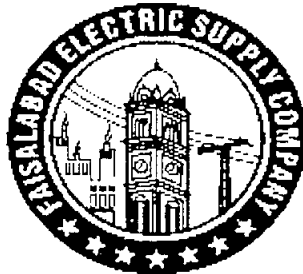


Faisalabad Electric Supply Company Limited



FESCO

APPLICATION

FOR

GRANT OF AN ELECTRIC POWER SUPPLIER LICENCE TO
FESCO AS SUPPLIER OF LAST RESORT.

Office Of

Director General (MIRAD) FESCO

Faisalabad

January 2023



Faisalabad Electric Supply Company Limited

Office Of Chief Executive Officer FESCO

West Canal Road Abdullah Pur Faisalabad

(Ph#041-9220184, Fax#041-9220233) (paceofesco@gmail.com)

No. 2903 /LoSOLR

Dated: 31.01.2023

The Registrar
National Electric Power Regulatory Authority,
NEPRA Tower, Attaturk Avenue (East),
Sector G-5/1, Islamabad.

Sub:- APPLICATION FOR GRANT OF ELECTRIC POWER SUPPLIER
LICENSE TO FAISALABAD ELECTRIC SUPPLY COMPANY (FESCO) AS
SUPPLIER OF LAST RESORT (SOLR)

It is informed that FESCO is a Deemed Licensee for supply of Electric Power as per proviso to Sub-Section (1) of Section 23E of Regulation of Generation, Transmission and Distribution of Electric Power Amended Act, 2018, (amended to date) for period of five years which will expire on April 30, 2023.


Under the clause (1) of Section 23E of the Act "No person shall, unless licensed by the Authority under this Act, engage in the supply of electric power to a consumer". As per Regulation 3(2)(b) of NEPRA Licensing (Electric Power Supplier) Regulations, 2022 notified as per SRO No.446(1)/2022 dated March 28, 2022, a Deemed Licensee has to make an application to the Authority / NEPRA at least ninety (90) days before expiry of the period.

Accordingly, in pursuance of Regulation 3(1) of NEPRA Licensing (Electric Power Supplier) Regulations, 2022 and in accordance with Regulation 3 of the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 issued vide SRO No.521(1)/2021 dated 27-04-2021, please find attached herewith the application for kind consideration of the Authority for grant of Electric Power Supply License to FESCO.

The working paper for authorization of Chief Executive Officer FESCO for signing of subject application has been submitted to FESCO Board of Directors and the requisite Resolution will be provided soon after approval.

Consequently, I, Engr. Ch. Bashir Ahmad, Chief Executive Officer FESCO hereby request the honorable Authority for grant of an Electric Power Supply License to Faisalabad Electric Supply Company (FESCO) as Supplier of Last Resort for a period of 20 years or more as deemed appropriate.

For any clarification, additional information or any other matter relating to this application Mr. Aamir Mahboob Ilahi, Director General (MIRAD) FESCO (Cell#0345-1500206, email: miradfesco@gmail.com) is designated as focal person.


(Engr. Bashir Ahmad)
Chief Executive Officer
FESCO, Faisalabad

Documents Attached:

1. Certified copy of certificate of Incorporation.
2. Certified copy of Memorandum of Articles of Association.
3. Certified copy of the last filed Annual Return (in case of an applicant who has submitted the annual return required to be submitted to the registrar of companies pursuant to section 130 of the Companies Act 2017.
4. A Prospectus.
5. Latest financial statements of the company.
6. Detail of any charges, encumbrances or liabilities attached to the company or its assets.
7. Training and development procedures and manuals.
8. Detailed profile of the experience in the energy sector of the company's management, staff and employees.
9. Curriculum vitae of the company's senior management, technical and professional staff.
10. Type of metering systems, billing and collection procedures, ability to access metering systems and other services / equipments.
11. Consumer class / category, sub-category on the basis of sanctioned load and voltage level.
12. Tariff categories for different consumer classes.
13. Proposed Service territory, relevant feeder maps and metering / testing facilities.
14. Feasibility study in respect of the project, including technical and financial proposals.
15. Emergency provisions and protocols.
16. Number of consumers and expected load, description of demand and consumption pattern on different time periods and 12 months projections on expected load, number of consumers and expected sales of units of each consumer category.
17. Five (05) years investment plan indicating schemes/models/framework for undertaking supply of electric power (including frameworks for providing non-discriminatory services and acquisition/sale of assets in relevant service territories).

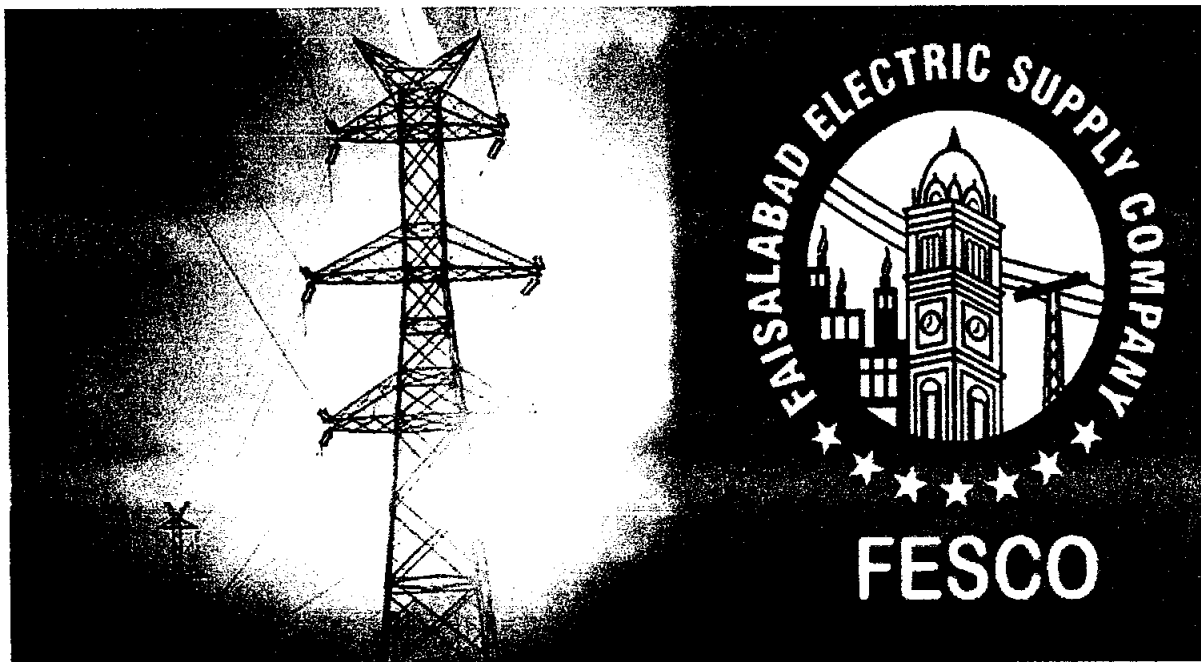
CC to:-

1. General Manager (Tech) FESCO Faisalabad.
2. General Manager (Op) FESCO Faisalabad.
3. General Manager (C&CS) FESCO Faisalabad.
4. Chief Financial Officer FESCO Faisalabad.
5. Director General (HR) FESCO Faisalabad.
6. Director General (IT) FESCO Faisalabad.
7. Chief of Audit FESCO Faisalabad.
8. Company Secretary FESCO Faisalabad.
9. Director (Legal) FESCO Faisalabad.
10. Master file.

CHECKLIST AS PER REGULATION 3 OF NEPRA LICENSING (APPLICATION, MODIFICATION, EXTENSION AND CANCELLATION) PROCEDURE REGULATIONS, 2021.

Sr.#	DESCRIPTION	FESCO REMARKS
1.	The type or category of license	Electric Power Supply License as Supplier of Last Resort.
2.	The proposed term of the license.	Proposed term of the license as per section 6(2) of NEPRA licensing (Electric Power Supplier) Regulation-2022 is 20 years starting from May 01, 2023 to 30 April, 2042 or more.
3.	Certified copies of: (a) Certificate of Incorporation. (b) Memorandum and Articles of Association. (c) Annual report of the company (FY 2021-22).	Attached as Annexure-A.
4.	Last annual return of the Company submitted in compliance of section 130 of the Companies Act.	Attached as Annexure-B.
5.	Evidence of the availability of adequate financial and technical resources for the purposes of the power supply business and such evidence may consist of.	
	a) Cash balances held in reserve along with the bank certificates	a) Nil
	b) Expressions of interest to provide credit or financing along with sources and details thereof; and	b) Nil
	c) Latest financial statements of the company.	c) Audited Financial Report for F.Y 2021-22 attached as Annexure-C.
	d) Details of any charges, encumbrances or liabilities attached to the company or its assets.	d) On 1 st March 2019 & 20 th May 2020, the company entered into an Authorization and Interest agreement with Power Holding (Pvt) Limited (PHPL) and Meezan Bank Limited (MBL), in which Company authorized PHPL to carry out "Certain Actions" in relation to Relevant Transaction Assets representing freehold land at Faisalabad and Jhang districts for the purpose of enabling PHPL to raise financing through the Sukuk issue. The detail is as under:- <ul style="list-style-type: none"> • Area of 1,062 kanals and 9 marlas amounting to Rupees 5,661.814 million & • Area of 3 582 kanals and 17 marlas amounting to rupees 3,728.101 million. Note No.15.1.3 on the financial statement is attached as Annex-D.
6.	Detailed profile of the applicant and the applicant's Senior Management, Technical and Professional Staff.	<ul style="list-style-type: none"> • Summary abstract (Name, Designation, Experience, Qualification) of Management Officers attached as Annexure-E. • The Company's Management and Company's Officers as well as Employees as under;- a) Management Positions (BPS-18 & Above) = 137. b) Entry Level Positions (BPS-17) = 219

		<p>c) Staff (BPS-1 to 16) = 13234 Technical=7240 Non-Technical=5994</p>
7.	Application fee as set out in Schedule-II (Fees for Grant, Extension of Term or Modification of License)	<p>Fee for grant of Electric Power Supplier License as set out in Schedule-II of NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulation-2021 amounting to Rs. 3,064,255/- will be submitted after the approval of BoD FESCO.</p>
8.	Applicable documents in support and information set out in Schedule III for Electric Power Supply.	<p>Following attached as Annexure-F.</p> <ul style="list-style-type: none"> i. Relevant feeder maps Number of consumers and expected load. ii. Consumer class/category, sub-category on the basis of sanctioned load and voltage level. iii. Tariff categories of consumer classes to be served. iv. Demand and consumption pattern on different time periods. v. Procurement Plan for meeting expected loads. vi. 12-month projections on expected load, number of consumers and expected sale of units for each consumer category. vii. Training and development procedure and manuals. viii. Information relating to: <ul style="list-style-type: none"> a) Proposed service territory b) Billing and collection procedure (including provisions for remote metering). c) Ability to access consumer metering systems and other services/equipment. d) Emergency provisions and protocols. e) Basis of common service for commercial and residential consumers and their allocation thereof. f) Metering and testing facilities
9.	05 Years Investment Plan indicating Schemes / Models / Framework for undertaking supply of electric power (Including framework for providing non-discriminatory services and acquisition / sale of assets in relevant service territories).	<p>FESCO submitted its 5 years DIIP to NEPRA vide letter No.2474 dated 20.10.2022.</p>



PROSPECTUS



FAISALABAD ELECTRIC SUPPLY COMPANY

WEST CANAL ROAD ABDULLAHPUR FAISALABAD

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FESCO VISION AND MISSION

OUR VISION

To remain the best electricity Distribution Company among all public electric utilities and to support sustainable economic growth in FESCO's jurisdiction.

OUR MISSION

- To transform FESCO into a best performing corporate electricity distribution utility.
- To maintain top slot at Combined Efficiency Index
- To maintain highest level of customer service & satisfaction at an optimal cost.
- To provide continuous supply of power to end-consumers.

CEO MESSAGE

This indeed is a matter of pride for FESCO to be a profitable business entity. I feel honored to be the team leader of this successful venture. To me, the profit is actually an effect instead of a cause, commonly this effect comes with the untiring efforts, targeted approaches to work, sheer dedication and mission oriented guidance. FESCO as a whole has carried out an excelling performance in all areas of utility operations such as infrastructure development, along-with emplacing advancement in technology.



Engr. Bashir Ahmad

The past few years have been very difficult period due to acute load shedding. Utility operations remained stressed due to long outages. Rising demand of supply further aggravated the supply position. I am really grateful to the consumer representative associations such as Faisalabad Chamber of Commerce and Industries, Faisalabad Trade Union and Faisalabad Power Looms Association for their full cooperation and supports extended to FESCO during acute supply demand mismatch periods. I feel that without their help, support and cooperation, consumer satisfaction could not be achieved. I am equally thankful to my consumers who also extended their unconditional support and cooperation to FESCO.

The support of Ministry of Energy (Power Division) Islamabad Government of has been a great instrument to achieve all the targets & new initiatives set by Government of Pakistan, NEPRA and PPMC.

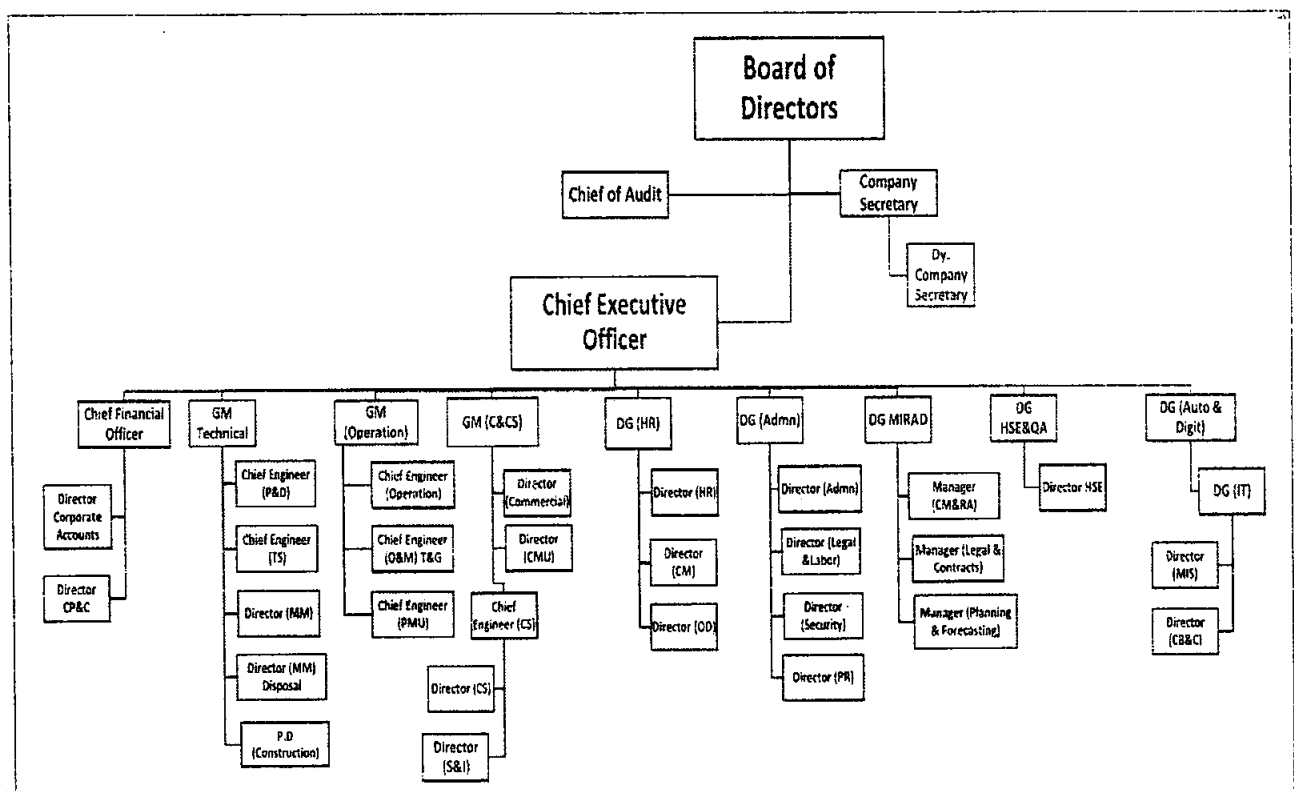
Government of Pakistan reconstituted the new Board of Directors by nominating Directors to represent customers, academia, utility professionals and Governments. The visional nomination of Directors to represent all stakeholders is making the FESCO Board more active, dynamic and vibrant in developing and promulgating policy frameworks for FESCO.

1. INTRODUCTION OF FESCO

Faisalabad Electric Supply Company was incorporated as a Public Limited Company under Companies Ordinance 1984 on March 21, 1998. FESCO service territory is comprised of 8 Civil Districts viz Faisalabad, Jhang, Chiniot, Toba Tek Singh, Bhakkar, Mianwali, Khushab and Sargodha. FESCO jurisdiction covers approximately 45,387 sq. km area of these districts. FESCO distributes and supplies electricity to 4.87 Million customers within a territory having a population of 32.5 Million people.

To serve the consumers in its area of responsibility, FESCO Organization has been divided into various categories like Operation, Construction and Grid System Operation (GSO). Operation has been further divided into Technical and Commercial setups. Construction wing has two further bifurcations like construction of projects of 11KV and below network and 132KV and 66KV network. FESCO's whole manpower remains busy day and night to serve its 4,869,142 Nos. customers.

1.1 ORGANIZATION STRUCTURE



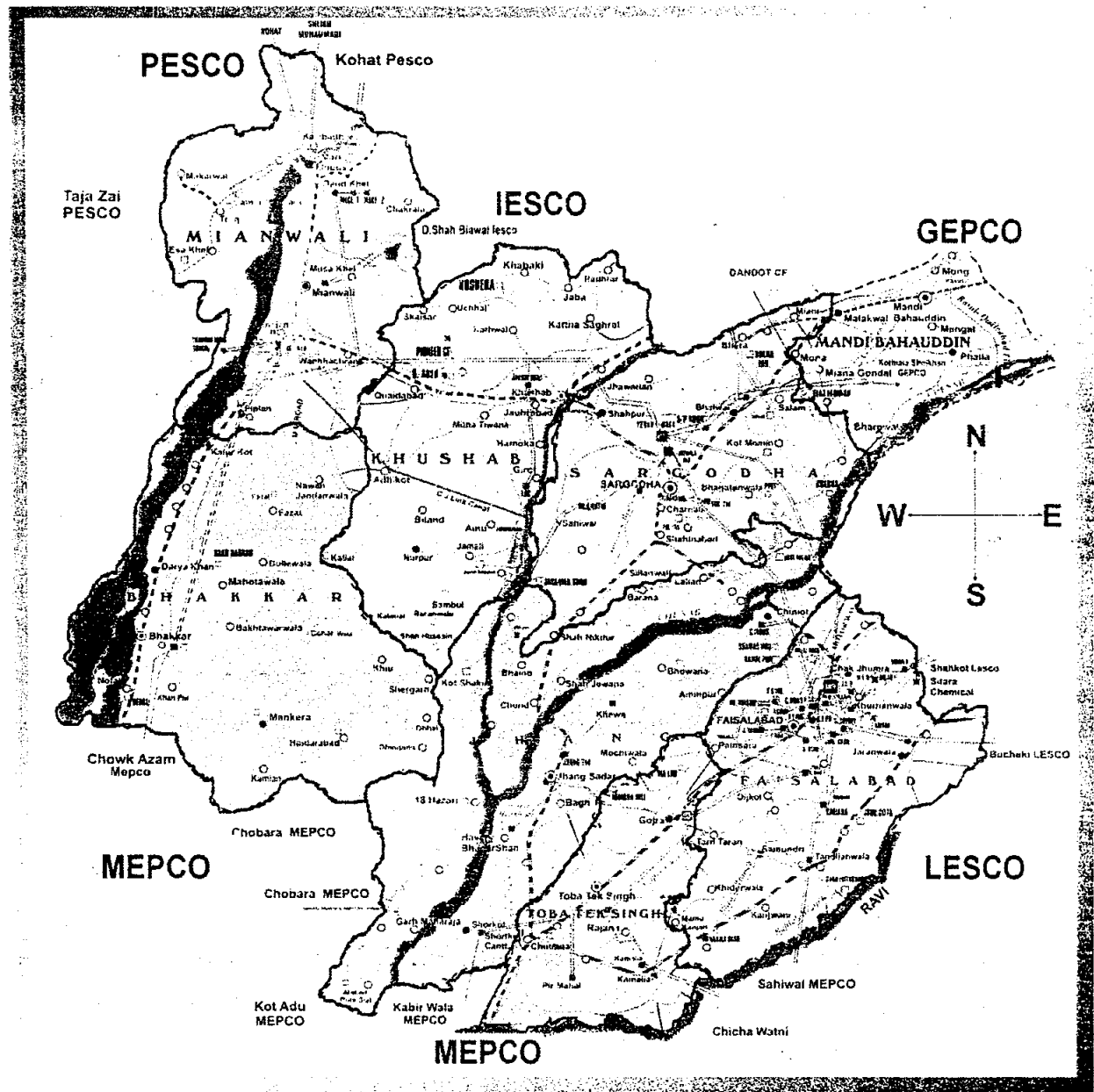
2. SALIENT FEATURES OF THE SYSTEM OF FESCO

Area Jurisdiction (Districts Faisalabad, Jhang, Chiniot, Bhakkar, T.T.Singh, Mianwali, Khushab, Sargodha)	44,247 Sq KM
No. of customers	4,869,142
No. of Grid Stations (132 KV = 85) (66KV = 17)(Pvt = 22)	124
No. of Power Transformers	281
Power TFS Installed Capacity (MVA)	7204 MVA
Max. Demand Recorded	3802MW
Transmission Lines (132kv : 2662 Km and 66kv : 881 KM)	3,543 KM
HT Line (11KV)	43819 KM
LT Line (400/230 Volts)	27621 KM
No. of Distribution T/Fs (3934.146 MVA)	124801
Operation Circles(5), Operation Divisions (26), Operation Sub Division (140)	171
P.D (Construction) (1), Construction Divisions (4), Construction Sub Divisions (11), ELR Sub Division (4)	20
P.D (GSC) (1), Construction Division (1), Construction Sub Division (2), T&I/Civil Sub Division (2)	6
GSO Circle (1) SS&T Divisions (05) Sub Divisions (29)	35
Manpower (Officers 361) (Staff 13406)	13767
Cars, Jeeps, Truck, Cranes, Fork Lifter & Motorcycle (Total Vehicles)	845
Total Assets as on 30.06.2022 (Core Assets-132 & Non-Core Assets-33)	165

FESCO has 5 Operation Circles, 26 Operation Divisions, 140 Operation Sub Divisions, and 01 Grid System Operation (GSO) Circle, 04 SS&T Divisions and 01 P&I Division, 14 SST Sub Divisions and 4 No P&I Sub Divisions. Presently, there are two Construction Directorates; one for development of 11KV and below network projects and second for development of 132 KV and 66 KV network of FESCO. Another Directorate which provides support service to Operation is Technical Services which carries out meter testing and checking. This Directorate has its divisional level setups at 1st Circle, 2nd Circle, Jhang Circle, Sargodha Circle and Mianwali Circle. Superintending Engineers manage Circle operations. Divisional operations are managed by Executive Engineers and Sub Divisional operations are managed by Sub Divisional Officers.

2.1 FESCO JURISDICTION

FESCO is neighbor to some other DISCOs such as LESCO, GEPCO, IESCO, PESCO and MEPCO and has the supply sharing networks with these DISCOs as well.



Faisalabad Circles 1st and 2nd manage the supply and customers of District Faisalabad. 1st Circle jurisdiction confines to eastern part of the City and extends to Jaranwala, Khurrianwala, Chak Jhumra and Chiniot. Second Circle Faisalabad jurisdiction spreads over to western part of the City and extends to Tandlianwala and Sammundri Tehsils. Both of these Circles have their Circle Headquarters at Faisalabad. Jhang Circle has Circle Headquarters at Jhang City and manages the supply and customers of Jhang and Toba Tek Singh Districts. Geographically, Jhang Circle is the largest among all Circles of FESCO. Sargodha Circle jurisdiction confines to the whole of Sargodha and Khushab Districts. Mianwali Circle manages the supply and customers of Mianwali and Bhakkar Districts. This Circle shares its boundaries with other DISCOs such as IESCO, PESCO and MEPCO.

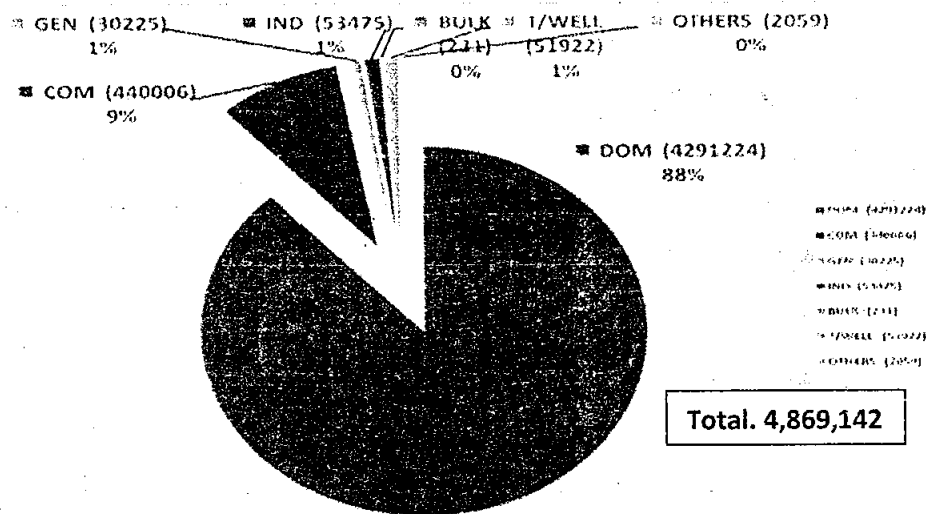
FESCO has various administrative arrangements to place XEN Operation at all District Headquarters. Moreover, considering the geographical vastness of various Tehsils and amalgamation of customers, the XENs Operation have been placed in all big Tehsils like, Bhalwal Tehsil of Sargodha, Gojra and Kamalia Tehsils of Toba Tek Singh, Jaranwala and Sammundri Tehsils of Faisalabad. Faisalabad District Headquarter has two Operation Circle Headquarters, Six Divisional Headquarters and FESCO Headquarters as well. Project Director (Construction) executes the development projects of HT, LT, Deposit Works and village electrification. The Construction Headquarters is stationed at Faisalabad and it has Three Construction Divisions viz Faisalabad, Sargodha and Jhang. Construction Division Faisalabad has its Headquarters in Faisalabad City and executes all development projects of District Faisalabad, Construction Division Sargodha has its Headquarters at Sargodha City and executes all development projects of Districts Sargodha, Khushab and Mianwali, Construction Division Jhang has its Headquarters at Jhang City and executes all development projects of Districts Jhang, Chiniot, Toba Tek Singh and Bhakkar.

In order to provide extended customer services to its valued customers, FESCO has ensured the operation of customer services at all Operation Sub Divisions, Divisions, Circles and at FESCO Headquarters levels. These customer service centers work round the clock to redress the supply related complaints of the customers, whereas, the billing related complaints are received and redressed during the Office hours.

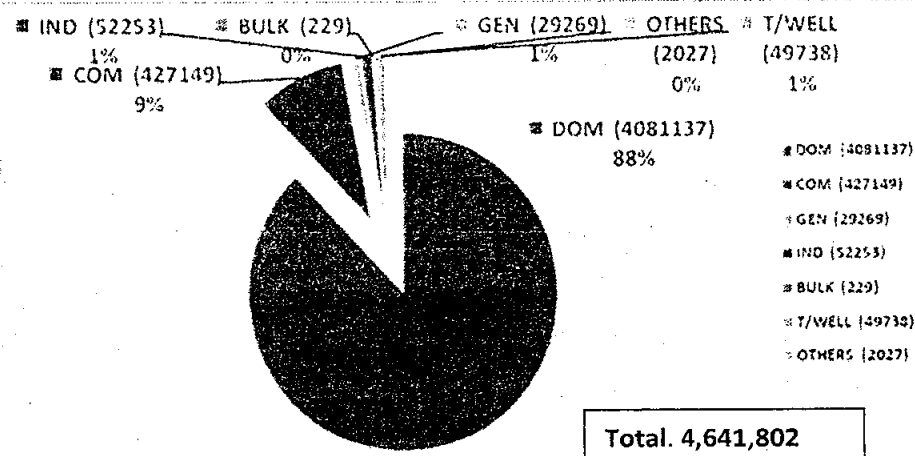
2.2 CONSUMER MIX

At the end of June 2022, FESCO had 4.869 million consumers out of which 4.291 million were Domestic, 0.440 millions were Commercial, 0.053 millions were Industrial and 0.051 million were Agricultural Tube Wells consumers. Whereas, at the end of June 2021, FESCO had 4.641 million consumers out of which 4.081 million were Domestic, 0.427 millions were Commercial, 0.052 millions were Industrial and 0.049 million were Agricultural Tube Wells consumers. Following graph depicts the comparative percentage of number of consumers of last two years at FESCO level:-

CONSUMER MIX (NUMBERS) 2021-22



CONSUMER MIX (NUMBERS) 2020-21



FESCO PROSPECTUS

These pie charts depict the maintenance of their ratios in terms of numbers in each sector and increase in overall numbers could not drag these ratios, but these ratios are misleading to the effect that addition in numbers in subsidies dependent sectors i.e. domestic and agriculture was much higher than the contributing sectors i.e. industrial and commercial. FESCO understands that social sectors growth is beyond its control but as a Company it is making all efforts to install commercial and industrial connections on priority.

The 2nd Circle Faisalabad is heavily dominated by medium/small industrial consumers besides domestic customers. On the other hand, the 1st Circle dominated by big industrial consumer and Jhang Circles are dominated by domestic & agricultural consumers. 1st and 2nd Circles Faisalabad have Small Industrial customers as well. Jhang Circle has exceptionally large numbers of agricultural customers due to which it leads all the Circles in agriculture consumption. It contributes approximately 1% of agriculture consumption of FESCO. Majority of Government Department customers are under Sargodha Circle due to which bulk power supply is maximum in Sargodha Circle. The Circle wise position of Consumers in numbers at the end of current financial year is given as under;

CIRCLEWISE CONSUMER MIX (NUMBERS) 2021-22

Category	1 st Circle FSD	2 nd Circle FSD	Jhang Circle	Sargodha Circle	Mianwali Circle	Total
Domestic	963,446	916,557	962,819	929,231	519,171	4,291,224
Commercial	117,600	93,659	88,395	100,514	39,838	440,006
General Connections	5,285	4,208	7,269	8,488	4,975	30,225
Industrial	13,839	22,957	8,097	6,690	1,892	53,475
Tube Wells	14,118	6,208	21,073	5,964	4,559	51,922
Bulk & Others	743	681	466	260	140	2,290
Total	1,115,031	1,044,270	1,088,119	1,051,147	570,575	4,869,142
% of Total Cons:	23	21	22	22	12	100

CIRCLEWISE CONSUMER MIX (NUMBERS) 2020-21

Category	1 st Circle FSD	2 nd Circle FSD	Jhang Circle	Sargodha Circle	Mianwali Circle	Total
Domestic	916,989	870,056	912,195	887,994	493,903	4,081,137
Commercial	114,661	91,039	85,064	97,352	39,033	427,149
General Connections	5,046	4,075	7,059	8,259	4,830	29,269
Industrial	13,433	22,546	7,896	6,537	1,841	52,253
Tube Wells	13,572	5,968	20,130	5,647	4,421	49,738
Bulk & Others	728	672	460	257	139	2,256
Total	1,064,429	994,356	10,32,804	1,006,046	544,167	4,641,802
% of Total Cons:	23	21	22	22	12	100

2.3 CONSUMPTION MIX

During the current year 2021-22 FESCO made total sale of 15919million units out of which 1st Circle Faisalabad contributed 38%, 2nd Circle contributed 22%, Jhang Circle contributed 16%, Sargodha Circle contributed 16% and Mianwali Circle contributed 8%. Comparing with last year, Jhang& Sargodha Circle maintains their ratio. Analyzing this change, it is evident that sale in domestic sector of FESCO was increased from 7,062 million units to 7,391 million units and at the same time, there was an increase in commercial, industrial & in agricultural consumption. NEPRA, while determining tariff of the Company, takes into consideration of the higher slab sales as well and if Company sells more units to low slab categories, it directly gives effect to its earning capacity. Following table highlights the category wise and Circle wise contribution of sales:-

CIRCLE WISE CONSUMPTION 2021-22

Category	(Mkwh)					Total
	1 st Circle FSD	2nd Circle FSD	Jhang Circle	Sargodha Circle	Mianwali Circle	
Domestic	1761	1730	1404	1468	699	7062
Commercial	258	165	122	164	61	770
General Connections	71	33	35	42	28	209
Industrial	2512	1321	340	659	105	4937
Tube Wells	282	194	462	113	215	1268
Bulk & Others	41	16	18	133	48	256
Total	4925	3460	2381	2579	1156	14501
% of Total Sale	34	24	16	18	8	100

Comparing the category wise consumption of current year 2021-22 with the previous year 2020-21, it is clear that domestic, commercial & industrial Sector has significantly increased its contribution and remained leading. Agricultural Sector has also shown significant increase in consumption. One of these sectors is subsidy dependent not only the direct subsidies paid by Governments but also cross subsidized rates applied built in tariff mechanism. In Agricultural Sector, there has been a significant increase in consumption from 1268 million units to 1367 million units. Following Table highlights the consumption contribution of each category in 2021-22 and its comparative narration with year 2020-21:-

CIRCLE WISE CONSUMPTION 2020-21

(Mkwh)

Category	1 st Circle FSD	2 nd Circle FSD	Jhang Circle	Sargodha Circle	Mianwali Circle	Total
Domestic	1761	1730	1404	1468	699	7062
Commercial	258	165	122	164	61	770
General Connections	71	33	35	42	28	209
Industrial	2512	1321	340	659	105	4937
Tube Wells	282	194	462	113	215	1268
Bulk & Others	41	16	18	133	48	256
Total	4925	3460	2381	2579	1156	14501
% of Total Sale	34	24	16	18	8	100

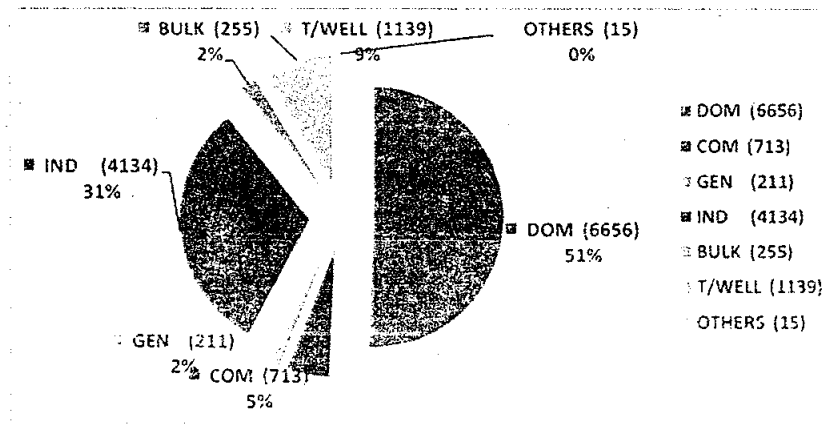
In 2021-22, 1stCircle share in sale mix increased by 38% compared with 34% in 2020-21. Jhang Circle, Sargodha & Mianwali maintained their previous year contributions. 2nd Circle had 2% decreased consumption than the previous year which was mainly decreased in Bulk & others consumption due to Covid-19 Pandemic. Marginally, if we compare the increase in overall contribution, it was evident that lower billed units of FESCO were taken away for sale as higher billed units and average sale rate increase from Rs. 17.860/- to 23.036/-.

