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## Response to Request for Review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 1984. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Cuiyun Zhang  
Carbon Management Service

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## **Response to the CDM Executive Board**

### **Issue 1:**

The DOE is requested to clarify how it has validated the investment analysis, in particular, the appropriateness of a benchmark issued in 1995 when assessing the additionality of a project with investment decision made in 2006.

### **Response by TÜV SÜD:**

The applied benchmark “Economic evaluation code for small hydropower projects (SL16-95)” is still applicable today, and so it was at the time of the investment decision. It applies to hydro-power installations with a capacity below 25 MW, extended to capacities below 50MW if the installation is located in rural areas; the proposed project, which installed capacity is 32MW and is located in rural areas, applies the mentioned benchmark document SL16-95.

The SL16-95 was issued by the Ministry of Water Resources of the People’s Republic of China (MWR). Both in 2007 and 2008 the validity of the code has been re-confirmed, as could be evidenced by:

- 1) The answer to the Request for Review of project 996 - Zhoubai Hydroelectric Project, dated 04/06/2007.
- 2) The statements of the Research and Design Institute of No.14 China Hydro Engineering Bureau and the National Research Institute for Rural Electrification, accredited by the Chinese Government, which clarified that SL 16-95 is still used by the institutes when assessing the financial feasibility of small hydropower projects, dated 26/11/2008 and 01/12/2008.

Moreover, the DOE have verified that in October 2006 the Ministry of Water Resources of the People’s Republic of China have confirmed the validity of the SL16-95, including it into a list of the applicable evaluation standards<sup>1</sup>.

Further TÜV SÜD has observed that SL16-95, and hence the 10% benchmark, is still widely used in recent feasibility studies of hydropower projects in China.

It should be further clarified that the 8% benchmark which has been applied in case of other projects activities submitted for registration, and was chosen according to the specific condition of those projects, which did not allow the DOE to validate a 10% benchmark as the appropriate one to be used.

In particular in the case of project activity number 1875 (Sanchawan 32MW Hydro Power Project in Guizhou Province China), the 8% benchmark was chosen according to the installed capacity (32MW) and the location of the project which could hardly be considered as a rural area. These considerations lead to apply the “Interim Rules on Economic Assessment of Electrical Engineering Retrofit Project” (China Electric Power Press, 2003) indicating a benchmark of 8% as appropriate in that context.

In the case of project 2159 (Erbaqu Small Hydropower Project in Gansu Province) the benchmark was chosen according to the Preliminary Design Report which used as reference the “Interim Rules on Economic Assessment of Electrical Engineering Retrofit Project” (China Electric

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<sup>1</sup> <http://www.mwr.gov.cn/tzgg/qt/20060926000000479251.aspx>



Power Press, 2003) because of the project specifics in terms of costs and taking into consideration that it is a bundled hydropower station.

It is concluded that the applicability of the specific benchmark relies on the specificity of the project. As a consequence, the DOE confirms that for the proposed project activity 1984 the benchmark of 10% is still applicable and that the project meets the applicability criteria as mentioned according to the SL16-95.

### **Response by the Project Participants:**

The “Economic Evaluation Code for Small Hydropower Project (SL16-95)” belong to the Professional Standards of People's Republic of China which was approved and published by the Ministry of Water Resources of the People's Republic of China on June 2, 1995 and began to take effect on July 1, 1995<sup>[2]</sup>. In this document, the small hydropower project is defined as: the station with installed capacity no more than 50MW. In 2002, the Ministry of Water Resources of the People's Republic of China issued the “Bulletin of Valid Hydropower Technical Standard”. According to the requirements in hydropower document No [2002]07, which is the “Economic Evaluation Code for Small Hydropower Project (SL16-95)”, the standard above is still in validity and enforceable<sup>[3]</sup>. Additionally, this benchmark is still in effect in 2006.<sup>[4]</sup>

In addition, since 1995, the institutes on hydropower aspect in China generally apply the document (SL16-95) to make out Feasibility Study Reports (FSRs), Preliminary Design Reports (PDRs), and relevant reports.

