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ENERGY POLICY PROGRAM QUARTERLY PROGRESS REPORT OCTOBER - DECEMBER 2013



DECEMBER 2013

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ENERGY POLICY PROGRAM

QUARTERLY PROGRESS REPORT: OCT - DEC 2013

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Cover photo: Certificate Distribution Ceremony of Live Line Training, Tarbela

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ACRONYMS

AEAI	Advanced Engineering Associates International
CEO	Chief Executive Officer
CFW	Corporate Finance Wing
CPGCL	Central Power Generation Company Ltd
CPPA	Central Power Purchasing Authority
DISCO	Distribution Company
DGPC	Directorate General Petroleum Concessions
EMMP	Environmental Mitigation and Monitoring Plan
EPP	Energy Policy Program
FARA	Fixed Amount Reimbursable Agreement
FATA	Federally Administered Tribal Areas
FESCO	Faisalabad Electric Supply Company
FY	Financial year
GE	General Electric
GENCO	Generation Company
GEPCO	Gujranwala Electric Supply Company
GHCL	GENCO Holding Company Limited
GOP	Government of Pakistan
GTPS	Guddu Thermal Power Station
HEC	Heavy Electric Complex
HESCO	Hyderabad Electric Supply Company
JTPS	Jamshoro Thermal Power Station
KPK	Khyber Pakhtunkhwa
kV	Kilovolts, 1000 volts, unit of electric potential (voltage)
LC	Letter of Credit
LNG	Liquefied Natural Gas
LSA	LNG Services Agreement
MOF	Ministry of Finance
MPNR	Ministry of Petroleum and Natural Resources
MTPS	Muzaffargarh Thermal Power Station
MW	Megawatt, unit of electrical power, 1 million watts,

MWP	Ministry of Water and Power
NEPRA	National Electric Power Regulatory Authority
NPCC	National Power Control Center
NTDC	National Transmission and Despatch Company
O & M	Operations and Maintenance
PC	Planning Commission
PESCO	Peshawar Electricity Supply Company
PIL	Project Implementation Letter
PO	Purchase Order
Power-SIM	Power Sector Integrated Model
PPA	Power Purchase Agreement
PQA	Port Qasim Authority
PTF	Power Transformers
QESCO	Quetta Electric Supply Company
RFP	Request for Proposal
RPC	Reactive Power Compensation
SBP	State Bank of Pakistan
SCADA	Supervisory Control and Data Acquisition
SMS	Secured Metering System
SOW	Scope of Work
SSGC	Sui Southern Gas Company
TAPI	Turkmenistan-Afghanistan-Pakistan-India pipeline
TOR	Terms of Reference
ToU	Time of Use
TPS	Thermal Power Station
USAID	United States Agency for International Development
USD	United States Dollar, US\$
WAPDA	Water and Power Development Authority

PROGRAM OVERVIEW

The Energy Policy Program (EPP) is a multiyear, USAID-funded initiative to increase power generation, improve transmission and enhance cost recovery. EPP works with selected energy enterprises to assist the Government of Pakistan's sector reform efforts. The program supports the joint goals of the United States Government (USG) and the Government of Pakistan in reforming the power sector, and is designed to address Pakistan's chronic electricity shortage. The program is currently in its *Integration Phase*, which continues the due diligence and G2G program focus, while emphasizing an integration of technical upgrades, policy reform implementation, and transmission-related activities.

Figure I: EPP Phases



EPP comprises of interrelated activities and interventions built around four major components:

Component I - Monitoring & support of Project Implementation: EPP provides monitoring and implementation support for six signature energy projects: four repair and maintenance projects (3 GENCOs and Tarbela); and two multipurpose dam completion projects (Gomal Zam and Satpara)

Component II - Advice and Support of Energy Sector Policy Reform: EPP supports generation and transmission-related studies and policy reform activities assigned by USAID with the support of Implementing Partners.

Component III - New Projects, Planning and Development: EPP conducts and prepares due diligence reports on new projects under consideration for USG support in order to provide detailed information on these projects, reduce USG risk, and set a basis for creating Project Implementation Agreements for selected projects.

