

Resettlement Plan Due Diligence

June 2013

MFF 0021-PAK: Power Distribution Enhancement Investment Program – Tranche 4

Prepared by Quetta Electric Supply Company for the Asian Development Bank.

This is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

Due Diligence Document

Document Stage: Final
Project Number: Q1-Q18
{June 2013}

Islamic Republic of Pakistan: Multitranche Financing Facility (MFF)
For Power Distribution Enhancement
Investment Program

Tranche-IV: Power Transformer's Extension
& Augmentation Subprojects

Prepared by: Environment & Social Safeguards Section
Project Management Unit (PMU)
QESCO, Pakistan.

Table of contents

ABBREVIATIONS	ii
EXECUTIVE SUMMARY	iii
1 Project Overview	1
1.1 Project Background	1
1.2 Scope of Work	1
2 Scope of Land Acquisition and Resettlement	2
2.1 Scope and Rationale for Land Acquisition	2
2.1.1 Site Identification	2
2.1.2 Location and Scale of Project	3
2.2 Resettlement Impacts	5
2.2.1 Number of houses to be displaced	5
2.2.2 Number of Directly Affected Persons (AP's)	5
2.2.3 Number of Indirectly Affected Persons (AP's)	5
2.2.4 Loss of Agricultural Area / Cropland	5
2.2.5 Loss of Orchards	5
2.2.6 Loss of water courses	5
2.2.7 Loss of trees	6
2.2.8 Loss of structures / buildings	6
2.2.9 Loss of individual and community livelihoods	6
2.2.10 Loss of forest land	6
2.2.11 Damage or disturbance to government installations	6
2.2.12 Damage or disturbance to utility lines	6
2.2.13 Loss of grazing and fishing activities	6
2.2.14 Summary	6
2.3 Community's Overall Response to the Proposed Sub-Project	6
2.3.1 Project Awareness	6
2.3.2 Effects on business and living conditions	6
2.3.3 Job Opportunities	6
2.3.4 Suitability of Proposed site	7
2.4 Socio-Economic Survey	7
2.5 Indigenous People	7
2.6 Gender Impacts	7
2.7 Resettlement Budget	7
2.8 Implementation Schedule	7
3 Monitoring & Evaluation	7
4 Identification and Selection of Alternative Sites	7

List of Tables

Table 1. 1 Component of Tranche-IV Sub-Projects	1
Table 1. 2 Summary of Sub-Project Works under Tranche-IV	2

ABBREVIATIONS

ADB	Asian Development Bank
AP	Affected Persons
DISCOs	Distribution Companies
EA	Executing Agency
QESCO	Quetta Electric Supply Company
MFF	Multi-tranche Financing Facility
MoWP	Ministry of Water & Power
PEPCO	Pakistan Electric Power Company
PMU	Project Management Unit

Units

GWh	Giga Watt Hour
-----	----------------

EXECUTIVE SUMMARY

1. The Government of Pakistan (the Government) has requested the Asian Development Bank (ADB) to support the Power Distribution Enhancement Investment Program (the Investment Program) and provide financing through a multi-Tranche financing facility (MFF) for \$810 million over 10 years. The Investment Program is designed to provide grid-connected customers with adequate and reliable supply of electricity. The rehabilitation, augmentation, and expansion of the eight power Distribution Companies (DISCOs) systems will increase the reliability of supply to residential, agricultural, commercial, and industrial customers in Pakistan. A reliable electricity supply will lead to social and economic benefits and improved conditions for schools, hospitals, and other social services.
2. This Investment Program will (i) improve power distribution infrastructure through system rehabilitation, augmentation, and expansion; and relieve the power system from distribution bottlenecks and constraints; (ii) enable continued operation and maintenance in accordance with best international practices; and (iii) commercialize DISCO operations. Specifically, (i) DISCOs will adhere to regulatory requirements and comply with the security standards; (ii) about 12,000 gigawatt-hours (GWh) of additional energy will be supplied through the national grid annually; (iii) the system will be capable of meeting peak demand, with electricity outages significantly reduced; and (iv) 30 million additional people will have access to electricity from the national grid.
3. Pakistan Electric Power Company (PEPCO) has been nominated by Ministry of Water and Power (MoWP) to act as the Executing Agency (EA) with each DISCO being the Implementing Agency (IA) for work in its own area. PEPCO's role in the processing and implementation of the investment program is that of a coordinator.
4. Quetta Electric Supply Company (QESCO) will implement the MFF Tranche-IV program which includes ten (10) Extension and eight (8) Augmentation sub-projects at overloaded substations. Extension projects will add new transformers to substations, whereas augmentation will replace the existing overloaded transformers with larger capacity transformers at same location. The sub projects are located in Quetta , Pishin, Mastung, Kallat, Khuzdar, Loralai Qila Abdullah, Barkahn and Musakhel Districts of Baluchistan. The 18 sub-projects will be implemented at existing 132 grid station of QESCO Jurisdiction all over Baluchistan.
5. Sub-Project under Tranche-IV, are of extension and augmentation in nature, will be executed within walled boundaries of 18 grid stations and will not encroach on any land outside the grid stations. All the land belongs to the QESCO; As such preparation and implementation of Land Acquisition and Resettlement Plan (LARP) will not be involved.

