Resettlement Plan Due Diligence

June 2013

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

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

Due Diligence Document

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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)
FESCO, Pakistan.

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ABBREVIATIONS

ADB	Asian Development Bank
AP	Affected Persons
DISCOs	Distribution Companies
EA	Executing Agency
FESCO	Faisalabad 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. Faisalabad Electric Supply Company (FESCO) will implement the Tranche-IV program which includes fourteen (14) extension and fourteen (14) 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 projects are located in the urban and rural areas of FESCO. The 28 sub-projects will be implemented in Faisalabad City, Sammundri, Manjhla Bagh , Tandlianwala, Khurrianwala, Chak Jhumra, Thikri Wala Kamalia, Pir Mahal , Toba Tek Singh, Bhamab (Jhang) , Kamal Pur ,Chiniot Industrial, Bhawana, Khewa, Lalian , Kirana ,Bhalwala & Jauharabad in Punjab province .

5. The extension and augmentation sub-projects will all be within the existing grid stations and will not encroach on any land outside the grid stations. All the land belongs to FESCO.

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.

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1-2 Scope of Work

5. In Tranche-IV Project, 28 No Power Transfer alongwith 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

Component of Tranche-IV Sub-Projects						
Project No	**Associated Project**	**Name of 132 KV Grid Station**	**Tehsil**	**Administrative District**	**Type of Project**	**New Transformer Size**
F-1	F10	Agri. I University	Faisalabad	Faisalabad	Augmentation	1 X 40 MVA
F-2	F 11	Agri. I University	Faisalabad	Faisalabad	Augmentation	1 X 40 MVA
F-5	F-17	Sammundri Road	Faisalabad	Faisalabad	Augmentation	1 X 40 MVA
F-8	F-20	Factory Area	Faisalabad	Faisalabad	Augmentation	1 X 40 MVA
F-6	F-18	Jhang Road	Faisalabad	Faisalabad	Augmentation	1 X 40 MVA
F-7	F-19	Nishat Abad New	Faisalabad	Faisalabad	Augmentation	1 X 40 MVA
F-28	F-25	Khurrianwala	Jaranwala	Faisalabad	Augmentation	1 X 40 MVA
F-11	F-2	Thikriwala	Faisalabad	Faisalabad	Extension	1X26 MVA
F-15	F-3	Chak Jhumra	Chak Jhumra	Faisalabad	Extension	1X26 MVA
F-10	F1	Tandlianwala	Tandlianwala	Faisalabad	Extension	1X26 MVA
F20	F-8	Sammundri	Sammundri	Faisalabad	Extension	1X26 MVA
F-26	-	Manjhla Bagh	Tandlianwala	Faisalabad	Extension	1x13 MVA
F 3	F 15	Chiniot indst	Chiniot	Chiniot	Augmentation	1 x 40 MVA
F 4	F 16	Chiniot indst	Chiniot	Chiniot	Augmentation	1 x 40 MVA
F 22	F 12	Kamal Pur	Chiniot	Chiniot	Augmentation	1 x 26 MVA
F 21	F 9,F 23	Barana	Lalian	Chiniot	Augmentation	1 x 26 MVA
F 24	F 22	Bhawana	Bhawana	Chiniot	Extension	1 x 13 MVA
F 27	-	Lalian	Lalian	Chiniot	Extension	1 x 13 MVA
F 25	F-28	Kirana	Sargodha	Sargodha	Extension	1X26 MVA
F 17	F-5	Bhalwal	Bhalwal	Sargodha	Extension	1X26 MVA
F-9	F-21	Jauharabad	Khushab	Khushab	Augmentation	1 x 40 MVA
F-12	F-22	Kamalia	Kamalia	Toba Tek Singh	Augmentation	1 x 40 MVA
F-13	F14	Toba Tek singh	Toba Tek singh	Toba Tek Singh	Extension	1X26 MVA
F14	F13	Toba Tek singh	Toba Tek singh	Toba Tek Singh	Augmentation	1X26 MVA
F-16	F4	Pir Mahal	Kamalia	Toba Tek Singh	Extension	1X26 MVA
F-19	F7	Bhamb	Jhang	Jhang	Extension	1X26 MVA

