Response to the request for review for the CDM project activity "China Fujian Putian LNG Generation Project, CNOOC Fujian Gas Power Co., Ltd" with the reference number 1859

Attention: Mr. Rajesh Kumar Sethi
Chairman of the Board
CDM Executive Board to Kyoto Protocol

November 5, 2008

Dear Chairman of the Board,

We were informed that our project "*China Fujian Putian LNG Generation Project, CNOOC Fujian Gas Power Co., Ltd*" (Ref. no.1859) was requested for review by CDM Executive Board on the 28 October 2008. As required by the Board, we would like to answer the questions, clarify the issues and provide additional information, as required by the Board, as follows. Please forward our answers, clarifications and additional information to the Board.

Issue 1 raised:

Further clarification is required on how the DOE has validated the suitability of the input values to the investment analysis as per the guidance of EB 38 paragraph 54(c).

Our clarifications:

This project is located in Fujian Province. The Feasibility Study Report (FSR) of the project was completed by Electric Power Survey & Design Institute of Fujian Province in November 2004, a qualified third party independent from the PP. Electric Power Survey & Design Institute of Fujian Province, established in 1958, covers the survey and consultancy in the electricity industry with Grade A qualification approved by Ministry of Construction. */**Annex 1a** of this response/*

The FSR was finished in November of 2004 and approved by NDRC on 20/12/2005, showing the authorization from the government of the data in FSR. Therefore, the FSR is an official document prepared by an independent third party and cross-checked and approved by the national government. And the construction starting date was very close to the time of governmental approval by NDRC.

The detailed information to provide for the validation, by means of cross-check as per

the requirement of the Para. 54 (c) of the report of EB-38 meeting, the input values used for the IRR calculations are described as follows.

Except Income Tax Rate, all the other data for IRR calculation in this PDD are from FSR, and the calculation process has been checked with the FSR. For the three parameters that are used in the sensitivity analysis, further clarification is listed as follows:

[the input data of Total Investment]

The project is still under construction, and the actual total investment amount shall be available at the time of the total commissioning (Year 2010). So the PP is not able to provide actual investment cost to DOE for cross check. But the PP would like to provide other credible and reliable data source for cross check purpose. According to the *Reference Index of the Limit Design Cost for Thermal Power Generation, Transmission and Transformation Projects* authorized by the Electric Power Planning and Design General Institute, the reference fixed asset investment unit cost for installing 2 new 300MW-grade imported Gas-Steam Combined Cycle Units (Grade 9F, one to one) is RMB 3,289.00/KW, and that for expanding two units is RMB 3,190.00/KW. Due to the facts that the prices for the imported equipments & materials are final prices and the Domestic Reserve Fund Rate is 4.5%, the Reference unit costs become RMB 3,345.00/KW and RMB 3,245.00/KW respectively after adjustment based on the 8% of the Domestic Reserve Fund Rate stipulated in the FSR. This project newly built 4 new units with RMB 3,287.64/KW(Total Fixed Asset Investment/Total Installed Capacity) as the fixed asset investment unit cost. ***/Annex 1b** of this response/* and please see the comparison figures as follows which will give the evidence for the reasonability of the Project's cost level.

Item / Yuan/kW		2 units Price	Variation Range
Putian Project (Newly-built equipment)		3287.64	-
8% for Domestic Reserve Rate	Newly-built equipment	3345	-1.74%
	Expanded equipment	3245	1.30%
4.5% for Domestic Reserve Rate	Newly-built equipment	3289	-0.04%
	Expanded equipment	3190	2.97%

Based on the above-mentioned facts along with the comparison figures, it is concluded that the Cost Level for Putian Project is reasonable.

As a result of the enlargement of fixed assets investment in China, the price of the construction material kept going up. Compared with 2005, the price of cement in

Fujian in 2006 raised 9.2%[1], which leads to the increase of the total investment. Therefore, adopting parameters from FSR was applicable and conservative when the investment decision was made.

[the input data of NG Price]

The Natural Gas (NG) source of the proposed Fujian Putian LNG Generation Project is provided by Tangguh gas field in Indonesia. Along with the increasing trend of the NG price of the international market, Tangguh gas field of Indonesia increased the NG price as well. In June 2006, Indonesia Government approved that the NG price for exporting to Fujian Province in China would lift the price as set in. Which may result in the increase of the NG cost of the proposed project.

