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VISIT REPORT

VERIFICATION OF PROJECT WORKS COMPLETED
UP TO DECEMBER 8, 2012 AT TARBELA HYDRO POWER
PLANT



December 2012

This program is made possible by the support of the American people through the United States Agency for International Development (USAID)

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Contract No: AID-EPP-I-00-03-00004

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I. PURPOSE of VISIT

A visit to Tarbela Hydro Power Plant was conducted on December 8, 2012 by EPP engineers to monitor progress of the Repair and Rehabilitation of Tarbela Power Plant. The purpose of the visit was to expedite the completion of rehabilitation works under the USAID funding and to inspect the digital governors arrived at Tarbela from GE USA.

2. STATUS of WORKS in PROGRESS

On December 8, 2012 Tarbela Power Station's total maximum generation was 2035 MW at a reservoir level of 1462 ft. After the installation of new Class F windings under the FARA, Units #1, 3 and 4 are capable of generating 195 MW at full reservoir level; however, at the time of visit these were generating 152 MW each. As of today, 128 MW has been added under the FARA rehabilitation program.

Following is the brief summary of the progress:

1. Unit # 4 winding was replaced with new class F winding in May 2011. At the time of visit the unit was generating 152 MW and winding temperatures were under controlled limits.
2. Unit # 1 winding was replaced with new Class F winding in Feb 2012. At the time of visit the unit was generating 152 MW and winding temperatures were under controlled limits.
3. Unit # 3 winding was replaced with new Class F winding in May 2012. At the time of visit the unit was generating 152 MW and winding temperatures were under controlled limits. Furthermore, WAPDA is finalizing the purchase order for the procurement of one third winding spares from Marubeni Corporation, Japan. WAPDA was requested to expedite the process.
4. New Station Drainage Pumps and Unwatering Pumps are installed in the Drainage and Unwatering Sump. WAPDA has placed purchase order for the Tank dewatering pump of smaller size with a delivery period of 12 weeks.
5. The manufacturing of Digital Governors completed at GE, USA. Two WAPDA engineers inspected the Governors at GE Works in July 2012 and after satisfactory inspection equipment was released for shipment. The new Governors arrived at Karachi port in early November and have arrived at Tarbela on November 30, 2012. EPP engineers inspected the new equipment arrived at site, however detailed inspection will be carried out after the arrival of GE engineers next week. WAPDA has requested shutdown on unit # 5 to install new Governor under the supervision of GE engineers. Depending on unit shut down approval, the installation of new Governors to commence during the low flow season in December 2012 and is scheduled to complete by June 2013 on all ten units. WAPDA has not yet received \$ 2.7 million for the 90% payment for Governors verified by EPP office on November 20, 2012 and forwarded to Energy office for approval and reimbursement. WAPDA requested EPP to request OFM to expedite the reimbursement of \$ 2.7 million.
6. The procurement of the SCADA system has been delayed due to technical negotiations with ABB. The case is with WAPDA Central Contract Cell for adjudication. WAPDA was requested to expedite the procurement.
7. The expiry date of Tarbela FARA is December 31, 2012. WAPDA has submitted request for an extension in the validity of FARA for one year and requested EPP to expedite its approval from Energy Office.

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3. Visit Photographs



Figure 1: Plaque at Tarbela Power Plant



Figure 2: Discussion in Control Room about Performance of Replaced Windings at Unit 1, 3 & 4

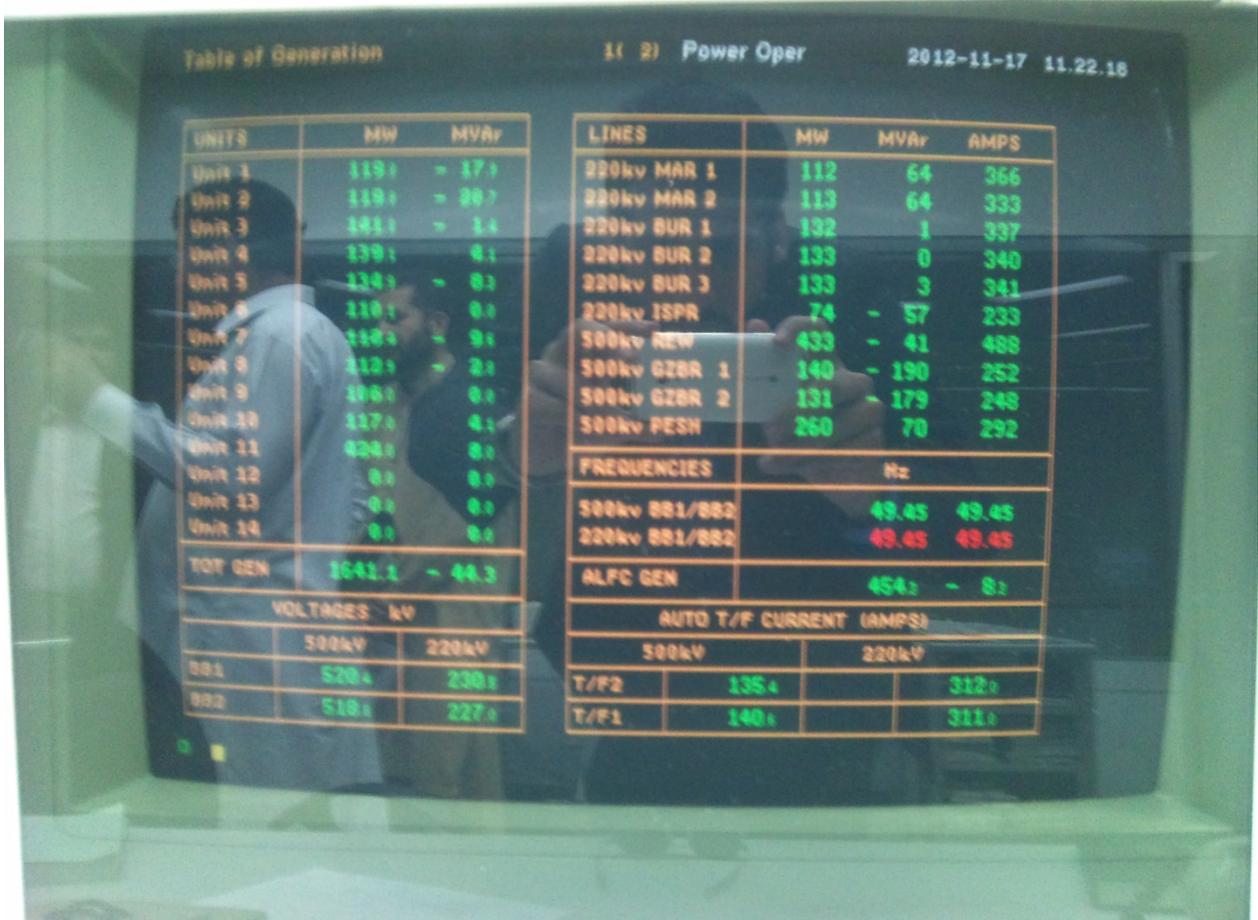


Figure 3: Computer in Control Room Displaying the MW Generation from All Units



Figure 4: Checking the MW Generation of All Units and the Windings Temperature

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