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Our / Your Reference	Contact	Direct Dial	Date
	Rainer Winter E-Mail: rwinter@tuev-nord.de	Phone: -3329 Fax: -2139	22.09.2008

Request for Review
"28MW Jinkouba Hydropower Project" (1633)

Dear Sir/Madam,

Please find below the response of the TÜV NORD JI/CDM Certification Program to the request for review for the above mentioned project no. 1633.

If you have any questions do not hesitate to contact us.

Yours sincerely,

TÜV NORD JI/CDM Certification Program

Rainer Winter

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Request for Review (1-1)	
Issue raised by EB Members / DNA	*Further clarification is required on how the DOE has validated the suitability of the input values to the investment analysis, as per the guidance of EB 38 paragraph 54.*
Response of DOE	1. The validation team has checked in detail the timeline of the approval process in order to assess the likeliness of input value changes during the time period between the finalization of the project feasibility study (FSS) and the start of the project. As time period from FSS to project starting date is 1 year i. e. from Oct. 2004 to Nov. 2005 the validation team has concluded that material changes during this time period are not very likely thus the input estimations in FSS are still valid at the time of project start. 2. The FSS is prepared by the third party *Institute of Reconnaissance and Design of Sinohydro Engineering Bureau No.7.* The Sinohydro Engineering Bureau No.7 is an ISO9002 quality control system certified organization who was founded in 1965 and has a skilful expertise in hydropower project design and construction. The Institute is qualified to compile design reports for hydropower projects. It has obtained second grade qualification in water resources industry (reservoir pivot, watercourse renovation, city flood control) and electric power industry (hydropower) issued by the Ministry of Construction. The validation team has further checked the FSS approval process. The FSS has been approved by local Development and Reform Committee on 03. Oct. 2004. The input values indicated in FSS were assessed as appropriate by the government. 3. For details of the assessment of the electricity tariff, O & M cost and other financial parameters pl. refer to the attached document “Financial Analysis”. If this information is not sufficient to close the request for review, we appoint Mr. Li Yong Jun as our contact person: Mr. Li Yong Jun CDM project manager China Room 11C, East Ocean Centre II, No. 618 Yan An Rd. (E), Huangpu District, Shanghai China 200001 Tel: +86 (0)21 53855353-259 Fax: +86 (0)21 53855369

Request for Review (1-2)	
Issue raised by EB Members / DNA	*The DOE is requested to clarify how they have validated that the use of fixed input values (tariffs and O&M cost) in the IRR calculation is appropriate in the context of the project activity.*

Response of DOE

Tariff

1. Considering the electricity tariff and the Operation and Maintenance Costs as fixed values in accordance with the document "Economical Assessment and Parameters for Construction Project, 3rd edition". This is the basis for the financial analysis as indicated in the feasibility study report, which is the basis for considering CDM benefits. Due to this guideline which is issued and developed by the Chinese government, a price escalation over the project lifetime is not foreseen.

2. The tariff is strictly regulated by relevant governmental authorities in China. Usually the different provincial Price Stabilization Offices guide the grid tariff of the respective province; if necessary the National Development and Reform Commission (NDRC) also regulates the tariff of regional grid. Thus the price is not established on market mechanisms rather than on strict regulation. During the last 10 years, before the investment decision was taken by the project owner, the tariff rate of hydropower plants in Gansu province was fixed at 0.16 RMB Yuan/kWh (Including VAT) (see table below). In 2005 the tariff changed to 0.18 RMB Yuan/kWh (Including VAT). However, in the financial analysis of the proposed project the grid tariff is assumed to be 0.22 RMB Yuan/kWh. This price is just applicable to the year 2005 and to a certain amount of electricity supplied to the grid based on contractual agreements between the grid company and the project owner. For all subsequent years the price 0.18 RMB Yuan/kWh will most likely to be achieved. As the much higher price of 0.22 RMB Yuan/kWh is applied over the whole project lifetime, the validation team is the opinion that an increase rate is not necessary.