The installed capacity of the project is 32MW, therefore, the benchmark of 10% in the document (SL16-95) as mentioned above is applicable to the project. Therefore, the project is appropriate to employ the benchmark of 10% listed in document (SL16-95) in PDD requesting for registration.

### **Issue 2:**

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

#### *Background:*

#### *EB 41, Annex 46, Paragraph 5*

*(b) The project participant must indicate, by means of reliable evidence, that continuing and real actions were taken to secure CDM status for the project in parallel with its implementation. Evidence to support this should include, inter alia, contracts with consultants for CDM/PDD/methodology services, Emission Reduction Purchase Agreements or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds), evidence of agreements or negotiations with a DOE for validation services, submission of a new methodology to the CDM Executive Board, publication in newspaper, interviews with DNA, earlier correspondence on the project with the DNA or the UNFCCC secretariat;*

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[2]<http://www.cws.net.cn/guifan/bz/SL16-95/>

[3] <http://www.ches.com.cn/jishubiaozhun/001.htm>

[4]<http://www.jxsly.com:6203/zy/syyw/qt/2007/slbz/1.htm>, confirmed by Water Resources and Hydropower Planning and Design General Institute of the Ministry of Water Resources of the People's Republic of China



**Response by TÜV SÜD:**

In order to provide a detailed overview of the timeline of the events as evidenced during the onsite audit and the document review Table 1 is hereafter proposed. In case of CDM – related events, the evidence that has been verified by the DOE is mentioned and a brief comment about its relevance in the CDM context added.

Table 1: Key events in the context of the CDM application process

Date	Key event	Evidence	Comment and relevance in the CDM context
<p>A first Feasibility Study Report was issued on October 2005 by the Chongqing Fuling District Investigation and Design Institute of Water Resources and Hydropower. According to an increase in the investment for the transmission lines and the road construction, the report was adjusted by the same institute: the Budget Evaluation Report was therefore issued on January 2006; a supplementary Financial Report was also issued at the same time by the same institute, the Chongqing Fuling District Investigation and Design Institute of Water Resources and Hydropower.</p>			
<p>19 January 2006</p>	<p>The project owner acquired the letter about recommending the project to apply CDM project by local DRC.</p>	<p>The Letter about Recommending Sichuan Wanyuan Baiyangxi Hydropower Station to Apply CDM Project Wanfagaihan [2006]5</p>	<p>The document issued by the local DRC (Wanyuan City Development and Reform Commission) explicitly mentions the CDM as a solution to overcome the investment barrier for the proposed project. The document demonstrate that, from here on, the PPs were aware of the possibility to apply for CDM.</p>
<p>23 January 2006</p>	<p>The project owner decided to apply for CDM to overcome financial barrier.</p>	<p>Minute “Directorate Decision on the CDM Application of Sichuan Wanyuan Baiyangxi Hydropower Station”</p>	<p>According to the minute of the meeting, the project owner, based on the available information, decided to apply for CDM. In order to proceed, the research for a CDM consulting company was also encouraged by the directorate.</p>
<p>The EIA for the proposed project was issued on March 2006 and related approval received on 26<sup>th</sup> April 2006.</p>			
<p>30 May 2006</p>	<p>The project owner consigned the Tianqing Power to complete the CDM application work for the project.</p>	<p>Letter of Commitment for CDM Application</p>	<p>With this document the project owner have demonstrated to have a strong commitment to proceed with the application for the CDM by assigning it to a specialized company (namely and hereafter “TQ Power”).</p>
<p>During the couple of months (from June 2006 to end of August 2006), TQ Power started to look for a buyer and to write the draft PDD. The project owner, signed on August 25<sup>th</sup>, 2006 the purchasing contract for the main equipments, as evidenced and verified during the assessment.</p>			