In the PDD prepared based on the FSR and submitted for registration, the natural gas price is 1.411 yuan/ m^3 including VAT. On the contrary, the actual contracted price with the gas supplier is 1.661 yuan/ m^3, much more expensive (17.72%) than expected. /***Annex 1c*** *of this response*/ This increasing trend of natural gas price will continue both in China and elsewhere in the World. Since the natural gas price is much higher than what was used in PDD, we believe the PDD is conservative and it is highly unlikely that the project could under any reasonable assumptions achieve the benchmark rate of return.

[the input data of Bus-bar tariff]

In the PRC, the tariffs are highly regulated by the central government. As per Power Purchase Agreement (hereafter referred to as the PPA) of the Project, "The bus-bar tariff of the Project will be the bus-bar tariff determined by the local pricing bureau." It is obvious that the bus-bar tariff of the Project is strictly controlled by the local government.

In addition, according to P85 in Financial Assessment Methods and Parameters for Construction issued by the National Development and Reform Commission and the Ministry of Construction, "it is hard either to predict the future price level in the preliminary study phase or to ensure the reliability of the predicted result due to the long-term operation period. So usually, the price level of the project input and project output in the first year of operation period should be predicted and this price level should be fixed in the investment analysis during the operation period." Therefore, it is suitable to apply the fixed (constant) bus-bar tariff of FSR in the investment analysis.

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[1] http://www.fjjg.gov.cn/fjwjj/jgjc/sjjl/jcfxzl/webinfo/2006/10/1196825641913055.htm

For the other parameters used in the IRR analysis, we would like to address the following:

[The input data of Income Tax]

The income tax rate is 33% in FSR while 25% in the PDD. The reason is that China issued a new Enterprise Income Tax Law before submitting the PDD to EB. The Law stipulates that the enterprises shall implement the new income tax rate of 25% from January 1, 2008. When the income tax of 25% was adopted, the IRR must be higher than the result calculated by using 33%. Therefore, it is more appropriate and conservative for the project to use 25% as income tax rate than the case when using 33%.

[the input data of O&M Cost]

According to the information published by the Bureau of Labor and Social Security of Fujian Province, the actual average increase of enterprises wage was 6%~9% in 2004[2]; and in 2006, the increase rate was between 7%~9%[3]. It could be drawn that the salary of the enterprise staff has been on the rise. Therefore, the actual O&M cost in operating phase of the project would be higher than the data in FSR. So, adopting the data from FSR was conservative and applicable.

[Others]

As we know, a Richter 8.0 earthquake occurred in Sichuan Province on May 12, 2008. Dongfang Steam Turbine Works, as a main equipment supplier of this project, was heavily damaged by this tremendous natural disaster. And it inevitably caused a 6-9 month's delay on the delivery of the unit 3 and unit 4 of LNG project. Such delay would make the project further less economically attractive.

Through above analysis, the application of data in FSR used for IRR calculation in the PDD is reasonable and suitable.

See detailed data source used in IRR calculation in the following table:

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[2] http://www.fjlss.gov.cn/ShowInfo.asp?InfoId=7954

[4] http://www.fjlss.gov.cn/ShowInfo.asp?InfoId=8227

Item	Unit	Value	Data source
Total project cost	10^4RMB	542,092	FSR
Working capital	10^4RMB	15,402	FSR
Annual electricity generation	GWh	382(01/10/2008) 3,820(2009) 6,112(2010~2027) 3,310.67(2028)	FSR
Annual operating hours	Hours	4000	FSR
Auxiliary electricity consumption rate	%	2.03	FSR
Bus-bar tariff (excluding 17%VAT)	RMB/MWh	391.20	FSR
LNG Consumption	m^3/kWh	0.1938	FSR
LNG price (incl. VAT)	RMB/m^3	1.411	FSR
VAT of water	%	13	FSR
VAT of materials	%	17	FSR
Income tax rate	%	25	In accordance with the Government document *the Enterprise Income Tax Law of the People's Republic of China* issued on 16/03/2007, the income tax rate for enterprises prescribes 25% from 01/01/2008.

As showed above, it can be clearly concluded that the input values of the investment analysis are suitable and appropriate, through the cross check with other credible and reliable data sources.

Issue 2 raised:

Further clarification is required on how the DOE has validated the common practice analysis.

