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## To the CDM EXECUTIVE BOARD



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DPT-ZE-3510.02  
ZLS-ZE-219/99  
ZLS-ZE-246/99

Your reference/letter of	Our reference/name	Tel. extension/E-mail	Fax extension	Date/Document	Page
	IS-CMS-MUC/CF Cyprian Fusi	+49 89 5791-1195 Cyprian.Fusi@tuev-sued.de	+49 89 5791-2756	25-02-2010	1 of 11

Dear Members of the CDM Executive Board,

Please find below the response to the Request for Review for the CDM project **Yunnan Diqing Jisha Hydropower Project** with registration number **2869**. In case you have any further inquiries please do not hesitate to contact us for we would always be ready to cooperate with you.

Best regards

Thomas Kleiser  
Carbon Management Service

Additionally included:

Annex 1: Information Reference List (Updated Annex 2 of Validation Report)

Headquarters: Munich  
Trade Register: Munich HRB 96 869

Supervisory Board:  
Dr.-Ing. Manfred Bayerlein (Chairman)  
Board of Management:  
Dr. Peter Langer (Spokesman)  
Dipl.-Ing. (FH) Ferdinand Neuwieser

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## RESPONSE TO THE CDM EXECUTIVE BOARD

### REQUEST No.1:

**The DOE is requested to provide a validation opinion on the input values applied to the IRR calculation, in particular, the investment cost, the O&M cost, the net electricity export, and the PLF, according to the VVM, v1, paragraphs 109 and 111.**

### RESPONSE FROM THE PROJECT PARTICIPANT

Dear Members of the CDM Executive Board,

We were informed that our project “**Yunnan Diqing Jisha Hydropower Project (2869)**” (hereafter referred to as the **Project**) was requested for review by CDM Executive Board on February 11, 2010. As required by the Board, we would like to answer the questions, clarify the issues and provide additional information, as follows.

The sources of the input values used in the investment analysis in the final PDD are from the officially approved FSR and the revised investment of the proposed project. The major factors of investment analysis, i.e., total investment, annual electricity generation, PLF and O&M cost, have been crosschecked in the following sections to the best of our knowledge.

#### **Total investment**

The value of total investment cannot be crosschecked with the actual total investment, for the third-party auditing firm hasn't finished the audited project completion report. However, the estimated report for the total investment of the proposed project finished by the experts from the third party (China water conservancy & Hydropower engineering Consult Company) has been used to crosscheck the total investment in PDD, in which the experts estimated the rationality of additional investment resulting from geological condition and confirmed the total investment of 854.96 Million Yuan in the revised investment of the proposed project<sup>1</sup>.

Furthermore, the value of total investment has also been crosschecked through comparison with similar hydropower projects (with UNFCCC Reference Numbers) in Yunnan Province. The investment per MW in the PDD is 7124 Yuan /KW, which is within the limited adequate range of investment per MW of similar hydropower projects in Yunnan Province is from 3656 to 7549 Yuan/KW, is within the statistical range.

#### **O&M cost**

The value of O&M cost has been crosschecked through the statistical analysis of O&M cost for hydropower plants in China issued by the Electric Power Net<sup>2</sup>. The public document indicates that the O&M cost for hydropower plants is 0.04-0.09Yuan/kWh. The O&M cost of the proposed project is 0.048 Yuan/kWh,<sup>3</sup> which is at the lower end of the indicated range.

Furthermore, the value of O&M cost, being crosschecked, is within the proper range of O&M cost of similar hydropower projects (with UNFCCC Reference Numbers) in Yunnan Province as

<sup>1</sup> The experts' comments for the revised investment of Yunnan Jisha hydropower plant

<sup>2</sup> <http://www.chinapower.com.cn/article/1001/art1001919.asp>

<sup>3</sup> The O&M cost of the proposed project is calculated simply as total static investment divided by total electricity supplied to the grid( 854.96Million Yuan/ (571600MWh\*33year))

well. The annual O&M cost per MW in the final PDD is 18.22 Yuan million/MW<sup>4</sup>, while the range of O&M cost value of similar hydropower projects in Yunnan Province is from 7.37 to 18.50 million/MW, which is within the statistical range.

### **Annual output**

According to the confirmation letter for the outputs by Grid Company, the proposed project started supplying electricity into the grid in December 2008. So the value of net power supply has been crosschecked with the actual power supply in year 2009 of full operation of the Project. The value in the PDD is 571600 MWh, while the actual power supply during year 2009 is 372543.5 MWh. In 2009, much of the southwest China is in drought, especially the amount of rainfall that year in Yunnan province was the lowest among the recent 49 years, which was proclaimed by Yunnan Weather Bureau. Since the flow has been slowed down due to the droughts, the actual power supply during year 2009 was lower than the expected value in FSR and PDD. The confirmation letter for annual output of Jisha Hydropower project by Yunnan power Grid Company during that period has been provided.

Furthermore, the crosscheck on the value of operating hour has also been completed after comparing with the average value of operating hours of similar hydropower projects (with UNFCCC Reference Numbers) in Yunnan Province. The operating hour of the proposed project is 4763 h, while the average value of operating hours of similar hydropower projects in Yunnan Province is 4069h. This implies that the value in the PDD is appropriate and reasonable.

### **PLF**

The plant load factor of the proposed project was assessed in the process of validating the electricity supplied to the grid.

According to EB48 Annex 11, 3 (a) and (b), the plant load factor shall be the value (a) which was provided to banks and/or equity financiers while applying for financing or to the government while applying for implementation approval, or (b) determined by a third party.

The PP concluded that the plant load factor of the proposed project was correctly defined and reasonable, for the factor was calculated from parameters which were cited from the FSR finished by BEIJING NATIONAL WATER CONSERVANCY & ELECTRIC POWER ENGINEERING CO., LTD and approved by Yunnan Development and Reform Committee, which is corresponded to above mentioned organizations in EB Annex.

PLF is calculated simply as operating hours at full load divided by 8760. For the project, the operating hour is 4763 h. So the PLF of the proposed project is 54.37%.

The value of PLF has also been crosschecked in comparison with the range of PLF cost of similar hydropower projects (with UNFCCC Reference Numbers) in Yunnan Province. The PLF in the PDD is 54.37%, while the average value of PLF of similar hydropower projects in Yunnan Province is 46.46%, showing the value of the proposed project is conservative and suitable.

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<sup>4</sup> The annual O&M cost per MW is calculated as annual O&M cost shown in the final IRR sheet divided by the capacity of the proposed project.

