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Request for Review

Dear Sir or Madame:

Please find below the response to the review formulated for the CDM project with the title “Si-chuan provincial Longchi & Caoyuan 9 MW Small-scale Hydro Power Bundle Project” with the registration number 2071. In case you have any further inquiries, please let us know as we kindly assist you.

Yours sincerely,

Cuiyun Zhang
Carbon Management Service

Enclosures:

Enclosure 1: IRR calculation spreadsheet for substation Longchi
Enclosure 2: IRR calculation spreadsheet for substation Caoyuan

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Response to the CDM Executive Board

Issue 1:

As CAR6 notes that the project had been two-third's completed according to the Board of the project developer, the DOE is requested to confirm what additional evidence was assessed to reach a conclusion that the project had not been substantially concluded before the suspension of construction, and how this evidence was determined to be more authentic and reliable than the minutes of the Board of the project developer

Response from the Project Participant:

The further clarification from the PP on this issue is as below:

There is a misunderstanding caused by translation that the project had been two-thirds completed according to the Board of the project developer. In the context of the meeting minutes, the owner had indicated that the process of the project would lag than initial expected because the geological condition has been altered. So it is incompatible that the owner indicated that the project had been substantially concluded before the suspension of construction in the same minutes. In the construction contract[1], the owner should invest 54 million RMB to complete both Longchi and Caoyuan project. But due to the unexpected situation[2], the project would cost additional 18 million RMB[3]. So the text "project had been completed to two-thirds" does not mean that two-thirds of the construction of the project had been completed, but it means that the initial 54 million RMB investment can only cover the cost to complete about two-thirds of the whole project, and additional 18 million RMB will be required to cover the whole project construction. Because of the lack of financial resources to cover the project cost, the owner decided to apply CDM to mobilize financial resources. The "project had been completed to two-thirds" is a mis-translation that causes the misunderstanding[4].

For the real construction process of Longchi&Caoyuan project, which can be seen from the below figures below:

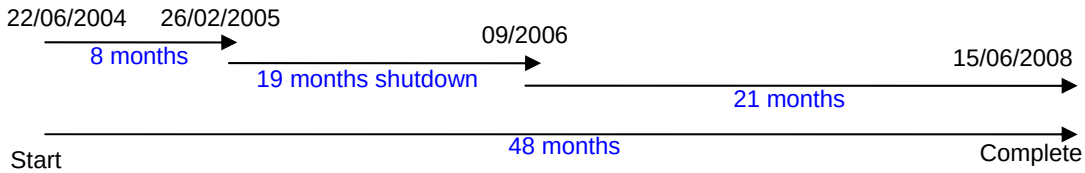

Figure 1Time schedule for the construction of Longchi project

[1] Construction Contract, signed by Sichuan Mingjiang electrolytic Management Plant and Santai County Hydro power Construction field engineering Co., Ltd.– 22nd .Jun ,.2004

[2] Notice of Design changing for Longchi and Caoyuan Project, suggested by the Mianyang City Water Conservancy Power Architecture&Reconnaissance Design Institute–16/07/2005.

[3] Caoyuan&Longchi project increase investment Report, designed by the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd.-25/07/2005