Significant increase in pattern of industrial consumption was observed during the year and increase in agricultural sector consumption was also observed. The consumption pattern showed the increasing trend due to availability of electricity in productive sectors. The use of electricity in improvement of quality of life was observed as 53% during the year against 51% of last year. Use in bulk supply and other consumers remained 2%, at par with the last year. Indeed, there was insignificant increase in consumption of electricity in all sectors but proportionately more increase was observed in domestic and agricultural sectors and decrease in industrial sector due to Covid-19 Pandemic.

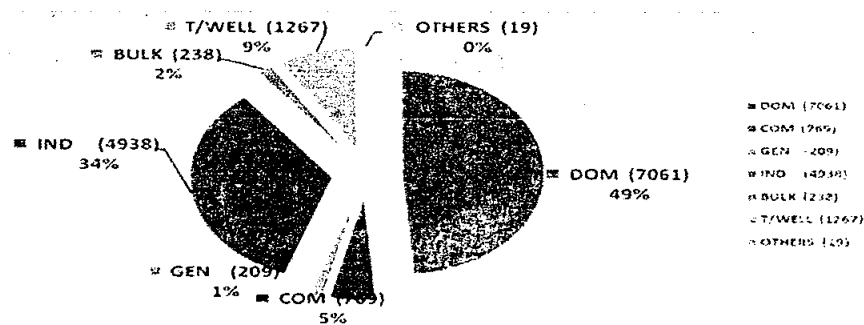
FESCO made lot of efforts during the year 2021-22 in order to improve the consumption patterns. Big and small industry was given relief by Govt. A collective effort was made with the help of industrial organizations in order to develop and implement a zero load shedding programme. Accordingly, small industrial connections having domination on domestic feeders were declared as industrial dominated feeders due to which they were treated like big industries.

Consumption mix charts of current year and the year 2021-22 are given below for comparative analysis:-

CATEGORY WISE CONSUMPTION MIX (MILLION UNITS) 2021-22



CATEGORY WISE CONSUMPTION MIX (MILLION UNITS) 2020-21



2.4 SALE AND REVENUE

FESCO made sales of Rs.366707 million during 2021-22 and generated revenue of Rs. 347777 millions which was 94.84% of the sale. Overall sale increased by 41.59% and revenue collection increased by approximately 38.14% Public sector consumer's sale was recorded as Rs.15854millions and revenue was generated as Rs.15295millions which was around 96.47%. In private sector, FESCO made sales of Rs.350853million and recovered Rs.332482million. Various types of the subsidies were built in the tariff on the directions of the Government; the payments of these subsidies were to be released by the respective Governments. The account of these outstanding subsidies is given below:-

DETAIL OF SUBSIDIES (PRIVATE) FESCO

(Fig. In Million)

Detail of Subsidies	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20	Jun-21	Jun-22
Federal Government Liability							
(a) (Agriculture T/W (Pv(12.5%)) (From 01-07-07 to 30-06-10)	185	185	185	185	185	185	185
Difference of Rate of Agri with KisanItthad (b) Rs.10.35 Per Unit & NEPRA Tariff of Rs. 17.50 & 11.20 (From Jul-13)	198	216	268	301	307	318	319
(c) GST Subsidy for Domestic and 25% Subsidy for the period (01.07.08 to 30.06.11)	1024	1024	1024	1024	1024	1024	1024
Prime Minister Subsidy for domestic and Agriculture Consumers (Jamali Govt.) Prior to NEPRA 2003	44	44	44	44	44	44	44
Prime Minister Relief for Industries Vide No.P-1-4(13) 2014-15 Dt.04.02.16 From 01.01.16	798	3652	6089	17327	5058	4630	4646
Zero Rated Industrial Rate (ZRIR) Ministry SRO No. 1(I) 2019 to SRO No.12 (I) From 01.01. 2019	-	-	-	5086	16763	22220	20728
Prime Minister Relief	-	-	-	-	-	-	9384
TOTAL FEDERAL GOVT.	2249	5121	7610	23968	23381	28422	36330
(b) Agriculture T/W GST Subsidy From 01-07-16	429	419	628	1042	2659	4516	7568
TOTAL PROVINCIAL GOVT.	429	419	628	1042	2659	4516	7568
GOVT. TOTAL	2678	5540	8239	25011	26040	32937	43898

If these outstanding subsidies amounts would have been paid to FESCO by end of June 2022, the recovery %age would have gone to 106.85%. Recovery from provincial government departments remained a problem area during the whole year and FESCO notices for Recovery to the heads of respective government organizations and even in certain cases disconnections were done. Federal Government departments paid their due amounts regularly except defense department. This is worth mentioning that FESCO does not have any billing dispute with any Federal or Provincial department. A large sum of FESCO dues was held up with WASA which could not be cleared due to non-availability of budget with them.

Private sector recoveries during the year were 94.76% which was mainly due to non payment of different subsidies to industrial & Agri consumer as tabulated above. There was a consistent increase in running arrears in private sector payments which was specifically analyzed and observed that domestic consumers were adopting a trend of making payments after accumulation of electricity bills of two months. This view was also strengthened due to the fact that payment of Late Payment Surcharge (LPS) increased as compared to last year. Following table highlights the receivables position of the Company:-

CATEGORY WISE RECEIVABLES

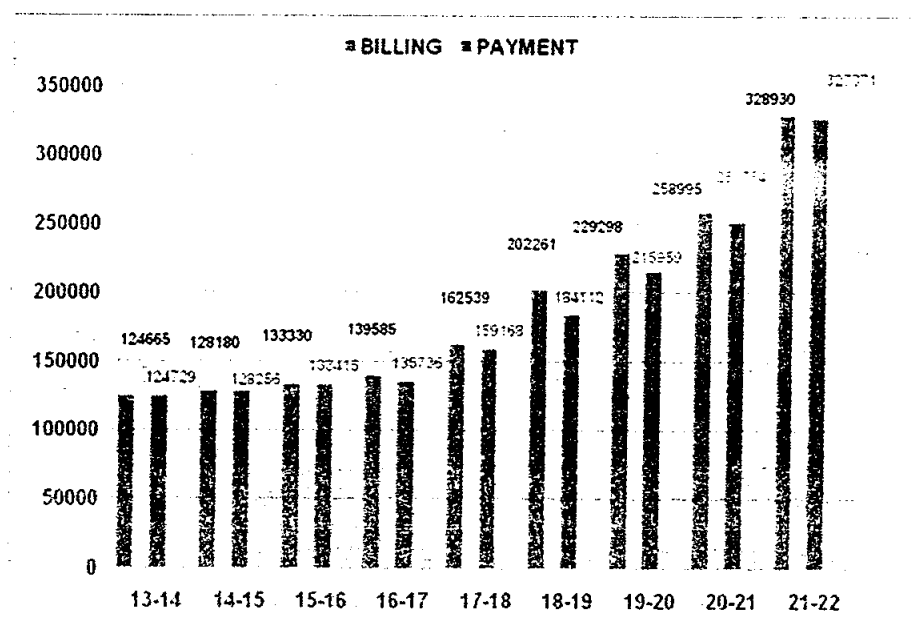
(Fig. In Million)

SR. NO	PARTICULAR	06/2019	06/2020	06/2021	06/2022
1-	F/GOVT AGENCIES	71	536	456	944
2-	P/GOVT AGENCIES	313	607	1768	1849
3-	TOTAL GOVT (1+2)	384	1144	2224	2793
4-	TOTAL PRIVATE	33020	45800	51999	70365
5-	GRAND TOTAL (3+4)	33404	46944	54223	73158
DETAIL OF PRIVATE RECEIVABLE					
i-	SPILL OVER	5816	11159	16233	22431
ii-	DEFERRED AMOUNT	235	4987	495	775
iii-	SUBSIDIES	25011	26040	32938	43897
iv-	UN-IDENT: CASH	19	16	19	19
a-	P.DISCONNECTED	621	780	815	984
b-	RUN. DEFAULTERS	1305	2771	1458	2097
c-	UNPAID DEBT	53	79	79	198
v-	SUB TOTAL(a+b+c)	1978	3630	2352	3280
d-	NET ARREARS (ii+v)	2213	8617	2847	4055
e-	TOTAL (i+ii+iii-iv+v)	33020	45800	51999	70365

The above table shows consistent increases in few Heads of recoveries such as Spillover, Subsidies and Disconnected defaulters. Let's have a look of the amounts. Spillover amounts are basically such payments for which FESCO has raised bills to the customers which come due for payment during the following month. In current running month, FESCO does not have the legal force to compel the customers for payments. So, in every month, some portion of recoveries goes as a spill over. Subsidies are basically those FESCO claims which have been picked up by the Governments for payments which otherwise would have been paid by the customers. FESCO does not raise these claims to customers but raises these to respective Governments. Running arrears are such amounts which have been billed to the customers but remain unpaid on the part of customers. FESCO takes all legal steps to recover these amounts besides following up the customers continuously. Every month, FESCO carries out analysis of these amounts in order to find out the blockage of revenue and accordingly field force is applied either for disconnection or provision of facilitation of installments to customers. In nutshell, these are recoverable claims.

It has also been observed that FESCO receivables are increasing consistently year by year. The basic reason for this increase is the rise in overall billing due to tariff rise. Major portion of billing is the spillover and subsidies. Non payments of subsidies by the Governments

give rise to receivables. Secondly, the percentage rise in tariff becomes the multiplier for the rise of spillover being the part of billing. The rise in tariff is so consistent that during the last five years, it has more than 100% increase due to which FESCO overall revenue has become more than double during the last five years. Following graph highlights the trend of FESCO sales and revenue (Rs. Millions are shown on Y-Axis and Years on X-Axis);



From the above graph, it is evident that FESCO has a trend of having 100% recoveries of its billing but this trend was disturbed due to outstanding subsidies from the Governments during the last couple of years. If these subsidies are regularly paid by the Governments, the Company position must have been much better. Even with these outstanding subsidies, FESCO has obtained 100% payment percentage which is still ahead of all Companies as no Company is at par with FESCO on overall %age recovery.

FESCO has a very good system of recoveries, besides customer's facilitation of making payments 24/7 through NADRA, Banks, and Credit Cards, in villages through Post Offices etc, field staff remains busy for follow up in the field. After posting of cash on MIS Files, defaulter's lists are provided to the field staff regularly. These lists are updated by MIS Department on weekly basis so as to ensure that every default is in the knowledge of FESCO Staff. At Company Level, Review meetings are held regularly in order to review the progress for which standard formats are used. Following is the table which compares the Public and Private Sectors Billing, Recoveries, payment percentages of the current year as well as the previous year:-

PROGRESSIVE BILLING (WITHOUT SUBSIDY) & COLLECTION

FROM 07/21 TO 06/22 FESCO

(Rs Millions)

CIRCLE	PERIOD	BILLING (WITH SUBSIDY)			PAYMENT			% PAYMENT		
		GOVT	PVT	TOTAL	GOVT	PVT	TOTAL	GOVT	PVT	TOTAL
IST FSD	07/21 to 06/22	3409.54	123451.72	126861.26	3571.27	122814.91	126386.18	104.74	99.48	99.63
	07/20 to 06/21	2629.33	82252.93	84882.26	2032.69	83667.01	85699.70	77.31	101.72	100.96
2ND FSD	07/21 to 06/22	1674.05	75744.89	77418.94	1660.63	75465.80	77126.43	99.20	99.63	99.62
	07/20 to 06/21	1191.60	58626.89	59818.49	849.48	59962.58	60812.06	71.29	102.28	101.66
JHANG	07/21 to 06/22	1855.78	43372.17	45227.95	1730.80	43185.14	44915.94	93.27	99.57	99.31
	07/20 to 06/21	1424.55	33234.09	34658.64	1462.77	34501.70	35964.37	102.68	103.81	103.77
SRG.	07/21 to 06/22	5877.05	49677.50	55554.55	5644.86	49614.84	55259.70	96.05	99.87	99.47
	07/20 to 06/21	5070.41	39943.81	45014.22	4934.64	41136.57	46071.21	97.32	102.99	102.35
M.WALI	07/21 to 06/22	2825.87	21041.72	23867.59	2687.41	20995.83	23683.24	95.10	99.78	99.23
	07/20 to 06/21	2190.85	15066.18	17257.03	2167.43	15648.81	17816.24	99.93	103.87	103.24
FESCO	07/21 to 06/22	15642.29	313288.00	328930.29	15294.97	312076.52	327371.49	97.78	99.61	99.53
	07/20 to 06/21	12506.74	229123.90	241630.64	11446.91	234916.67	246363.58	91.53	102.53	101.96
%AGE INC/DEC		26.70	42.34	41.59	33.59	37.40	38.14			

IMPROVEMENT IN CUSTOMER SERVICES DELIVERY AND ESTABLISHMENT OF MODERNIZED/STATE-OF-THE-ART CUSTOMER CARE CENTRE.

FESCO prime focus is on customer satisfaction and service delivery and growing consumer awareness and expectations. FESCO has established 171 Nos. State-of-the art Customer Care Centres with modern facilities i.e, Smart Interactive Screen / Qmatic Machine, upgraded software / applications, excellent seating arrangement, one window operation) in order to meet with the customer expectations and satisfaction.

Following facilities are being provided to consumers at FESCO Customer Care Center:

- Online Due Date Extension & Installments Facility
- Online Bill Correction Facility upto 300 units
- Issuance of Duplicate Energy Bills
- New Connection Application Registration
- Complaints Registration
- Ease of information/guidance required by consumers

FESCO has taken following initiatives for improvement in Service Delivery:

- i. Software for due date extension, installments & bill correction is developed in collaboration with PITC, to facilitate the consumers.
- ii. Consumer's due dates are extended online upto 10 days through PITC software at one window in FESCO Customer Care Center and energy bills with extended due dates printed on them are handed over to consumers for direct payment in bank.

- iii. Easy installment facility is being provided to the consumers in FESCO Customer Care Center at one window through PITS software and revised bills with installment amount printed on them are handed over to consumers for direct payment in bank.
- iv. Bill correction facility, for correction upto 300 units is being provided to the consumers at FESCO Customer Care Center through PITS software and revised printed bill is handed over to the consumers for payment in banks.
- v. Token Machine System has been introduced in FESCO Headquarter Customer Care Center for customers' ease and better management
- vi. Smart Screen has been installed in FESCO Headquarter Customer Care Center, for facilitation of consumers. Following tasks can be performed through Smart Screen Interactive System":
 - Online Complaint Registration
 - Check Load Management Schedule
 - Estimated Bill Calculation
 - Billing Information
- vii. A dedicated Counter has been established at FESCO Headquarter Customer Care Center for Senior Citizens & Overseas Pakistanis Counters, to resolve their grievances at one window.
- viii. Separate counters have been created to register failure of supply complaints as well as for registering new connection applications online, by collecting required information/documents from applicants.

3. THE PROPOSED INVESTMENT

In-order to achieve the economic growth and poverty reduction in the areas within FESCO jurisdiction, it is essential to ensure a reliable & stable electric power distribution and supply to these areas to meet the increasing demand in Industrial, Agricultural, Commercial, and Domestic sectors. Electricity demand is expected to grow by around 6% per annum during the coming years. In order-to cope with this growth, it is estimated / average that 150-200MW additional capacities would be required annually to achieve the aforesaid goals, the expansion in FESCO distribution network is immensely required. The proposed plan has therefore been prepared to meet the requirement of system efficiency and stability to deliver adequate, reliable &

quality power to its customers. This project will also help in meeting the requirements of the National Electric Power Regulatory Authority (NEPRA).

3.1 PURPOSE AND GOALS OF INVESTMENT PLAN

Investment Plan entails company's vision, mission, stakeholders' needs, general indicators, sales and consumer forecasts, power supply issues with limitations, human resources and organizational development, financial projections, regulatory requirements including quality of service, subsidies and legal restrictions affecting timely collection of delinquent payments, performance indices with initiatives and risk assessment and will serve as a central reference document for integrated cross-functional planning that will help FESCO to make informed decisions based on priorities.

The goal of the Investment Plan/Business Plan is to create a document which will be used by the CEO and Senior Managers of FESCO to focus its activities and energies for the next five years in making it a financially viable company by improving the governance of the entity, introducing new technologies including up gradation of existing technology, machinery and improving human resources in line with best practices worldwide. This plan will also be utilized by the Policy, Strategy Market Reforms (PSM), Risk Management & Customers Services Committee to the Board for regular monitoring, to ensure that company achieves its stated objectives.

This Investment Plan covers a five-year period from FY 2023-24 to FY 2027-28, encompassing the following areas:

- Defining the activities and resources available to FESCO through the incorporation agreements and laws relating to it.
- Identifying projections of power demand, power resources and population served expected in the time period from 2023-24 to 2027-28.
- Illustrating the strategic objectives for 2023- 24 to 2027-28, aligned with optimally achievable scenario as defined by the regulator, which designated coordinators prepared to accomplish the strategic goals in the five-year timeframe of the Investment Plan.
- The best and optimally achievable scenarios to demonstrate what is required and what can be achieved keeping in view the resources constraints and on ground realities.
- Projecting the financial impact on company's bottom-line of implementing the project plans.

3.2 MAJOR PLANNING SITUATION

The following challenges faced by FESCO require integrated cross functional planning:

- Manpower shortage
- C-Level hiring as approved by BoD FESCO
- Setting up of New Safety Directorate through hiring of DG (HSE) from open market
- Capacity payment issues, network constraints and decrease in Demand due to Net-Metering etc.
- Delayed determination / notification of tariff
- Taxes issues with FBR
- Technical challenges and technological advancement that require FESCO to upgrade the network, including metering to receive and measure continuous and reliable flow of power
- Operational challenges to maintain continuous flow of reliable power to the customers and meet their expectations in demand dominated, load-shedding driven regime
- Institutional challenges faced while developing the capacity of FESCO
- Smooth power evacuation, especially related to variable renewables being integrated in the network
- Compliance with applicable laws and regulations
- Social responsibility to conserve energy and social up-lift

3.3 COMPETITIVE TRADING AND BILATERAL CONTRACT MARKET (CTBCM)

In 2015, the Economic Coordination Committee (ECC) of the Cabinet decided to transition from the current regime towards CTBCM and mandated CPPA-G to prepare a design and plan for this transition and get it approved from NEPRA.

In pursuance of the mandate given by ECC and the stipulations of the Market Operator Rules, 2015, CPPA-G with the help of international consultants (MRC Group) prepared a high-level conceptual design, defining the principles and structure of the market, and submitted it to NEPRA for approval in March 2018. The Authority through its determination dated December 05, 2019, approved the High-Level/Conceptual Design of the Competitive Trading Bilateral Contract Market (CTBCM).

Authority approved the CTBCM and Implementation Roadmap through its determination dated November 12, 2020 (the "CTBCM Determination") which was also recognized in the National Electricity Policy 2021 (the "NEP 2021") approved by the Council of Common Interest ("CCI").

Under Sections 23A and 23B of the Act, the CPPA-G submitted an application (the "Application") on October 14, 2021 for grant of the licence for the MO along with the draft Market Commercial Code (the "MCC") for approval of the Authority.

In its determination dated May 31, 2022, NEPRA approved the grant of the MO licence to the CPPA-G subject to the terms and conditions contained in the licence along with approval of the Market Commercial Code (MCC), and CTBCM test-run plan to be undertaken by the CPPA-G during the soft-launch of the market:

- granted the Market Operator License to CPPA
- approved the Market Commercial Code
- approved the 6-month CTBCM test-run plan

The broader CTBCM framework is guided by the National Electricity Policy 2021, (draft) National Electricity Plan 2022, Strategic Roadmap prepared and agreed with Ministry of Energy (Power Division) and FESCO Medium Term Demand Forecast submitted to NEPRA.

3.4 STRATEGIC POSITIONING

As the Pakistan Power Sector (PPS) undergoes another set of continued reforms, FESCO is all set to add value to the evolving wholesale competitive electricity market in line with Competitive Trading & Bilateral Contract Market (CTBCM) regime.

Towards the end, moving ahead of the single territorial electric power service provider within service territory; FESCO, as envisaged per CTBCM, has initiated transformation as multirole service provider as "Electric Power Supplier" and "Power Distributer". As per regulation, FESCO shall, however, continue to be "Supplier of Last Resort" so as to ensure continued, uninterrupted, reliable and adequate power supply to any and all the customers at all times, within the Service Territory.

As Power Distributor, i.e., the Distribution Network Operator (DNO), FESCO pledges to provide interconnection facility and open access to its system for all intending users

(Market Participants) including but not limited to, the eligible Generation Companies, Bulk Power Consumers, Traders, Competitive Electric Power Suppliers, Distributed Generation etc. at reasonable and affordable prices, without any favor or otherwise, discrimination or restrictions. Taking natural monopoly wire-business role, as DNO, FESCO is well aware that the position requires to ensure embedding principles of impartiality, non-discrimination and arm's length transaction even while dealing with Power Supplier arms of our own company.

As Power Supplier, FESCO is all set to take the daunting task of facing competition at wholesale market level and thus gearing up to ensure retention of base load Bulk Power Consumers (BPC). We also clearly understand our commercial priorities shall not undermine the rights of embedded regulated customers.

3.5 PROPOSED PROJECTS

Sr. #	Description	Unit	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	New Grid Stations	No.	7	9	4	7	3	30
2	Conversion of G/Station (66kv to 132kv)	No.	0	0	0	0	0	0
3	Extension of Power T/F	No.	2	4	2	4	3	15
4	Augmentation of Power T/F	No.	9	6	8	11	2	36
5	Extension of Line Bay	No.	1	5	4	0	5	15
6	New 132kv T Lines (373.5 SDT+290 D/C)	No.	8	11	7	10	6	42
7	2 nd Circuit Stringing	No.	0	0	0	0	0	0
8	Reconductoring of T/L	No.	0	0	1	0	0	1
9	Installation of 132kv Capacitors at G/Stations	MVAR	100	100	100	100	100	500
10	Re-habilitation of H.T Feeders	No.	32	34	36	38	40	180
11	Rehabilitation of L.T Feeders	No.	800	850	900	950	980	4480
12	New 11kv Line	km	566.89	610.94	655	705.05	741.11	3278.99
13	Reconductoring of 11 kv Lines	km	255.56	271.53	287.50	303.47	319.44	1437.50
14	New LT Line	km	342	376	402	437	485	2042
15	Reconductoring of LT Lines	km	16	16.5	17	17.2	17.3	84
16	New Service Connections	No.	255630	268411	281833	295923	310720	1412517
17	Distribution T/Fs Replacement	No.	400	450	500	550	600	2250
18	Energy Meters Replacement	No.	67000	84000	91000	95000	113000	450000
19	AMR /AMI Metering	No.	16066	16145	16008	20000	20000	88219

FESCO PROSPECTUS

YEAR WISE BREAKUP FOR REQUIREMENT OF FUNDS (RS. IN MILLION)

3.5.1 SUMMARY OF CAPITAL COST FOR PROPOSED PROJECTS

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	6775	7328	8001	10318	6356	38778
B	Distribution of Power (DOP)	1,219	1,283	1,348	1,413	1,596	6,859
C	Energy Loss Reduction (ELR)	2555	2984	3507	4378	4842	18266
D	Vehicles and T&P	2397	1504	1438	1347	1708	8394
E	Civil works	690	843	826	997	950	4306
F	Technical Improvement Plan	525	1190	1435	400	100	3650
G	Commercial Improvement Plan	408	388	480	490	510	2276
H	Financial Improvement Plan of IT Directorate	312	213	229	252	377	1383
I	HR Improvement Plan	210	190	190	210	210	1010
Total		15091	15923	17454	19805	16649	84,922

3.5.2 SUMMARY OF ANNUAL RECURRING COSTS (In Rs. million)

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	305	330	360	464	286	1745
B	Distribution of Power (DOP)	55	58	61	64	72	309
C	Energy Loss Reduction (ELR)	115	134	158	197	218	822
D	Vehicles and T&P	108	68	65	61	77	378
E	Civil works	31	38	37	45	43	194
F	Technical Improvement Plan	24	54	65	18	5	164
G	Commercial Improvement Plan	18	17	22	22	23	102
H	Financial Improvement Plan of IT Directorate	14	10	10	11	17	62
I	HR Improvement Plan	9	9	9	9	9	45
Total		679	717	785	891	749	3822

3.6 BENEFITS AND FINANCIAL ANALYSIS

3.6.1 EXPANSION AND REHABILITATION OF SECONDARY TRANSMISSION AND DISTRIBUTION SYSTEM

TANGIBLE BENEFITS

ABSTRACT OF MVA CAPACITY TO BE ADDED AND ADDITIONAL ENERGY TO BE SUPPLIED UNDER TRANSMISSION EXPANSION PLAN							
Description		Fiscal Year					
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
MVA Capacity to be added	Current Year		652	618	373	626	261
	Cumulative		652	1270	1643	2269	2530
Additional Energy could be supplied @ 0.9 P.F 0.7 L.F and 80 % Loading (Million kWh)	Current Year		2878.606	2728.495	1646.810	2763.815	1152.325
	Cumulative		2878.606	5607.101	7253.911	10017.726	11170.051

REDUCTION IN LOSSES AND SAVINGS IN TERMS OF ENERGY (STG)

S/ No.	Description		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	Reduction in Losses % (MW)	Current Year	0	0.15	0.10	0.10	0.05	0.05
		Cumulative	0	0.15	0.25	0.35	0.40	0.45
2	Energy Savings* @ 0.7 L.F (Million kWh)	Current Year	0	28.618	20.357	21.438	11.285	6.782
		Cumulative	0	28.618	48.975	70.413	81.698	88.480

*Reduction in Energy Loss/year = MW x 8760 x Loss Factor**

**Loss Factor = $0.3 \times \text{Load Factor} + 0.7 \times (\text{Load Factor})^2$

Loss Factor @ 0.7 L.F = 0.553

3.6.2 INCREASE IN REVENUE AS RESULT OF ENERGY CONSUMPTION OF CONSUMERS TO BE ADDED UNDER DISTRIBUTION EXPANSION PROGRAM

Sr.	Energy Consumption of Customers To Be Added (Million kWh)			Av. Energy Sales Price (Rs. / kWh)	Av. Energy Purchase Price (Rs. / kWh)	Sales (Million Rs.)	Purchases (Million Rs.)	Potential Benefits (Million Rs.)
	Year	Sales	Purchase					
1	2024-25	987.38	1082	24.58	22.22	24,270	24,042	228
2	2025-26	2001	2189	26.18	23.66	52,386	51,792	594
3	2026-27	3142	3434	27.88	25.2	87,599	86,537	1,062
4	2027-28	4343	4741	29.7	26.84	128,987	127,248	1,739
5	2028-29	5637	6148	29.7	26.84	167,419	165,012	2,407

3.6.3 INCREASE IN REVENUES AS RESULT OF POTENTIAL SAVING IN ENERGY UNDER DISTRIBUTION REHABILITATION PROGRAM

No	Year	No. of 11kv Feeders To Be Rehabilitated		No. of LT Proposals To Be Rehabilitated		Ave. Saving / Proposal (MkWh)		Potential Saving In Energy (MkWh)			Energy Rate / kWh (RS.) *	Potential Gross Benefits
		Current	Cumulative	Current	Cumulative	H.T	L.T	H.T	L.T	TOTAL		
1	2024-25	32	32	800	800	2.135	0.047	68.32	37.8	106.12	22.22	2,358
2	2025-26	34	66	850	1650	1.442	0.032	95.14	53.11	148.25	23.66	3,508
3	2026-27	36	102	900	2550	1.154	0.026	117.73	66.3	184.03	25.2	4,638
4	2027-28	38	140	950	3500	0.974	0.022	136.34	75.6	211.94	26.84	5,688
5	2028-29	40	180	980	4480	0.817	0.020	146.99	90.1	237.09	26.84	6,363

3.7 PROJECTED T&D LOSSES

Fiscal Year	Energy Purchase (Million KWH)	Energy Sale (Million KWH)	Units Lost (Million KWH)	%age Projected Losses	%age Increase/ Decrease
2021-22	17512.53	15918.79	1593.74	9.10%	
2022-23	18391	16765.24	1625.76	8.84%	
2023-24	19423	17725.43	1697.57	8.74%	-0.10%
2024-25	20357	18606.30	1750.70	8.60%	-0.14%
2025-26	21438	19615.77	1822.23	8.50%	-0.10%
2026-27	22571	20675.04	1895.96	8.40%	-0.10%
2027-28	23709	21729.30	1979.70	8.35%	-0.05%
Total %age Increase/ Decrease					-0.49%

FINANCIAL ANALYSIS

ASSUMPTIONS:

- Sale Rate for FY 2023-24 has been assumed as Rs. 22.88 kWh which is further indexed with reference to projected CPI.
- Purchase Rate for FY 2023-24 has been assumed as Rs. 20.86 kWh which further indexed with reference to projected CPI.
- It is assumed that the benefit will accrue from the following year of investment.
- The life of project has been assumed as 29 years.

SUMMARY OF FINANCIAL ANALYSIS

Energy Saving / Loss Reduction	NPV (Rs. Million)	IRR (%)	Benefit to Cost Ratio	Payback period (Years)
Secondary Transmission & Grids (STG)	5,325	19.31	1.18	8-Years, 01-Month,
Energy Loss Reduction (ELR)	18,347	47.39	2.36	05 Years, 05-Month
Distribution of Power (DoP)	5,010	30.82	1.96	06 Years, 05 Months
AMI / Smart Energy Meters	85	17.18	1.05	08Years, 08 Months
Overall - Investment Program	17,711	21.09	1.27	07 Years, 10 Month

Note;- The Financial Benefits relating to other projects like Vehicles & T&P, Civil Works, Technical, Financial and HR have not been accounted for in overall investment program. However, costs thereof have been discounted.

It is obvious from the results that the Plan is feasible on said assumptions and facts. Therefore, proper monitoring of benefits & costing is essential.

4. SOCIAL ENVIRONMENT IMPACT OF THE PROPOSED FACILITY OR SYSTEM

Pakistan has had laws that contain provisions for environmental protection. These laws which were partially inherited from pre-independence days dealt with air and water quality, canal irrigation, land tenure and use, forest conservation, wildlife protection, energy development, pesticide use, noise, public health etc. Not only did these laws prove ineffective, punishment for violation was mild and easy to circumvent, but these laws also did not adequately cover the subject areas and several of these laws became outdated. Many aspects of environment degradation remained uncontrolled and under-regulated. Pakistan therefore responded to its environmental concerns by introducing laws, establishing environmental protection institutions, and developing human resources and technical capability through local resources and foreign assistance.

To cope with above mentioned requirements, **The Pakistan Environmental Protection Act (PEPA-97)** which provides national policy on the subject was promulgated in December 1997, which is single comprehensive law that provides the protection, conservation, rehabilitation, and improvement of the environment, for the prevention and control of pollution and promotion of sustainable development. The Act cover air, water, soil and noise pollution, also including hazardous waste disposal and motor vehicular pollution.

Section 12 of The Pakistan Environmental Protect Act (PEPA-97) lays down the requirements of Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA). This section states as under:

1. No proponent of a project shall commence construction or operation unless he has filed with the Government Agency designated by Federal Environmental Protection Agency or Provincial Environmental Protection Agencies, as the case may be, or, where the projects likely to cause an adverse environmental effect an environmental impact assessment and has obtained from the Government Agency approval in respect thereof.
2. The Government Agency shall subject to standards fixed by the Federal Environmental Protection Agency,
 - a. Review the *Initial Environmental Examination (IEE)* and accord its approval, or require submission of an environmental impact assessment by the proponent; or
 - b. review the *Environmental Impact Assessment(EIA)* and accord its approval subject to such conditions as it may deem fit to impose, require that the environmental impact assessment be re-submitted after such modifications as may be stipulated or reject the project as being contrary to environmental objectives.

“Filing, Review and Approval of Environmental Assessment-Govt. of Pakistan November 1997” containing schedule A, B & C which lists the requirement of IEE or EIA. Federal Government Notification titled *“Guidelines for Preparation, Review of Environmental Reports Govt. of Pakistan November 1997”* has been consulted in this regard. FESCO has prepared its own Environmental Policy and is enforced since 2014.

4.1 EIA/IEE REQUIREMENTS

Pak-EPA in August 2000 issued *“Policy and Procedures for Filling, Review and Approval of Environmental Assessment”*, which includes schedules A, B & C defining projects in terms of the requirement of EIA and IEE .

