

**Response to the request for review for the CDM project activity
“Lijiang Wulanghe Secondary Hydropower Project”
with the reference number 2114**

Dear Chairman of the Board,

We were informed that our project “Lijiang Wulanghe Secondary Hydropower Project” (Ref. No.2114) was requested for review by CDM Executive Board on 26th Jan., 2009. As required by the Board, we would like to answer the questions, clarify the issues as raised in the request by the Board as follows:

Issue 1. The PP should explain and the DOE should clarify how the investment analysis was validated as credible and appropriate, in particular taking into account the sudden change of the tariff, as applied in the FSR, approved 15 October 2004, assuming a tariff of 0.197 RMB/kWh and making the project financially viable, which was then changed to 0.176 RMB/kWh w/VAT, based on the Price Administration Bureau Document issued only one week later on 24 Oct. 2004, making the project financially unattractive without CDM.

The DOE should clarify how the investment analysis was validated as appropriate, in particular the basis for the tariff assumed in the FSR and whether the change in tariff is not considered to be an E+ policy, according to EB 22, Annex 3, para. 6.)

PP response

Investment analysis applied in the PDD was as per the “Tool for the demonstration and assessment of additionality”. And after the analysis of Option III in the PDD, the project is not financially attractive without CDM revenue.

On the issue of the changing tariff not considering being E+ policy, further clarification is as below:

As per EB22 Annex 3, para 6(a) the Board agree that National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels that is to be taken into account when establishing baseline scenarios.

The lower tariff offered by the local grid company was specific for the proposed project. The changing in tariff is neither the National and/or sectoral policies nor regulations, therefore, it can not be considered to be an E+ policy. Detailed explanation is as following:

The FSR of the Project was finished in Sep., 2004, by Yunnan Province Lijiang Water and Hydropower Survey & Research Institute who is a qualified third party independent from the PP and has obtained a C grade certificate in water conservancy and electricity industry issued

by the “Department of Construction” of Yunnan Province¹. Moreover, the FSR was approved by DRC of Yunnan Province on 15th Oct., 2004. And this is the legal procedure for the government to approve the project. After gained the approval, the project owner immediately negotiated the issue of tariff with the local grid company, Yunnan Heibaishui Electric Power Group Co., Ltd, who is the only Power Grid Company in Lijiang City. And the grid company ought to consider its own investment before buying the energy. As the Project is located quite distantly, in the remote mountain area, if buying the energy generated, the grid company would cost much investment in constructing the transmission line, so that they could not achieve an ideal earning. Due to it, the grid company would only offer a tariff of 0.176yuan/kWh. (*Annex 1*)

Based on the description above, it can be indicated that the changing in tariff is a market conduct, have nothing to do with the E+ policy.

Issue 2. The DOE should clarify how it has validated the common practice analysis, in particular the essential distinction between the project activity and the remaining similar project activities.

PP response

According to the Additionality Tool, common practice shall provide an analysis of any other activities that are similar to the project. The other activities similar to the proposed project are projects in the same region (Yunnan Province), rely on a broadly similar technology (Hydropower projects), are of similar scale (below 50 MW), and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing. Etc. We now provide further clarification on project identified in the common practice of the PDD as follows:

a. Projects in Yunnan Province

China is a so large country that the development policy and regulations as well as the investment environment for each province is different (e.g. with regards to taxes, loan policy and electricity tariffs). Therefore, limiting projects to the provincial level is widely adopted when identifying similar projects for common practice.

b. Hydropower projects with installed capacity of less than 50MW

1) As per Standard for Classification and Flood Control of Water Resource and Hydroelectric Project (SL252-2000) (*Annex 2*), issued by the MWR in 2000, Project with installed capacity of 50MW or below were classified to be small scale projects in China. Hence the hydropower projects with capacities higher than 50MW are excluded from this common practice.