Component of Tranche-IV Sub-Projects						
Project No	**Associated Project**	**Name of 132 KV Grid Station**	**Tehsil**	**Administrative District**	**Type of Project**	**New Transformer Size**
F23	F21	Khewa	Jhang	Jhang	Extension	1X13 MVA
F-18	F6	Bhakkar	Bhakkar	Bhakkar	Extension	1X26 MVA

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	12	-	12
26	2	10	12
13	-	4	4
Total	**14**	**14**	**28**

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 FESCO, 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. Fourteen (14) No extension and fourteen (14) 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. **F-1 & F-2 Augmentation of 132 KV Grid Station Agriculture University Faisalabad:** Grid station is located in the premises of Chak No. 123 RB Siddhu Pura Tehsil & District Faisalabad having total area of 93 Kanals (FESCO/WAPDA Property). Presently 32 No. feeders are emerging out from the grid station. Four (04) No. power transformers having capacity of 31.5/40 MVA (2 No.) and 20/26 MVA (2 No.) are installed which are overloaded. To improve the loading position at the grid station, augmentation of 02 No. 31.5/40 MVA Power

Transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) will be executed within walled boundaries of existing grid station, which is located on outer periphery of Agriculture University near Allied Hospital.

9. **F-3 & F4 Augmentation of 132 KV Grid Station Chiniot:** Grid station is located in Moaza Chiniot No. 02 Tehsil & District Chiniot having total area of 64 Kanals – 07 Marlas. Grid Station was established in 1986. Presently Three No. Power Transformers (one 31.5/40 MVA, and two 20/26 MVA capacity) are installed at the Grid Station which are backing 21 No. Distribution Feeders. 20/26 MVA Power Transformers are overloaded which cannot support future requirement. To overcome overloading situation, augmentation of 02 No. 31.5/40 MVA power transformers in place of overloaded P/T (having lesser capacity of 20/26 MVA) is proposed under Tranche-IV. Augmentation will be executed within walled boundaries of existing grid station, which is located near vegetable market on Jhang Road Chiniot.

10. **F-5 Augmentation of 132 KV Grid Station Sammundri Road Faisalabad:** Grid station is located in Chak No. 223 RB having total area of 87 Kanals – 09 Marlas (WAPDA/FESCO Property). Presently four No. power transformers (one 31.5/40 MVA and two 20/26 MVA Capacity) are installed at the grid station which are backing up 26 no. distribution feeders. The 20/26 MVA Power Transformer is overloaded which is proposed to be augmented with 31.5/40 MVA Power Transformer. Augmentation activity will be executed within walled boundaries of existing grid station, which is located on main Sammundri Road Faisalabad near Sammundri Road Ontario Post.

11. **F-6 Augmentation of 132 KV Grid Station Jhang Road Faisalabad:** Jhang Road substation was established in 1964 in WAPDA/FESCO Property and is located in Chak No. 220 RB Jamal Pur having total area of 76 Kanals – 18 Marlas. Presently there are three power transformer (1 No. 31.5/40 MVA and 02 No. 20/26 MVA) which are overloaded. In Tranche-IV augmentation of 31.5/40 MVA power transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) will be executed within walled boundaries of existing Grid station which is located on main Jhang Road Faisalabad near Faisalabad International Air Port (3Km). The National Institute of Biological & Genetic Engineering Faisalabad is about 1 Km distance from the existing grid station.

12. **F-7 Augmentation of 132 KV Grid Station Nishatabad Faisalabad:** New Nishatabad Grid Station is located within 220 KV NTDC Grid Station premises, which is Wapda property. Presently 14 No. outgoing feeders are fed through two no. 20/26 Power Transformers, which remained overloaded up to 98 % in peak hours. To overcome overloading augmentation of 31.5/40 MVA Power Transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) is proposed in Tranche-IV which is to be executed within walled boundaries of existing grid station, that lies at about 1 Km away from Wapda Engineering Academy Nishatabad/Steam Power Station.