## **RESPONSE FROM THE DOE**

**EB 44, Annex 3, VVM version 01 paragraph 109 states** “To verify the accuracy of financial calculations carried out for any investment analysis, the DOE shall:

- a) Conduct a thorough assessment of all parameters and assumptions used in calculating the relevant financial indicator, and determine the accuracy and suitability of these parameters using the available evidence and expertise in relevant accounting practices;
- b) Cross-check the parameters against third-party or publicly available sources, such as invoices or price indices;
- c) Review feasibility reports, public announcements and annual financial reports related to the proposed CDM project activity and the project participants;
- d) Assess the correctness of computations carried out and documented by the project participants;
- e) Assess the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions.”

**EB 44, Annex 3, VVM version 01 paragraph 111 (c) states** “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: 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.”

**EB 48, Annex 11 paragraph II § 3 states** “The plant load factor shall be defined ex-ante in the CDM-PDD according to one of the following three options:

- a) The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval;
- b) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company);”

**EB 41, Annex 45, Paragraph 6 states** “Input values used in all investment analysis should be valid and applicable at the time of the investment decision taken by the project participant. The DOE is therefore expected to validate the timing of the investment decision and the consistency and appropriateness of the input values with this timing. The DOE should also validate that the listed input values have been consistently applied in all calculations.”

## **INVESTMENT COSTS:**

The actual total investment figure of the project activity can reasonably be cross-checked and confirmed with an audit report conducted by a third party. But this auditing is still underway according to the project participants. However, the **The experts' comments for the revised investment of Yunnan Jisha hydropower plant** issued on August 19, 2004 by China Water Conservancy & Hydropower Engineering Consult Company indicates that the total investment of 854.96 Million Yuan for this project activity (IRL No. 29).

Furthermore, the value of total investment has also been cross-checked by comparing with similar hydropower projects in Yunnan Province (IRL No. 86). The investment per KW in the final PDD is 7124 Yuan /KW, which is within the range of investment per KW of similar hydropower projects in Yunnan Province which is from 3656 to 7549 Yuan/KW (IRL No. 86).

In conclusion, the source of the input value of investment cost used in the financial analysis in the final PDD has been checked according to VVM, v1, paragraph 18. The investment cost of the Project is deemed to be appropriate and credible.

The DOE therefore is able to confirm that the investment costs of the project used in the investment analysis at the time of investment decision was appropriate according to annex 3 of EB 44 VVM § 111 (b).

### OPERATION AND MAINTENANCE COST

Similarly, the actual total O&M costs of the project activity can best be cross-checked and confirmed with an audit report conducted by a third party. But this auditing is still being conducted according to the project participants. This notwithstanding, the value of O&M cost has been cross-checked with information given in the Statistical Analysis of O&M cost for Hydropower Plants in China issued by the Electric Power Net (IRL No. 30). This document indicates that the O&M cost for hydropower plants lies from 0.04-0.09Yuan/kWh. The O&M cost of the proposed project is 0.048 Yuan/kWh, which is actually at the conservative end of the range.

Furthermore, the value of O&M cost for this project is comparable to those of similar hydro plants in Yunnan Province. The annual O&M cost per MW in the final PDD is 18.22 Yuan million/MW while the range of O&M cost of similar hydropower projects in Yunnan Province is from 7.37 to 18.50 million/MW (IRL No 86). The O&M cost for this project activity and of this capacity is therefore considered to be realistic.

### NET ELECTRICITY EXPORT:

Considering that the plant has been operational since December 2008, the DOE pursued to validate the actual net energy fed into the grid. According to the Confirmation Letter for the Outputs by the Grid Company (IRL No. 78), the actual power fed into the grid by the project in 2009 is **372 543 MWh**. This is far less than **571 600 MWh** indicated in the final PDD. The PP claims that this is due to the fact that in 2009, much of Southwest China experienced hash drought, where the amount of rainfall in Yunnan Province was the lowest in the recent 49 years. This claim is confirmed by Rainfall in Yunnan province in 2009 (IRL No. 79) published by Yunnan Weather Bureau.

The operating hours are **4 763 hours** as indicated in the approved FSR (IRL No. 90) and used in the investment analysis. This figure is in the same order with those of similar hydro plants in Yunnan Province whose average is about **4 069 hours** (IRL No. 86). The DOE is therefore convinced that if not of the hash drought season the plant would have been able to generate and feed the intended amount of power into the grid as mentioned in the final PDD.

The DOE can therefore conclude that the electricity output mentioned in the FSR and used in the investment analysis was appropriate and conservative according to annex 3 of EB 44 VVM § 111 (c).

### PLANT LOAD FACTOR (PLF):

The plant load factor is determined as the number of hours of production at full load divided by **8760 hours** (total hours in a year) as  $4763/8760 = 54.37\%$ . This is similar to those of similar projects in the same province (IRL No. 86) whose average is about 46.46%. The PLF for this project activity is therefore deemed to be appropriate compared with those of similar hydro-power projects in Yunnan Province.

Since the operational hours and total installed capacity are indicated in the approved FSR of December 2003 (IRL No. 7 & 8), the DOE therefore considers the PLF, as a proxy to power

output, used in the investment analysis as appropriate since the FSR was issued by a third party and approved by the government therefore fulfilling EB 48, Annex 11 paragraph II § 3(a) and 3(b).

The financial calculation has been completely checked, including all the calculation files and no mistakes have been found. Hence it can be confirmed that the calculations and the input values for the investment analysis as per VVM § 111 guidance and EB 41, Annex 45, Paragraph 6 are correct. It can be concluded that the input values used in the investment analysis are plausible and can be considered applicable for this project activity at the time of the investment decision according to EB 44, Annex 3, VVM § 109 and EB 44, Annex 3, VVM § 111(c).

## REQUEST NO. 2:

The DOE shall explain: (a) the changes on the input values made between the PDD submitted for GSC and the one submitted for registration, as per VVM, v1, paragraph 18; and (b) the date the revised FSR was completed and approved as the PDD submitted for GSC<sup>5</sup> (8 Jan 2008) applies the values from the original FSR.

## RESPONSE FROM THE PROJECT PARTICIPANT

Comparing the input values between the PDD submitted for GSC and the one submitted for registration, three financial indicators including the total investment and annual output were changed. The difference of main parameters for calculation of financial indicators was shown in Table 2.

