



USAID
FROM THE AMERICAN PEOPLE

PAKISTAN

ENERGY POLICY PROGRAM

MONTHLY PROGRESS REPORT

MAY 2014



May 2014

This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of Advanced Engineering Associates International, Inc. (AEAI) and do not necessarily reflect the views of USAID or the United States Government.

ENERGY POLICY PROGRAM

MONTHLY PROGRESS REPORT: MAY 2014

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

Order No: AID-391-TO-12-00002

© USAID Energy Policy Program

House 4, Street 88, Sector G-6/3
Ataturk Avenue, Islamabad, Pakistan
Tel: +92 (51) 835 7072, Fax: +92 (51) 835 7071
Email: JHicks@ep-ep.com.pk



Cover Photo: USAID's Provincial Director for Sindh and Baluchistan, Leon Waskin, along with USAID team during a visit to the Guddu Thermal Power Station

DISCLAIMER

The contents of this report are the sole responsibility of AEAI and do not necessarily reflect the views of USAID or the United States Government (USG).

CONTENTS

Acronyms.....	i
Monthly Highlights.....	2
Progress in Numbers.....	3
Program Overview.....	4
Component 1: Project Monitoring & Implementation.....	7
Component 2: Policy and Reform	11
Component 3: New Projects, Planning and Development.....	16
Component 4: New Activities.....	17
Transmission.....	17
Cross-cutting Activities.....	19
Communications.....	21
Administration/Management Support to EPP	22
Procurement.....	24
List of Key Meetings.....	26

TABLES

Table 1: Monthly Highlights.....	2
Table 2: Results Achieved through G2G Projects.....	7
Table 3: EPP Trained GENCO's Staff	19
Table 4: Accrual Table.....	22
Table 5: Completed Procurement.....	24
Table 6: List of Key Meetings Conducted in May	26

FIGURES

Figure 1: EPP Phases.....	4
Figure 2: Map of EPP Activity Areas.....	6

DISCLAIMER

The contents of this report are the sole responsibility of AEAI and do not necessarily reflect the views of USAID or the United States Government (USG).

ACRONYMS

AEAI	Advanced Engineering Associates International
CPGCL	Central Power Generation Company Ltd.
CPPA	Central Power Purchasing Authority
DGPC	Directorate General Petroleum Concessions
DISCO	Distribution Company
EMMP	Environmental Mitigation and Monitoring Plan
EPP	Energy Policy Program
FARA	Fixed Amount Reimbursable Agreement
GENCO	Generation Company
GHCL	GENCO Holding Company Limited
GOP	Government of Pakistan
GTPS	Guddu Thermal Power Station
ISGS	Interstate Gas System
JTPS	Jamshoro Thermal Power Station
KPK	Khyber Pakhtunkhwa
kV	Kilovolts, 1000 volts, unit of electric potential (voltage)
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
PESCO	Peshawar Electricity Supply Company
PIL	Project Implementation Letter
PO	Purchase Order
PowerSIM	Power Sector Integrated Model
PPA	Power Purchase Agreement
PQA	Port Qasim Authority
PTF	Power Transformer
RFP	Request for Proposal
SCADA	Supervisory Control and Data Acquisition
SMS	Secured Metering System
SOW	Scope of Work
SSGC	Sui Southern Gas Company
USAID	United States Agency for International Development
WAPDA	Water and Power Development Authority

MONTHLY HIGHLIGHTS

The Energy Policy Program (EPP) achieved the following results during the month of May 2014.

Table 1: Monthly Highlights

Component 1

- G2G Tarbela: EPP has submitted the Environmental Monitoring and Audit Report to USAID.
- G2G Muzaffargarh: EPP has submitted the Environmental Monitoring and Audit Report to USAID.
- G2G Jamshoro: EPP certified a claim of U.S. \$426,000 against PIL Item# 23: (Off-Line Efficiency Monitoring System), and forwarded to USAID/ENR for disbursement.
- G2G Guddu: EPP facilitated the visit of USAID's Provincial Director for Sindh and Baluchistan, Mr. Leon Waskin, and Deputy Regional Director, Dr. Randy Hatfield, along with Matt Landon, Deputy Director of USAID Pakistan's Energy Office to Guddu.
- G2G Guddu: EPP supported USAID in issuing tax exemption letters for CPGCL for clearance of equipment worth U.S. \$121,796.
- G2G Mangla: EPP supported WAPDA to in regularizing the Mangla Assignment Account through the State Bank of Pakistan, and on May 22, 2014, the first payment of U.S. \$13 Million was transferred.
- PEI: EPP is working with JPCL to develop the Performance Efficiency Improvement Plan.
- 20 GENCO staff completed training at the second installment of best practices in thermal operations and maintenance.

Component 2

- MWP: EPP reviewed the Interim Market Rules for CPPA-G with regard to generation and transmission, and made a number of important suggestions.
- MWP: EPP promoted the removal of CPPA from NTDC so that NTDC can function purely as the Transmission Company and System Operator.
- MOF: EPP helped the Corporate Finance Wing in negotiating and finalizing terms for the Rs. 31 Billion loan to meet the shortfall in cash flow of at CPPA.
- MPNR: EPP facilitated the PQA inputs on the proposed Scope of Work for the Full Bridge Mission Simulation (FMS) study.
- MPNR: EPP helped facilitate the Revised Implementation Agreement (IA) initialed between PQA and ETPL.
- MPNR: The data evaluation of 39 public domain wells by LMKR, in consultation with HDIP, was completed.
- MPNR: EPP, in consultation with PTS, prepared the first draft of the flared/low pressure gas guidelines.

Component 3

- EPP arranged a meeting for USAID with WAPDA to discuss next steps for the Kaitu Weir project.
- EPP presented the work being done on G2G projects to a team from the United States Army Corp of Engineers.

Component 4

- PESCO: 54 MW of throughput capacity were added to PESCO's network.
- PESCO: A 145kV SF6 circuit breaker was installed at the Balakot 132kV Grid Station.
- PESCO: A new 40 MVA transformer (PTF) was commissioned at the DI Khan 132 kV Grid Station.
- NTDC: Audits were conducted at the 3 grid stations: Shahibagh 220kV, Rawat 500kV, and Sheikh Muhammadi 500kV Grid Stations.

PROGRESS IN NUMBERS

Indicator	Unit	LOP Target	Achieved as of May 2014	Total Achieved as of May 2014	LOP % Achieved as of May 2014
I.a: GWh of energy sold	GWh	TBD	0	0	0%
I.1.a: Number of beneficiaries with improved energy services due to United States Government assistance	Individuals	13,112,306	691,092	12,405,338	95%
I.1.b: GWh of energy availability	GWh	7,599	378.43	7,142.43	94%
I.1.c: MW available to meet power sector demand as a result of USG assistance	MW	1,263	54	1,227	97%
I.1.1.a: MW of electrical power added or saved as a result of USG improvements	MW	1,263	54	1,227	97%
I.1.1.b: Efficiency of thermal power plant tests completed	No.	3	0	2	67%
I.1.1.c: Number of USG supported installations and operations and maintenance improvements	No.	40	9	82	205%
I.1.1.d: Number of transmission bottlenecks resolved	No.	13	2	5	38%
I.1.4.a: Public and private funds leveraged by the USG for energy infrastructure projects	USD	\$48,500,000	0	\$33,500,000	69%
I.2.b: Percent Change in the Gross Annual Accumulation of circular debt	%	140%	0	0	0%
I.2.1.a: Number of key policies and regulations in various stages	No.	10	0	8	80%
I.2.2.a: Number of policies following international best practices	No.	5	0	1	20%
I.2.2.b: Number of board recommendations following international best practices	No.	4	0	1	25%
I.2.3.a: Number of best practice-driven systems created, improved, and implemented	No.	10	0	3	30%
I.2.4.b: Number of public forums resulting from USG assistance in which government officials and citizens interact	No.	12	0	5	42%
4.4-8: Number of beneficiaries receiving improved infrastructure services due to USG assistance	Persons	13,112,306	691,092	12,405,338	95%

PROGRAM OVERVIEW

EPP is a multi-year, USAID-funded initiative to increase power generation, improve transmission capacity and reliability. 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.

