



Bi-annual Environmental Monitoring Report

Project Number: Loan # 2727 – Pak Tranche 2

July – Dec, 2014

Government of the Islamic Republic of Pakistan

ASIAN DEVELOPMENT BANK PDEIP-MFF

(Power Distribution Enhancement Investment Program-Multi

Tranche Financing Facility (Tranche-2)

Prepared by:

Environment and Safeguard Section PMU QESCO

Quetta (Pakistan)

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ABBREVIATION

A	Augmentation
ADB	Asian Development Bank
BPI	British Power International
BEPA	Balochistan Environmental Protection Agency
BOQs	Bill of Quantities
C	Conversion
CSC	Construction supervision Consultant
DGS	Distribution Grid System
E	Extension
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
SSEMP	Social safeguard and Environmental Management Plan
GOP	Government of Pakistan
GSC	Grid System Construction
HSE	Health Safety & Environment
IEE	Initial Environmental Examination
LARF	Land Acquisition & Resettlement Framework
LARP	Land Acquisition & Resettlement Plan
MC&C	Monitoring, Controlling & Coordination
MFF	Multi Trenches Financing Facility
MM	Mitigation Measures
MVA	Mega Volts Ampere
PPEs	Personal Protection Equipments
PMU	Project Management Unit
PDEIP	Power Distribution Enhancement Investment Program
PS&C	Planning, Scheduling & Coordination
QESCO	Quetta Electric Supply Company
STG	Secondary Transmission Grid
T/LINE	Transmission Line

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Part 1- Introduction

1.1 Company:-

Quetta Electric Supply Company (QESCO) is a Public Limited Utility Company, established in 1998 under Companies Ordinance 1984 and is responsible for distribution of Electric Power within its territorial jurisdiction and presently serving approximately over 0.5 Million Customers (Domestic, Commercial, Agricultural, Industrial and others) in the thirty districts of Balochistan.

1.2 Project Management Unit (PMU)

To effectively plan, execute and monitor the project loan No 2727 Power Distribution Enhancement Investment Program (Tranche 2), a Project Management Unit (PMU) has been established under General Manager/Chief Engineer (Development) comprising of four sections i.e. Planning, Scheduling & Coordination, Procurement, Finance, and Environment & Social Safeguard section along with Project Director (GSC).

1.3 Detail of Project

Existing conditions of the QESCO power distribution and transmission system are inadequate to meet rapidly growing demand for electrical power. To cope with this situation, the existing power infrastructure has to be improved and upgraded. The overall contribution of power infrastructure requires institutional arrangements, capacity building that support strategic management of the sector, planning and management of investments.

The basic information of the loan No. 2727 is here as under:-

Loan Number:-ADB-2727 PAK

Project Title:- Power Distribution Enhancement Investment Program- Multi Tranche Financing Facility (PDEPMFF)_Tranche-2 (STG)

1.4 Location of the Project:-

This project covers extension & augmentation work in 12 Districts of Balochistan in QESCO territory that are Quetta, Pashin, Qila saifullah, Loralai, Khuzdar, Mastung, , Sibi, Jafarabad, Kharan Turbat, Kalat, & Gwadar.

Borrower:-GOP/ QESCO

Executing Agency:-PEPCO

Implementing Agency:-QESCO

Date of Signing Agreement:-28-01-2011

Date of Effectiveness:-08-10-2011

Date of Loan Closing:-30-09-2015

Date of Last ADB Review Mission: - 17 June, 2014

Amount of Loan: - 19.760 Million US \$

1.5 Objectives of the Project

QESCO through GOP has undergone a Project Financing agreement with Asian Development Bank for:

- Strengthening the capacity of Power Distribution and Transmission networks
- To meet the increasing electricity demand in the selected areas more efficiently
- To upgrade the existing power infrastructure.

1.6 Construction activities and project progress during previous 6 months of Tranche 2

(i) Identification of subprojects

(ii) Preparation of PC 1

(iii) Approval of PC 1 from ADB/PEPCO

(iv) Balochistan Environmental Protection Agency (BEPA) has issued No Objection Certificate (NOC) of QESCO – Extension and Augmentation of 16 sub projects

under ADB loan No. 2727-Pak Tranche-II vide letter No. DG (EPA)/1536/2011 dated 03-12-2011 (**Annex-A**)

1.7 Scope of Work

There are 15 Nos. of QESCO-Extension and Augmentation approved Sub projects under ADB Tranche-2. Its detail is here as under:

