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USAID ENERGY POLICY PROGRAM

MONTHLY PROGRESS REPORT

July 2015



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ACRONYMS

AEAI	Advanced Engineering Associates International, Inc.
AEDB	Alternative Energy Development Board
CNG	Compressed Natural Gas
DGPC	Director General Petroleum Concessions
E&P	Exploration and Production
EETL	Engro Elengy Terminal Limited
ECIL	Engineering Consultants Int. Pvt. Ltd.
DISCO	Distribution Company
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation and Monitoring Plan
EPP	Energy Policy Program
FBR	Federal Board of Revenue
FWO	Frontier Works Organization
FGE	Facts Global Energy
G2G	Government-to-Government
GENCO	Generation Company
GOP	Government of Pakistan
JPCL	Jamshoro Power Company Limited
LNG	Liquefied Natural Gas
MPNR	Ministry of Petroleum and Natural Resources
MW	Megawatt
MWP	Ministry of Water and Power
NEPRA	National Electric Power Regulatory Authority
NREL	National Renewable Energy Laboratory
NTDC	National Transmission and Dispatch Company
OGRA	Oil and Gas Regulatory Authority
PESCO	Peshawar Electricity Supply Company
PIL	Project Implementation Letter
PowerSIM	Power Sector Integrated Model
PPA	Power Purchase Agreement
PQA	Port Qasim Authority
PSO	Pakistan State Oil Company
SIGTTO	Society of International Gas Terminals and Tankers Association
USAID	United States Agency for International Development
WAPDA	Water and Power Development Authority
WFW	Watson Farley & Williams

EXECUTIVE SUMMARY

EPP continues to provide monitoring and implementation support for the Government to Government Signature Energy Projects.

Monitoring and Implementation. During July, EPP visited Muzaffargarh Thermal Power Station site to expedite the installation of the remaining equipment. EPP provided USAID the status of the remaining procurements and also their assessment and recommendation on the GENCO's time extension request.

On the Mangla Dam Rehabilitation Project, EPP provided USAID with the updated progress of the equipment procurement. For the Tarbela Rehabilitation Project, EPP provided USAID with a cost review memorandum for equipment to be procured under Phase II. EPP's environmental expert also visited Tarbela and Mangla power stations to ensure that the rehabilitation works are in compliance with the Environmental Mitigation and Monitoring Plan.

EPP provided USAID with an update on the status of the remaining procurements and also their assessment and recommendation on the Guddu, Jamshoro, and Muzaffargarh Thermal Power Station time extension request.

Policy and Reform. During July, EPP met with senior officials of the Ministry of Water and Power to discuss the Thermal Power Purchase Agreement (PPA). During the month, EPP assisted with addressing Jamshoro Power Company Limited's (JPCL's) most recent version of the PPA, regarding capacity payments, heat rate testing, and liquidated damages.

EPP is providing assistance to the Energy Wing through consolidation of information provided by Member Energy with other pertinent data from various sources, including Alternative Energy Development Board, National Electric Power Regulatory Authority, and National Renewable Energy Laboratory.

Corporate Finance Wing of the Ministry of Finance is being provided with assistance in working out the amount of additional Tariff Differential Subsidy for K-Electric under NEPRA's decision of July 2, 2015 regarding the quarterly adjustments of K-Electric for the second, third, and fourth quarters of financial year 2013-14 and first quarter of financial year 2014-15. The tax exemption request for equipment imported by EPP was followed up for clearance with the Pakistan Federal Board of Revenue (FBR). Corporate Finance Wing is also being assisted in examining and preparing comments on the proposal regarding deregulation of Compressed Natural Gas (CNG) prices for end-consumers.

During July support to the Ministry of Petroleum and Natural Resources focused on LNG import activities. The Pakistan State Oil Company (PSO) was awarded the bid for procuring two spot LNG cargoes for July 2015 and three spot LNG cargoes for the period August-October 2015. Another spot cargo was procured from Qatargas on an FOB basis using the Floating Storage and Regasification Unit (FSRU) as a LNG carrier. The first ship-to-ship LNG transfer was completed at the Engro Elengy Terminal Limited (EETL) terminal on July 17. Another ship-to-ship transfer was successfully conducted on July 29. EPP environment and pipeline experts conducted a periodic monitoring review of the LNG terminal at Port Qasim and visited to discuss matters related to environmental monitoring. As a follow up to the presentation on the Shale Gas Resource Assessment Study given to the Minister on June 26, meetings were held with Director General Petroleum Concessions (DGPC) officials on July 2 and July 9. The draft final report for deliverable D-4 regarding rules and supplemental agreements to incorporate the provisions of tight gas, low BTU gas price, and marginal gas fields guidelines has been finalized for transmission to USAID.