Component IV - New Activities: EPP focuses on strengthening Pakistan's transmission network, as well as fuel-mix diversification through support to energy import efforts. Complementing these activities, EPP's capacity building program facilitates sustainability by enhancing local capability in critical areas.

The current phase of the EPP will conclude in October 2015, with the anticipated goal of 1,263 MW added or restored to the energy sector for an overall megawatt addition of 4200 MW¹ by 2017.

¹ Assumes 50% of the LNG import is allocated to the power sector (equivalent of 2500 MW)

Confidential information redacted

PROGRESS IN NUMBERS

Item	Achieved or Completed	Targets LOP	% Completion
Generation MW	913	863	105.8
Transmission MW	48	400	12
Policy Reform and Governance input	2	9	22.2
Due Diligence/Studies completed	2	NA	NA
G2G Funding \$ million	132.08	141.7	93
Procurement contracts \$ million	10.16	25.9	39

Where We Work

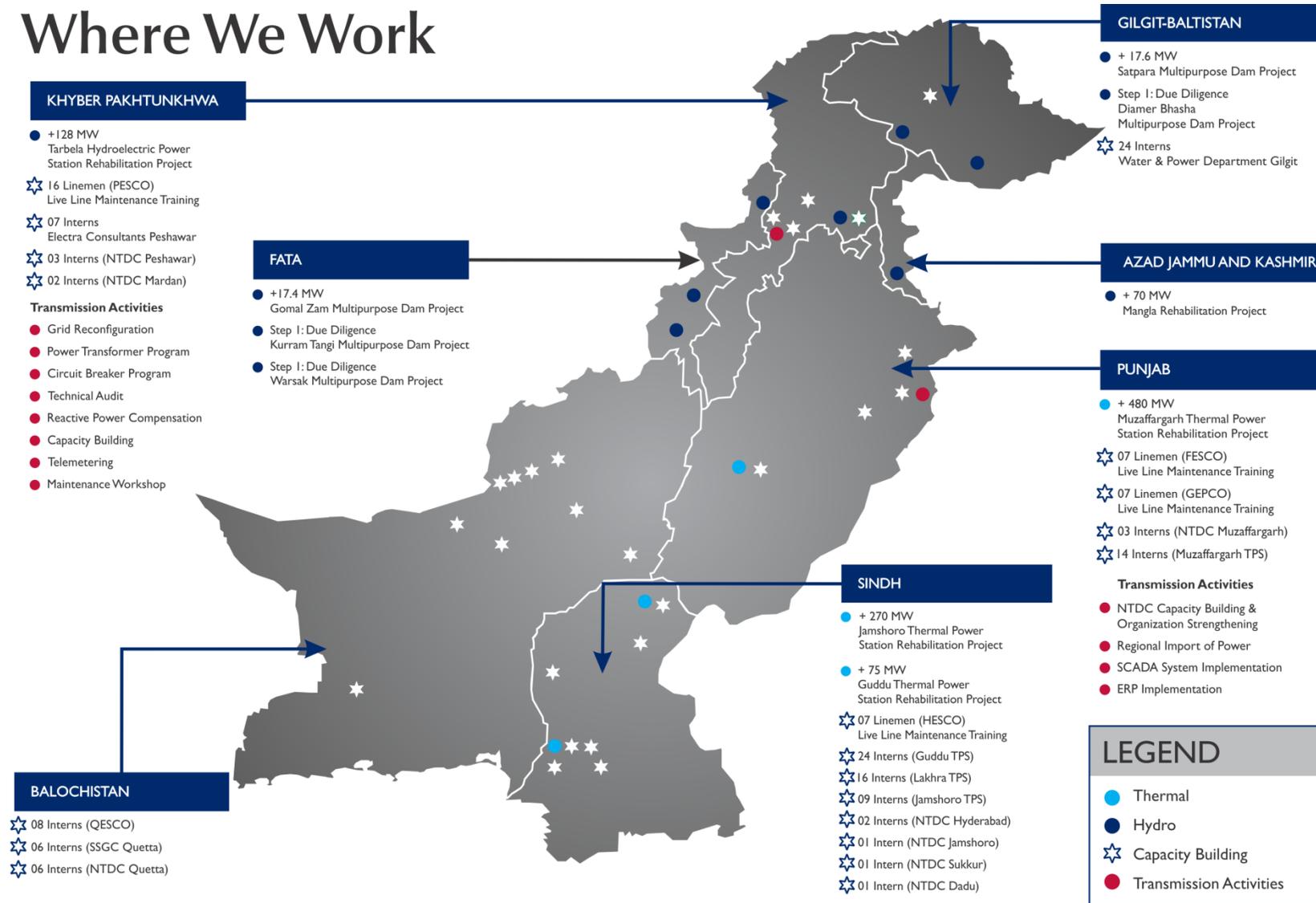


Figure 2: Map of EPP Activity Areas

COMPONENT I: PROJECT MONITORING & IMPLEMENTATION

EPP provides monitoring and implementation support for the six G2G signature energy projects identified in the Task Order Award. These projects include rehabilitation of three thermal power plants (Muzaffargarh, Guddu and Jamshoro), one hydropower plant (Tarbela Dam); and construction of two new multipurpose dams (Gomal Zam Dam and Satpara Dam). Total USG funding for these projects is US\$ 141.7 million (per revised agreements), and the estimated gains in generation have been 863MW to date. As of December 2013, \$ 132.08 million – or 93% of total funding – has been disbursed to GOP implementing partners, and 913 MW have been added to Pakistan’s national grid. Results achieved through the G2G projects are illustrated in the table below:

Table 1: Results Achieved through G2G Projects

Projects	USG Funding (Million)	Paid (Million)	Completion Date	MW Gains/Benefits	
				Target	Achieved (Dec 31, 2013)
Tarbela	\$16.50	\$13.95	12/31/14	128	128
Jamshoro*	\$19.32	\$15.96	03/31/14	150	270
Guddu*	\$19.12	\$17.34	12/31/13	75	-
Muzaffargarh*	\$15.77	\$13.83	12/31/13	475	480