While there is a continued and ongoing focus on due diligence and successfully implementing the G2G effort, EPP has begun integrating work on technical upgrades, policy reform implementation, and transmission-related activities. All of these efforts represent a comprehensive approach to help Pakistan expand its indigenous production capacity, eliminate the need for subsidies, and mitigate pressures contributing to the country's current energy crisis. At the conclusion of this important program, EPP will have contributed substantially to both the immediate energy shortages, and helped the country build longer-term energy sufficiency.



Figure 1: EPP Phases

EPP encompasses interrelated activities and targeted interventions that meet the objectives of the program's four components:

Component I - Monitoring & support of Project Implementation: EPP proactively advises and supports USAID and counterparts in the monitoring, implementation, and compliance of Fixed Amount Reimbursement Agreements (FARA) with the GOP. This includes monitoring and supporting timely counterpart compliance with all of the terms and conditions of FARAs, and inspection and certification of deliverables.¹ Specifically, 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 actively supports energy sector reform by undertaking activities that are requested by one or more GOP entities and by the direct secondment of staff to work in the offices of the requesting entity as advisors and specialized support staff.² In achieving the objectives of this component, EPP supports generation and transmission-related studies and policy reform activities assigned by USAID with the support of the GOP.

Component III – New Projects, Planning and Development: Based on frequently changing priorities and schedules of USAID and USG entities, EPP undertakes due diligence of projects and activities that are candidates for USG support.³ Specifically, EPP conducts and prepares due diligence reports on new projects under consideration for USG support in order to provide detailed information, reduce USG risk, and set a basis for creating Project Implementation Agreements for the selected projects.

¹ C.4.2, Component One, pg. 8 of 46, Contract No: AID-EPP-I-00-03-00004

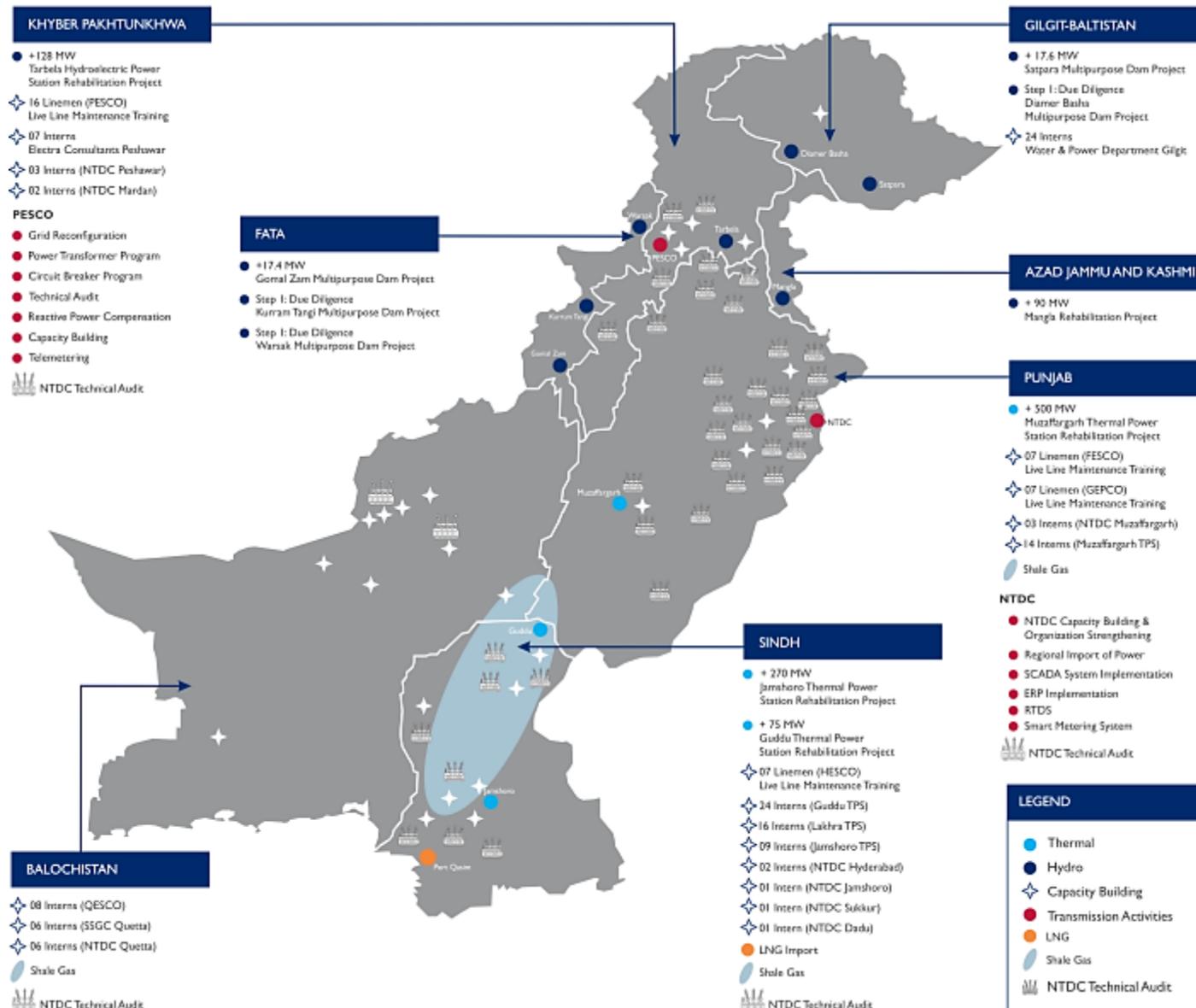
² C.4.3, Component Two, pg. 11 of 46, Contract No: AID-EPP-I-00-03-00004

³ C.4.4, Component Three, pg. 12 of 46, Contract No: AID-EPP-I-00-03-00004

Component IV – New Activities: As a result of Modification Number 2 to the EPP Task Order Award, EPP supports the following efforts: a turnaround power distribution company (DISCO); identification of new, high-impact opportunities that promote continued support for governance; live line training for transmission linemen; technical assistance to the Ministry of Petroleum and Natural Resources (MPNR) (USAID pre-approved activities, including but not limited to, Liquefied Natural Gas (LNG), oil and gas (including shale gas), and advisory services to increasing natural gas supplies for power generation); targeted assistance to the National Transmission and Dispatch Company (NTDC) and the National Power Control Center (NPCC) to mitigate unscheduled shortages; help generation companies (GENCOs) to improve baseline efficiency measurements and improved operations and maintenance; and deliver technical assistance efforts in support of GOP and USAID activities that promote capacity building, increased public awareness, and targeted advisory services⁴. EPP's capacity building program facilitates sustainability by enhancing local capability in critical areas.

⁴ C.4.5.1, Component Four, pgs. 3-9, , Amendment/Modification No. 2 of Contract No: AID-EPP-I-00-03-00004

Figure 2: Map of EPP Activity Areas



COMPONENT I: PROJECT MONITORING & IMPLEMENTATION

EPP provides monitoring and implementation support for the seven G2G Signature Energy Projects identified in the Task Order Award. These projects include rehabilitation of three Thermal power plants (Muzaffargarh, Guddu and Jamshoro), two hydropower plant (Tarbela

and Mangla), and construction of two new multipurpose dams (Gomal Zam Dam and Satpara Dam). Total USG funding for these projects is U.S. \$291.7 Million (per the revised agreements) that will result in an estimated gain of 953 MW for Pakistan’s national grid.

