

VISIT TO NEW BONG ESCAPE HYDROPOWER PROJECT ON 15TH MARCH, 2014

An 11-Member Congress delegation led by Engr. Faisal Shahzad, Member, Executive Council visited the First Hydel IPP Project in A J K. The project is located on Bong Canal. It is 84 – MW Hydro project developed on B. O. O. T. (Build Own Operate and Transfer) basis. Annual generation of 540 GWh. It will be handed over to Pakistan Free of Cost after 25 – years operation.

The delegation was briefed about the Salient features of the project completed with a visit to the Departments / Project site. A brief history of the project is given below :

Laraib Energy Limited (“Laraib”) is the owner and developer of 84 MW hydroelectric powers generating complex known as the New Bong Escape Hydroelectric Power Complex (the “Project”) on the Jhelum River in Azad Jammu and Kashmir (A J & K).

The Project commenced commercial operations on 23rd March 2013 and has the distinction of being Pakistan and A J & K’s first hydropower IPP. By developing a bankable framework this trendsetting project has paved the way for rapid and full scale development of Pakistan and A J & K’s hydropower potential. Laraib is a subsidiary of The Hub Power Company Limited (“HUBCO”) which owns 75% of the shares of the Company. HUBCO is the owner of the 1,292 MW Hub Power Station which is the first and largest power station to have been financed by the private sector in Southern Asia during the 1990s and one of the largest private power projects in the newly industrialized world at that time. The balance 25% shares are held by the minority shareholders.



The Project has been developed under Build-Own-Operate-Transfer (BOOT) basis, whereby it would be transferred to the Government of A J & K free of cost at the end of a 25-year term. The Project is located on Jhelum River 7.5 km downstream of the 1,000 MW Mangla Dam, a major

multi-purpose water storage project commissioned in 1967. The Project does not involve the construction of a dam or reservoir nor will it affect the existing water management regimes. It withdraws water released from the existing Mangla Dam and returns that water to the main stem of the Jhelum River through a 6.5 km long tailrace constructed in a sub-channel of the River Jhelum. The Project is not expected to materially affect upstream or downstream hydrology of the Jhelum River due to its run of river nature and is unlikely to cause any significant, lasting environmental and social impacts. The energy generated by the Project is evacuated through an in-out connecting arrangement with the double circuit 132 kV Mangla - Kharian transmission line, which passes over the Project site. No right-of-way acquisition is needed since connection facility has been built within the Project site.

The Project uses the water being discharged from the upstream existing hydropower plant (1,000 MW Mangla Hydroelectric Power Station) located at Mangla Dam. The raising of Mangla Dam has been completed recently by the Pakistan's Water and Power Development Authority (WAPDA), and will result in increase in the storage capacity of the Mangla Dam ("Mangla Dam Raise Project"). The Mangla Dam Raise Project will provide better regulated water to the Project.

The Project achieved Financial Closing on December 20, 2009. USD financing has been provided by Asian Development Bank, Islamic Development Bank, International Finance Corporation, and the French origin Société de Promotion et de Participation pour la Coopération Economique ("PROPARCO") whereas PKR financing has been provided by Habib Bank Limited ("HBL") and National Bank of Pakistan ("NBP").

The energy generated by the Project is purchased by a single buyer i.e. Pakistan's National Transmission and Dispatch Company Limited (the "NTDC") under a long term Power Purchase Agreement (the "PPA"). Under the PPA the hydrological risk is borne by the Power Purchaser through guaranteed payment for fixed costs like debt servicing, O&M, ROE and insurance. A cost plus tariff mechanism is in place under the PPA and the Project has been allowed a tariff of PKR 6.8362 / KWh (US cents 8.5453 / KWh) at Financial Closing which will be adjusted for certain allowed reopeners at the Commercial Operations Date.

Other Concession Documents package includes the GOP Implementation Agreement with Government of Pakistan, A J & K Implementation Agreement with A J & K Entities (i.e. Government of A J & K and A J & K Council), Water Use Agreement with Government of A J & K and Land Lease Agreements with Government of A J & K.

Under its guarantee (i.e. the GOP Guarantee), Government of Pakistan has guaranteed the payment obligations of NTDC, Government of Pakistan and Government of A J & K under the Concession Documents.

The construction of the Project started on December 29, 2009 under a fixed price, time certain EPC Contract executed with Sambu Construction Company Limited of South Korea ("Sambu") in June 2009. The water to wire E & M equipment package has been supplied by a leading E & M supplier; Andritz Hydro under a subcontract with Sambu. Hyundai Engineering is the design subcontractor of the EPC Contractor.

The Project has achieved commercial operation date on March 23, 2013 which is about two months ahead of the required commercial operations date under the PPA.

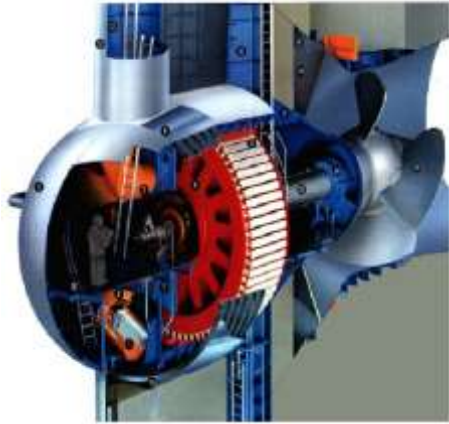
Construction of the Project was monitored by Owner's Engineer comprising of joint venture of Montgomery Watson Harza ("MWH") and National Engineering Services of Pakistan ("NESPAK") while Mott MacDonald of UK are the Technical Advisor to the Financiers and were responsible for construction and environmental monitoring on their behalf.

The Operation and Maintenance of the Project is being carried out by TNB REMACO Pakistan

(Private) Limited, a wholly owned subsidiary of TNB Repair and Maintenance SDN BHD which is ultimately owned by Tenaga Nasional Berhad, Malaysia.

The Project insurances have been placed offshore with leading insurance companies through AON, UK who are the Insurance Advisor and Broker of Record for the Project.

The Project was registered as a Clean Development Mechanism (CDM) project by CDM Executive Board under the United Nations Framework Convention on Climate Change on January 31, 2009 thus achieving the distinction of becoming the first Hydropower Project in Pakistan / A J & K to have been registered with UNFCCC as a CDM project.



Machine Ratings

Type: Kaplan (Bulb) Turbine

Net Head: 9.34m

Power max: 21MW x 4

Speed: 100rpm

Nominal Discharge: 253.21m³/s x 4

Generator: 26.25MVA x 4