Gomal Zam	\$45.00	\$45.00	Completed	17.4	17.4
Satpara	\$26.00	\$26.00	Completed	17.6	17.6
Total	\$141.71	\$132.08		863	913

* Amendment to Activity Agreement(s) underway to extend the project completion date to 12/31/14

During the reporting period, EPP technical experts visited the project sites regularly, verified deliveries, inspected equipment, and continuously monitored work progress.

Rehabilitation of Tarbela Hydropower Plant

In the reporting quarter, EPP monitored the installation of digital governor at unit seven of the power plant, and oversaw the commissioning of digital governors installed at units 7 and 9. Digital governors are to be installed on ten units of the plant. Upon installation, the governors will increase the reliability and sustainability of the power plant, but not support restoration of additional megawatts.

In April 2010, through a G2G mechanism USAID entered into a partnership with the Government of Pakistan for the repair and rehabilitation of the Tarbela hydroelectric power station. By upgrading three generator units, 128 megawatts of power generating capacity (equivalent to 481 million kilowatt hours of energy per year) have been restored. This is enough to supply electricity to 2 million people.

Of the \$16.5 million funding amount committed for Tarbela, the total disbursement as of December 2013 was \$13.5 million.

Gomal Zam Multipurpose Dam Project

With \$45 million of funding, USAID supported WAPDA in the completion of the main dam, powerhouse, and switchyard and transmission line at Gomal Zam.

The dam has added 17.4 MW to the national grid and is capable of storing 1.14 million acre feet of water that will control flooding and irrigate 191,000 acres of land. The project stands completed and was inaugurated by U.S. Ambassador Olson in September 2013.

Satpara Multipurpose Dam Project

EPP successfully achieved the Satpara Multipurpose Dam project objectives ahead of the desired completion date of December 31, 2013. The dam, four powerhouses, and irrigation canals are complete. The entire funding amount of \$26 million committed for Satpara has been disbursed to the GOP.