As of May 2014, U.S. \$146.82⁵ Million has been disbursed to GOP implementing partners, and 933 MW have been added to Pakistan’s national grid. Results achieved through the successful monitoring and implementation of G2G projects are illustrated in the table below:

Table 2: Results Achieved through G2G Projects

Projects	USG Funding (\$USD Million)	Paid (\$USD Million)	Completion Date	MW Gains/Benefits	
				Target	Achieved (May 31, 2014)
Tarbela	\$16.50	\$13.95	12/31/14	128.0 MW	128.0 MW
Jamshoro	\$19.32	\$16.39	12/31/14	150.0 MW	270.0 MW
Guddu	\$19.12	\$17.34	12/31/14	75.0 MW	In progress
Muzaffargarh	\$15.77	\$15.14	12/31/14	475.0 MW	500.0 MW
Gomal Zam	\$45.00	\$45.00	Completed	17.4 MW	17.4 MW
Satpara	\$26.00	\$26.00	Completed	17.6 MW	17.6 MW
Mangla	\$150.00	\$13.00	12/31/2017	90 MW	In Progress
Total	\$291.71	\$146.82		953 MW	933 MW

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

Rehabilitation of Tarbela Hydropower Plant

EPP coordinated with WAPDA to expedite the procurement of a spare winding, a SCADA System, and a small drainage pump to ensure completion of the project on time. The USAID-funded rehabilitation at Tarbela Hydropower Station has resulted in the restoration of 128 MW of power generation capacity. The MW gains are sufficient to meet the energy consumption needs of at least 1.2 million people.

The Environmental Monitoring and Audit Report for the Tarbela Rehabilitation Project has also been submitted to USAID.

Of the \$16.5 million funding amount committed for Tarbela, the total disbursement as of May 2014 was U.S. \$13.95 Million.

⁵ EPP certified \$426,000 for the Jamshoro Rehabilitation Project in May 2014

Gomal Zam Multipurpose Dam Project (Project Completed)

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

The dam has the capacity to generate 17.4 MW of electricity, and is capable of storing 1.14 million acre feet of water that will control flooding and irrigate 191,000 acres of land. The power generated by the dam is enough to meet the electricity consumption needs of 161,000 individuals. The project is now complete, and was inaugurated by U.S. Ambassador Olson in September 2013.

Satpara Multipurpose Dam Project (Project Completed)

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

The dam has added 17.6 MW 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 163,000 individuals.

Severe weather conditions created challenges for work on this project, but EPP completed the project ahead of schedule. The inauguration of the dam has been delayed due to poor weather.

Muzaffargarh Thermal Power Station (MTPS) Rehabilitation Project

The rehabilitation work to date has resulted in 500 MW of capacity restoration at the power plant, which exceeds the target of 475MW set in the Activity Agreement. Major equipment has been installed and rehabilitated at MTPS, and the procurement of the remaining equipment required is in process. EPP continued to support MTPS in the procurement process to expedite obtaining the remaining equipment, and minimize delays in rehabilitation work.

EPP has submitted the Environmental Monitoring and Audit Report to USAID. With an amendment to the Activity Agreement, the project completion date has been extended to December 31, 2014.

As of May 2014, out of the obligated amount of U.S. \$15.77 Million, the total amount disbursed to the GOP stands at U.S. \$15.14 Million.

Jamshoro Thermal Power Station (JTSP) Rehabilitation Project

The USAID-funded rehabilitation of JTSP has resulted in the restoration of 270 MW of power generation capacity, which exceeds the project objective of 150 MW outlined in the Activity Agreement.

During this reporting period, EPP continued to support JTSP in the procurement process to expedite obtaining the remaining equipment, and minimize delays in rehabilitation work.

EPP visited JTSP to discuss the status of the remaining procurement, and to expedite the completion of the project. With EPP's support, USAID revised the Activity Agreement and extended the project completion date to December 31, 2014.

In May, EPP certified a claim of U.S. \$426,000 against PIL Item# 23 (Off-line Efficiency Monitoring System), and forwarded to USAID/ENR for disbursement. With this claim, the total amount disbursed to the GOP as of May 2014 is U.S. \$16.38⁶ Million.

Guddu Thermal Power Station (GTPS) Rehabilitation Project

In May, EPP facilitated the visit of USAID's Provincial Director for Sindh and Baluchistan, Mr. Leon Waskin, and Deputy Regional Director, Dr. Randy Hatfield, along with Matt Landon, Deputy Director of USAID Pakistan's Energy Office to Guddu. The delegation visited the power plant and toured the USAID-funded rehabilitation work to uprate the three turbines (GT-7, GT-8 and ST-5).

⁶ EPP certified claims of \$16,389,150; out of which \$426,000 is in process of reimbursement with USAID

This rehabilitation is expected to be completed in June 2014, and will restore 75 MW; enough to supply electricity to 600,000 people.

The rehabilitation work on all the three turbines (GT-7, GT-8 & ST-5) commenced on March 13, 2014, and is ongoing ahead of the planned schedule.

EPP submitted Guddu's Environmental Monitoring and Audit Report to USAID.

EPP also supported USAID in issuing tax exemption letters for CPGCL for clearance of equipment worth U.S. \$121,796. In response to CPGCL's extension request, EPP facilitated USAID's review of the Activity Agreement that extended the project completion date to December 31, 2014. The total amount disbursed to the GOP as of May 2014 is U.S. \$17.34 Million.



CEO GTPS showing the model of the power plant to USAID delegation

Mangla Dam Rehabilitation Project

EPP supported USAID in finalizing and signing the Project Implementation Letter (PIL) in March. Subsequently, EPP supported WAPDA in regularizing the Mangla Assignment Account through the State Bank of Pakistan, and on May 22, 2014, the first payment of U.S. \$13 Million was transferred to that account.

USAID is providing U.S. \$150 Million to the GOP for the Mangla Dam Rehabilitation Project, out of which U.S. \$72 Million was sub-obligated under an Activity Agreement signed on August 15, 2013. USAID will upgrade Units 5 and 6, as these two units are of the most degraded. USAID will also fund the balance of the plant's units that will improve efficiency and extend the productive life of all 10 units. USAID anticipates an additional 90 MW of power generating capacity through this rehabilitation work.

EPP submitted the revised Mangla Resettlement Report to USAID for review, and also supported Mangla in ensuring environmental compliance. EPP met the Resident Representative in Karachi to ensure the timely opening of a Letter of Credit for the procurement of rehabilitation equipment.

Per the Activity Agreement, the project completion date is December 31, 2017, and the total amount disbursed to the GOP as of May 2014 is U.S. \$13 Million.

GENCOS PERFORMANCE EFFICIENCY IMPROVEMENT PROGRAM

Having achieved substantial and highly-visible results through the replacement of equipment that resulted in increased 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 which will reflect the actual costs they incur in producing electricity. The net result of this effort will be an increase in annual revenues through fuel saving of U.S. \$75 Million.

In May, EPP carried out working level discussions with JPCL regarding USAID support for improving the commercial and technical performance of the GENCOs. The Performance Efficiency Improvement Plan is being developed in consultation with JPCL.

Procurement of Flow Meters

The procurement of the flow meters for the three GENCOs is complete. These meters were critical in ensuring that accurate instruments are in place prior to NEPRA-compliant heat rate tests.

Heat Rate and Dependable Capacity Testing

Heat rate tests have been completed at Muzaffargarh and Jamshoro and achieved U.S. \$70 Million in annual fuel savings. With EPP support, a revised tariff petition has been filed with NEPRA for Jamshoro.