13. **F-8 Augmentation of 132 KV Grid Station Factory Area Faisalabad:** Factory Area Sub Station located in chak No. 212 RB having area of 140 Kanal -19 Marla (WAPDA/FESCO's property) was established on 13th Feb 1991. Presently 23 No. distribution feeders are fed through 04 No. power Transformers (1 No. 31.5/40 MVA & 3 No 20/26MVA) which are overloaded. Augmentation of 31.5/40 MVA power transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) will be executed within walled boundaries of existing grid Station which is located near old Lal Cloth Mill and lies at about 1Km distance from Sammundri Road Novelty overhead bridge .

14. **F-9 Augmentation of 132 KV Grid Station Jauharabad District Khushab:** Jauharabad Sub Station. Grid station is located in Chak No 63 Muhajar Branch (MB) having total area of 79 Kanal and 02 Marlas (WAPDA/FESCO's property). It was established in 1985. Presently two No. power transformers (1 No. 31.5/40 MVA & 20/26 MVA) feed 19 No. distribution feeders. Present installed power transformers are overloaded. The Proposed augmentation of 31.5/40 MVA power transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) will be executed within walled boundaries of existing grid station which is located in Jauharabad at about 3 Km distance in North from Khushab Mianwali Road.

15. **F-10 Extension of 132 KV Grid Station Tandlianwala District Faisalabad:** Tandlianwala Grid Station established in Chak No. 420 GB Jhok Burhan having total area of 65 Kanal 09 Marlas 1986 (WAPDA/FESCO's property). Presently 02 No. Power Transformers (both 20/26 MVA) are installed at the grid station which is overloaded up to 95 %. Tranche-4 has proposed Extension to the existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer to overcome the overloading of existing power transformers. Space for extension of 20/26 is available in the yard. Extension work would be carried out within walled boundaries of existing grid station which is located on 2 Km Sammundri Road (along the Disty) Tandlianwala District Faisalabad.

16. **F-11 Extension of 132 KV Grid Station Thikri Wala District Faisalabad:** Thikri Wala grid station established in year 2007 in Chak No 70 JB Mansoora having total area of 67 Kanals (WAPDA/FESCO's property since 2007). Presently Two Number Power Transformers (one no. 20/26 MVA and other 10/13 MVA) are feeding 10 No. feeders. Power Transformer T-1 20/26 MVA is overloaded up to 95%. To overcome overloading, installation of another 20/26 MVA power transformer is proposed as extension to the existing infrastructure of the grid station under Tranche-4. For extra foundation bay, space is available in the yard and would be carried out within the walled boundaries of existing grid station, which is located about 3 Km away from Thikri Wala bus stop on Abbas Pur Link Road District Faisalabad.

17. **F-12 Augmentation of 132 KV Grid Station Kamalia District Toba Tek Singh:** The 132 KV Grid Station Kamalia is located in Chak/Moaza No 54/2 Tukra Tehsil Kamalia District Toba Tek Singh having total area of 57 Kanal 13 Marlas (WAPDA/FESCO's property). Primarily 66 KV grid station was established in 1965, which was converted into 132 KV in 1981. Presently two no. Power Transformers (one 31.5/40 MVA and other 20/26 MVA) are feeding 13 No distribution feeders. T-2 P/T 31.5/40 MVA is overloaded up to 96 % and T-1 P/T 20/26, remained overloaded up to 98 %. To overcome overloading situation at grid station, augmentation of 31.5/40 MVA transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) is proposed in Tranche-IV and will be executed within walled boundaries of existing grid station which is located in Main Rajjana –Kamalia Road at about 2 Km distance from Railway crossing toward Rajjana.

18. **F-13 & 14: Augmentation/Extension of 132 KV Grid Station Toba Tek Singh City:** The Grid station is located in Chak No. 329 JB Tehsil & District Toba Tek Singh having total area of 36 Kanal 09 Marlas (WAPDA/FESCO's property). Presently the 02 No. Power Transformers installed having 20/26 MVA capacity each are found overloaded up to 98 % and 95 % of their ultimate capacity. To overcome the present loading situation and coming future load, Augmentation of 31.5/40 MVA power transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) and extension of 20/26 MVA P/T to the existing infrastructure of grid station have been proposed. Power transformers will be procured and replaced/ installed within the walled boundaries of existing grid station, which is located on Rajjana Road. Space for foundation bay for extension is available in yard with little bit modification.