- a. **Schedule A** defines projects which require an EIA. It deals with the list of major projects which have potential to affect a large number of peoples. The impact of such project may be irreversible and could lead to significant changes in land use and in social, physical and biological environment. Schedule A projects relating to Energy Sector are *“Major power transmission lines (above 66 KV) including grid stations”*.
- b. **Schedule B** defines projects which require an IEE. It deals with the projects where the range of environmental issues is comparatively narrow and issues can be understood and managed through less extensive mitigation measures. Schedule B Projects relating to Energy Sector are *“Electrical transmission lines (11 KV and smaller) and large distribution project”*.
- c. **Schedule C** combines everything not in Schedule A and B. Illustrative examples given in Schedule C projects are *“Project promoting energy efficiency”*

Thus Investment Plan of FESCO Project is covered by Schedule A which requires preparation of a full EIA Report. Therefore Environmental Impact Assessment Report will be submitted to EPA Punjab for the Approval on the format given below (Reference: clause 2.3 Guide lines for Preparation review of Environmental Reports).

4.2 FORMAT OF EIA REPORT

A. EXECUTIVE SUMMARY

B. INTRODUCTION OF THE PROJECT

- Brief description of nature , size and location of project and other pertinent background information

C. DESCRIPTION OF PROJECT

- Type & category of Project
- Objectives of the Project

- Alternatives
- Location , project site layout land use , road access , topography , population , road access , topographic and vegetation
- Size or magnitude of operation including capital cost and associated risks.
- Proposed schedule of Implementation
- Detail of restoration and rehabilitation plan
- Government Approval

D. DESCRIPTION OF ENVIRONMENT

- Physical resources , topography , soil , climate , surface water groundwater , geology/seismology
- Ecological resources , fisheries , aquatic biology , wild life , forest , rare or endangered species
- Human life and economic development –population and communities , industries , infrastructure , institutions , transportation , land use power sources and transmission , agricultural and mineral development
- Quality of life value –Socioeconomic , public health , recreational resources , aesthetic value , archaeological or historical treasures and cultural values

E. SCREENING OF POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES.

- Environmental Problems due to project location , design , construction, operation , enhancement measures and additional consideration
- Environmental Monitoring (Internal & External) program and institutional requirement
- Environmental Audit by third party

F. CONCLUSION

For similar Scope of Works of Tranche-III ADB Loan 2972-Pak, an Environmental Impact Assessment (EIA) Report was prepared by PMU FESCO and submitted to Environmental Protection Department (EPD) Punjab Lahore. EPD after site inspection of concerned District Officer Environment and **public hearing** granted the environmental approval. *As per approval, no Environmental Risk and Hazards are associated with the construction of new Grid Stations & Transmission Lines , conversion of 66 KV existing Grid Station to 132 KV and Augmentation/Extension Sub-Project.* The same process would be adopted for preparation of EIA Report. Site inspection of concern District Officers Environment will be arranged. After Public hearing, EPD will consider granting of Environmental approval.

As per requirement of Environmental Management & Monitoring Plan (EMMP), periodic monitoring for implementation of EMMP is required. Lump sum provision for Environmental Mitigation Measures is provided in report and detail will be provided in contract documents. From this type of provision, expenditure on testing of NEQS, Plantation of Trees as per requirement of Environmental Protection Department's approval, waste management, erosion control Environmental /Social Trainings, External & internal Monitoring and other associated measures, can be incurred.

Environment & Social Internal Monitoring Mechanism will be strengthened to monitor the envisaged goals. Monitoring Reports be prepared quarterly for review of competent forum. These reports will include comparison of base line data of water Air and noise and monitoring data of NEQS parameters. Monitoring Staff will be equipped with requisite monitoring equipment e.g. Digital Camera, pH Meter, Noise Meter, Digital Location Meter (longitude & latitude), Ambient Air Quality Sampler/Tester. E&SS Cell be provided independent transportation and other facilities for frequent field visits.

Following Environmental concerns will be taken care of during implementation of DIIP project:-

- No waste solvents, petroleum product, toxic chemicals or solutions will be disposed of in city drainage system. These types of wastes shall be taken to an approved disposal facility.
- Construction activities will not cause the release of Sulphur Hexafluoride SF6
- Hazardous and toxic waste will be collected as per FESCO Waste Management Plan. Suitable Metal Containers will be used to collect the waste.
- Approved site Specific Environmental Management Plan (SSEMP).
- Construction activities will be executed in such a way that no blasting at project site is required to control noise level.
- All stakeholders including contractor will be trained to deal with environmental hazardous. Awareness campaign regarding NEQS will be launched for all stakeholders.
- Labour/work force will be required to use PPEs.
- Labour/work force will be provided safe drinking water
- All Occupational Health and Safety (OHS) measures will be considered during construction activities. First Aid Box be made available at site. Construction Area will be cordoned off with reflecting tapes to avoid OHS hazardous. Safety instruction sign boards will be erected at site of work
- Environmental Grievances Re-dressal Mechanism will be enforced.

- Training of Labour/workforce and FESCO staff will be arranged for effective implementation of EMMP and other environmental mitigation measures.

4.3 SOCIAL SAFEGUARDS

Objective of Social Safeguards are “Avoid, minimize or mitigate Land Acquisition and Resettlement (LAR)”.

- Avoid: Implement the project on freely available land
- Minimize: - Seek Project or design alternatives
- Mitigation: - Enhance, at least restore, livelihood of displaced persons (DPs) and improve living standard of DPs.

Minimal land acquisition and resettlement or livelihood impacts are expected from construction of new substations or transmission lines, conversion of 66 KV Existing Grid Stations to 132 KV, Augmentation & Extension Projects.

4.3.1 NEW GRID STATIONS: -

Efforts will be made to construct the new Grid Stations on Government / FESCO land and voluntary donations from FESCO's clients. In case of non-availability of Govt. land in the vicinity, land acquisition and resettlement for such substations is expected to be carried out through mechanism of willing buyer and willing seller that will not trigger Govt and Donors Policy. In these cases, a Due Diligence Report (DDR) will be prepared by providing evidence that the land was acquired through the mechanisms specified above, but no LARP will be required.

In case land for construction of substation, is to be acquired through the provision of Land Acquisition Act 1894, then Land Acquisition and Resettlement Plans (LARPs) will be prepared and implemented by making compensation to affected persons. LARPs will be updated for any change in design and scope of work.

4.3.2 CONVERSION OF GRID STATIONS:-

Conversion of 66 KV to 132 KV Grid Stations will take place within walled boundaries of existing grid stations. As such no Land Acquisitions and Resettlement will be involved. No LARPs will be prepared and implements. Only **Due Diligence Report (DDR)** will be prepared by providing evidence of land.

4.3.3 AUGMENTATION & EXTENSION SUB PROJECTS:-

Augmentation & Extension Sub Project of existing Grid Stations will take place within walled boundaries of existing grid stations. In case of Augmentation, procured Power Transformers will be replaced on existing foundations whereas in case of extension, additional foundation bays will be constructed. As such no Land Acquisitions and Resettlement will be involved. No LARPs will be prepared and implemented. Only **Due Diligence Report (DDR)** will be prepared by providing evidence of land on which existing grid station is to be constructed.

4.3.4 132 KV TRANSMISSION LINE SUB PROJECTS:

According to provisions of Telegraph Act & existing practice by Government, no land compensation will be paid for land falling under the towers. Affected Persons will be compensated through crop/tree/infrastructure compensation. For sub-projects entailing the construction of Transmission lines where poles are to be sited within public road corridors—no land acquisition and resettlement will be needed, nor allowed under the Land Acquisition and Resettlement Framework (LARF).

4.3.4.1 132 KV TRANSMISSION LINES PASSING THROUGH CULTIVATED AREAS.

For each Transmission Lines passing through cultivated area, LARPs are to be prepared, implemented and monitored through vigorous monitoring. LARPs on the specified format be prepared, updated & implemented for payment of compensation to affected persons.

4.3.4.2 DISPLACED PERSONS:-

Displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

4.3.4.3 REPLACEMENT COST:-

The calculation of replacement cost will be based on the following (i) fair market value (ii) transaction costs (iii) interest accrued (iv) transitional and restoration costs and (v) other applicable payments if any. Where market conditions are absent or in a formative stage, the borrower/client will consult with the displaced persons and host populations to obtain adequate information about recent land transactions, land value by types, land titles, land use, cropping patterns and crop production, availability of land in the project area and region and other related information. The borrower/client will also collect baseline data on housing, house types, and construction materials. Qualified and experienced

experts will undertake the valuation of acquired assets in applying method of valuation, depreciation of structures and assets should not be taken into account.

4.4 BASE LINE SURVEY CONSIDERATIONS:

During Base Line Surveys, assessment of damages of assets will be made for the following:-

Built-up Property i.e Residential Houses/Dera, Tube wells, Peter Engine Pumps, Hand Pumps,

Commercial Assets i.e Brick Kiln, Poultry Farms, Fish Farms, Shops, Flour Machines

Economic Trees. Trees having height 4 meter or more & girth 15-20 cm coming in corridor of influence of Transmission Lines will be removed. Kikar, Shisham, Sufaida, Beri, Simble etc. have low economic values and treated as fire wood. A single tree yield on average about 400 kg of firewood. Firewood value differs from kind of trees. Cost of compensation of fire wood will be paid on the basis of prevailing market rates. Bohr Tree has a high cultural value & will be avoided as possible.

Fruit Trees e.g. **Mango**, Dates, Jamin, Citrus, bears high economic value and will be paid on the rates provided by Govt Agencies.

Infrastructure. During base line survey possible damages to infrastructure e.g. Metaled Road, Katcha Village Track, Water Courses, Canal/Distributaries, Drainage Channel, Railway Line, Gas Pipelines, Telephone Lines & , Transmission Lines will be made. Damaged infrastructure will be rehabilitated.

Cultural Property. Grave yards, mosques, shrine or site of archaeological importance comes under cultural property and will be avoided.

4.4.1 FORMAT OF LAND ACQUISITION & RESETTLEMENT PLAN

A. **Introduction of the Project** including background and description of project

B. **Project Compensation& Rehabilitation Frame Work**

- i. Policy provisions, Eligibility and Entitlement
- ii. Land Classification
- iii. Assessment of compensation.

C. **Assessment of Impacts**

- i. Resettlement Field Surveys
- ii. Minimization of Impacts
- iii. Impacts of the Sub Project – Impact of Towers & Transmission Lines

D. **Socio-Economic Profile of Affected Peoples**

- i. Census of Affected Household –Field Methodology, indigenous Peoples,

- ii. Data of affected households including housing, livelihood/income, poverty

E. Institutional Arrangements

- i. Internal & External Monitoring
- ii. Consultation & Disclosure
- iii. Public Consultation for undertaking LARPs
- iv. Compensation option discussed

F. Conclusion & Disclosure of LARPs.

G. Grievance Redressal Mechanism

H. Budget & Estimate of LARPs

- i. Basis for compensation
- ii. Determining the rate of compensation
- iii. Rehabilitation
- iv. Budget for Land & Assets Acquisition

I. Implementing Schedule & Cut of Date:-Compensation eligibility will be limited by the cut-off date on completion of the final census after the line route survey is finalized. The DHs (that settle in the affected areas and/or make changes in the land use patterns) after this cut-off-date will not be eligible for compensation. They will, however, be given a three months' notice requesting them to vacate the premises/corridor and dismantle the affected structures and/or other establishments (if any) prior to project implementation.

J. Monitoring & Evaluation

4.4.2 CONSIDERATION FOR MINIMIZATION OF IMPACTS REGARDING FINALIZATION OF LAY OUT PLAN & PROFILE OF TRANSMISSION LINES

FESCO usually takes all possible steps to safeguard against and minimize the likely adverse impacts on local communities in the design and implementation of its STG Project, involving construction of grid stations and transmission lines. Accordingly, the following specific actions will be applied to avoid and minimize the likely resettlement impacts of Transmission Lines sub-projects

Alignment of the transmission line and tower to tower spans are altered slightly to avoid both the compact housing and commercial areas and scattered farm-houses;

A minimum clearance under the line required is **7 m**, which is maintained for the whole line, even by providing **2 m to 6 m leg** and/or body extension to the towers where required; and,

In urban reaches, the broad-based (7m x 7m) towers will be replaced by narrow-based (1m X 1m) tabular poles, which to be constructed along outer fringes of a road's ROW, to further minimize the impacts on people.

Any built-up structures falling in the outer fringes of the total 30m Rows are not removed, only those falling directly under the live power cables are removed and relocated.

Transmission Line should not pass through Abadies

Transmission Lines should be away from Mosque, School, Hospital, other sensitive Area of ecological importance.

Transmission Line rout should be away from locations of Archaeological importance

Transmission Line should not disturb ecology, wet land & Estuaries

Planted Forests be avoided so that minimum trees are involved.

Constructed Deras be avoided No Indigenous People are found in the proposed FESCO Subproject; however Indigenous People should not be disturbed during execution of Subprojects.

GOVERNMENT OF PAKISTAN



CERTIFICATE OF INCORPORATION

(Under section 32 of the Companies Ordinance, 1984 (XLVII of 1984))

Company Registration No. L 09460 of 1997-98

I hereby certify that "FAISALABAD ELECTRIC SUPPLY COMPANY LTD."

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is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that

the company is limited by

Shares.

Given under my hand at

Lahore.

21st

March

this

day of

ninety eight.

one thousand nine hundred and

Fee Rs. 5,000.200/-

Certified to be true Copy



Joint Registrar
Securities & Exchange
Commission of Pakistan
Company Registration Office
FAISALABAD.

22 DEC 2022

REGISTRAR
OF COMPANIES

No JRL 6990

Dated - 21.3.98

CRO-1

THE COMPANIES ORDINANCE, 1934

PUBLIC COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

OF

FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED

I. The name of the company is "Faisalabad Electric Supply Company Limited".
 II. The registered office of the company will be situated in Faisalabad, Province of Punjab, Pakistan.

III. The objects for which the Company is established are to undertake any or all of the following businesses:

1. To acquire or take over those properties, rights and liabilities of the Pakistan Water and Power Development Authority comprising that administrative division formerly known as the Faisalabad Area Electricity Board (AEB) pursuant to the Pakistan Water and Power Development Authority Act of 1958 (as amended) and to carry on, expand and extend the businesses and activities of such Board or any part thereof including, without limitation, the business of a public electricity distributor and supplier.
2. To acquire or take over the properties, rights and liabilities of the grid stations of the Pakistan Water and Power Development Authority and the radial transmission lines in relation thereto which at the date of adoption of this Memorandum and Articles of Association are directly and exclusively supplying electricity to the areas formerly supplied by the Faisalabad AEB and are located within the said AEB.
3. To carry on all or any of the businesses of purchasing, importing, transforming, converting, distributing, supplying, exporting and dealing in electricity and all other forms of energy and products or services associated therewith and of promoting the conservation and efficient use of electricity and all other forms of energy, and all other powers necessary or incidental to the business of electricity distribution and supply.
4. Electrification. - To do anything which a public electricity supplier is empowered or required to do under or by virtue of or under a license or other authorization granted according to law and its implementing rules and regulations or any statutory instrument made thereunder or any statutory modification or re-enactment thereof and to plan, survey, design, supply equipment, and carry out the electrification of cities, towns, villages, gas and oil refineries, workshops, buildings, highways, bridges, ports, air terminals, and other premises within its area of supply.
5. Dealer in Electrical Equipments. - To carry on all or any of the businesses of wholesalers, retailers, traders, importers, exporters, suppliers, distributors, designers, developers, manufacturers, installers, fitters, testers, repairers, maintainers, contractors, constructors, operators, users, inspectors, reconditioners, servicers, improvers, alterers, protectors, removers, hirers, replacers, importers and exporters of, and dealers in, electrical appliances, systems, products and services used for energy conservation.

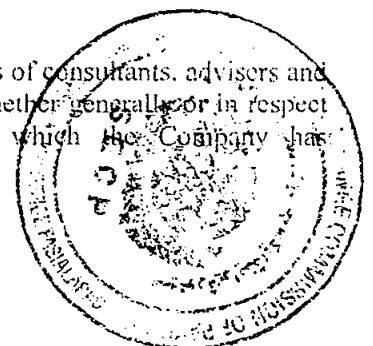
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domestic, commercial, agricultural, industrial, household and general equipment, furniture, fixtures, fittings and devices, and all other kinds of goods, equipment, machinery, materials and installations, including but not limited to cables, wires, meters, pylons, tracks, rails, pipelines and any other plant, apparatus, equipment, systems and things incidental to the efficient transformation, supply, and distribution of electricity.

- 6.5 Determination of Retail Tariff Rates. - To ascertain the retail tariff rates that will secure recovery of operating costs, interest charges and depreciation of assets, redemption at due time of loans other than those covered by depreciation, payment of taxes, and a reasonable return on investment, and to petition the appropriate government body for the adoption of or increase in its schedule of retail tariff rates.
7. Facilities and Installations. - To locate, establish, construct, equip, operate, use, manage and maintain power grid stations, transforming, switching, conversion, and distribution facilities, grid stations, cables, overhead lines, substations, switching stations, tunnels, cable bridges, link boxes, telecommunications stations, masts, aerials and dishes, fiber optic circuits, satellites and satellite microwave connections, heat pumps, plant and equipment for combined heat and power schemes, offices, computer center, shops, dispensing machines for pre-payment cards and other devices, showrooms, depots, factories, workshops, plants, printing facilities, warehouses and other storage facilities (including but not limited to facilities for storage and disposal of products and waste), training, education and display centers, stands and show-houses, testing premises, laboratories, research stations, compressor stations, vehicle parks, terminals, transport facilities, roads, and other electrical installations and infrastructure it may deem beneficial.
8. Acquisition and Conveyance of Assets. - To acquire or convey, whether by purchase, lease, concession, grant, hire or otherwise, establish, develop, exploit, operate and maintain real or personal properties including but not limited to land, any estates in land, claims, licenses, concessions, easements, exploration and production rights, and rights or interests of all descriptions in or relating to the same, which may seem to the Company capable or possibly capable of affording or facilitating the purchase, transformation, conversion, supply, distribution, and development of electricity or any other form of energy, and for the accomplishment of all the purposes of the Company herein stated.
9. Site Development. - To build, construct, maintain, alter, enlarge, pull down, and remove or replace structures, factories, offices, works, wharves, roads, railways, tram ways, machinery, engines, walls, fences, banks, dams, sluices or water courses and to clear sites for the same and to work, manage and control the same and to carry on any other business which may seem to the Company capable of being conveniently carried on in connection with the above or calculated directly or indirectly to enhance the value of or render more profitable the Company's properties, but not to engage in the business of a real estate developer.
10. Intellectual Property Rights. - To apply for and take out, purchase or otherwise acquire any patents, patent rights, inventions, secret processes, designs, copyrights, trademarks, service marks, commercial names and designations, technological know-how, formulae, licenses, concessions and the like (and any interest in any of them), and exclusive or non-exclusive or limited rights to use any secret or other information as to any invention or secret process of any kind, and to use, exercise, develop, and grant licenses

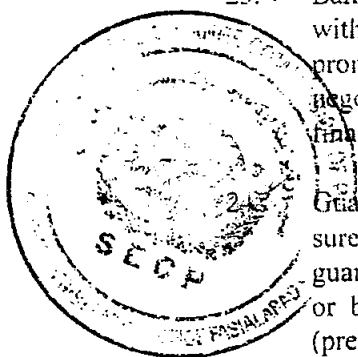
in respect of, and otherwise turn to account and deal with, the property, rights and information so acquired.

11. ✓ Metering. - For the purposes of electricity supply, distribution and communication, to install in, on, above or under any premises or place and to operate, use, inspect, maintain, repair, replace and remove cables, lines, ducts, transformers, switchgear (remotely controlled and otherwise, and including time switches), fuses, circuit breakers, electricity service equipment, meters and other devices for measuring or controlling the quantity or quality of electricity supplied, prepayment and debt payment devices, items provided to afford access to, support, encase, insulate, and protect from damage or tampering, the above-mentioned gadgets, or to protect people and property from injury or damage, or to comply with any legal obligation and for other purposes associated with the supply of electricity and to install all such things and apparatus and items for the purposes of supplying, measuring and controlling light, heat, steam, hot water, air-conditioning and refrigeration, and for associated purposes, including payment for these facilities.
12. ✓ Demand Forecasting. - To provide or procure the provision of such facilities and services as may be necessary or desirable to forecast electricity/energy demand and to satisfy such demand.
13. ✓ Transportation. - To acquire, (whether by purchase, lease, concession, grant, hire or otherwise), charter, lease, take or let on hire, operate, use, employ or turn to account, build, equip, service, repair, maintain, and supply motor vehicles, railway locomotives, wagons, trucks, vessels, and craft of any description, engineering plants and machinery, and parts and accessories of all kinds, and to carry on the businesses of storage contractors, freight contractors, carriers by land, water and air of freight and passengers, forwarding agents, shipping agents and agents of any other kind, in so far as such activities are incidental to or necessary for the transformation, supply and distribution of electricity.
14. ✓ Audio-Visual System. - To carry on as principal, agent, contractor or sub-contractor all or any of the businesses of running, operating, managing, supplying and dealing in systems for the conveyance by any means of sounds, visual images, signals, and services, facilities and equipment ancillary to or for use in connection with such systems.
15. ✓ Management Information System. - To carry on all or any of the businesses of running, operating, managing, supplying and dealing in data processing and information retrieval systems, computers, computer programmes and software, computer bureau and data bases, meter reading and credit checking and to provide services, facilities and equipment ancillary to or for use in connection with the same.
16. ✓ Research and Development. - To carry on business as inventors, researchers and developers, to conduct, promote and commission research and development in connection with the businesses and activities of the Company and its subsidiaries, to establish and maintain research stations, laboratories, workshops, testing and proving grounds and sites, facilities and establishments and installations, and to exploit and turn to account the results of any research and development carried out by or for it.
17. ✓ Labour Contracting. - To carry on all or any of the businesses of consultants, advisers and suppliers of management, personnel and training services, whether generally or in respect of one or more of the types of business or activity which the Company has



power to carry on, and to provide training and educational courses, instruction and materials, of every description for workers of the Company and for other persons.

18. ✓ Contracts. - To enter into agreement with any individual, firm, cooperative or other society, company, corporate body, Government or local authority or other legal entity necessary or expedient for the purpose of carrying on any business of the Company.
19. ✓ Engineering Services. - To carry on all or any of the businesses of and provide services associated with, engineers (including without limitation electrical, mechanical, heating, ventilation, civil, chemical, sanitation, telecommunications and gas engineers), mechanics, technicians, draftsmen, designers, surveyors, architects, builders, decorators, caterers, kitchen installers, and shopfitters.
20. ✓ Advertisement. - To adopt such means of making known the products of the Company as may seem expedient and, in particular, by advertising in the press, by circulars, by purchase and exhibition of works of art or interests, by publication of books and periodicals, and by granting prizes, rewards and donations.
21. ✓ Other Businesses. - To carry on all or any of the businesses of manufacturers, wholesalers, retailers, and traders, whether generally or in relation to particular goods or commodities, and to carry on all or any of the businesses of factors, debt collectors, and developers of and dealers in property, so far as incidental to or necessary for the transformation, distribution and supply of electricity.
22. ✓ Borrowing. - To borrow or raise money or secure or discharge any debt or obligation (whether of the Company or any other person) in such manner as the Company thinks fit and in particular (but without prejudice to the generality of the foregoing) by the creation or issue, upon such terms as to priority or otherwise as the Company thinks fit, of securities of any kind or mortgages or discharges founded or based upon all or any part of the undertaking, property, assets and rights (present and future) of the Company, or, without any such security, and advance payments with or without allowance of mark-up thereon.
23. ✓ Bank Accounts. - To open, operate, transfer, and close banking accounts of the Company with any bank or banks and to draw, make, accept, endorse, discount, execute, and issue promissory notes, bills of exchange, bills of lading, warrants, debentures, and other negotiable/non-negotiable or transferable/non-transferable instruments, but not to act as a finance or banking company.
24. ✓ Guaranty and Suretyship. - To enter into any guarantee, contract of indemnity or suretyship and, in particular (without prejudice to the generality of the foregoing), to guarantee, support or secure, with or without consideration, whether by personal obligation or by mortgaging or charging all or any part of the undertaking, property and assets (present and future), and unsubscribed capital of the Company or by both such methods or in any other manner, the performance of any contract, obligation or commitment of, and the repayment or payment of the principal amounts of and any premiums, interest, dividends, and other moneys payable on or in respect of any securities or liabilities of, any person, including (without prejudice to the generality of the foregoing) any company which is a subsidiary, an affiliate or a holding company of the Company or otherwise associated with the Company, whether or not any valuable consideration or advantage is received by the Company.



25. ✓ Partnerships. - To enter into partnership, joint venture or cooperation arrangements with any person or company or other legal entity, local or foreign, carrying on or engaged in any business or transaction which the Company is authorized to carry on or engage in, or otherwise seek assistance from or assist any such person, company or legal entity.
26. ✓ Related Businesses. - To acquire by any means the whole or any part of the assets, and to undertake the whole or any part of the liabilities, of any person, natural or juridical, carrying on or proposing to carry on any business which the Company is authorized to carry on or which can be carried on in connection therewith, to acquire an interest in, amalgamate or enter into partnership or into any arrangement for sharing profits, cooperation, or mutual assistance, with any such person, to promote, form and sponsor any company or companies in furtherance of the objects herein stated, and to give or accept, for any of the acts or things aforesaid or property acquired, such consideration as the Company thinks fit, including without limitation, any shares, debentures, or other securities or rights.
27. ✓ Equity Investment. - To invest the surplus moneys of the Company not immediately required in any manner to subscribe for, purchase or otherwise acquire, and to hold, and deal with, any shares, debentures, bonds, notes, and other securities, obligations and investments of any nature whatsoever, including any options or rights in respect of them, and otherwise to invest and deal with the money and assets of the Company, but not to act as an investment company.
28. ✓ Lending. - To advance money or give credit to such persons or companies and on such terms as may seem expedient and, in particular, to customers and others having dealings with the Company, to guarantee the performance of any contract or obligation and the payment of money by the Company, and to accept securities of any person or any property or interest therein of whatever nature in payment or partial payment for any services rendered or for any sale or supply made to, or debt owing from, any such person, but not to act as a finance or banking company.
29. ✓ Trusts. - To vest any real or personal property, rights or interests acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the Company, with or without any declared trust in favour of the Company, and to undertake and execute any trust the undertaking whereof may seem desirable, either gratuitously or otherwise.
30. ✓ Portfolio Investments. - Subject to such terms and conditions as may be thought advantageous, to trade its shares and to undertake markup and currency swaps, options (including traded options), swap option contracts, forward exchange contracts, future contracts or other financial instruments allowed by law, including hedging agreements of any kind, all or any of which may be on a fixed and/or floating rate basis and/or in respect of local or foreign currency or commodities of any kind, but not to engage in the business of a stockbroker.
31. ✓ Government Permissions. - To apply for and obtain necessary consents, permissions and licenses from any Government, Provincial, Local, Foreign, Multilateral or other authorities or entities for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for effecting any modification of the constitution of the Company or for any other purpose which may seem expedient and to enter into arrangements with any Government or authorities, foreign or federal.

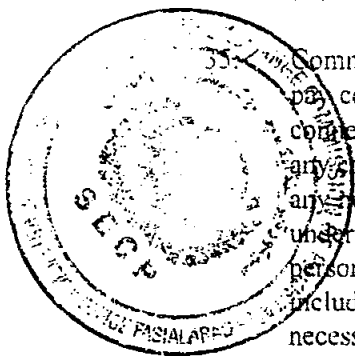
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provincial, municipal, local or otherwise, public or quasi-public bodies, or with any other persons, in any place where the Company may have interests that may seem conducive to the objects of the Company or any of them and to obtain from any such Government, authorities or persons any rights, privileges and concessions which the Company may think fit to obtain, and to carry out, exercise and comply therewith.

32. ✓ Dispute Resolution. - To resolve disputes by negotiation, conciliation, mediation, arbitration, litigation or other means, judicial or extra-judicial, and to enter into compromise agreement with creditors, members and any other persons in respect of any difference or dispute with them and to exercise the power to sue and be sued and to initiate or oppose all actions, steps, proceedings or applications which may seem calculated directly or indirectly to benefit or prejudice, as the case may be, the interests of the Company or of its members.

33. ✓ Employees' Funds. - To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to such persons who are or were at any time in the employ or serv. . . of the Company, or of any company which is a holding company or a subsidiary of the Company or is allied to or associated with the Company or with any such subsidiary or affiliate company, or who are or were at any time directors or officers of the Company or of any such other company as aforesaid, and the wives, widows, families and qualified dependents of any such persons, and also to establish, subsidize and subscribe to institutions, associations, clubs or funds calculated to be for the benefit of or to advance the interests and well-being of the Company or of any such other company as aforesaid, and make payments to or towards the insurance of any such person as aforesaid and do any of the matters aforesaid, either alone or in conjunction with any such other company as aforesaid.

34. ✓ Remuneration. - To enter into contracts with its salaried employees, including a chief executive who, prior to his appointment as such, was not a director of the Company or of its subsidiary or holding Company, and to provide for such other financial assistance to said employees or workers under personnel rules and regulations that the Company may subsequently adopt.



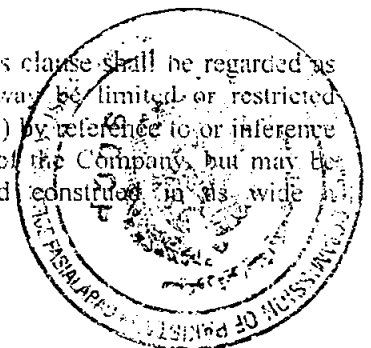
35. ✓ Commissions. - To pay and discharge all or any expenses, costs and disbursements, and to pay commissions and to remunerate any person for services rendered or to be rendered in connection with the formation, registration, promotion and flotation of the Company, and any company formed, sponsored, registered, and promoted by the Company or incidental to any negotiations between promoters preliminary to the formation of the Company, and the underwriting, placing or issue at any time of securities of the Company or of any other person plus all costs and expenses incurred in the acquisition of any property or assets, including the accomplishment of all or any formalities which the Company may think necessary or proper in connection with any of the matters aforesaid.

36. ✓ Charitable Contributions. - To subscribe or contribute (in cash or in kind) surplus properties to, and to promote or sponsor, any charitable, eleemosynary, scientific, educational, benevolent or useful object of a public character or any object which may in the opinion of the Company be likely, directly or indirectly, to further the interests of the Company, its employees and workers or its members.

37. Dissolution and Winding Up. - To cease carrying on or wind up any business or activity of the Company and to cancel any registration of and to wind up or procure the dissolution of the Company in any state or territory.
38. Equity Conversion. - To issue, allot and grant options over securities of the Company towards the satisfaction of any liability or obligation undertaken or agreed to be undertaken by or for the benefit of the Company, or in consideration of any obligation or for any other similar purpose.
39. International Operations. - To procure the Company to be registered or recognized in any part of the world and to do all or any of the above things in any part of the world, either as principal, agent, trustee, contractor or otherwise, alone or in collaboration with another, and either by or through agents, trustees, sub-contractors, subsidiaries or otherwise.
40. Disposal of Assets and Declaration of Dividends. - To dispose by any means of the whole or any part of the assets of the Company or of any interest therein and to distribute in specie or otherwise by way of dividends or bonus or reduction of capital all or any of the property or assets of the Company among its members, and particularly, but without prejudice to the generality of the foregoing, securities of any other company formed to take over the whole or any part of the assets or liabilities of the Company or any proceeds of sale or other disposal of any property or assets of the Company.
41. Insurance. - To insure the property, assets, and employees of the Company in any manner deemed fit by the Company, and to create any reserve fund, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing, insuring, improving, extending or maintaining any of the properties of the Company or for any other purpose conducive to the interests of the Company, but not to act as an insurance company.
42. Regulations. - To make rules or regulations not inconsistent with this Memorandum and to provide for all matters for which provision is necessary or expedient for the purpose of giving effect to the provisions of this Memorandum and the efficient conduct of the affairs of the Company.
43. General Power. - To carry on any other businesses or activities which the Directors consider capable of being carried on directly or indirectly for the benefit of the Company and to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

Declaration. It is hereby declared that

- (a) the word "company" in this Memorandum of Association, except where used in reference to this Company, shall be deemed to include any partnership or other body of persons, whether corporate or unincorporated, and whether domiciled in Pakistan or elsewhere;
- (b) the objects specified in each of the paragraphs of this clause shall be regarded as independent objects and, accordingly, shall in no way be limited or restricted (except where otherwise expressed in such paragraphs) by reference to or inference from the terms of any other paragraph or the name of the Company, but may be carried out in as full and ample a manner and construed in its wide



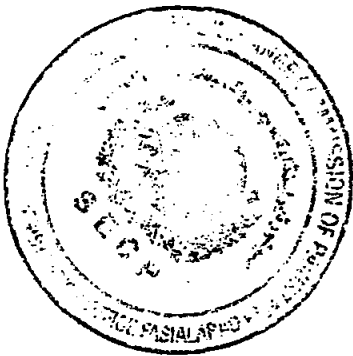
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sense as if each of the said paragraphs defined the objects of a separate and distinct company;

- (c) the headings used in each of the paragraphs are for convenience only and are not intended to affect the construction thereof in any way; and,
- (d) notwithstanding anything contained in the foregoing object clauses of this Memorandum of Association, nothing herein shall be construed as empowering the Company to undertake or indulge in the business of banking or financing institution, leasing, investment, or real estate brokerage or insurance, directly or indirectly, as restricted by law or in any unlawful operations.

IV. The liability of the members is limited.

V. The authorized share capital of the Company is Rs. 50,000,000,000 (Rupees Fifty billion) divided into 5,000,000,000 (five billion) ordinary shares of Rs. 10 (Rupees Ten) each with power to increase or reduce the capital and to divide the shares in the capital for the time being into several classes and to attach thereto respectively such rights, privileges or conditions as may be determined by or in accordance with the regulations of the Company, and to vary, modify or abrogate any such rights, privileges or conditions in such manner as may for the time being be provided by the regulations of the Company in accordance with law; provided, however, that rights as between various classes of ordinary shares, if any, as to profits, votes and other benefits shall be strictly proportionate to the paid-up value of shares.