EPP also submitted the heat rate test report for Muzaffargarh to USAID, and will now commence support in filing a revised tariff petition.

Issues/Constraints and Steps Taken to Resolve Them

Regularize the Mangla Assignment Account to disburse US\$13 Million against the first invoice .EPP supported WAPDA to regularize Mangla Assignment Account through the State Bank of Pakistan

Procurement of remaining equipment at Jamshoro. EPP met Jamshoro management to expedite the remaining procurements.

Planned Activities for the Coming Month

- Provide monitoring and implementation support for the installation and commissioning of GT-7, GT-8 & St-5 of Guddu to restore another 75 MW to the national grid
- Delivery of small un-watering pump is expected at Tarbela. EPP will inspect the pump once it reached at site and will certify the invoice.

COMPONENT 2: POLICY AND REFORM

SUPPORT TO THE MINISTRY OF WATER AND POWER

During this reporting period, 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, fuel diversification, policy and finance.

Improved Policy Implementation

Sector reform is gaining momentum, and with it comes the need to have in place key industry rules and regulations such as the Power Market Rules.

- EPP reviewed the Interim Market Rules for CPPA-G with regard to generation and transmission, and made a number of important suggestions to better reflect the reality that these sector entities face.

More Autonomous Energy Sector Entities

EPP is working with GOP owned and operated power sector entities, NTDC, and the GENCOs to improve efficiency, improve operational and management functions, and to strengthen them so that they can function autonomously.. Specific activities include:

- **Drafting a new Power Purchase Agreement (PPA) and the Fuel Supply Agreement (FSA)** for the GENCOs to meet both best practice and the new conditions imposed under sector reform. EPP met with the Jamshoro Power Company to gain understanding of the issues they face in fulfilling the covenants of the PPA and FSA.
- **Promoting the removal of CPPA from NTDC.** Sector reform calls for CPPA to be removed from the NTDC, and for NTDC to function purely as the Transmission Company and System Operator. This will require major changes at NTDC, and provides an opportunity to install operating procedures that provide greater autonomy and enhance performance. EPP met with key NTDC staff to discuss the transition.
- **Supporting independence of state owned companies and improved business practices.** As state owned companies with a historic pattern of Ministry involvement, these companies have not operated as independent companies and not adequately planned their business operations. EPP developed business plans alongside the relevant stakeholders in 2011 to guide their transition. However, since these initial business plans were developed, there have been significant changes in the sector and there is a need to revise the business plans accordingly.

Improved Capacity of USAID-Supported Energy Public-Sector Entities

Policy decisions in Pakistan are often made without the benefit of detailed quantitative analysis. To better prepare senior decision-makers, EPP has developed a tool (PowerSIM) for analyzing how key policy, regulatory and operational parameters impact important sector performance indicators such as circular debt, cash flow, generation, end-use quantities of electricity, and tariffs. After successfully demonstrating the usefulness PowerSIM to major stakeholders, the model is undergoing further testing and validation.

Issues and Constraints, and Measures Taken to Resolve Them

Improved Policy Implementation: Interim Market Rules

The draft rules contain a number of inconsistencies with regard to the generation and transmission sectors, and do not fully account for the operating procedures in these sectors. For example, the rules call for the CPPA to make payments to fuel suppliers. This is contrary to both the current practice with IPPs, and their contractual requirements. EPP team has submitted comments that should resolve these issues.

More Autonomous Energy Sector Entities

PPAs/FSAs: The development of new PPAs/FSAs for the GENCOs is compounded by a number of issues such as the new market rules, the proposed privatization of two GENCOs, and the inertia of past practices. EPP is undertaking a thorough analysis of the changing sector conditions and covenants, and is preparing PPAs and FSAs that recognize the current practices and capabilities of sector entities, while preparing them to operate more efficiently and flexible enough to accommodate changing sector conditions. For example, given that NTDC, CPPA, the GENCOs, and Fuel Suppliers are all government owned the tendency has been to either not include liquidated damages (LD) in the contracts, or not to implement them. The new contracts will include LD and provide for clauses that allow them to remain inactive with mutual agreement. This will pave the way for either more efficient operation as a state owned or private entity. The absence of LD in the PPA or FSA would have been a major deterrent privatization.

Improved Capacity of USAID-Supported Energy Public-Sector Entities

PowerSIM: During this reporting period, EPP tested the model to identify any remaining modeling issues, and collected current 2013 data which only just became available. Several issues were identified, and the subcontractor developing the model is making the required changes. EPP has collected all current 2013 data that is publicly available, and will update the model once validation is complete.

Planned Activities for the Coming Month

More Autonomous Energy Sector Entities

- Draft PPA/FSA ready for discussion with key stakeholders
- Meeting with NTDC/GENCOs to discussion business plans
- Review of key documents to separate NTDC and CPPA

Improved Capacity of USAID-Supported Energy Public-Sector Entities

- PowerSim updated with most current data
- Training at Ministry of Petroleum and Planning Commission on PowerSim

SUPPORT TO MINISTRY OF FINANCE

- **Regulatory Framework of NEPRA:** Work continued on diagnostic analysis of NEPRA's role in the development of the power sector as advised by the Council of Common Interest (CCI). The suggestions and comments given by the various stakeholders on the draft report are being reviewed by the members of the committee constituted by the Economic Reforms Unit (ERU) of the Ministry of Finance. Power Sector Circular Debt position is being reviewed and updated in consultation with the Corporate Finance Wing for submission to the Finance Secretary.
- **Release of Funds to TESCO:** EPP attended a meeting chaired by the Senior Joint Secretary (Corporate Finance) regarding the release of funds to the Tribal Areas Electric Supply Company (TESCO) for payment of the electricity dues of FATA consumers. The meeting was attended by the Chief Executive TESCO, General Manager - Finance PESCO, and the representative of the Chief Engineering Adviser, Ministry of Water and Power. In this meeting, the mechanism for verification of the claims of TESCO regarding domestic consumers was resolved. It was decided that TESCO will submit its claim to the office of the Chief Engineering Adviser (CEA). These claims will be verified by CEA, and the Ministry of Finance will release the funds during the current financial year.
- **CPPA:** Assistance was provided to the Corporate Finance Wing in negotiating and finalizing terms for the Rs. 31 Billion loan being arranged through local banks for meeting the shortfall in cash flow at CPPA. This amount will be utilized by CPPA for payment to PSO. Terms for the loan amounting to Rs. 25.7 Billion were also finalized, and the amount was released by the Consortium of the Bank to Power Holding Companies to make payment to CPPA. This will

settle the partial liabilities of the GENCOs towards PSO. The transaction was completed on May 21. The banks are working to arrange the remaining amount of Rs. 4.3 Billion.

- **OGRA Ordinance 2002:** Assistance is being provided to the Corporate Finance Wing in formulating their views on a summary submitted by the Ministry of Petroleum and Natural Resources regarding policy guidelines under section 21 of OGRA Ordinance 2002 (Determination of Revenue Requirements of Gas Utility Companies).
- **Policy Guidelines for CNG prices:** Assistance is being provided to the Corporate Finance Wing in formulating their views and comments on a summary to be submitted by the Ministry of Petroleum and Natural Resources to ECC regarding policy guidelines for the determination of CNG consumer end-prices.

Impact

- Assistance provided by EPP helped the Ministry of Finance to formulate their views and comments on various policy issues that help mitigate Pakistan's power crisis.

Issues/Constraints

- No constraints were faced during the reporting period.

Planned Activities for the Coming Month

- Ongoing assistance will be provided to examine and formulate views on the policy proposals that will be submitted by the energy sector ministries and entities to the Ministry of Finance.
- Ongoing monitoring of Circular Debt.