19. **F-15:- Extension of 132 KV Grid Station Chak Jhumra District Faisalabad:** Grid station is located in the premises of Chak No. 186 RB Dhilwan having total area of 53 Kanals & 18 Marla. (WAPDA/FESCO's property since 1990). Presently 13 No. feeders are emerging from grid station. Both the Transformers have 20/26 MVA capacity. T-2 Transformer remained overloaded up to 92 %. To combat with loading position and increasing trend, extension of additional 20/26 MVA power transformer to existing infrastructure of grid is proposed under Tranche-IV. Extension work would be carried out within walled boundaries of existing grid station which is located about 2 Km away from Chak Jhumra city on Jhumra –Khurrianwala road district Faisalabad. Construction of foundation bay can be accommodated within the yard while extension of Control House Building will be required.

20. **F-16:- Extension of 132 KV Grid Station Pir Mahal District Toba Tek Singh:** Grid station is located in the premises of Chak No. 779 GB Pir Mahal having total area of 59 Kanals & 17 Marla (WAPDA/FESCO's property). Primarily grid station was established as 66 KV Sub Station and was converted into 132 KV status in 2005. Presently 9 No. feeders are emerging with back up of 02 No. power transformers of 20/26 MVA. Both the Transformers are overloaded up to 99 % of their safe capacity. To overcome the loading situation, extension to existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer is

proposed. Extension work would be carried out within walled boundaries of existing grid station which is located about 2 Km away from Pir Mahal City on Sandhilianwali Road.

21. **F-17:- Extension of 132 KV Grid Station Bhalwal District Sargodha:** Grid station is located in the premises of Chak No. 7 NB (Northern Branch) having total area of 69 Kanals & 10 Marla (WAPDA/FESCO's property. Presently 02 No. power transformers having 20/26 MVA Capacity each are installed at grid station backing up 12 No. Distribution Feeders. T-1 20/26 power transformer is overloaded up to 92 %. As such forced load shading is to be implemented to save the existing infrastructure of grid station. To overcome overloading situation by procuring and installation of additional 20/26 MVA power transformer is proposed under Tranche-IV which will be executed within walled boundaries of existing grid station which is located about 2 Km away from Bhalwal City on Bhera Bhalwala road District Sargodha. Space for foundation Bay can be made available with little modification.

22. **F-18:- Extension of 132 KV Grid Station Bhakkar City:** Grid station is located in the premises of Chak No. 34-B TDA having total area of 76 Kanals & 13 Marla (WAPDA/FESCO's property). Previously grid station was constructed for the status of 66 KV in 1964 which was converted into 132 KV in 1995. Presently 02 No. 132 KV power transformers of 20/26 MVA capacities each are installed in 132 KV infrastructures which are overloaded. To overcome the overloading situation, extension to existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer is proposed. Extension work would be carried out within walled boundaries of existing grid station which is located about 1 Km away from General Bus Stand and District Council Office on Jhang Road . Space for extension is available in the yard.

23. **F-19:- Extension of 132 KV Grid Station Bhamb District Jhang:** Grid station is located in the premises of Moaza Shareen having total area of 74 Kanals (WAPDA/FESCO's property). Presently 12 No. outgoing feeders are backed up with 02 No. power transformers having capacity of 20/26 MVA each which overloaded up to 99 %. To overcome overloading situation, extension to existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer is proposed in Tranche-IV project. Space for foundation bay is available in the yard of grid station. However extension to control house building will be required. Extension work would be carried out within walled boundaries of existing grid station which is located near Bus Stand of More Mandi (Shah Jewna) on Jhang – Sargodha Road.