We the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Sr. No.	Name and surname (Present and former) in full (in Block Letters)	Father's/Husband's Name in Full	Nationality	Occupation	Residential Address in Full	Number of Shares taken by Each Subscriber	Signature
1.	Mr. Muhammad Bashir Baigash	Abdul Khanan	Pakistani	WAPDA Service	A-2, WAPDA Officers Colony, Abdullahpur, Faisalabad.	1	
2.	Mr. Riaz Ahsan Baig	Abdul Latif Baig	Pakistani	WAPDA Service	House No. 85/E/2, Arif Jan Road, Lahore Cantt.	1	
3.	Mr. Javed Nizam	Muhammad Islam	Pakistani	WAPDA Service	263-Tariq Block, New Garden Town, Lahore.	1	
4.	Kh. Sajjad Haider	Kh. Muhammad Azam	Pakistani	WAPDA Service	3-Sikandar Block, Allama Iqbal Town, Lahore.	1	
5.	Mr. Saif-ud-Din	Akhtar Mehmood (Late)	Pakistani	WAPDA Service	25-B, WAPDA Colony, Abdullahpur Faisalabad.	1	
6.	Mr. Tariq Shahab	Shaukat Ali Shahab Talib	Pakistani	WAPDA Service	21-Greenwood Homes, Block C, New Muslim Town, Lahore.	1	
7.	Mr. Zaheer ud Din	Fazal Elahi	Pakistani	WAPDA Service	209-Pak Block, Allama Iqbal Town, Lahore.	1	

Total number of shares taken (Seven)

Dated the 12 day of March 1995

Witnesses to above signatures

(Full Name, Father's/Husband's Name)

(in Block Letters) KHALID BASHIR
S/o Mohd Baigash

Adel, Joint Registrar
Securities & Exchange
Commission of Pakistan
Company Registration Office
FAISALABAD

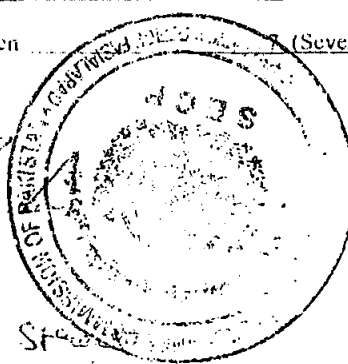
Certified to be true Copy
22 DEC 2022

Signature

Occupation

Full Address

Signature
Service
34- Rizwan Street
Samanabad Lahore



THE COMPANIES ORDINANCE, 1984
PUBLIC COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

OF

FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED



I. PRELIMINARY

1. TABLE "A" Not to Apply

The regulations in Table 'A' in the First Schedule to the Companies Ordinance, 1984 shall not apply to the Company except as reproduced herein.

2. Definitions

Unless the context otherwise requires, capitalized terms used in these Articles shall have the meanings set out below:-

- (a) "Articles" mean these Articles as originally framed or as from time to time altered in accordance with law.
- (b) "Board" means the group of Directors in a meeting duly called and constituted or, as the case may be, the Directors assembled at a board.
- (c) "Company" means the Faisalabad Electric Supply Company Limited.
- (d) "Directors" means the Directors for the time being of the Company as named in Article 49 and, subsequently, such members duly elected and registered pursuant to Sections 178 and 205, respectively.
- (e) "Month" means calendar month according to the Gregorian calendar.
- (f) "Office" means the registered office for the time being of the Company.
- (g) "Ordinance" means the Companies Ordinance, 1984, or any modification or re-enactment thereof for the time being in force.
- (h) "Ordinary Resolution" means a resolution passed at a general meeting of the Company when the votes cast (whether *viva voce*, by show of hands or by poll) in favour of a resolution by members who, being entitled to vote in person or by proxy, do so vote, exceed the number of votes, if any, cast against the resolution by members so entitled and voting.
- (i) "Register" means, unless the context otherwise requires, the register of members to be kept pursuant to Section 147 of the Ordinance.
- (j) "Seal" means the common or official seal of the Company.

(k) "Section" means a Section of the Ordinance.

(l) "Special Resolution" means the special resolution of the Company as defined in Section 2(1)(36) of the Ordinance.

3. Interpretation

In these Articles, unless the context otherwise requires:-

(a) provisions bearing on transfer or transmission of shares, meetings, voting in person or by proxy, management, and the appointment, powers and removal of Directors and employees of the Company shall be read subject to the provisions of Section 183 relating to the power of control by a holding company over its subsidiary;

the headings are for convenience only and do not constitute part of these Articles and shall not be used in construing these Articles;

(b) the singular includes the plural and vice versa and words denoting any gender shall include all genders;

(c) references to any Act, Ordinance, legislation, Rules or Regulations or any provision of the same shall be a reference to that Act, Ordinance, legislation, Rules or Regulations or provision, as amended, re-promulgated or superseded from time to time;

(d) the terms "include" or "including" shall mean include or including without limitation;

(e) expressions referring to writing shall, unless the contrary intention appears, be construed as including references to printing, lithography, photography, and other modes of representing or reproducing words in a visible form;

(f) words importing persons shall include bodies corporate; and

(g) words and expressions contained in these Articles shall bear the same meaning as in the Ordinance.

II. BUSINESS

4. Public Company

The Directors shall have regard to the restrictions on the commencement of business imposed by Section 146 if, and so far as, those restrictions are binding upon the Company.

III. SHARES

A. General

5. Shares Under Directors' Control

Subject to Section 183 and these Articles, the shares of the Company shall be under the control of the Directors who may allot or otherwise dispose of the same to such persons, on such terms and conditions as the Directors think prudent.

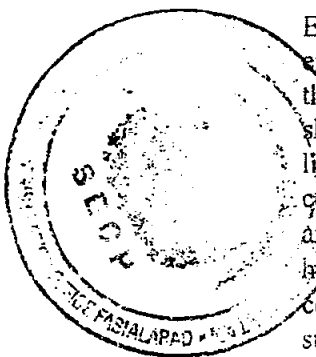
6. Amount Payable on Application

No shares shall be offered to the public for subscription except upon the term that the amount payable on application shall not be less than the full amount of the nominal amount of the share.

7. Allotment of Shares

No share shall be issued at a discount except in accordance with the provisions of the Ordinance. The Directors shall, as regards any allotment of shares, duly comply with such of the provisions of Sections 68 to 73, as may be applicable to the Company. The minimum subscription upon which the Company may proceed to allot the shares shall be Rs 10,000 (Rupees Ten Thousand).

8. Share Certificates



Every person whose name is entered as a member in the Register shall, free of charge, be entitled to receive within ninety (90) days after allotment or within forty-five (45) days of the application for registration of transfer, a certificate under Seal specifying the share or shares held by him and the amount paid-up thereon, including in particular and without limitation, such legends as the Company shall be obliged to affix to certain classes of share certificates as provided by law or as the Company shall have agreed to affix pursuant to any contractual arrangement in this respect. Provided, that, in respect of share or shares held jointly by several persons, the Company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all.

9. Certificate under Seal

The certificate of title to shares may be issued under the authority of a Director or of a committee of Directors duly authorized thereto by the Board in such manner and form as the Directors may from time to time prescribe. The Seal shall be duly affixed to every share certificate issued by the Company.

10. Issuance of Replacement Certificate

If a share certificate is defaced, lost or destroyed, it may be renewed on payment by the requesting shareholder or his representative of such fee and stamp taxes, if any, and compliance with such terms prescribed by the Directors as to evidence and indemnity and payment of expenses incurred by the Company in investigating title.

11. Joint Holders

The Company shall not be bound to register more than four persons as joint holders of any share.

12. Trusts Not Recognized

Except as required by law, no person shall be recognized by the Company as holding any share/s upon any trust, and the Company shall not be bound by or be compelled in any way to recognize (even when having notice thereof) any equitable, contingent, future or partial interest in any share or any interest in any fractional part of a share or (except only as by these Articles or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.

13. Payment of Commission

The Company may at any time pay a commission to any person for subscribing or agreeing to subscribe (whether absolutely or conditionally) for any shares, debentures or debenture stock in the Company or procuring or agreeing to procure subscriptions (whether absolutely or conditionally) for any shares, debentures or debenture stock in the Company; Provided, that, if the commission in respect of shares shall be paid or payable out of capital, the statutory requirements and conditions shall be observed and complied with, and the amount or rate of commission shall not exceed such percentage on the shares, debentures or debenture stock in each case subscribed or to be subscribed, as may be determined by the Board subject to any limits required by law. The commission may be paid or satisfied, either wholly or partly, in cash or in shares, debentures or debenture stock. The Company may also on any issue of shares pay such brokerage fees as may be lawful; Provided that such brokerage fees shall not exceed such percentage of the shares, debentures or debenture stock paid-up as may be determined by the Board, subject to any limits required by law.

14. Bar on Use of Company Funds

Except to the extent and in the manner allowed by Section 95, no part of the funds of the Company shall be employed in the purchase of, or in loans upon the security of, the Company's shares.

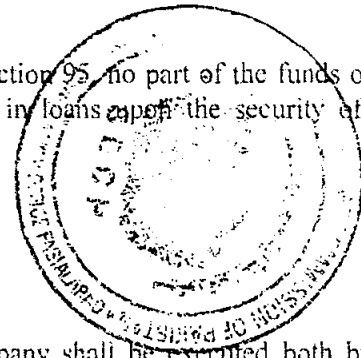
B. TRANSFER OF SHARES

15. Transfer

The instrument of transfer of any share in the Company shall be executed both by the transferor and transferee, and the transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the Register in respect thereof.

16. Form of Transfer

Shares in the Company shall be transferred in the following form, or in any usual or common form which the Directors shall approve:-



Faisalabad Electric Supply Company Limited

I/We, _____, of _____, in consideration of the sum of Rupees _____ paid to me by _____, of _____, (hereinafter called the "Transferee/s", for brevity), do hereby transfer to the Transferee/s the Ordinary/Preferred Share(s) numbered _____ to _____ inclusive, standing in my/our name in the books of the Faisalabad Electric Supply Company Limited, to hold unto the said Transferee, his/her/their executors, administrators and assigns, subject to the several conditions on which I/We held the same at the time of the execution hereof, and I/We, the Transferee/s, do hereby agree to take the said share (s) subject to the conditions aforesaid

Witness our hands this _____ day of _____.

Transferor

Transferee

Signature

Signature

Signed by the above-named Transferor/s and Transferee/s in the presence of:

Witnesses

Full Name, Father's/
Husband's Name

(1) _____
Signature

Nationality _____

Full Address: _____

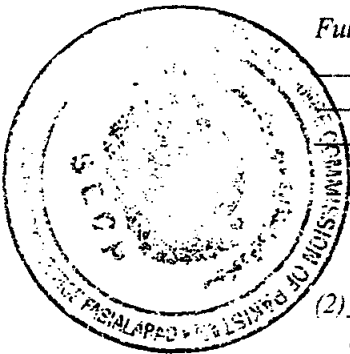
Occupation _____

Full Address of
Transferee: _____

(2) _____
Signature

Full Address: _____

Occupation _____



17. Non- Refusal of Transfer of Shares

The Directors shall not transfer any fully paid shares unless the transfer deed is defective or invalid. The Director may decline to recognize any instrument of transfer, unless-

- (a) a fee not exceeding two rupees as may be determined by the Directors and the appropriate stamp tax is paid to the Company in respect thereof; and
- (b) the duly stamped instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer.

If the Directors refuse to register a transfer of shares, they shall within one Month after the date of which the transfer deed was lodged with the Company send to the transferee and the transferor notice of the refusal indicating the defect, invalidity or any ground for objection to the transferee, who shall, after removal of such defect or invalidity be entitled to re-lodge the transfer deed with the Company.

18. Closure of Register

On giving seven days' prior notice in the manner provided by the Ordinance, the Register may be closed for such period or periods not exceeding forty-five (45) days in any one year as the Directors may from time to time determine; however, the Register shall not be closed for a period longer than thirty (30) days at any given time.

C. TRANSMISSION OF SHARES

19. Transmission

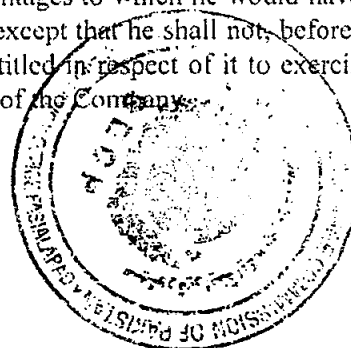
The executors, administrators, heirs or nominees, as the case may be, of a deceased sole holder of a share shall be the only persons recognized by the Company as having any title to the share. In the case of a share registered in the names of two or more holders, the survivor or survivors shall upon proof of his right of succession be the only person or persons recognized by the Company as having any title to the share.

20. Election to Register or Transfer

Any person becoming entitled to a share in consequence of the death or insolvency of a member shall, upon such evidence being produced as may from time to time be required by the Directors, have the right, either to be registered as a member in respect of the share or, instead of being registered himself, to make such transfer of the share as the deceased or insolvent person could have made. The Directors shall, in either case, have the same right to decline or suspend registration as they would have had in the case of a transfer of the share by the deceased or insolvent person before the death or insolvency.

21. Rights of Person Entitled by Transmission

A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would have been entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the Company.



D. ALTERATION OF CAPITAL

22. Power to Increase Capital

The Company may, from time to time, by ordinary resolution, increase the share capital by such sum to be divided into shares of such amount as the resolution shall prescribe.

23. Further Issue of Capital

All further issue of shares capital shall be subject to the applicable provisions of Section 86. Thereafter, the Directors may dispose of the same in such manner as they think most beneficial to the Company.

24. Provisions Applicable to New Shares

The new shares capital shall be subject to the same provisions with reference to transfer and transmission as the original share capital.

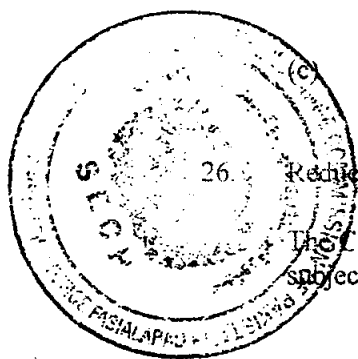
25. Consolidation and Subdivision

The Company may, by ordinary resolution:-

- (a) consolidate and divide its share capital into shares of larger amount than its existing shares;
- (b) subdivide its existing shares or any of them into shares of smaller amount than that fixed by the Company's Memorandum of Association, subject to the provisos to Section 92, sub-section (1), clause (d); or
- (c) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

26. Reduction of Share Capital

The Company may, by Special Resolution, reduce its share capital in any manner, with and subject to any incident authorized and consent required by law.



IV. MEETINGS AND PROCEEDINGS

A. GENERAL MEETINGS

27. Statutory Meeting

The statutory general meeting of the Company shall be held within the period required by Section 157.

28. Annual General Meeting

The annual general meeting shall be held in accordance with the provisions of Section 158, within eighteen (18) Months from the date of incorporation of the Company and, thereafter, once at least in every year within a period of six Months following the close of its financial year and not later than fifteen Months after the holding of its last preceding annual general meeting, as may be determined by the Directors.

29. Other Meetings

All general meetings of the Company other than the statutory meeting or an annual general meeting shall be called extraordinary general meetings.

30. Extraordinary Meetings

The Directors may whenever they think necessary, call an extraordinary general meeting. Extraordinary general meetings may also be called on such requisition, or in default, may be called by such requisition, as provided under Section 159. If at any time there are not within Pakistan sufficient Directors capable of acting to form a quorum, any Director of the Company may call an extraordinary general meeting in the same manner as nearly as possible as that in which meetings may be called by the Directors.

B. Notice and Proceedings

31. Notice of Meetings

Twenty-one days' notice at the least (exclusive of the day on which the notice is served or deemed to be served, but inclusive of the day for which notice is given) specifying the place, the date and the hour of meeting and, in case of special business, the general nature of that business, shall be given in the manner provided by the Ordinance for the general meeting to such persons as are, under the Ordinance or the regulations of the Company, entitled to receive such notices from the Company.

32. Special Business

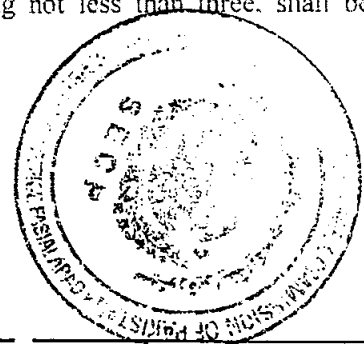
All business shall be deemed special that is transacted in an extraordinary general meeting and those transacted in an annual general meeting, with the exception of declaration of dividends, the consideration of the accounts, balance sheet and the reports of the Directors and auditors, the election of Directors, and the appointment and fixing of the remuneration of auditors.

33. Quorum

No business shall be transacted at any general meeting unless a quorum of members is present at that time when the meeting proceeds to business. Three members present personally who represent not less than twenty-five percent of the total voting power either on their own account or as proxies shall be a quorum.

34. Effect of Quorum Not Being Present

If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if called upon the requisition of members, shall be dissolved; In any other case, it shall stand adjourned to the same day in the next week at the same time and place, and, if at the adjourned meeting a quorum is not present within half an hour from the time appointed for the meeting, the members present, being not less than three, shall be a quorum.



35. Chairman of Meeting

The Chairman of the Board of Directors, if any, shall preside as chairman at every general meeting of the Company, but if there is no such Chairman, or if at any meeting he is not present within fifteen minutes after the time appointed for the meeting, or is unwilling to act as chairman, any one of the Directors present may be elected to be the chairman, and if none of the Directors is present, or willing to act as chairman, the members present shall choose one of their number to be the chairman.

36. Adjournment

The Chairman may, with the consent of any meeting at which a quorum is present (and shall if so directed by the majority of members present), adjourn the meeting from time to time but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. When a meeting is adjourned for ten days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

37. Voting

A resolution put to the vote in any general meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. Unless a poll is so demanded, a declaration by the Chairman that a resolution has, on a show of hands, been carried, or carried unanimously, or by a particular majority, or lost, and an entry to that effect in the minutes of the proceedings of the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favor of, or against, that resolution.

38. Demand for a Poll

A poll may be demanded only in accordance with the provisions of Section 167.

39. Manner of Taking a Poll

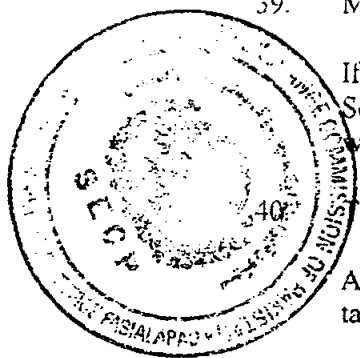
If a poll is duly demanded, it shall be taken in accordance with the manner laid down in Section 168 and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded.

40. Time of Taking a Poll

A poll demanded on the election of Chairman or on a question of adjournment shall be taken at once.

41. Casting Vote

In the case of an equality of votes, whether on a show of hands or on a poll, the chairman of the meeting at which the show of hands takes place, or at which the poll is demanded, shall have and exercise a second or casting vote.



C. Votes of Members

42. Right to Vote

Subject to any rights or restrictions for the time being attached to any class or classes of shares, on a show of hands every member present in person shall have one vote except for election of Directors in which case the provisions of Section 178 shall apply. On a poll, every member shall have voting rights as laid down in Section 160.

43. Voting By Joint Holders

In case of joint-holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint-holders. For this purpose, seniority shall be determined by the order in which the names stand in the Register.

44. Voting: Corporation Representatives

On a poll, votes may be given either personally or by proxy; Provided, that, no body corporate shall vote by proxy as long as a resolution of its directors in accordance with the provisions of Section 162 of the Ordinance is in force.

45. Proxy to be in Writing

The instrument appointing a proxy shall be in writing under the hand of the principal to his attorney duly authorized in writing. A proxy must be a member of the Company.

46. Instrument Appointing Proxy to be Deposited

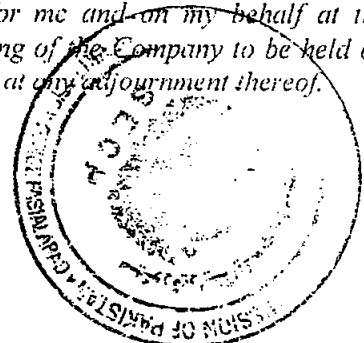
The instrument appointing a proxy and the power-of-attorney or other authority (if any) under which it is signed, or a notarially certified copy of that power or authority, shall be deposited at the Office of the Company not less than forty-eight (48) hours before the time for holding the meeting at which the person named in the instrument proposes to vote and in default the instrument of proxy shall not be treated as valid.

47. Form of Proxy

An instrument appointing a proxy may be in the following form, or a form as near thereto as may be:

FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED

I, _____, of _____, in the District of _____, being a member of Faisalabad Electric Supply Company Limited, hereby appoint _____ of _____, as my proxy to vote for me and on my behalf at the (annual/extraordinary as the case may be) general meeting of the Company to be held on the _____ day of _____, and at any adjournment thereof.



48. Revocation of Authority

A vote given in accordance with the terms of an instrument of proxy shall be valid notwithstanding the previous death or insanity of the principal or revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the share in respect of which the proxy is given: Provided, that, no intimation in writing of such death, insanity, revocation or transfer as aforesaid shall have been received by the Company at its Office before the commencement of the meeting or adjourned meeting at which the proxy is used.

V. MANAGEMENT AND ADMINISTRATION

A. Board of Directors

49. Number of Directors

The number of Directors shall not be less than seven. The first Directors, to hold office until the first annual general meeting, shall be:-

1. Mr. Muhammad Bashir Bangash
2. Mr. Riaz Ahsan Baig
3. Mr. Javed Nizam
4. Kh. Sajjad Haider
5. Mr. Salah-ud-Din
6. Mr. Tariq Shahab
7. Mr. Zaheer ud Din

Qualification of Directors

Save as provided in Section 187, no person shall be appointed as a Director unless he is a member of the Company.

Chairman of the Board

The Directors may elect one of their number as the Chairman of the Board and vest in him such powers and functions as they may deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control.

52. Chief Executive

The Directors may elect one of their number to be the Chief Executive of the Company in accordance with the provisions of Sections 198 and 199 and vest in him such powers and functions as they deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control. The Chief Executive of the Company shall be the *ex-officio* Vice-Chairman of the Board. The

provisions of the Ordinance shall be observed regarding other matters relating to the Chief Executive.

53. Remuneration

Subject to any approval or limits required by law, the terms and conditions and remuneration of:-

- (a) Director for performing extra services, including the holding of the office of Chairman;
- (b) the Chief Executive; and
- (c) any Director for attending the meetings of the Directors or a Committee of Directors shall be determined by the Board of Directors.

54. Alternate Director

A Director may, with the approval of the Board, appoint any person (including another Director) to be his alternate Director and such an alternate Director shall be entitled to notice of meetings of the Directors and to attend and vote thereat accordingly and, generally, to exercise all the rights of such absent Director subject to any limitations in the instrument appointing him. For the purposes of the proceedings at such meetings, the provisions of these Articles shall apply as if any alternate Director (instead of his appointer) were a Director. An alternate Director shall not require any share qualification and he shall *ipso facto* vacate office as and when his appointer (a) vacates office as a Director; (b) removes the appointee from office; or (c) returns to Pakistan; Provided, that, upon each occasion upon which the appointer thereafter leaves Pakistan again, and unless the appointer shall have informed the Company to the contrary, he shall be deemed to have re-appointed the appointee as his alternate Director and no further approval of the Board shall be required unless the appointer desires to approve another person not previously approved by the Board as his alternate. If an alternate Director shall be himself a Director, his voting rights shall be cumulative but he shall not be counted as more than one for quorum purposes. Any appointment or removal under this Article shall be reflected by notice in writing under the hand of the Director making the same.

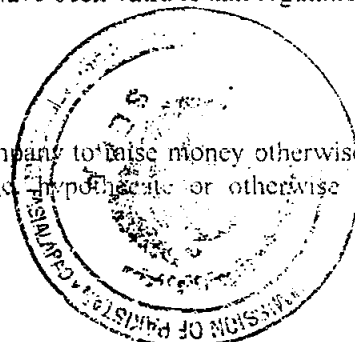
B. POWERS AND DUTIES OF DIRECTORS

55. General Management Powers

The business of the Company shall be managed by the Directors, who may exercise all such powers of the Company as are not by the Ordinance or by these regulations, required to be exercised by the Company in general meeting, subject nevertheless to the provisions of the Ordinance or to any of these Articles, and such regulations being not inconsistent with the aforesaid provisions, as may be prescribed by the Company in a general meeting; but no regulation made by the Company in general meeting shall invalidate any prior act of the Directors which would have been valid if that regulation had not been made.

56. Borrowing Powers

The Directors may exercise all the powers of the Company to raise money otherwise than by issue of shares and to mortgage, charge, pledge, hypothecate or otherwise create



an encumbrance on its undertaking or any part thereof and to issue debentures and other securities whether outright or as security for any obligation, liability or debt of the Company or of any third party. In exercising the aforesaid powers of the Company the Directors may, from time to time and on such terms and conditions as they think fit, raise money from banks and financial institutions and from other persons under any permitted system of financing, whether providing for payment of interest or some other form of return, and in particular the Directors may raise money on the basis of mark-up price, musharika, modaraba or any other permitted mode of financing, and without prejudice to the generality of the foregoing the Directors may exercise all or any of the powers of the Company under Section 196(2) of the Ordinance. In particular, the Directors may issue any security as defined in Section 2(1)(34) of the ordinance or may issue any instrument or certificate representing redeemable capital as defined in 2(1)(30A) of the Ordinance or participatory redeemable capital as defined in Section 2(1)(25) of the Ordinance.

57. Duties of Directors

The Directors shall duly comply with the provisions of the Ordinance.

58. Minute Books

The Directors shall cause minutes to be made in books provided for the purpose of:-

- (a) all appointments of officers made by the Directors;
- (b) the names of the Directors present at each meeting of the Directors and of any committee of the Directors; and
- (c) all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors; and every Director present at any meeting of Directors or committee of Directors shall sign his name in a book to be kept for that purpose.

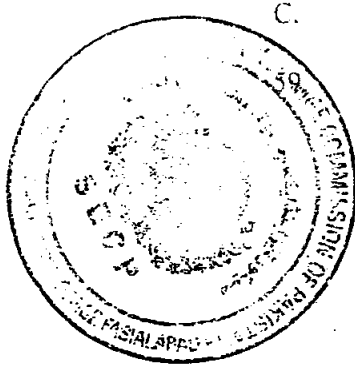
C. DISQUALIFICATION OF DIRECTORS

Disqualification of Directors

No person shall become a Director of the Company if he suffers from any of the disabilities or disqualifications mentioned in Section 187 of the Ordinance and, if already a Director, shall cease to hold such office from the date he so becomes disqualified or disabled or:-

- (a) if removed by general or special order of the holding company;
- (b) if removed by a resolution of members as hereinafter provided; or
- (c) if by notice in writing given to the Company he resigns his office:

Provided, however, that no Director shall vacate his office by reason only of his being a member of any company which has entered into contracts with, or done any work for, the Company but such Director shall not vote in respect of any such contract or work, and if he does so vote, his vote shall not be counted.



D. PROCEEDINGS OF DIRECTORS.

60. Meetings of Directors

- (a) The Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meetings, as they deem proper. Questions arising at any meeting shall be decided by a majority of votes. In case of an equality of votes, the Chairman shall have and exercise a second or casting vote. A Director may, and the secretary on the requisition of a Director shall, at any time, summon a meeting of Directors. Seven (7) days' notice at the least, exclusive of the day on which the notice is served or deemed to be served, but inclusive of the day for which notice is given, shall be given for a meeting of Directors; Provided, that, if all the Directors entitled to attend and vote at any such meeting so agree, in writing, a meeting may be held of which less than seven (7) days' notice has been given.
- (b) A meeting of the Directors may consist of a conference between Directors, some or all of whom are in different places: Provided, that, each Director who participates is able to hear each of the other participating Directors addressing the meeting, and, if he so wishes, to address each of the other participating Directors simultaneously, whether directly, by conference telephone or by any other form of communications equipment (whether in use when this Article 60(b) is adopted or developed subsequently) or by a combination of methods. A quorum shall be deemed to be present if those conditions are satisfied in respect of the minimum number and designation of Directors required to form a quorum. A meeting held in this way shall be deemed to take place at the place where the largest group of Directors is assembled or, if no such group is readily identifiable, at the place from where the Chairman participates. Any Director may, by prior notice to the Secretary, indicate that he wishes to participate in the meeting in such manner, in which event, the Directors shall procure that an appropriate conference facility is arranged.

61. Chairman of Directors' Meetings

The Chairman of the Board shall preside at all meetings of the Board but, if at any meeting the Chairman is not present within ten minutes after the time appointed for holding the same or is unwilling to act as Chairman, the Directors present may choose one of their number to be chairman of the meeting.

62. Committees

The Directors may delegate any of their powers not required to be exercised in their meeting to committees consisting of such member or members of the body as they think fit. Any committee so formed shall, in the exercise of the powers so delegated, conform to any restrictions that may be imposed on it by the Directors.

63. Chairman of Committee Meetings

A committee may elect a chairman of its meetings but, if no such chairman is elected, or if at any meeting the chairman is not present within ten minutes after the time appointed for holding the same or is unwilling to act as chairman, the members present may choose one of their number to be chairman of the meeting.

64. Proceedings of Committee Meetings

A committee may meet and adjourn as it thinks fit. Questions arising at any meeting shall be determined by a majority of votes of the members present. In case of an equality of votes, the chairman shall have and exercise a second or casting vote.

65. Validity of Directors' Acts

All acts done in any meeting of the Directors or of a committee of Directors shall, notwithstanding that it be afterwards discovered that there was some defect in the appointment of such Directors or that they or any of them were disqualified, be as valid as if every such person had been duly appointed and was qualified to be a Director unless the said act or acts is *ultra vires* in itself.

66. Resolution in Writing

A resolution in writing circulated to all the Directors and signed by a majority of the total number of Directors or affirmed by them through fax, telex or telegram shall be as valid and effectual as if it had been passed at a meeting of the Directors duly convened and held.

E. ELECTION AND REMOVAL OF DIRECTORS

67. Rotation of Directors

At the first annual general meeting of the Company, all the Directors shall retire from office, and Directors shall be elected in their place in accordance with Section 178 for a term of three years.

68. Eligibility for Re-election

A retiring Director shall be eligible for re-election.

69. Election in Accordance with the Ordinance

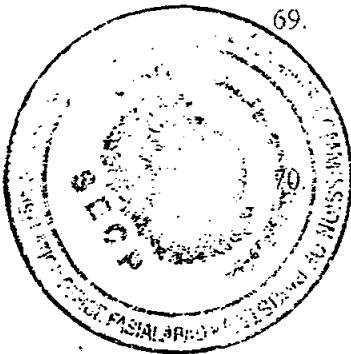
The Directors shall comply with the provisions of Sections 174 to 178 and Sections 180 and 184 relating to the election of Directors and matters ancillary thereto.

Filling of Casual Vacancy

Any casual vacancy occurring in the Board of Directors may be filled by the Directors, but the person so chosen shall be subject to retirement at the same time as if he had become a Director on the day on which the Director in whose place he is chosen was last elected as Director.

71. Removal of Director

The Company may remove a Director but only in accordance with the provisions of the Ordinance.



VI. THE SEAL

72. Common Seal

The Directors shall provide a common seal of the Company which shall not be affixed to any instrument except by the authority of a resolution of the Board or by a committee of Directors authorized in that behalf by the Board. Two (2) Directors or one Director and the secretary of the Company shall sign every instrument to which the common seal is affixed.

73. Official Seal

The Directors may provide for the use in any territory, district or place not situated in Pakistan, of an official seal which shall be a facsimile of the common seal of the Company, with the addition on its face of the name of every territory, district or place where it is to be used. The provisions of Section 213 shall apply to the use of the official seal.

VII. DIVIDENDS AND RESERVES

74. Declaration of Dividends

The Company in general meeting may declare dividends but no dividend shall exceed the amount recommended by the Board.

75. Interim Dividends

The Board may from time to time direct payment to the members or to the holding company such interim dividends as appear to be justified by the distributable profits of the Company.

76. Dividends Payable Out of Profits

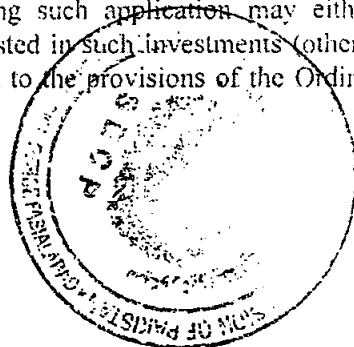
No dividends shall be paid otherwise than out of distributable profits of the year or any other undistributed profits. No unpaid dividend shall bear interest against the Company.

77. Dividends Payable on Amount Paid on Shares

All dividends shall be declared and paid according to the amounts paid on the shares.

78. Reserve Fund

The Directors may, before recommending any dividend, set aside out of the profits available for distribution of the Company such sums as they think proper as a reserve or reserves which shall, at the discretion of the Directors, be applicable for meeting contingencies, or for equalizing dividends, or for any other purpose to which the profits of the Company may be properly applied, and pending such application may either be employed in the business of the Company or be invested in such investments (other than shares of the Company) as the Directors may, subject to the provisions of the Ordinance, from time to time think fit.



79. Profit Carried Forward

The Directors may carry forward any profits which they may think prudent not to distribute, without setting them aside as a reserve.

80. Payment of Dividends Specie

With the sanction of a resolution in a general meeting, any dividend may be paid wholly or in part by the distribution of specific assets and in particular of paid-up shares or debentures of any other company or in any one or more of such ways. The Directors may fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any members upon the footing of the value so fixed, in order to adjust the rights of all members, and may vest any such specific assets in trust for the members entitled to the dividend as may seem expedient to the Directors.

81. Dividends to Joint Holders

If several persons are registered as joint holders of any share, any one of them may give effectual receipt for any dividend payable on the share.

82. Notice of dividend

Notice of any dividend that may have been declared shall be given in the manner hereinafter mentioned to the persons entitled thereto. The Company may give such notice by publication in a newspaper of general circulation in the Province where the Office is situated.

83. Period for Payment of Dividends

Dividends shall be paid within the period specified in Section 251.

VIII. ACCOUNTS

84. Books of Account

The Directors shall cause to be kept proper books of account as required under Section 251.

Place Where Accounts Kept

The books of account shall be kept at the Office or at such other place as the Directors shall think fit and shall be open to inspection by the Directors during business hours.

