Validation Table for Assessment of Financial Parameters

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
Annual electricity generation	74,030	MWh	Preliminary Design Report/ page 362	/PDR/	☒	☒	The value is from Preliminary Design Report, calculated as the project capacity multiplied by annual operation time. The project capacity is 20 MW. The annual operation time is 3701.5 hours. Based on electricity generation data from June 2007 to May 2008, the total electricity generation during that period is only 47,555.02 MWh. Thus applying 74,030 MWh as annual electricity generation in investment analysis is conservative.
Annual power supplied to the grid	68,580	MWh	Preliminary Design Report/ page 362	/PDR/	☒	☒	The value is from Preliminary Design Report, calculated as “annual electricity generation” * “effective electricity rate 0.93” * (1- plant use rate 0.5%). The values of effective electricity rate and plant use rate are default values. Based on electricity sales data from June 2007 to May 208, the total power supplied to the grid is during that period is only 45,587.542 MWh. Thus applying 68,580 MWh as annual power supplied to the grid in investment analysis is conservative.
Total static Investment	22,970	10^4 RMB	Project Evaluation Report/ page 1	/PER/	☒	☒	The value of total static investment is from Project Evaluation Report, which is higher than the total static investment indicated in Preliminary Design Report (19,284.58* 10^4 RMB). However, since the preliminary design report was done in June 2003 and there has been big rise in material price between 2003 and 2006, increase in investment is reasonable. Besides, according to the Audit Report issued by Guangdong Zhengzhong Zhujiang Accounting

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
							Firm in April 2008, the actual total Investment of the project is 28,672* 10^4 RMB, which is higher than the value applied. Thus the total static investment applied is evaluated to be credible.
Original value of Fixed assets investment	23,630	10^4 RMB	Project Evaluation Report/ page 1 IRR calculation Sheet	/PER/ /IRR/	☒	☐	Original value of Fixed assets equals to total static investment plus loan interest in construction period. (Preliminary Design Report/ page 364. Loan interest in construction period is calculated based on total amount of bank loan, investment plan during construction period, and bank loan rate. Bank loan rate is 5.76%, derived from Preliminary Design Report/ page 364.
Electricity tariff (VAT Incl.)	0.42	RMB/kWh	Preliminary Design Report/ page 366	/PDR/	☒	☒	The tariff is derived from approved Preliminary Design Report. It is also cross-checked through Electricity Purchasing and Sales Contract signed in January 2007 [/EPS/]. In EPS, the electricity tariff is 0.432 RMB/kWh, 2.9% higher than the applied value; however it is still not exceeding the 10% variation range. Based on the information above, electricity tariff (VAT Incl.) 0.42 RMB/kWh is valid and conservative.
Annual O&M costs	400.56	10^4 RMB	Preliminary Design Report/ page 365, 366	/PDR/	☒	☒	The O&M consists of payroll, employee welfare, cost of overhaul, other expenses, water charges, insurance for fixed assets, and cost on operation and maintenance of reservoir. The payroll is 384,000 RMB/yr, calculated as the number of employee (32) multiplied by the average annual salary (12,000 RMB/person). The values are from Preliminary Design Report/ page 365. The average annual salary 12,000 RMB/Employee is

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					Correctness of value applied	Appropriateness of information source	Comment
							lower than 18,214 RMB/person, average annual salary of in-position employee in Shaoguan City in Jan-June 2006 (http://www.lechang.gov.cn/zhengwu/ArticleShow.asp?ArticleID=3171), which is conservative. To confirm, based on payroll in November 2008, the employee number is 42 while the calculated average annual salary is 19044 RMB/Employee. Both are higher than the values applied in IRR calculation. The welfare is 153,600 RMB/yr, calculated as 40 % of total value of payroll. The rate 40% is from Preliminary Design Report/ page 365 and is in compliance with China current policy. The cost of overhaul is 2,363,000 RMB/yr, calculated as the original value of fixed assets multiplied by rate of overhaul (1 %). The rate 1 % is from Preliminary Design Report/ page 365. Other expenses are 240,000 RMB/yr, calculated as the installed capacity multiplied by rate of other expenses 12 RMB/KW. The rate 12 RMB/KW is from Preliminary Design Report/ page 366. The water charges is 222,100 RMB/yr, calculated as the electricity generation (74,030,000 KWh) multiplied by the rate of water charges (0.003 RMB/KWh). The rate of water charges is from Preliminary Design Report/ page 365 and is in compliance with China current policy. The insurance for fixed assets is 7868,800 RMB/yr, calculated as the original value of fixed assets multiplied by the rate of insurance (0.25%). The rate 0.25 % is from Preliminary Design Report/ page 365. The above calculations are in compliance with the

Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT		
					Correctness of value applied	Appropriateness of information source	Comment
							requirements defined in the "Project financial evaluation method and parameter" Ver.03, issued by National Development and Reform Committee and National Construction Ministry in 2006. In conclusion the O&M costs are in average only calculated to be about 1.7 % of total investment, the This can be considered as conservative.
Value added tax (VAT)	6	%	Preliminary Design Report/ page 366	/PDR/	☒	☒	The value is derived from the document No.[1994]004, issued by the National Financial Ministry and National Revenue Ministry, which was also confirmed in document [1998]843 and [2006]47 issued by National Revenue Ministry.
City maintenance & construction tax	5	%	Preliminary Design Report/ page 366	/PDR/	☒	☒	5 % of VAT, the value is derived from the document "Project financial evaluation method and parameter" Ver.03, issued by National Development and Reform Committee and National Construction Ministry in July 2006.
Surtax for education expenses	3	%	Preliminary Design Report/ page 366	/PDR/	☒	☒	3 % of VAT, the value is derived from the document "Project financial evaluation method and parameter" Ver.03, issued by National Development and Reform Committee and National Construction Ministry in July 2006.
Income tax rate	33	%	Preliminary Design Report	/PDR/	☒	☒	The value is derived from Corporate Income tax Temporary Terms of People's Republic of China published on 23/12/1993 which is valid until year 2007. (http://www.lawtime.cn/zhishi/sszsglf/xiangguanfagui/20070426/63781.html)
Integrated Depreciation rate	3.33	%	Preliminary Design Report/ page 366	/PDR/	☒	☒	The integrated depreciation rate is from Preliminary Design Report and is evaluated as reasonable.
Installed capacity	20	MW	Preliminary Design Report/ page 364	/PDR/	☒	☒	The capacity is from Preliminary Design Report, and is proved by on-site validation.

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					Correctness of value applied	Appropriateness of information source	Comment
Project Lifetime	30	year	Preliminary Design Report/ page 365	/PDR/	☒	☒	The value is from Preliminary Design Report, and proved by Evidence of the project lifetime, issued by Tianjin Heavy Hydropower Equipment Manufacture Co., Ltd, 11/01/2008 [/EPL/].
Loan interest rate	6.12	%	Preliminary Design Report/ page 366	/PDR/	☒	☒	The value is from Preliminary Design and is evaluated as reasonable.