[4] The Minutes of deciding invest the project after consider CDM–15/07/2005

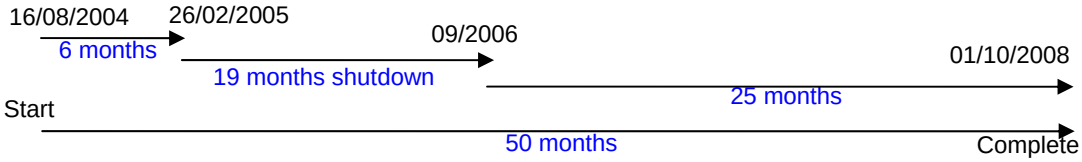

Figure 2 Time schedule for the construction of Caoyuan project

It is can be seen from the figures that the whole construction period of Longchi project was 29 months, and Caoyuan project was 31 months. The Project owner signed the contract with the construction company in Jun., 2004 and then started construction of Longchi project in Jun., 2004 and Caoyuan project in Aug., 2004. However, during the construction of the proposed projects, the geological structure of both the Longchi and Caoyuan project site were found to be far more unstable than that was expected in the FSR. The bed rock was severely weathered, thus, the inner layer of the tunnel need to be supported by reinforced concrete slab which resulted in a great increasing in the investment. So the construction had to be stopped because of huge financial difficulties on Feb. 26th, 2005[5]. Before the projects have been suspended, the Longchi project had been constructed nearly 8 months, and the construction period for Caoyuan project was 6 months. Therefore, the construction for both Longchi and Caoyuan project could not been completed to two-third's of the whole engineering when they were suspended on 26th, Feb. 2005.

Another evidence "Risk Assessment Report"[6] compiled by Mianyang City Yuxing Construct Engineering Supervision Co., Ltd. indicates that only some foundation work of the construction completed before the suspending, including temporary construction of road and leveling the building site, earth-rock cofferdam, basic diversion channel digging and basic digging of the power plant for both Longchi and Caoyuan project. And only 3.52 million RMB had been invested to the construction[7]. The Supervision Company is a third party beyond the owner and the construction team who have the responsibility to supervise the process and quality of the project. Further more, this evidence was assessed by another third party, Sichuan Hong Wei Property Appraise Co.,Ltd who has the permission to assess the fair value of the completed project based on the project quantities of that time. Therefore, two separate third parties can prove that only some foundation work of the construction of the whole project was completed, not two third's was completed. We apologized for the poor translation that causes misunderstanding.

[5] Notify of Temporary Stopping Construction from the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd. to the Santai County Hydro power Construction field engineering Co., Ltd.–24/02/2005
[6] Risk Assessment Report designed by the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd.– 20/07/2005.
[7] Completed quantity statistical table counted by the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd.-25/02/2005

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Response by TÜV SÜD:

The validators were strongly convinced that the construction for the project could not have been completed to two-third's of the whole engineering when construction was suspended on 26th, Feb. 2005 through the below table and following relative evidences:

Table 1 Timeline of the two projects

Timeline of Longchi Project		Timeline of Caoyuan Project	
22/06/2004	Construction Started	16/08/2004	Construction Started
26/02/2005	Construction Suspended	26/02/2005	Construction Suspended
07/09/2006	Construction Resumed	07/09/2006	Construction Resumed
15/06/2008	Put into Operation	01/10/2008	Put into Operation

The construction start could be evidences via:

- Construction Contract, signed by Sichuan Mingjiang electrolytic Management Plant and Santai County Hydro power Construction field engineering Co., Ltd on 22nd Jun, 2004 (IRL25).

The further steps of the projects implementation were evidenced as follows:

- The suspension of the construction by "*Notification of Temporary Stopping Construction from the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd. to the Santai County Hydro power Construction field engineering Co., Ltd on 24/02/2005*" (IRL18).
- The status of the project at the time when the construction was suspended:
    - "Monthly Statistic Tables for the Completion of Construction for Caoyuan and Longchi Power Station Construction, Mianyang City Yuxing Construct Engineering Supervision Co., Ltd on 25/02/2005" (IRL43); stating that, prior to suspending the construction some 1.55 million yuan was invested to Caoyuan project as well as 1.97 million yuan was invested to Longchi project till 25th, February 2005. A total of about 3.5 Million RMB was spent at the time when construction was suspended. This is about 6.5% of the originally estimated total investment, and less than 5% of the revised total investment. It is concluded that such a small fraction of the total expenditures could only lead to a small part of the construction. It is considered impossible that such share as small as 6.5% of the investment could contribute to more than about 6.5% completion of the project.
    - *"Notification of Approach-Construction Resume raised by the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd. to the Santai County Hydro power Construction field engineering Co., Ltd on 07/09/2006" (IRL41);* stating that due to geological problems, Longchi and Caoyuan power stations stopped construction from February 2005 till August 2006, and will re-start soon with additional investment .

