

PROJECT DESCRIPTION OF XUNDIAN JINFENG 12.6MW HYDROPOWER PROJECT

Document Prepared By Yunnan Xudong Phosphate Chemical Group Jinfeng Power Generation Co., Ltd.

Zhang Ning (reachble@gmail.com)

Project Title	Xundian Jinfeng 12.6MW Hydropower Project
Version	Version 06 21/08/2012
Date of Issue	09-09-2011 this version of the document issued
Prepared By	Yunnan Xudong Phosphate Chemical Group Jinfeng Power Generation Co., Ltd.
Contact	13810150486, reachable@gmail.com

Table of Contents

1 PROJECT DETAILS..... 3

1.1 SUMMARY DESCRIPTION OF THE PROJECT3

1.2 SECTORAL SCOPE AND PROJECT TYPE3

1.3 PROJECT PROPONENT3

1.4 OTHER ENTITIES INVOLVED IN THE PROJECT.....4

1.5 PROJECT START DATE.....4

1.6 PROJECT CREDITING PERIOD.....4

1.7 PROJECT SCALE AND ESTIMATED GHG EMISSION REDUCTIONS OR REMOVALS.....4

1.8 DESCRIPTION OF THE PROJECT ACTIVITY.....5

1.9 PROJECT LOCATION5

1.10 CONDITIONS PRIOR TO PROJECT INITIATION.....7

1.11 COMPLIANCE WITH LAWS, STATUTES AND OTHER REGULATORY FRAMEWORKS7

1.12 OWNERSHIP AND OTHER PROGRAMS7

 1.12.1 *Proof of Title*7

 1.12.2 *Emissions Trading Programs and Other Binding Limits*7

 1.12.3 *Participation under Other GHG Programs*7

 1.12.4 *Other Forms of Environmental Credit*7

 1.12.5 *Projects Rejected by Other GHG Programs*7

1.13 ADDITIONAL INFORMATION RELEVANT TO THE PROJECT8

2 APPLICATION OF METHODOLOGY 8

2.1 TITLE AND REFERENCE OF METHODOLOGY8

2.2 APPLICABILITY OF METHODOLOGY8

2.3 PROJECT BOUNDARY.....8

2.4 BASELINE SCENARIO.....8

2.5 ADDITIONALITY8

2.6 METHODOLOGY DEVIATIONS.....8

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS 9

3.1 BASELINE EMISSIONS9

3.2 PROJECT EMISSIONS9

3.3 LEAKAGE.....9

3.4 SUMMARY OF GHG EMISSION REDUCTIONS AND REMOVALS9

4 MONITORING 9

4.1 DATA AND PARAMETERS AVAILABLE AT VALIDATION9

4.2 DATA AND PARAMETERS MONITORED.....9

4.3 DESCRIPTION OF THE MONITORING PLAN9

5 ENVIRONMENTAL IMPACT..... 10

6 STAKEHOLDER COMMENTS 10

1 PROJECT DETAILS

1.1 Summary Description of the Project

The Xundian Jinfeng 12.6MW Hydropower Project (hereafter, “the Project”) is a run of river type hydropower project. The total installed capacity is 12.6MW (2*6.3MW). The purpose of the Project is to utilize the hydro resource to generate electricity which would otherwise have been produced by fossil fuel-fired power plants. The electricity generated will supply the South China Grid via the Yunnan Power Grid (hereafter referred to as CSPG). The Project has registered as a CDM project on 29th April, 2010 and is expected to reduce emissions of greenhouse gases by an estimated 40,760tCO₂e per year during the first crediting period.

The Project Descriptions according to VCS Standard, v3.2 criteria are provided below:

1.2 Sectoral Scope and Project Type

The sectoral scope and activity type of the project is identified as follow:

Sectoral Scope 01: Energy industries (renewable-/non-renewable sources)

Type I: Renewable energy projects

The project is not a grouped project.

1.3 Project Proponent

Table-1 The information of the project proponents

Roles/Responsibilities	Project Owner
Organization	Yunnan Xudong Phosphate Chemical Group Jinfeng Power Generation Co., Ltd.
Address	Julongge Villa,Luoman Hotspring Hotel, Dianchi Street, Kunming City, Yunnan Province
Post Code	650238
Country	P.R.China
Telephone	+86-871-4613319
Fax	+86-871-4589236

There is just one proponent, the project owner, in this project.

1.4 Other Entities Involved in the Project

N/A

1.5 Project Start Date

The project started on 29/05/2008.