SUPPORT TO MINISTRY OF PETROLEUM & NATURAL RESOURCES

LNG Imports

ISGS was asked to provide a formal request to USAID with a proposed scope of work, deliverables, and schedule for the option to extend consulting support for the *Fast-Track LNG Project*. EPP is awaiting ISGS's response.

Upon receipt of USAID's approval, media ads for hiring consultants for LNG commercial and legal support were published in widely-circulated local newspapers and the Gulf News in the Middle East. RFPs were also uploaded onto EPP's website. An amendment to the RFP's was issued extending the deadline for submitting proposals.

Port Qasim Authority (PQA) inputs were received on the proposed SOW for conducting the Full Bridge Mission Simulation (FMS) study. A media ad and an RFP for procuring consulting services for conducting the FMS study was finalized. An advertisement will be placed in the leading national newspapers on June 1, 2014, and the RFP uploaded on the EPP website.

Technical and commercial proposals for Consulting Services for LNG Import Terminals at Port Qasim have been received. Technical proposals are currently being evaluated by the Technical Committee.

A Skype call was conducted with QED on May 12 to conclude their activities. QED was asked to provide the remaining labor and non-labor invoices, and submit all deliverables (per their TORs and contractual requirements) against the current budget. Following the Skype call, QED submitted its final labor and non-labor invoices and deliverables. EPP reviewed the deliverables and verified the LOE against the labor invoice, which has been cleared for payment following the stakeholders' acceptance of the deliverables. The non-Labor invoice is currently under review by EPP.

In response to USAID's queries, EPP provided comments on the revised draft EDF-EMMP prepared by EPP's Environment Specialist.

A Revised Implementation Agreement (IA) was initialed between PQA and ETPL, as some differences had developed since the original was signed. These issues have been resolved.

Shale Gas

The data evaluation of 39 public domain wells by LMKR, in consultation with HDIP, has been completed. The evaluated data was further reviewed by NuTech for final selection of the wells' cores/cuttings for export to the United States for further testing.

At LMKR's request, DGPC approached OGDCL and PPL to release confidential data for the short-listed wells. Both companies have now agreed to provide the data requested. LMKR is in discussion with the two companies to settle the modalities.

EPP facilitated coordination between LMKR and local E&P companies currently working on collating information pertaining to shale plays through DGPC.

Upstream Oil and Gas Support

EPP continued to lend day-to-day advisory support to DGPC on various legal and regulatory issues. EPP reviewed and prepared cases for DGPC regarding relinquishment of an exploratory block by Petronas, surrender of off-shore blocks by Niko Resources of Canada, regularization of OGDCL leases, and responses to the queries of the Additional Secretary MPNR regarding UEPL leases.

The case regarding the decision of MPNR/Law Division on Rule 32 (extension of leases) of the 1986 and 2001 Rules, as per EPP's suggested notification, and amended as desired by DGPC, was submitted to the Secretary MPNR for approval and submission to the Law Division.

EPP, in consultation with PTS, prepared the first draft of flared/low pressure gas guidelines. A presentation prepared by PTS/EPP was submitted to DGPC and DG Gas. A meeting on Low Pressure/Flared Gas Guidelines was convened by the Additional Secretary MPNR. PTS also attended this meeting. Revised guidelines based on discussions with the Additional Secretary MPNR were submitted to DGPC.

A comparison of the E&P Rules, as advised by DGPC, was performed by PTS. The issues concerning the draft Supplemental Agreement for policy conversions were discussed with DGPC. EPP suggested that the necessary packages for the 2007, 2009 and 2012 policies be incorporated into the draft agreement. The revised agreement is now being reviewed by EPP.

PTS provided comments on the proposal submitted by ENI/PPL regarding the Shale Gas Pilot Project. The Low BTU Gas Pricing Policy was reviewed as requested by DGPC, and necessary recommendations were submitted.

EPP reviewed and prepared cases for DGPC regarding the non-performance of M/s Techno and M/s Pyramid Resources of Canada/JV, and gave its recommendations to DGPC for further necessary action.

A meeting between PTS and OGDCL was arranged by DGPC to look into the depleting/marginal gas fields for revival of production. OGDCL has agreed to share data on some of their fields, subject to finalization of the necessary NDA.

The issue of regularization and extension of the Palli lease was discussed with stakeholders, and EPP lent its recommendations. EPP has finalized its recommendations on the surrender of the Rajar exploration block, and the transfer of work to another area.

Issues and Constraints, and Measures Taken to Resolve Them

LNG: A revised SOW for simulation studies was obtained after regular follow up with PQA. Considerable follow up was conducted with the stakeholders (including MD ISGS) to obtain acceptance of QED deliverables for clearing its labor invoice. Prior efforts by QED led to the signing of the LSA between SSGC and ETPL, which is a major milestone.

Shale Gas: Provision of selected confidential wells' cores/cuttings data from OGDCL and PPL was delayed due to the reluctance of the concerned companies. The matter was raised with DGPC, and after discussion with the concerned companies, they agreed in principle to provide the confidential data. The LMKR meeting with the local companies engaged in the shale gas evaluation has been delayed due to DGPC's busy schedule. EPP continues to follow up on this matter.

Upstream Oil & Gas Support: There is a serious constraint of manpower at DGPC. The issue was discussed with DGPC, the Secretary and the Advisor MPNR as it is impeding the progress of work under Work Area -4 (Advisory Support on day-to-day issues).

Planned activities for the coming month

LNG: EPP will evaluate bids submitted for consulting services for PQA and sign a sub-contract with the successful bidder; evaluate bids by commercial and legal consultants for LNG procurement; evaluate bids for Navigation Simulation Studies for PQA; and possibly execute an IA between ETPL and PQA.

Shale Gas: EPP will submit the interim report for Milestone-3 and commence Milestone-4; and train DGPC professionals by LMKR on GGX software.

Upstream Oil & Gas Support: EPP will continue to implement the six month Work Plan with a focus on Work Areas 1 and 3 pertaining to the peer review and implementation of the policies (Supplemental Agreement); finalize work on the minimum organizational setup for DGPC. Meetings with stakeholders and the client on Work Areas 1, 2 and 3 will commence.

SUPPORT TO MINISTRY OF PLANNING AND DEVELOPMENT

EPP staff seconded to the Ministry of Planning and Development reviewed and updated records of indigenous production, import and demand for natural resources (gas, oil, LPG) for the Energy Chapter of the 11th 5 Year Development Plan 2013-18 under "Pakistan Vision 2025". The staff also developed an Excel-based tool to convert values of energy entities (MW, gas) into standard TOE values.

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 the Member Energy and the Minister so that they could carry out routine assignments smoothly.

COMPONENT 3: NEW PROJECTS, PLANNING AND DEVELOPMENT

Run-of-River (RoR)

EPP continued its close monitoring of the ongoing Rapid Environmental Analysis (REA) for two Run of River (RoR) projects – Alai Khwar and Duber Khwar – and provided management oversight and guidance throughout this reporting period to enable Hagler Bailly (HB) to develop a credible report.

A Draft Final Report by HB on the REA for the Allai Khwar and Duber Khwar Run-of-River (RoR) projects was discussed with USAID. HB will incorporate missing items and resubmit the report for final review before it is submitted to USAID.

Kurram Tangi/Kaitu Weir project

USAID met with EPP early in the month to discuss the status of lending support to the Kaitu Weir project. USAID decided to fund the project, and EPP submitted a Step I Due Diligence Report in 2011.

In support of USAID's decision to develop the project, EPP met with WAPDA. EPP arranged a meeting for USAID with WAPDA to discuss next steps for the Kaitu Weir project. WAPDA was asked to suggest a "Milestone and Payment Schedule" for consideration by USAID. EPP met again with a team from WAPDA to describe the content and format for the information required by USAID to Draft a PIL for funding the project, and continues to regularly coordinate the collection of necessary information from WAPDA.

