

TÜV SÜD Industrie Service GmbH \cdot 80684 Munich \cdot Germany



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Your reference/letter of

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Request for Review

Dear Sir or Madam,

Please find below the response to the review formulated for the CDM project with the title "Dachunhe 50 MW Hydropower Project in Yunnan Province" with the registration number 2010. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

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Javier Castro Carbon Management Service

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Response to the CDM Executive Board

Request 1:

The DOE is requested to explain the suitability of the 10% benchmark, which was issued in 1995 when assessing the additionality with an investment decision made in 2005.

Response from PP:

Although the Economic Evaluation Code for Small Hydropower Projects (Document No. SL16-95) was issued by the Ministry of Water Resources in 1995, it is valid nowadays. Its validity has been acknowledged by the Bulletin from Ministry of Water Resources about the valid water resources technology standard in June 2002¹ and in Sep 2006². It has not been replaced by any other standard from its issuance. Therefore, the Economic Evaluation Code for Small Hydropower Projects (Document No. SL16-95) is applicable in 2005 when the investment decision of the proposed project was made.

Based on Economic Evaluation Code for Small Hydropower Projects (Document No. SL16-95), the benchmark IRR of the projects with installed capacity of 50MW or within 50MW in countryside is 10%³. The proposed Dachunhe 50MW hydropower in Yunnan Province is composed of two parts, Yiji part of 30MW and Erji part of 20MW, and either the installed capacity of each part or the entire CDM activity is applicable to the Code SL16-95. Therefore, the 10% benchmark IRR, which is also applied in the Feasibility Study Complement Report of the project approved by local government, was adopted for investment analysis in the PDD.

Response from DOE:

The applied benchmark for the proposed project referred to the "Economic evaluation code for small hydropower projects" (Document No.SL16-95) issued in 1995, in which it mentions "This evaluation code is applied for small hydropower projects with installed capacity no more than 25MW (all newly-built, expansion, modification or retrofit projects). Besides, projects with a capacity of less than 50MW in rural areas can refer to this code too." (Article 1.2).

In 2002, the Ministry of Water Resources issued a Bulletin on Effective Technical Standard in Hydro & Water Industry. The "Economic evaluation code for small hydropower projects" (Document No.SL16- 95) issued in 1995 is still indicated as valid in this list (http://www.cws.net.cn/guifan/bzdt/bzgg.asp).

The Code validity was confirmed again by an official organization, i.e. Chinese Hydraulic Engineering Society, which published all valid standards for hydraulic industry on September 9th, 2006 (<u>http://www.ches.org.cn/jishubiaozhun/001.asp</u>).

Furthermore, TÜV SÜD can confirm, based on its local and sectoral expertise, that this benchmark is pretty common and widely applied in China for this type of project.

As a result, TÜV SÜD is quite confident the 10% benchmark is appropriately applied and can be considered as suitable for the proposed project activity.

¹ <u>http://www.cws.net.cn/guifan/bzdt/bzgg.asp</u>.

² http://www.mwr.gov.cn/tzgg/qt/20060926000000479251.aspx.

³ Economic Evaluation Code for Small Hydropower Projects (Document No. SL16-95).



Request 2:

The DOE/PP are requested to explain how it has validated the common practice analysis, including: (a) the selection of similar activities considering that the total capacity of the project activity is 50 MW; (and that considering a range between 25 and 75MW (+/- 50%) would have been more appropriate) (b) the essential distinction between the project activity and one similar project as the latter has lower "unit investment" and higher "operating hours".

Response from PP:

(a) the selection of similar activities considering that the total capacity of the project activity is 50 MW:

According to *Tool for the Demonstration and Assessment of Additionality*, projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory frame-work, investment climate, access to technology, access to financing, etc.

As per the official classification of the Chinese government in the Almanac of China's Water *Power* (Volume 10, page 141),

- Large scale hydropower stations include hydropower stations with an installed capacity larger than 300 MW (≥300MW);
- Medium scale hydropower stations include hydropower stations with an installed capacity between 50 MW and 300 MW (≥50 MW & _300 MW);
- Small scale hydropower stations include hydropower stations with an installed capacity between 50 MW and 0.5 MW (≥0.5 MW&_50 MW).