86. Inspection by Members

The Directors, or their representatives, shall from time to time determine whether and to what extent and at what time and place/s and under what conditions or regulations the accounts and books or papers of the Company or any of them shall be open to the inspection of members not being Directors. No member (not being a Director) shall have any right of inspecting of an account and book or papers of the Company, except

as conferred by law or authorized by the Directors or by the Company in general meeting.

87. Annual Accounts

The Directors shall as required by Sections 233 and 236 cause to be prepared and to be laid before the Company in general meeting such profit and loss accounts and balance sheets duly audited and reports as are referred to in those sections.

88. Balance Sheet and Profit and Loss Account

A balance sheet, profit and loss account, and other reports referred to in the preceding Article shall be made out every year and laid before the Company in the annual general meeting made up to a date not earlier than six months before such meeting. The balance sheet and profit and loss account shall be accompanied by a report of the auditors of the Company and the report of Directors.

89. Copy of Accounts to be Sent to Members

A copy of the balance sheet and profit and loss account and reports of Directors and auditors shall, at least twenty-one days preceding the meeting, be sent to the persons entitled to receive notices of general meetings in the manner in which notices are to be given as hereinafter provided.

90. Compliance with the Ordinance

The Directors shall in all respects comply with the provisions of Sections 230 to 236.

91. Capitalization of Profits

The Company in general meeting may, upon the recommendation of the Directors, resolve that it is desirable to capitalize any part of the amount for the time being standing to the credit of any of the Company's reserve accounts or to the credit of the profit and loss accounts or otherwise available for distribution. The Company may then set free such sum for distribution among the members who would have been entitled thereto if distributed by way of dividend and in the same proportions, on condition that the same be not paid in cash but be applied in or towards paying up in full un-issued shares or debenture of the Company to be allotted and distributed, credited as fully paid up to and amongst such members in the proportion aforesaid. The Board of Directors shall give effect to such distribution by resolution.

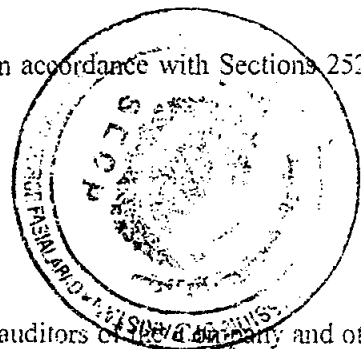
92. Audit

Auditors shall be appointed and their duties regulated in accordance with Sections 252 to 255 of the Ordinance.

IX. NOTICES

93. Notice to Members, etc.

Notice shall be given by the Company to members and auditors of the Company and other persons entitled to receive notice in accordance with law.



X. CONFIDENTIALITY

94. Confidentiality Undertaking

Every director, manager, adviser, auditor, trustee, member of a committee, officer, agent, accountant, or other employees of the Company shall, if so required by the Directors, before entering upon his duties, sign a confidentiality undertaking in relation to all transactions of the Company with its customers and the state of accounts with individuals and in matters relating thereto, and shall undertake not to reveal any of the matters which may come to his knowledge in the discharge of his duties, except when required to do so by the Directors or by any general meeting or by any a court of law of competent jurisdiction and except so far as may be necessary in order to comply with any of the provisions in these presents.

95. Members' Access to Company Premises

No member or other person (not being a Director) shall be entitled to enter upon the property of the Company or examine the Company's premises or properties without the permission of a Director, subject to Article 94, to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery of trade, or secret process or of any matter whatsoever which may relate to the conduct of the business of the Company and which in the opinion of the Directors will be inexpedient, in the interest of the Company and its members, to communicate.

XI. RECONSTRUCTION

96. Reconstruction

On any sale of the undertakings of the Company, the Directors or the liquidators on a winding up may, if authorized by a Special Resolution, accept fully paid shares, debentures or securities of any other company, either then existing or to be formed for the purchase in whole or in part of the property of the Company. The Directors (if the profits of the Company permit), or the liquidators (in a winding up), may distribute such shares or securities, or any other properties of the Company amongst the members without realization, or vest the same in trustees for them. A Special Resolution may provide for the distribution or appropriation of the cash, shares or other securities, benefits or property, and for the valuation of any such securities or property at such price and in such manner as the meeting may approve. All shareholders shall be bound by any valuation or distribution so authorized, and waive all rights in relation thereto save only such statutory rights (if any) as are, in case the Company is proposed to be or is in the course of being wound up, incapable of being varied or excluded by these Articles.

XII. WINDING UP

97. Division and distribution of Assets Upon Dissolution

If the Company is wound up, the liquidator may, with the sanction of a Special Resolution of the Company and any other sanction required by law, divide amongst the members in specie or kind the whole or any part of the assets of the Company (whether

they shall consist of property of same kind or not) and may, for such purpose, set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members. The liquidator may, with like sanction, vest the whole or any part of such assets in trustees upon such trust for the benefit of the contributors, as the liquidator with like sanction, shall think fit; Provided, that, no member shall be compelled to accept any shares or other securities whereon there is any liability.

XIII. INDEMNITY

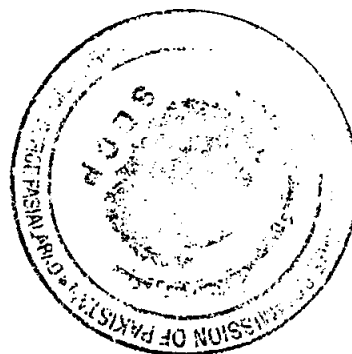
98. Indemnification

Every officer or agent of the Company may be indemnified out of the assets of the Company for any liability incurred by him in defending any proceedings, whether civil or criminal, arising out of his dealings in relation to the affairs of the Company, except those brought by the Company against him, in which judgement is given in his favour or in which he is acquitted, or in connection with any application under Section 488 in which relief is granted him by a court of competent jurisdiction.

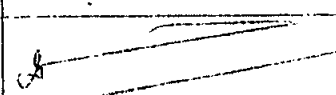

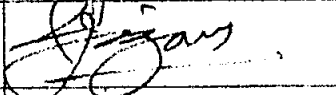
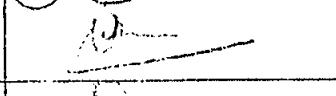
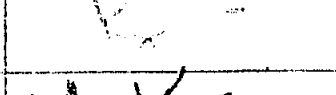


XIV. ARBITRATION

99. Differences to be Referred to Arbitrator

Every intra-corporate dispute shall, as a condition precedent to any other action at law be referred, in conformity with the Arbitration Act, 1940, as amended, and its implementing rules, to the decision of an arbitrator to be appointed by the parties in dispute or, if they cannot agree upon a single arbitrator, to the decision of two arbitrators of whom one shall be appointed by each of the parties in dispute, or, in the event of the two arbitrators not agreeing, then of an umpire to be appointed by the two arbitrators, in writing, before proceeding on the reference. Such decision and arbitral award shall be final and binding on the parties. Intra-corporate disputes shall include any dispute that may arise between the Company on the one hand and any of the members, their executors, administrators or assigns on the other hand, or between members, their executors, administrators or assigns, relating to these Articles or the statutes, or anything then or thereafter done, executed, omitted or suffered in pursuance of these Articles or of the statutes or any breach or alleged breach, or otherwise relating to these Articles or to any statute affecting the Company or to any of the affairs of the Company.



We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of these Articles of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Sr. No.	Name and surname (Present and former) in full (in Block Letters)	Father's/ Husband's Name in Full	Nationality	Occupation	Residential Address in Full	Number of Shares taken by Each Subscriber	Signature
1.	Mr. Muhammad Bashir Bangash	Abdul Khanan	Pakistani	WAPDA Service	A-2, WAPDA Officers Colony, Abdullahpur, Faisalabad.	1	
2.	Mr. Riaz Ahsan Baig	Abdul Latief Baig	Pakistani	WAPDA Service	House No. 83/E/2, Arif Jan Road, Lahore Cantt.	1	
3.	Mr. Javed Nizam,	Muhammad Islam	Pakistani	WAPDA Service	263-Tariq Block, New Garden Town, Lahore.	1	
4.	Kh. Sajjad Haider	Kh. Muhammad Azam	Pakistani	WAPDA Service	3-Sikandar Block, Allama Iqbal Town, Lahore.	1	
5.	Mr. Salah-ud-Din	Akhtar Mehmood (Late)	Pakistani	WAPDA Service	25-B, WAPDA Colony, Abdullahpur Faisalabad.	1	
6.	Mr. Tariq Shahab	Shaukat Ali Shahab Talib	Pakistani	WAPDA Service	21-Greenwood Homes, Block C, New Muslim Town, Lahore.	1	
7.	Mr. Zaheer ud Din	Fazal Elahi	Pakistani	WAPDA Service	209-Pak Block, Allama Iqbal Town, Lahore.	1	

Total number of shares taken 7 (Seven)

Dated the 12 day of March 1998

Witnesses to above signatures

(Full Name, Father's/Husband's Name)

(in Block Letters)

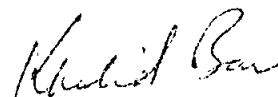
KHALID BASHIR
S/O Mr. Bashir

Adl. Joint Registrar
Securities & Exchange
Commission of Pakistan
Company Registration Office
FAISALABAD

22 DEC 2002

Certified to be true Copy

Signature

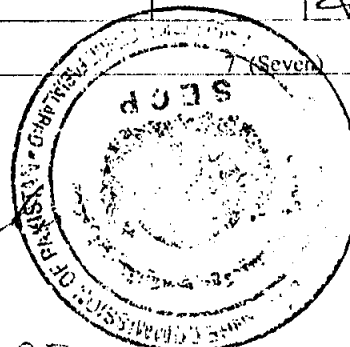


Occupation

Service

Full Address

34-Regwan Street
Gumamabad Lahore



**TECHNICAL AND FINANCIAL PROPOSALS IN REASONABLE DETAIL FOR THE
OPERATION, MAINTENANCE, PLANNING AND DEVELOPMENT OF THE
FACILITY OR SYSTEM**

PROPOSED PROJECTS

Sr. #	Description	Unit	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	New Grid Stations	No.	7	9	4	7	3	30
2	Conversion of G/Station (66kv to 132kv)	No.	0	0	0	0	0	0
3	Extension of Power T/F	No.	2	4	2	4	3	15
4	Augmentation of Power T/F	No.	9	6	8	11	2	36
5	Extension of Line Bay	No.	1	5	4	0	5	15
6	New 132kv T/Lines (373.5 SDT+290 D/C)	No.	8	11	7	10	6	42
7	2 nd Circuit Stringing	No.	0	0	0	0	0	0
8	Reconductoring of T/L	No.	0	0	1	0	0	1
9	Installation of 132kv Capacitors at G/Stations	MVAR	100	100	100	100	100	500
10	Re-habilitation of H.T Feeders	No.	32	34	36	38	40	180
11	Rehabilitation of L.T Feeders	No.	800	850	900	950	980	4480
12	New 11kv Line	km	566.89	610.94	655	705.05	741.11	3278.99
13	Reconductoring of 11 kv Lines	km	255.56	271.53	287.50	303.47	319.44	1437.50
14	New LT Line	km	342	376	402	437	485	2042
15	Reconductoring of LT Lines	km	16	16.5	17	17.2	17.3	84
16	New Service Connections	No.	255630	268411	281833	295923	310720	1412517
17	Distribution T/Fs Replacement	No.	400	450	500	550	600	2250
18	Energy Meters Replacement	No.	67000	84000	91000	95000	113000	450000
19	AMR /AMI Metering	No.	16066	16145	16008	20000	20000	88219

YEAR WISE BREAKUP FOR REQUIREMENT OF FUNDS (RS. IN MILLION)

SUMMARY OF CAPITAL COST FOR PROPOSED PROJECTS

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	6775	7328	8001	10318	6356	38778
B	Distribution of Power (DOP)	1,219	1,283	1,348	1,413	1,596	6,859
C	Energy Loss Reduction (ELR)	2555	2984	3507	4378	4842	18266
D	Vehicles and T&P	2397	1504	1438	1347	1708	8394
E	Civil works	690	843	826	997	950	4306
F	Technical Improvement Plan	525	1190	1435	400	100	3650
G	Commercial Improvement Plan	408	388	480	490	510	2276
H	Financial Improvement Plan of IT Directorate	312	213	229	252	377	1383
I	HR Improvement Plan	210	190	190	210	210	1010
	Total	15091	15923	17454	19805	16649	84,922

SUMMARY OF ANNUAL RECURRING COSTS (In Rs. million)

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	305	330	360	464	286	1745
B	Distribution of Power (DOP)	55	58	61	64	72	309
C	Energy Loss Reduction (ELR)	115	134	158	197	218	822
D	Vehicles and T&P	108	68	65	61	77	378
E	Civil works	31	38	37	45	43	194
F	Technical Improvement Plan	24	54	65	18	5	164
G	Commercial Improvement Plan	18	17	22	22	23	102
H	Financial Improvement Plan of IT Directorate	14	10	10	11	17	62
I	HR Improvement Plan	9	9	9	9	9	45
	Total	679	717	785	891	749	3822

BENEFITS AND FINANCIAL ANALYSIS

EXPANSION AND REHABILITATION OF SECONDARY TRANSMISSION AND DISTRIBUTION SYSTEM

TANGIBLE BENEFITS

ABSTRACT OF MVA CAPACITY TO BE ADDED AND ADDITIONAL ENERGY TO BE SUPPLIED UNDER TRANSMISSION EXPANSION PLAN							
Description		Fiscal Year					
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
MVA Capacity to be added	Current Year		652	618	373	626	261
	Cumulative		652	1270	1643	2269	2530
Additional Energy could be supplied @ 0.9 P.F 0.7 L.F and 80 % Loading (Million kWh)	Current Year		2878.606	2728.495	1646.810	2763.815	1152.325
	Cumulative		2878.606	5607.101	7253.911	10017.726	11170.051

DIIP-4: REDUCTION IN LOSSES AND SAVINGS IN TERMS OF ENERGY (STG)

S/ No.	Description		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	Reduction in Losses % (MW)	Current Year	0	0.15	0.10	0.10	0.05	0.05
		Cumulative	0	0.15	0.25	0.35	0.40	0.45
2	Energy Savings* @ 0.7 L.F (Million kWh)	Current Year	0	28.618	20.357	21.438	11.285	6.782
		Cumulative	0	28.618	48.975	70.413	81.698	88.480

*Reduction in Energy Loss/year = MW x 8760 x Loss Factor**

**Loss Factor = $0.3 \times \text{Load Factor} + 0.7 \times (\text{Load Factor})^2$

Loss Factor @ 0.7 L.F = 0.553

INCREASE IN REVENUE AS RESULT OF ENERGY CONSUMPTION OF CONSUMERS TO BE ADDED UNDER DISTRIBUTION EXPANSION PROGRAM

Sr.	Energy Consumption of Customers To Be Added (Million kWh)			Av. Energy Sales Price (Rs. / kWh)	Av. Energy Purchase Price (Rs. / kWh)	Sales (Million Rs.)	Purchases (Million Rs.)	Potential Benefits (Million Rs.)
	Year	Sales	Purchase					
1	2024-25	987.38	1082	24.58	22.22	24,270	24,042	228
2	2025-26	2001	2189	26.18	23.66	52,386	51,792	594
3	2026-27	3142	3434	27.88	25.2	87,599	86,537	1,062
4	2027-28	4343	4741	29.7	26.84	128,987	127,248	1,739
5	2028-29	5637	6148	29.7	26.84	167,419	165,012	2,407

INCREASE IN REVENUES AS RESULT OF POTENTIAL SAVING IN ENERGY UNDER DISTRIBUTION REHABILITATION PROGRAM

No	Year	No. of 11kv Feeders To Be Rehabilitated		No. of LT Proposals To Be Rehabilitated		Ave. Saving / Proposal (MkWh)		Potential Saving In Energy (MkWh)			Energy Rate / kWh (RS.) *	Potential Gross Benefits
		Current	Cumulative	Current	Cumulative	H.T	L.T	H.T	L.T	TOTAL		
1	2024-25	32	32	800	800	2.135	0.047	68.32	37.8	106.12	22.22	2,358
2	2025-26	34	66	850	1650	1.442	0.032	95.14	53.11	148.25	23.66	3,508
3	2026-27	36	102	900	2550	1.154	0.026	117.73	66.3	184.03	25.2	4,638
4	2027-28	38	140	950	3500	0.974	0.022	136.34	75.6	211.94	26.84	5,688
5	2028-29	40	180	980	4480	0.817	0.020	146.99	90.1	237.09	26.84	6,363

PROJECTED T&D LOSSES

Fiscal Year	Energy Purchase (Million KWH)	Energy Sale (Million KWH)	Units Lost (Million KWH)	%age Projected Losses	%age Increase/ Decrease
2021-22	17512.53	15918.79	1593.74	9.10%	
2022-23	18391	16765.24	1625.76	8.84%	
2023-24	19423	17725.43	1697.57	8.74%	-0.10%
2024-25	20357	18606.30	1750.70	8.60%	-0.14%
2025-26	21438	19615.77	1822.23	8.50%	-0.10%
2026-27	22571	20675.04	1895.96	8.40%	-0.10%
2027-28	23709	21729.30	1979.70	8.35%	-0.05%
Total %age Increase/ Decrease					-0.49%

FINANCIAL ANALYSIS

ASSUMPTIONS:

- Sale Rate for FY 2023-24 has been assumed as Rs. 22.88 kWh which is further indexed with reference to projected CPI.
- Purchase Rate for FY 2023-24 has been assumed as Rs. 20.86 kWh which further indexed with reference to projected CPI.
- It is assumed that the benefit will accrue from the following year of investment.
- The life of project has been assumed as 29 years.

SUMMARY OF FINANCIAL ANALYSIS

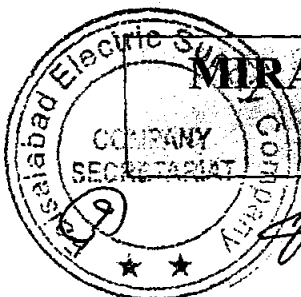
Energy Saving / Loss Reduction	NPV (Rs. Million)	IRR (%)	Benefit to Cost Ratio	Payback period (Years)
Secondary Transmission & Grids (STG)	5,325	19.31	1.18	8-Years, 01-Month,
Energy Loss Reduction (ELR)	18,347	47.39	2.36	05 Years, 05-Month
Distribution of Power (DoP)	5,010	30.82	1.96	06 Years, 05 Months
AMI / Smart Energy Meters	85	17.18	1.05	08Years, 08 Months
Overall - Investment Program	17,711	21.09	1.27	07 Years, 10 Month

Annex-A

(5)



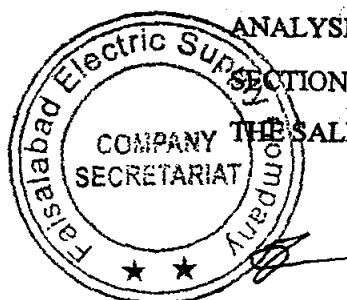
**5-YEAR DISTRIBUTION
INTEGRATED
INVESTMENT PLAN
(DIIP) 2023-24 TO
2027-28**



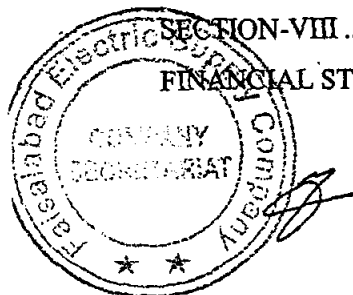
**MIRAD DEPARTMENT FESCO HQ CANAL ROAD
FAISALABAD**

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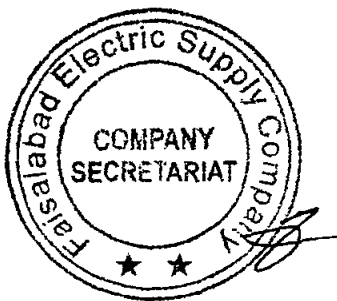
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SECTION –I

EXECUTIVE SUMMARY

i. INTRODUCTION

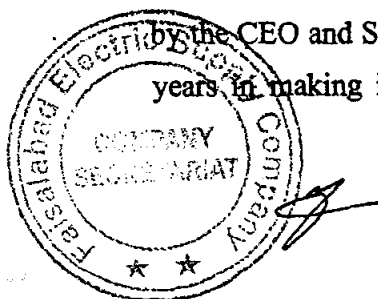
Faisalabad Electric Supply Company was incorporated as a Public Limited Company under Companies Ordinance 1984 on March 21, 1998. FESCO service territory is comprised of 8 Civil Districts viz Faisalabad, Jhang, Chiniot, Toba Tek Singh, Bhakkar, Mianwali, Khushab and Sargodha. FESCO jurisdiction covers approximately 45,387 sq. km area of these districts. FESCO distributes and supplies electricity to 4.87 Million customers within a territory having a population of 32.5 Million people.

In-order to achieve the economic growth and poverty reduction in the areas within FESCO jurisdiction, it is essential to ensure a reliable & stable electric power distribution and supply to these areas to meet the increasing demand in Industrial, Agricultural, Commercial, and Domestic sectors. Electricity demand is expected to grow by around 6% per annum during the coming years. In order-to cope with this growth, it is estimated / average that 150-200MW additional capacities would be required annually to achieve the aforesaid goals, the expansion in FESCO distribution network is immensely required. The proposed plan has therefore been prepared to meet the requirement of system efficiency and stability to deliver adequate, reliable & quality power to its customers. This project will also help in meeting the requirements of the National Electric Power Regulatory Authority (NEPRA).

ii. PURPOSE AND GOALS OF INVESTMENT PLAN

The Distribution Integrated Investment Plan (DIIP) entails company's vision, mission, stakeholders' needs, general indicators, sales and consumer forecasts, power supply issues with limitations, human resources and organizational development, financial projections, regulatory requirements including quality of service, subsidies and legal restrictions affecting timely collection of delinquent payments, performance indices with initiatives and risk assessment and will serve as a central reference document for integrated cross-functional planning that will help FESCO to make informed decisions based on priorities.

The goal of the Investment Plan/Business Plan is to create a document which will be used by the CEO and Senior Managers of FESCO to focus its activities and energies for the next five years in making it a financially viable company by improving the governance of the entity,



introducing new technologies including upgradation of existing technology, machinery and improving human resources in line with best practices worldwide. This plan will also be utilized by the Policy, Strategy Market Reforms (PSM), Risk Management & Customers Services Committee to the Board for regular monitoring, to ensure that company achieves its stated objectives.

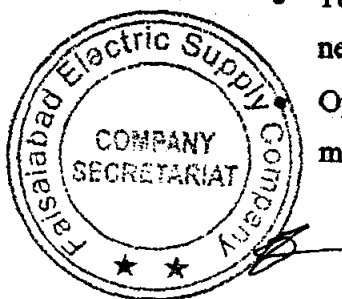
This Investment Plan covers a five-year period from FY 2023-24 to FY 2027-28, encompassing the following areas:

- Defining the activities and resources available to FESCO through the incorporation agreements and laws relating to it.
- Identifying projections of power demand, power resources and population served expected in the time period from 2023-24 to 2027-28.
- Illustrating the strategic objectives for 2023- 24 to 2027-28, aligned with optimally achievable scenario as defined by the regulator, which designated coordinators prepared to accomplish the strategic goals in the five-year timeframe of the Investment Plan.
- The best and optimally achievable scenarios to demonstrate what is required and what can be achieved keeping in view the resources constraints and on ground realities.
- Projecting the financial impact on company's bottom-line of implementing the project plans.

iii. MAJOR PLANNING SITUATION

The following challenges faced by FESCO require integrated cross functional planning:

- Manpower shortage
- C-Level hiring as approved by BoD FESCO
- Setting up of New Safety Directorate through hiring of DG (HSE) from open market
- Capacity payment issues, network constraints and decrease in Demand due to Net-Metering etc.
- Delayed determination / notification of tariff
- Taxes issues with FBR
- Technical challenges and technological advancement that require FESCO to upgrade the network, including metering to receive and measure continuous and reliable flow of power
- Operational challenges to maintain continuous flow of reliable power to the customers and meet their expectations in demand dominated, load-shedding driven regime



- Institutional challenges faced while developing the capacity of FESCO
- Smooth power evacuation, especially related to variable renewables being integrated in the network
- Compliance with applicable laws and regulations
- Social responsibility to conserve energy and social up-lift

iv. **COMPETITIVE TRADING AND BILATERAL CONTRACT MARKET (CTBCM)**

In 2015, the Economic Coordination Committee (ECC) of the Cabinet decided to transition from the current regime towards CTBCM and mandated CPPA-G to prepare a design and plan for this transition and get it approved from NEPRA.

In pursuance of the mandate given by ECC and the stipulations of the Market Operator Rules, 2015, CPPA-G with the help of international consultants (MRC Group) prepared a high-level conceptual design, defining the principles and structure of the market, and submitted it to NEPRA for approval in March 2018. The Authority through its determination dated December 05, 2019, approved the High-Level/Conceptual Design of the Competitive Trading Bilateral Contract Market (CTBCM).

Authority approved the CTBCM and Implementation Roadmap through its determination dated November 12, 2020 (the "CTBCM Determination") which was also recognized in the National Electricity Policy 2021 (the "NEP 2021") approved by the Council of Common Interest ("CCI").

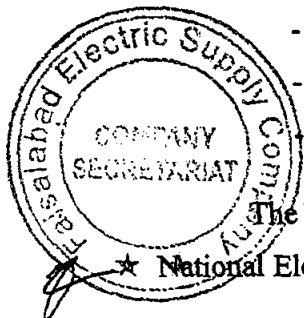
Under Sections 23A and 23B of the Act, the CPPA-G submitted an application (the "Application") on October 14, 2021 for grant of the licence for the MO along with the draft Market Commercial Code (the "MCC") for approval of the Authority.

In its determination dated May 31, 2022, NEPRA approved the grant of the MO licence to the CPPA-G subject to the terms and conditions contained in the licence along with approval of the Market Commercial Code (MCC), and CTBCM test-run plan to be undertaken by the CPPA-G during the soft-launch of the market:

- granted the Market Operator License to CPPA
- approved the Market Commercial Code
- approved the 6-month CTBCM test-run plan

The broader CTBCM framework is guided by the National Electricity Policy 2021, (draft)

★ National Electricity Plan 2022, Strategic Roadmap prepared and agreed with Ministry of Energy



(Power Division) and FESCO Medium Term Demand Forecast submitted to NEPRA.

STRATEGIC POSITIONING

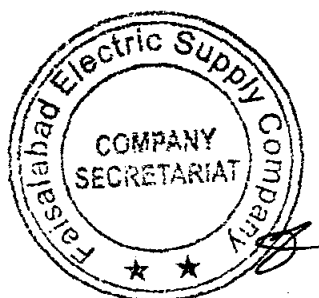
As the Pakistan Power Sector (PPS) undergoes another set of continued reforms, FESCO is all set to add value to the evolving wholesale competitive electricity market in line with Competitive Trading & Bilateral Contract Market (CTBCM) regime.

Towards the end, moving ahead of the single territorial electric power service provider within service territory; FESCO, as envisaged per CTBCM, has initiated transformation as multirole service provider as "Electric Power Supplier" and "Power Distributer". As per regulation, FESCO shall, however, continue to be "Supplier of Last Resort" so as to ensure continued, uninterrupted, reliable and adequate power supply to any and all the customers at all times, within the Service Territory.

As Power Distributor, i.e., the Distribution Network Operator (DNO), FESCO pledges to provide interconnection facility and open access to its system for all intending users (Market Participants) including but not limited to, the eligible Generation Companies, Bulk Power Consumers, Traders, Competitive Electric Power Suppliers, Distributed Generation etc. at reasonable and affordable prices, without any favor or otherwise, discrimination or restrictions. Taking natural monopoly wire-business role, as DNO, FESCO is well aware that the position requires to ensure embedding principles of impartiality, non-discrimination and arm's length transaction even while dealing with Power Supplier arms of our own company.

As Power Supplier, FESCO is all set to take the daunting task of facing competition at wholesale market level and thus gearing up to ensure retention of base load Bulk Power Consumers (BPC). We also clearly understand our commercial priorities shall not undermine the rights of embedded regulated customers.

The Integrated Generation & Transmission Plans are prepared by DISCOs and NTDC Lahore including IGCEP 2021, TSEP & DIIP based on Medium Term PMS Forecast. (Generation Plan & NTDC Expansion Plan are attached as Annex: "C").



After intensive deliberation, FESCO BoD has prepared SWOT analysis based action plan as under;-

1. **ANALYSES TOOL**

SWOT analysis (Inter-Active) used to develop Action Plan

2. **Customer**

Team Mindset change – customer orientation, Revamping CS Processes, Adoption of PITS software for Complaint management, Android based application, Re-branding the Company. Budgetary resources and Implementation for improving reliability of Supply

3. **HR Capital**

Hiring of C-Level Team, Capacity Building of Existing Senior Team, Team building. Recruitment Policy, Training and Development, Motivation, Performance Management System. Succession Planning

4. **HSE and QA**

Visible and demonstrated leadership, HSE responsibility of “Line Manager” instead of HSE Directorate, formation of HSE Committees at grass root level, Train the Trainer Program.

5. **Technology, Innovation, Technical and Operations**

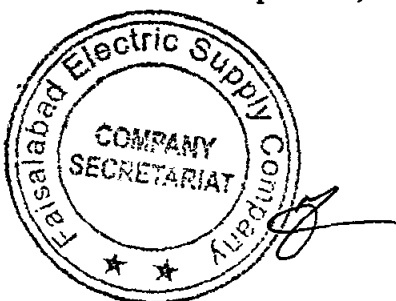
SMART Meters (5 KW and Tube wells), GIS mapping, Feasibility Studies for APMS and SCADA, Strengthening of Technical Services Directorate, establishment of Transformer Reclamation Workshop.

6. **Business Processes Re-engineering**

Revamping of HR, Legal, Finance, Audit and MM departments etc.

7. **Governance**

BOD and Committees, Business and Strategic Plans, inquiries, Corp Governance and SECP Compliances, Power Division stewardship.