29 September 2006	The project owner signed the Emission Reduction Purchase Agreement (ERPA) with ENEL Trade S.p.A.	ERPA	The ERPA has been considered by the DOE as a highly reliable evidence that the PPs had undertaken a strong commitment to secure the secure CDM status for the project.
30 October 2006	The project owner submitted the CDM application letter and PDD to the Chinese DNA	Application Form for Administrative Consensus	As soon as the draft PDD was completed by TQ Power, the project owner issued this application to the Chinese DNA in order to obtain the necessary Letter of Approval for the CDM.
15 December 2006	The project was listed on China DNA official website as approved	Screenshot of the related website page of the Chinese DNA	The document provide a reliable evidence that the project obtained the approval form the Chinese DNA on 15 <sup>th</sup> December 2006.
18 January 2007	The project owner acquired Letter of Approval (LoA) published by China DNA.	LoA	The LoA was issued by the Chinese DNA. It should be also noted that the LoA was issued only one month after the project owner obtained the approval as per the website of the Chinese DNA.
The period of time between February 2007 and July/August 2007 was employed by the PPs to prepare the PDD for GSP. The project was assigned to the DOE for the validation on August 2007 and the validation started on September 28 <sup>th</sup> 2007, according to the starting date of the GSP (publication of the GSP-PDD). The on site assessment was performed by TÜV SÜD on 14 <sup>th</sup> October 2007.			

The timeline of the events as evidenced during the on-site assessment and as confirmed with this further assessment DOE is confident that the information given is correct and in compliance with the actual situation and project history. All the above mentioned key events have been substantiated by verifiable documents and evidences.

It should be further noted that, according to the timeline, the main bureaucratic steps to secure the CDM application were completed on January 2007. Nevertheless, according to the above, it's confirmed that continuous and real actions were taken by the PPs to secure the CDM status for the proposed project activity.

**Response by the Project Participants:**

In January 2006, the Budget Evaluation Report (BER) and the Financial Report (FR) of the project was completed by Chongqing Fuling District Investigation and Design Institute of Water Resources and Hydropower (the Institute). And then the local DRC issued the approval for BER and FR later. According to BER and SFR, the IRR is 7.72% which is lower than the benchmark. The project face high investment risk, therefore, the project owner hesitated to invest on the project. Fortunately, at that time, the National Development and Reform Commission has promulgated the <Clean Development Mechanism Management Regulation> formally already. Also later, the local DRC issued the recommending letter to the project owner and suggested



the project owner to apply for CDM project to overcome the financial difficulties on January 19, 2006. After receiving the CDM recommending letter, the project owner comprehended clearly that the CDM support could improve the financial indexes for this project. Through serious consideration and discussion, the project owner held the directorate meeting on January 23, 2006 and decided to apply for CDM project due to the high investment risk and the low IRR. Since then, the project owner began to look for the CDM consulting enterprises. On May 30, 2006, the project owner consigned the Beijing Tianqing Power International CDM Consulting, Co., Ltd. (Tianqing Power) to execute the applying work for CDM.

Only after considering the CDM revenue seriously and consigning Tianqing Power to apply for CDM, the project started the construction on June 10, 2006(the earliest starting date of the project), and then signed purchase agreement for turbine and generator on August 25, 2006. From the analysis mentioned above, it is evident that the project owner has considered CDM support seriously before starting the project.

Afterwards, Tianqing Power finished the drafting PDD and began to seek for the buyer. Only after 3 months, the project owner signed ERPA with ENEL Trade SpA on September 29, 2006 smoothly. And then project owner and Tianqing Power submitted the CDM application letter and PDD to China DNA on October 30, 2006. Soon, the project was listed on China DNA official website as approved on December 15, 2006. And the project owner also acquired LOA (paper pattern) of China DNA on January 18, 2007. And then the Tianqing Power started to revise PDD for GSP. At the same time, the buyer started to look for DOE for the project's validation, after serious investigation, the DOE has been consigned and the PDD has been started GSP on September 28, 2007 and DOE performed interviews on-site on October 14, 2007. Since then, the CDM application work was going on smoothly. Please find below detailed timeline of project implementation in the table below.