New Projects, Planning, and Development. Evaluation of the technical proposal and financial proposals received for construction of the Kaitu Weir feeder tunnel linking the Kaitu River to Kurram Tangi Reservoir, two powerhouses with installed capacity of 18.4 MW, two irrigation canals, and associated structures was completed by the Water and Power Development Authority (WAPDA). EPP prepared and submitted the Activity Agreement and Project Implementation Letter (PIL) Agreement to USAID. Milestone dates for funding disbursement and the associated payment schedule for the proposed \$81 million USAID funding is under preparation for final PIL Agreement.

EPP provided relevant information to USAID as assistance in drafting of the Activity Agreement and PIL Agreement for \$36 million USAID funding for the Golen Gol Project. EPP has collected Environmental Impact Assessment (EIA) reports prepared for the Golen Gol Project and transmission line. The Project is 38 percent completed and is expected to complete by August 2017.

Program Support Activities. Live-Line maintenance training at the National Transmission and Despatch Centre (NTDC) Tarbela Training Center resumed on July 27, 2015. To date, EPP has completed three of the five refresher courses. During July, the EPP Procurement Department completed and issued Purchase Orders amounting more than \$2,211,373, including: Two 250 MVA, 220/132kV three-phase Auto-Transformers with all accessories and spare parts, which were cleared tax exempted by Customs authorities; they are in process of being transported to the NTDC Grid Station.

The Patrind Project REA is pending with NTDC for route finalization. PO of Integration of intermittent renewable resources with national grid executed and work begun which is expected to be completed at end of September 2015. The draft final report is expected on August 28, 2015.

COMPONENT I: PROJECT MONITORING AND IMPLEMENTATION

EPP continues to provide monitoring and implementation support for the Government to Government (G2G) Signature Energy Projects. EPP visited Muzaffargarh Thermal Power Station site to expedite the installation of the remaining equipment. The equipment will add to the reliability of the power plant. Subsequent to the generating company's (GENCO's) time extension request, EPP provided the United States Agency for International Development (USAID) the status of the remaining procurements and also their assessment and recommendation on the GENCO's time extension request. The remaining items will add to the reliability of the power plants.

On Mangla Dam Rehabilitation Project, EPP provided USAID with the updated progress of the equipment and answered queries related to the progress. The project will add 90 MW to the national grid.

On Tarbela Hydropower Plant Rehabilitation Project, EPP provided USAID with a cost review memorandum for equipment to be procured under Phase II. The project will add another 20 MW to the national grid and also add to the sustainability of the power plant.

EPP's environmental experts also visited Tarbela and Mangla power stations to ensure that the rehabilitation works are in compliance with the Environmental Mitigation and Monitoring Plan (EMMP).

Table I: Results Achieved through G2G Projects

Projects	USG Funding (\$ Million)	Disbursed (\$ Million)	Completion Date	MW GAINS/BENEFITS	
				Target	Achieved (July 31, 2015)
Tarbela (Phase I)	16.50	15.55	12/31/15	128.0 MW	128.0 MW
Jamshoro	19.32	19.32	7/31/15 ¹	150.0 MW	270.0 MW
Guddu	19.12	18.91	7/31/15 ²	75.0 MW	80.0 MW
Muzaffargarh	15.77	15.71	7/31/15 ³	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	12/31/17	90 MW	In progress
Tarbela (Phase II)	25.00	Signing of PIL is in Progress	12/31/16	20 MW	In progress
Total	316.71	153.49		973 MW	1,013 MW

¹ Jamshoro requested a time extension, which is currently under process.

² Guddu requested a time extension, which is under process.

³ Muzaffargarh requested a time extension, which is under process.

REHABILITATION OF TARBELA HYDROPOWER PLANT

Phase-I:

EPP's environmental experts visited the site to ensure that the rehabilitation works are in compliance with EMMP. The report will be submitted in August 2015.

Phase-II:

EPP provided USAID a cost review memorandum for equipment to be procured under Tarbela Phase-II. The project will add another 20 MW to the national grid and also add to the sustainability of power plant.