Table 1 Main parameters for calculation of financial indicators

Items	Unit	PDD for GSC	Data source	PDD for Registrati-on	Data source
		Amount		Amount	
Capacity	MW	120	FSR, Page 1 ,Chapter 14	120	FSR, Page 1 ,Chapter 14
Total Sta-tic Invest-ment	Million Yuan	<b>593.54</b>	FSR, Page 7 ,Chapter 13	<b>854.96</b>	The approval letter for the revised investment of the proposed project
Annual output	MWh/year	<b>562,800</b>	FSR ,Page1 ,Chapter 1	<b>571,600</b>	FSR ,Page1 ,Chapter 14
Averaged Electricity Tariff (Ex-cluding VAT)	Yuan/kWh	0.1752	FSR ,Page5 ,Chapter 14	0.1752	FSR ,Page5 ,Chapter 14

<sup>5</sup> Global Stakeholder Consultation

Value Ad- ded Tax (VAT)	%	17	FSR ,Page12 ,Chapter 14	17	FSR ,Page12 ,Chapter 14
O&M costs	Million RMB	<b>534.837</b>	FSR, Page 9 ,Chapter 14	<b>656.01</b>	Final IRR sheet submitted for reg- istration
Income tax	%	33	FSR, Page 9 ,Chapter 14	33	FSR, Page 9 ,Chapter 14
Expected CERs Price	EUR/tCO <sub>2</sub>	9.0	Letter of intent	9.0	Letter of intent
Project Lifetime	Year	34 (including 3 years cons- truction period)	FSR, Page3 ,Chapter 14	34 (including 3 years construction pe- riod)	FSR, Page3 ,Chapter 14
CERs cre- diting time	Year	7*3		7*3	
IRR	%	<b>7.10</b>		<b>6.50</b>	

The explanations for the changes were shown as follow:

#### Total static investment

The value of total static investment in the PDD submitted for GSC was **593.54** Million Yuan, which was only composed of the investments on engineering works listed in the table below. Due to the CDM consultant's inaccurate mastering of investment parameters in the Methodologies, the inconsistent data appeared in the PDD. Comparing with the total static investment of **690.2929** Million Yuan in the FSR, the incorrect investment in the PDD submitted for GSC didn't include construction loan and other preparatory fee.

Sections	Engineering works	Investment (10000Yuan)
1	Construction Engineering	30910.49
2	Equipments and Installation Engineering	16540.27
3	Metal Structure and Installation Engineering	2562.21
4	Temporary Engineering	6538.06
5	Other Fees	9341.03
	<b>Total</b>	<b>593.54</b>

However, the value of total investment of **854.96 Million Yuan** in the final PDD submitted for registration was revised based on the budgetary estimate of the proposed project approved by Yunnan DRC.

The IRRs calculated with the incorrect total static investment of 593.54 Million Yuan in the FSR is 7.1%, which was submitted for GSC; The IRRs calculated with the total static investment of 854.96 Million Yuan in the emendatory documentation of budgetary estimate is 6.41%, which was submitted for registration.

### Annual output

Two values of annual output in the PDD submitted for GSC and the final PDD submitted for registration were from the FSR. The value of 571600MWh (FSR, p1-2) was the theoretical electricity generated by the proposed project. Considering the parameters modification of coefficient of effective electricity generation (99%) and the auxiliary consumption and losses (0.55%), the value of the net output supplying to the grid was 562800MWh (FSR, p1-2).

In the PDD submitted for GSC, the project owner used the net output supplying to the grid to estimate the financial analysis. However, the project owner directly used the conservative value, i.e., the theoretical electricity generation of 571600MW, to estimate the financial analysis in the final PDD submitted for registration.

### O&M cost

The annual O&M costs mainly include maintenance costs, salary and welfare, material cost and other costs. According to the *Economical Assessment Method and Parameters for Construction Project (3rd edition)* issued by NDRC and Ministry of Construction of China, the Calculation formula of O&M cost could be interpreted as:

Operating cost = Maintenance Fee + Salary and Welfare Fee + Material and other Cost + Insurance Fee

So the change of O&M cost resulted from the increase of the total investment with the fixed rates of Maintenance, insurance premium and other relevant parameters.

In summary, the change on the input values made between the PDD submitted for GSC and the one submitted for registration was resulted mainly through the following reasons:

The CDM manager of the proposed project in China Fulin Windpower Development Corporation was short of CDM experience on hydropower projects.

Secondly, the poor communication between the Project Proponent and the CDM consultant during the early stage of CDM development, especially on those valid documents, triggered the incorrect application of data in the PDD.

Besides, due to the CDM consultant's inaccurate mastering of investment parameters in the Methodologies, the inconsistent data appeared in the PDD.

At the validation stage, after the project owner and the CDM Company were aware of the mistake by learning the relevant methodologies and guidance on CDM, the final PDD was updated the input values based on the emendatory documentation of budgetary estimate of the proposed project approved by Yunnan DRC.



## **RESPONSE FROM THE DOE**

**EB 44, Annex 3, VVM version 01 paragraph 18 (c) states** “Transparency requires DOEs to: Clearly identify changes made to documentation.”

The table below shows the changes in input values from GSC PDD to Final PDD.

Parameter	Units	GSC PDD	Data Source	Final PDD	Data Source
Total Static Investment	Million Yuan	<b>593.54</b>	FSR, Page 7 Chapter 13	<b>854.96</b>	The approval letter for the revised investment of the proposed project
Annual output	MWh/year	<b>562,800</b>	FSR ,Page1 Chapter 1	<b>571,600</b>	FSR ,Page1 Chapter 14
Averaged Electricity Tariff (Excluding VAT)	Yuan/kWh	0.1752	FSR ,Page5 Chapter 14	0.1752	FSR ,Page5 ,Chapter 14
O&M Costs	Million RMB	<b>534.837</b>	FSR, Page 9 Chapter 14	<b>656.01</b>	Calculated (IRR File)
IRR	%	<b>7.10</b>		<b>6.50</b>	

These changes can be substantiated as follows:

### **TOTAL STATIC INVESTMENT**

The value of total static investment of **593.54** Million Yuan mentioned in the PDD submitted for GSC was erroneously taken directly from the approved FSR (IRL No. 92). The correct figure ought to have been **690.2929** Million Yuan as indicated in the FSR (IRL No. 92).

However, the value of total investment of **854.96 Million Yuan** in the final PDD submitted for registration was revised based on the approval letter for the revised investment of the proposed project approved by Yunnan DRC (IRL No. 31).

The IRRs calculated with the total static investment of 593.54 Million Yuan in the FSR is 7.1%, which was submitted for GSC while the IRRs calculated with the total static investment of 854.96 Million Yuan in the approval letter for the revised investment of the proposed project is 6.41%, which was submitted for registration.

### **ANNUAL OUTPUT**

The FSR mentions two figures for electricity output. The value of 571600MWh is the theoretical electricity generation and 562800MWh is the net power expected to be fed into the grid, after considering the coefficient of effective electricity generation of 99% and the auxiliary consumption and losses of 0.55% (IRL No. 90). 562800MWh is mentioned in the GSC PDD but

571600MWh is mentioned in the final PDD for conservative reasons in the calculation of IRR. This change is therefore considered appropriate.