The Distribution Plan of FESCO, which is integrated with the 132kv network studies, envisages expansion and rehabilitation of FESCO network during the years 2023-24 to 2027-28 which consists of the following works:

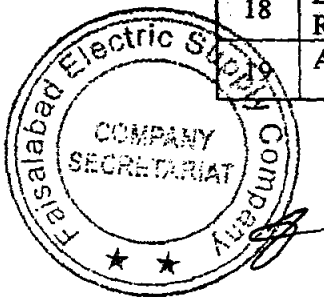
v. COMPANY'S INVESTMENT PLAN

As per direction of the Regulator (NEPRA) FESCO has prepared Distribution Integrated Investment Plan, detail is as under;

ABSTRACT OF WORKS FOR DIIP PLAN

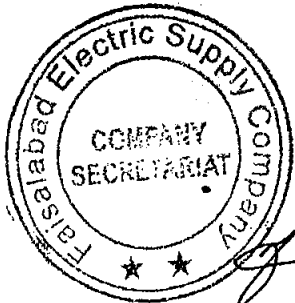
DIIP-1: PROPOSED PROJECTS

Sr. #	Description	Unit	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	New Grid Stations	No.	7	9	4	7	3	30
2	Conversion of G/Station (66kv to 132kv)	No.	0	0	0	0	0	0
3	Extension of Power T/F	No.	2	4	2	4	3	15
4	Augmentation of Power T/F	No.	9	6	8	11	2	36
5	Extension of Line Bay	No.	1	5	4	0	5	15
6	New 132kv T/Lines (373.5 SDT+290 D/C)	No.	8	11	7	10	6	42
7	2 nd Circuit Stringing	No.	0	0	0	0	0	0
8	Reconductoring of T/L	No.	0	0	1	0	0	1
9	Installation of 132kv Capacitors at G/Stations	MVAR	100	100	100	100	100	500
10	Re-habilitation of H.T Feeders	No.	32	34	36	38	40	180
11	Rehabilitation of L.T Feeders	No.	800	850	900	950	980	4480
12	New 11kv Line	km	566.89	610.94	655	705.05	741.11	3278.99
13	Reconductoring of 11 kv Lines	km	255.56	271.53	287.50	303.47	319.44	1437.50
14	New LT Line	km	342	376	402	437	485	2042
15	Reconductoring of LT Lines	km	16	16.5	17	17.2	17.3	84
16	New Service Connections	No.	255630	268411	281833	295923	310720	1412517
17	Distribution T/Fs Replacement	No.	400	450	500	550	600	2250
18	Energy Meters Replacement	No.	67000	84000	91000	95000	113000	450000
	AMR /AMI Metering	No.	16066	16145	16008	20000	20000	88219



YEAR WISE BREAKUP FOR REQUIREMENT OF FUNDS (RS. IN MILLION)**DIIP-2: A. SUMMARY OF CAPITAL COST FOR PROPOSED PROJECTS**

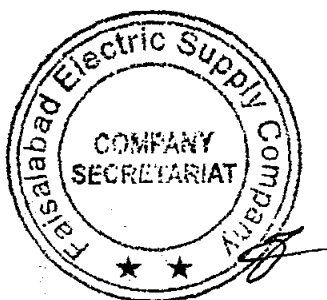
Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	6775	7328	8001	10318	6356	38778
B	Distribution of Power (DOP)	1,219	1,283	1,348	1,413	1,596	6,859
C	Energy Loss Reduction (ELR)	2555	2984	3507	4378	4842	18266
D	Vehicles and T&P	2397	1504	1438	1347	1708	8394
E	Civil works	690	843	826	997	950	4306
F	Technical Improvement Plan	525	1190	1435	400	100	3650
G	Commercial Improvement Plan	408	388	480	490	510	2276
H	Financial Improvement Plan of IT Directorate	312	213	229	252	377	1383
I	HR Improvement Plan	210	190	190	210	210	1010
Total		15091	15923	17454	19805	16649	84,922



(17)

B. SUMMARY OF ANNUAL RECURRING COSTS (In Rs. million)

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	305	330	360	464	286	1745
B	Distribution of Power (DOP)	55	58	61	64	72	309
C	Energy Loss Reduction (ELR)	115	134	158	197	218	822
D	Vehicles and T&P	108	68	65	61	77	378
E	Civil works	31	38	37	45	43	194
F	Technical Improvement Plan	24	54	65	18	5	164
G	Commercial Improvement Plan	18	17	22	22	23	102
H	Financial Improvement Plan of IT Directorate	14	10	10	11	17	62
I	HR Improvement Plan	9	9	9	9	9	45
Total		679	717	785	891	749	3822



BENEFITS AND FINANCIAL ANALYSIS**A. EXPANSION AND REHABILITATION OF SECONDARY TRANSMISSION AND DISTRIBUTION SYSTEM****TANGIBLE BENEFITS**

DIIP-3: ABSTRACT OF MVA CAPACITY TO BE ADDED AND ADDITIONAL ENERGY TO BE SUPPLIED UNDER TRANSMISSION EXPANSION PLAN							
Description		Fiscal Year					
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
MVA Capacity to be added	Current Year		652	618	373	626	261
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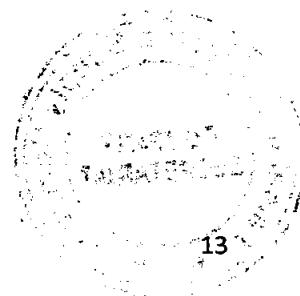
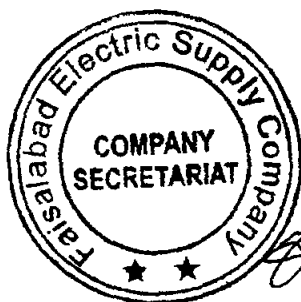
DIIP-4: REDUCTION IN LOSSES AND SAVINGS IN TERMS OF ENERGY (STG)

S/ No.	Description		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
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		Cumulative	0	28.618	48.975	70.413	81.698	88.480

*Reduction in Energy Loss/year = MW x 8760 x Loss Factor**

**Loss Factor = $0.3 \times \text{Load Factor} + 0.7 \times (\text{Load Factor})^2$

Loss Factor @ 0.7 L.F = 0.553



FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

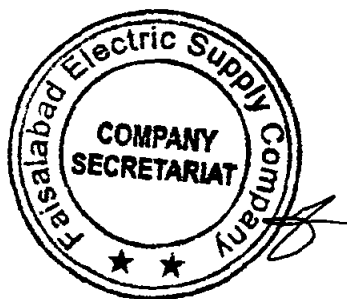
**DIIP-5:
INCREASE IN REVENUE AS RESULT OF ENERGY CONSUMPTION OF CONSUMERS TO
BE ADDED UNDER DISTRIBUTION EXPANSION PROGRAM**

Sr.	Energy Consumption of Customers To Be Added (Million kWh)			Av. Energy Sales Price (Rs. / kWh)	Av. Energy Purchase Price (Rs. / kWh)	Sales (Million Rs.)	Purchases (Million Rs.)	Potential Benefits (Million Rs.)
	Year	Sales	Purchase					
1	2024-25	987.38	1082	24.58	22.22	24,270	24,042	228
2	2025-26	2001	2189	26.18	23.66	52,386	51,792	594
3	2026-27	3142	3434	27.88	25.2	87,599	86,537	1,062
4	2027-28	4343	4741	29.7	26.84	128,987	127,248	1,739
5	2028-29	5637	6148	29.7	26.84	167,419	165,012	2,407

DIIP-6:

**INCREASE IN REVENUES AS RESULT OF POTENTIAL SAVING IN ENERGY
UNDER DISTRIBUTION REHABILITATION PROGRAM**

No	Year	No. of 11kv Feeders To Be Rehabilitated		No. of LT Proposals To Be Rehabilitated		Ave. Saving / Proposal (MkWh)		Potential Saving In Energy (MkWh)			Energy Rate / kWh (RS.) *	Potential Gross Benefits
		Current	Cumulative	Current	Cumulative	H.T	L.T	H.T	L.T	TOTAL		
1	2024-25	32	32	800	800	2.135	0.047	68.32	37.8	106.12	22.22	2,358
2	2025-26	34	66	850	1650	1.442	0.032	95.14	53.11	148.25	23.66	3,508
3	2026-27	36	102	900	2550	1.154	0.026	117.73	66.3	184.03	25.2	4,638
4	2027-28	38	140	950	3500	0.974	0.022	136.34	75.6	211.94	26.84	5,688
5	2028-29	40	180	980	4480	0.817	0.020	146.99	90.1	237.09	26.84	6,363



DIMP-7: PROJECTED T&D LOSSES

Fiscal Year	Energy Purchase (Million KWH)	Energy Sale (Million KWH)	Units Lost (Million KWH)	%age Projected Losses	%age Increase/ Decrease
2021-22	17512.53	15918.79	1593.74	9.10%	
2022-23	18391	16765.24	1625.76	8.84%	
2023-24	19423	17725.43	1697.57	8.74%	-0.10%
2024-25	20357	18606.30	1750.70	8.60%	-0.14%
2025-26	21438	19615.77	1822.23	8.50%	-0.10%
2026-27	22571	20675.04	1895.96	8.40%	-0.10%
2027-28	23709	21729.30	1979.70	8.35%	-0.05%
Total %age Increase/ Decrease					-0.49%

FINANCIAL ANALYSIS**ASSUMPTIONS:**

- Average Sale Rate FY 2022-23 has been assumed as Rs.22.88 kWh which is further indexed with reference to projected CPI.
- Average Purchase Rate (unadjusted) for FY 2022-23 has been assumed as Rs.19.42 kWh which further indexed with reference to projected CPI.
- It is assumed that the benefit will accrue from the following year of investment.
- The life of project has been assumed as 29 years.

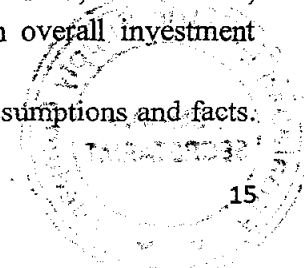
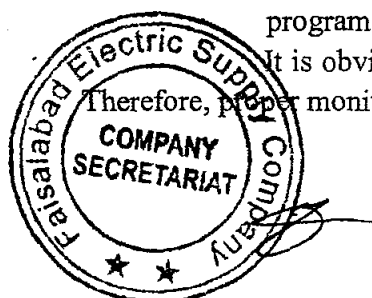
SUMMARY OF FINANCIAL ANALYSIS

Energy Saving / Loss Reduction	NPV (Rs. Million)	IRR (%)	Benefit to Cost Ratio	Payback period (Years)
Secondary Transmission & Grids (STG)	5,325	19.31	1.18	8-Years, 01-Month,
Energy Loss Reduction (ELR)	18,347	47.39	2.36	05 Years, 05-Month
Distribution of Power (DoP)	5,010	30.82	1.96	06 Years, 05 Months
AMI / Smart Energy Meters	85	17.18	1.05	08 Years, 08 Months
Overall - Investment Program	17,711	21.09	1.27	07 Years, 10 Month

Note:- The Financial Benefits relating to other projects like Vehicles & T&P, Civil Works, Technical, Financial and HR have not been accounted for in overall investment program. However, costs thereof have been discounted.

It is obvious from the results that the Plan is feasible on said assumptions and facts.

Therefore, proper monitoring of benefits & costing is essential.



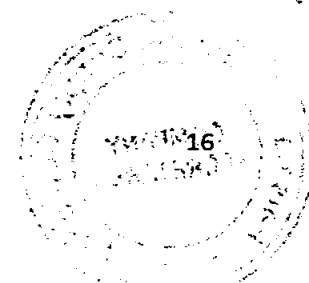
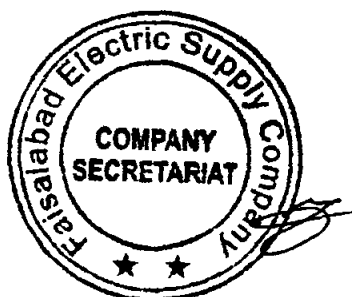
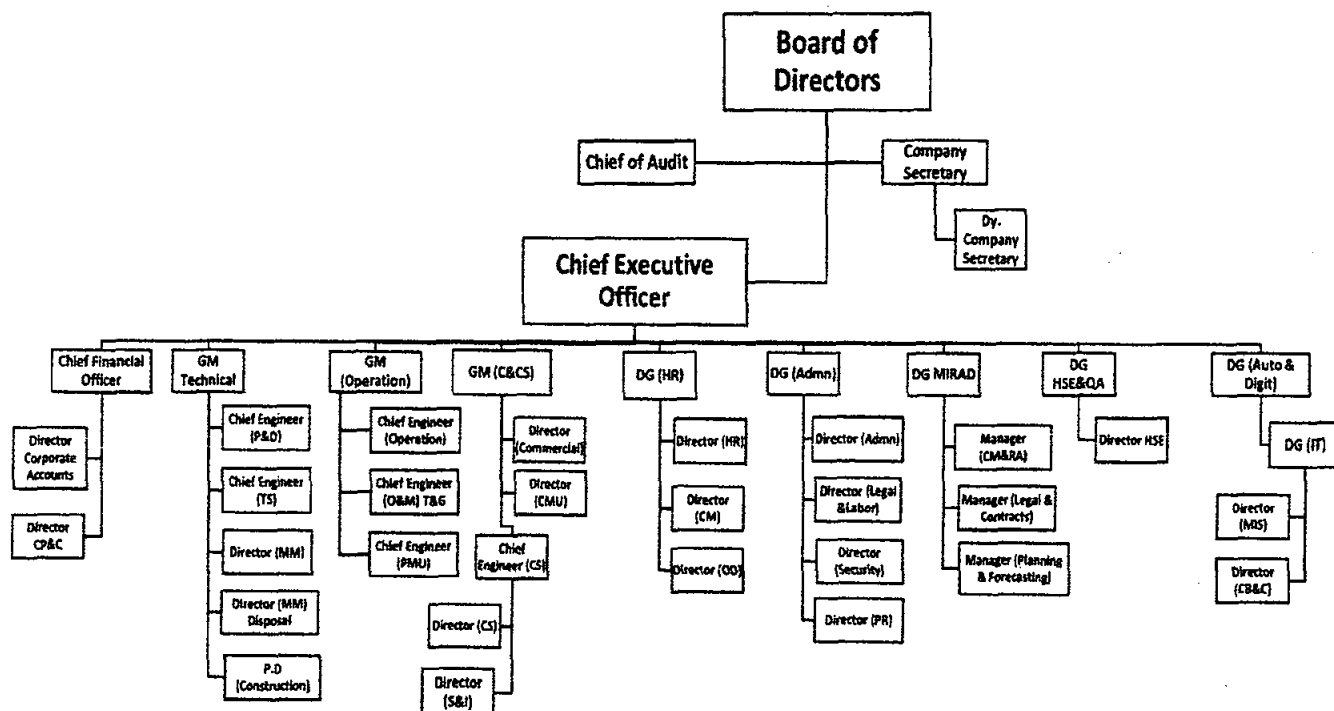
SECTION-II

THE COMPANY'S BASELINE

i. GENERAL INFORMATION

In-order to achieve the economic growth and poverty reduction in the areas under FESCO jurisdiction, it is essential to ensure a Reliable & Stable Electric Supply to these areas to meet the increasing demand in an Industrial, Agricultural, Commercial, and Domestic sector. Electricity demand is expected to grow by around 5.56% per annum during the coming years. In order-to cope this growth, it is estimated / average that 150-200 MW additional capacities would be required annually to achieve the aforesaid goals, the expansion of FESCO network is urgently required. The proposed plan has therefore been prepared to meet the requirement of system efficiency and stability to deliver adequate & quality power to the customers. This project will also help to meeting the requirements of the National Electric Power Regulatory Authority (NEPRA).

FESCO ORGANOGRAM



LEGAL AND CONTRACTUAL FRAMEWORK

FESCO was incorporated as a public limited company under Companies Ordinance, 1984 on March 21, 1998. Certificate of Commencement of Business was issued on March 26, 1998. In compliance of the Ordinance and corporate governance rules 2013, the Board of Director's has been nominated by Govt. of Pakistan. The composition of Board of Director's is as under.

COMPOSITION OF BOD

1.	Mr. Syed Hasnain Haider	Chairman/Director
2.	Mr. Bashir Ahmad	CEO/Director
3.	Mr. Rana Atif	Director
4.	Mr. Suleman Najib Khan	Director
5.	Mr. Barrister Dr. Irfan Ahmad Chattha	Director
6.	Mr. Mahfooz Ahmed Bhatti	Director
7.	Miss Lubna Usman	Director
8.	Mr. Muhammad Anwar Sheikh	Director
9.	Nazir Ahmad	CFO
10.	Mr. Athar Ayub	Company Secretary
11.	Mr. Farrukh Aftab	Director (Legal)
12.	Mr. Muhammad Saleem	Chief Internal Audit

CHARTERED ACCOUNTANTS

M/S Riaz Ahmad & Co. Chartered Accountants 560-F, Raja Road Gulistan Colony
Faisalabad.

WEBSITE

<http://www.fesco.com.pk/>

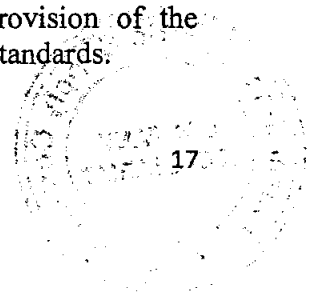
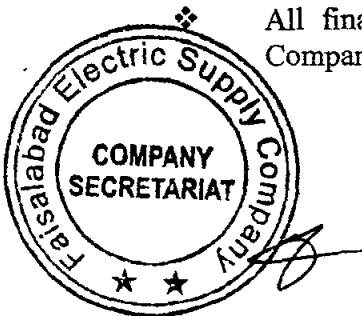
All the financial and administrative powers rest with the Board of Director which have been delegated to Company's functionaries in accordance with the hierarchy.

CORPORATE GOVERNANCE

In compliance with the Code of Corporate Governance, among other things FESCO has ensured that;

- ❖ As BoD has effective representation of Independent Non-Executive Director so that the Board as a group includes relevant core competencies.

All financial statements are prepared in conformity with the provision of the Companies Act 2017 adhering to International Financial Reporting Standards.



- ❖ Proper books of accounts have been prepared and maintained with estimates based on reasonable and prudent judgment.
- ❖ The statement of compliance with the best practices of corporate governance is reviewed and certified by statutory auditors before publication.
- ❖ There is implementation and monitoring of an effective system of internal controls.
- ❖ All the Govt policies are followed and adopted / implemented in FESCO in the interest of customers.

FINANCIAL MANAGEMENT

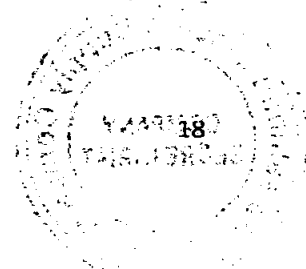
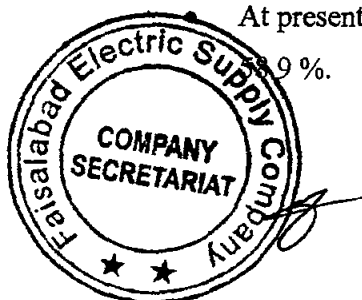
- Formulation of financial management framework to ensure maximum utilization of company resources.
- Investment of Surplus Funds from Security Deposits and Consumers contribution etc. on short term basis.
- Reconciliation of all types of collections (Revenue, New Connections, Deposit Works and all other miscellaneous sources of revenue).
- Monthly, Quarterly and Annual Financial Statements.
- Regulatory Accounts to NEPRA.
- Pre-Audit of Supplier, Contractors & Consultants bills in line with relevant rules and SOPs.
- Tariff Petition Preparation & its submission to NEPRA for determination and then notified by GoP.
- Providing guideline for the annual budget along with preparation of the Annual consolidated Operation & Maintenance (O&M) and Capital Budget of the company.
- Submission of GoP Subsidy Claims to Ministry of Energy.
- E-payment & E-filing of Income and Sales Tax statement to FBR.
- Dealing all litigation cases pertaining to Income Tax, Sales Tax and PST at the level of CIR(A), ATIR, High Court and Supreme Court (if required).

HR MANAGEMENT AND ADMINISTRATIVE

Board has sanctioned the hiring of 5 / 6 senior management positions such as Chief Financial Officer, Chief Internal Auditor, Company secretary, DG Health and Safety, DG Digitalization etc. Board has also sanctioned the training of the remaining senior team at LUMS, NUST to upgrade their skills in such areas as leadership, team building, problem solving etc. the idea is to mix the two teams to create an effective top level leadership for FESCO's turnaround and functioning as a modern corporate entity. Approval of the MOE is awaited due to the freeze on hiring to do the hirings and to put this plan into full action.

At present FESCO is working with shortage of staff at all levels, for which as the directions of BoD FESCO. Management has started recruitment process inline with the direction of Ministry of Energy (Power Division). The HR Department is primarily responsible for the below mentioned activities but not limited to.

At present the sanctioned Officers strength is 594 and working 350. and occupancy ratio is 58.9 %.

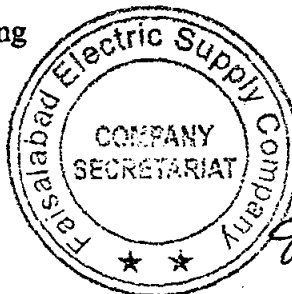


- At present Staff strength is 24048, working = 13585 and occupancy ratio is 56.5 % (24)
- Disciplinary cases are being disposed of promptly in accordance under the Efficiency and Discipline Rules (E&D) of the company.
- On an average 12% of Officers are being trained during the year. Next year training is 100%.
- On an average 20% of staff is being trained during the year.
- KPIs for Senior Management and its compliance.
- Preparation of clear Job Descriptions and Job Specifications
- Rs. 55 Million were spent during the FY year 2021-22 for training.
- FESCO has four Line Man training centers and facilities of WAPDA Staff College
- Islamabad and WAPDA Engineering Academy Faisalabad are being used for training of Officers. MIRAD officers are attending all schedule trainings organised by CPPA-G at Power Sector Centre of Excellence (PSCE) LUMS Lahore.
- Officers are also being trained through LUMS, PIMS, NUST and ICMA etc.

IT-MIS

IT Department is primarily responsible for billing to consumers and provides other IT related services to FESCO. This department has three Computer centers at three different places with headquarter at Faisalabad and others at Jhang and Sargodha the core functions are as under .

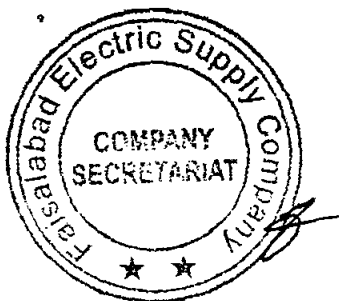
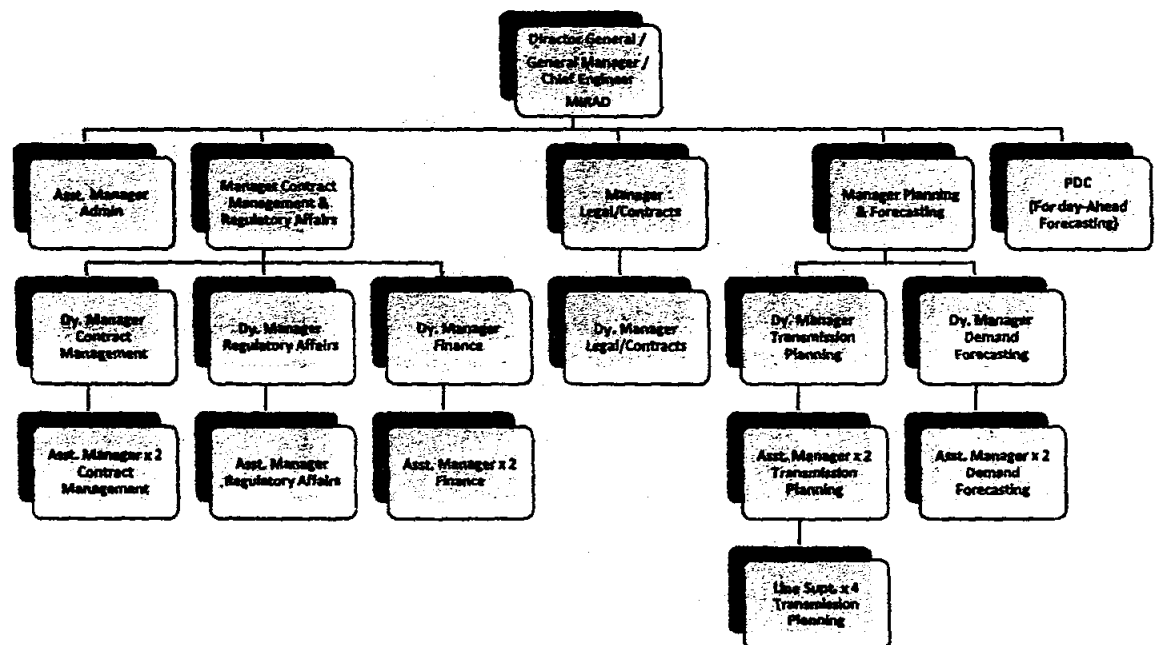
- It provides Service Excellence by FESCO through the use of Information and Communications Technology.
- A simple challenge for the department, by setting itself a target for the new millennium by which it will have built up the Information Technology infrastructure, data and information processing capability for the Government to use and produce the most excellent level of service for its customer, the general public
- It promotes, facilitate and Deliver High Quality Information Technology Services to Executives and other Departments on Cost effective basis to Support FESCO's Strategic and operational needs.
- The goal of IT Department is to provide cost-effective means to achieve business results and improve operating efficiency. Accordingly, the following strategies have been formulated:
 - Using IT as efficiency improvement tool
 - Integrating IT and Business Planning
 - Evolving Efficient Structures
 - Developing Hybrid Skills.



MARKET IMPLEMENTATION AND REGULATORY AFFAIRS DEPARTMENT (MIRAD)

- The CTBCM implementation plan requires DISCOs to have a dedicated department to which certain responsibilities regarding implementation of CTBCM actions for DISCOs could be assigned and could manage internal (within DISCOs) and external (with other entities such as CPPA, NEPRA, PPIB and other DISCOs etc.) coordination for implementation of necessary actions.
- Moving forward this department will become a dedicated central interface between DISCOs and Competitive Electricity Market equipped with staff having specialized and competency and supported by necessary infrastructure to inter alia administer the market operations including bilateral contracts portfolio management, short and medium term demand forecasting, transmission planning and overseeing legal and regulatory affairs.

MIRAD ORGANOGRAM



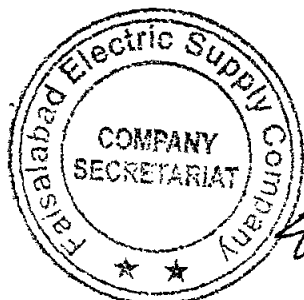
COMMERCIAL MANAGEMENT

FESCO Commercial Directorate is responsible for accurate billing to customers and ensure 100% recovery of billed amount. Besides this FESCO BoD has approved Credit Management with responsible to ensure 100% recovery of receivable.

SUMMARY OF UNITS PURCHASED AND BILLED:

Summary of units purchased, units billed, number of consumers, recovery against the billed amount etc. During the periods FY2020-21 and FY2021-22. The state of losses and recovery for last year is as under:-

Year	Units Purchased from CPPA	Units Billed	No. of Consumers in Million	Amount Billed	Amount Recovered	Receivables	Average Rate Per Unit	% Of Collection against Billing
	mkWh	mkWh		(Rs. Million)	(Rs. Million)	(Rs. Million)	(Rs.)	
2021	15985	14501	4.641	241627	246363	54223	17.860	102
2022	17513	15919	4.869	328929	327371	73178	23.036	100



- Collection% age:

Comparative periodic Billing-Collection %age performance of FESCO for last Five years is detailed below:

Description	Period	Billing	Collection	% age collection
		Total	Total	Total
FESCO	Jul-21to Jun-22	328929	327371	100
	Jul-20to Jun-21	241627	246363	102
	Jul-19toJun-20	208795	202548	97
	Jul-18toJun-19	183468	183311	100
	Jul-17toJun-18	155927	155899	100
Inc with Previous Year Upto Jun-21	Rs. Million	32835	43815	
	%age	15.73	21.63	
Inc with Previous Year Upto Jun-22	Rs. Million	87307	81008	
	%age	36.13	32.88	

NUMBER OF DEFECTIVE METERS:

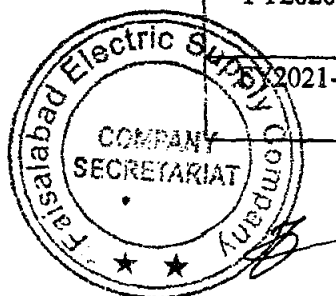
FESCO replaced 389,136 No .of defective energy meters in FY2020-21and 259,861 in FY2021-22. As given below:

Period	Total defective meters	Meters Replaced	
		S/Phase	3/Phase
FY2020-21	27286	383581	5555
FY2021-22	35412	254471	5390

NUMBER OF PENDING NEW CONNECTIONS:

FESCO has 7051 No. of Ripe applications pending for installation at the end of June 2021 ,and 50832 Ripe applications pending for installation at the end of Jun-2022. The detail is given as:

Period	Connections	Pending Application		
	Installed	Ripe	Un-Ripe	Total
FY2020-21	254965	7051	47227	54278
FY2021-22	191387	50832	46048	96880



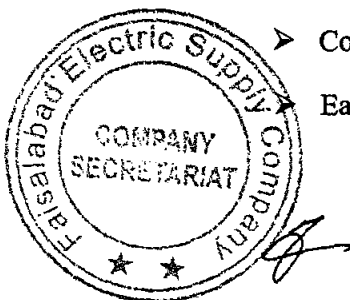
IMPROVEMENT IN CUSTOMER SERVICES DELIVERY AND ESTABLISHMENT OF MODERNIZED/STATE-OF-THE-ART CUSTOMER CARE CENTRE.

FESCO prime focus is on customer satisfaction and service delivery and growing consumer awareness and expectations. We have assigned highest level of priority to service delivery and are coaching our senior team on its importance, they are doing the same down below the chain of command. A number of specific actions are under way:

- a) **Customer Care Centers :-** FESCO flag ship customer service center at our Head Quarters has been modernized and many facilities such as Inter-active TV / Qmatic Machine (for 24 hours access to customer service products i.e. even after office hours), special counters for overseas Pakistanis and Senior Citizens, excellent seating arrangement etc. have been provided in order to provide better services to valuable customers through one window operation for timely and satisfactory complaint redressal. The center has been inaugurated by Honorable Minister for Energy on 07.01.2022. FESCO is now proceeding with modernizing the remaining 163 Customer Care Centers on a fast track basis.
- b) Previously, FESCO had a plethora of phone numbers through which customers could lodge their complaints, and there was no proper monitoring mechanism due to which customers were not getting satisfactory service. We have moved away from the same and are now using 118 (CCMS) only, this will improve service delivery greatly.
- c) FESCO has declared 01 No. Division (People Colony Division) as 'Model Division' along with its 07 Nos. Sub-Divisions, and provided the aforementioned facilities to enhance customer satisfaction.
- d) FESCO has also launched "FESCO Light" Android Application for facilitation of FESCO consumers regarding Load Management Schedule, Duplicate Bills, Information Regarding Previous Billing, Registration of New Complaints, Online Application for New Connection and Bill Estimator.
- e) Proper training sessions should be conducted for the improvement /Betterment in the performance of technical staff.

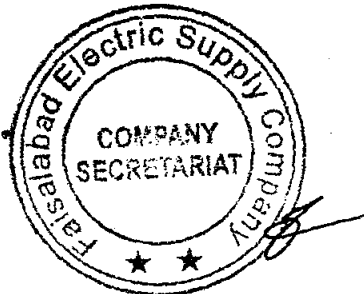
Following facilities are being provided to consumers at FESCO Customer Care Center:

- Online Due Date Extension & Installments Facility
- Online Bill Correction Facility upto 300 units
- Issuance of Duplicate Energy Bills
- New Connection Application Registration
- Complaints Registration
- Ease of information/guidance required by consumers



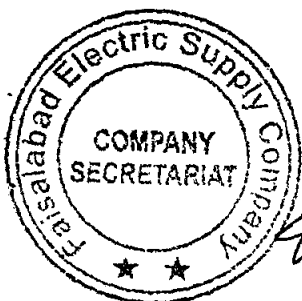
FESCO has taken following initiatives for improvement in Service Delivery:

- i. Software for due date extension, installments & bill correction is developed in collaboration with PITC, to facilitate the consumers.
- ii. Consumer's due dates are extended online upto 10 days through PITC software at one window in FESCO Customer Care Center and energy bills with extended due dates printed on them are handed over to consumers for direct payment in bank.
- iii. Easy installment facility is being provided to the consumers in FESCO Customer Care Center at one window through PITC software and revised bills with installment amount printed on them are handed over to consumers for direct payment in bank.
- iv. Bill correction facility, for correction upto 300 units is being provided to the consumers at FESCO Customer Care Center through PITC software and revised printed bill is handed over to the consumers for payment in banks.
- v. Token Machine System has been introduced in FESCO Headquarter Customer Care Center for customers' ease and better management
- vi. Smart Screen has been installed in FESCO Headquarter Customer Care Center, for facilitation of consumers. Following tasks can be performed through Smart Screen Interactive System":
 - Online Complaint Registration
 - Check Load Management Schedule
 - Estimated Bill Calculation
 - Billing Information
- vii. A dedicated Counter has been established at FESCO Headquarter Customer Care Center for Senior Citizens & Overseas Pakistanis Counters, to resolve their grievances at one window.
- viii. Separate counters have been created to register failure of supply complaints as well as for registering new connection applications online, by collecting required information/documents from applicants.

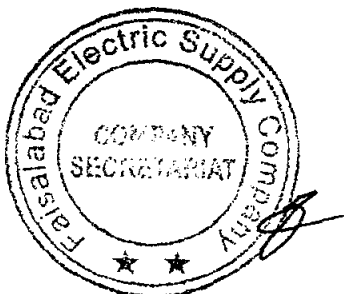
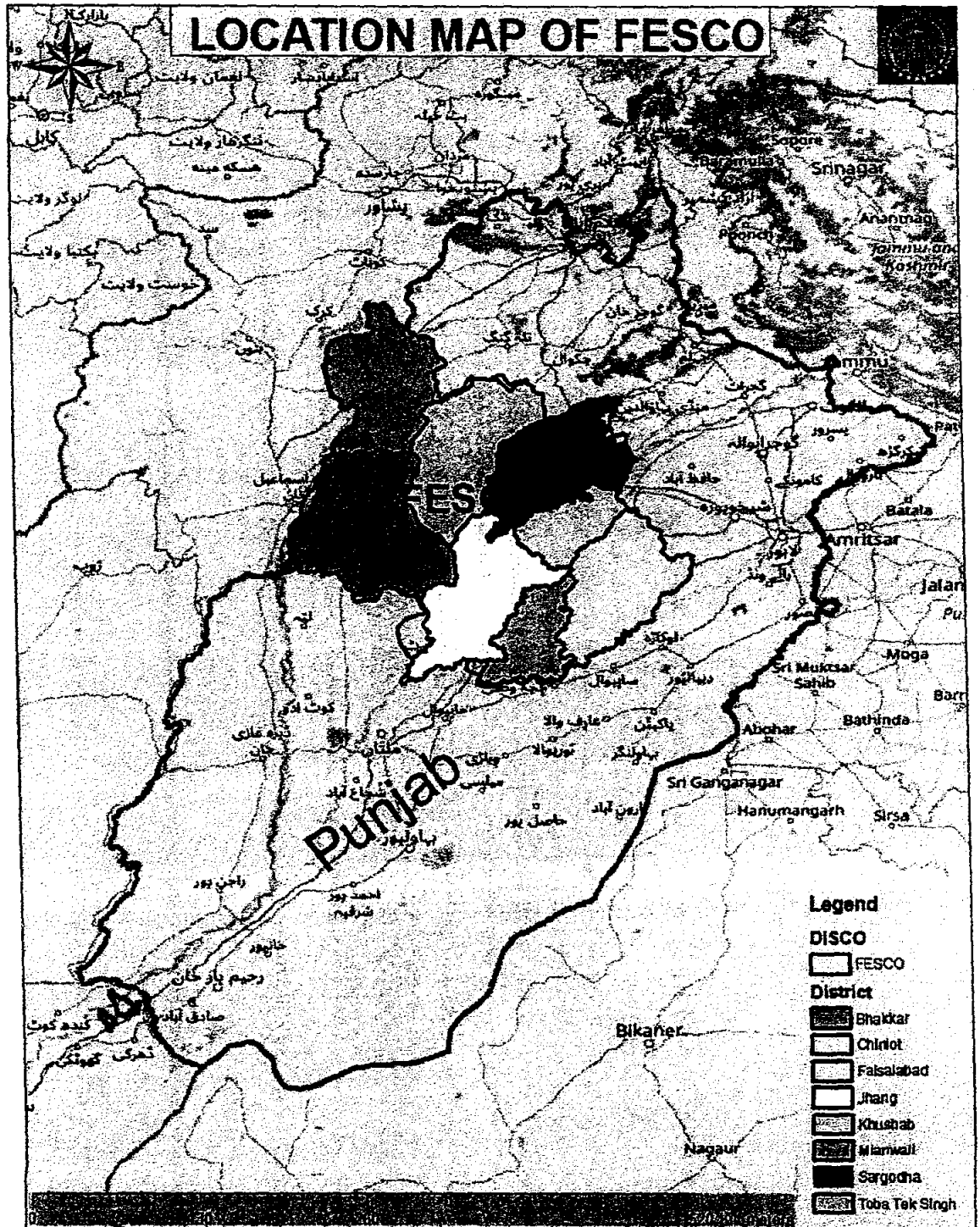


INTERNAL CONTROL

- Expenditures are incurred after the Admin approval of the Competent Authorities to whom the financial powers have been delegated by the Board of Directors (BoD).
- All the investment approvals are accorded by the Competent Authorities to whom the Board of Directors has delegated the financial powers.
- All the payments of the projects and material procurement are pre audited by Finance department.
- FESCO has very effective Internal Audit system and follow the audit manual devised with the help of USAID.