24. **F-20:- Extension of 132 KV Grid Station Sammundri District Faisalabad:** Grid station is located in the premises of Chak No. 140 GB Moza Sarwar Kot Tehsil Sammundri District Faisalabad having total area of 64 Kanals & 10 Marla.(WAPDA/FESCO's property). Previously grid station was constructed for 66KV capacity which was converted to 132 KV status in 2009. Presently 9 No. outgoing feeders are backed up with 02 No. power transformers having capacity of 20/26 MVA each which overloaded up to 98 %. To overcome overloading of existing power transformers, extension to existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer is proposed under Tranche-IV. Space for foundation bay is available in the yard of grid station. Extension work would be carried out within walled boundaries of existing grid station which is located about 2 Km away from Bus Stand Sammundri on Sammundri-Gojra Road .

25. **F-21:- Augmentation of 132 KV Grid Station Barana District Chiniot:** Grid station is located in Chak/Moaza Barana Tehsil Lalian District Chiniot having total area of 62 Kanal 07 Marlas (WAPDA/FESCO's property since 1967) . Primarily 66 KV Grid Station was constructed in 1967 and was converted to the status of 132 KV in 2012. Presently 02 No. power transformers (one 20/26 MVA and other 10/13 MVA) backing up 07 No. distribution feeders. T-1 power transformer of 10/13 MVA capacity is overloaded to 560 Ampere's. To overcome overloading, augmentation of 20/26 MVA power transformer in place of overloaded P/T (having lesser capacity of 10/13 MVA) is proposed under Tranche-IV and will be executed within walled boundaries of existing grid station which is located near Govt High School Barana.

26. **F-22:- Augmentation of 132 KV Grid Station Kamal Pur District Chiniot:** Kamal Pur grid station is located in Chak/Moaza 128 JB Tehsil & District Chiniot having total area of 109 Kanal 01 Marlas (WAPDA/FESCO's property since 2010) . At present two No power transformers having Capacity of 10/13 MVA each are installed at the grid station which are backing up 06 No. feeders which are overloaded and cannot cope with the future requirement. To overcome the situation, augmentation of **20/26** MVA power transformer in place

of overloaded P/T (having lesser capacity of 10/13 MVA) will be executed within walled boundaries of existing grid station which is located on Faisalabad Chiniot Road near newly constructed FAST University.

27. **F-23:- Extension of 132 KV Grid Station Khewa Tehsil & District Jhang :-** Grid station is located in the premises of Moza Khewa Tehsil & District Jhang having total area of 101 Kanals & 17 Marla (WAPDA/FESCO's property since1985) . Presently 6 No. outgoing feeders are backed up with 02 No. power transformers (one 20/26 MVA T-1 and other 10/13 MVA capacity) which overloaded up to 89 %. To overcome overloading of existing power transformers, extension to existing infrastructure of grid station by procuring and installation of additional 10/13 MVA power transformer is proposed under Tranche-IV. Space for foundation bay is available in the yard of grid station .Extension work would be carried out within walled boundaries of existing grid station which is located about 01 Km away from Khewa Bus Stand on Chiniot Jhang Road .

28. **F-24:- Extension of 132 KV Grid Station Bhawana District Chiniot :-** Grid station is located in the premises of Moza Bhawana Tehsil Bhawana & District Chiniot having total area of 57 Kanals & 11 Marla.(WAPDA/FESCO's property since 1964). Previously Grid Station was constructed for 66KV Capacity in 1964 which was converted to 132 KV status in 2012. Presently 8 No. outgoing feeders are backed up with 02 No power transformers (one 20/26 MVA T-1 and other 10/13 MVA capacity) which are overloaded. To overcome overloading of existing power transformers, extension to existing infrastructure of grid station by procuring and installation of additional 10/13 MVA Power Transformer is proposed under Tranche-IV. Space for foundation bay is available in the yard of grid station .Extension work would be carried out within walled boundaries of existing grid which is located about 1.5 Km away from Bhawan Bus Stand on Chiniot Jhang Road .

29. **F-25:- Extension of 132 KV Grid Station Kirana District Sargodha:** Grid station is located in the premises of Chak No. 50 NB District Sargodha having total area of 69 Kanals & 10 Marla (WAPDA/FESCO's property). Grid Station was established for 132 KV status in 2004. Presently 10 No. outgoing feeders are backed up with 02 No. power transformers (both 20/26 MVA capacity) which are overloaded. To overcome overloading of existing power transformers, extension to existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer is proposed under Tranche-IV. Space for foundation bay is available in the yard of grid station .Extension work would be carried out within walled boundaries of existing grid station which is located about main Faisalabad Road about 2 Km away from 46 Bus /Wagon Stand Sargodha .