1.6 Project Crediting Period

The project crediting period is from 29/05/2008 to 28/04/2010. The total crediting period is 700 days.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project	Yes
Mega-project	No

According to AMS-I.D (version 15), the estimated emission reduction are calculated as follows:

$$ER_y = BE_y - PE_y - L_y$$

Where:

ER_y is the emission reduction by the project activity during a given year y.

BE_y is the baseline emissions in year y.

PE_y is the emissions of the proposed project activity in year y.

L_y is the leakage in the construction period of the proposed project in year y.

1. Baseline emissions (BE_y) can be calculated as below:

$$BE_y = (EG_y - EG_g) * EF_y$$

Where:

EG_y is the electricity delivered to grid in year y.

EG_g is the electricity supplied by grid in year y.

EF_y is the baseline emission factor.

According to the preliminary design report of the Project, the net annual electricity delivered to the grid is approximately 48,334MWh/yr, i.e. EG_y – EG_g=0.

The baseline emission factor is about 0.8433 tCO₂e /MWh, i.e. y EF = 0.8433 tCO₂e /MWh.

So, the estimated baseline emission is as follows:

$$BE_y = (EG_y - EG_b) \times EF_y = 40,760 \text{ tCO}_2\text{e/yr.}$$

2. According to the AMS-I.D. methodology, the emission in the construction period of the Project is neglected. So the GHG emission within the project boundary is zero, i.e. $PE_y = 0$.

Meanwhile, according to the AMS-I.D. methodology, the energy generating equipment isn't transferred from another activity or transferred to another activity, i.e. $L_y = 0$.

With the emissions from the Project being zero, the emission reductions of the project activity are equivalent to the emissions of the baseline. The annual emission reduction of the first crediting period is about 40,760 tCO₂e/yr.

$$ER_y = BE_y = (EG_y - EG_b) \times EF_y = 40,760 \text{ tCO}_2\text{e/yr}$$

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
2008(29/05-31/12)	24,233
2009(01/01-31/12)	40,760
2010(01/01-28/04)	13,177
Total estimated ERs	78,170
Total number of crediting years	1.92 (700 days)
Average annual ERs	40,760

1.8 Description of the Project Activity

N/A

1.9 Project Location

The Project is located in Xundian County, Yunnan Province, People's Republic of China. The construction site is in Fengyi Village and Jinyuan Village. The geographical coordinate of the powerhouse are east longitude of 103°06'35" and north latitude of 25°52'35". Figure 1-1 and Figure 1-2 show the location of the Project.