As for the proposed project activity, it is composed of two parts, Yiji part of 30MW and Erji part of 20MW. Each part is an independent operating power station, but the project owner analyzed their finance estimation by combining their investments and costs together, and made the investment decision to implement them together as a CDM project. However, as per the official classification, both parts of the proposed project activity are classified as small scale hydropower stations, and operated in the same regulatory frame-work with small scale projects. Furthermore, in China, Small hydropower projects have to run within different tax rates and tariff⁴ from middle and large scale hydropower projects. Therefore, the size range applied in the common practice analysis in the PDD has been defined as hydropower projects with installed capacity between 0.5MW to 50MW in accordance with the official classification.

However, from the authoritative statistics and yearbooks, such as Yearbook of China Water Resources published by China Water Power Press, Almanacs of China's Water Power published by China Electrical Power Press, China Electric Power Yearbook published by China Electrical Power Press and Yunnan Statistical Yearbook published by China Statistics Bureau etc., there is no information about the hydropower projects with installed capacity lower than 15MW. In accordance with the guidance on common practice analysis in the Tool for the Demonstration and Assessment of Additionality, which states that "If necessary data/information of some similar projects are not accessible for PPs to conduct this analysis, such projects can be excluded from this analysis", the hydropower projects with installed capacity lower than 15MW

⁴ <u>http://www.hwcc.com.cn/newsdisplay/newsdisplay.asp?Id=68015</u>.



are excluded in the common practice.

Furthermore, we take additional common practice analysis in the range of all the hydropower projects listed in the China Water Resources Year Book (Edition 2006 and 2007) issued by P. R. China Water Resources Ministry as below.

Based on the China Water Resources Year Book (Edition 2006 and 2007), all the hydropower projects in Yunnan Province are listed in the Table 1.

No.	Project Name	Installed Capacity (MW)	Largest Sharehol- der	Background	Operation Date
1	Chongjianghe Hydro Project	48	China Guodian Corporation	State-own	2006
2	Lamenga Erji Hydro Project	32	Nujiang Zaifeng Hydropower Co,.Ltd.	State-own	2003
3	Luozehe	25	DianNeng Group	State-own	1988
4	Laodukou hydro Pro- ject	37.5	Luoping Power Ltd	State-own	2005
5	Laohushan Erji Hydro Project	25	DianNeng Group	State-own	1998
6	Hongshiyan Hydro Project	44	DianNeng Group	State-own	
7	Yisahe Hydro Project	26.6	Yuanjiang Power Ltd	State-own	1994

Table 1 Hydropower Projects in Y	unnan Province ⁵
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⁵ http://www.yn.gov.cn/yunnan,china/73469366967992320/20041130/15017.html http://www.yn.xinhuanet.com/newscenter/2006-01/23/content 6106793.htm http://www.hglm.com/rdsq/gzzj/200611/23511 2.html http://www.ydxw.com/showinfo.asp?id=3532 http://www.ydxw.cn/showinfo.asp?id=32571 http://www.china5e.com/news/power/200508/200508100295.html http://news.sina.com.cn/c/2004-12-30/09444669685s.shtml http://www.guangdongdz.com/cjbd/163/1638475.html http://www.china5e.com/news/water/200312/200312050091.html http://www.ydxw.com/showinfo.asp?id=12343 http://finance.memail.net/050110/129,5,571873,00.shtml http://0871.und.cn/small/cpybase.do?companyid=D658A7E06D9B41318F44FBF1B0E6C0E7 http://www.dhtjb.com/Html/20041230111017-1.html http://www.7c.gov.cn/color/DisplayPages/ContentDisplay_455.aspx?contentid=9204 http://www.eecce.com/pindao/hangye/5121415493.asp?id=33665&pd=diangong http://yzh.yepg.com/Article/ShowInfo.asp?ID=1500 http://www.sc.xinhuanet.com/topic/content/2003-11/03/content 1143092.htm http://business.sohu.com/20070201/n247985822.shtml http://www.yndhdl.com/gyjs.htm http://www.gdxds.com.cn/Colligate.asp?classid=17 http://www.ynzx.gov.cn/info/detail.jsp?infold=A000000648 http://www.cwet.com.cn/asp/article show.asp?article id=142

