Hangzhou Yatai, *A WAY TO SUCCESS*

Hangzhou Yatai Hydro Equipment Completing Co., Ltd. (briefed as Hangzhou Yatai), a sub company of **Hangzhou Regional Center (Asia-Pacific) for Small Hydro Power (HRC)**, was set up and registered in Hangzhou in 2002, which aims to provide complete package of electromechanical equipment for hydropower projects, especially for those located in foreign countries, thus an import & export license also being entitled to this company when established.

Since then, efforts have been made to develop the hydropower equipment market in southeast & south Asian countries including Vietnam, Laos, Cambodia, Sri Lanka, Philippines, Indonesia, Nepal, Pakistan etc., and it's unforgettable that in 2004, joy comes with an order from Sri Lanka, in which the customer asks for a Turgo turbine with runner diameter of 41cm and output of 220kW. This is our first contract, however the contract is not signed face to face and until now we are still keeping in touch through mails and calls only. Then come two orders from Philippines and one order from Japan for procuring three micro turbine-generator sets, and during that period we export a set of low-voltage automatic control system to Hydro Power Center (HPC) in Vietnam.

Year 2005 and 2006 are really enchanted to experience the contracting for Gera II (1950kW Francis type) and Sandia (1200kW Pelton type) hydropower projects in Peru, which gives a strong push to Hangzhou Yatai. Although these two projects are delayed to accomplish in 2009 attributable to the Peruvian side, the two projects seem to be another landmark. After that, Hangzhou Yatai starts to explore hydropower market in Turkey and is sequentially awarded with contracts for Kizkale (fixed propeller), Keklicek (Francis), Yalnizca (Kaplan), Pinar (Francis) and Kartalkaya (Francis) hydropower projects in 2007, while year 2008 receives a big bonus from Turkish market including six Akfen's hydropower projects, Akcay (Francis) project and Garzan-I (Francis) project etc. with a total contract value over 25 million US dollars.

With unremitted efforts of all the staffs, Hangzhou Yatai achieves great triumphs in 2009, which include successful conclusions of Keklicek, Akcay, Yalnizca, Pinar hydropower projects in Turkey and Gera II and Sandia hydropower projects in Peru and also in November a new contract for Murat I & II (Francis) hydropower projects has been signed. Although confronted with lots of difficulties and inconveniences, such as language barrier, different life style, and other technical obstacles in the project field, Hangzhou Yatai professionals are perseverant and diligent to work out the problems with constant and constructive supports from home, thus gaining high appreciation and reputation by convincing the owners of our excellent performance.

References for Equipment Supply Overseas:

1. SHP automatic control system for Vietnam
2. Tea-plantation power plant in Sri Lanka (1×200kW)
3. Governing system for Hydro Power Center of Vietnam
4. Gera II hydropower station in Peru (1×1950kW)
5. Control system for Basaran hydropower station in Turkey
6. DAO (1×40kW) and PEI (1×30kW) MHPs in Philippines

7. Micro hydropower station in Canada (1×70kW)
8. Wanique hydropower station in Fiji (2×400kW)
9. Sandia hydropower station in Peru (1×1200kW)
10. Kizkale hydropower station in Turkey (1×250kW)
11. Keklicek hydropower station in Turkey (2×4500kW)
12. Yalnizca hydropower station in Turkey (3×5MW)
13. Pinar hydropower station in Turkey (3×10MW)
14. Kartalkaya hydropower station in Turkey (3×2.7MW)
15. Akcay hydropower station in Turkey (2×11.5MW+1×5.5MW)
16. Otluca-I hydropower station in Turkey (3×12.296MW)
17. Otluca-II hydropower station in Turkey (3×1936kW)
18. Boguntu hydropower station in Turkey (3×1107kW)
19. Saracbendi hydropower station in Turkey (4×5918kW)
20. Yuvarlakcay hydropower station in Turkey (2×1655kW)
21. Çamlica-III hydropower station in Turkey (3×9052kW)
22. Garzan-I hydropower station in Turkey (2×21MW)
23. Counterweight butterfly valve for Electroandes in Peru (2009)
24. Murat I (3×8410kW) & II (3×3416kW) hydropower stations in Turkey

Brief to Hydropower Projects Accomplished in 2009:

1. Gera II Hydropower Project

Owned by de Electro Oriente S. A, Gera II hydropower station, located in Moyobamba, San Martin, is of 42m water head, equipped with a horizontal Francis turbine-generator unit, and the installed capacity of this power station is 1950kW. Gera II is the first project for Hangzhou Yatai to undertake in Peru and the whole system is put into operation in January 2009. Although the electromechanical equipment has ever been kept in the warehouse for more than one and a half years, its operation proves a highly reliable performance of the equipment.

2. Sandia Hydropower Project

Sandia hydropower plant is situated in far southeastern Peru in Puno province, 15km to Sandia downtown. It is a small run-of-the-river type with an installed capacity of 1200kW and a water head of 220m, and it is also the first Pelton project for Hangzhou Yatai awarded in overseas market.

Electro PUNO S.A. is the sole owner of Sandia hydropower plant and awards the contract to PROYEC who is representative of Hangzhou Yatai in Peru in 2006. Featured with an unattended automation system, this power plant is integrated into the national power grid of Peru at the end of October, 2009.

3. Akcay Hydropower Project

Established near the town of Nazilli in Aydin of Turkey, Akcay hydropower plant has an installed capacity of 28.5 MW and a rated water head of 87m. As the Supplier, Hangzhou Yatai also sends experienced engineers to help the site installation, testing and commissioning until to its favorable operation in August 2009. It takes only 15 months after signing the contract and the Owner AKCAY HES Elektrik Uretin A.S is very satisfied.

4. Yalnizca Hydropower Project

Yalnizca hydropower project involves the construction of a 15 MW (consisting of 3×5MW vertical Kaplan turbines with double regulating performance). It is developed by Filyos Enerji Uretim ve Ticaret A.S. The project is located 10km southwest of the city of Karabuk, along Filyos River (or "Filyos Cayi") in Karabuk province, in the west Black Sea region of Turkey. This power plant including a computer-based control system is put into the commercial operation in September 2009.

5. Keklicek Hydropower Project

Invested by H.G.M. Enerji Inş. Nak. Gıda Güb. Yem San. ve Tic. Ltd. Şti., Keklicek hydropower project is at suburban area of Malatya in the southeast of Turkey. The water head of the power plant is 166m and it consists of 2 horizontal Francis turbine-generator units with total installed capacity 2×4337kW. Hangzhou Yatai supplies the electro-mechanical equipment and achieves the acceptance and commercial commissioning in July 2009.

6. *Pinar Hydropower Project*

The project area of Pinar hydropower is in Southeastern Anatolia Region, within the boundaries of Tut district in Adıyaman, upon Göksu River. With a net head of 67m, the total installed capacity of the vertical Francis turbine-generator units amounts to 30MW (10MW for each). This power plant is put into operation in November 2009.

Since the establishment of Hangzhou Yatai, a fast and reliable growth has been achieved and some splendid times have been witnessed, however, more and more wonders can be expected, we are sure.

With the start of 2010, our engineers will set out for the installation of Akfen projects and also our factories are busy for the newly-signed Murat I & II projects inside which our contracting service expands to include the site installation. Nobody would doubt if we get more and more orders from Turkish market in 2010 as there is being recovered from the disastrous financial crisis, and we all believe Hangzhou Yatai can extend its business from Turkey to the Balkan Region, to African market as well as Southeast Asia as there are very huge potentials for hydropower development around the world.

Hangzhou Yatai, is just on the way to success.