Table 1 the timeline of project implementation

Date	Main event	Source
1-2006	The Budget Evaluation Report (BER) and the Financial Report (FR) were completed by the Institute.	BER and FR
12-1-2006	The local DRC issued the Approval of BER and FR.	Approval of BER and FR
19-1-2006	The project owner acquired the letter about recommending the project to apply CDM project by local DRC.	CDM Recommendation Letter
23-1-2006	Due to the high investment risk and low IRR, the project owner decided to apply for CDM to overcome financial barrier.	Directorate decision for applying CDM
3-2006	The Environment Assessment Report (EIA) was completed.	EIA
26-4-2006	The EIA was approved by local Environment Protection Bureau.	Approval of EIA
30-5-2006	The project owner consigned the Tianqing Power to complete the CDM application work for the project.	Commitment Letter
10-6-2006	The project was approved to start the construction (the earliest starting date of the project).	Permission for Starting Construction
25-8-2006	The project owner signed turbines and generators purchase agreement.	The turbines and generators purchase agreement



29-9-2006	The project owner signed ERPA with ENEL Trade SpA.	ERPA
30-10-2006	The project owner submitted the CDM application letter and PDD to China DNA.	CDM application Form
15-12-2006	The project was listed on China DNA official website as approved.	China DNA official website
18-1-2007	The project owner acquired LOA (paper pattern) published by China DNA.	LOA
28-9-2007	The project starts GSP for validation.	The UNFCCC website
14-10-2007	TÜV SÜD performed interviews on-site.	
At the beginning of 2009	The project will begin the commissioning.	

From the analysis above, it can be concluded that the CDM played a crucial function on the decision of implement of the project. And real and concrete actions to secure registration as a CDM project activity have been continuously taken in parallel with its implementation. Therefore the project meets the requirement of EB 41, Annex 46, paragraph 5b.

**Issue 3:**

The DOE is requested to further clarify and provide evidence on the suitability of the input values to the investment analysis as per the requirement of EB 38 paragraph 54(c) guideline.

- “54. The Board clarified that in cases where project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed project activities, DOEs are required to ensure that:*
- (c) On the basis of its specific local and sectoral expertise, confirmation is provided, by cross-checking or other appropriate manner, that the input values from the FSR are valid and applicable at the time of the investment decision.”*

**Response by TÜV SÜD:**

The Budget Evaluation Report and the supplementary Financial Report (both dated January 2006) have been used in PDD as the reference document to perform the investment analysis. According to the timeline of the project as evidenced by the project participants and validated during the assessment the DOE confirms that the input values taken from the supplementary above mentioned documents were valid at the time of the CDM decision. In particular these documents have been considered as the only valid and reliable source as the implementation of the project fully relies on it.

The validity of the input values as in the Budget Evaluation Report and the supplementary Financial Report) has been checked by the DOE.

To further confirm and verify the appropriateness and validity of the input values as used in PDD to perform the investment analysis, the assessment team have reviewed each figure as follows:



### Static total investment

The Static total Investment as presented in the GSP-PDD was deeply investigated during the course of the validation. As consequence, the PPs were asked by the DOE to provide more details on the composition of the Static Total Investment and to deliver the related evidences. A detailed overview of the composition of these costs was provided by the PPs in the submitted PDD (please see Table B.3 in PDD requesting registration) and related data sources requested and verified by the DOE.