30. **F-26:- Extension of 132 KV Grid Station Manjhla Bagh Tehsil Sammundri, District-Faisalabad** Grid station is located in the premises of Chak No. 487 GB Moza Girwan Munjhla Bagh Tehsil Sammundri & district Faisalabad having total area of 68 Kanals (WAPDA/FESCO's property). Grid station was established for 132 KV statuses in 1986. Presently 07 No. outgoing feeders are backed up with 02 No. power transformers (both 20/26 MVA capacity) which are overloaded up to 94 %. To overcome overloading of existing power transformers, extension to existing infrastructure of grid station by procuring and installation of additional 20/26 MVA power transformer is proposed under Tranche-IV. Space for foundation bay is available in the yard of grid station .Extension work would be carried out within walled boundaries of existing grid station which is located about 05 Km from Zafar Chowk on the road leading to Kanwani Zafar Chowk is in turn 03 KM away from Mureedwala Bus Stop. Space for construction of foundation bay for installation of power transformer is available in yard.

31. **F-27:- Extension of 132 KV Grid Station Lalian District Chiniot :-** Grid station is located in the premises of Moza 57 SB Jandal Tehsil Lalian & District Chiniot having total area of 51 Kanals & 06 Marla (WAPDA/FESCO's property). Previously grid station was constructed to the status of 66 KV in 1965 which was converted to the status of 132 KV in 2008. Previously 02 No. power transformers having capacity of 20/26 MVA each which are backing up 11 No. distribution feeders. Installed power transformers are loaded. To overcome overloading situation, extension to existing infrastructure of grid station by procuring and installation of additional 10/13 MVA power transformer is proposed in Tranche-IV. Extension work would be carried out within walled boundaries of existing grid station which is located about 2 Km away from Lalian Bus Stop toward Sargodha. Space for construction of foundation bay for installation of Power Transformer in the yard.

32. **F-28 Augmentation of 132 KV Grid Station Khurrianwala District Faisalabad:-** Grid station is located in Chak194 RB Ram Nagar (Lathianwala) tehsil Jaranwala district Faisalabad having total area of 43 Kanal 03 Marlas (WAPDA/FESCO's property). Grid station was established in 1993 to the status of 132 KV. Presently 03 No. power transformers (each having capacity of 20/26 MVA) are feeding 21 No. distribution feeders which are overloaded. To overcome overloading situation at grid station, augmentation of 31.5/40 MVA transformer in place of overloaded P/T (having lesser capacity of 20/26 MVA) is proposed in Tranche-IV and will be executed within walled boundaries of existing grid station which is located in Main Sheikhupura Faisalabad Road about 3 Km from Khurrianwala Chowk .

2.2 Resettlement Impacts

2.2.1 Number of houses to be displaced

33. 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)

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

2.2.3 Number of Indirectly Affected Persons (AP's)

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

2.2.4 Loss of Agricultural Area / Cropland

36. 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

37. There are no losses of orchards.

2.2.6 Loss of water courses

38. No watercourses exist in the subproject areas.

2.2.7 Loss of trees

39. 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

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

2.2.9 Loss of individual and community livelihoods

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

2.2.10 Loss of forest land

42. The work being carried out with in the existing grid stations does not incur loss of forestlands.

2.2.11 Damage or disturbance to government installations

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

2.2.12 Damage or disturbance to utility lines

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

2.2.13 Loss of grazing and fishing activities

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

2.2.14 Summary

46. 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

47. 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

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

2.3.2 Effects on business and living conditions

49. 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

50. 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

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

2.4 Socio-Economic Survey

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

2.5 Indigenous People

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

2.6 Gender Impacts

54. 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

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

2.8 Implementation Schedule

56. This is not applicable, see above.

3 MONITORING & EVALUATION

57. 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

58. 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.