### **O&M Cost**

According to the *Economical Assessment Method and Parameters for Construction Project (3rd edition)* issued by NDRC and Ministry of Construction of China, O&M cost should be calculated as follows:

OPERATING COST = MAINTENANCE FEE + SALARY AND WELFARE FEE + MATERIAL AND OTHER COST + INSURANCE FEE

The change in O&M cost mentioned in GSC PDD compared with final PDD is mainly due to the increase in the total investment with the fixed rates of Maintenance, insurance premium and other relevant parameters.

The GSC PDD also contained some errors due to the fact the CDM manager of the proposed project in China Fulin Windpower Development Corporation was short of CDM experience on hydropower projects. These errors were corrected in the course of the validation process and the corrections reflected in the final PDD submitted for registration.

The DOE also validated the possible impact on the financial attractiveness of the project due to variations in the above mentioned parameters used in the investment analysis. A fluctuation of  $\pm 10\%$  for the parameters has been considered by the project participant.

If all of the above parameters would fluctuate between -10% and 10%, the IRR of **Yunnan Diqing Jisha Hydropower Project** will not be able to exceed the 8% benchmark. This means that the fluctuation, within a reasonable range, of the main parameters will not influence the conclusion on the investment decision: which is that the **Yunnan Diqing Jisha Hydropower Project** is not financially attractive without revenues from the sales of CERs generated by the project.

The DOE can confirm that the sensitivity analysis has been conducted according to EB 51, Annex 58, paragraph 17 & 18.

### **REQUEST NO. 3:**

**The DOE is requested to further explain how the proposed tariff for the project activity has been determined, as with the application of the highest tariffs issued for similar projects in the province, the project IRR crosses the benchmark.**

### **RESPONSE FROM THE PROJECT PARTICIPANT**

To prepare the FSR of the proposed project, the project owner had two ways to determine the expected tariff.

Method (1): The third parties (The Designing Institutes) will assess the tariff for the project according to the industrial standard (here refers to the basic return rate of 8% for power sector), when the essential information of expected tariff is unavailable or the estimation of the tariff is uncertain at all. The project owner will be informed that only applying a tariff that is equal to or higher than the calculated tariff, which is acquired through the above estimation process, can the project reach or exceed the basic return rate of the industrial standard and receive financial attractiveness. The key point of this assessed tariff lies in offering a critical point of Profit and Loss for the proposed project.

Method (2): If the third parties (The Designing Institutes) are able to make appropriate judgment on determining the tariff according to their technical experience or local wind power situations, the professional designers will decide the tariff with economic feasibility in the project FSR on the basis of referring to the tariff level of similar projects which was agreed on in the PPA (the Power Purchase Agreement signed between the project owner and grid company) or the guiding tariff provided by relevant government.

Firstly, the project owner used Method (1) to assess the calculated tariff for the proposed project.

Secondly, after comparing the calculated tariff of 0.206 Yuan/ kwh without VAT with the tariff level of 0.1709Yuan/kWh without VAT of similar projects issued by government in 2003, the project owner found the calculated tariff was higher than the tariff level of similar projects. In year 2003, the tariff level of similar projects was 0.1709Yuan/kWh without VAT shown in the public documents (Dezhengfa[2003]367 and Dehongfa[2003]4 issued by the government).

There upon, the project owner referred to the tariff level of similar projects to determine the expected tariff of 0.1752 Yuan/kWh without VAT for the proposed project in the FSR. As shown in Table 5, the tariff of the proposed project is conservative in 2004.

However, the tariff of 0.1838 Yuan/kWh without VAT (0.215Yuan/kWh with VAT) in the governmental document (Yunfagaijiage [2006]28) and in the PPA had been obtained after the CDM consideration and the starting dates of the proposed project. Therefore, the project owner applied the tariff in the FSR to estimate the financial analysis in the PDD.

After obtaining the tariff of 0.1838Yuan/kwh without VAT in the PPA, the project owner re-checked the IRR of proposed project and found that the IRR of 6.91% was still lower than benchmark (8%). Moreover, the tariff of 0.1752 Yuan/kwh without VAT in the FSR was still used in final PDD submitted for registration, which is in line with Para 111(a), (b) of VVM.

According to the statistics for similar hydropower projects with the capacity over 50MW (with UNFCCC Reference Numbers) in Yunnan Province shown in Table 5, only project "Yunnan Whitewaters Hydropower Development Project", a set of three cascade hydropower stations

with the total capacity of 78 MW, is with the VAT rate of 6%, while all the other projects are with the VAT rate of 17%<sup>6</sup>.

Based on the document “VAT rate-Notice on VAT Policy on hydropower projects” issued by Ministry of finance in 1993, 1994 and in 2009<sup>7</sup>, the VAT rate for hydropower projects with the capacity of equal to and lower than 50MW was 6% in China. However, the VAT rate should be 17% for hydropower projects with the capacity over 50MW. Therefore, although the VAT rate of 6% had been used in the FSR and PDD of “Yunnan Whitewaters Hydropower Development Project”, the actual tariff and VAT rate should been in line with the approved document and taxation law issued by Ministry of finance.

In summary, according to the statistics for similar hydropower projects with the capacity of more than 50MW (with UNFCCC Reference Numbers) in Yunnan Province shown in the table below, the IRR of the proposed project is 7.22% with the highest tariff of 0.1887 Yuan/kwh without VAT, except the project ( Ref No.841) with an incorrect VAT rate.

Ref.	Name	Capacity (MW)	Tariff without VAT in PDD (Yuan/kwh)	VAT Rate (%)	Starting date (year)
841	Yunnan Whitewaters Hydropower Development Project	78	0.2028	6	2007
2133	Nansha Hydro Power Project in Yunnan Province China	150	0.1838	17	2006
2086	Yunnan Gangquhe No.1 Hydro-power Project	60	0.1838	17	2006
2151	Yunnan Leidatan 108MW Hydro-power Project	108	0.1578	17	2005
2073	Yunnan Dayingjiang Meng'e Hydro Power Station	99	0.125	17	2004
2580	Yunnan Yunpeng Hydropower Project	210	0.184	17	2005
2837	Weiyuan River 72MW Hydropower Project in Jinggu County Simao District Yunnan Province, China	72	0.1698	17	2005
2877	Yunnan Sinanjiang Hydropower Project	201	0.1887	17	2005
2852	Yunnan Saizhu Hydropower Project	102	0.1769	17	2005
1930	Yunnan Dehong Nongling Hydro-power Project	180	0.1838	17	2006
	<b>The proposed project</b>	<b>120</b>	<b>0.1752</b>	<b>17</b>	<b>2004</b>

For hydropower projects in China, the tariffs are different during high flow period, lower water period and normal river flow period respectively. In Yunnan province, the distinct tariffs for hy-

<sup>6</sup> VAT rate-Notice on VAT Policy on hydropower projects issued by Ministry of finance in 1993,1994 and 2009

<sup>7</sup> Notice on VAT Policy regarding Some Resources Utilization and Other Products issued by Ministry of Finance and State Administration of Taxation in 1993, 1994 and 2009. In the documents, the vat rates are 17% for Some Resources Utilization and Other Products, except hydropower projects with the capacity of equal to and lower than 50MW. For hydropower projects with the capacity of equal to and lower than 50MW the VAT rate is 6% in China.

dropower stations with a total installed capacity over 50MW that transmit electricity are 0.215 Yuan/kWh with VAT in May and November, 0.19 Yuan/kWh with VAT from June to October, and 0.24 Yuan/kWh with VAT from January to April and December, with an weighted average tariff of 0.215 RMB/kWh with VAT (time weighted)<sup>8</sup>.