1 PROJECT OVERVIEW

1.1 Project Background

1. The Government of Pakistan (the Government) has requested the Asian Development Bank (ADB) to support the Power Distribution Enhancement Investment Program (the Investment Program) and provide financing through a multi-Tranche financing facility (MFF) for \$810 million over 10 years. The Investment Program is designed to provide grid-connected customers with adequate and reliable supply of electricity. The rehabilitation, augmentation, and expansion of the eight power Distribution Companies (DISCOs) will increase the reliability of supply to residential, agricultural, commercial, and industrial customers in Pakistan. A reliable electricity supply will lead to social and economic benefits and improved conditions for schools, hospitals, and other social services.

2. This Investment Program will (i) improve power distribution infrastructure through system rehabilitation, augmentation, and expansion; and relieve the power system from distribution bottlenecks and constraints; (ii) enable continued operation and maintenance in accordance with best international practices; and (iii) commercialize DISCO operations. Specifically, (i) DISCOs will adhere to regulatory requirements and comply with the regulated security standards; (ii) about 12,000 gigawatt-hours (GWh) of additional energy is forecast to be supplied through the national grid annually; (iii) the system will be upgraded to meet peak demand, with electricity outages significantly reduced; and (iv) 30 million additional people will have access to electricity from the national grid by 2018.

3. Pakistan Electric Power Company (PEPCO) has been nominated by Ministry of Water and Power (MOWP) to act as the Executing Agency (EA) with each DISCO being the Implementing Agency (IA) for work in its own area. PEPCO's role in the processing and implementation of the investment program is that of a coordinator.

4. Quetta Electric Supply Company (QESCO) will implement the Tranche-IV program which includes ten (10) Extension and eight (8) Augmentation sub-projects at overloaded substations. The sub projects are located in Quetta, Pishin, Mastung, Kallat, Khuzdar, Loralai Qila Abdullah, Barkahn and Musakhel Districts of Baluchistan. The 18 sub-projects will be implemented at existing 132 grid station of QESCO Jurisdiction all over Baluchistan.

1.2 Scope of Work

5. In Tranche-IV Project, 18 No Power Transfer along with requisite Control Panels /Circuit Breakers etc are to be procured as per ADB Procurement Guidelines. For augmentation locations, procured power transformers are to be replaced with existing P/T of lesser capacities. Foundation of previous transformers will be utilized. On extension locations, power transformers are to be installed by construction of foundation bays and extension of control house building (if required). Location wise scope of work is given in table 1.1 as under:

Table 1.1 Component of Tranche-IV Sub-Projects

Tranche-IV QESCO Subprojects				
Project No	Associated Project	Name of Grid Station	Type of Project	New Transformer Size
Q 1	—	132 kV Alizai	Extension	1 x 26 MVA
Q 2	Q 3	132 kV Chaman	Augmentation	1 x 40 MVA
Q 3	Q 2	132 kV Hurramzai	Extension	1 x 13 MVA
Q 4	Q 5	132 kV Baghbana	Augmentation	1 x 40 MVA

