MWh, or
- (b) the emission factor(s) of the specific power plant(s) from which electricity is imported, if and only if the specific plants are clearly known, or
- (c) the average emission rate of the exporting grid, if and only if net imports do not exceed 20% of total generation in the project electricity system, or
- (d) the emission factor of the exporting grid, determined as described in steps 1,2 and 3 below, if net imports exceed 20% of the total generation in the project electricity system.

In the OM emission factor calculation in the PDD of the proposed project, the aggregated CO<sub>2</sub> emission from different fuels is used as numerator, the sum of electricity from fossil fuel-fired in ECPG and the imported electricity is used as denominator, which means the emission factor for the imported electricity has been chosen as 0 tCO<sub>2</sub>/MWh. This is in line with ACM0002 and conservative.

9. The validation report (page 8) states that “The IPCC default values used for OM&BM calculation have been changed from IPCC 1996 to IPCC 2006”. However, there is no reference to which one is more conservative and why they changed only these default values and leave the IPCC 1996 value for GWP of methane (21). Further clarification is required.

As per EB’s Twenty-six meeting report, item 68 says: “*The Board further clarified that the ‘2006 IPCC Guidelines for National Greenhouse Gas Inventories’ will be published on the IPCC website on 24 October 2006 after which this version shall be considered as the latest version.*” Therefore the data have been changed from IPCC 1996 to IPCC 2006 where it uses IPCC default values in OM&BM calculation in the PDD to be in accordance with the clarification in the meeting report.

Article 5 of the Kyoto Protocol specifies that the Global Warming Potentials to be used shall be those accepted at COP 3 (the Kyoto meeting in 1997). The accepted Global Warming Potentials from COP 3 are those published in the IPCC Second Assessment Report, published in 1995. For the purpose of CDM, which is a mechanism under the Kyoto Protocol, these values have always been used in the calculation of emissions and emission reductions for any projects involving greenhouse gases other than CO<sub>2</sub>. It is correct that the IPCC Third Assessment Report and the IPCC Fourth Assessment Report have both revised the GWP for non-CO<sub>2</sub> greenhouse gases. Subsequent Conferences of the Parties and Meetings of the Parties following COP 3 have not amended the GWP to be used under the Kyoto Protocol. Therefore under the rules governing the CDM the GWPs as published in the IPCC Second Assessment Report must be used for CDM projects and have been used for this project.

10. According to the monitoring methodology ACM0002 and parameter E<sub>Gy</sub> described on page 34 the net electricity is used for calculation of ER. It is not explained in monitoring plan how the net electricity will be calculated, how the self consumption will be assessed, even if it is insignificant. Further clarification is required.

In section *B.7 Data and parameters monitored* of the PDD submitted for registration, the net electricity delivered to the grid by the project activity is monitored directly by the electricity meters reading at project boundary (gateway meters). The net electricity delivered to the grid will be continuously measured and monthly recorded. This is in line with the monitoring requirement of ACM0002 to monitor the net electricity supplied to the grid. The self consumption has already been deducted from the total electricity generated by the project activity while measuring the net electricity supply to the grid through the gateway meters. The readings of the gateway meters are also used as the amount of electricity sales/purchase between the project owner and the grid company. Thus the net electricity supplied to the grid can also be double checked by receipt of sales.

11. Letter of Confirmation and Reply to the Submission of Supplementary Loan Evaluation Materials by Industrial and Commercial Bank of China, Ningbo City Branch (reference # 14) confirming that CDM has been taken into consideration before project starting date is not submitted. The DOE shall further clarify whether they have assessed and validated the pertinent information.

The Letter of Confirmation and Reply to the Submission of Supplementary Loan Evaluation Materials by Industrial and Commercial Bank of China, Ningbo City Branch confirming that CDM has been taken into consideration, dated 18 September 2004, which is before the project start, has been provided to the DOE during validation.

12. The electricity import for 2003 mentioned on page 11 and in Annex 3 is different. Further clarification is required.

We acknowledge that the electricity import for 2003 mentioned on page 11 is a typo. The electricity import for 2003 in Annex is correct. PDD updated.

13. In table B.6.2 the data unit for parameter  $F_{i,j,y}$  should be t or  $m^3$ , otherwise it could be read as mass divided by volume.

To avoid misunderstanding, we change the data unit to "t or  $m^3$ ". PDD updated.

14. All the relevant information should be made available.

All the relevant information is available and provided to the DOE during the validation.

There are two other issues as follows which is not relevant to proposed project:

15. The DOE should clearly state how the applicability condition that "no fuel switch is done in the process" has been validated.

There is no such requirement of "no fuel switch is done in the process" in the methodology AM0029 version 01.

16. The methodology requires that "among the alternatives that do not face any prohibitive barriers, the most economically attractive alternative should be considered as the baseline scenario". No such comparison has been conducted in the determination of the baseline.

There is such requirement of "among the alternatives that do not face any prohibitive barriers, the most economically attractive alternative should be considered as the baseline scenario" in the methodology AM0029 version 01.

In the PDD submitted for registration the determination of baseline scenario has been carried out in accordance with the steps required in AM0029 version 01.

With the above clarification, explanation and additional information, we expect that the concerns raised by CDM Executive have been fully and adequately addressed, and we sincerely hope that the CDM Executive Board would approve this project for registration.

Yours sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'O' followed by a series of loops and a long horizontal stroke extending to the right.

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**Note:**

*In case you have any further question or request during review process, please don't hesitate to contact us by phone call or Email to persons list as below.*

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