## PROJECT DESIGN DOCUMENT FORM (CDM PDD) - Version 03





CDM - Executive Board

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### SECTION A. General description of project activity

# A.1. Title of the project activity:

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Title: Ganluo Camp Hydropower Project

Version: 03 Date: 05/06/2011

#### Revision History:

Version	Date	Comments
Version 01	30 <sup>th</sup> Aug. 2010	PDD for NDRC
Version 02	28th Dec. 2010	PDD for GSP
Version 03	05 <sup>th</sup> Jun. 2011	Revised PDD

# A.2. Description of the project activity:

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Ganluo Camp Hydropower Project (hereafter: the proposed project), a run-of-river hydropower project, is located in Aga Town, Ganluo County, Sichuan Province, P. R. China. The proposed project will use available hydropower energy resources of Ganluo River, a branch of Dadu River, to generate electricity.

The proposed project has an installed capacity of 24.8MW (12.4MW\*2). The annual electricity generation from the proposed project is estimated to be 121870MWh, and the net electricity supply from the proposed project is estimated to be 118238MWh per year<sup>1</sup>. With a total submerge area of 10294m<sup>2</sup>, the power density is calculated to be 2409.17W/m<sup>2</sup> (24800000W / 10294 m<sup>2</sup>=2409.17 W/m<sup>2</sup>)<sup>2</sup>, which is higher than 10 W/m<sup>2</sup>. And no inhabitants need to be resettled due to the proposed project activities<sup>3</sup>.

The electricity generated from the proposed project will be connected to Sichuan Provincial Power Grid, which is a part of Central China Power Grid (CCPG). The proposed project will displace equal amount electricity generated by other power plants of CCPG, thus, greenhouse gases (GHG) emission reduction can be achieved. The average estimated GHG emission reductions will be 91126 tCO<sub>2</sub>e per year. Prior to the start of the implementation of the proposed project, electricity was delivered to the grid by the operation of other power plants belonging to the CCPG. The baseline scenario as identified in section B.4 is the same as this scenario.

The project activity contributions to sustainable development are mainly:

- Reducing GHG emission by replacing fossil fuel-fired generated electricity with renewable water resource;
- Promoting the local water resource rational development;
- Improving the local energy generation infrastructure, bridging the gap between power supply and demand and reducing the deficiency of the local grid;
- Contributing to local economic development and improving inhabitant life quality through increasing employment opportunity.

Data source: the Preliminary Design Report (PDR). According to the PDR, the electricity output of the project is 121870MWh, excluding the consume rate of 1% and the transmission system loss rate of 2%, therefore the net electricity supply to the grid is 118238MWh which is calculated as: 121870\*(1-1%)\*(1-2%).

<sup>&</sup>lt;sup>2</sup> Data sourse: the Environmental Impact Assessment (EIA), Volume 2, Page 11.

<sup>3</sup> Source: The Preliminary Design Report, Volume 1, Page 20.