Tranche-IV QESCO Subprojects				
Project No	Associated Project	Name of Grid Station	Type of Project	New Transformer Size
Q 5	Q 4	132 kV Darwaza	Extension	1 x 13 MVA
Q 6	Q 19	132 kV Gidder	Augmentation	1 x 40 MVA
Q 7	Q 8	132 kV Kallat	Augmentation	1 x 40 MVA
Q 8	Q 7	132 kV Kanak	Extension	1 x 26 MVA
Q 9	—	132 kV Khanozai	Extension	1 x 40 MVA
Q 10	Q 11	132 kV Pishin	Augmentation	1 x 40 MVA
Q 11	Q 10	132 kV Loralai	Extension	1 x 26 MVA
Q 12	Q 13	132 kV Quetta City	Augmentation	1 x 40 MVA
Q 13	Q 12	132 kV Kuchlak	Extension	1 x 26 MVA
Q 14	Q 15	132 kV Sariab	Augmentation	1 x 40 MVA
Q 15	Q 14	132 kV Mariabad	Extension	1 x 26 MVA
Q 16	—	132 kV Panjpai	Augmentation	1 x 26 MVA (From Khuzdar)
Q 17	—	132 kV Kingri	Extension	1 x 13 MVA (From Dukki)
Q 18	—	132 kV Barkhan	Extension	1 x 13 MVA (From Bhag)

Table 1. 2 Summary of Sub-Project Works under Tranche-IV

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	7	1	8
26	1	5	6
13	-	4	4
Total	8	10	18

2 SCOPE OF LAND ACQUISITION AND RESETTLEMENT

6. The extension and augmentation sub-projects will all be executed within the existing Grid stations and will not encroach on any land outside the grid stations. All the land belongs to the QESCO, which has been transferred by the Board of Revenue under the Land Acquisition Act 1894. As such preparation and implementation of Land Acquisition and Resettlement Plan (LARP) will not be involved

2.1 Scope and Rationale for Land Acquisition

2.1.1 Site Identification

7. As indicated above, no new land will be acquired for the project. Ten (10) No extension and Eight (08) No augmentation subprojects will be carried out with in walled boundaries of existing grid stations. The extension subproject includes delivery and addition of new transformer (addition in power infrastructure of

grid station) while augmentation includes replacement of existing transformer (having lesser capacity and remained overloaded) with a transformer of higher capacity in the existing grid stations.

For sub-projects selection following criteria was adopted:

- Technical justification.
- Financial and economic viability, and
- Minimal residual environmental and social impacts.

2.1.2 Location and Scale of Project

8. **Q 1. Alizai sub station. (Extension)** The DGS is located about 75 from the Quetta city. The extension sub-project will extend an existing transformer with another higher capacity 26 MVA in an existing DGS. The project proponent (QESCO) plans to have the sub project completed by mid to late 2018. The extension subproject will be located entirely within the existing substation that is located at Alizai. Based on the field visit and discussions with the staff of QESCO, the extension will have no severe environmental impacts. There is good road access. The staff of QESCO was in favor of the project and wants its early implementation. The IEE team is also in favor of the project.
9. **Q 2. Chaman grid station. (Augmentation)** The sub-project will be augmented by installing a higher capacity 40 MVA transformer in an existing DGS existing. The grid station is about 120km from Quetta city. The road access is fairly good. The total number of staff is 12 however the shortage of staff was mentioned as problem. While interviewing the staff at the DGS, they are in favor of the project and wanted its early implementation as most of the transformers are over loaded. QESCO plans to have the sub project completed by mid to late 2018. The IEE team is of the opinion that there will be no impacts of the environment because of this project.
10. **Q 3. Hurrmazai sub station. (Extension)**The DGS is located 75 KM from Quetta. QESCO plans the extension of, 13 MVA at the DGS. The proposed extension is entirely within the existing DGS and hence will not affect the environment and will have no environmental impacts. Yard has the potential of expansion and an extra foundation for transformer is also available. The staff complained about shortage of drinking water. There is good road access to the sub station.
11. **Q 4. Baghbana sub station. (Augmentation)** The DGS is located 303 KM from Quetta on the Quetta - Karachi road. QESCO plans the augmentation of 40 MVA at the DGS. The proposed augmentation is entirely within the existing DGS and hence will not affect the environment and will have no environmental impacts. Yard has the potential of expansion and an extra foundation for transformer is also available. There is good road access to the sub station.
12. **Q 5. Darwaza sub station. (Extension)** The DGS is located about 32 from the Quetta city. The extension sub-project will extend an existing transformer with one higher capacity 13 MVA in an existing DGS. The Project Proponent (QESCO) plans to have the sub project completed by mid to late 2018. The extension subproject will be located entirely within the existing substation that is located at Darwaza Mastung Based on the field visit and discussions with the staff of QESCO, the extension will have no environmental impacts. There is good road access. The staff of QESCO was in favor of the project and wants its early implementation. The IEE team is also in favor of the project.
13. **Q 6. Gidder sub station. (Augmentation)**The DSS is located 255km south west of Surab in the Kalat district. The augmentation sub-project will replace an existing transformer with one with a 40 MVA higher capacity in an existing DGS. The project Proponent (QESCO) plans to have the sub project completed by mid to late 2018. The augmentation subproject will be located entirely within the existing substation that is located at Gidder. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. There is good road access. The staff of QESCO was in favor of the project and was its early implementation.

