

# SATPARA DAM VISIT REPORT

## Verification of Project Works Completed up to June 22, 2012



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## 1. PURPOSE of VISIT

In order to monitor progress, a field visit to the Satpara Multipurpose Dam and Hydropower Project was conducted from June 20 to June 22, 2012 by Director, Implementation Unit and Senior Energy Expert from EP Project. The purpose of the visit was to verify the completion of works and current status on the main dam, power houses 1 & 2, irrigation system and power houses 3 & 4. In addition to this, the implementation status of EMMP and the seepage condition at the dam was also examined. The field visit was important as it relates to expediting the completion of the project under USAID funding.

## 2. STATUS of WORKS COMPLETED

For the purpose of verifying works completed on the Satpara dam project, Talha Javed and Saleem Paracha from AEAI inspected the project on site for physical verification of completed works. Following is the brief summary of project works completed up to June 22, 2012;

- |  |                 |
|--|-----------------|
| 1. Civil Works for Dam and Powerhouse 1 & 2:         | 100 % complete  |
| 2. Irrigation System;                                | 99.9 % complete |
| 3. Civil, Electrical and Mechanical Works for 3 & 4; | 75 % complete   |
| 4. Consulting Services for Satpara Project;          | 90 % complete   |

Civil works on the main dam and powerhouse # 1 & 2 were completed on July 29, 2011 as per schedule specified in the Activity Agreement. Remaining works including construction of the roads, lighting arrangements and railings at the dam site were completed during the month of July. During this visit, dry testing of the spillway gates was witnessed and found satisfactory. Construction activities on the irrigation system were 99.9 % complete and the remaining works include completion of six outlets on left bank canal. The testing of both right and left bank canals was carried out on June 22 by releasing water in the canals. WAPDA was requested to complete the remaining six outlets, prior to the contractual completion date of June 30, 2012 to enable AEAI to verify the completion of milestones as per Payment Schedule of the Activity Agreement.

WAPDA awarded civil works contract for unit # 3 & 4 to M/s Descon as a variation order to the existing contract and the excavation works started in early April, 2011. The contract for E & M works was awarded to M/s Andritz Technologies, China on June 9, 2011 with a completion period of 21 months. The overall completion status of Units 3 & 4 was 75 % as of June 22, 2012.

All four units of powerhouse # 1 & 2 were operating and generating 6 MW due to low reservoir level. At full reservoir level expected in early August both powerhouses will operate at full generation capacity of 13.8 MW.

In accordance with the Activity Agreement for Satpara Project, WAPDA will enter into a Power Purchase Agreement with Gilgit-Baltistan PWD that would recover WAPDA's costs including O&M for a continued sustainable Satpara Project operation; however, WAPDA has not yet signed a Power Purchase Agreement with the local distribution company and delivering free power to PWD. Therefore, WAPDA does not have sufficient funds to purchase spare parts for the sustainability of the power plants operations. WAPDA has not yet signed PPA with G/B PWD and was requested to address this issue immediately. USAID/ AEAI can provide any assistance required by WAPDA to have sustainable operation of the power houses and project.

### **3. SEEPAGE CONDITION at the DAM**

It was noticed that the reservoir level was increasing due to higher inflow of water in the Satpara reservoir. On June 22, 2012 the total seepage recorded downstream of the dam by WAPDA was 8 cusecs. For more accurate and precise measurements WAPDA recently installed improved instruments which are recording total seepage from the dam. WAPDA filled the sink holes and depressions in the reservoir area (developed in 2010) in accordance with the recommendations of the Dam Safety Experts.

### **4. IMPLEMENTATION OF EMMP**

WAPDA Satpara has appointed EHS Officer and EHS Engineer to maintain day to day coordination and ensure that the EMMP is adequately implemented. They have also prepared Check List for the implementation of the Work Plan. AEAI through its sub-contractor is monitoring the implementation of EMMP and a separate report is issued for this activity.

The site visit photographs dated June 21 and 22 are in the AEAI Shared Folder.

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