The investment of the proposed project had to be increased due to altered geological condition, as could be shown through the following evidences:

- Minutes of deciding invest the project after consider CDM held on 15/07/2005 (IRL9)
- Risk Assessment Report raised by Mianyang City Yuxing Contract Engineering Supervision Co. Ltd. on 20/07/2005 (IRL38).
- The Design Changing Notice drafted by suggested by the Mianyang City Water Conser-

vancy Power Architecture & Reconnaissance Design Institute on 16/07/2005 (IRL23)
- Caoyuan & Longchi Project Investment Increasing Report, designed by the Mianyang City Yuxing Construct Engineering Supervision Co. Ltd. on 25/07/2005 (IRL33)
- The Assets Assessment Report (2008 No.99) for Backward Assessment for Verify Asset Value of Sichuan Minjiang Lectrolyte Management Hydro Power Co., Ltd. (IRL44)

Having reviewed all above listed evidence, we can confirm that the phrase “the project had been completed to two-thirds” clearly appears to be is a misunderstanding. There are various evidences from third parties which could confirm that the proposed project faced a geological problem at the very beginning of the project construction period (e.g. IRL 38, 41) and that proof that only a small part of the investment was spend before the projects suspension (IRL43), proving that only about 5% of the total investment were spent when construction was paused. Those evidences appear to be authentic and reliable because they are published by the Chinese Government Approved Appraise Institute and other third parties. Therefore CAR6 was closed.

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Issue 2:
In the context of the investment analysis guidelines, the DOE is requested to provide further details regarding how expenditures committed to prior to the cessation of construction were assessed and excluded from the investment analysis of the restarting of construction.

Response from the Project Participant:

In the context of the Investment Analysis Guidelines(version 2), the seventh section indicates that "in the case of project activities for which implementation ceases after the commencement and where implementation is recommenced due to consideration of the CDM the investment analysis should reflect the economic decision making context at point of the decision to recommence the project. Therefore capital costs incurred prior to the revised project activity start date can be reflected as the recoverable value of the assets, which are limited to the potential reuse/resale of tangible assets". "The capital expenditures should be included not at the original investment costs but at the market fair value at the point of the decision to proceed with the investment, demonstrating the value through assessments done by chartered specialists".

For this project, the Supervision Company of the project assessed the quantities and the capital investment when the project was suspended. Longchi project had been expended 1,970,100RMB, and Caoyuan project had been expended 1,554,600RMB[6], the total expend is 3,524,700RMB.

And the owner also asked a chartered specialists Sichuan Hong Wei Property Appraise Co.,Ltd. to assess the capital expenditures at the market fair value. The Backward Assets Assessment Report[8] shows that the project cost 3,264,000RMB at the market fair value on the base date 31, July 2005. Where, Longchi station cost 1,827,000RMB, Caoyuan station cost 1,437,000RMB.

According to the regulation of the "Investment Analysis Guidelines", the tangible assets incurred prior to the revised project activity start date can be treated as a part of the total investment to calculate IRR, and the intangible assets should be deducted from the total investment. Therefore, for this project, before the suspending, the total expend is 3,524,700RMB, among this investment, 3,264,000RMB is the tangible assets at the market value. The intangible assets cost 260,700RMB.

As per the "Investment Analysis Guidelines", only the intangible assets 260,700RMB should be deducted from the total investment. But for this project, all the original investment costs were excluded from the investment analysis. This is conservative.

Response by TÜV SÜD:

The "*Assets Assessment Report* " designed by Sichuan Hong Wei Property Appraise Co., Ltd. for the proposed project was provided here; is written by charted specialist who are qualified by the Chinese government. With help of this report it could be evidenced that the intangible as-

[8] Assets Assessment Report designed by Sichuan Hong Wei Property Appraise Co.,Ltd.-30/12/2008

sets and the tangible assets are separately handled; the value of intangible assets was deducted from the total investment.