http://www.swcc.org.cn/page1_view.asp?id=14062

http://www.yn.xinhuanet.com/ynnews/2003-01/28/content 184336.htm

http://www.gz.csg.cn/show.aspx?id=5042&cid=180



8	Maomaotiao Hydro Proiect	40	Wenshan Power Company	State-own	2005
9	Nantinghe Hydro Pro- ject	34	Wenshan Power Company	State-own	2004
10	Xiashilong Hydro Pro- ject	25	Guangnan Power Company	State-own	2005
11	Yanziya Hydro Pro- ject	25	Dianxi Power Ltd.	State-own	2005
12	Supahe Wunihe Hyd- ro Project	30	Baoshan Power Stake-holding Company	State-own	2005
13	Houqiao Erji Hydro Project	32	Baoshan Power Stake-holding Company	State-own	2005
14	Supahe Sanjiangkou Hydro Project	30	Baoshan Power Stake-holding Company	State-own	1993
15	Ximaxingyun Aluminium Factory Hydro Project	26	Yingjiang Xinyun Company	Private-own	
16	Mengdianhe Erji Hyd- ro Project	30	Mengdianhe Erji Hydropower Co,.Ltd.	Private-own	2004
17	Menggahe Siji Hydro Project	40	Menggahe Hydro Development Co,.Ltd	Private-own	
18	Jirenhe Hydro Project	30	China Guodian Corporation	State-own	1993
19	Chaishitan Hydro Project	60	DianNeng Group	State-own	2001
20	Zhangwo Hydro Pro- ject	54	Sichuan Yibin Yili Group Co., Ltd	Private-own	2007
21	Lazhuang Hydro Pro- ject	60	Yunnan Luoping Zinc and Electricity Co., Ltd	Private-own	
22	Husonghe Hydro Pro- ject	63	Yunnan Dehong Power Co., Ltd	State-own	1997
23	Luosiwan Hydro Pro- ject	60	Guodian Diqing Shangri-la Generat- ing Ltd	State-own	1999
24	Xucun Hydro Project	78	Dali Huaneng Hy- dropower Co.,Ltd	State-own	
25	Gaoqiao Hydro Pro- ject	90	Dianneng Group	State-own	2004
26	Malutang (First Phase) Hydro Project	100	Wenshan Malutang Power Co., Ltd	State-own	2004
27	Ajiutian Hydro Project	105	Yunnan Baoshan Supahe Power Co., Ltd	State-own	2004



28	Yungui Xiangshui	100	Liupanshui Beipan-	State-own	2002
	Hydro Project		jiang Power Co.,		
			Ltd		

According to above information, we can clearly identify 23 out of above 28 projects having the background of state-own company, and they usually have strong background in capital access and capacity of resisting uncertainty risks. Compared with private investors, state-own companies firstly have strong capital access ability because of their large capital reserves and operational capacity. Secondly, state-own electric power companies have conducted many practical projects of different sizes and accumulated rich experiences in hydro construction and operation. Besides, for state-own company, the stronger negotiation ability with Grid Company also reduces the uncertainty risk in the investment. They are not comparable for private investors.

The remaining five projects are Mengdianhe Hydro Project (Second Phase), Menggahe Hydro Project, Ximaxingyun Hydro Project, Zhangwo Hydro Project and Lazhuang Hydro Project, which have similar background with the Project. However, Menggahe Hydro Project is also in the process of CDM application⁶ to search for carbon finance.

