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# ENERGY POLICY PROGRAM TARBELA VISIT REPORT

MAY 2015



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# USAID/PAKISTAN: ENERGY POLICY PROGRAM (EPP)

Tarbela Visit Report

**Contract No:** AID-EPP-I-00-03-00004 **Order No:** AID-39I-TO-12-00002

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## **1. Purpose of Visit**

A visit to Tarbela Hydro Power Plant was conducted on May 23, 2015 by EPP Chief of Party along-with EPP Senior Energy Expert to inspect the new equipment arrived at site under Tarbela Phase I and to obtain necessary documentation/purchase orders for Phase II.

In this regard, EPP staff met with relevant WAPDA staff at Tarbela.

## **2. Site Visit**

EPP engineers visited power station and inspected the station drainage pump recently arrived at Tarbela. This was necessary to verify WAPDA reimbursement claim for this item under Phase-I FARA. In addition, SCADA System also arrived at Tarbela; however, it will be opened in presence of insurance inspectors and will be jointly inspected with WAPDA engineers and EPP engineers next week. WAPDA is scheduled to install and test/commission the new SCADA System by August, 2015.

On Phase-I, only one remaining item- Generator Rotor Poles are under procurement and WAPDA was requested to expedite its completion by end December 2015.

On Phase-II, WAPDA has opened the special dollar account in the National Bank of Pakistan in Islamabad. This condition is necessary to meet before any disbursement being made under Phase-II funding.

WAPDA engineers have repaired the damaged draft tube of Unit-11 during the lean water period and during our visit unit was operating and generating 424 MW. The permanent repairs will be carried out by qualified contractor during next year shutdown.

EPP also visited the control room and at the time of visit the plant was generating 1884 MW. Eleven units out of fourteen were operating and remaining were under shutdown due to low reservoir level and maintenance works.

**3. Site Visit Photographs**



Figure 1: Station drainage pump at Tarbela Powe house



Figure 2: Station drainage pump at Tarbela Powe house



Figure 3: Station drainage pump at Tarbela Powe house



Figure 4: Specifications of Station drainage pump

Reservoir = 1495.86 ft.

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Table of Generation

11 21 Power Oper

2015-05-23 12.11.10

UNITS	MW	MVA <sub>r</sub>	LINES	MW	MVA <sub>r</sub>	AMPS
Unit 1	121.2	49.2	220kv MAR 1	138	69	384
Unit 2	123.2	52.2	220kv MAR 2	138	67	382
Unit 3	118.4	52.2	220kv BUR 1	142	57	383
Unit 4	117.2	57.2	220kv BUR 2	143	57	382
Unit 5	0.0	0.0	220kv BUR 3	145	57	387
Unit 6	119.2	13.2	220kv ISPR	62	5	153
Unit 7	100.2	9.2	500kv REW	488	0	536
Unit 8	103.2	13.2	500kv GZBR 1	144	- 136	204
Unit 9	115.7	15.1	500kv GZBR 2	131	- 124	200
Unit 10	117.2	16.2	500kv PESH	376	202	448
Unit 11	422.0	132.0				
Unit 12	0.0	0.0				
Unit 13	0.0	0.0				
Unit 14	420.0	128.0				
TOT GEN	1894.9	540.9				
VOLTAGES kV			FREQUENCIES			
	500kV	220kV	Hz			
BB1	532.0	235.1	500kv BB1/BB2	50.01	50.02	
BB2	532.0	235.2	220kv BB1/BB2	50.02	50.02	
			ALFC GEN	440.2	55.1	
			AUTO T/F CURRENT (AMPS)			
			500kV	220kV		
			T/F2	174.7		390.7
			T/F1	174.2		387.2

0

Figure 5: Log Sheet showing the Unit wise generation

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