Tariff (including VAT)	Applicability	period of validity	Source
0.16 RMB Yuan/kWh	All Small hydropower project	1996-2004	Decree No.: Gan Price Industry [1996]20
0.18 RMB Yuan/kWh	All Small hydropower project	Since 2005	Decree No.: Gan Price Commerce [2004]352
0.22 RMB Yuan/kWh	a portion of Small hydropower project	Only 2005	Decree No.: Gan Price Commerce [2005]312

O&M costs

1. The O&M costs are assumed to be about 2 % of the total investment. This is already conservative, as usually the costs can be assumed to be 1 - 4 %.[1]

2. The validation team considered publicly available sources of information such as Statistic data and National economic evaluation code, to confirm the appropriateness of O & M cost.

3. The possibility of O & M cost change (variation range in sensitivity analysis) is counterchecked by statistic information:
   Material prices as well as average costs for employees have been increasing during the past years.
   Thus the fixed amount O & M costs in IRR calculation along with the 10 %

[1] Cp. Renewable Energy – Technology, Economics and Environment, page 376, 2007

	variation range in sensitivity analysis is reasonable and conservative. In conclusion the validation team is the opinion that increasing/decreasing prices over the project lifetime is not appropriate as the assumptions are already conservative. If this information is not sufficient to close the request for review, we appoint Mr. Li Yong Jun as our contact person: Mr. Li Yong Jun CDM project manager China Room 11C, East Ocean Centre II, No. 618 Yan An Rd. (E), Huangpu District, Shanghai China 200001 Tel: +86 (0)21 53855353-259 Fax: +86 (0)21 53855369

Request for Review (1-3)	
Issue raised by EB Members / DNA	*Further clarification is required why the tariff is not included in the sensitivity analysis and how the DOE has validated that an increase is unlikely to occur.*
Response of DOE	1. As the selected sensitivity parameter "electricity output" is calculated as electricity supplied to the grid multiplied with the electricity tariff, the variation curve of tariff is identical with the trend of output variation. Thus the variation of the tariff as provided in the IRR calculation submitted for registration, is included and assessed in the final validation report. Therefore it was included in the sensitivity analysis. 2. During the validation, the most conservative applied tariff for the proposed project is 0.22 RMB/kWh (including VAT). Also considering the variation of the electricity tariff in Gansu province in past 10 years, the increase of 8.3 % (reaching the benchmark) is also not most likely. If this information is not sufficient to close the request for review, we appoint Mr. Li Yong Jun as our contact person: Mr. Li Yong Jun CDM project manager China Room 11C, East Ocean Centre II, No. 618 Yan An Rd. (E), Huangpu District, Shanghai China 200001 Tel: +86 (0)21 53855353-259 Fax: +86 (0)21 53855369

Request for Review (1-4)	
Issue raised by EB	*Further clarification is required on why the DOE has limited the common practice analysis to projects commissioned after 2000 and the capacity range of 20-250 MW.*

Members / DNA	
Response of DOE	1. The common practice was assessed according to the requirements as per additionality tool (ver.03) which was applicable during validation. 2. The choice of Gansu province to compare the proposed project with other projects is assessed to be appropriate as the invest environment such as favourable policy or tariff scale varies from province to province in China. 3. The limit of the common practice analysis to projects commissioned after 2000 is due to the consideration of reformation of electric power sector in China in 2002[2]. After 2002 private capital providers were allowed to invest in hydropower development. As the proposed project was developed by a private entity and as it was commissioned after 2002, it must be seen in the context of the new regulatory frame. Before 2000 hydropower plants were commissioned by governmental organisations. The investment climate was different compared to the situation after the reform. 4. The limit of the common practice analysis to the capacity range of 25-250 MW (not 20-250 MW as indicated in the review comments) is determined according to the classification of hydropower projects in China[3]. As the capacity of proposed project (28 MW) belongs to the defined mid-scale (25 - 250MW) scope, the chosen limit is reasonable to identify and analyze similar projects with the similar scale considering the host county industry policy. If this information is not sufficient to close the request for review, we appoint Mr. Li Yong Jun as our contact person: Mr. Li Yong Jun CDM project manager China Room 11C, East Ocean Centre II, No. 618 Yan An Rd. (E), Huangpu District, Shanghai China 200001 Tel: +86 (0)21 53855353-259 Fax: +86 (0)21 53855369

[2] State Council, Notice on Electric Power System Reform Scheme (No. 5 Guofa [2002])

[3] The classification is Directed by Ministry of Water Resources，the information also can be found in following two websites: http://www.mwr.gov.cn/slbk/20030728/15959.asp http://www.chinawater.net.cn/water-power/content.asp?s=685