Additional Support

EPP provided USAID with talking/briefing points on the two RoR's and the Kaitu Weir Projects for a video conference call with Washington, D.C.

EPP presented the work being done on G2G projects with a focus on the Kaitu Weir Project and the Run of River Projects – Alai Khwar and Dubair Khwar – to a team from the United States Army Corp of Engineers working with the USAID Mission in Islamabad.

EPP continued its assistance to USAID on their ongoing assessment of WAPDA's institutional systems and capacity to implement USAID-funded projects by accompanying a USAID team to an Exit Meeting with WAPDA in Lahore where a Draft Report was discussed. USAID will finalize its report in light of that discussion

COMPONENT 4: NEW ACTIVITIES

TRANSMISSION

PESCO

To date, EPP's efforts have added 294.1 MW of transmission throughput capacity to PESCO's network. During this reporting period, 54 MW of throughput capacity were added to PESCO's system.

Technical Audits

82 of 85 (96%) audits of PESCO Grid Stations have been completed. The audit reports are under development to highlight the problems discovered, and propose corrective and preventive measures going forward.

Circuit Breakers

One 145kV SF6 circuit breaker (CB) was installed during this reporting period at the Balakot 132kV Grid Station. EPP has supported the replacement of 7 circuit breakers for PESCO. The CBs protect electrical circuits from damage under fault conditions, and enhance the safety and reliability of PESCO's network.

Power Transformer Program

Power Transformers:

- A new 40 MVA transformer (PTF) was commissioned along with ancillaries at the DI Khan 132 kV Grid Station. This transformer has resulted in an increase of 40 MW of throughput capacity in PESCO's network, and is likely to benefit 511,920 people.
- After commissioning the 11kV circuit breakers for the new 40 MVA PTF at the Hattar 132 kV Grid Station, 14 MVA of throughput capacity has been added to PESCO's network. This capacity addition is likely to benefit 179,172 people.



40 MVA Transformer installed at DI Khan Grid Station

Oil Sampling

During this period, oil sample testing results from 12 power transformers were received. To date, results from oil sample testing of 169 out of 205 power transformers have been received. The results indicate required maintenance to increase transformer life.

NTDC

Technical Audits

22 of 41 (54%) NTDC Grid Station audits have been completed. Three grid stations, Shahibagh 220kV, Rawat 500kV, and Sheikh Muhammadi 500kV, were audited this month.

During the month, EPP held a series of meetings with NTDC Managing Director and executives to update them on the program's support activities. NTDC answered queries on RTDS, and the queries related to the Series Compensation Study were shared with NTDC for their response. Discussions were held on the New Wheeling Agreement and National Policy for Tariff and subsidies Guideline 2014, NTDC Business Plan and the Smart Metering Project. It was agreed upon that NTDC will send a formal request to EPP to update the Business Plan and enhanced assistance in the Smart Metering Project.

EPP also met with NTDC's GM Planning to discuss the study for series compensation on 500kV Lines and the load forecasting methodology. A meeting was conducted with NTDC's GM GSO to

discuss the ongoing technical audits and share their findings. NTDC requested EPP to meet with the audit teams and discuss any specific areas that needed to be included in the audit reports.

Issues and Constraints, and Measures Taken to Resolve Them

- The civil work required at the Jamrud Industrial 132 kV Grid Station has delayed the commissioning of the new 11kV CB. EPP is in the process of engaging a contractor to carry out the required civil work. This should enable the commissioning of the new CB by end of June
- The locations for the installations of displays for the SMS extension have not been communicated by NTDC. This challenge may delay implementing this project. EPP requested that NTDC provide the location details for the displays so that they can be installed.

Planned Activities for June 2014

- Ongoing activities at PESCO, such as oil sampling, and technical audits will proceed as planned.
- A 20/26 MV PTF, after repairs, has reached the Gadoon Amzai 132 kV Grid Station. This PTF will add throughput capacity of 13 MW.
- The incomer panel for the new 40 MVA PTF at the Jamrud Industrial 132 kV Grid Station, will be installed and commissioned in June. This will help add 14 MW of throughput.
- The live line tools, capacitor cells (and associated equipment), and P&I tools and plants (T&P) are due to arrive by end of June.
- The live line consultant will be available in June. The consultant will help review NTDC live line work and related practices.
- EPP will continue to conduct technical audits of NTDC grid stations.

CROSS-CUTTING ACTIVITIES

CAPACITY BUILDING

Best Practices in Thermal Operations & Maintenance Training

EPP completed the second of three GENCO training programs focused on best practices in thermal operations and maintenance on May 30, 2014. Through O&M training, the GENCOs will be able to identify deficiencies in their current maintenance practices and increase the plants' efficiency. EPP will conclude the O&M series in June 2014, and continue to monitor and evaluate participants to ensure implementation of best practices. To date, EPP trained the following GENCO staff:

Table 3: EPP Trained GENCO's Staff

GENCOS	Batch I Participants (March 2014)	Batch II Participants (May 2014)	Total
Jamshoro	7	6	13
Guddu	7	7	14
Muzaffargarh	6	7	13
TOTAL	20	20	40

EPP is awaiting USAID approval of its Country Code exemption request before the intended subcontractor can deliver the planned Hydel O&M training. The training program is notionally scheduled for September 2014.

NTDC/CPPA Support

EPP is awaiting nominees from NTDC for the planned U.S. Grid Operations Exchange Visit, notionally scheduled for August 2014. EPP will begin facilitating the visa request process after nominees have been interviewed, ranked, and approved by USAID and NTDC.

EPP continues to develop a Design Department rehabilitation and capacity building scope of work that will increase NTDC's design capacity and ability to better deliver transmission improvements.

EPP is developing Storage Area Network (SAN) training for CPPA staff to improve the effectiveness and productivity of CPPA executives with internal maintenance. Training will take place in EPP Lahore office and will be carried out by the SAN provider.

Live Line Training

Logistical and transportation delays in delivering the live line tools necessitate a refresher course for those Live Line Training (LLT) participants from HESCO, GEPCO, FESCO, and PESCO. EPP is developing a curriculum to coincide with the delivery of the tools and trucks for hand over to the four previously-trained DISCOs. The refresher course is notionally scheduled for September 2014.

EPP is awaiting USAID approval of its Country Code exemption request for the subcontractor to carry out the assessment of NTDC's Tarbela Training Center before completing the LLT series. EPP will train crews from IESCO, QESCO, LESCO, SEPCO, and MEPCO following the rehabilitation of the Tarbela Training Center.

GENDER ACTIVITIES

Baseline Gender Equality Assessment

EPP continues to follow up with stakeholders and collect data for the Baseline Gender Equality Assessment. As of this reporting period, EPP collected baseline gender data from OGDCL, Jamshoro TPS, NTDC, WAPDA, and ADB. EPP will compile all baseline data into a comprehensive report, and provide recommendations for further gender equality in the energy sector.

Female Participation in Training Activities

EPP reached out to Air University, Bahria University, Islamia University, University of Engineering and Technology (UET), Foundation for Advancement of Science and Technology (FAST), and National University of Science and Technology (NUST) to nominate female engineers, female faculty members, students, and alumni to participate in the June 2014 Best Practices in Thermal O&M Training Program. To date, all O&M participants have been male; however, EPP will actively pursue female participation in all future training activities.

MONITORING & EVALUATION

M&E Plan Update and Logical Framework (Log Frame)

EPP worked with Margaret Harriet from the Project Management Unit (PMU) of USAID Pakistan's Program Office, to review the current EPP M&E Plan, and to make updates by June 2014. As additional background, EPP developed a draft Log Frame that requires USAID approval before implementing.