EXTENSION/ AUGMENTATION SUB PROJECTS TRANCHE 2
Table No 1

Sr. No	GRID STATION	TYPE	CAPACITY(MVA)	
1	YARU	A	1 X 26	
2	KHANOZAI	A	1 X 26	
3	MUSLIM BAGH	E	1 X 26	
4	KILLA SAIFULLA	A + E	2 X 40 + 1 X 40	
5	WADH	E	1 X 26	
6	KHUDKUCHA	A	1 X 26	
7	QUETTA INDUSTRIAL	A + E	2 X 40 + 1 X 40	
8	SIBI	A	2 X 26	
9	ZEHRI	E	1 X 26	
10	KHARAN	A	1 X 26	
11	TURBAT	A	1 X 26	
12	SURAB	A	1 X 26	
13	SUHBATPUR	A	1 X 26	
14	DUKI	A	1 X 26	
15	GAWADAR	A	1 X 26	
Rating of Power Transformers T/F (MVA)		Augmentation of T/F (Replacement at existing foundation) (No)	Extension of T/F (addition through new foundation) (No)	Total No of Power Transformer
40		4	2	6
26		11	3	14
Total		15	5	20

Table No.2 PHYSICAL STATUS OF QESCO SUB PROJECTS TRANCHE-2

Sr. No	GRID STATION	TYPE	CAPACITY(MVA)	Physical Progress	% age Progress	Date of Completion/Remarks
1	YARU	A	1 X 26	Completed	100	26.03.2012
2	KHANOZAI	A	1 X 26	Completed	100	15.04.2012
3	MUSLIM BAGH	E	1 X 26	Completed	100	30.07.2013
4	KILLA SAIFULLA	A + E	2 X 40 +1 X 40	Completed	100	21.07.2012 & 26.11.2012 installation & erection is completed but yet to be energized
5	WADH	E	1 X 26	Completed	100	05.10.2012
6	KHUDKUCHA	A	1 X 26	Completed	100	04.05.2012
7	QUETTA INDUSTRIAL	A + E	2 X 40 + 1 X 40	In Progress	80	17.01.2012 & 11.11.2012 Extension is in Progress
8	SIBI	A	2 X 26	Completed	100	24.01.2012 & 08.07.2013
9	ZEHRI	E	1 X 26	Completed	100	23.06.2012
10	KHARAN	A	1 X 26	Completed	100	28.04.2014
11	TURBAT	A	1 X 26	Completed	100	01.10.2012
12	SURAB	A	1 X 26	Completed	100	31.08.2013
13	SUHBATPUR	A	1 X 26	Completed	100	03.02.2013
14	DUKI	A	1 X 26	Completed	100	12.04. 2013
15	GWADAR	A	1 X 26	Completed	100	05.12.2013

1.8 Changes in Project Organization and Environmental Management Team

Environmental and Social officers have been appointed within effective date but Deputy Manager (E&S) yet to be appointed. However, the post of Deputy Manager (E&S) has been upgraded as Manager (E&S). Manager from Civil Engineering is working on the post of Manager (E&S).

Up to date organization chart is attached as **Annexure- B**

1.9 Relationships with Contractors, Owner, lenders etc.

Relationship between contractors, owners and lenders were found excellent. No dispute reported during the completed sub projects.

Part II Environmental Monitoring

2. Environmental Monitoring Summary:-

All subprojects are within the Boundaries of the existing grid stations. More than 80% work of sub projects have been completed while less than 20% will be completed in next six months hopefully. No any significant environmental impact has been observed/reported during the environmental monitoring, if so that will be communicated accordingly.

Part III Environmental Management

3 EMS, SSEMP and work plans:-

As all subprojects are within the Boundaries of the existing grid stations, therefore EMS, SSEMP and work plans is implemented as per IEE Report of subprojects.

3.1 Site Inspection and Audits:-

Site inspections and audits of the sub projects are being performed with the time of physical work.

3.2 Non Compliances Notices:-

If any environmental impact observed at construction and operational stage of subprojects, the non compliance notices will be communicated accordingly.

3.3 Issues Covered:-

No major environmental issue has been observed and if found will be communicated/ covered accordingly

3.4 Corrective Action Plans:-

If any non compliances found during the construction and operation stage of sub projects the corrective action plan will be prepared with in due coarse of time.