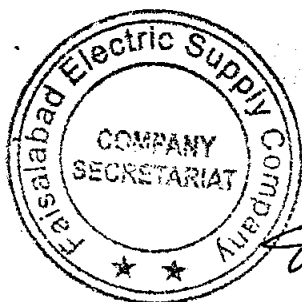


ii. LOCATION OF THE LICENSEE/FESCO ON THE MAP OF PUNJAB

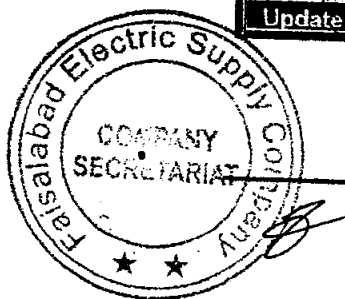
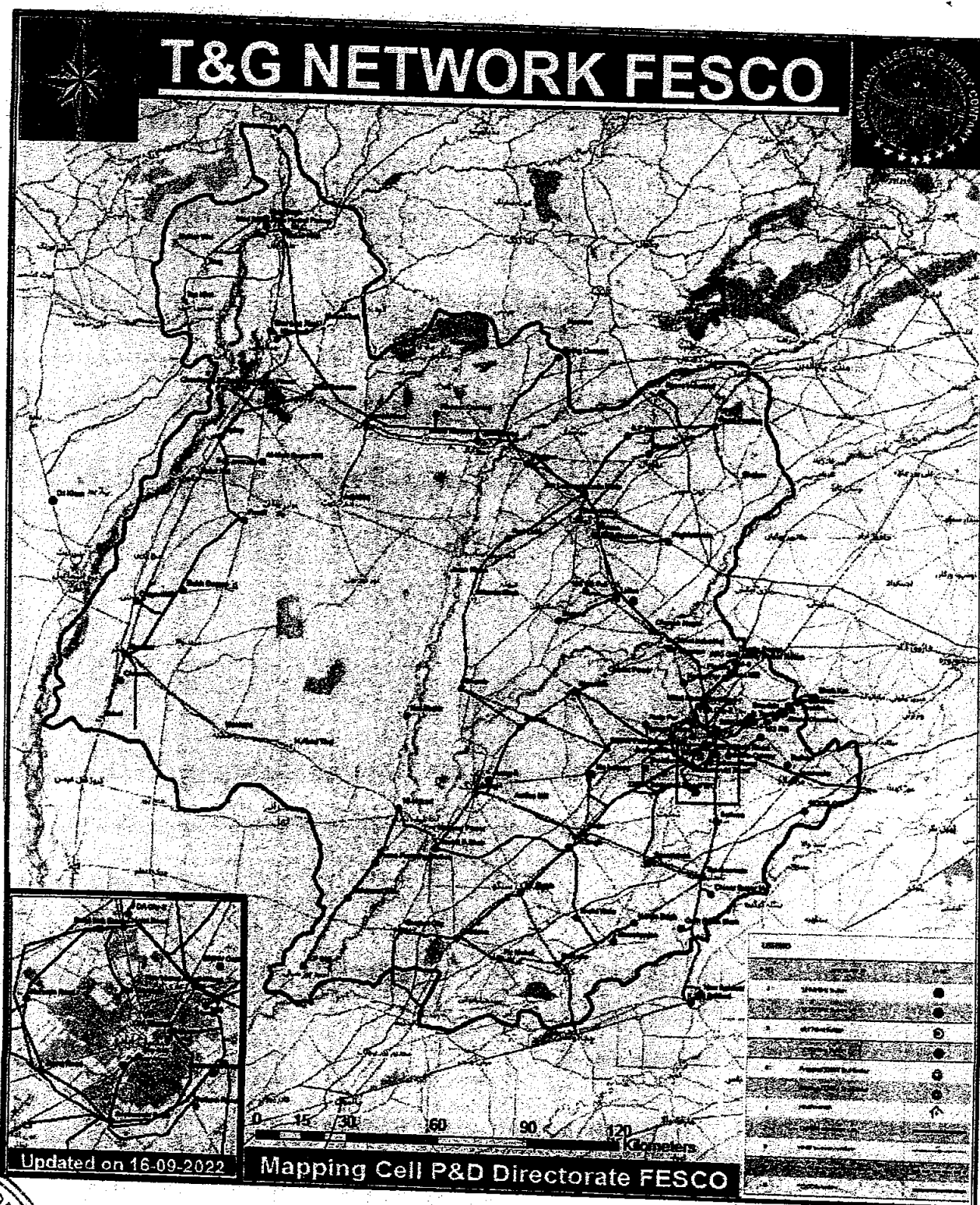


iii. COMPANY'S STRUCTURE

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TOTAL FESCO AREA= 45387 km² (Approximately)

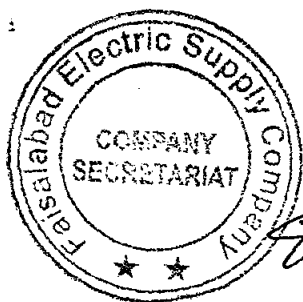


STATISTICAL AND FINANCIAL INFORMATION

DIIP-8: PHYSICAL ASSETS OF FESCO

The physical assets (Electrical) of FESCO as on 30th June, 2022 are detailed as under:

Description	Unit	Quantity
A. Grid Stations		
• 132kv Grid Stations	No.	85
• 66kv Grid Stations	No.	16
• 132kv Consumer Grid Stations	No.	23
• Power Transformers Installed (Different Capacity)	No.	283
• Total Installed Capacity of Power Transformers	MVA	7243.6
B. Transmission Lines 132kv& 66kv		
• Total Length of Transmission Line	kms	5431.77
C. Distribution System		
• 11 KV Feeders	No.	1202
• Total Length of 11 KV (H.T) Line	kms	43819.235
• Total Length of LT Line	kms	27621.719
• Distribution Transformers Installed (Different Capacity)	No.	117895
• Total Installed Capacity of Distribution Transformers	MVA	7022.227
D. Service Connections		
• Domestic	No.	4,291,224
• Commercial	No.	440,006
• Industrial	No.	53,475
• Tube-well	No.	51,922
• Others	No.	32,515
• Total Consumers	No.	4,869,142



DIIP-9: LENGTH OF DISTRIBUTION LINES:

By 30-06-2022, the total length of HT (11kv) and LT (0.4kv, 3-phase and 0.23kv, 1-phase) lines in the FESCO Faisalabad system was 43819.235km and 27621.72km respectively. Circle wise distribution of the length of lines (Table 3.4, Annex-3) is as follows:

Name of Circle	Length		Percentage (%)	
	H.T	L.T	H.T	L.T
Faisalabad-I	8592.105	4447.692	19.61	16.10
Faisalabad-II	4991.150	3806.262	11.39	13.78
Jhang	12319.047	7589.129	28.11	27.48
Sargodha	10053.954	6375.515	22.94	23.08
Mianwali	7862.980	5403.121	17.94	19.56
Total	43819.235	27621.719		

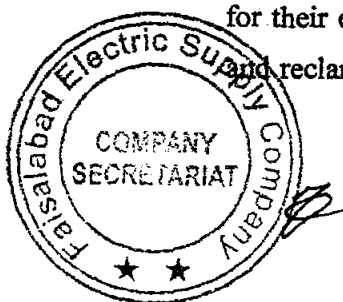
TRANSFORMERS INSTALLED.

117895 distribution transformer substations of sizes ranging between 10kva and 630kva have been installed in the FESCO system in both urban and rural areas as on 30-06-2022.

The total installed transformer capacity is about 7022.227 MVA.

POWER DEMAND AND SUPPLY

The load forecast is being done through Demand Forecasting Section, functioning under the MIRAD Department of FESCO and required information is being collected by the Power Market Survey personnel by actual visits to sites. This forecast is based on past experience to extend power facilities to areas of FESCO. The future loads of all types of communities are projected on the basis of present pattern of power consumption, taking into consideration the industrial and agricultural development programs. The demand of districts in each administrative Division and then of all the Divisions located in the entire system are worked out after accounting for transmission and distribution losses and applying appropriate diversity factors at different stages. The power requirements of medium and large industries are determined on the basis of information collected for the sanctioned industrial projects as well as from existing undertakings; for their expansion plans by the survey staff. For pumping load, the program regarding salinity and reclamation control schemes, along with the installation of private tube-wells are taken into



account. The load of villages is included as per envisaged village electrification program for the period.

On the basis of this Power Market Survey (Annex: "B") jointly prepared by FESCO under supervision of Planning (Power) NTDC, FESCO Demand Forecast is given as under:

COMPUTED PEAK DEMAND

CHARACTERISTICS OF FESCO SYSTEM

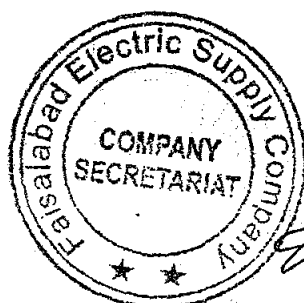
The characteristics of integrated FESCO system (during 2021-22) are given below:-

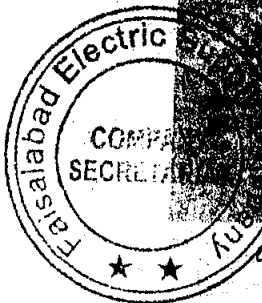
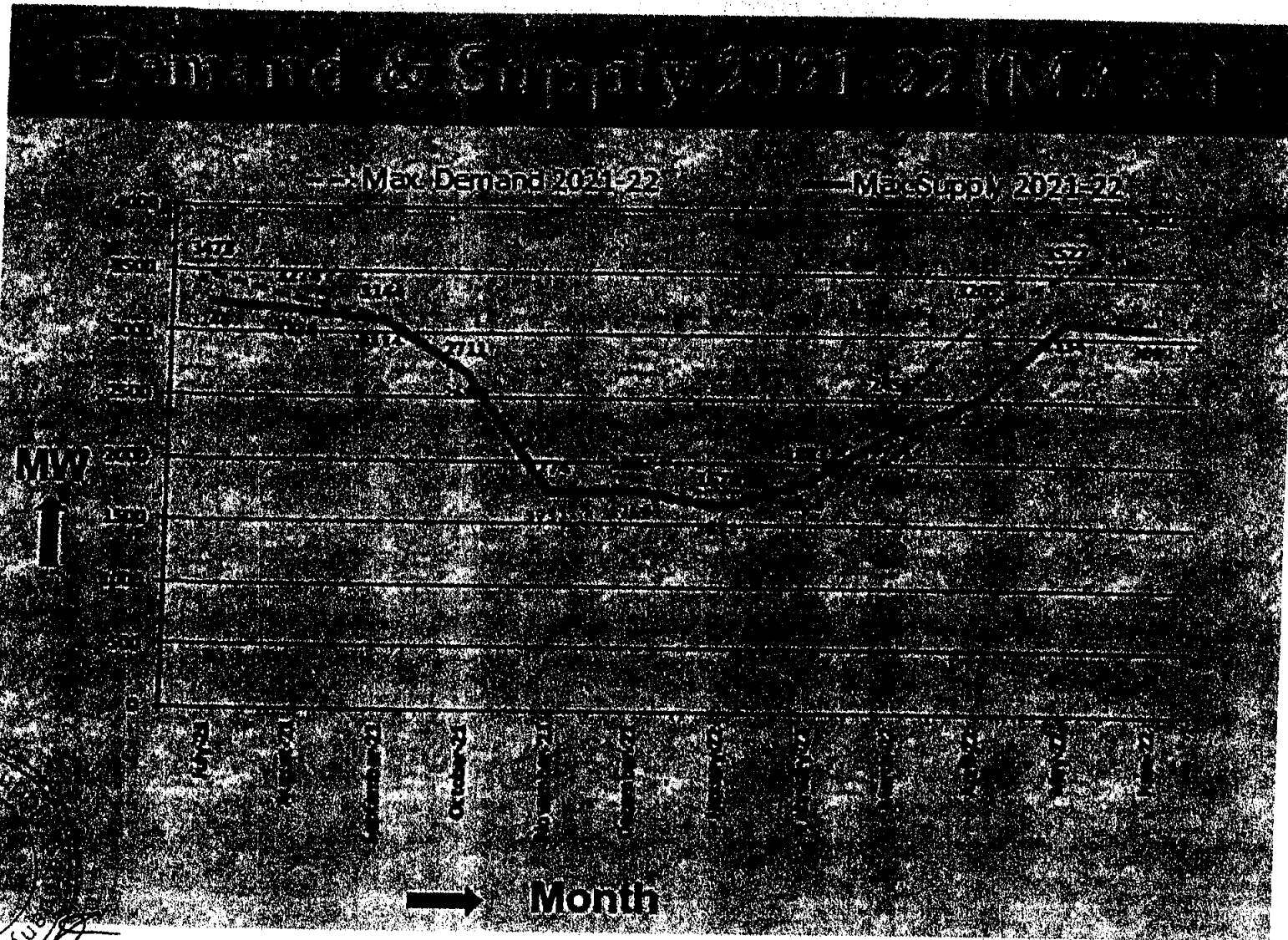
DIIP-10: CHARACTERISTICS OF FESCO SYSTEM

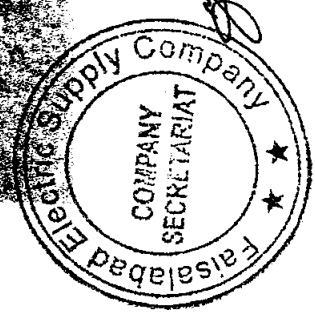
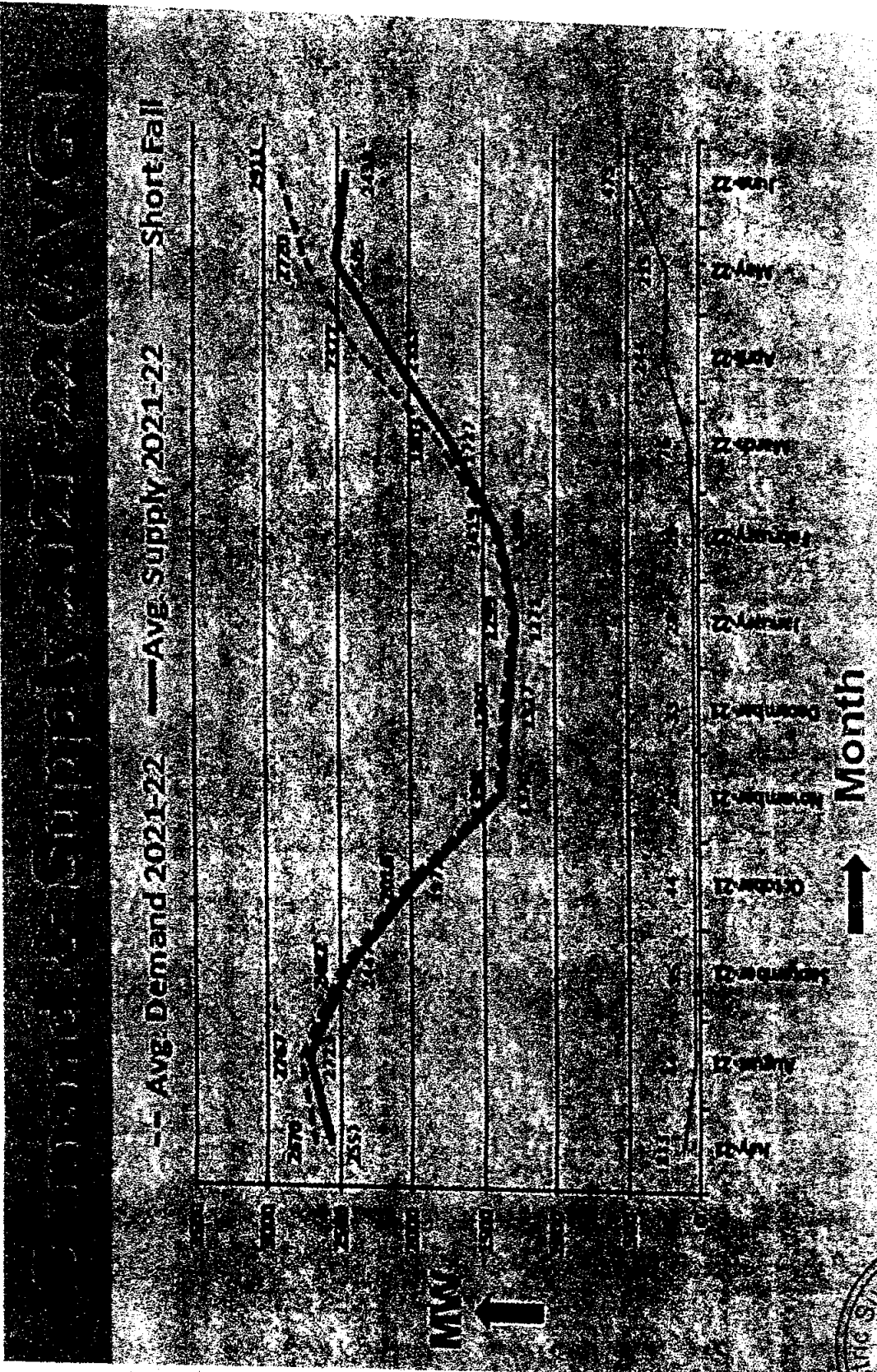
A	Seasonal variations of the maximum demand	
1	Sumer Season	Recorded = 3092 MW Computed = 3802 MW
2	Winter Season	Recorded = 1651 MW Computed = 1678 MW
B	Power Factor	90% = 0.90
C	Annual load factor(on Min: Demand)	Recorded = 64.58 % Computed = 52.58 %
D	Diversity Factor(Used for different type of loads in the Power Market Survey)	
	In villages:	= 1.05
	In towns:	= 1.11
	In cities:	= 1.18
	B/W Districts/Cities/Towns & Villages:	= 1.05
	In Divisions:	= 1.18
F	Transmission & Distribution losses	9.10 % during 2021-22

DIIP-11: COMPUTED PEAK DEMAND

Year	Computed Peak Demand (MW)					
	Including Load Shedding	% G.R	Excluding Load Shedding	% G.R	Difference/ Load Shedding	%age load shedding
2023-24	4105		3886		219	5.3
2024-25	4313	5.1	4086	5.1	227	5.3
2025-26	4559	5.7	4322	5.8	237	5.2
2026-27	4815	5.6	4569	5.7	246	5.1
2027-28	5072	5.3	4815	5.4	257	5.1

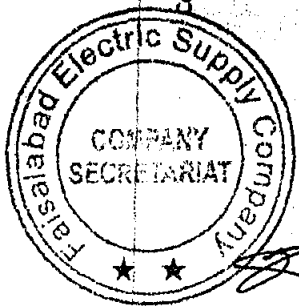
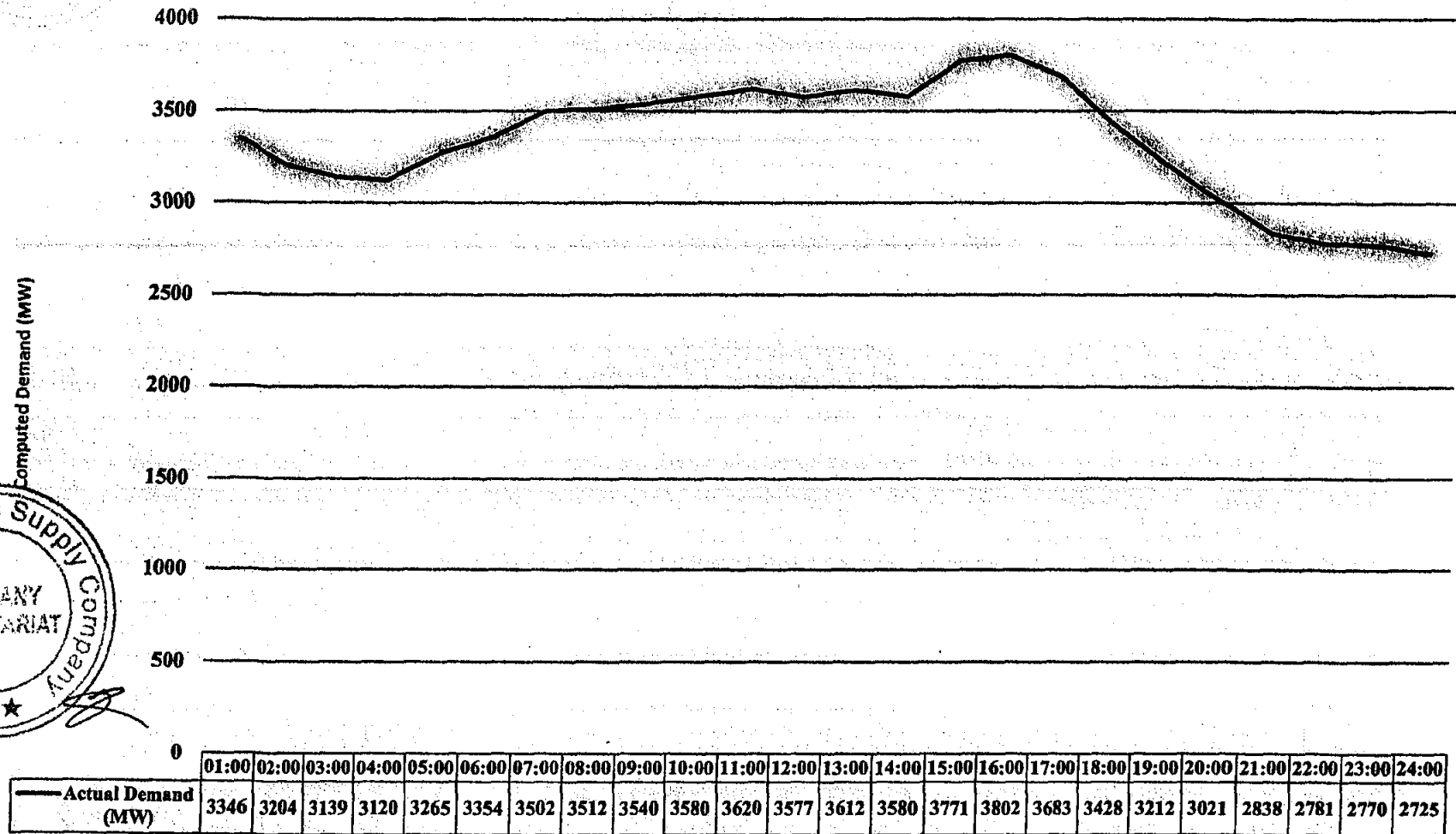






FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

**Actual Maximum Demand
(MW) on 30.06.2022**



SECONDARY TRANSMISSION AND DISTRIBUTION NETWORK CONDITIONS

The Grid Station system has a prime role in Transmission and distribution of energy. The lengthy 132kv and 66kv Lines are used for transfer of power to Grid Stations in far flung areas of FESCO jurisdiction. Generally, Transmission Lines and Grid Station equipment is in good condition and being maintained properly. There is vast distribution network. The general condition of the distribution network is satisfactory for existing demand but likely to be overloaded by increasing demand and these networks require investment for dispersal of additional power required by the costumers. The existing 11kv and L.T system also required rehabilitation in more than 20% cases where poles are not in good condition and augmentation of conductors is required.

ANALYSIS OF THE MAIN ISSUES FACING THE COMPANY

FINANCIAL ISSUES

- Delayed determination / notification of tariff
- Taxes issues with FBR
- Shortage of Staff

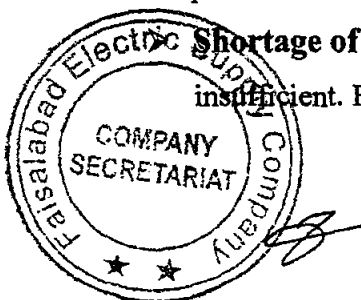
INVESTMENT NEEDS

The objective of power development program for the five year plan and subsequent years is to provide adequate generation, transmissions and distribution facilities in the system to fulfil the targets fixed in the industrial agricultural and social sectors of the economy. This can be achieved by increasing the system , transmission and distribution capability. Considerable additional power can be released by rehabilitating, upgrading and expansion of STG and the existing distribution system..

OTHER ISSUES

- **Shortage of Staff;** FESCO is facing shortage of 233 No. officers out of which 112 No. are technical whereas 121 No. are non-technical officers. Furthermore, 10,189 No. posts of officials are also vacant due to which it is very problematic to manage the operational & maintenance work of the company. Overall, FESCO is facing shortage of 10,412 No. of employees, working strength is 13,628 out of 24,040. BoD FESCO has allowed hiring of C-level positions 07 Nos. new position have already been creating by BoD FESCO. Furthermore, phase wise recruitment process has been started against vacant positions.

Shortage of Vehicles; The existing transport fleet of the company is very old and also insufficient. Huge funds are required for replacement of old vehicles with new ones as well



as availability of power vehicles, power tools and bucket mounted vehicles for working on Transmission & distribution lines.

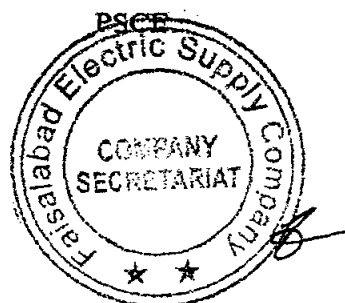
SECTION-III

Power Market Survey (PMS), where the bottom up approach is applied considering the best international practices for the development of ten years forecast which is called Medium-term Load Forecast with facilitation from National Transmission and Dispatch Company (NTDC). The year 2020-21 has been taken as the base year and the forecast horizon is ten years up to 2030-31. The base year sale data (consumer-category wise energy sale of each feeder) and the expected spot loads data at the locations of different sub-stations have been collected by FESCO Power Market Survey team besides Transmission & Distribution losses along with the loss reduction plans, historical category-wise sale and number of consumers. Data for the base year has also been adjusted for the estimated amount of un-served energy (load shedding) in order to have realistic figures of energy consumption. Furthermore, this report is updated on yearly basis, in order to capture any potential drastic change in consumer consumption pattern.

In the year 2020-21, peak demand of FESCO was 3142 MW, energy sale was 14501 GWh and energy purchased was 15984 GWh. In the total energy sale for the year 2020-21 the shares of domestic sector and industrial sector were 51% and 35% respectively. The total number of consumers in 2020-21 were 4.64 million, and number of consumers in various categories was 4.06 million in domestic, 0.47 million in commercial, 0.052 million in industrial sector and 0.049 million in agricultural sector.

Forecast results show that in the years 2024-25 and 2030-31 energy sale will be 18219 GWh and 25283 GWh, peak demand will be 4025 MW and 5766 MW, and energy purchased will be 19661 GWh and 27157 GWh respectively. For the period 2020-21 to 2030-31, annual average compound growth rate of energy sale, peak demand and energy purchased will be 5.72%, 6.1% and 5.6% respectively.

FESCO Load Forecast Department of MIRAD has conducted the detail power Market Survey in association with NTDC Report to the Study a detailed session for Medium Term Forecast at LUMS



The salient features of next 05 years forecast are as under

FORECASTS FOR NEXT FIVE YEARS

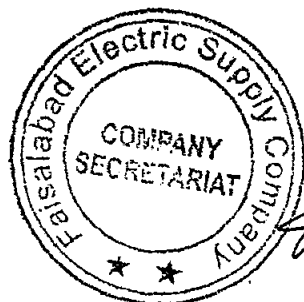
DIIP-12: CONSUMER GROWTH BY CATEGORY

(No. in Million)

Description	2023-24	2024-25	2025-26	2026-27	2027-28
Domestic	4.731	4.968	5.216	5.477	5.751
Commercial	0.485	0.509	0.535	0.562	0.590
Industrial	0.059	0.062	0.065	0.068	0.072
Agriculture	0.057	0.060	0.063	0.066	0.070
Other	0.036	0.038	0.040	0.041	0.044
Total	5.368	5.637	5.918	6.214	6.525
Growth %	5.000	5.000	5.000	5.000	5.000

DIIP-13: ENERGY FORECAST (GWH)

Description	2023-24	2024-25	2025-26	2026-27	2027-28
Domestic	8655	9094	9546	10028	10498
Commercial	917	982	1051	1126	1206
Industrial	6253	6475	6817	7161	7509
Agriculture	1644	1773	1909	2052	2203
Other	259	259	259	260	260
Total	17727	18582	19581	20626	21675
Growth %	5.7	4.8	5.4	5.3	5.1



DEMAND FORECAST (In MW)

Description	2023-24	2024-25	2025-26	2026-27	2027-28
Total Demand	4045	4249	4491	4743	4995

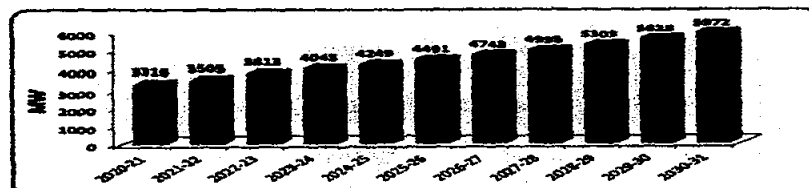
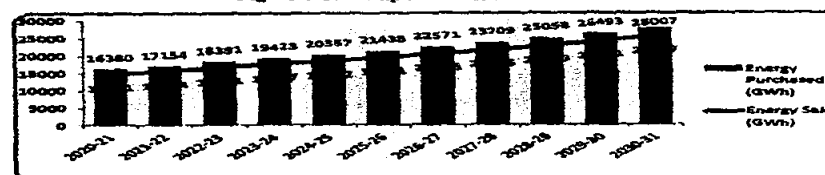


Figure 1-6: Computed Peak Demand

**GENERATION FORECAST AND POWER ACQUISITION PROGRAM**

The Generation forecast and NTDC Expansion Plan has been attached as **Annex-C**

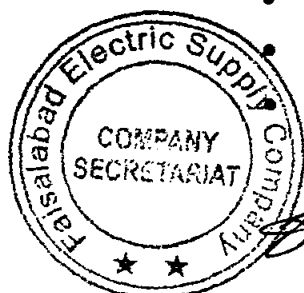
DIIP-14: ANTICIPATED LOAD SHEDDING

Description	2023-24	2024-25	2025-26	2026-27	2027-28
Total Demand (MW)	4105	4313	4559	4815	5072
Generation Available (MW)	3886	4086	4322	4569	4815
Shortfall (MW)	219	227	237	246	257

Power Market Survey Study (PMS) is attached as **Annex-B**

OTHER CHANGES INCLUDING TECHNOLOGICAL ADVANCES

- Technical audit of big consumers is encouraged by FESCO.
 - Installation of AMR/AMI meters.
 - The installation of TOU meters is also the part of demand side load management.
- Installation of capacitors at Grid Station and 11 KV Feeders has also helped to improve the power quality which in turn conserves the electricity.

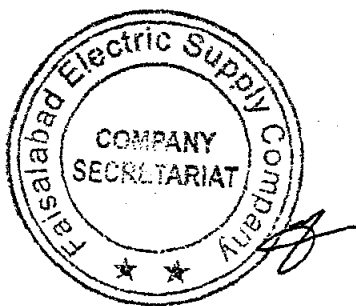


SECTION -IV

NEXT FIVE YEARS GOALS AND OBJECTIVES

Goals and objectives in five years plan has been set keeping in view the directions of the Regulator (NEPRA) regarding performance standards and in light of Grid Code, Distribution Code, Consumer Service Manual and Distribution Planning Code, so that following goals can be achieved.