Our clarifications:

The common practice analysis part of PDD covered similar NG/LNG projects existed in ECPG, including Yuyao Electricity Generation Project using Natural Gas (Ref 1227)[4], Zhejiang Provincial Energy Group Zhenhai Natural Gas Power Generation Co., Ltd's NG Power Generation Project (Ref 1344)[5], Xiaoshan Power Plant's NG Power Generation Project of Zhejiang Southeast Electric Power Co., Ltd. (Ref 1343)[6], Hangzhou Hadian Banshan Power Generation Co., Ltd's Nature Gas Power Generation Project[7], Nanjing Grid Connected Natural Gas Combined Cycle Power Plant[8], Shanghai Baoshan Grid Connected Natural Gas Combined Cycle Power Plant Project (Ref 1381)[9], Fujian Jinjiang LNG Power Plant (Ref 1898)[10] and Fujian Xiamen Eastern LNG Power Plant. Except Xiamen Eastern LNG Power Plant, all the other projects were under CDM developing, and four of them were registered successfully:

- Yuyao Electricity Generation Project using Natural Gas (Ref 1227);
- Zhejiang Provincial Energy Group Zhenhai Natural Gas Power Generation Co., Ltd's NG Power Generation Project (Ref 1344);
- Xiaoshan Power Plant's NG Power Generation Project of Zhejiang Southeast Electric Power Co., Ltd. (Ref 1343); and
- Shanghai Baoshan Grid Connected Natural Gas Combined Cycle Power Plant Project (Ref 1381).

In every PDDs for 4 registered projects above, they are mentioning that there are '8'natural gas generation projects similar to the proposed project in ECPG, and all of these '8' projects are same as these in this Putian's PDD.

Xiamen Eastern LNG Power Plant was wholly owned by RGM International, located in Xiamen special economic zone of China. As a foreign-invested project, the Xiamen Eastern LNG Power Plant enjoyed much more favorable investment conditions than this proposed project activity, and therefore the investment environment is totally

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[4] http://cdm.unfccc.int/Projects/DB/DNV-CUK1183455647.94/view

[5] http://cdm.unfccc.int/Projects/DB/DNV-CUK1189684459.76/view

[6] http://cdm.unfccc.int/Projects/DB/DNV-CUK1189665775.96/view

[7]http://cdm.unfccc.int/Projects/Validation/DB/ZZKJUSHZT1XSP2A66FUSV7A58FSNDY/view.html

[8]http://cdm.unfccc.int/Projects/Validation/DB/TJM7MQXVK8V2TQIIXB2YRSSO7XQS4S/view.html

[9] http://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1192083874.4/view

[10] http://cdm.unfccc.int/Projects/DB/DNV-CUK1214834393.65/view

different. From the website of Xiamen government, it shows that the project can enjoy the favorable conditions, such as, there are no income tax for the first two years and half income tax for the next three years after the first two years and this policy is applied from the year at which the project has the income. Putian project as a wholly owned domestic entity can not benefit from this policy. As a project invested by a foreign corporation in Xiamen special economic zone, its income tax is 15%. These favorable policies can be found on the website of Xiamen Municipal Office State Administration of Taxation[11] and website of Xiamen Municipal Government of China[12].

The favorable conditions mentioned above show that Xiamen Eastern LNG Power Plant has a different investment environment from Fujian Putian LNG Generation Project. Therefore, the similar projects identified do not contradict the claim that the proposed project activity is additional.

Issue 3 raised:

The DOE is requested to provide reliable evidence that CDM was considered prior to the project start date and that continuing and real actions were taken to secure CDM status for the project activity in parallel with its implementation, following the guidelines from paragraph 5, EB 41, Annex 46. The response should provide a detailed timeline of project implementation.

Our clarifications:

According to the requirement of EB 41, held from 30/07/2008 to 02/08/2008, detailed information regarding the timeline of the project should be provided to DOE. The PDD of Fujian Putian LNG Generation Project has not detailed the timeline as required since the registration request was made to EB in June 2008, which was earlier than EB 41. At this new requirement by EB, the PP has revised the PDD and submitted the timeline with relevant evidence to DOE in details.

According to the description provided in paragraph 67 of EB 41, the "Glossary of CDM terms" defines the start date of a CDM project activity as: "the earliest date at which either the implementation or construction or real action of a project activity begins". And the PDD of proposed project compiling earlier took the date of the decision on carrying out CDM study research of the Construction Office as the start date, even though the project owner was not officially established at that time.