PakInfo Entry

EPP completed the Q2 FY2014 PakInfo entry with revised baseline, target, and calculations of certain indicators. All updates were accompanied by comments, also uploaded onto PakInfo.

Site Visits

EPP conducted M&E site visits for past LLT participants at FESCO, GEPCO, and HESCO during May. The results from the site visits will be compiled into a comprehensive report to be given to the LLT assessment team.

Planned Activities

- The final batch of participants from the Best Practices in Thermal Operations and Maintenance (O&M) Program will be trained from June 8 – 20th in Islamabad.
- Candidates will be finalized for the NTDC Grid Operations exchange visit, CPPA Storage Area Network on-the-job training, and Best Practices in Hydro O&M
- M&E site visits will be conducted for data verification for select generation and transmission deliverables.

COMMUNICATIONS

EPP's Communications activities promote and develop outreach strategies that highlight the program's ongoing efforts and achievements.

Events:

The Communications Team organized and facilitated the visit of USAID's Provincial Director for Sindh and Baluchistan, Mr. Leon Waskin, and USAID Islamabad's Energy Team to visit and witness the ongoing USAID-funded rehabilitation of the Guddu Thermal Power Station. This was the first visit by any USAID official to Guddu since the 1980's.

EPP hosted the USAID Communications Working Group meeting at its Islamabad office on May 29, 2014.

The Certificate Distribution Ceremony for the second installment of the Thermal O&M Training Program was organized on May 30, 2014 at the Serena Hotel in Islamabad. 20 engineers were awarded certificates by EPP's Chief of Party on the successful completion of the two weeks training.

Outreach Material

To strengthen communications and outreach efforts, the Communications Team began collecting data that will help develop success stories and one-pagers.



EPP's Chief of Party, Jim Hicks awarding certificate to a participant

Reports

The Communications Team provided appropriate USAID branding and marking for the following EPP-generated reports:

- EDF/EMMP – LNG Activities
- Environmental Monitoring and Audit Report JTPS
- Environmental Monitoring and Audit Report THPS
- Environmental Monitoring and Audit Report MHPS
- Progress Report 1 of ROR
- Environmental Monitoring and Audit Report GTPS
- Environmental Monitoring and Audit Report THPS
- Environmental Monitoring and Audit Report JTPS
- Environmental Monitoring and Audit Report MTPS
- EDF/EMMP – Transmission Activities
- Initial Review of Implementation of Resettlement Action Plan - MDRP
- Progress Report 2 of ROR
- Visit Report of GTPS - May 6-9, 2014
- EDF/EMMP – LNG Activities
- EPP Presentation
- EDF/EMMP – Transmission Activities
- Updated Progress on 1st Environmental and Audit Report GTPS
- Progress Report 3 of ROR

Confidential information redacted

Confidential information redacted

PROCUREMENT

Table 5: Completed Procurement

Item	Achieved or Completed	Targets LOP	% Completion
Procurement Contracts (\$ Million)	14.73	41.54	35.46

Purchase Orders Issued during the Month

In May four purchase orders amounting to U.S. \$ 25,259 were issued:

1. Repair of Radiators: Purchase Order issued to Multi Works. Amount U.S. \$10,769.
2. Transportation, Loading & Unloading of 31.5/40 MVA Power Transformer: Purchase Order issued for Transportation, Loading & Unloading of 31.5/40 MVA, 132/66kV Power Transformer from PTESU Lahore to Grid Station Chakdara-PESCO. Amount U.S. \$8,934
3. Custom Clearance and Transportation of Live Line Tools & Equipment: Purchase Order issued to Security Packers for Custom Clearance and Transportation of Live Line Tools & Equipment from Karachi to Islamabad. Amount U.S. \$4,898.
4. Loading, Transportation and Unloading of Three Toyota HIACE Vans: Purchase Order issued to United Professional Movers for Loading, Transportation and Unloading of three Toyota High roof Vans from Islamabad to PESCO. Amount U.S. \$658.

Work Continued

- **31.5/40MVA New Power Transformer:** The third power transformer was delivered, installed, commissioned and energized at D.I. Khan Grid Station. Inventory tagging has been completed, and the Material Receiving Report (MRR) and GRN have been received.
- **Hilux Pickups 4x4 M/T for Transmission:** AEAI's Home Office reviewed the purchase order, and the consent letter for USAID is being prepared. Approximately **U.S. \$270, 000.**
- **Tools & Equipment for PESCO T&G Department:** Bid received and handed over to EPP's Technical Team for a Technical Evaluation. Approximately **U.S. \$450, 000.**
- **Telescopic Bucket Truck:** Received bids, and the Technical Evaluation is underway. Approximately **U.S. \$300,000.**
- **Repair of Damaged Towers:** Received bids, and the Technical Evaluation is underway. Approximately **U.S. \$255,000.**
- **220/132kV-250MVA Three Phase Auto Transformers:** Received bids, and the Technical Evaluation is underway. Approximately **U.S. \$4 Million.**
- **Refurbishment/Repair of Live Line Logistics Trailers:** Technical Evaluations underway. Approximately U.S. \$45,000.
- **Toyota HIACE Vans for P&I PESCO:** Toyota vans cleared customs duty free, and have been received in Islamabad. Inventory tagging has been completed.
- **Legal Advisory Services for LNG Procurement:** The advertisement was published on Sunday, May 4, 2014 in local newspapers, and May 6, 2014 in Gulf News. Approximately **U.S. \$1,200,000.**
- **Commercial and Technical Advisory Services for LNG Procurement:** Request for Proposals was advertised on Sunday May 4, 2014 in local newspapers, and May 06, 2014 in Gulf News. Approximately **U.S. \$1,800,000.**
- **O&M Hydro Power Plant Training:** Request for Geographic Code waiver has been sent to USAID for approval. Amount **U.S. \$136,000.**
- **Study for Enhancement of Transmission Capacity of NTDC:** Request for Proposals is being developed for consultancy services to study the enhancement of transmission capacity of

NTDC's 500kV Transmission System by the application of Series Compensation. Approximately **U.S. \$50,000.**

- **Custom Clearance, Transportation and Transit Insurance of Live Line Tools:** Bids have been received, and a commercial review is underway. Approximately U.S. \$20,000.
- **Placement of 20/26 MVA Power Transformer at Gadoon Amazai GS:** Bids have been received, and a commercial review is underway. Approximately **U.S. \$3,061.**
- **Transportation of Radiators:** Bids have been received, and a commercial review is underway. Approximately **U.S. \$1,523.**
- **Replacement of 20/26 MVA PTF at 132kV Chakdara:** Request for Proposals is in process. Approximately U.S. \$15,000.
- **Augmentation of 10/13 MVA PTF at 132kV Khawazakhela GS:** Request for Proposals is in process. Approximately U.S. \$22,000.
- **Dismantling and removal of 31.5/40 MVA Power Transformer:** Request for Proposals is in process. Approximately U.S. \$5,584.
- **Civil Work at Jamrud Grid Station:** Request for Proposals is in process. Approximately **U.S. \$1,633.**

Planned Activities for the Next Month

- Purchase order for the replacement of the 20/26MVA PTF at Chakdra Grid Station. Approximately **U.S. \$15,000.**
- Purchase order for the augmentation of the 10/13 MVA PTF at Khawazakhela Grid Station. Approximately **U.S. \$22,000.**
- Purchase order for Hilux Pickups (4x4 M/T for transmission). Approximately **U.S. \$270,000.**
- Purchase order for the refurbishment and repair of live line logistics trailers. Approximately **U.S. \$45,000.**
- Bidding process for the Study for Enhancement of Transmission Capacity of NTDC's 500kV Transmission System. Approximately **U.S. \$50,000.**
- Bidding Process Port Qasim Authority Consultancy Services. Approximately **U.S. \$2,000,000.**
- Bidding Process for PQA Fast Track Facility Construction Supervision Services. Technical and Commercial Bids have been received. Approximately **U.S. \$750,000.**
- Bidding Process for Hilux Pickups (4x4 M/T for transmission). Approximately **U.S. \$270,000.**
- Bidding Process for Telescopic Bucket Trucks. Approximately **U.S. \$300,000.**
- Bidding Process for tools and equipment for PESCO's T&G Department. Approximately **U.S. \$200,000.**
- Bidding process for the repair of damaged towers. Approximately **PKR 25.5 Million.**
- Bidding process for the 220/132kV-250MVA three phase auto transformers. Approximately **U.S. \$4 Million.**
- Civil works at Jamrud Grid Station Request for Proposal. Approximately **U.S. \$1,633.**
- Follow-up for installation and commissioning of 20/26MVA Power Transformer at Gadoon Grid Station.
- Follow-up for delivery of SAN and associated equipment for NTDC.

