

NANSHA HYDRO POWER PROJECT IN YUNNAN PROVINCE CHINA

Document Prepared By Guizhou Phenix Low Carbon Consulting Co., Ltd

Project Title	Nansha Hydro Power Project in Yunnan Province China
Version	<i>Version 01</i>
Date of Issue	<i>22-05-2012</i>
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1 PROJECT DETAILS

1.2 Sectoral Scope and Project Type

This category of the Project would fall within sectoral scope 1: energy industries (Renewable sources).

The Project is not a Grouped project.

1.3 Project Proponent

The Project proponent is Honghe Guangyuan Hydro Power Development Co.Ltd

Organization:	Honghe Guangyuan Hydro Power Development Co.Ltd
Street/P.O.Box:	780 Building Hongzhuyuan
City:	Mengzi County
State/Region:	Yunnan Province
Country:	People's Republic of China
Represented by:	Wang Hualin
Telephone:	+86-873-3743179
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1.5 Project Start Date

The first set of water turbine and generator unit started commissioning on 28/12/2007, the second on 17/06/2008, and the third on 16/08/2008.

Project start date: 28/12/2007

1.6 Project Crediting Period

Project start date:28/12/2007 on which the project activity began reducing or removing GHG emission.

To regard as a CDM Project, the Crediting period start date:12/01/2009 on which the first monitoring period commenced.

7×3 years was selected as the crediting period of the Project. That is, the length of the first crediting period is 7 years which will be renewed two times.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

The total installed capacity of the Project is 150MW, so it falls into the project.

It is expected that the project activities will generate emission reductions for about 3,638,376 tCO₂e over the first 7-year renewable crediting period from Jan, 2009 to Dec, 2015.

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
2009	519, 768
2010	519, 768
2011	519, 768
2012	519, 768
2013	519, 768
2014	519, 768
2015	519, 768
Total estimated ERs	3,638,376
Total number of crediting years	7
Average annual ERs	519, 768

1.9 Project Location

The layout of the dam and the power station of the proposed project is on the same line on Hong River. So the dam and the power station have the same east longitude and north latitude. The geographical coordinates of the proposed project are east longitude 102°51'21" and north latitude 23°13'46", 2.5km away from Yuanyang County.

The spatial extent of the Project boundary also includes all the power plants physically connected into the SCPG. Due to net electricity imported from SCPG, the SCPG was considered when determining the operating margin emission factor.

1.10 Conditions Prior to Project Initiation

As a hydro power project, the project will produce clean electricity using hydro power resources and will generate GHG emission reductions by avoiding CO₂ emission from electricity generation of fossil fuel fired power plants. Operation of the project does not lead to GHG emission. It is confirmed that the project was not implemented to create GHG emissions primarily for the purpose of its subsequent removal or destruction.

1.12 Ownership and Other Programs

1.12.1 Proof of Title

The business license of Honghe Guangyuan Hydro Power Development Co.Ltd.

The FSR approval letter of the Project

The EIA approval letter of the Project

The equipment contracts of the Project

The construction contracts of the Project

1.12.2 Emissions Trading Programs and Other Binding Limits

The Project is not included in an emission trading program, and does not take place in a jurisdiction or sector in which binding limits are established on GHG emissions. The Project does not reduce GHG emissions from activities that participate in an emissions trading program, so this clause is not applicable.

The project has been registered as a CDM project on 12/01/2009, 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 only emission reductions achieved from 28/12/2007 to 11/01/2009 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 has been registered as a CDM project on 12/01/2009 with registration reference number 2133.

1.12.4 Other Forms of Environmental Credit

The Project is a renewable energy generation project, which discharges no emission during operation period. Thus, the project doesn't fall into categories that creating GHG emissions primarily for the purpose of its subsequent removal or destruction.

The Project has not created another form of environmental credit, which will be verified by DOE. And The Project will not create other environmental credit in the future.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

This project is not a grouped project

Leakage Management

No fossil fuel will be consumed by the Project activity, so no leakage need to be considered in the Project.

Commercially Sensitive Information

There is no any commercially sensitive information involved.

Further Information

As a renewable hydro power project, the proposed project will contribute to the local sustainable development through following aspects:

- The proposed project will supply enough clean electricity for developing the mines and metal smelting industry in Honghe Hani & Yi Autonomous State.
- To displace part of the electricity from coal-fired power plants, and thus will avoid environmental pollution caused by coal burning.
- To make good use of the local water resource to solve the difficulties of lack of power and unstable voltages.
- To create new job opportunities for the local people: temporary job opportunities will be available during the construction period and 98 permanent jobs during the operation time.
- After the operation of the proposed project, the local people can make good use of electricity instead of biomass, especially firewood, which can reduce the breakage to local vegetation and protect the environment.

The main technical index of the proposed project

Item	Unit	Value	Note
The water surface area of the reservoir	Million m2	8.938	At the normal water level
Regulating performance		Daily	
Installed capacity	MW	150	3×50MW
Annual electricity generation	MWh	702,280	
Electricity connected to SCPG annually	MWh	616,314	
Annual operation hours	h	4,682	
The maximum height of the dam	M	85	Grinding Concreting Gravity Dam
The collocation type of the power plant		Type of back dam	