

*Translation:*

## **Statement Regarding the Effective Electricity Coefficient of Gaokeng Hydropower Station**

Sichuang Tongjiang Gaokeng Hydropower station is a daily-regulation hydropower plant located on the main stream of Tongjiang River in Tongjiang County, Sichuan Province . The installed capacity is 15MW, the average annual power generation is 59841.3 MWh and the average annual effective electricity of the plant is 50712.5 MWh.

The average annual effective electricity coefficient of the plant was determined to be 84.745% in accordance to the relative design codes, regulations and experience applicable to hydropower projects. The main factors have been considered in the calculation of the coefficient are:

1. Total 43 years water flow (from 1959 to 2002) recorded by the hydrological station of project site; the intra and inter-annual variability of the water flow.
2. Characteristics of load variations of the grid
3. Operational location of the plant in the grid
4. The Electric power supply/demand balance of the grid
5. Maintenance, repair and emergency shut-down of power units, etc.

Hereby certified!

Water Conservancy & Electric Power Construction Investigating  
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Dated on 8<sup>th</sup>, January 2009

## 关于高坑水电站有效电量系数的说明

四川通江高坑水电站项目位于四川省通江县境内的通江河干流上，是一座日调节水电站，总装机容量为 15MW。电站多年平均年发电量为 5984.13 万 KWh，多年平均年有效电量为 5071.25 万 KWh。

电站的多年平均年有效电量系数依据水电站项目相关设计规范及经验计算确定，为 84.745%。我们在计算中主要考虑了如下因素：

1. 项目所在水文站 1959~2002 年共 43 年的水文流量，径流的年际和年内变化；
2. 电网的负荷变化特性；
3. 电站在电网内的运行位置；
4. 电网的电力电量平衡；
5. 电站的机组检修、事故停机等。

特此说明。