In order to further substantiate the figure which was estimated in the PDD as 230 Mio Yuan RMB, the PPs have been requested to provide evidence of the costs which have been actually undertaken up to date. According to the fact that the project is still not operational, the Static Total Investment as certified by an independent party, has been verified by the DOE. In particular, the Financial Audit Report as issued on December 11<sup>th</sup>, 2008 by the Sichuan Tiancheng Certified Public Accountants Co., Ltd., the total investment undertaken up to the month of November 2008 is more than 232 Mio Yuan RMB.

The DOE is confident that this document provide a reliable and verifiable confirmation of the assumptions done by the PPs regarding this figure and even of its conservative estimation under the CDM additionality perspective.

### Grid price

The value of 0.26 Yuan RMB/kWh was assumed in the Financial Report issued on January 2006 and used as reference by the project participants. Further confirmation of the reasonability of such a grid price comes from a notice issued on June 2004 by the National Development and Reform Commission through the Sichuan Province Price Bureau which stated the grid price for hydropower stations with reference to the operational hours. In particular, the document provided a price of 0.28 Yuan RMB with VAT for projects which operational hours does not exceed the 3,700 hours and a price of 0.19 Yuan RMB (with VAT) in case of excess of this operating time. It's confirmed that the price used by PPs of 0.26 Yuan RMB/kWh (with VAT) as stated in the Financial Report, is in compliance with the mentioned regulation on prices; considering the operating time of the proposed project (4,351 hours) a weighted average of the prices (0.19 Yuan RMB/kWh up to 3,700 hours and 0.28 Yuan RMB/kWh for the excess time of 651 hours) lead to obtain a price of 0.26 Yuan RMB/kWh (VAT included) , thus confirming the validity of the assumption done in the approved Financial Report.

### Annual utilization hour

A value of 4,351 hours has been assumed in PDD according to the value as reported in the Feasibility Study Report issued on 2005 (and the consistent Financial Report issued on January 2006) which relies on a strong hydrological study, taking into consideration data from 1959 to 2002: the hydraulic regime of the Ren river has been studied by the institute in charge to prepare the FSR considering a consistent amount of historical flow data and water availability within the mentioned period. The value of the annual utilization hours has been compared to the average value obtained by the analysis of more than 250 hydro power projects currently under validation. According to this DOE's internal statistics, the average annual utilization hours is 3,871, confirming that the proposed project estimated a reasonable and even conservative value. The figure of the annual utilization hours has been furthermore compared with the value observed in many other similar scale hydropower plants in China and it's confirmed as a reasonable and conservative value. The data assumed in the FSR and in PDD has been therefore considered acceptable and consistent with the specifications of the project as evidenced during both the onsite audit and the subsequent additional review.



### Annual Operation Cost

The annual operating costs of 4.968 Mio Yuan RMB in the Financial Report issued on January 2006 have been used to perform the investment analysis in PDD.

This figure was obtained in the Financial Report as a result of a calculation which considers the parameters of payroll and welfare, cost of overhaul, cost of materials and other expenses, water charges and reservoir maintenance. The DOE have checked that the values behind these parameters were set to be in compliance with the local figures for the same. The transparency of the IRR calculation spreadsheet as requested by the DOE allowed to perform this check; according to the Financial Report (January 2006), the power station will have a fixed staff of 28 persons each of those will receive an average payroll of 7000 Yuan RMB/year. The number of employees of the hydropower station and the related payroll are consistent with the project specifications and local payroll respectively; furthermore, the DOE confirms that, according to the trend in salaries in China, an increase in the payroll is likely to occur throughout the next years. The employee's welfare fund and insurance have been assumed according to the local regulations to account for 14% and 17% of the payroll respectively.

The cost of overhaul has been estimated according to a percentage of 1.00% of the total fixed asset value and the costs for the materials set to be 5 Yuan/kW; the remaining costs account for 24 Yuan/kW which also match with the local regulations. As a result of the calculation, the annual operating and maintenance costs account for about 2.16% of the static total investment which, according to the experience on this sector it's confirmed to be a reasonable and conservative value.