3.5 Consultation and Complaints:-

As the result of consultation with stakeholders none of complaint has been observed during the said period

3.6 Implementation report on EIA/IEE mitigation requirements of QESCO Subprojects

References	Requirements	Action to Date	Action required/ Comments
Orientation for Contractor, and Workers	<ol style="list-style-type: none"> 1. QESCO to engage environmental specialist to monitor and progress all environmental statutory and recommended obligations. 2. Conduct special briefing for managers and / or on-site training for the contractors and workers on the environmental requirement of the project. Record attendance and achievement test. 3. Agreement on critical areas to be considered and necessary mitigation measures, among all parties who are involved in project activities. 4. Continuous progress review and refresher sessions to be followed 	<ol style="list-style-type: none"> 1. QESCO has a fully functional E&S Section, which conducts monitoring activities regularly. 2. Special briefings and on site training have been conducted for the managers, staff and workers on environmental requirements of the project. 3. There are no critical areas; all the sub projects are within the boundaries of existing grid stations, so there is no need of any agreement on critical areas. 4. E& S Section of PMU QESCO follows the continuous progress and review the project activities 	<p>No further action is required for orientation of contractor and workers. All the project activities are with in the boundaries of existing grid stations.</p>
Safety Precautions for the Workers	<ol style="list-style-type: none"> 1. Providing adequate warning signs 2. Providing workers with skull guard or hard hat and hard toe cap shoes. 3. Contractor shall instruct his workers in health and safety matters, and require the workers to use the provided safety equipment 4. Establish all relevant safety measures as required by law and good Engineering practices. 	<ol style="list-style-type: none"> 1. All the warning signs are installed at project site. 2. All workers are provided with Personal Protection Equipments (PPEs) 3. No civil work is involved in Tranche 2 subprojects. However, workers are instructed for health and safety matters. 4. All relevant safety measures as required by law and good engineering practices have been established as per guidelines. 	<p>Maximum safety precautions for workers have been provided. No any further action or mitigation measure is required.</p>
Waste Disposal	<ol style="list-style-type: none"> 1. Estimating the amounts and types of construction waste to be generated by the project. 2. Investigating whether the waste can be reused in the project or by other interested parties. 3. Identifying potential safe disposal sites close to the project, or those designated sites in the contract. 4. Investigating the environmental conditions of the disposal sites and recommendation of most suitable and safest sites. 5. Piling up of loose material should be done in segregated areas to arrest washing out of soil. Debris shall not be left where it may be carried by water to down stream flood plains, dams, lagoons etc. 	<ol style="list-style-type: none"> 1. No civil work is involved in Tranch-2 sub projects therefore no waste has been generated for said period. 2. No waste is being reused by any party. 3. All the sub projects are within the boundaries of existing grid stations, and no civil work is involved, therefore no such site for safe disposal is applicable. 4. The environmental condition for safe disposal at most suitable site is verified before disposal of any type of waste. 5. No pilling up of material is done during the execution of work. 	<p>No further action is required.</p>

	<p>6. Used oil and lubricants shall be recovered and reused or removed from the site in full compliance with the national and local regulations.</p> <p>7. Oily wastes must not be burned. Disposal location to be agreed with local authorities/EPA.</p> <p>8. Waste transformer insulating oil to be recycled, reconditioned, or reused at an appropriate SS or other facility.</p> <p>9. Machinery should be properly maintained to minimize oil spill during the construction.</p> <p>10 Solid waste should be disposed at an approved solid waste facility open burning is illegal and contrary to good environmental practice</p>	<p>6. Needful is done with full compliance with national & local regulations.</p> <p>7. Needful is done.</p> <p>8. No power transformer oil is being reused or reconditioned at project site or other facility.</p> <p>9. All vehicles and machinery being used during construction are maintained properly to avoid oil spills at the site.</p> <p>10. Needful is don with good environmental practices.</p>	<p>GSC Staff is directed to recover the used oil from the site with environmental friendly manners.</p>
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(Annex-A)

OFFICE OF THE DIRECTOR GENERAL
BALOCHISTAN ENVIRONMENTAL PROTECTION
AGENCY GOVERNMENT OF BALOCHISTAN
SAMUNGLI ROAD QUETTA.

Office: 081-9201840 Fax: 081-9201180



No.DG(EPA)/ 1536 /2011 Dated 03/12 /2011

NO OBJECTION CERTIFICATE

To
Mr. Javaid Aftab
Road Chief Engineer (Dev)
PMU QESCO, Head Quarter.
Zarghoon Quetta Cantt.