Therefore, the tariff of 0.24 Yuan/kWh with VAT (0.2051 Yuan/KWh without VAT) is only the tariff for hydropower projects in high flow period, not the highest tariff for hydropower projects in Yunnan.

## **RESPONSE FROM THE DOE**

### **HOW THE ELECTRICITY TARIFF IS DETERMINED:**

In preparing the Feasibility Study Report, project IRR is usually calculated backwards using the industry standard Internal Rate of Return – also known as the benchmark. This is done by a contracted third party provided that not enough tariff information is available to make a prediction. If there is tariff information in the region then this is used.

In year 2003, the tariff level of similar projects in Yunnan Province was 0.1709Yuan/kWh without VAT as shown in the public available documents (Dezhengfa[2003]367 and Dehongfa[2003]4. Based on these documents the tariff for this project activity was derived as 0.1752 Yuan/kWh without VAT as indicated in the FSR.

According to **Illumination letter for tariff of Jisha Hydropower project by Yunnan Power Grid Company** issued on February 23, 2010 (IRL No. 88) *“Based on the regulations of hydropower tariff issued by Development and Reform Commission of Yunnan Province, the subsidy from Hydropower projects of 0.0033 Yuan/kWh (including tax) is used to promote earlier shut-down of small thermal power plants and obtaining reimbursement; and all hydropower companies, applying exceptional tariff standard, share the cost of 0.03 Yuan/kWh before March 31st, 2009. .... the benchmark tariff of Jisha hydropower project, on the grounds of Tariff Guidance Document promulgated by Development and Reform Commission of Yunnan Province, is 0.215Yuan/kWh (including tax). However, due to the reimbursement regulation after the shut-down of thermal power plants, the practical tariff, from January to March in 2009, is 0.1817 Yuan/kWh (including tax) and 0.2117 Yuan/kWh after April, 2009.”*

In other words the tariff should be **0.215-0.0033-0.03=0.1817** including VAT (from January 2008 to March 2009) and **0.215-0.03=0.2117** including VAT (after April 2009) after reimbursement.

However, the tariff of **0.1838 Yuan/kWh** without VAT (**0.215Yuan/kWh** with VAT) in the governmental documents such as the **Guidance tariff for Hydropower projects with the capacity of more than 50MW in Yunnan** issued by Yunnan DRC on 6 January 2006 (IRL No. 71), the **Regulating issue related to price unbalance of the China Southern Power Grid** issued by National Development and Reform Committee on June 8, 2004 (IRL No. 89) and in the **Power Purchase Agreement** signed with Yunnan Power grid company on March 27, 2009 (IRL No. 73) was available after the investment decision and the starting dates of the proposed project.

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<sup>8</sup> Notice on trial Electricity Tariff Provision for Newly Constructed Hydropower Stations during Flood and Drought Periods (Yunfagaijiage [2006]28”). Note: Calculation:  $0.215 \times (2/12) + 0.19 \times (5/12) + 0.24 \times (5/12) = 0.215$  Yuan/kWh with VAT, i.e, 0.1838 Yuan/kWh without VAT

Therefore, the project owner applied the tariff **0.1752 Yuan/KWh** (without VAT) indicated in the FSR in the IRR calculation whose result is presented in the PDD.

Applying the tariff of 0.1838Yuan/kwh without VAT in the PPA in the IRR calculation gives an IRR of 6.91% which is still lower than benchmark of 8%. The PP, however, maintained the tariff of 0.1752 Yuan/kwh without VAT in the FSR in the final PDD submitted for registration since it was valid tariff at the time of the investment decision according to VVM paragraph 111(a) and (b).

According to the document **Notice on VAT Policy on Hydropower Projects** (IRL No. 82) issued by the Ministry of finance in 1993, 1994 and 2009, the VAT is 6% for hydropower projects with capacity equal or lower than 50MW in China and 17% for hydropower projects with capacity above 50MW. This VAT rate is in line with those of similar hydropower projects with the capacity more than 50MW in Yunnan Province (IRL No. 86).

The DOE has also been analyzing the recent trend at EB concerning tariffs. Our research has revealed the following tariffs in Yunnan Province which will be applied to this project activity in order to test its additionality.

The request never made mention of any highest tariff in the region in question so the DOE had to focus its research on published hydropower projects in Yunnan Province and on published guidelines and clarifications on tariff by the government. The different tariffs and the corresponding IRR figures obtained with 100% coefficient is summarized in the table below.

Tariff (Including VAT)	Source (IRL No.)	IRR with 571 600 MWh (100 % Coefficient)	Comments
0.2150	PPA (IRL No. 73)	6.93 %	Before Reimbursement of subsidy
0.1817	IRL No. 88	5.16 %	After Reimbursement or subsidized (Actual Tariff)
0.1920	IRL No. 85	5.72 %	Invoice before subsidy in flood season
0.2050	FSR (IRL No. 7)	6.41 %	Derived Tariff by third party used in PDD
0.1900	IRL No. 71 & 89	5.62 %	For flood season (from June to October) with more power generation
0.2150	IRL No. 71 & 89	6.93 %	Basic Tariff for normal seasons; taking both seasons into account
<b>0.2400</b>	<b>IRL No. 71 &amp; 89</b>	<b>8.18 %</b>	<b>For dry season (from December to April) with less power generation</b>

The results show that all the tariffs will produce acceptable IRR results which are below the benchmark but for the dry season tariff which gives an IRR of **8.18 %** which is clearly above the 8% benchmark.

With these results the DOE has to decide whether this project is additional and therefore should be registered as a CDM project activity or whether it has failed the additionality test and as a result should not be registered as a CDM project activity.

Based on our best judgment and on our sectoral expertise and also on our understanding of the energy sector in China, and on the evaluation of the documentation provided; and based on the cross check made with publicly available information, the DOE is able to recommend that this project activity can be registered as a CDM project activity.

#### **REQUEST No.4:**

**The DOE is requested to validate the prior consideration of CDM in accordance with the VVM paragraph 100 considering: (a) a turbine purchase contract was signed (2 July 2004, VR, p72) prior to the CDM prior consideration and project starting dates (27 August and 21 October 2004, respectively); and (b) the gap of almost 3 years between the project starting date and the CDM consultancy contract (3 Jun 2007).**

#### **RESPONSE FROM THE PROJECT PARTICIPANT**

According to the Para 67 of EB41 meeting report, 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.”