The DOE confirms that, according to these considerations, the annual O&M costs as stated by the PPs in the PDD have been estimated basing the calculation on provable parameters and reliable assumptions, which leave limited margins of uncertainty about the value used in the Financial Report and transparently calculated by the PPs.

### Response by the Project Participants:

The input values at the time of the investment decision are sourced from approved BER and FR. The BER and FR were completed by Chongqing Fuling District Investigation and Design Institute of Water Resources and Hydropower based on Economic Evaluation Code for Small Hydropower Projects (SL16-95) and Interim Regulations of Hydropower Construction Project Financial Evaluation etc. This Institute is an independent organization which is qualified to compile design reports for hydropower projects (it has obtained a grade A Certificate in Engineering Design issued by the Ministry of Construction of the People's Republic of China). In Addition, the BER and FR were also approved by local DRC. Furthermore, the BER and FR were completed before the investment decision and the period between the BER and FR and investment decision is sufficiently short. Therefore, the BER and FR can be considered as an independent and realistic assessment of the proposed project activity, including the parameters listed therein which are used as input values in the investment analysis of PDD requesting for registration.

In order to prove the conservative of the input values in the PDD for requesting registration, the important input values in PDD can be cross-checked.



### Static total investment

According to the Finance Audit Report, the actual total investment of the project is 232,554,351.03 Yuan RMB <sup>[5]</sup>, which is higher than the investment in the PDD (230,000,000 Yuan RMB). Therefore, the investment in PDD is conservative and applicable.

### Grid price

The grid price of the project is 0.26 Yuan RMB/kWh with VAT in the approved FR, which is also used in the PDD for requesting registration. According to the grid price document [2004]1038 published by NDRC in 2004, the grid price of the newly hydropower stations in Sichuan Province is 0.28 Yuan RMB/kWh with VAT. However, based on the document [2004]1038, the annual utilization hours of hydropower stations employ the uniform grid price regulated by government is 3,700 hours. As for the hydropower stations that annual utilization hours have exceeded 3,700 hours, the uniform grid price shall employ another price as 0.19 Yuan RMB/kWh with VAT. (Namely, only 3,700 hours can get the price of 0.28 Yuan RMB/kWh with VAT, the exceeded hours can only get the price of 0.19 Yuan RMB/kWh with VAT). Therefore, according to the policy of grid price above, the actual grid price of the project is 0.26 Yuan RMB/kWh with VAT <sup>[6]</sup>. In China, the grid price is strictly regulated by China government and it is established on strict regulation rather than the market mechanism, so it is difficult to forecast the future grid price by the project owner. As the grid price is related tightly to the national economy and livelihood of people, the government of China has to make the grid price steady. So the grid price in FR and in the PDD for requesting registration is consistent with the grid price document and the actual grid price. Therefore, the grid price in FR and in the PDD for requesting registration is reasonable and applicable at the time of investment decision.

### Annual utilization hour

The annual utilization hour in the PDD is calculated based on water resource data of 44 years (1959~2002), so the dramatic change of electricity generation of the project in the whole crediting period will rarely happen. Therefore, the value of annual utilization hour is reasonable and applicable to be used for IRR calculation.

### Annual Operation Cost

The annual operation cost is calculated according to the parameters from the approved FR. The annual operation cost includes salary, overhaul cost, welfare fund, water charges, other cost, the property insurance and the maintenance expenses of reservoir. All these parameters in the FR are consistent with Economic Evaluation Code for Small Hydropower Projects (SL16-95) and Interim Regulations of Hydropower Construction Project Financial Evaluation.