2) Since the hydropower projects involved in the common practice analysis and the related main parameters are sourced from *Yearbook of China Water Resources*, which is an official statistics, issued by China Water Conservancy and Hydro Power Press. In the Yearbook, no

¹ Engineering Design Certificate of Yunnan Lijiang Water and Hydropower Survey & Research Institute with a grade C issued by the Department of Construction of Yunnan Province.

information on projects below 25MW in Yunnan Province has been referred to. Accordingly hydropower projects with the capacity ranging from 25MW to 50MW are performed in the common practice.

c. Hydropower projects commissioned after 2002

The significant reform to Chinese Power was taken place in 2002. Before the power industry restructure in year 2002, the hydropower projects were mainly developed by the state owned enterprises, provincial governments ensured that project entity of power plants can obtain sufficient return by providing guarantee electricity tariff. Hydropower projects were constructed with the national or the local governmental funds, or the government provided the loan guarantee for the companies, the developers didn't have financing difficulties. Thus the electricity tariff for each power plant was determined with the principle of full-cost recovery. However, the national policy changed after 2002, the electricity tariff will be determined on the basis of average costs of power generation using the same advanced technology and built within the same period under the provincial power grids. Thus projects commissioned after 2002 are considered as similar projects to the proposed project since they were operated under a same policy scheme.

According to *Yearbook of China Water Resources (2006 and 2007)* and Investigation report provided by the project owner, similar projects are listed in Table below:

No.	Project Name	Installed capacity (MW)	Commission year	Project owner
1	Luozehe Project	25	1988 ²	Stated owned
2	Nandinghe Project	34	2004	Wenshan Electric Power Co., Ltd ³ (stated owned)
3	Yanziya Project	25	2005	Heqing Xinyuan Yanggongjiang Power Co., Ltd ⁴
4	Houqiao Project	48	2005	Yunnan Baoshan ⁵ Binlangjiang Hydropower Development Co.,Ltd
5	Laodukou Project	37.5	2005	Yunnan Luoping Laodukou Power Co.,Ltd
6	Wunihe Project	30	2005	Yunnan Baoshan Supahe Hydropower Development Co., Ltd, ⁶
7	Chaoyang Project	40	2006	
8	Chongjianghe	48	2006	Guodian Diqing Shangri-la Generation

² <http://www.ydxw.com/showinfo.asp?id=12343>

³ <http://stock.baidu.com/cn/read.php?code=600995&id=71994&t=2>

⁴ <http://www.dh.gov.cn/bofcom/432911834190708736/20070124/103037.html>

http://www.bhi.com.cn/info/show/Show_N107.asp?ID=78270&Code=R5IDEH

⁵ http://www.checc.cn/news/news.jsp?type=37&new_id=3574

⁶ http://news.yntv.cn/category/4010601/2007/09/14/2007-09-14_492362_4010601.shtml

				Limited Liability Company
9	Maomaotiao	25	2005	Maomaotiao Power Co., Ltd

Further clarification of the essential distinction between the project activity and the remaining similar project activities are as follows:

- Project No. 1 was started commission before 2002, which were developed by the state under a power system environment that is relatively more prefer financial environment than that of current;
- Projects No.2 was developed by state-owned entity---Wenshan Electric Power Co., Ltd.(hereafter referred to as “Wenshan Company”) was founded in 1997, whose main business is power generation and grid (Wenshan Grid) and it has abundant experience in hydropower industry. The Wenshan Company made initial public offering in 2004(South China Power Grid Company is the biggest stakeholder of the Wenshan Company), and it was the first Electric Power Listed Companies of Yunnan Province⁷;
- Project No. 3 was developed by state holding entity—Heqing Xinyuan Yanggongjiang Power Co., Ltd, whose stakeholders of Dianxi Electric Bureau (Dali Electric Power Supply Bureau) is similar as Wenshan Company, its’ main business is power generation and grid(Dali Grid) and it has abundant experience in hydropower industries⁸;
- Project No. 4 was developed by state-owned entitiy ---Yunnan Baoshan Binlangjiang Hydropower Development Co.,Ltd, whose all stakeholders of Baoshan Electricity Co.,Ltd, Kunming Reconnaissance and Design Institute and Yunnan Machinery Import and Export Co., Ltd. are all state-owned companies with powerful ability⁹;
- Project No. 5 was developed by state holding entity---Yunnan Luoping Laodukou Power Co.,Ltd, whose stakeholder of Luoping Zinc & Electricity Co., Ltd, is a state-owned and listed company with powerful ability access to finance, meanwhile, the Project enjoyed a higher tariff of 0.20yuan/kWh¹⁰;
- Projects No. 6 and No.7 were developed by state holding entity---Yunnan Baoshan Supahe Hydropower Development Co., Ltd, whose all stakeholders of Baoshan State Assets Operation Co.,Ltd, Yunnan Development investment Co., Ltd and Baoshan Electricity Co., Ltd are all state-owned companies with powerful ability
- Project No.8 is a extension project¹¹ which has essential distinction between the proposed project;