MANGLA DAM REHABILITATION PROJECT

EPP's environmental experts visited the site to ensure that the rehabilitation works are in compliance with the EMMP. Its report will be submitted in August 2015. EPP also provided USAID with the updated progress of the equipment under the Mangla project and answered queries related to the progress. The project will add 90 MW to the national grid.

GUDDU THERMAL POWER STATION REHABILITATION PROJECT

Subsequent to the request for a time extension at Guddu, EPP provided USAID with an updated on the status of the remaining procurements and also their assessment and recommendation on the Guddu time extension request. The remaining items will enhance the reliability of the power plants.

JAMSHORO THERMAL POWER STATION REHABILITATION PROJECT

EPP provided an update to USAID on the procurement of remaining equipment. This facilitated in finalizing the time extension request made by Jamshoro to complete the project. The remaining equipment will add to the reliability of the power plant. EPP also provided their assessment and recommendation on the Muzaffargarh time extension request.

MUZAFFARGARH THERMAL POWER STATION REHABILITATION PROJECT

EPP visited site to expedite the installation of the remaining equipment. The remaining equipment will add to the reliability of the power plant. EPP also provided an update to USAID on the procurement of remaining equipment. This facilitated in finalizing the time extension request made by Muzaffargarh to complete the project. The remaining equipment will add to the reliability of the power plant. EPP also provided their assessment and recommendation on the Muzaffargarh time extension request.

COMPONENT 2: POLICY AND REFORM

SUPPORT TO MINISTRY OF WATER AND POWER

During July, EPP met with senior officials of the Ministry of Water and Power (MWP) to discuss the on-going and proposed activities with MWP. The major activities undertaken during the month concerned the Thermal Power Purchase Agreement (PPA). During the month, EPP assisted with drafting replies to Jamshoro Power Company Limited's (JPCL) redline version of the PPA forwarded to EPP. JPCL had raised issues regarding capacity payments, heat rate testing, and liquidated damages, which EPP addressed in replies based on review by EPP technical and legal experts. These comments have been sent to the MWP and once EPP and MWP develop a consensus on the approach, EPP will incorporate the necessary amendments.

SUPPORT TO MINISTRY OF PLANNING AND DEVELOPMENT

EPP continued to provide advisory support to the Energy Wing throughout the month on a variety of tasks as requested by Member Energy and Secretary Planning. EPP is providing assistance to the Energy Wing through consolidation of information provided by Member Energy with other pertinent data secured on their behalf from various sources, including Alternative Energy Development Board (AEDB), National Electric Power Regulatory Authority (NEPRA), and National Renewable Energy Laboratory (NREL). EPP is also providing additional IT support to Member Energy for preparing of a presentation based on this information.

Implementation of E-Governance. During the month, EPP continued working with the Technical Staff of the Planning Commission for development and implementation of the Local Area Network (LAN) at the Energy Wing.

Technical Assistance. Through its seconded staff, EPP continued to provide general technical assistance, and system and network administration to the offices of Member Energy and provided support for routine tasks. EPP also provided IT application support through use of existing software to update the daily power supply demand scenario and shortfall in the power sector based on the information provided.

PowerSIM. During the month EPP worked with the Energy Wing using the Power Sector Integrated Model (PowerSIM) for case analysis to compare actual data with model-generated results for 2013-14. On request of Member Energy, EPP provided training on the PowerSIM model regarding an overview of implementation of key development projects. Following the training, the model was made available to the Delivery Unit staff for use.

GIS Mapping. EPP continued assisting Planning Commission with developing the Geographical Information System (GIS), including procuring Vector Based Mapping of Nationwide Transmission System, Power Generation Plants and providing general technical support for upcoming projects.

Project Documentation. In compliance with the requirements for closeout and audit, EPP has started collecting and compiling copies of all the deliverables submitted to the MWP and Planning Commission.

SUPPORT TO MINISTRY OF FINANCE

The EPP team at the Ministry of Finance continued to provide advisory support throughout the month on a variety of tasks as requested by the Finance Wing, Ministry of Finance:

- Corporate Finance Wing of Ministry of Finance is being provided with assistance in working out the amount of additional Tariff Differential Subsidy for K-Electric under NEPRA's decision of July

2, 2015 regarding the quarterly adjustments of K-Electric for the second, third, and fourth quarters of financial year 2013-14 and first quarter of financial year 2014-15.