As for the proposed project, the purchase contract of water turbines was signed on 7 December 2004, not 2 July 2004 mentioned in VR and the construction contract was acquired on 21 October 2004. Moreover, the proposed project seriously considered CDM on 27 August 2004. After that, the continuing and real actions taken to support the CDM status for the proposed project between the project starting date (21 October 2004) and the CDM consultancy contract (3 June 2007) are listed in the table below (PDD, page 11)

No.	Date	Description
1	27/08/2004	Directorate decision of the proposed Project For CDM project development
2	11/09/2004	The intent letter of CDM development between Guodian Diqing Shangri La Electricity Generation Co., Ltd and China Fulin Windpower Development Corporation
3	21/10/2004	The construction contracts of the project (as the starting date of the project, in line with the definition of the starting date in the CDM Glossary of terms)
4	07/12/2004	the purchase contract of water turbines
5	30/03/2005	The project owner attended the “Circulation Mechanism Research on CDM in China by NDRC <sup>9</sup> ” to study the apply process of CDM and the supports from CDM.

<sup>9</sup> <http://cdm.ccchina.gov.cn/web/NewsInfo.asp?NewsId=223>

6	21/12/2005	Directorate decision of the proposed Project to quicken the application of CDM project development
7	05/09/2006	The project owner attend the “CDM Training about renewable energy projects by Longyuan(Beijing) carbon asset management technology Co.,ltd” to prepare for the following work about CDM.
8	03/06/2007	CDM development contract between Guodian Diqing Shangri La Electricity Generation Co., Ltd and China Fulin Wind power Development Corporation
9	14/09/2007	The LoI signed by the project owner and the Kommunalkredit Public Consulting GmbH
10	11/2007	CDM Validation contract between Guodian Diqing Shangri La Electricity Generation Co., Ltd and TUV SUD China
11	02/2008	The LoA signed by the NDRC of the People's Republic of China
12	19/11/2008	The LoA signed by the Kommunalkredit Public Consulting GmbH

## **RESPONSE FROM THE DOE**

**EB 49, Annex 22: GUIDELINES ON THE DEMONSTRATION AND ASSESSMENT OF PRIOR CONSIDERATION OF THE CDM, paragraphs 7 & 8 state** “Assessment of real and continuing actions shall be validated by the DOE and the validation should focus on real documented evidence as indicated in paragraph 6 (b), including an assessment by the DOE of the authenticity of the evidence.

*In validating proposed CDM project activities where:*

- (a) There is less than 2 years of a gap between the documented evidence the DOE shall conclude that continuing and real actions were taken to secure CDM status for the project activity;*
- (b) the gap between documented evidence is greater than 2 years and less than 3 years, the DOE may validate that continuing and real actions were taken to secure CDM status for the project activity and shall justify any positive or negative validation opinion based on the context of the evidence and information assessed;*
- (c) The gap between documented evidence is greater than 3 years; the DOE shall conclude that continuing and real actions were not taken to secure CDM status for the project activity.”*

The DOE hereby acknowledge that the equipment purchase contract with code name **GSG/JS-JD-001** was indeed signed on December 07, 2004 and not on July 02, 2004 as mentioned in the cited validation report. This was a typo error, for which we take responsibility, and has been corrected accordingly. We have also discovered that the same document was mentioned in IRL No. 37 and as number 13 in the timeline provided in the PDD.

In the course of the validation process PPs claimed that CDM was just gaining grounds in China especially during 2004-2006. Therefore, CDM related activities implemented by the project participants were mainly focus on attending CDM training and studying information concerning CDM. There were many small meetings with CDM experts but no important milestones were



reached or agreements signed. This explains the time lap (without documented CDM activities) between the project starting date and the first real CDM related activity mentioned in the request question.


However, the DOE was guided by **EB 49, annex 22** which says *“In validating proposed CDM project activities where... the gap between documented evidence is greater than 2 years and less than 3 years, the DOE may validate that continuing and real actions were taken to secure CDM status for the project activity and shall justify any positive or negative validation opinion based on the context of the evidence and information assessed.”*

The DOE could therefore invoke the ‘acceptable’ approach in validating the CDM continuous consideration in cognizant of the fact that the gap between project starting date and first CDM relevant activity was long but less than 3 years.




### **ANNEX 1: INFORMATION REFERENCE LIST (IRL)**


The IRL is a listing of all documents and sources used in the validation report and in this response. All documents have been validated by TÜV SÜD.

Final Report	25-02-2010	Validation of the “Yunnan Diqing Jisha Hydropower Project”  Information Reference List	Page 1 of 6	
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Reference No.	Document or Type of Information
1.	Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 1, dated 15/06/2007. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 2, dated 30/08/2007. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 3, dated 24/09/2007. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 3.1, dated 21/05/2008. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 3.2, dated 20/09/2008. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 3.3, dated 10/12/2008. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 3.3, dated 27/04/2009. Project Design Document for CDM project “Yunnan Diqing Jisha Hydropower Project “, version 3.5, dated 04/11/2009
2.	Consolidated baseline methodology for grid-connected electricity generation from renewable sources, ACM0002, version 7.
3.	Tool to calculate the emission factor for an electricity system ( version01.1 ) ; Tool for the demonstration and assessment of additionality (version 5.2); Tool to calculate project or leakage CO2 emissions from fossil fuel combustion (version02,).
4.	Participant list of on-site interview, signed on Jan. 08th, 2008.
5.	On-site interviews at the project site in Diqing town, Yunnan. P.R China., conducted on Jan. 8th, 2008 by auditing team of TÜV SÜD:  Validation team: Mr. Li Lixin CDM Auditor trainee, TUV SÜD Industrie Service GmbH Ms. Chen Xiaoying CDM Auditor, TUV SÜD Industrie Service GmbH  Interviewed persons: Mr. Guo Yimin General Manager, CDM manager of China Guodian Diqing Shangri-La Generating Co., Ltd. Mr. Li Jun CDM Engineering manager of China Guodian Diqing Shangri-La Generating Co., Ltd. Mr. Li Gang CDM Manager of China Fulin windpower development Corporation. Mr. Zhang Nianwu Project Manager, China Long Yuan Electric Power Group Corp. Mr. Liu Hongrong Chairman of the board of Guodian Diqing Shangri La Electricity Generation Co., Ltd. Mr. XU Hongliang Chairman of the board of China Fulin Windpower Development Corporation Mr. Hu Yizhong Legal representative of Guodian Diqing Shangri La Electricity Generation Co., Ltd
6.	