Moreover, since the project has not been completed yet, it is impossible for us to calculate the actual annual operation cost. However, according to the Economic Evaluation Code for Small Hydropower Projects (SL16-95) and Interim Regulations of Hydropower Construction Project Financial Evaluation, most data for calculating operation cost is fixed, while only salary of em-

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[5] Based on the Finance Audit Report of December 2008, the actual investment is 232,554,351.03 Yuan RMB up to November 30, 2008. But the project construction is not yet completed (expected to be completed early 2009), and therefore the actual investment will be higher than the figure from the Finance Audit Report of December 2008.

[6] The total installed capacity is 32MW and the annual utilization hours is 4,351 hours. So the actual grid price of the project =  $(0.28 \times 3,700 + 0.19 \times 651) / 4351 = 0.26$  yuan RMB/kWh.



ployees' maybe fluctuant. During the period 2002 - 2006, salary in Sichuan Province increased annually on average with 7.7%<sup>[7]</sup>. Thus the actual operation cost will be increased due to the increased salary. Therefore the annual operation cost in the IRR calculation is conservative.

#### **Issue 4:**

Further clarification is required on how the DOE has validated the common practice analysis, in particular, the discrepancy in the number of similar projects identified (10 versus 24), while referring to same data source.

#### **Response by TÜV SÜD:**

The DOE will provide a revised description on how the common practice has been assessed according to the information as reported in the PDD and confirmed during the onsite audit and document review. The information provided by the PPs regarding the common practice analysis is therefore confirmed as follows: 23 stations within the capacity range 15 to 50 MW located in Sichuan Province have been definitely mentioned according to the Yearbook of China Water Resources 2006. The inaccurate information in the Validation Report will be amended and the description revised.

The PPs have demonstrated that out of the 23 stations included in the analysis, only 10 can be considered as similar, as 13 stations were developed prior to the year 2000 under a different market environment. In particular has been verified that with year 2000 the power sector in China was subjected to a wide reform process which had a strong impact on the attractiveness of the market, especially for the independent power producers.

Of the 10 similar projects the PPs have demonstrated that three of these are state-owned (namely Jinhua, Tongkou and Fuliutan Hydropower Stations), one (namely Sanxing Hydropower Station) was found to have a state-owned company as the larger shareholder; three projects have been able to reach remarkably higher IRR values (namely Niujiawan Third Level Hydropower Station, Laifu and Dingcunba Hydropower Stations).

Two more projects (Baishuihe and Shazui Hydropower Stations), due to particularly favourable conditions in terms of water availability and grid price, did not face similar barriers as the proposed project. The remaining project, Zhongzui Hydropower Station is applying for the CDM as faced barriers to its implementation.

The description on common practice analysis as in the Validation Report will be amended by the DOE in order to fully match with the assessment which was performed onsite and during the document review.

#### **Response by the Project Participants:**

In the Common Practice Analysis in PDD for requesting registration, according to Yearbook of China Water Resources 2006, 23 hydropower projects were identified in Sichuan province within the capacity range of 15 to 50 MW and listed in Sub-step 4a. Among them, 13 hydropower projects commissioning prior to the year 2000 are excluded<sup>[8]</sup>. Finally, 10 hydropower projects similar to the project with commissioning date post 2000 were identified in Sichuan province within the capacity range of 15 to 50 MW.

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[7]China Statics Year Book 2003-2007 (<http://www.stats.gov.cn/tjsj/nds/>)

[8]Economist Intelligence Unit (2003), "China Hand", page 37-40.

Projects commissioning prior to the year 2000 are excluded because they were developed by the state under a market environment that was substantially different from the current market environment, which is, for independent power producers at least, considerably less attractive



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As explained in the PDD, among the 10 similar projects, four projects are state owned or have a state owned largest shareholder, which are much easier to make finance than the private company. Three projects have an IRR which is much higher than the IRR of the project and above the benchmark of 10%. Two projects enjoy significantly superior economical and water resource conditions than the project. The one remaining similar project faced the same or similar barriers as the project and is now applying for CDM. See details in the PDD requesting for registration, and the relevant evidences have been provided and validated by DOE.