- Corporate Finance Wing of Ministry of Finance is being assisted in examining and preparing comments on the proposal regarding deregulation of Compressed Natural Gas (CNG) prices for end-consumers.
- A briefing was provided to Senior Joint Secretary, Corporate Finance regarding the proposal of Khyber Pakhtunkhwa government for an increase in the net hydel profit.
- Corporate Finance Wing of Ministry of Finance is being assisted in scrutinizing the tariff differential claims of the distribution companies for the month of June 2015 submitted by the Office of the Engineering Advisor, Ministry of Water and Power.

SUPPORT TO MINISTRY OF PETROLEUM AND NATURAL RESOURCES

Liquefied Natural Gas Imports

Liquefied Natural Gas Procurement

- Pakistan State Oil Company (PSO) was awarded the bid for procuring two spot LNG cargoes for July 2015 and three spot LNG cargoes for the period August-October 2015. Another spot cargo was procured from Qatargas on an FOB basis using the Floating Storage and Regasification Unit (FSRU) as a LNG carrier.
- The first ship-to-ship LNG transfer was completed at the Engro Elengy Terminal Limited (EETL) terminal on July 17. Another ship-to-ship transfer was successfully conducted on July 29.
- Watson Farley & Williams (WFW) and Facts Global Energy (FGE) supported PSO in discussion of the issues related to LNG measurement and testing procedure under the Qatargas sales purchase agreement with the jointly appointed third-party independent surveyor.
- EPP continued support to PSO for LNG procurement with Qatargas under the G2G mechanism.

Support to Port Qasim Authority

- ECIL's environment and pipeline experts conducted a periodic monitoring review of the LNG terminal.
- EPP Environmental Specialist and LNG Advisor visited the EETL Terminal on July 14 to discuss matters related to environmental monitoring.
- The revised version of standard operating procedures for LNG vessels arriving at Port Qasim (including the Conditions of Use and Marine Services Certificate) and response to queries raised by Qatargas on Society of International Gas Terminals and Tankers Association (SIGTTO) waiver for LNG vessels calling at Port Qasim was forwarded to Qatargas. The revised version of the standard operating procedures along with annexures has been uploaded on Port Qasim Authority (PQA) website.
- Provisional tariff for LNG vessels calling at Port Qasim prepared by EPP partner ECIL-Granada was uploaded on the PQA website. LNG tariff is to be finalized upon approval of PQA Board and the GOP.
- Review by ECIL-Granada team for closing of issues arising out of various gap studies conducted for LNG terminal design and quality is in process.

Shale Gas

- A series of meetings was held with LMKR/KMR team to discuss Milestone-5, covering the financial evaluation to compute the well-head cost. Various scenarios under the financial model were generated to come up with the optimum well-head cost structure, which is to be recommended to the GOP.
- As a follow up to the presentation on the Shale Gas Resource Assessment Study given to the Minister at the Ministry of Petroleum and Natural Resources (MPNR) on June 26, meetings were held with Director General Petroleum Concessions (DGPC) officials on July 2 and July 9. Points

raised by DGPC were communicated to NuTech team that is expected to arrive in Islamabad during the first week of August to discuss the issue with DGPC.

Upstream Oil and Gas

- Advisory work on day-to-day issues of DGPC continued, including advice rendered on various regulatory, commercial, and legal issues.
- Weekly progress review meetings with Petroleum Technology Solutions Ltd. were held throughout the month.
- Finalization of on-shore supplemental agreements for conversion from old to new policies as submitted by the Exploration and Production (E&P) companies continued. Thus far, sixty-eight such agreements have been executed between the GOP and the E&P companies. The matter is being taken up by DGPC with the E&P companies to expedite the submission of the pending draft agreements.
- The draft final report for deliverable D-4 regarding rules and supplemental agreements to incorporate the provisions of tight gas, low BTU gas price, and marginal gas fields guidelines has been finalized for transmission to USAID.

COMPONENT 3: NEW PROJECTS, PLANNING, AND DEVELOPMENT

KURRAM TANGI/KAITU WEIR PROJECT

Evaluation of the technical proposal and financial proposals received for construction of the Kaitu Weir feeder tunnel linking the Kaitu River to Kurram Tangi Reservoir, two powerhouses with installed capacity of 18.4 MW, two irrigation canals (Spaira Ragma and Sheratella), and associated structures was completed by the Water and Power Development Authority (WAPDA). WAPDA in association with the Mott Macdonald Pakistan Project Consultant is negotiating with the contractor to firm up the bid price.