The dam has added 17.6MW to the Skardu grid, and is capable of storing 0.09 million acre feet of water that will control flooding and irrigate 15,500 acres of land. The power generated by the dam is enough to meet the electricity consumption needs of 280,000 individuals.

Two monitoring visits were made to the site by EPP engineer and meetings were held with WAPDA. Discussions were held on decreased power generation capacity of the dam in the winter season and remedial measures were proposed to ensure continuous operation of the powerhouses during winter season to minimize load shedding in the Skardu region.

During the reporting quarter EPP certified the last completion invoice of \$0.8 million. The \$26 million USG funding committed for the project has been disbursed to WAPDA.

Muzaffargarh Thermal Power Station Rehabilitation Project

Rehabilitation work to date has resulted in the addition of 480 MW of generation capacity at Muzaffargarh Thermal Power Station (MTPS), which exceeds the target of 475MW. The 480 MW added to the national grid is sufficient to supply electricity to 7.6 million beneficiaries. Major equipment has been installed and rehabilitated at MTPS, and procurement of the remaining equipment required is in process.

During the reporting period, EPP continued to support MTPS in the procurement process to expedite obtaining the remaining equipment, and minimize delays in rehabilitation work. An amendment to the Activity Agreement is under review/consideration to extend the project completion date to December 31, 2014.

EPP supported USAID in the issuance of a customs/GST exemption letter to Northern Power Generation Company Limited (NPGCL)² to aid in receiving tax exemption from the Economic Affairs Division (EAD).

In this quarter, EPP certified invoices amounting to \$1.64 million. As of December 2013, the total amount disbursed to the GOP stands at \$13.83 million for MTPS.

Jamshoro Thermal Power Station Rehabilitation Project

In October, EPP submitted the report on 'Current Dependable Capacity and Heat Rate Test of Jamshoro Thermal Power Station' to USAID and GHCL for review. The tests will facilitate JTPS in filing a revised tariff petition with NEPRA. Upon approval, the revised tariffs are expected increase JTPS' revenue by some 9% annually.

² NPGCL was established as a public limited company in 1998. It comprises of eight generating blocks situated at Muzaffargarh, Faisalabad, Multan and Lahore.

EPP supported USAID in the issuance of a customs/GST exemption letter to the Jamshoro Power Company Limited³(JPCL). The letter will aid JPCL in receiving tax exemption from the Economic Affairs Division (EAD).

Amendment No. 1 to the Activity Agreement revised the project completion date to March 31, 2014, and obligated the incremental funding to cover the costs of insurance and freight for equipment to be procured. A second amendment to the Activity Agreement is under review/consideration to extend the project completion date to December 31, 2014. The total amount disbursed to the GOP as of December 2013 is \$15.96 million.

Rehabilitation of Guddu Thermal Power Station

Further to the agreement between Central Power Generation Company Limited⁴ (CPGCL) and General Electric (GE), major equipment was delivered at GTPS. EPP conducted an inspection of equipment in coordination with representatives from GE and CPGCL and the Rehabilitation is scheduled to commence in the second quarter of FY2014, and is anticipated to take three months. The rehabilitation will lead to gains of 75 MW, enough power to meet the electricity consumption needs of more than 170,000 households.

EPP supported USAID in issuing a customs/GST exemption letter for CPGCL. The letter will aid CPGCL in receiving tax exemption from the Economic Affairs Division (EAD) of the Ministry of Finance.

In response to CPGCL's extension request, EPP is supporting USAID in the review of the Activity Agreement with the aim of extending the project completion date to December 31, 2014. The total amount disbursed to the GOP as of December 2013 is \$17.34 million.

Mangla Dam Rehabilitation Project

EPP held meetings with WAPDA and USAID to discuss the payment mechanism for disbursement of funds under the Mangla Dam Rehabilitation Project. EPP assisted USAID in drafting the payment schedule.

EPP also assisted WAPDA in obtaining the approval of PC-I by furthering the issue at both the Ministries of Finance and Planning and Development. The PC-I of Mangla rehabilitation was approved by the Executive Committee of the National Economic Council (ECNEC) on December 29, 2013.