⁷ <http://www.wsdl.com.cn/introduce/>

⁸ <http://www.ydxw.com/showinfo.asp?id=69584>

⁹ <http://cache.baidu.com/c?m=9d78d513d9d436a44f9c92697c...5c77f48f34cfa&p=9d708e0186cc42f90be2923445&user=baidu; http://www.ymc.com.cn/EN/about.htm>

¹⁰ <http://www.topcj.com/html/2/KPGG/20070214/45241.shtml> ;

¹¹ <http://www.lonwin.com.cn/display.asp?ID=15838>

- Project No. 9 enjoy a much higher bus bar-tariff of 0.25 yuan/kWh¹², which makes the project more financially attractive.

According to the analysis above, Projects No. 1 and No.8 should be excluded in the common practice, which has been revised in the PDD.

From the description above, it can be confirmed that there are essential distinctions between the proposed project and the common practice projects, and the proposed project is absolutely not a common practice.

Issue 3. The DOE is requested to confirm that the ex-ante emission factor of 0.84335 tCO₂/MWh complies with the requirements of the methodology regarding the use of the most up-to-date data at the time of PDD submission as the PDD for the global stakeholder comments used a different EF (0.7784 tCO₂/MWh). If not, the EF should be based on the latest available data at the start of validation.

PP response

Roadmap of Emission factor applied

No.	Item	Time	Comments
1	The published 2005 emission factor by China DNA ¹³	15/12/2006	0.7784 tCO ₂ /MWh
2	PDD_GSP of starting validation	06/2007	0.7784 tCO ₂ /MWh
3	The published 2006 emission factor by China DNA ¹⁴	09/08/2007	0.84335 tCO ₂ /MWh
4	The published 2007 emission factor by China DNA	18/07/2008	0.8801 tCO ₂ /MWh
5	Final PDD of ending validation and uploading to EB secretariat.	08/2008	0.84335 tCO ₂ /MWh

The PDD of the Project was firstly started validation in June 2007, and the emission factor applied in the PDD was 0.7784tCO₂/MWh which was published by China DNA on 15th Dec., 2006 and valid before the starting of the validation. As we known, China DNA updates the emission factor based on the latest statistical data every year. Therefore, the emission factor applied in the final PDD in Aug., 2008 was updated. Before the end of validation (during the period of validation), the valid emission factor were 0.84335tCO₂/MWh and 0.8801tCO₂/MWh, respectively published on 9th Aug., 2007 and 18th Jul., 2008. Considering the two emission factor, we finally chose 0.84335tCO₂/MWh since it was more conservative. As per the latest guidance of EB, emission factor that were published at the time of GSP starting should be applied, we have updated it as 0.7784tCO₂/MWh in the revised PDD.

Issue 4. The PP/DOE are requested to clarify that the monitoring plan is in line with the approved methodology, in particular why the monitoring of the surface area of full

¹² http://www.788111.com/f10/600995/f10_newscontent/2/174050602171.html

¹³ <http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/2006/2006121591135575.pdf>

¹⁴ <http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1364.pdf>

reservoir level at the start of the project is not included.

PP response

The flooded surface area of the project mentioned in the PDD was 0.10km^2 , which was based on the EIA. (**Annex 3**) The EIA of the Project was finished by General Station for Geological Environment Monitoring of Yunnan Province in Mar., 2003, who is a qualified third party independent from the PP and has the qualification for EIA consultant service and has obtained a B grade certificate in environment assessment certified by the State Environmental Protection Agency. (**Annex 4**) In addition, the EIA was approved by the Environmental Protection Bureau of Yunnan Province on 23rd Apr., 2003.

Moreover, data of the surface area of the full reservoir level has been measured once by Lijiang Water and Hydropower Survey & Research Institute, through an engineering survey, based on the forecast water level and the topographical reservoir map, at the start of the project, and the data was calculated as 0.095km^2 . (**Annex 5**) Therefore, data applied in the PDD is more conservative. As per the approved methodology (version 06), the monitoring of the surface area of full reservoir level at the start of the project has also been added in the revised PDD.