EPP provided relevant information to USAID as assistance in drafting of the Activity Agreement and Project Implementation Letter (PIL) Agreement. Milestone dates for funding disbursement and the associated payment schedule for the proposed \$81 million USAID funding is under preparation for final PIL Agreement.

The Planning Commission PC-I for the project amounting to \$126 million is already approved by GOP. It consists of \$81 million for Kaitu Weir and associated structure and command area development to be financed by USAID and \$45 million from loans under discussion by the Economic Affairs Division (EAD) with the Italian Government.

GOLEN GOL PROJECT

EPP had previously completed and submitted the Due Diligence Report of the Golan Gol Project to USAID. USAID accordingly authorized \$36 million funding for the powerhouse electrical and mechanical equipment (Lot 3.2 of contract) to WAPDA. The total cost of Lot 3.1 and Lot 3.2 contracts is \$75.5 million. The Kuwait Fund is providing a \$37 million loan for construction of the powerhouse civil works and evaluation and management equipment with a shortfall of about \$ 38.5 million.

EPP has finalized and submitted the Activity Agreement and PIL Agreement for \$36 million USAID funding of Golen Gol. EPP has collected Environmental Impact Assessment (EIA) reports prepared by Consultants in 2008 for the Golen Gol Project and transmission line. EPP has also provided input on the IEE Report of Golen Gol hydro power project.

The Project is 38 percent completed and is expected to be completed by August 2017; when completed it will provide 438 GWh of energy to National Grid annually. Revenue from Golen Gol will be over \$33 million a year and this cheaper power will replace electricity production from thermal plants using imported fuel oil of about \$65 million per annum.

COMPONENT 4: NEW ACTIVITIES

NATIONAL TRANSMISSION AND DESPATCH COMPANY

Real Time Digital Simulator (RTDS). The simulator arrived during the second week of July and Custom's clearance is awaited.

Auto-Transformer Program

- Two JHSP 250MVA, 220/132kV Auto-Transformers have arrived at Port in Karachi with delivery expected at the site by mid-August 2015.
- The Fire Protection System has been shipped by M/s. Xuming with delivery expected by mid-August 2015.
- Repair work on the 150 MVA and 160 MVA transformers is underway with more than 50% repairs complete. The repaired transformers are expected to be delivered by mid-September 2015.

Live-Line Maintenance

- The live-line training for twenty linemen each from LESCO and QESCO started on May 18, 2015; it will be completed on September 18, 2015.

Patrind Hydropower Project

The Patrind Project is a 147 MW run-of-river hydroelectric power generation facility being constructed between the Kunhar and Jhelum Rivers costing USD 362 million, on a build-own-operate-transfer (BOOT) basis. The REA is pending with NTDC for route finalization.

NTDC System Studies

Integration of intermittent renewable resources with national grid: the PO executed and work begun. Expected completion end September 2015. The draft final report is expected on August 28, 2015. Gopa, the consultant doing the Study will meet with AEDB, NTDC, and other stakeholders on September 08, 2015. The final report is due on September 25, 2015.



Live Line maintenance crew of PESCO after the refresher course

PROGRAM SUPPORT ACTIVITIES

CAPACITY BUILDING

Live-Line Maintenance. The linemen resumed their training at National Transmission and Despatch Centre (NTDC) Tarbela Training Center on July 27, 2015. To date, EPP has completed three of the five refresher courses at Islamabad Electricity Supply Company (IESCO), Peshawar Electricity Supply Company (PESCO), and Faisalabad Electric Supply Company (FESCO); the fourth refresher course at Gujranwala Electric Power Company (GEPCO) is to commence in August 2015.

NTDC Design Center EPP finalized the names of all the participants for the certificate ceremony to be held in August 2015.

LNG Business Management Certificate: EPP is planning to host a monitoring and evaluation session to conduct debriefing presentations with all the participants at PQA and SSGC in August 2015. EPP is planning to host a similar session with Oil and Gas Regulatory Authority (OGRA) participants in Islamabad in August 2015.

Real Time Digital Simulator Training: EPP conducted participant selection interviews from the NTDC Planning Department on July 7 and from the System Protection and Design Department on July 8, 2015. EPP will evaluate the scoring sheets and share the short-listed candidates with the Transmission Department for their review before the final selection. EPP is working with the trainer concerning the travel details and the visa process.

