



Sayı : 11717802-724- 1290  
Konu: Pakistan'da HES Özelleştirmeleri

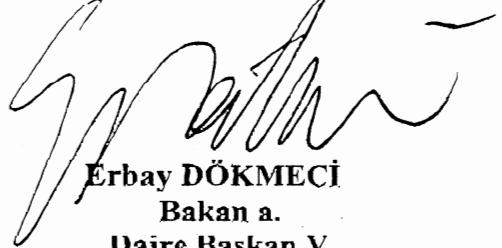
02 Mayıs 2014

### TÜRKİYE ODALAR VE BORSALAR BİRLİĞİNE

Ülkemizin Yüksek Düzeyli Stratejik İşbirliği Konseyi düzeyinde ikili işbirliği yürütmekte olduğu Pakistan'ın Su ve Elektrik Bakanlığı Müsteşarı Sayın Saif Ullah Chattha ve heyeti ile Bakanlığımız Müsteşarı Sayın Metin Kilci başkanlığındaki Bakanlığımız heyeti arasında 30 Nisan 2014 tarihinde Ankara'da ikili enerji işbirliğine ilişkin bir görüşme gerçekleştirilmiştir.

Mezkûr görüşmede, Pakistanlı heyet tarafından bilgileri yazımız ekinde iletilmekte olan 3 adet hidroelektrik santralının (HES) özelleştirilmesinin planlandığı ve mezkûr HES'lerin özelleştirmelerine Türk özel sektör enerji şirketlerinin katılım sağlamasının tercih edildiği Bakanlığımıza bildirilmiştir.

Bu minvalde, Pakistan'da yapılması planlanan HES özelleştirmelerinin yazımız ekinde iletilen bilgi notları ile birlikte Birliğiniz üyelerine duyurulması ve ilgi gösterecek şirketler hakkında Bakanlığımıza bilgi verilmesi hususlarında gereğini rica ederim.

  
Erbay DÖKMECİ  
Bakan a.  
Daire Başkan V.

**EK:** HES Bilgi Notları (3 sayfa)

### TARBELA HYDEL POWER STATION

Tarbela Dam is one of the world's largest earth and rock filled Dam and greatest water resources development project which was completed in 1976 as a component part of Indus Basin Project. The Dam is built on one of the World's largest rivers – the Indus known as the "Abbasin" or the father of rivers. Wapda is responsible for operation of Reservoir and Power Station.

No. of Tunnels	=	5
Main Spillway Capacity	=	6, 50,000 cusecs
Auxiliary Spillway Capacity	=	7, 50,000 cusecs
Type	=	Earth and Rock fill
Height	=	485 ft (above river bed)
Length	=	9000 ft
Total Capacity	=	3478 MW 1750(175x10)+ 1728(432x4)
Max. op. level	=	1550 ft
Min. op. level	=	1378 ft

UNITS	1-4	5-8	9-10	11-14
Commissioning Date	Jul,1977	Dec,1982	Apr,1985	Feb,1993

Gross Annual Generation (2012-13)	=	14,788.224 GWh
Auxiliary Consumption (2012-13)	=	32.624 GWh
Net Electrical Output (NEO) (2012-13)	=	14,755.599 GWh
Plant Factor (2012-13)	=	48.54 %
Project Cost	=	Rs. 16.417 Billion (1967)
Actual Revenue (2012-13)	=	Rs. 21.543 Billion
Funded by	=	ADB, KFW, World Bank

Current Tariff at Bus Bar (Notified)	=	Rs. 1.79 / kWh
Estimated Revenue for FY 2013-14	=	Rs. 23.218 Billion
Estimated Revenue for FY 2014-15	=	Rs. 26.471 Billion

Current Loans (As on 30-06.2014) = Rs. 7.258 Billion (Will be paid off by FY 2035)  
(CDL & Foreign Relent Loans)

(In addition to above, Tarbela Power Generation Plant Assets partially has been pledged by Wapda 2<sup>nd</sup> & 3<sup>rd</sup> Sukuks Cos. for Rs. 1.2 Billion (Total 8.0 Billion – Rs. 6.8 Billion paid off) and Rs. 10.0 Billion respectively.)

### MANGLA HYDEL POWER STATION

Mangla Dam Project was actually conceived in 1950's as a multipurpose project to be constructed at a place called Mangla on river Jhelum located about 30 km upstream of Jhelum city (120 km from Capital Islamabad). The initial investigation and its feasibility studies were completed in 1958. Later on the project was included in the Indus Basin Project. The construction of Mangla Dam was started in 1962 and completed in 1967. Wapda is responsible for operation of Reservoir and Power Station.

Total no. of units	=	10 x 100 MW
Total installed Capacity	=	1000 MW
Rated Head	=	296 ft
Max. op. level (ft)	=	1242 ft
Min. op. level (ft)	=	1040 ft

UNITS	<u>1~4</u>	<u>5~6</u>	<u>7~8</u>	<u>9~10</u>
Commissioning Date	<b>1967/1969</b>	<b>Mar,1974</b>	<b>Jul,1981</b>	<b>1993/1994</b>

Gross Annual Generation (2012-13)	=	4,713.188 GWh
Auxiliary Consumption (2012-13)	=	136.630 GWh
Net Electrical Output (NEO) (2012-13)	=	4,576.558 GWh
Plant Factor (2012-13)	=	53.8 %
Project Cost	=	Rs. 3.455 Billion (1961)
Actual Revenue (2012-13)	=	Rs. 6.682 Billion
Funded by	=	USA, UK, Australia, Canada, Germany, New Zealand, World Bank, CZECH, Credit Loan Marubini
Current Tariff at Bus Bar (Notified)	=	Rs. 1.79 / kWh
Estimated Revenue for FY 2013-14	=	Rs. 7.399 Billion
Estimated Revenue for FY 2014-15	=	Rs. 8.436 Billion

### GHAZI BAROTHA HYDEL POWER STATION

Ghazi Barotha Hydropower Project is located on the Indus River downstream of Tarbela Dam. The Project utilizes the hydraulic head available between the tailrace at Tarbela Dam and the confluence of the Indus and Haro Rivers for power generation. In this reach Indus River drops by 76 m in a distance of 63 km. This Project possesses the minimum of environmental and social impacts. Ghazi Barotha Hydropower Project consists of three main components. The Barrage, the Power Channel and the Power Complex.

Discharge Capacity	=	1,600 cumecs
Total installed Capacity	=	1450 MW (5 x 290)
Max. op. level (ft)	=	1096
Min. op. level (ft)	=	1079

Number of Units	5
Commissioning Date	2003/2004

Gross Annual Generation (2012-13)	=	7,164.650 GWh
Auxiliary Consumption (2012-13)	=	81.807 GWh
Net Electrical Output (NEO) (2012-13)	=	7,082.843 GWh
Plant Factor (2012-13)	=	56.41 %
Project Cost	=	Rs. 94.733 Billion (1997)
Actual Revenue (2012-13)	=	Rs. 10.341 Billion
Funded by	=	ADB, KFW, European Investment Bank, Islamic Bank, World Bank, Japanese Bank of International Corporation
Current Tariff at Bus Bar (Notified)	=	Rs. 1.79 / kWh
Estimated Revenue for FY 2013-14	=	Rs. 11.249 Billion
Estimated Revenue for FY 2014-15	=	Rs. 12.826 Billion
Current Loans (As on 30-06.2014) (CDL & Foreign Relent Loans)	=	Rs. 20.820 Billion (Will be paid off by FY 2031)