GENCOS PERFORMANCE EFFICIENCY IMPROVEMENT PROGRAM

Having achieved substantial and highly visible results through the replacement of equipment that resulted in power generation capacity and efficiency improvements, EPP is now focused on improving the commercial operations of the GENCOs. In this regard, EPP is providing support to the GENCOs to conduct NEPRA-compliant Heat Rate tests in order to obtain a revised tariff from NEPRA which will reflect the actual costs incurred by GENCOs in producing electricity.

Procurement and Calibration of Flow Meters

During the reporting period, SGS⁵ continued with the calibration of gas flow meters at Guddu TPS. Fifty percent (50%) of the meters at Guddu have been calibrated, while procurement of orifice plates is underway. This procurement is necessary to complete the calibration of the remaining meters.

³ JPCL was incorporated in 1998 and manages the Jamshoro and Kotri Thermal Power Stations

⁴ Established in 1998, CPGCL manages the operations of Guddu Thermal Power Station

⁵ EPP has contracted the services of SGS for calibration of flow meters at the three GENCOs located at Jamshoro, Muzaffargarh and Guddu

Twelve flow meters were delivered and installed at MTPS. Following the inspection of the calibrated meters by EPP the heat rate testing schedule was finalized.

Heat Rate and Dependable Capacity Testing

EPP coordinated with PES (and independent engineering firm) to conduct heat rate tests at MTPS. The testing schedule was finalized in consultation with NEPRA and NPGCL, and a Heat Rate test on Unit 2 of MTPS was conducted on December 30, 2013 in the presence of NEPRA, CPPA, PES, EPP and MTPS representatives. The tests on the remaining units are scheduled to be completed by mid-January 2014.



Readings being taken during heat rate test at MTPS



Calibrated flow meter at MTPS

Capacity Building at GENCOs and WAPDA

EPP has designed an Operations and Maintenance (O&M) training program to increase the capacity of 120 technical staff at GENCOs and WAPDA. The training will be carried out in groups of 20 trainees, with each training session spread over a period of two weeks.

In December, EPP made progress with the GENCO Thermal and Hydro Training Series programs, and selected tentative dates for the upcoming quarter. A meeting was held with the selected training service provider (TSP) for thermal training to discuss the logistics, curriculum and training schedule.

COMPONENT 2: POLICY AND REFORM

SUPPORT TO THE MINISTRY OF WATER AND POWER

During the quarter, EPP continued to lend targeted and impact-oriented support to the Ministry of Water and Power (MWP) in implementing the GOP's Power Sector Reform Program in generation, transmission, fuels, policy and finance.

Power System Integrated Model (Power SIM)

In consultation with MWP, EPP finalized the Power SIM by including various scenario analysis of increased power tariff, and impact of hike in circular debt.

In November, EPP conducted an online training session of 5 Washington based USAID staff on using the model under different scenarios. Four Section Officers of MWP were trained on the usage of the Power SIM during the month of December. The trainings covered all aspects of the model, including the generation, transmission, and distribution modules, and analysis of various financial impacts of policy reforms and efficiency enhancements in the power sector.

Power Purchase Agreements (PPAs)

At MWP's request of support to ensure complete execution of Power Purchase Agreements (PPAs) by the GENCOs, EPP initiated a review of the NEPRA Act and agreements between the GENCOs and NTDC.

SUPPORT TO MINISTRY OF FINANCE

During the reporting period, EPP seconded staff supported the Corporate Finance Wing of Ministry of Finance in assignments related to the power sector. EPP drafted a brief on the re-emergence of Power Sector Circular Debt. Keeping in view the continuous increase in power sector outlays by provincial governments and other government entities, EPP seconded staff to the Ministry of Finance (MOF) to review adjustments at source and propose mitigating efforts.

EPP assisted the Ministry to review the performance of the DISCOs for the first four months of the current fiscal year. Support was also extended to the Ministry in drafting briefs on the efficiency audit to captive power generation plants.