Ximaxingyun Hydro Project is a captive plant and supplies produced electricity to aluminium factory directly⁷. Similarly, Lazhuang Hydro Project supplies electricity to support generation of the Zinc factory⁸. Compared with the Project that supplies electricity directly to Grid, these two projects are in distinct operation environment and mechanism. Furthermore, the electricity tariff for aluminum factory and Zinc factory are 0.394 RMB/kWh and 0.418 RMB/kWh⁹ in Yunnan province, which means Ximaxingyun Hydropower Project and Lazhuang Hydro Project get the income equal to 0.394RMB/kWh and 0.418 RMB/kWh respectively, obviously higher than 0.18 RMB/kWh.

Zhangwo Hydro Project supplies electricity to Sichuan Power Grid¹⁰, and is dispatched by Central China Power Grid (CCPG) where applies different regulations and tariff compared with China Southern Power Grid the Project supplies electricity to.

As for Mengdianhe Erji Hydro Project, its unit investment is 3800RMB/kW¹¹. In contrast, the proposed project locates in a mountainous region, and there are forests beside the water diversion routes. In order to avoid forest destruction, the construction plan with open channels, which is much cheaper and will probably cause serious water loss and soil erosions, was abandoned, and the plan with water diversion tunnels of 19.735km¹² was chose in the proposed project. The long diversion tunnels increased the total investment of the proposed project to 4880RMB/kW (Yiji part is 4894RMB/kw and Erji part is 4859RMB/kw)¹³, which is 28% higher than Mengdianhe Erji Project.

On the other hand, the annual operation hour of Mengdianhe Erji Hydro Project is 6000 hours¹⁴, which is owed to the abundant water resources¹⁵. But as for the proposed project, basing on

⁶ http://cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File1346.pdf

⁷ http://0871.und.cn/small/cpybase.do?companyid=D658A7E06D9B41318F44FBF1B0E6C0E7

⁸ http://business.sohu.com/20070201/n247985822.shtml

⁹ http://www.yn.gov.cn/yunnan,china/79381449580478464/20070927/1157455.html

¹⁰ http://www.86ne.com/Ocean/200602/Ocean_33168.html

¹¹ http://www.dhtjb.com/Html/20041230111017-1.html

¹² FSR and FSCR and their Approval Letters from local government

¹³ FSR and FSCR and their Approval Letters from local government

¹⁴ http://www.dhtjb.com/Html/20041230111017-1.html

¹⁵ <u>http://www.yjxcw.com/shownews.asp?news_id=290</u>



the water energy analysis in the feasibility study, its operation hour is 4802h (Yiji part of 4794 hours per year and Erji part of 4811 hours per year) ¹⁶, which is 20% lower than Mengdianhe Erji Project.

If the unit investment of the proposed project reduces to 3800RMB/kW, and the operating hour of the proposed project increases to 6000 hours at the same time, the IRR of the proposed project without revenues of CERs would increase to 13.88%¹⁷, which is much higher than the benchmanrk IRR 10%, and the proposed project will become financial attractive. So the Project can be considered to have essential distinctions to Mengdianhe Erji Hydro Project.

So the Project is significantly different from above similar options and not a common practice.

(b) the essential distinction between the project activity and one similar project as the latter has lower "unit investment" and higher "operating hours".

"Unit investment" means the total investment divided by the installed capacity, and indicates the construction investment level of hydropower projects. "Operating hour" means the operating time per year of projects, and indicates the income level of hydropower projects. "Unit investment" and "Operating hour" are two of the most important parameters that can obviously affect the financial index of hydropower project. Since the detailed financial parameters of those similar projects are unavailable from the public sources, we have to analysis the essential distinction between the proposed project activity and similar projects by comparing "unit investment" and "operating hour".

As stated in the Section B.5. of PDD version 06 dated on 05/08/2008 and the above response to Issue 2 (a) from PP, Mengdianhe Erji Hydro Project has similar background and operation environment with the proposed project. Its unit investment is 3800RMB/kW. In contrast, the proposed project locates in a mountainous region, and there are forests beside the water diversion routes. In order to avoid forest destruction, the construction plan with open channels, which is much cheaper and will probably cause serious water loss and soil erosions, was abandoned, and the plan with water diversion tunnels of 19.735km¹⁸ was chose in the proposed project to 4880RMB/kW (Yiji part is 4894RMB/kw and Erji part is 4859RMB/kw), which is 28% higher than Mengdianhe Erji Project.