GENDER ACTIVITIES

Post-Training. EPP hosted multiple post-training evaluation sessions for participants from Hydro Operations and Maintenance, NTDC Design Center, and live-line maintenance.

PAKINFO

PakInfo Reporting: PakInfo entries were submitted for Q3-FY2015 in July.

Indicator	PIRS	Baseline	Baseline Year	LOP Target	FY 2014 Target	FY 2014 Result	FY 2015 Target	FY 2015 Result	FY 2016 Target	FY 2017 Target
1a. Gigawatt-hours (GW-h) of energy sold			FY 2010	3,084	1,065.00	2,008.49	876.00	957.29	0.00	0.00
1.1.a. Number of beneficiaries with improved energy services due to United States Government assistance (4.4.1-31)			FY 2011	5,631,120	1,945,296	3,667,906	1,599,750	1,748,208		
1.1.b. Gigawatt-hours (GW-h) of energy availability			FY 2010	3,084	1,065.00	2,008.48	876.00	957.29	0.00	0.00
1.1.c. Power (megawatts) available to meet power sector demand as result of USG assistance			FY 2010	440	152.00	286.60	125.00	136.60	0.00	0.00
1.1.1.a. Megawatts (MW) of electrical power added or saved as a result of United States Government supported construction, rehabilitation, and other generation and transmission improvements			FY 2010	12	0.00	0.00	6.00	8.20	0.00	0.00
1.1.1.c. Number of United States Government supported installations and operations and maintenance improvements of generation plants and transmission networks			FY 2012	175	94	95	72	60		
1.1.1.d. Number of transmission bottlenecks resolved			FY 2012	121	79	80	38	38		
1.1.4a. Public and private funds leveraged by the United States Government for energy infrastructure projects (alternative F indicator 4.4.1-32)			FY 2012	194	15.00	5.00	155.00	140.00	0.00	0.00
1.2.1.a. Number of key policies and regulations in development stages of analysis, drafting, stakeholder consultation, legislative review, approval, or implementation as a result of USG Assistance (e.g. gas allocation policy of 2005, tariffs, and subsidy policies)	Download		FY 2012	12	3	4	2	23		
1.2.2.a. Number of policies following international best practices developed and implemented			FY 2012	6	5	2	4	2		
1.2.2.b. Number of board recommendations following international best practices implemented by public sector entities			FY 2012	4			4	2		
1.2.3.a. Number of best practice-driven systems created, improved, and implemented			FY 2012	10	3	1	5	3		
1.2.4b. Number of public forums resulting from United States Government assistance in which government officials and citizens interact			FY 2012	12			7	1		

Confidential information redacted

Confidential information redacted

PROGRESS IN NUMBERS

Table 3 below provides the EPP indicators, targets, and achievements for July 2015. **Table 4** presents EPP Indicators by component for July 2015.

Table 3: EPP Indicators and Achievement for July 2015

Indicator	Unit	LOP Target	Achieved in July FY2015	Total Achieved as of July FY 2015	LOP % Achieved as of July FY2015
I.a: GWh of energy sold	GWh	7880	0	9,182	117%
I.1.a: Number of beneficiaries with improved energy services due to United States Government assistance	Individuals	13,624,226	0	15,847,956	116%
I.1.b: GWh of energy availability	GWh	7880	0	9,182	117%
I.1.c: MW available to meet power sector demand as a result of USG assistance	MW	1,303	0	1,518.2	117%
I.1.1.a: MW of electrical power added or saved as a result of USG improvements	MW	875	0	1,027.2	117%
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.	181	0	166	92%
I.1.1.d: Number of transmission bottlenecks resolved	No.	121	0	122	101%
I.1.4.a: Public and private funds leveraged by the USG for energy infrastructure projects	US \$	193.5 million	0	178.5 million	92%
I.2.1.a: Number of key policies and regulations in various stages	No.	12	0	34	283%
I.2.2.a: Number of policies following international best practices	No.	6	0	4	67%
I.2.2.b: Number of board recommendations following international best practices	No.	4	0	2	50%
I.2.3.a: Number of best practice-driven systems created, improved, and implemented	No.	10	0	8	80%
I.2.4.b: Number of public forums resulting from USG assistance in which government officials and citizens interact	No.	12	0	6	50%