SUPPORT TO MINISTRY OF PLANNING AND DEVELOPMENT

EPP staff backed up data from the Member Energy's official computer, and shared it with the Chief of Party and Deputy Chief of Party as directed by the Member Energy. EPP also provided routine system and network trouble shooting, and provided general technical assistance to the office of Member Energy and the Minister of Planning and Development so that they could carry out routine assignments smoothly.

SUPPORT TO MINISTRY OF PETROLEUM & NATURAL RESOURCES

LNG Imports

During the reporting quarter, the LNG Import program picked up pace. EPP's subcontractor QED facilitated ISGS to review the bids posted by the potential bidders for providing complete services for

delivery of LNG to SSGC in the vicinity of Port Qasim. As a result of the evaluations, Elengy Terminal Pak Limited (ETPL), was awarded the contract.

In December 2013, EPP, along with USAID, held meetings with the Port Qasim Authority (PQA) and ISGS in Karachi. The purpose of these meetings was to discuss the LNG program in greater detail, with an emphasis on the challenges faced by the program and facilitation/support required from USAID. The team was also given a tour of the PQA facilities.

EPP regularly coordinated with the consultants on program progress, and monitored the achievement of deliverables.

Shale Gas

In October, EPP was granted formal approval by DGPC to commence the Shale Gas Program. Following the approval, an orientation meeting was hosted by EPP at its premises. The meeting was attended by USAID and State Department representatives, Director General DGPC and EPP's subcontractors for the program.

The Non-Disclosure Agreement (NDA) for Shale Gas activities was signed by DGPC, EPP and LMKR during the reporting period. Following the NDA signing, DGPC granted approval for the review and usage of its data for this effort. Work has commenced under Milestone I of the Shale Gas program.

Work under the Shale gas program started with a delay of five months due to longer-than-anticipated bureaucratic procedures associated with the approval processes of the GOP.

Upstream Oil and Gas support

The procurement request package for upstream oil and gas support is under preparation.

COMPONENT 3: NEW PROJECTS, PLANNING & DEVELOPMENT

During the reporting quarter, EPP developed the Environmental Monitoring and Mitigation Plan (EMMP) for the Mangla Rehabilitation Project in consultation with USAID Regional Energy Advisor and Hagler Bailly.

Also, EPP continued to advise and assist USAID in evaluating the request from WAPDA to support four run-of-river hydropower projects: Duber; Allai; Khan Khawar; and Jinnah. The projects, if selected for G2G support, will add 419 MW of affordable and clean hydroelectric power to the national grid. EPP received revised cost estimates from WAPDA for the projects, and shared this data with USAD for review.

COMPONENT 4: NEW ACTIVITIES

TRANSMISSION

PESCO

EPP continued to focus on strengthening the power transmission network and on capacity building for power sector entities involved in transmission, with particular emphasis on the Peshawar Electric Supply Company (PESCO). To date, 48MW of generation capacity has been restored in PESCO's network as a result of EPP's assistance.

In December 2013, EPP held a coordination meeting with the Chief Executive Officer of PESCO, and apprised him of EPP's work progress and results achieved. The CEO expressed his appreciation of EPP's initiatives, and regarded the technical audits and Reactive Power Compensation Study as projects that can provide the most visible and impactful opportunities for system improvement at PESCO

Reactive Power Compensation Study

A presentation on the Reactive Power Compensation (RPC) was delivered to the CEO, PESCO and EPP team by the consultants, PPI. The participants were given an understanding of the present reactive power scenario within the context of the grid. The RPC study was finalized and submitted to USAID for review.

Technical Audits

EPP engineers conducted technical audits of 11 grid stations. To date, 77 of 86 (approximately 90%) PESCO grid stations have been audited. The technical audits highlight problems and bottlenecks, and prioritize proposed corrective measures.

Power Transformer Program

EPP is supporting the rehabilitation of 20/24 MVA transformer of the 132kV Jamrud Grid Station. In this regard, EPP transmission team conducted an inspection visit to Heavy Electrical Complex to see the ongoing repairs. Upon repair and installation, the transformer will add 20MVA of energy to PESCO's network.