On the other hand, the annual operation hour of Mengdianhe Erji Hydro Project is 6000 hours, which is owed to the abundant water resources¹⁹. But as for the proposed project, basing on the water energy analysis in the feasibility study, its operation hour is 4802h (Yiji part of 4794 hours per year and Erji part of 4811 hours per year)²⁰, which is 20% lower than Mengdianhe Erji Project.

If the unit investment of the proposed project reduces to 3800RMB/kW, and the operating hour of the proposed project increases to 6000 hours at the same time, the IRR of the proposed project without revenues of CERs would increase to 13.88%, which is much higher than the benchmanrk IRR 10%, and the proposed project will become financial attractive.

Therefore, the Mengdianhe Erji Hydro Project is essential distinct from the proposed project.

¹⁶ FSR and FSCR and their Approval Letters from local government

¹⁷ Annex 1-IRR Calculation Sheet-Common Practice Analysis

¹⁸ FSR and FSCR Approval Letter from local government

¹⁹ http://www.yjxcw.com/shownews.asp?news_id=290

²⁰ FSR and FSCR and their Approval Letters from local government



Response from DOE:

As indicated by the additionality tool, "projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc." The similar scale (capacity range) was chosen to be 15 MW to 50 MW.

The upper limit (i.e. 50 MW) of the indicated capacity range was chosen based on Chinese technical and economical classification discussed as following.

As indicated by the Chinese government and the Almanac of China's Water Power, hydropower stations with an installed capacity between 0.5 MW and 50 MW (including) are classified as small scale, greater than 50 MW and less than 300 MW are considered as medium scale and any stations that are 300 MW or higher are classified as large scale hydropower stations.

The "Economic evaluation code for small hydropower projects (SL16-95)" issued by the Ministry of Water Resources of the People's Republic of China also applies to hydropower projects as having an installed capacity up to 50MW.

Any projects with a higher capacity than 50 MW would be in a different classification scheme and would therefore face a different environment, regulations, etc. Hence, only projects up to 50 MW were considered to be similar.

In order to be conservative, the capacity range has been extended to 300 MW despite the different classification scheme. As indicated by the PPs, and confirmed by TÜV SÜD, the biggest hydropower station in Yunnan Province has a capacity of 105 MW. Essential distinctions were indicated for each of the similar projects and it was clearly explained why and how these similar projects are/were financially and/or economically more attractive. These distinctions could be verified by TÜV SÜD.

Furthermore, the lower limit of the capacity range was chosen as 15 MW. This is a combined result of the Chinese hydropower classification scheme, which defines the lower limit for the small-scale with 0.5 MW and the availability of the required data. Any stations with a capacity of less than 15 MW had to be excluded because necessary data/information of some similar projects are not accessible.

Regarding question 2b, i.e. the essential distinction between the project activity and one similar project as the latter has lower "unit investment" and higher "operating hours" are as following:

The similar project is facing lower investment costs due to less complicated construction works where no long diversion tunnels were required. In addition, operational hours are higher because of the elevated abundance of water resources. TÜV SÜD considers these distinctions as reasonable and applicable for the two discussed projects.

In summary, TÜV SÜD confirms, that even with the extended capacity range, it could be clearly demonstrated that there are essential distinctions between the proposed CDM project activity and other similar projects and that the credibility check is passed successfully.



Request 3:

The PP/DOE should provide reliable evidence that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation, following EB41, Annex 46, parag. 5(b).

Response from PP:

As described in the PDD version 06 dated on 05/08/2008, continuing and real actions have been taken by the Project owner to push the CDM application work forward.