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Reference No.	Document or Type of Information
7.	Feasibility Study Report for CDM project “Yunnan Diqing Jisha Hydropower Project”. issued by Beijing Guodian Hydropower Engineering Co., Ltd., dated Dec, 2003.
8.	Approval of Yunnan Diqing Jisha Hydropower Project, issued by Yunnan DRC(2004-100), dated Feb.13th. 2004.
9.	EIA of “Yunnan Diqing Jisha Hydropower Project”(Guohanpingzhengjiazi1015), issued by Beijing Guodian Hydropower Engineering Co., Ltd., dated June, 2004.
10.	Approval of EIA of Yunnan Diqing Jisha Hydropower Project (2004-422), issued by Yunnan EPB, dated Jul. 6 <sup>th</sup> , 2004.
11.	Approval of get into grid of Yunnan Diqing Jisha Hydropower Project, issued by Yunnan Power Grid, dated Dec. 22th.2003.
12.	The business license of Guodian Diqing Shangri-La power generation Co. Ltd. issued by Yunnan Diqing industry and commerce administration, dated Sep. 19 <sup>th</sup> , 2003.
13.	Equipment purchasing agreements for the hydro-turbines and accessory equipment (GSG/JS-JD-001) signed on 7th December 2004. Equipment company:Kunming electrical machine corporation limited.
14.	Questionnaires of stakeholders’ comments. Dated Jul. 1 <sup>st</sup> , 2007 to Jul. 31 <sup>st</sup> , 2007.
15.	Approval of the transfer agreement of forest land for construct of Diqing Jisha Hydropower project (Yunlinzhengzi2004-76), issued by Yunnan forest bureau, dated.Mar. 2nd , 2004.
16.	Approval of the transfer agreement of soil for construct of Diqing Jisha Hydropower project (Diguotuzi2004-19), issued by Diqing soil source bureau, dated.Mar. 25th , 2004.
17.	The geologic estimate advice for Diqing Jisha Hydropower project on the channels by the local geological department,dated July 21 <sup>st</sup> 2004
18.	The approval letter for Diqing Jisha Hydropower project by Environmental Protection Bureau of Yunnan Province, dated Sep. 16th 2004
19.	Directorate meeting of Diqing Jisha Hydropower project For CDM project development ,dated Aug,27 <sup>th</sup> ,2004
20.	The intent letter of CDM development between Guodian Diqing Shangri La Electricity Generation Co., Ltd and China Fulin Windpower Development Corporation, dated Sep.11st, 2004.
21.	CERs purchase agreement, signed between Kommunalkredit Pubic Consulting GmbH and China Guodian Diqing Shangri-La Generating Co., Ltd. signed Sep., 2007.
22.	Yunnan Diqing Jisha Hydropower Project General Ichnography (1:10000).

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Reference No.	Document or Type of Information
23.	Approval of programmatic report of hydropower resource development of Diqing Shuoduohe River. Issued by Yunnan program bureau. (Yunjinengjiao(92)1455). Dec.3 <sup>rd</sup> 1992.
24.	Approval of Diqing Jisha Hydropower Project proposal (Yunjijichu2003-1065). Issued by Yunnan development program committee. Sep.19 <sup>th</sup> , 2003.
25.	Approval of Water and Soil protection of Diqing Jisha Hydropower Project (Yunshuishuibao2004-27), by Yunnan Water and Soil protection Bureau at Mar. 4 <sup>th</sup> 2004.
26.	The approval of geological disaster fatalness evaluation for construct of Diqing Jisha Hydropower Project (Yunguotuzihuan2004-12), issued by Yunnan soil resource bureau at Jan. 8 <sup>th</sup> 2004.
27.	The approval of mineral resources investigation of Diqing Jisha Hydropower Project (Yunguotuzichu2004-1), issued by Yunnan soil resource bureau at Jan.9 <sup>th</sup> 2004.
28.	Part of bank loan agreement signed with Agriculture bank of China Yunnan branch bank(Xiangdiansi 2006-9), 737,000,000RMB, dated Feb. 15 <sup>th</sup> , 2006.
29.	The experts ' comments for the revised investment of Yunnan Jisha hydropower plant; August 19, 2004
30.	The statistical analysis of O&M cost for hydropower plants in China, in which O&M cost for hydropower plants is about 0.04-0.09Yuan RMB/kWh. ( <a href="http://www.hnpower.com/country/info.asp?id=1101">http://www.hnpower.com/country/info.asp?id=1101</a> )
31.	The experts ' comments for the FSR of Yunnan Jisha hydropower plant issued on Jan.15 <sup>th</sup> 2004
32.	The notification for the tariff of new constructed hydropower turbines issued by Development and Reform Commission of Yunnan province on Jan.6 <sup>th</sup> 2006.
33.	Provisional regulations on enterprise income tax of the people's republic of China.
34.	Provisional regulations on Value Added Tax (VAT) of the people's republic of China.
35.	The construction contracts of the project,dated on Oct.21 <sup>st</sup> 2004
36.	The project construction permission for the proposed Project, dated on Oct.27 <sup>th</sup> 2004
37.	Equipment purchasing agreements,dated on Dec.7 <sup>th</sup> 2004
38.	CDM development contract between Guodian Diqing Shangri La Electricity Generation Co., Ltd and China Fulin Windpower Development Corporation,dated on June 3 <sup>th</sup> 2007
39.	The LoI signed by the project owner and the Kommunalkredit Public Consulting GmbH, dated on Sept.14 <sup>th</sup> 2007
40.	LoA_China_Yunnan Diqing Jisha.pdf signed by the NDRC of the People's Republic of China, dated on Feb.2008
41.	LoA_ CDM Project Activity “Yunnan Diqing Jisha_Austria.pdf by Austrian DNA (Lebensministerium), dated on Nov.19 <sup>th</sup> 2008