EPP delivered 86 cooling fans to PESCO during the reporting period, 15 cooling fans were installed at various grid stations. To date, a total of 348 cooling fans procured from HEC have been delivered to PESCO. The fans, once installed, will enhance the capacity of PESCO transformers by 183 MW, and will ensure the reliable supply of electricity to over 2 million residents of Khyber Pakhtunkhwa (KPK).

Transmission Line

EPP inspected the transmission towers on the 132kV Mardan-Dargai transmission line. Four towers were found to be severely damaged, causing safety and reliability problems. Scopes of Work (SOW) for the repair of the damaged towers and procurement of mobile vans for T&G department of PESCO were developed.

NTDC/NPCC

EPP completed technical audits of 6 of 41 NTDC grid stations (approximately 15% complete).

In a meeting held at NTDC, EPP team members briefed NTDC's Audit Committee on the implementation of the Enterprise Resource Plan (ERP). It was decided that EPP will share the draft terms of engagement between NTDC and EPP, project timeline, and the SOW with NTDC in the coming month.

During the reporting quarter, EPP submitted three due diligence reports to USAID on construction of transmission line for dispersal of power from Partrind Hydropower Project, Evacuation of power from Lal Sohanra power plant, and construction of transmission line in Islamabad. Due diligence on the evacuation of power from wind power plants at Jhimpir and Gharo is also underway. To support this effort, EPP held a meeting with the Alternative Energy Development Board (AEDB) to discuss the upcoming wind power projects in Sindh. AEDB assured EPP of its support in facilitating due diligence visits to the sites, and committed to sharing data on wind power.

EPP's Transmission Team finalized the SOW for the procurement of equipment for the Smart Metering System in consultation with NTDC.

EPP experts held a meeting with NPCC's SCADA system provider to gain detailed insight on the existing installed SCADA system and its capabilities. This will aid EPP's team in developing capacity building activities for the NPCC dispatchers

CAPACITY BUILDING & PARTICIPANT TRAINING

This is a cross cutting activity providing support to all components of EPP through strengthening the capacity building of the GOP partners.

In December 2013, EPP developed the first draft of the *EPP Capacity Building and Participant Training Plan*, secured dates for the upcoming GENCO Hydro and Thermal training series, and evaluated the EPP internship program. This evaluation discovered that 33 of the 127 interns who participated in the program have gained full time employment.

The *EPP Capacity Building and Participant Training Plan* defines the program's training impact goals, collaboration with other training programs currently underway in Pakistan, USAID compliance instructions and requirements, as well as past activities and planned activities with budget estimates. Additionally, EPP established a Trai-Net account in during the reporting period, and will begin monthly reporting of all training activities, including past program activities, in January 2014.

Live Line Training

Live line training for 21 FESCO, GEPCO, and HESCO linemen was completed during the reporting period. During the 14 week-long training course, 7 crew members from each DISCO were provided classroom and hands-on training.

Through this targeted training, EPP is building the capacity of power distribution companies to carry out maintenance work on 132 and 66kV transmission lines while they are still energized. Each DISCO is expected to save 2 GWh of energy annually by carrying out live line maintenance, which will result in uninterrupted power supply to the consumers.

ADMINISTRATION/MANAGEMENT SUPPORT TO EPP

ACCOUNTING/FINANCE

Miscellaneous payments were made to vendors during the reporting period. Payroll and financial reconciliations were completed. Payment Vouchers were thoroughly reviewed to ascertain that adequate documentation has been gathered, and that the working papers have been documented and provide an adequate basis for reporting.

LOGISTICS

Logistical support was provided for 184 trips made by EPP staff. International travel for expats was arranged, and regular follow up was maintained with the Ministry of Foreign Affairs for obtaining longer-term visas for EPP expats.

HUMAN RESOURCES

In the quarter, EPP's staff strength increased by seven members. New recruitment were made in the procurement, Finance & Admin, Transmission and Policy teams.