14. **Q 7. Kalat sub station. (Augmentation)** The DSS is located 140km from Quetta city in the Kalat district. The augmentation sub-project will replace the sub station transformer by a new high capacity 40 MVA power transformer. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team visits this site and its remote location. The IEE team is of the opinion that there will be no impacts of the environment because of this project. Shortage of staff was mentioned as a problem.
15. **Q 8. Kanak sub station. (Extension)** The extension sub-project will extend an existing transformer with one with a high capacity 26 MVA in an existing DGS. Kanak sub station is located in Mastung district on Quetta – Noshki road about 55 km from Quetta city. The road access fairly good. Based on the discussions with the staff of QESCO, the extension will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team is of the opinion that there will be no considerable impacts of the environment because of this project. Lack of drinking water and shortage of staff are the problems mentioned by the staff of sub station.
16. **Q 9. Khanozai sub station. (Extension)** Khanozai sub station is located at the Quetta – Muslim Bagh road and is 80 KM away from Quetta. The road access is fine. There is a plan of extension transformer with one of a higher capacity in an existing DGS. The yard has the potential of extension at the sub station. Field visits and discussions with the staff of the sub station reveal that there will be no considerable environmental impacts because of the proposed project; sub station has a nice location.
17. **Q 10. Pishin sub station (Augmentation).** The augmentation sub-project will replace an existing transformer one with a higher capacity 40 MVA in an existing DGS. Pishin sub station is located in Pishin district on Quetta – Chaman road about 55 km from Quetta city. The road access fairly good. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team is of the opinion that there will be no impacts of the environment because of this project. Shortage of staff and lack of drinking water was mentioned as problems by the staff of sub station.
18. **Q 11 Loralai sub station: (Extension)** The extension sub-project will extend an existing transformer with one with a higher capacity 26 MVA in an existing DGS. Loralai Grid Station is 265 Km from Quetta city on Quetta - Loralai road. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team visited the site and of its remote location in the tribal belt of Baluchistan. The IEE team is of the opinion that there will be no impacts of the environment because of this project.
19. **Q 12. Quetta city Grid station. (Augmentation)** Located in the Kili Alam Khan of Quetta city, the sub project area is 5 km away from the Quetta city. QESCO proposes an argumentation of 1X40 MVA power transformers. The sub station yard has the potential of extension. The proposed project will have no negative environmental impacts. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation.
20. **Q 13. Kuchlak sub station: (Extension)** The extension sub-project is located at Quetta-Chaman road that is 25 Km away from Quetta city. The sub project will extend an existing transformer with one with a higher capacity 26 MVA in an existing DGS. The yard has the potential of extension. Based on the discussions with the staff of QESCO, the extension will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team visited and team has opinion that there will be no impacts of the environment because of this project.
21. **Q 14. Sariab sub station: (Augmentation)** The augmentation sub-project will replace an existing transformer with one with a higher capacity 40 MVA in an existing DGS. The yard has the potential of extension. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team is of the opinion that there will be no impacts of the environment because of this project.

22. **Q 15. Mariabad grid station: (Extension)** The extension sub-project will extend an existing transformer with one with a higher capacity 26 MVA in an existing DGS. The yard has the potential of extension. Based on the discussions with the staff of QESCO, the extension will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team is of the opinion that there will be no impacts of the environment because of this project.
23. **Q 16. Panjpai sub station: (Augmentation)** The augmentation sub-project is located Panjpai and 80 Km away from Quetta city. The sub project will replace an existing transformer with one with a higher capacity 26 MVA in an existing DGS from Khuzdar.. Based on the discussions with the staff of QESCO, the augmentation will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team visited the site main and of the opinion that there will be no impacts of the environment because of this project. Shortage of staff was mentioned as problems by the staff of sub station.
24. **Q 17. Kingri sub station: (Extension)** The extension sub-project is located at Kingri in Musakhel district that is 400 Km away from Quetta city. The sub project will extend an existing transformer with one with a higher capacity 13 MVA in an existing sub station. Based on the discussions with the staff of QESCO, the extension will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team is of the opinion that there will be no impacts of the environment because of this project. Shortage of staff was mentioned as problems by the staff of sub station
25. **Q 18. Barkhan sub station: (Extension)** The extension sub-project is located in Barkhan district that is 500 Km away from Quetta city. The sub project will extend an existing transformer with one of 13 MVA in an existing sub station. Based on the discussions with the staff of QESCO, the extension will have no environmental impacts. The staff of QESCO was in favor of the project and was its early implementation. The IEE team was unable to visit these site main because of its remote location and insecurity because of its location in the tribal belt of Baluchistan. The IEE team is of the opinion that there will be no impacts of the environment because of this project.