When the projects construction stopped from February 2005 until September 2006, both the tangible assets of the project at that time (IRL18) and the total investment which was spend until this date (IRL19) was assessed by chartered specialists. Further, based on the risk assessment report (IRL38) and the report of increasing investment report (IRL33) the projects viability was recalculated completely. The calculation done in the CDM context excludes all costs which incurred prior to project re-start, which is a conservative approach, which fully in compliance with EB41, Annex 45, paragraph 7 guidance.

As indicated by the PPs above, the “value of fixed assets” in sheet “Basic parameters” of the IRR spreadsheets (as attached as enclosure 1 and 2 to this response), shows these deductions as follows:

- In case of Caoyuan substation, a rounded 1,550,000 RMB are deducted from the “value of fixed assets”, as can be seen in square C17.
- In case of Longchi substation, a rounded 1,970,000 RMB are deducted from the “value of fixed assets”, as can be seen in square C16.

To conclude, TÜV SÜD can state that, as all costs which incurred prior to project restart are subtracted from the financial analysis, a conservative approach is taken, in compliance with EB41, Annex 45, paragraph 7 guidance.

Reference No.	Document or Type of Information
1.	Project Design Document for CDM project "Sichuan provincial Longchi & Caoyuan 9 MW Small-scale Hydro Power Bundle Project", version 01, Nov. 17 2007. Final PDD version 3, August 6, 2008.
2.	Consolidated baseline methodology for AMS-I.D. "Grid-connected renewable electricity generation", version 12; and the approved consolidated baseline and monitoring methodology ACM0002 "Consolidated baseline and monitoring methodology for grid-connected electricity generation from renewable sources." (Version 06).
3.	Tool for Appendix B of the simplified modalities and procedures for small-scale CDM project activities, version 06
4.	Participant list of on-site interview, signed on Jan. 4 2008
5.	On-site interviews at the office of Sichuan Minjiang Electrolyte Manganese Hydro Power Co., Ltd., conducted on Jan. 4-5 2008 by auditing team of TÜV SÜD: Validation team: Mr. Carl Zhou GHG Auditor, Jiangsu TÜV Product Service, Shenzhen branch Interviewed persons: Mr. Zhen Daoshuang Sichuan Minjiang Electrolyte Manganese Hydro Power Co., Ltd. General manager Mr. Xie Caineng Sichuan Minjiang Electrolyte Manganese Hydro Power Co., Ltd. Board Chairman Mr. Wallace Wang KOE Environmental Consultancy, Inc. (Japan) Project manager Mr. Fancy Zhao KOE Environmental Consultancy, Inc. (Japan) Project manager
6.	FSR: Longchi hydro power, dated on Jan. of 2004, Sichuan province Mianyang city hydro power construction and survey design institute; Caoyuan hydro power, dated on Jan. of 2004, Sichuan province Mianyang city hydro power construction and survey design institute
7.	Approval of FSR (including project approval) of Longchi and Caoyuan hydro power stations, 20/04/2004, Mianyan city development and planning commision and Mianyan city water power bureau,
8.	Business license, 25/12/2006, and company constitution 11/27/2006.
9.	Minutes of deciding invest the project after consider CDM–18/07/2005
10.	China Electric Power Yearbook, 2002~2006 Edition.
11.	EIA report for Longchi and Caoyuan projects, 2005/10 Chendu science university EP&S institute,
12.	The approval of EIA report for Longchi and Caoyuan projects, on 30/12/2005, Mianyan city Environment Protection Bureau.