Confidential information redacted

Confidential information redacted

LIST OF KEY MEETINGS

Meeting	Date	Location	Purpose	Outcome/Result
Power Planners International (PPI) and PESCO	Oct. 3, 2013	PESCO Office, Peshawar	Orientation on Reactive Power Compensation Study	The RPC study was shared with PESCO officials
Power Planners International (PPI) and PESCO	Oct. 3, 2013	PESCO Office, Peshawar	Resolve bottlenecks relating to telemetry	PPI agreed to provide their assistance in resolving the issues
Minister and Secretary MPNR, MPNR officials, ISGS, EPP, QED	Oct. 5, 2013	MPNR, Pak Secretariat	Logistics and port issues related to Fast Track LNG Program	Conclusions from QED's visit to PQA, KHI and impact on RFP/LSA
Secretary MPNR, MD, ISGS, EPP	Oct. 13, 2013	MPNR, Pak Secretariat	PQA issues related to Fast Track LNG Program	Further deliberations required regarding scope of the work for PQA
HEC	Oct. 23, 2013	HEC, Hattar	Resolve issue with installation of cooling fans and request HEC's assistance	HEC agreed to provide assistance
Matt Lannon (USAID Project Manager)	Oct 24	EPP Office, Islamabad	Discuss the progress of the GENCOs	USAID PM was briefed and decided that a meeting with CEO GHCL. And CEOs is required to remove the bottlenecks
DGPC, US Dept. of State, USAID – Office of Energy, EPP, LMKR, NuTech, KMR	Oct 25, 2013	EPP Office, Islamabad	Discussion on the Shale Gas program	Discussed the implementation modalities and overview of the program.
USAID Office of Energy, EPP, LMKR, NuTech	Oct 25, 2013	LMKR Head office, PTET Tower, Isb	Shale Gas Program	Overview of LMKR and visit of the facility
USAID Regional Environmental Advisor, Deputy Mission Environmental Officer and Environment Lead Hagler Bailly	Oct 25	EPP Office, Islamabad	Discuss the comments given by MoE on the draft EMMP	Hagler Bailly expert was briefed that what changes/additions are required and advised him to prepare the final version
Project Manager JPCL	Oct. 28, 2013	EPP Office, Islamabad	Discuss the progress of Jamshoro Project	The bottlenecks were identified
ISGS team, PQA representative, USAID Energy Office and EPP team	Nov 5, 2013	ISGS HO, Islamabad	Logistics and port issues related to Fast Track LNG Program	Developed a draft SOW to be discussed further.
Power Planners International (PPI) and PESCO	Nov 7, 2013	PESCO Office, Peshawar	Training of PESCO staff on telemetering system	PESCO staff was trained of configuration, operation and maintenance of the system

Meeting	Date	Location	Purpose	Outcome/Result
ISGS team, PQA representative, SSGC team USAID Energy Office and EPP team	Nov 25 & 26, 2013	ISGS HO, Islamabad	Support to PQA for Fast Track LNG Program LSA issues for negotiations with the bidder	Discussed the LSA issues and the need to support PQA immediately for the evaluation. Key items for discussions with the bidder
Member Power, GM Hydel	Dec 04, 2013	WAPDA house, Lahore	To discuss Mangla Rehab Project Payment Schedule, Opening of WAPDA Account for Project and O&M Training	<ol style="list-style-type: none"> 1. Draft Payment Schedule received from WAPDA 2. WAPDA issued request letter to open Account for Mangla 3. List of nominated candidates received from WAPDA for training
GM Thermal (CEO GHCL)	Dec 05, 2013	CEO GHCL Office, Lahore	To discuss O&M Training and NPGCL HR Test	<ol style="list-style-type: none"> 1. List of nominated trainees received from GHCL 2. Installation of flow meters expedited and Heat Rate testing schedule discussed
NPGCL FARA Project Manager	Dec 06, 2013	Muzaffargarh TPS	To expedite the installation of flow meters	Flow meters installed on all units
CE Tarbela	Dec 21, 2013	Tarbela Power Station	To discuss and expedite the procurement of remaining FARA equipment	WAPDA committed to complete the remaining procurements within the project completion date

Energy Policy Program

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