2.2 Resettlement Impacts

2.2.1 *Number of houses to be displaced*

26. No houses exist on the project sites and the area is not inhabited, therefore there are no resettlement issues related with housing.

2.2.2 *Number of Directly Affected Persons (AP's)*

27. No peoples are living on the project sites, hence there are no directly affected.

2.2.3 *Number of Indirectly Affected Persons (AP's)*

28. As there will be no work in the adjoining areas, there will be no indirect effects.

2.2.4 *Loss of Agricultural Area / Cropland*

29. The grid stations land have no agriculture use, therefore there is no loss of agricultural area or any cropland.

2.2.5 *Loss of Orchards*

30. There are no losses of orchards.

2.2.6 *Loss of water courses*

31. No watercourses exist in the subproject areas.

2.2.7 Loss of trees

32. Tree plantations exist within the grid stations and in the surrounding areas. No tree will be removed for the erection of new transformers.

2.2.8 Loss of structures / buildings

33. No loss of structures / buildings will occur due to the implementation of the sub-projects.

2.2.9 Loss of individual and community livelihoods

34. There are no losses of livelihoods. (see 2.2.2 and 2.2.3)

2.2.10 Loss of forest land

35. The work being carried out within the existing grid stations does not incur loss of forestlands.

2.2.11 Damage or disturbance to government installations

36. The area / grids belong to QESCO with allied structure and equipment. The installation / erection of transformers will be carried out within these grid stations. This will improve bring improvement to the overloaded substations.

2.2.12 Damage or disturbance to utility lines

37. There will be no disturbance to the utility lines.

2.2.13 Loss of grazing and fishing activities

38. There is no loss of grazing and fishing activities. (see 2.2.4)

2.2.14 Summary

39. The project falls under **Category-C** therefore, no resettlement plan is required as there is no private land acquisition or acquisition of other assets. There is no displacement of people and there is no loss of income is caused by the subproject.

2.3 Community's Overall Response to the Proposed Sub-Project

40. The major concern of the community is of load shedding. Some residents also demanded employment of local persons during the erection / installation period. The local communities' responses to the subproject are summarized as follows:

2.3.1 Project Awareness

41. The majority of the beneficiary communities were found aware of the Project activities.

2.3.2 Effects on business and living conditions

42. Almost all of the community expect a positive impact of the sub-project in terms of improved voltage and reduced load shedding.

2.3.3 Job Opportunities

43. The communities requested to be hired for unskilled to semi-skilled jobs during the construction and operation of the project activities.

2.3.4 Suitability of Proposed site

44. The present sites are suitable for extension and augmentation of power transformers.

2.4 Socio-Economic Survey

45. No socio-economic survey was required for this project as this fall in Category-C as per ADB Guidelines.

2.5 Indigenous People

46. There are no indigenous people in the project area.

2.6 Gender Impacts

47. During the discussion with community it was observed that women's status was considered to be much below that of men. They were not allowed to move freely and have low participation in decision making for socio economic activities.

2.7 Resettlement Budget

48. This is not applicable for any of the sub projects. (see 2.2.14)

2.8 Implementation Schedule

49. This is not applicable, see above.

3 MONITORING & EVALUATION

50. The Monitoring & Evaluation activities of this sub-project will be limited to monitoring the implementation of construction. It will be ensured that the contractors, vendors and economic activities include the employment of local labor force in the construction and post construction activities.

4 IDENTIFICATION AND SELECTION OF ALTERNATIVE SITES

51. No studies of alternative sites are required as the subproject do not involve any involuntary resettlement and social and economic loss to any section of the society or the grazing rights of the indigenous peoples. No activity for the compensation or relocation is planned under the subproject.