LIST OF KEY MEETINGS

Table 6: List of Key Meetings Conducted in May

Meeting with	Date	Location	Purpose	Outcome/Result
USAID and WAPDA	May 5	EPP	Discuss plan, activities, and progress on Kaitu Weir Project	WAPDA will provide information required to prepare PIL
CEO CPGCL, Director Chemical CPGCL	May 7	Guddu Power Station	To introduce EPP Cross Cutting staff the CEO and Director to garner buy-in for data collection regarding female employment at the GENCOs	Data collected and interviews conducted by EPP Cross Cutting staff
Guddu	May 8	Guddu	Discuss gender baseline data and EPP assessment terms.	EPP will continue to gather data and draft the gender integration assessment.
HESCO live line trainees	May 8	Hyderabad	Conduct a follow-up assessment for live line maintenance trainees	Prepared a report on trainee responses and feedback.
Hagler Bailly (HB)	May 8	EPP	Progress report on REA of 2 RoR projects	Draft of Final Report will be submitted soon
Deputy Director, USAID Energy Office, Pakistan	May 12	EPP Office	To discuss the status of the GENCO's remaining procurements	Briefing conducted on the latest status of the procurements
Sr. J.S.(C.F)	May 12	Ministry of Finance, Islamabad Office of the Sr.J.S.(CF)	Release of funds to Tribal Areas Electric Supply Company (TESCO) for payment of the electricity dues of FATA consumers	A mechanism for verification of electricity dues of domestic consumers of FATA was worked out, to be followed by TESCO/ Ministry of Water and Power.
NTDC	May 13 and 14	NTDC Office, Lahore	Met with Planning Commission to gain greater insight into forecasting Met with Mr. Daud to discuss NTDC BTA, Wheeling Agreement. and business plan Met with various other staff to discuss business plan, multi-year tariff, and market rules.	General informational meeting to understand how NTDC was dealing with these issues, and where EPP expertise was needed.
Jamshoro	May 14	Jamshoro	Discuss gender baseline data and EPP assessment terms.	EPP will continue to gather data and draft the gender integration assessment.

Meeting with	Date	Location	Purpose	Outcome/Result
NTDC GM Planning	May 14	WAPDA House, LHR	Study for series compensation on 500kV Lines	The procurement for the series compensation study is underway. The queries we received from the bidders were discussed.
NTDC	May 15	WAPDA House, Lahore		<ul style="list-style-type: none"> • Gained an understanding of current conditions and challenges. • Awaiting Board Decision on Business Plan • Awaiting draft CPPA transfer agreement
Robert Graniere, Policy Advisor MWP, PDP Mary Clark Webster, Energy Consultant, PDP Abid Lodhi, Policy & Planning Advisor, PDP Hira Mumtaz, Associate Advisor Energy Policy, PDP	May 15	EPP Office, Islamabad	PDP Presented the Market Rules for CPPA Guarantee Limited, and discussed the new market structure that all stakeholders wish to move toward.	Draft Market Rules up for comments from EPP Team
NTDC GM GSO	May 15	WAPDA House, LHR	To discuss ongoing technical audits	Findings of the audits were discussed. GM was requested to meet our audit teams and let them know of any special requirements he feels necessary to be included in the audit reports.
NTDC MD	May 16	WAPDA House, LHR	<p>To discuss:</p> <ul style="list-style-type: none"> • New Wheeling Agreement and National Policy for Tariff and subsidies guideline 2014 • Real Time Digital Simulator (RTDS) • NTDC Business Plan • TORs for dealing with renewable energy sources integration with National Grid • SMS Project 	<ul style="list-style-type: none"> • On RTDS: NTDC gave replies to the queries concerning RTDS... • On business plan: no letter rcvd. yet... We would be in a position to talk about updates only upon receiving request letter • On renewable energy sources: TORs received from NTDC and are being reviewed. EPP to initiate the procurement process in this month • On SMS: Actions will be taken only upon receiving request letter(s) from NTDC
CE Mangla Power Station	May 17	Mangla Power Station	To discuss and brief on reporting, inspection, and monitoring requirements per the PIL	Template was shared with the CE, and a briefing was held on the reporting requirements per PIL
FESCO live line trainees	May 21	Faisalabad	Conducted a follow-up assessment for live line maintenance trainees.	Prepared a report on trainee responses and feedback.

Meeting with	Date	Location	Purpose	Outcome/Result
CE Mangla Power Station	May 22	EPP Office	To discuss the issuance of the NOC from the State Bank of Pakistan	Facilitated issuance of the NOC, and reimbursement of that amount to the Mangla Account
Resident Representative, Karachi	May 23	Karachi	To discuss the opening of a letter of credit for the procurement under the Mangla Rehab Project	Ensured the timely opening of the letter of credit
USAID DMEO, USAID COTR, USAID program management specialist, Hagler Bailey (HB)	May 27	EPP Office	To discuss the comments on the draft REA report	HB is incorporating the comments and will submit the final report
MD ISGS, EPP (COP and Director Policy Reforms)	May 27	ISGS Head Office, Islamabad	Follow-up on QED deliverables acceptance; upcoming LNG consulting services procurements.	<ul style="list-style-type: none"> • ISGS facilitated obtaining stakeholders' acceptance of QED deliverables. • ISGS agreed on the way forward for the following ongoing procurements: <ul style="list-style-type: none"> – Consulting services for LNG import terminals at Port Qasim. – Legal, commercial and technical advisory services for LNG procurement. – Full Bridge Mission Simulation Study for PQA.
USAID and HB	May 27	EPP	Review Draft Final Report on REA of 2 RoR projects	Revised Draft to be prepared by HB
WAPDA	May 28	EPP	Discuss information needed by USAID for PIL	WAPDA will submit needed information to USAID with a copy to EPP
NTDC Senior Management (MD and GMs of GSO, Planning, GSC, TSG and others)	May 29	WAPDA House, LHR	Update NTDC management on EPP activities	NTDC executives received an update on NTDC related activities tasked to EPP
U.S.-Army Corps of Engineers, COTR, Mr. Tim Moore	May 30	EPP Office	To meet EPP G2G Team and to do a review of the estimates for Kaitu Weir, Alliah, and Duber Kwars.	G2G Team was introduced to the U.S.-Army Corps of Engineers Team
USAID and U.S. Army Corps of Engineers	May 30	EPP	Describe the Kaitu Weir and 2 RoR Projects, provide information requested and answer questions to enable review of the projects	Army Corps of Engineers Team will be in touch with EPP over the next two weeks

ENERGY POLICY PROGRAM

House 4, Street 88, G-6/3, Islamabad, Pakistan
Tel: +92 51 835 7072, Fax: +92 51 835 7071

www.ep-ep.com.pk