In the design phase, the IRR of the Project is obvious lower than benchmark and is not financial attractive to the Project owner. Having received the local government's advise²¹, All stockholders of the Project met to discuss the feasibility of implementing the Project as a CDM project. After the stockholders' decision to implement the Project as a CDM project²², Farsighted Group was contracted on 28 May 2005 to take charge of the CDM application work²³. However, lack of applicable methodologies made the work hard to move forward. After the deviation in application of methodology AM0005 in October 2005²⁴, EF could be calculated basing on public available data in China. Then the emission reductions could be calculated to finish the PIN²⁵ of the Project. A draft PDD was also under developing but not completed because of lacking of the information of carbon buyer. The Project owner started to search carbon buyer in early 2006. However, many contacted buyers from Europe did not want to be the participant of the project with installed capacity of 50MW considering the WCD-related risks²⁶. After many times of unsuccessful negotiations, in Aug. 2006, in order to convince the buyers, the Project owner decided to prepare a WCD report²⁷ with reference to UK WCD Form which is generally accepted in Europe. Due to the complicated procedures and requirements, the preparation of the WCD report went slowly. Fortunately, in late 2006, the Project owner was informed that some other buyers possibly didn't care about the scale of hydropower projects. Then the Project owner began to contact JCF in Nov. 2006, and the Term Sheet for the carbon trade was signed on 30 May 2007²⁸ after the on-site investigation and several times of negotiations. Afterward, the developing of the Project was accelerated, and the Project owner started to select DOE to conduct the validation of the Project and apply for the approval of China DNA²⁹ given the complete PDD. After receiving the LoA from DNA on 30 Sep, 2007³⁰, the Project started GSP on 6 Oct 2007³¹.

The detailed timetable of implementation and CDM-related actions are listed in the Table 2 as bellow.

²¹ Annex 2-Local Government's Recommendation Letter.

²² Annex 3-Board Meeting to implement CDM.

²³ Annex 4-CDM Implementation Contract with Farsighted Group.

 ²⁴ http://cdm.unfccc.int/UserManagement/FileStorage/6POIAMGYOEDOTKW25TA20EHEKPR4DM

²⁵ Annex 5-Project Idea Note

 ²⁶ Annex 6- The Process and Problems about the Dachunhe 50MW Hydropower Project from The CDM consultant
²⁷ Annex 7 WCD Procest Consultant

²⁷ Annex 7-WCD Report Consulting Service Contract with Yunnan Investigation, Design & Research Institute of Water Resources & Hydropower.

²⁸ Annex 8-Term Sheet with JCF.

²⁹ Annex 9- Notice About the Thirty-fourth Auditing Council From NDRC.

³⁰ Annex 10- LOA From China.

³¹ <u>http://cdm.unfccc.int/Projects/Validation/DB/4A0G4DDC1SNOND6O3ZWDC8REECDPUJ/view.html</u>



Date	Real Actions	Evidences
2004-	Finishing Feasibility Study Report and	Feasibility Study Report and com-
06/2004-07	receiving comments from judging com-	ments from judging committee
	mittee	
2004-	Finishing Feasibility Study Complement	Feasibility Study Complement Re-
07/2004-10-	Report and receiving its approval letter	port and its approval letter from
18	from government	government
2004-	Finishing EIA Report and receiving its	EIA Report and its approval letter
08/2004-09-	approval letter	
10		
2005-03-30	Receiving local government's Recom-	Local Government's Recommenda-
	mendation letter suggesting and support-	tion Letter
	ing the Project to implement CDM activity	
2005-05-06	Stockholder conference with decision of	Board Meeting to implement CDM
	implementing CDM activity	
2005-05-28	Contract with a CDM consultant	CDM Implementation Contract with
2000 00 20		Farsighted Group
2005-06-30	Construction Permission and construc-	Construction Permission
2000 00 00	tion start	
2005-09-20	Contract of Generator Units	Contract of Generator Units
2005 10 07	EE could not be calculated basing on	http://cdm.upfccc.int/LiserManagem
2005-10-07	public available data until it was re-	ant/FileStorage/AM_CLAP_OF IW/
	quested the deviation in application of	
	methodology AM0005 in China	
2006 02 24	Finishing DIM of the Droject	<u>TJ</u> Droiget Idea Nata
2006-02-24	Finishing Pin of the Project	Project fueld Note
2006-03-09	Deing guere of the demonde of WOD	Contract of Main Transformers
2006-07-14	Being aware of the demands of WCD	The Process and Problems about
	and difficulties to find a appropriate buyer	the Dachunne SUMW Hydropower
	for the project with installed capacity of	Project from The CDIVI consultant
2006-08-09	Preparing a WCD report against the cri-	WCD Report Consulting Service
	teria and guidelines for Word Commis-	Contract with Yunnan Investigation,
	sion on Dams	Design & Research Institute of Wa-
		ter Resources & Hydropower
2007-05-30	Signing Term Sheet with JCF	Term Sheet with JCF
2007-07-20	Supplying for LOA from China and at-	Notice About the Thirty-fourth Au-
	tending the DNA's Auditing Council	diting Council From NDRC
2007-09-30	Receiving the LOA from China	LOA From China
2007-10-06	Global Stakeholders Participant	http://cdm.unfccc.int/Projects/Valid
		ati-
		on/DB/4A0G4DDC1SNOND6O3Z
		WDC8REECDPUJ/view.html
2007-09-27	The earliest operation date of the project	
(Erji part)		
2008-06-01		
(Yiji part)		