Figure 1-1: Location of the Project in Country Map

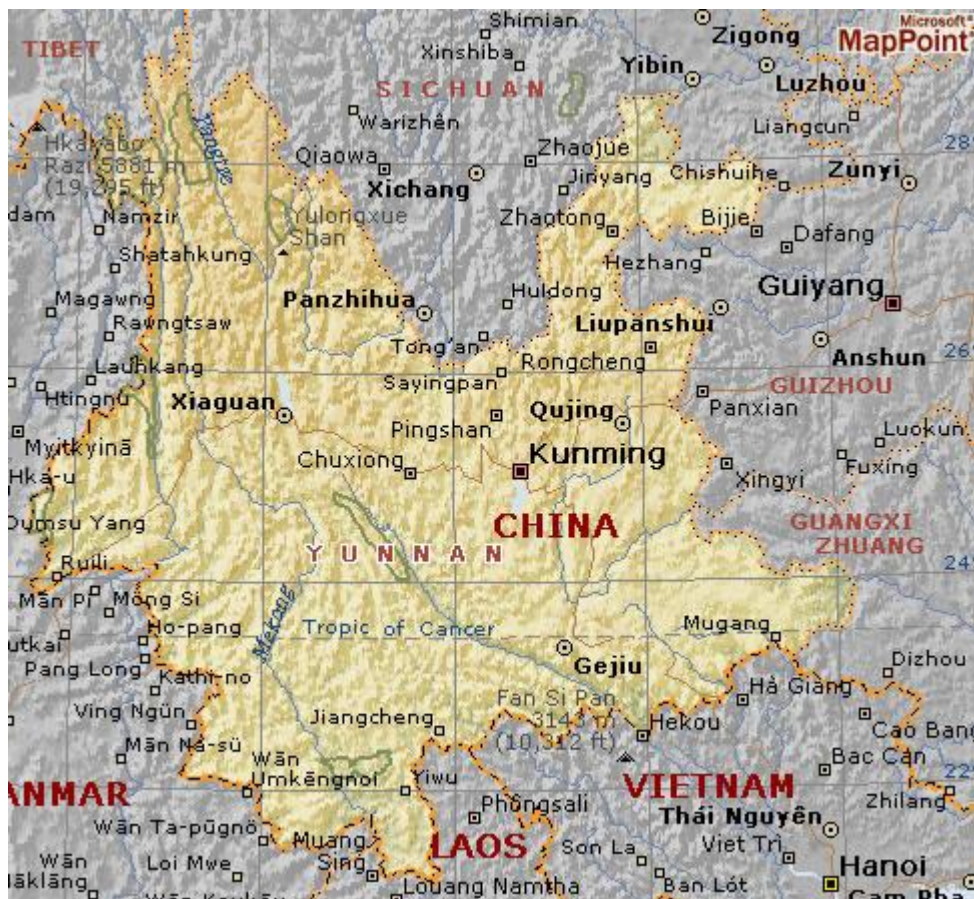


Figure 1-2: Location of the Project in Provincial Map

1.10 Conditions Prior to Project Initiation

The scenario existing prior to the implementation of the project activity is the same as the baseline scenario, where delivery of electricity to the grid is by the operation of grid-connected power plants and, in the absence of implementation of the project activity, is by the addition of new generation sources. The equipment and systems in operation prior to the start of the project activity are the power plants (mostly thermal, and mostly coal) supplying electricity to the South China Grid and set out in Annex 3 of the registered PDD. These include thermal power generation equipment such as engines, turbines, and related fuel supply (predominantly coal) and electricity distribution infrastructure.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

N/A

1.12 Ownership and Other Programs

1.12.1 Proof of Title

Xundian Jinfeng 12.6MW Hydropower Project is developed by Yunnan Xudong Phosphate Chemical Group Jinfeng Power Generation Co., Ltd. The business license of the project company and the letter of approval granted by the National Development and Reform Commission of the People's Republic of China is provided to demonstrate the right of use.

1.12.2 Emissions Trading Programs and Other Binding Limits

The project has been registered as a CDM project on 29/04/2010, for which a renewable crediting period of 3x7 years will be used under the CDM GHG Program. Therefore, CO2 emission reductions generated by the project during the CDM crediting period will be verified as unique CERs but not VCUs to avoid double counting. As to the project under VCS Standard(V3.2), only emission reductions achieved from 29/05/2008 to 28/04/2010 will be considered as VCUs, which will be sold only once to one particular buyer.

1.12.3 Participation under Other GHG Programs

The project was registered as a CDM project on 29/04/2010 with a reference number of 3023.

1.12.4 Other Forms of Environmental Credit

The suggested crediting period for the pre-registration VCUs started from 29/05/2008 and ended till 28/04/2010. And there is no other form of environmental credits created during the VCU crediting period under VCS.

1.12.5 Projects Rejected by Other GHG Programs

N/A

1.13 Additional Information Relevant to the Project**Eligibility Criteria**

N/A

Leakage Management

There is no leakage for this project.

Commercially Sensitive Information

There is no any commercially sensitive information has been excluded from the public version of the project description.

Further Information

N/A

2 APPLICATION OF METHODOLOGY**2.1 Title and Reference of Methodology**

N/A

2.2 Applicability of Methodology

N/A

2.3 Project Boundary

N/A

2.4 Baseline Scenario

N/A

2.5 Additionality

N/A

2.6 Methodology Deviations

N/A

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

$$BE_y = (EG_y - EG_b) \times EF_y = 40,760 \text{ tCO}_2\text{e/yr.}$$

3.2 Project Emissions

$$PE_y = 0.$$

3.3 Leakage

$$L_y = 0.$$

3.4 Summary of GHG Emission Reductions and Removals

Years	Estimated baseline emissions or removals (tCO ₂ e)	Estimated project emissions or removals (tCO ₂ e)	Estimated leakage emissions (tCO ₂ e)	Estimated net GHG emission reductions or removals (tCO ₂ e)
2008(29/05-31/12)	24,233	0	0	24,233
2009(01/01-31/12)	40,760	0	0	40,760
2010(01/01-28/04)	13,177	0	0	13,177
Total	78,170	0	0	78,170

4 MONITORING

4.1 Data and Parameters Available at Validation

N/A

4.2 Data and Parameters Monitored

N/A

4.3 Description of the Monitoring Plan

N/A

5 ENVIRONMENTAL IMPACT

N/A

6 STAKEHOLDER COMMENTS

N/A