[11] http://www.xm-n-tax.gov.cn/LlfxServlet?nwbz=2&lmbh=008&errpage=/jsp/internet/index/errPage.jsp&url=/publish/internet/bszn/FB0000000008.shtml

[12] http://www.xm.gov.cn/ts/zcfg/yhzc/200709/t20070901_176664.htm

However, in consideration of the definition of "the start date of a CDM project activity" of EB 41, the start date of the Project should be redefined as 15/03/2006, at which the construction activity started.

Major activities concerning CDM development of the project are as follows:

- As of 2003, a large scale of training activity on CDM has been done by Ministry of Science and Technology of China, which introduced abundant information. Then the project owner put forward the study to develop this project as CDM project at its third director work meeting of the Construction Office (25/06/2004).

- In November 2004, the FSR of the project has been finished by the qualified third party –Electric Power Survey & Design Institute of Fujian Province.

- According to the result of the FSR, without the support of CDM, the IRR of the project was 6.39% only (with the income tax of 33%), which made the project financially unattractive. On May 16th 2005, the project owner submitted the Electric Power Survey & Design Institute of Fujian Province to do the CDM consultation and compile the Special Report on the Economic Appraisement of Introducing the CDM to LNG Power Plant to evaluate the IRR of the project with the CDM revenue. ***/Annex 3a*** *of this response/*

- In October 2005, the Special Report on the Economic Appraisement of Introducing the CDM to LNG Power Plant ***/Annex 3b*** *of this response/* was finished, According to which, the IRR of the project could reach 8.98% (with the income tax of 33%), when the CERs price was US$10/T.

- On December 20th 2005, the FSR of the project has been approved by the NDRC.

- On January 24th 2006, in accordance with the result of preceding study, the board of the company decided to contract a professional CDM development entity to prepare the PDD and to seek potential CERs buyer. ***/Annex 3c*** *of this response/*

- On February 20th 2006, the CDM Cooperation Framework Agreement was signed with the CDM Project Entity, Beijing Changjiang River International Holding. ***/Annex 3d*** *of this response/*

- On March 14th 2006, the order to commence was obtained from the independent qualified third-party supervision – Guangdong Chuangcheng Construction Management Consulting Co., Ltd.

- On March 15th 2006, according to the requirement of the order to commence, the land formation on the site was begun.

- On August 31st 2006, the Major Equipment Purchase Contract with the Dongfang Electric Corporation was signed. ***/Annex 3e*** *of this response/*

- On January 10th 2007, the formal signing of the ERPA with Japan Mitsubishi Corporation was done. ***/Annex 3f*** *of this response/*

- On April 26th 2007, the project was approved by the NDRC CDM verification council.

- On April 28th 2007, the Validation Agreement was sign with the SGS.

- From May 1st ~ 30th 2007, collecting public comments on the website of EB was done.

- On June 7th 2007, the SGS finished the on-site verification.

- On July 16th 2007, the LOA from Chinese government was obtained.

- On July 27th 2007, the LOA from Japanese government was obtained.

Detailed Timeline：

Time	Milestone
25/06/2004	Third director work meeting of the Construction Office on CDM study research;
11/2004	FSR finished;
16/05/2005	Commissioned Fujian Electric Power Survey & Design Institute to do the CDM consultation
10/2005	The *Special Report on the Economic Appraisement of Introducing the CDM to LNG Power Plant* finished
20/12/2005	FSR approved by NDRC;
24/01/2006	Resolution of Board of Directors that start the CDM project and designate the person and

	apartment in charge
20/02/2006	Signed the Consulting Contract on CDM Development with CRIH;
14/03/2006	The order to commence of the project
15/03/2006	The project started
31/08/2006	Equipment Purchase Contract;
10/01/2007	ERPA signed;
26/04/2007	Adopted by the Audit Council of NDRC;
28/04/2007	Singed the Validation Proposal with SGS;
01/05/2007~30/05/2007	On EB website for public comments;
07/06/2007	On-site visit was performed by SGS;
16/07/2007	Got the LoA from China government;
27/07/2007	Got the LoA from Japan government.

According to the guidelines from paragraph 5, EB 41, Annex 46, the timeline listed above demonstrated that based on the conclusion of FSR, and the Board Resolutions from the Project Owner, the PP took CDM revenue into serious account before the project start, and the project owner is unlikely to implement the Project without CDM incentives.

With the above clarification, explanation and supplementing information, we hope that the CDM Executive Board would be satisfactory and would approve the registration of "*China Fujian Putian LNG Generation Project, CNOOC Fujian Gas Power Co., Ltd*".

Yours sincerely,

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