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Reference No.	Document or Type of Information
42.	The development report for solar PV in China ( <a href="http://finance.people.com.cn/GB/1038/59942/59949/6294546.html">http://finance.people.com.cn/GB/1038/59942/59949/6294546.html</a> )
43.	The industrial analysis for biomass technology in china by Economy Reference Newspaper( <a href="http://jckb.xinhuanet.com/cjxw/2007-11/27/content_75467.htm">http://jckb.xinhuanet.com/cjxw/2007-11/27/content_75467.htm</a> )
44.	(IRR_Yunnan Diqing Jisha Hydropower preject.xls) IRR calculation sheet
45.	EF calculation sheet
46.	<a href="http://cdm.ccchina.gov.cn/web/index.asp">http://cdm.ccchina.gov.cn/web/index.asp</a> .
47.	China Electric Power Yearbook 2007
48.	Benchmark_8% for IRR of the proposed project.pdf
49.	Approval letter for the revised investment of the proposed project.pdf
50.	The approval letter for the FSR of the proposed project by Development and Reform Commission of Yunnan province on 13rd Feb.2004.
51.	14 Economic assessment of FSR.pdf
52.	Notice Strictly Prohibiting the Installation of Fuel-fired Generation with the Capacity of 135MW or below decree no. 2002-6 <a href="http://nyj.ndrc.gov.cn/nyfjb/nyfjb4/nyfjb43/nyfjb432/t20070112_110563.htm">http://nyj.ndrc.gov.cn/nyfjb/nyfjb4/nyfjb43/nyfjb432/t20070112_110563.htm</a>
53.	Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects.pdf <a href="http://cdm.unfccc.int/UserManagement/FileStorage/0H24DGX7IPLSW9EAQYBUCR1JFM58KZ">http://cdm.unfccc.int/UserManagement/FileStorage/0H24DGX7IPLSW9EAQYBUCR1JFM58KZ</a>
54.	References for common practice.pdf ( <a href="http://old.yjx.gov.cn/new/xxxs.asp?id=20030218153335">http://old.yjx.gov.cn/new/xxxs.asp?id=20030218153335</a> )
55.	Yunnan Diqing Jisha Hydropower Project-TUV-clean.doc
56.	Approval letter for the migration allocation report of the proposed project.pdf
57.	<a href="http://cdm.unfccc.int/UserManagement/FileStorage/AM_CLAR_QEJWJEF3CFBP1OZAK6V5YXPQKK7WYJ">http://cdm.unfccc.int/UserManagement/FileStorage/AM_CLAR_QEJWJEF3CFBP1OZAK6V5YXPQKK7WYJ</a>
58.	The stakeholders invitation information for Yunnan Diqing Jisha hydropower projec.pdf
59.	National Bureau of Statistics of China, 2006 ( <a href="http://www.stats.gov.cn/english/statisticaldata/yearlydata/">http://www.stats.gov.cn/english/statisticaldata/yearlydata/</a> )
60.	Hydropower and Sustainable Development in China ( <a href="http://www.un.org/esa/sustdev/sdissues/energy/op/hydro_luyoumei.pdf">http://www.un.org/esa/sustdev/sdissues/energy/op/hydro_luyoumei.pdf</a> )
61.	Review of VAT rate-Notice on VAT Policy
62.	Yunnan FSR develop rules.pdf <a href="http://www.cas.ac.cn/10020/10127/2007/127260.htm">http://www.cas.ac.cn/10020/10127/2007/127260.htm</a>
63.	Yunnan investment approving measure.pdf <a href="http://www.34law.com/lawfg/law/1797/2820/print_890938468989.shtml">http://www.34law.com/lawfg/law/1797/2820/print_890938468989.shtml</a>
64.	China outpaces U.S. in cleaner coal-fired plants By Keith Bradsher, NYT (May 11, 2009) <a href="http://news.cnet.com/China-outpaces-U.S.-in-cleaner-coal-fired-plants/2100-13840_3-6249629.html">http://news.cnet.com/China-outpaces-U.S.-in-cleaner-coal-fired-plants/2100-13840_3-6249629.html</a>

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Reference No.	Document or Type of Information
65.	Pollution From Chinese Coal Casts a Global Shadow June 11, 2006 <a href="http://www.nytimes.com/2006/06/11/business/worldbusiness/11chinacoal.html">http://www.nytimes.com/2006/06/11/business/worldbusiness/11chinacoal.html</a>
66.	2008 Baseline Emission Factors for Regional Power Grids in China: <a href="http://cdm.ccchina.gov.cn/english/NewsInfo.asp?NewsId=3250">http://cdm.ccchina.gov.cn/english/NewsInfo.asp?NewsId=3250</a>
67.	Yunnan FSR develop rules.pdf
68.	Yunnan investment approving measure.pdf <a href="http://www.34law.com/lawfg/law/1797/2820/print_890938468989.shtml">http://www.34law.com/lawfg/law/1797/2820/print_890938468989.shtml</a>
69.	CDM Training about renewable energy projects by Longyuan(Beijing) carbon asset management technology Co.,Ltd
70.	The statistical analysis of O&M cost for hydropower plants in China
71.	Guidance tariff for Hydropower projects with the capacity of more than 50MW in Yunnan issued by Yunnan DRC on 6 Jan.2006 ,No[2006]28 <a href="http://wsmlp.xxgk.yn.gov.cn/newsview.aspx?id=38780">http://wsmlp.xxgk.yn.gov.cn/newsview.aspx?id=38780</a>
72.	Invoice for the proposed project.
73.	PPA for Jisha Hydropower project signed with Yunnan Power grid company on March 27, 2009
74.	Newsletter for the training “Circulation Mechanism Research on CDM in China by NDRC” in April 2005
75.	Newsletter on CDM experts to do technological review on 20 August 2005
76.	Newsletter on the on-site visit of several CERs buyers, December 11, 2005
77.	Invitation letter by Longyuan (Beijing) carbon asset management technology Co., Ltd on September 19, 2006
78.	Confirmation letter for annual output for Jisha Hydropower project by Yunnan power grid company, February 15, 2010
79.	Rainfall in Yunnan province in 2009. <a href="http://www.ynshangji.com/news/?2529.html">http://www.ynshangji.com/news/?2529.html</a> website date 20/02/2010
80.	Budgetary Chapter of the proposed project that is a part of FSR(Chapter 13)
81.	The tariff reference of similar hydropower projects in Yunnan
82.	Notice on VAT Policy on hydropower projects issued by Ministry of finance in 1994 and 2009.
83.	Notice and Minutes of Meeting on the stakeholders’ meeting on CDM development; November 20, 2006 and December 09, 2006
84.	Minutes of directorate meeting to determine CDM consult company and CERs buyer; February 05, 2007
85.	Power Sales Invoices for July and August 2009,
86.	Hydropower Projects in Yunnan.xlsx
87.	The documents for the tariff (Yunjingnengyuan[2008]444 and Yunjingnengyuan[2008]485).
88.	Illumination letter for tariff of Jisha Hydropower project by Yunnan Power Grid Company issued on February 23, 2010
89.	Regulating issue related to price unbalance of the China Southern Power Grid issued by National Development and Reform Committee (FaGaiJiaGe [2004] No. 1037) Dated June 8th,2004 Data Source: <a href="http://www.gdpi.gov.cn/special/fenju/zhifa/fg2004-">http://www.gdpi.gov.cn/special/fenju/zhifa/fg2004-</a>

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Reference No.	Document or Type of Information
	1037.htm
90.	FSR,Chapter 1 summary of the proposed project.
91.	FSR, Chapter 14 Economic assessment
92.	FSR, Chapter13 budgetary Chapter of the proposed project.
93.	Review of VAT rate-Notice on VAT Policy