Name of project & Description /
Location of the project :- PAK: MFF for Power Distribution
Enhancement Program (Tranche 2) in
Balochistan.
Date of IEE :- Dated Nov , 2011

After thorough review of the subject Initial Environmental Examination (IEE), the Balochistan Environmental Protection Agency has decided to accord it approval / No Objection Certificate in favour of M/S QESCO, subject to the following terms and conditions as laid down in Section-17 & 18 of EIA / IEE Regulation, 2000: -

1. Mitigation measures and Environmental Management Plan (EMP) as included in the IEE report should be strictly implemented.
2. Techniques should be adopted to minimize noise pollution, oil spill and environmental problems during the Extension and Augmentation of Power Transformers.
3. All precautionary measures should be strictly adhered to minimize any negative impacts in the area.
4. Any kind of wastage (oil and lubricants) generated / produced should be appropriately disposed off during extension, augmentation and maintenance.
5. Oily residues, fuel and any contaminated soil should be captured at source by installing bunds and refueling and maintenance should take place in dedicated areas away from surface water resources.
6. The proponent of the project shall resolve all disputes (if any) related to land prior to start of the transformers installation.
7. The QESCO shall be liable for compliance of Section-17 and 18 of EIA / IEE Regulation, 2000.
8. This approval will not absolve the QESCO from obtaining any other approval that may be required under any law.
9. This approval shall be treated as null and void if the conditions are not complied with.

The proponent of the project is bound to submit completion report of the project.

(Engr. Muhammad Khan Uthmankhail)
Deputy Director (Tech./Lab)

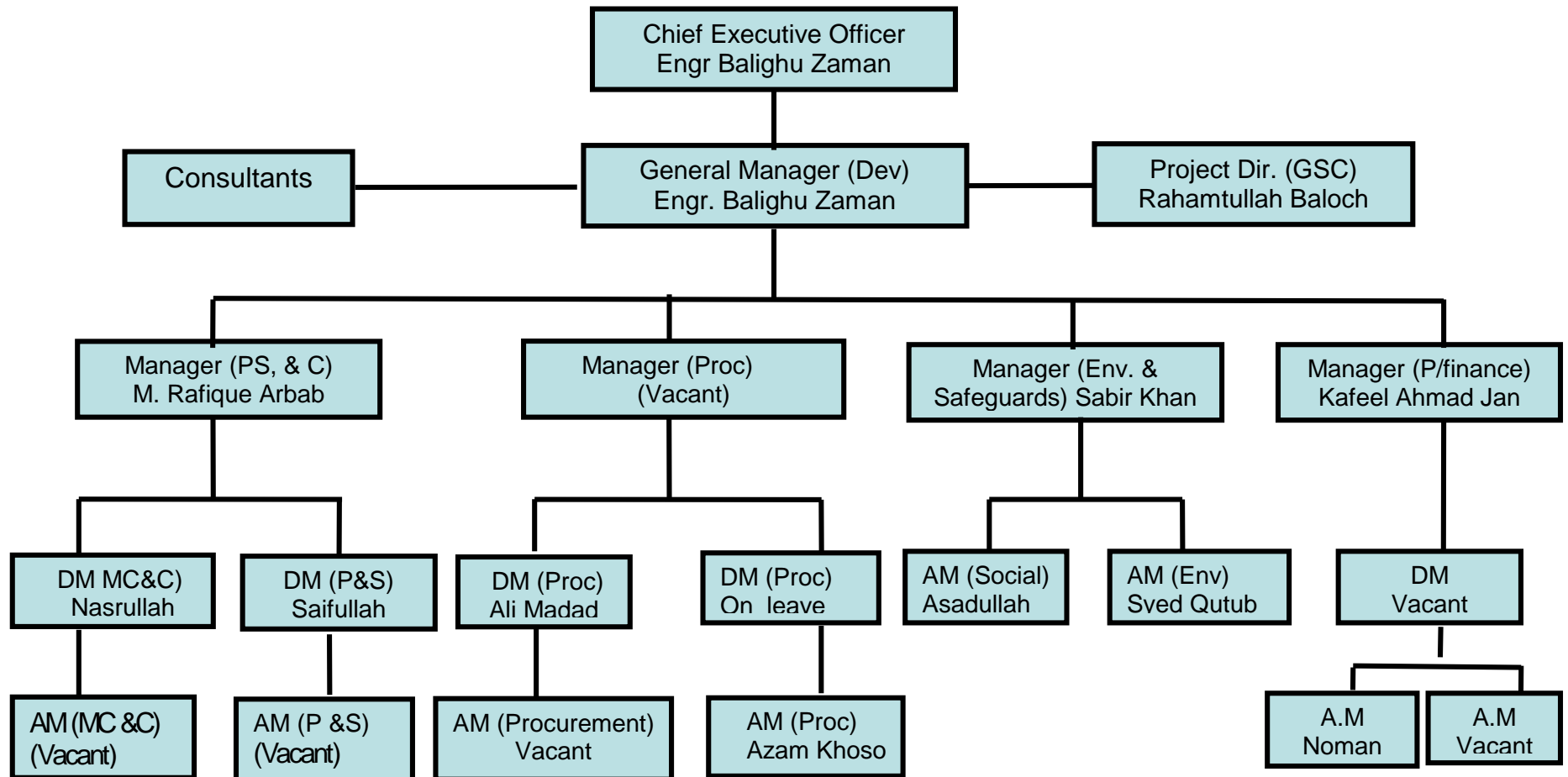
Copy for information to:

