

# FOCUS GROUP DISCUSSIONS

## Tarbela Power Plant - Report

Focus Group Discussion Session conducted May 15<sup>th</sup>, 2015

Energy Policy Program (EPP) successfully completed the “Best Practices in Hydro Operations and Maintenance training” between October – December, 2014. Through capacity building intervention activities, Hydro Power Stations developed international best practices in O&M programs. Each Hydro Power Plant participant undertook a two weeks extensive training course. The training course was designed to develop practices in operating, maintaining and managing power plant’s assets. This training not only benefited the participants, but their organization’s daily O&M practices, thus improving overall energy services in Pakistan. This training gave participants’ the opportunity to meet some truly exceptional professional trainers, and helped interact with their colleagues outside the office. The training program trained 71 people (engineers and students) in three batches which include participants from different Hydro Power Plants including Warsak Power Station, Tarbela Power Station, Ghazi Barotha Hydro Power Project, Mangla Power Station, Chashma and Jinnah Hydel Power Station, Nandipur Power Project, Small Hydel Power Stations, WAPDA House Lahore, National University of Computers and Emerging Sciences, Islamabad, National University of Science and Technology, Islamabad and Center for Advanced Studies in Engineering, Islamabad. Each training group received a two weeks of in-class training and post-training monitoring.

To check the sustainability, EPP conducted a post training evaluation session the participants. Participants were asked to elaborate the challenges they encountered, takeaways, and any suggestions for improving the future training via discussions and feedback forms. In Tarbela, EPP successfully met 8 of the 10 O&M participants to track the implementation and major accomplishments during the post training phase at Tarbela Power Plant. EPP used the quotes from the participants to highlight the challenges and potential solutions for future trainings.

## Focus Group Discussions at Tarbela Power Plant

This report summarizes the outcomes of the focus group discussions conducted on May 15, 2015 at Tarbela Power Plant. The focus group discussion was subjected to timely interventions for continuous improvement while focusing primarily at the ‘learning’ and ‘behavioral change’ levels. EPP’s M&E team followed up to track the implementation of the skills learned. EPP’s team asked the participant to share findings, lessons learned, and accomplished achievements while implementing the lesson learned.

EPP’s M&E team conducted an hour long session with Tarbela Power Plant participants. Below are the findings from the feedbacks given by the participants, for a better comprehension of the discussion, CCA team divided them into three different categories.

- 1) Skills learned and Implemented
- 2) Challenges faced
- 3) Suggestions

## Skills learned and implemented:

Participants mentioned the effective use of their newly acquired skills; including improvements in the plant’s operations, replacement of outdated protection systems, safety and fire alarm system have been

installed which is designed by the trainees. The participants mentioned the following about the newly acquired skills;

*“As a result of O&M training, I have developed a formula for Tarbela Power Station’s discharge which was previously inaccurately calculated. Now, discharge from Tarbela is as per IRSA demands. Progress is going on in replacement of outdated protection and control equipment”*

*“Being the shift engineer, I have implemented some of the skills which I have learned during the O&M training e.g. optimal operation of the plant where we categorized the operations based on different required criteria”*

*“Training has helped us in many ways in improving the plant’s operational efficiency while practicing good maintenance. Implementing the practices increased the plant efficiency and optimal operations by reducing the cost in a way to meet international safety standards. We have introduced some calculation formulas for water management”*

*“Digital governors have been introduced now and the digital exciters are servicing some of the Units”*

*“Training is helping us to achieve operational excellence and increase plant’s efficiency by employing better troubleshooting and testing techniques of various plant components”*

*The training helped us to understand the organization psychology and also the industrial standards practiced in other countries”*

*“The O&M training enabled us to implement the advance skills and best practices in the field of Hydel Generation”*

*“The organization is already following most of the required industrial standards. Some new standards were introduced during the O&M training which will be very helpful in future”*

*“O&M Training is helping us in procurement of equipment, operation, and control of the units and its auxiliaries”*

*“We have implemented the O&M training procedures such as spare parts arrangement and preventive/corrective maintenance as a result of which positive results are obtained”*

The participants mentioned the positives while explaining the challenges they are currently facing in implementing some of the required techniques.

## Challenges:

Participants highlighted the challenges they faced during the implementation their skills and completion of assignments; such as, arrangement of spare parts, absence of a procurement cell, delays in procurements, shortage of human resources in operations at the power plant. Furthermore, they have mentioned:

*“Challenges are shortage of human resources, lack of trained officials on the best practices, unavailability of MMS system, decentralized procurement department, unavailability of procurement cell causing budget constraints”*

*“Furthermore to the shortage of human resources, there is lack of confidence and skills to be implemented at the power plant for improvements”*

*“During the implementation process we are lacking the installation of computerized data management and analysis system”*

*“Our organization is facing the procurement of spare parts of different equipment, unavailability of procurement cell, lack of centralized procurement, budget constraints and lack of MMS”*

## Suggestions:

In order to further improve the future development initiatives and to determine the effectiveness to achieve the stated aims and objectives, participants were asked to give their suggestions. Participants have given their suggestions for moving forward positively.

*“As the world is proceeding towards the smart grid system and the era of digital technology so we have to replace all the analyze system by digital ones”*

*“It would have been more beneficial if training was organized on-site abroad or within country, more site visits to should be arranged to witness FAT test of various power house equipment which will also enhance technical skills”*

*“Our organization can bring more improvement by implementing best practices for increasing the efficiency and optimal proficiency of the plant by utilizing the international standards, providing advance onsite training to the engineers /technicians”*

*“Paper work should be replaced by computers and the advance O&M Skills, tools and equipment should be introduced. Some foreign training in this context should be arranged and performance of engineers should be groomed”*

*“For better improvements, organization needs to train its employees for best practices and make necessary provisions in the budget for implementing new techniques. A separate group of trained employees be helpful for ensuring these implementations”*