Reference No.	Document or Type of Information
	(Document No.: Mian Huan Han [2005]295 and Mian Huan Han [2005]296 for Caoyuan and Longchi hydropower station respectively).
13.	The evidence of land usage for Longchi and Caoyuan projects, including compensation programs, dated on 06/12/2006, Pingwuxian people government.
14.	Cooperation agreement with Sichuan Pingwu power Co. Ltd. Feb. 2004
15.	The meeting summary of stock changed between Sichuan Pingwu power Co. Ltd. and Sichuan Minjiang Electrolyte Manganese Hydro Power Co., Ltd. August 2004.
16.	“Evidence of compensation to the occupied lands”;
17.	State Power Corporation of China. Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects. Beijing:China Electric Power Press, 2003.
18.	Notification of Temporary Stopping Construction from the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd. to the Santai County Hydro power Construction field engineering Co., Ltd.– 24/02/2005
19.	Notify of Restarting Construction form the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd.to the Santai County Hydro power Construction field engineering Co., Ltd, dated on 16th, Aug, 2005.
20.	The consultant contract with KOE, dated on August 6 2005.
21.	The evidence about the bank rejected to loan for the proposed project, dated on 18/04/2005 and 20/04/2005, the china agricuture band and Pingwu village bank.
22.	The evidence of stakeholder comments: including Questionnaires,
23.	The notice about the design changed for the proposed project. Dated on 16/07/2005. Mianyang city water power construction survey and design institute.
24.	Grid-connected Agreement signed between the Sichuan Pingwu County Power(Group) Co.,Ltd. and Sichuan Mingjiang electrolytic manganese Plant–09/05/2005
25.	Contract for Construction Project for Longchi and Caoyuan Hydro Power Project between Sichuan Mingjiang electrolytic manganese Plant and Santai County Hydro power Construction field engineering Co., Ltd.– 22nd .Jun ,.2004
26.	The Schema of Huangyanghe River step hydropower station
27.	Notify of changing the design of Longchi and Caoyuan Project by the Mianyang City Water Conservancy Power Architecture&Reconnaissance Design Institute–16/07/2005
28.	The purchasing contract for Longchi and Caoyuan “Technical Agreement of Longchi project” signed with Yibin Fuyuan power generation facility Co.,Ltd in 12nd Apr.,2004.

Reference No.	Document or Type of Information
	"Technical Agreement of Caoyuan project" signed with Yibin Fuyuan power generation facility Co.,Ltd in 12nd Apr.,2004.
29.	List of design modifying by the Mianyang City Water Conservancy Program Design Institute. dated on July 16 of 2005.
30.	the Notify of Stopping Construction from the Mingjiang electrolytic manganese Plant to the Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd. – 23/02/2005
31.	Notification on Determining Baseline Emission Factors of China Power Grid issued by China's DNA on Dec 15th, 2006 on http://cdm.ccchina.gov.cn
32.	China national regulation of the meter checking, published by the National Technology Supervising Bureau in 1989, doc number[JJG597-89]
33.	Investment Increasing Report which was designed by Mianyang City Yuxing Construct Engineering Supervision Co.,Ltd. and approved by Pingwu County Hydro Affair Agricultural Machinery Bureau, on 25/07/2005.
34.	The Economic Assessment Rules of Small Hydropower Project SL16-95
35.	The qualification certificates of the employees.
36.	"Excel sheet of IRR calculation for Longchi project"; "Excel sheet of IRR calculation for Caoyuan project"
37.	"Evidence of compensation to the occupied lands";
38.	Risk Assessment report on the project from Supervision company, dated on July 20 2005.
39.	The purchasing contract of the devices for Longchi and Caoyuan, dated on March 23 2004, with Yibin Fuyuan power generation facility Co., Ltd.
40.	CER Termsheet, Feb 25, 2007, China Carbon N.V., Minjiang Electrolyte Manganese Hydro Power Co., Ltd.
41.	Notification of Approach (Resume of Reconstruction), September 7, 2006.
42.	Notify of Construction Resume, August 30, 2006.
43.	Monthly Statistic Tables for the Completion of Construction for Caoyuan and Longchi Power Station Construction, Mianyang City Yuxing Construct Engineering Supervision Co., Ltd, date on 25/02/2005.
44.	Assets Assessment Report for Backward Assessment for Verify Asset Value of Sichuan Minjiang Lectrolyte Management Hydro Power Co., Ltd, assessment date is from 15th December 2008 to 30th December 2008.