1. P.S to the Director General, EPA Balochistan, Quetta
2. Master File

Deputy Director (Tech./Lab)

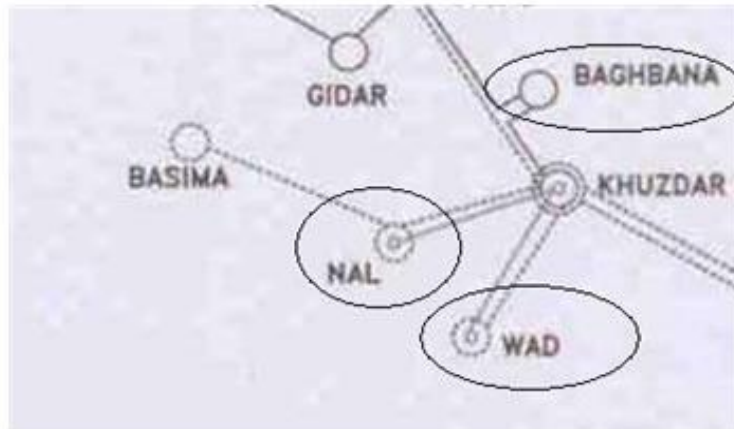
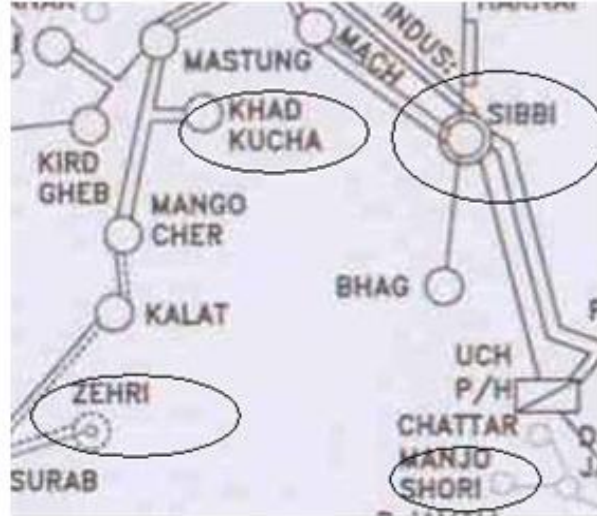
ORGANIZATION CHART PMU QESCO

(Annex-B)



Lay out Plan QESCO Subprojects of Tranche 2

(Annex-C)



Picture of the Subproject Sites/ Area

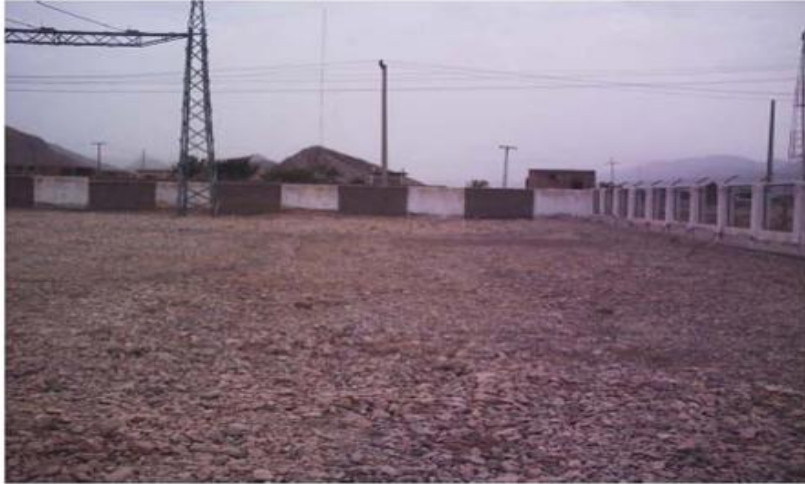
(Anne-x D)



A view of the yard of Qila Safiullah Grid Station



Open space at Yaro Grid Station



Open space at Khudkochoa Grid Station



Augmentation at Industrial Grid Station Quetta



Augmentation at Quetta Industrial Grid station



Augmentation at Quetta Industrial Grid Station