Table 4: EPP Indicators by Component July 2015

Indicator	Unit	Component	LOP Target	Achieved in July FY2015	Total Achieved as of July FY 2015	LOP % Achieved as of July FY2015
I.1.a: Number of beneficiaries with improved energy services due to United States Government assistance	Individuals	Total	13,624,226	0	15,847,956	116%
		I-Generation	7,993,106	0	9,382,406	117%
		IV-Transmission Throughput Capacity	5,477,544	0	6,283,818	115%
		IV – Transmission Added/Saved	153,576	0	181,732	118%
I.1.b: GWh of energy availability	GWh	I & IV	7880	0	9,182.1	117%
		I-Generation	4,796	0	5,642.29	118%
		IV-Transmission Throughput Capacity	2999.4	0	3,440.92	115%
		IV – Transmission Added/Saved	84	0	99.50	118%
I.1.c: MW available to meet power sector demand as a result of USG assistance	MW	I & IV	1,303	0	1,518.2	117%
		I-Generation	863	0	1,013	117%
		IV-Transmission Throughput Capacity	428	0	491	112%
		IV – Transmission Added/Saved	12	0	14.2	118%
I.1.1a: MW of electrical power added or saved as a result of USG improvements	MW	I & IV	875	0	1027.2	117%
		I-Generation	863	0	1,013	117%
		IV – Transmission Added/Saved	12	0	14.2	118%

ANNEX

ANNEX I: LIST OF KEY MEETINGS

Table 5: List of Key Meetings Conducted in July 2015

Meeting with	Date	Location	Purpose	Outcome/Result
Component I: Project Monitoring & Implementation				
Mr. Imran, USAID Ms. Diana, USAID	July 1, 2015	EPP Islamabad Office	To discuss and review payment schedule of Kurram Tangi project	Payment scheduled reviewed
CEO NPGCL Muzaffargarh	July 6, 2015	Muzaffargarh Thermal Power Station	Review of procurement and installation issues	Muzaffargarh provided timeline of the installation of remaining equipment
MSI	July 10 & 15, 2015	EPP Islamabad Office	Audit and evaluation of program objective	The requisite information provided in interviews
CE Tarbela	July 27, 2015	Tarbela Power Station	To ensure that the rehabilitation works are in compliance with EMMP	EPP ensured that the rehabilitation works are in compliance with EMMP
CE Mangla	July 28, 2015	Mangla Power Station	To ensure that the rehabilitation works will be in compliance with EMMP	EPP ensured that the rehabilitation works will be in compliance with EMMP
Program Support Activities				
Nominees from NTDC's Planning Department	July 7, 2015	PIA Building, 4 th Floor – NTDC Planning Department	Conducted Planning Department's participant selection interviews for RTDS training	EPP conducted participant selection interviews at NTDC Planning Department for the nominees from Planning Department
Nominees from NTDC's System Protection and Design Department	July 8, 2015	PIA Building, 4 th Floor – NTDC Planning Department	Conducted System Protection And Design Department's participant selection interviews for RTDS training	EPP conducted participant selection interviews at NTDC Planning Department for the nominees from System Protection and Design Department

Meeting with	Date	Location	Purpose	Outcome/Result
Mr. Nasir Osman, CE Design Dept.; Mr. Raja Liaqat Ali, CE Master Planning; Mr. Waseem Younus, Manager Planning Power; and Mr. Khawaja Riffat Hassan, Manager System Protection at NTDC Planning Department	July 8, 2015	PIA Building, 4 th Floor – NTDC Planning Department	EPP met the chiefs to discuss the RTDS design schedules and sustainability concerns	EPP met Mr. Nasir Osman, CE Design Dept.; Mr. Raja Liaqat Ali, CE Master Planning; Mr. Waseem Younus, Manager Planning Power; and Mr. Khawaja Riffat Hassan, Manager System Protection at NTDC to discuss the RTDS design schedules and sustainability concerns
Design Center Participants	July 8, 2015	PIA Building, 4 th Floor – NTDC Planning Department	Collection of sound bites based on participants training experience	EPP collected sound bites of the Design Center training participants on July 8th at NTDC's Planning Department.
MSI Audit Interviews - EPP's seconded staff	July 10, 2015	EPP Islamabad Office	MSI Performance Audit Interviews	EPP assisted MSI in conducting interviews with EPP's seconded staff as a part of their audit process at EPP Islamabad office
Halcrow Audit Team	July 24, 2015	Halcrow Islamabad Office	Halcrow discussed how they will carry out their technical audit of all the transmission related activities conducted by EPP	EPP assisted Halcrow in planning their technical audit of all the transmission related activities conducted by EPP

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