Table 2 Timetable of implementation of the Project



To summarize, the Project owner has seriously considered CDM and pushed the CDM application forward continuously. All the relevant evidences and annexes have been submitted to the DOE.

Response from DOE:

The project starting date was determined to be in line with the permission to launch the construction works in June 2005. As already indicated in the validation report, the reason for the delay of almost two years between the decision to develop this project as a CDM project (May 2005) and the submission of the PDD to TÜV SÜD for validation was the lack of experienced CDM staff and the numerous revisions of the applied methodology.

However, by looking more closely at this time period, a PIN was issued in February 2006 once EF factors were published by the China DNA and an intensive buyer search was started in early 2006. Since most potential buyers expressed their concerns regarding WCD risks, a contract was signed with a WCD consulting company in August 2006 (attached to this response) in order to overcome these concerns and finally find a buyer. The final contract with Japan Carbon Finance was signed in May 2007 (also attached to this response). TÜV SÜD was contracted in September 2007 with the validation work.

In summary, TÜV SÜD confirms that continuing and real actions were taken to secure the CDM status for this project in parallel with its implementation.



Request 4:

The DOE is requested to clarify how the monitoring of each part (Yiji and Erji) of the project activity will be undertaken.

Response from PP:

As shown in the Figure 1, the project includes two parts, Yiji part and Erji part. Firstly Yiji part is directly connected to Erji part. And then total electricity together with Yiji part and Erji part will be transferred to the substation.

As the proposed project supplies the electricity generation by two parts to CSPG through the same transmission line between Erji part and the substation, the Grid will only calculate total electricity generation by the proposed project delivered to CSPG. As described in the section B.7.2. of the PDD version 06 dated on 05/08/2008, the net electricity generation by the proposed project will be continuously monitored through the gateway meter M_{CER} at the substation. The reading of M_{CER} , witch is cross checked by the invoice from the Grid, will be taken to calculate CERs. The backup meter M_{BAC} locates at the side of Erji part, and it is managed by the project owner. The records of M_{CER} and M_{BAC} will be submitted to DOE for verification.

However, during daily operation of the project, electricity generated by Yiji part is continuously monitored through M_{10} , and that by Erji is continuously monitored through M_{21} and M_{22} . Monitoring data of M_{10} , M_{21} and M_{22} will be recorded and managed by the statistic staff of the proposed project.



SEL

Figure 1 Connecting Information of the Dachunhe Project



Response from DOE:

As indicated by the PPs, the Yiji part is connected with the Erji part which is further connected with the South China Power Grid via a substation. One main meter (M_{CER}) will be used to measure the net electricity supplied to the grid. The value will be further confirmed by double-checking with the sales receipts. A back-up meter is installed (M_{BAC}) in case of any malfunction of the main meter.

Additional meters are installed on site for internal control and measuring as indicated in the figure provided by the PPs. The reading of these meters will not be used to determine emission reductions, but as an internal control mechanism.