- a. Reliable dispersal of power
- b. Acceptable performance standards specified in guideline of NEPRA
- c. Loss reduction and improving connections
- d. Improving internal control
- e. Capacity building of employee
- f. Introducing corporate culture
- g. Improving safety
- h. Improved socio economic conditions of customers

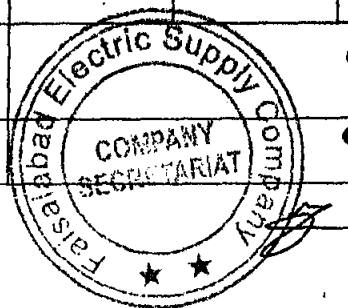


FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

GOALS AND OBJECTIVES MATRIX

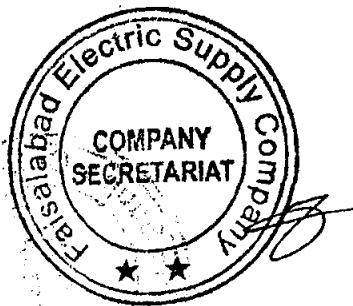
DIIP-15: FESCO STRATEGIC GOALS AND OBJECTIVES

Strategic Goals	Strategic Objectives	Leading Directorate	Coordinating Directorate	Target Measurement	Measurement as of FY 2022	Five Year Objectives FY 2024 to FY 2028					Project Manager	Supporting Plan
						FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28		
1. Improvement in Operational Efficiency	Losses	Operation Circle	Commercial	%age	9.10 %	8.74	8.60	8.50	8.40	8.35	Director Commercial	
	Collections	Operation Circle	Commercial	%age	101.1%	100	100	100	100	100	Director Commercial	
	SAIFI	Operation Circle	C.E (Op)	Numbers	35.53	34.6	34.3	34.0	33.6	33.0	T.O of Operation Circle	
	SAIDI	Operation Circle	C.E (Op)	Hours	1252	1223	1212	1201	1185	1170	T.O of Operation Circle	
	Others											
2. Improvement Customer care and Service	Reducing Billing Complaints	Operation Circle	Chief Engineer Customer Services	Numbers	3984	3200	2500	2100	1600	1250	DCM of Operation Circle	
	Others											
3. Improvement in FESCO Infrastructure	Human ware	Director (HR)	D.G (HR)	Quality of support services will be improved								
	Infoware	D.G (MIS)	CCO	Consumer satisfaction and quality assurance								



FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

	Orgoware	Director (HR&A)	DG (HR&A)	Coordination between directorate will be improved
	Technoware	Chief Technical Services	CTO	Reliability of the power supply and improvement in efficiency
4. Comply with applicable Laws & Regulations	NEPRA Rules, Codes etc	All Management Directors with relevant codes	D.G (HR&A)	Implementation of codes, rules and policies of the company
	Others			
5. Make FESCO Socially responsible		Director (HR&A)	D.G (HR&A)	Implementation of codes, rules and policies of the company



Section –V

PLAN FOR EXPANSION AND REHABILITATION OF SECONDARY TRANSMISSION SYSTEM (STG)

The STG projects were designed in order to ascertain inclusion of new Grid Stations Transmission Lines and other allied STG Projects a comprehensive load flow study carried out and based on best case study and optimally achievable case. Load Flow Study and Short Circuit Studies are attached as Annexure-D and Annexure-F

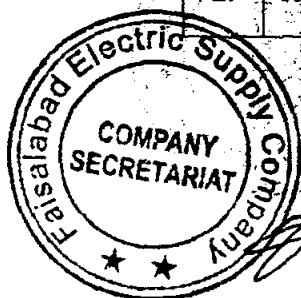
DIIP-16: GRID STATIONS

S/ No.	Description	Total No.	Total Capacity (MVA)	2023-24 (No.)	2024-25 (No.)	2025-26 (No.)	2026-27 (No.)	2027-28 (No.)
1.	New							
a.	132 KV	30	1454	7	9	4	7	3
2.	Augmentation							
a.	132 KV	35	468	9	6	8	11	2
b.	66 KV	1	5	-	0	-	-	-
3.	Extension (T/Bay)							
a.	132 KV	15	419	2	4	2	4	3
b.	66 KV	0	0		0			
4.	Extension (L/Bay)							
a.	132 KV	15	-	1	5	4	0	5
b.	66 KV	-	-	-	-	-	-	-

TRANSMISSION LINES

DIIP-17: NEW LINE

S/ No.	Description	Total Length (KM)	2023-24 (KM)	2024-25 (KM)	2025-26 (KM)	2026-27 (KM)	2027-28 (KM)
1.	132 KV D/C	422.3	98.8	117	54	86.5	66
2.	132 KV SBT	16	-	-		-	16



DIIP-18: 2ND CIRCUIT STRINGING OF EXISTING SDTT/LINES

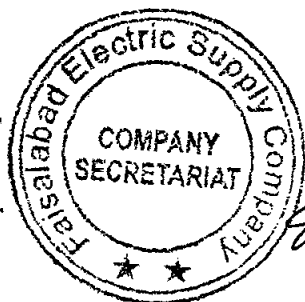
S/ No.	Description	Total Length (KM)	2023-24 (KM)	2024-25 (KM)	2025-26 (KM)	2026-27 (KM)	2027-28 (KM)
1.	132 KV D/C	-	-	-	-	-	-
2.	132 KV SDT	-	-	-	-	-	-

DIIP-19: RECONDUCTORING/ UP-GRADATION OF EXISTING T/LINES

S/ No.	Description	Total Length (KM)	2023-24 (KM)	2024-25 (KM)	2025-26 (KM)	2026-27 (KM)	2027-28 (KM)
1.	132 KV D/C	15	-	-	15	-	-
2.	132 KV SDT	-	-	-	-	-	-

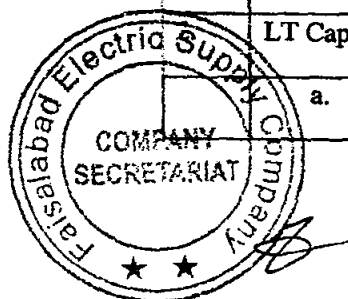
DIIP-20: CAPACITORS

S/ No.	Description	Total MVAR	2023-24	2024-25	2025-26	2026-27	2027-28
1.	11 KV Fixed capacitors	356	28	100	100	28	100
2.	11 KV Switched Capacitors	-	-	-	-	-	-
3.	132 KV Fixed Capacitors	144	72	0	0	72	0
4.	132 KV Switched Capacitors	-	-	-	-	-	-



PLAN FOR EXPANSION AND REHABILITATION OF DISTRIBUTION SYSTEM**DIIP-21: EXPANSION AND REHABILITATION****DOP**

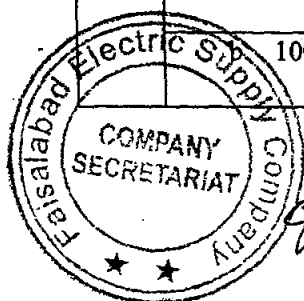
S/ No.	Description	Unit	Quantities					
			2023-24	2024-25	2025-26	2026-27	2027-28	Total
A. Scope of work for 11 KV Expansion								
1.	New HT Lines							
	Number of Proposals	No.						
	Length of New H.T Lines	KM	278	304	330	362	380	1654
2.	Transformers							
	a. 10 KVA	No.	575	575	638	702	702	3192
	b. 15 KVA	No.	446	447	511	575	575	2554
	c. 25 KVA	No.	1554	1555	2192	2192	2830	10323
	d. 50 KVA	No.	1160	1211	1274	1338	1402	6385
	e. 100 KVA	No.	446	447	511	575	575	2554
	f. 200 KVA	No.	178	185	192	198	205	958
	g. 400 KVA	No.	15	18	19	21	23	96
	h. 630 KVA	No.	5	6	6	6	7	30
	i. Other KVA	No.	-	-	-	-	-	-
	Sub Total		5379	5444	6343	6607	7319	26092
B. Scope of work for LT Expansion								
1.	New LT Lines							
	Number of Proposals	No.	-	-	-	-	-	-
	Length of New L.T Lines	KM	158	168	178	188	200	892
	LT Capacitors							
	a. Different KVARs	No.						



C. Service Connections								
1.	Single phase	No.	202232	214617	222872	234024	245736	111948
2.	Three Phase	No.	53298	53688	58846	61775	64855	292461
3.	TOU Meter	No.	100	106	115	124	129	574
Sub Total		No.	255630	268411	281833	295923	310720	1412443

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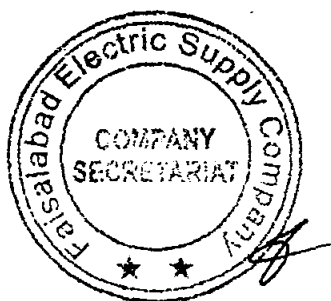
S/ No.	Description	Unit	Quantities					
			2023-24	2024-25	2025-26	2026-27	2027-28	Total
A. Scope of work for 11 KV Distribution system Rehabilitation								
1.	New HT Lines							
	Number of Proposals	No.	32	34	36	38	40	180
	Bifurcation	KM	288.89	306.94	325.00	343.05	361.11	1825.99
	Reconductoring	KM	255.56	271.53	287.50	303.47	319.44	1437.50
	Re-Routing	KM	-	-	-	-	-	-
2.	Replacement of Over Loaded Transformers							
	a. 50 KVA	No.	150	175	200	225	250	1000
	b. 100 KVA	No.	150	175	200	225	250	1000
	c. 200 KVA	No.	100	100	100	100	100	500
	d. Other KVA	No.						
	Sub Total		400	450	500	550	600	2500
3.	Replacement of defective/ burnt Transformers							
	a. 50 KVA	No.	152	177	202	227	252	1010
	100 KVA	No.	307	308	357	407	457	1836



	c. 200 KVA	No.	37	43	43	43	48	214
	d. Other KVA	No.						
	Sub Total	No.	496	528	602	677	757	3060
4	Replacement of Old Transformers (Useable life expired)							
	100 KVA	No.	330	329	329	329	329	1664
	200 KVA	No.	316	316	316	316	316	1580
	Sub Total	No.	646	645	645	645	645	3244
5.	11 KV Panels for replacement and Bifurcation of feeders	No.	10	13	16	19	22	80
B. Scope of work for LT Rehabilitation								
1.	LT Line Rehabilitation							
	Number of Proposals	No.	800	850	900	950	1000	4500
	Reconductoring / New LT Lines	KM	200	224.5	241	266.2	302.3	1234

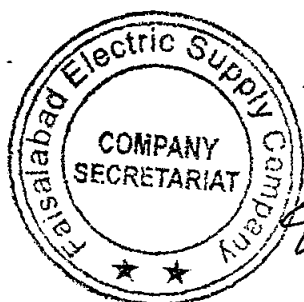
C. Reliability equipment.								
a. Sectionalizer	No.	160	130	98	64	60	235	
b. Auto Reclosers	No.	20	20	20	16	12	53	
c. Voltage Regulators (Single Phase Unit)	No.	55	30	30	23	15	75	
d. Fault Locator	No.	630	972	832	645	550	2170	
Sub Total	No.	865	1152	980	748	637	2533	
11 KV Panel	No.	Already included in STG Expansion						

The detailed scope of work is attached as Annex-H



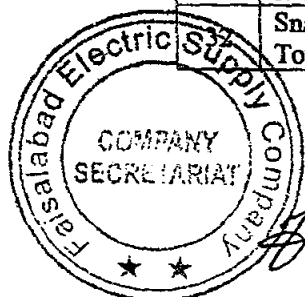
DIIP-22: Vehicles

S/ No.	Description	Quantity (No.)					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	Cars 1800cc	3	2	Nil	Nil	Nil	5
2	Cars 1600cc	8	4	3	Nil	Nil	15
3	Cars 1300cc	8	5	8	4	5	30
4	Cars 1000cc	20	10	16	9	13	68
5	Cars 800cc	10	8	8	6	5	37
6	Cars 660cc	20	15	10	10	10	65
7	Jeeps	Nil	Nil	Nil	Nil	Nil	0
8	Vans	6	5	5	4	5	25
9	Trucks	48	3	20	15	10	96
10	Cranes	16	15	10	10	10	61
11	Pickups	95	40	30	35	Nil	200
12	Bucket Mounted Vehicles	30	25	20	15	15	105
13	Buses	3	3	3	1	Nil	10
14	Tractors	3	2	2	Nil	Nil	7
15	Fork Lifters	9	5	3	3	2	22
16	Trailers	5	3	2	2	2	14
17	Motorcycles	50	50	50	25	25	200
Total		334	195	190	139	102	960



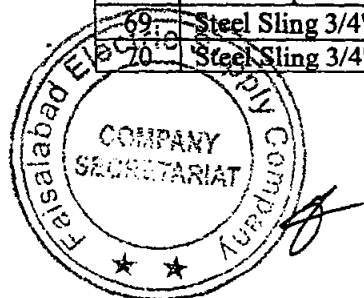
DIIP 23: Tools & Plants

S #	Item Description	Quantity					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A)	Tools & Plants						
1	Earthing Set	500	500	500	500	500	2500
2	Earth Tester	60	60	60	60	60	300
3	Fiber Class Extension Ladder	600	600	600	600	600	3000
4	Cuffing Hoist (750 Kg)	100	100	100	100	100	500
5	Cuffing Hoist (1500 Kg)	100	100	100	100	100	500
6	Clip On Volt Ampt Meter	157	157	157	157	157	785
7	Clip On Kw Meter	157	157	157	157	157	785
8	Chain Pulley Block (3 Ton)	100	100	100	100	100	500
9	First Aid Box	250	250	250	250	250	1250
10	Pulling Grip (6-10)	157	157	157	157	157	785
11	Pulling Grip (12-15)	157	157	157	157	157	785
12	Adjustable Screw Wrench	3000	3000	3000	3000	3000	15000
13	Line Man Tool Bag	3000	3000	3000	3000	3000	15000
14	Torch 3 Cells	3000	3000	3000	3000	3000	15000
15	Mobile Disc Washing Plant For Transmission Lines	1	0	0	0	1	2
16	Thermovision Camera	14	2	17	19	20	72
17	Voltage Stabilizer, 230v Ac Pure Sinusoidal 3kva	5	3	6	7	7	28
18	Power Cable Semiconductor Screen Removal Kit	15	4	18	20	22	79
19	Secondary Injection Test Set With 0-100A Continuous Output Channel (Accuracy 0.1%), 02 No. Binary Input , Timer Start/ Stop And Provision Of 110VDC Supply With Min Continuous 60VA Burden With Display And Software	4	0	0	0	6	10
20	Primary Injection Test Set With 2400A Continuous, 5000A 3 Minute And Easily Portable	4	0	0	0	6	10
21	Dc Hi-Pot Set (80kv)	3	0	0	4	4	11
22	Phase Sequence Meter/ Tester	5	9	6	7	7	34
23	Working Gloves	1223	10	1480	1628	1791	6131
24	Safety Hat In White Colour (Insulated)	115	11	139	153	168	587
25	Lineman Safety Boot No.7	166	12	201	221	243	843
26	Lineman Safety Boot No.8	226	13	273	301	331	1144
27	Lineman Safety Boot No.9	249	14	301	331	365	1261
28	Lineman Safety Boot No.10	137	15	166	182	201	701
29	Winch Machine (10ton) For Transmission Line (Uk)	4	17	5	5	6	37
30	Steel Rope 3/4" For Winch Machine	2800	18	3388	3727	4099	14032
31	Puller Machine (Zeck Pack SPW-13 Germany) + 2 Drums Of Steel Pilot Size 3/4"	2	19	2	3	3	29
	Snatch Block / Ruler For Hand Line 2" 1 Ton (Canada Make)	24	20	29	32	35	140



FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

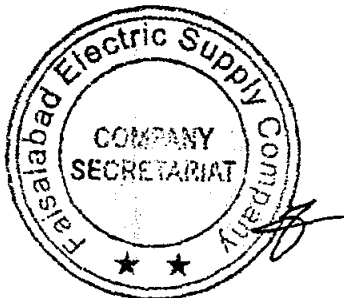
S #	Item Description	Quantity					Total
		2023-24	2024-25	2025-26	2026-27	2027-28	
33	Manual Hydraulic Press Machine With Die Set (70mm, 95mm, 120mm, 240mm, 500mm), Capacity 50-Ton	12	21	15	16	18	82
34	Nylon Rope 1"	3700	22	4477	4925	5417	18541
35	Nylon Rope 3/4"	3500	23	4235	4659	5124	17541
36	Strain Board Made In USA/Canada 14' Length	6	24	7	8	9	54
37	Hydraulic Conductor Cutter For Transmission Line	10	25	12	13	15	75
38	Torque Wrench 3/4"	15	26	18	20	22	101
39	Socket Set Complete 3/4"	34	28	41	45	50	198
40	Rain Coat (Medium)	215	29	260	286	315	1105
41	Rain Coat (Large)	250	30	303	333	366	1282
42	Genrator 5KVA	5	0	6	0	7	18
43	Electric Grass Cutting Machines	20	0	24	0	29	73
44	Leather Safety Jacket For Oprater Staff	205	33	248	273	300	1059
45	Fair Escap Mask (Helmat Type)	142	34	172	189	208	745
46	Temporary Earthing Set For 132KV Transmission Line With 8' Length Rod, Duck Bill Clamp For Earth (PTE), T-Clamp For Earth (PTE), Copper Cable (1/2") For Earth Lead (PTE) (15 Feet Each Lead)	48	35	58	64	70	275
47	Power Cutter For Tree Cutting	16	0	19	0	23	58
48	Line Man Safety Belt Synthetic 40"	42	37	51	56	61	247
49	Cable Cutter (Sizes 19/.52, 19/.83 & 37/.83)	16	39	19	21	23	118
50	Fiber Glass Ladder 15 Feet	30	40	36	40	44	190
51	Adjustable Wrench 200 Mm	50	41	61	67	73	292
52	Adjustable Wrench 300 Mm	50	42	61	67	73	293
53	Rechargeable Torch (Heavy Duty)	120	43	145	160	176	644
54	Lineman/Alm Uniform(Medium)	100	44	121	133	146	544
55	First Aid Box	120	45	145	160	176	646
56	Dril Machine	20	46	24	27	29	146
57	Nose Plier	20	47	24	27	29	147
58	Measuring Tape 100 Ft	20	48	24	27	29	148
59	Grinder Machine	16	0	19	0	23	58
60	Hot Air Gun	18	51	22	24	26	141
61	Socket Goti Set 1/2"	18	52	22	24	26	142
62	Spanner Set	18	53	22	24	26	143
63	Screw Driver Champion Set	18	54	22	24	26	144
64	Thermovision Gun (Day/Night) Minimum Range 25 Meters	50	55	61	67	73	306
65	Polypropylene Rope 1/2"	2600	56	3146	3461	3807	13070
66	Polypropylene Rope 3/4"	2750	57	3328	3660	4026	13821
67	Polypropylene Rope 1"	2660	58	3219	3540	3895	13372
68	Steel Rope 1/4"	300	59	363	399	439	1560
69	Steel Sling 3/4" * 3'	39	61	47	52	57	256
70	Steel Sling 3/4" * 5'	39	62	47	52	57	257



S #	Item Description	Quantity					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
71	DC Grounding /Earth Fault Relay 110V DC	80	63	97	106	117	463
72	Chain Block 750kg	4	64	5	5	6	84
73	Rope Ladder	24	65	29	32	35	185
74	Clamp On Ammeter With AC/DC Provision With Screen Backlight 0.01- 10A High Resolution	10	66	12	13	15	116
75	Lineman Safety Boot No.11	20	67	24	27	29	167
76	Arc Flash Suit	50	68	61	67	73	319
77	D.E.S / Oil Test Set, Min 80KV	5	69	6	7	7	94
78	Eye Protective Glass	50	70	61	67	73	321
79	Reflective Jacket	50	72	61	67	73	323
80	Nylon Sling 3/4" * 3'	55	73	67	73	81	349
81	Nylon Sling 3/4" * 5'	20	74	24	27	29	174
82	Cotton Inner Gloves	100	75	121	133	146	575
83	Warning Tape (Packets)	101	76	122	134	148	581
84	Warning Cone	101	77	122	134	148	582
85	Vacuum Cleaner	18	78	22	24	26	168
86	Conductor Grip Lynx	48	79	58	64	70	319
87	Conductor Grip Rail	39	80	47	52	57	275
88	Conductor Grip Earth	45	81	54	60	66	306
89	Ratchet Conductor Cutter Gear-Chain Type	4	83	5	5	6	103

B) Personal Protective T&P

1	Safety Hat Insulated	3000	3000	3000	3000	3000	15000
2	Line Man Safety Belt	2000	2000	2000	2000	2000	10000
3	Protective Rubber Gloves	7000	7000	7000	7000	7000	35000
4	Protective Lather Globes	7000	7000	7000	7000	7000	35000
5	Line Man Safety Boots	7000	7000	7000	7000	7000	35000
6	Rain Coat	3000	3000	3000	3000	3000	15000
7	D-Operating Rod	1000	1000	1000	1000	1000	5000
8	Insulated Plyer	3000	3000	3000	3000	3000	15000



OTHER FUNCTIONAL IMPROVEMENT PLANS

DIIP-24:

TECHNICAL IMPROVEMENT PLAN

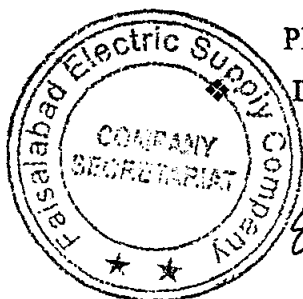
S/ No.	Description	Unit	Quantities				
			2023-24	2024-25	2025-26	2026-27	2027-28
1	HT Mapping (up-dation) 100% LT Mapping up to consumer & Development of Web Based Application for future updation along with Hardware and Software	Job	Web Based Application Design Data Migration HT Survey Up-dation	LT Survey HT Up-dation Integration Trainings	Defect liability Period		
2	Installation of SCADA system to connect FESCO 132 kv & 66 kv Grid Station with DCC & RCC.	Job	Feasibility Study	Hiring of Consultant & Contractor Design, selection and Procurement of RTU, Communication system, Master Stations	Installation of Equipment and Software capacity building of end users	Commissioning and defect liability	
3	Capacity Building of Technical Services (TS) Department and purchase of required I.T tools/ software	Job	Capacity Building & I.T tools for Bidding and evaluation process	Capacity Building & LT tools for G/S & T/Line Design. Purchase of Standards & technical literature	Capacity Building & I.T tools for Protection Design	Capacity Building & I.T tools for AMU/AMR	Capacity Building regarding updation of Technical specifications, standards & SOPs

COMMERCIAL IMPROVEMENT PLANS

Following plan is being designed keeping in view the directions of NEPRA *as follows*:

- ❖ Reducing Customer Complaints related to billing to less than 0.1 %
- ❖ To minimize New Connection installation duration.
- ❖ To minimize Reconnection Installation duration.
- ❖ Modernize the remaining 163 Service Centres on fast track basis.
- ❖ Captive power inclusion in system.
- ❖ Installation of interactive screens at Prominent Public places/ Commercial Malls/ Plazas/ buildings for facilitation of FESCO consumers.

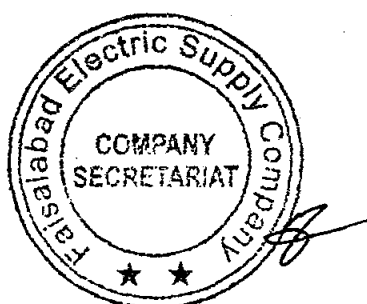
Demand side Management for improving Load factor and coincidence factor.



DIIP-25:

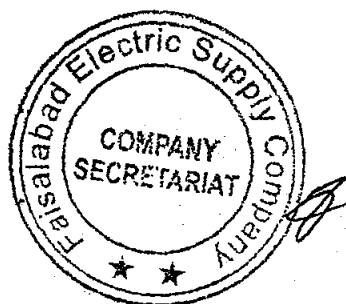
COMMERCIAL MANAGEMENT IMPROVEMENT PLAN

S/ No.	Description	Quantities					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	AMR /AMI Metering	16066	16145	16008	20000	20000	88219
C	New CIS system	Legacy system will be modernized taking care of CRM and complaint management automation			Modernization of existing system		
D	HHUs for meter reading (Mobile Unit for Meter Reading)	-	-	-	-	-	-
E	Consumer Census		Census of 1 st circle consumer		Census of remaining consumers		4.3Million consumer
F	Anti-theft efforts	Checking of 100% Industrial connection & 25% others through FESCO staff.					-
G	IT infrastructure to support new initiatives	Setting of control for reading of AMR/AMI meters					



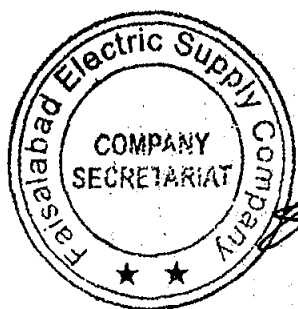
**DIIP-26: FINANCIAL MANAGEMENT IMPROVEMENT PLANS**

S/ No.	Description	Quantities					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	ERP system Implementation Phase-I Phase-II	<ul style="list-style-type: none">FICO, MM, PS and HCM modules has already been implemented successfully. 3rd Party Gap Analysis / Value addition / updating as per requirement will be started after Go-Live of ERP Phase-II of HCM and SharePoint after the approval of BOD FESCO.Technology Transformation from ECC 6 to S4 HANA along with upgradation / procurement of Data Centre hardware.Procurement and Implementation of SAP FIORI					100%
B	Revamping the Internal Audit	Additional staff will be recruited		Due to ERP implementation improvement in Internal Audit is expected.			
C	Other Studies and models preparation. Phase-I Phase-II	<ul style="list-style-type: none">New cost of service Model is being prepared with co-ordination of CPPA.APMS will be implemented for following features:<ul style="list-style-type: none">- Energy Metering- Power Quality Monitoring- Circuit Breaker Operations- Protection against Overloads & Short Circuits.					
D	IT Infrastructure to support new initiatives	I.T Infrastructure support will be required in software and hardware for improvement of Internal Audit and Financial Mgt.					



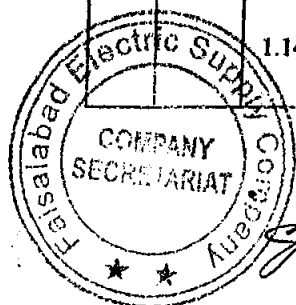
DIIP-27 Human Resource Improvement Plan (Employees Affairs)

Sr. No	Strategic Objectives		Coordinating Directorate	Leading Directorate	Target Measurement	Baseline Measurement	Target for Next Five Year					Subordinate Plan	
						2021-22	2023-24	2024-25	2025-26	2026-27	2027-28		
1.	Improvement in Employee Affairs	1.Human-Ware											
		1.1	Implement Performance Based Management System	Dir (CM) /Dir (HR)	DG (HR)		Will be prepared through consultant						
		1.2	Start Training & Capacity Building Initiatives	Dir (CM) /Dir (OD)	DG (HR)		6304	6500	6700	6900	7000	7500	
		1.3	Improve recruitment process	Dir (HR)	DG (HR)		BOD FESCO in its 230 th /24 th meeting held on 10.01.2022 has resolved and approved FESCO Recruitment Policy-2022. Recruitment / talent acquisition process will be improved and aligned further in the light of directions of Government of Pakistan.						
		1.4	Fulfill the basic requirement for needs to operate field staff	Dir (Admn)	DG (Admn)		The requirements of different formations of FESCO will be processed as per actual requirement and shall be accomplished 100% accordingly. Services shall be optimized by provision of all necessary requirements of field staff.						
		1.5	Improve communications with staff	DD (PR) / Dir (HR)/ Dir (CM)	DG (HR)		Arrangement of meeting as per schedule to be defined with peers and subordinates. Tier-I Chief Executive Officer & Directors, Tier-II Directors & S.Es / Managers, Tier-III S.Es / Managers and XENs / Dy. Directors.						



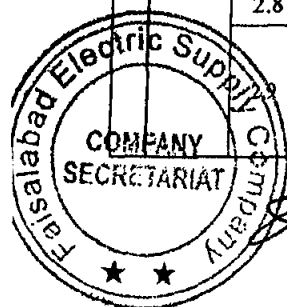
FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

Sr.No	Strategic Objectives	Coordinating Directorate	Leading Directorate	Target Measurement	Baseline Measurement	Target for Next Five Year					Subordina Plan	
					Year 2021-22	2023-24	2024-25	2025-26	2026-27	2027-28		
1.	Improvement in Employee Affairs	2.Human-Ware										
		1.6	HR High Level Strategy	Dir (HR)	DG(HR)	Approval and implementation	Nil	BOD FESCO has approved HR High Level Strategy which is being aligned with HR Manual of FESCO.				
		1.7	KPI for Senior Management	Management Directors	CEO			FESCO Senior Management KPI's have been disseminated to all concerned officers for achievement of assigned targets.				
		1.8	C-Level New Appointments	DG (HR&A)	BOD	100% recruitment	Nil	Approval of Ministry of Energy (Power Division) GoP is awaited after which C-level appointments will be made by observing all codal formalities.				
		1.9	Plan of Action For Devaluation of Powers (MoE)	DG (HR&A)	BOD			A comprehensive policy has been devised regarding delegation / exercise of powers on all HR matters.				
		1.10	Workers Welfare Fund	Dir (Admn)/ CFO	DG (Admn)			A Committee under the convenership of Chief Financial Officer FESCO has already been constituted to establish FESCO Workers Welfare Fund. After finalization of report, approval of BoD FESCO shall be obtained.				
		1.11	HR Development Program	Dir (HR) / Dir (CM)	DG (HR)			BOD FESCO has approved a comprehensive Professional Development Plan of Senior Management with a focus to develop HR in the areas like IT, Customer Relations, Soft Skills, Intrapersonal Skills etc.				
		1.12	Reorganization of Legal Department	Dir (L&L)	DG(HR)/ CLO			BOD FESCO has approved reorganization of Legal Department however, hiring against newly created posts is subject to approval of Ministry of Energy (Power Division) GoP.				
		1.13	Employee Engagement Survey	Dir (HR) / Dir (CM)	DG (HR)			Draft Survey Form has been developed, which is under consideration of HR, Nomination & Legal Committee of BOD FESCO. As and when it is approved, the same will be forwarded to all employees. After receipt of comments / reviews of employees, improvement programs will be chalked out.				
		1.14	Officer Transport Policy	DD (TPT)	DG (Admn)		Under deliberation with BOD	FESCO Transport Monetization Policy is still under consideration with HR, Nomination & Legal Committee, after being referred back from BOD FESCO. In the meanwhile, PEPCO has shared a Draft Vehicle Management Policy which shall be submitted to HR, Nomination & Legal Committee after requisite improvements on the recommendations of Management Committee constituted vide Office Order No.3019 dated 17.09.2021.				



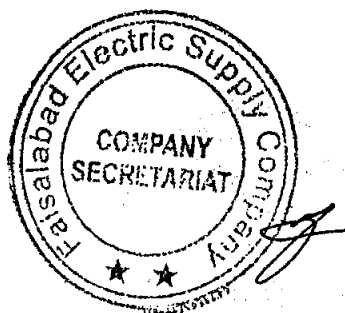
OUP-28 Human Resource Improvement Plan (Infrastructure & Responsibility)

Sr.No	Strategic Objectives	Coordinating Directorate	Leading Directorate	Target Measurement	Baseline Measurement	Target for Next Five Year					Subordinate Plan
					Year 2021-22	2023-24	2024-25	2025-26	2026-27	2027-28	
2.	4.Improvement in Infrastructure										
	4.1.Org-ware										
	2.1	Org A&R Review & Implementation	HR Consultant	DG (HR)	-	HR Consultant has been hired with the approval of BOD FESCO. The Org A&R Review will be finalized in due course of time.					-
	2.2	Improve Office facilities/work environment	Dir (Admn)	DG(Admn)		The requirements of different formations of FESCO will be processed as per actual requirement and shall be accomplished 100% accordingly. However, improvement in Office facilities/ working environment of Admn Directorate will be planned in Financial Year 2022-23. Customer Care Center, DCC, 118, Operation Circles and Model Divisions have been provided with latest equipment furniture / facilities as per their demands.					
	2.3	Conduct Yardstick study for HR	HR Consultant	DG (HR)		The case for revision of yardstick has been presented to HR, Nomination & Legal Committee for recommendations to BOD FESCO.					
	2.4	Conduct Motivational Campaigns	Dir(HR) / Dir (CM)/ DD (Training)	DG (HR)		A well structured plan will be prepared & implemented.					
	2.5	Conduct Career Planning Initiatives	HR Consultant / Dir CM	DG (HR)		Career planning initiatives will be prepared through HR Consultant FESCO.					-
	2.6	Improvement in Health & Education of Employees	Dir (Admn)	DG (Admn)		Draft Medical Attendance Rules of FESCO have been presented to HR, Nomination & Legal Committee which is under consideration.					
	2.7	Improvement in operational mobility	DD(TPT)	DG (Admn)		BOD FESCO has already accorded approval for replacement of 147 old vehicles with new one and new vehicles are being provided to Operation Sub Divisions gradually. Vehicles have been purchased uptill now.					
	2.8	Outsourcing of Security Services	DD (Sec)	DG (Admn)		Implemented Partially					-
	Media Management Strategy	DD(PR)	DG (Admn)		Plan on Media Management Image Building Strategy will be prepared by adopting proactive approach and put up to HR, Nomination & Legal Committee for recommendations to BOD FESCO for approval.						



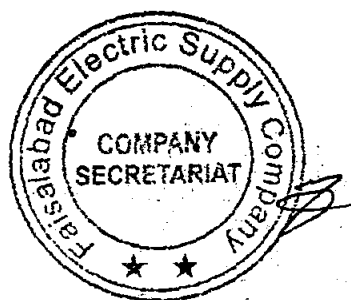
FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

Sr.No	Strategic Objectives	Coordinating Directorate	Leading Directorate	Target Measurement	Baseline Measurement	Target for Next Five Year							
					Year 2021-22	2023-24	2024-25	2025-26	2026-27	2027-28			
3.	Corporate Social Responsibility	6. Corporate Social Responsibility											
		3.1	Green and clean Pakistan	XEN(Civil) / SE (GSO)	DG(Admn)	No.		Awareness campaign among all employees of FESCO will be launched regarding environmental and global warming issues. Moreover, repeated instructions to ensure plantation in Office premises are being disseminated to all FESCO Formations.					
		3.2	Day-care centre / ladies rest rooms	XEN(Civil) / SE (GSO)	DG(Admn)			The matter is under consideration with the Management for establishment of Day Care Centre FESCO at WAPDA Hospital Faisalabad. Hopefully, the Day Care Center will be established in near future after consultation with MS WAPDA Hospital Faisalabad.					
		3.3	Internships Offered	XEN HQs	DG (HR)	No.		As per existing Policy, unpaid Internships are being offered to students of different Universities. However, FESCO Internship Policy 2022 is under deliberation with BOD FESCO.					



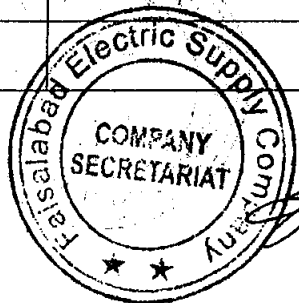
DIIP-29: STAFFING PLAN ALIGNED WITH INVESTMENT PLAN

Ser. No.	Description	Quantities					Total
		2023-24	2024-25	2025-26	2026-27	2027-28	
	A. Staff Required for Future Expansion						
1	Director / Chief Engineer	0	0	0	0	0	0
2	Manager	4	0	0	0	0	4
3	Deputy Manager	23	0	0	0	0	23
4	Assistant Manager	84	2	1	3	1	91
5	Line Superintendent	386	8	4	7	3	408
6	Line Man	1352	22	20	15	10	1419
7	Assistant Line Man	2057	34	30	20	25	2166
8	SDC / UDC	90	3	2	2	2	99
9	Clerks	282	6	3	4	3	298
10	Driver	271	4	0	1	2	278
11	Naib Qasid	166	3	1	1	1	172
12	Security Guards	187	4	2	2	2	197
13	Sweepers	87	2	1	1	1	92
14	Drafts Man	25	0	0	0	0	25
15	Tracer	29	0	0	0	0	29
16	Surveyors	5	0	0	0	0	5
17	Mali	33	2	1	1	0	37
18	Data Control Supervisors	12	2	1	0	0	15
19	Others	1835	18	22	18	30	1923
	Total	6928	110	88	75	80	7281



SECTION –VI**COSTS AND FINANCING PLAN****A. CAPITAL EXPENDITURE AND ADDITIONAL OPERATING COSTS FOR EXPANSION AND REHABILITATION OF
SECONDARY TRANSMISSION AND DISTRIBUTION SYSTEM****DIIP-30: SUMMARY OF CAPITAL EXPENDITURE COST**

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	6775	7328	8001	10318	6356	38778
B	Distribution of Power (DOP)	1,219	1,283	1,348	1,413	1,596	6,859
C	Energy Loss Reduction (ELR)	2555	2984	3507	4378	4842	18266
D	Vehicles and T&P	2397	1504	1438	1347	1708	8394
E	Civil works	690	843	826	997	950	4306
F	Technical Improvement Plan	525	1190	1435	400	100	3650
G	Commercial Improvement Plan	408	388	480	490	510	2276
H	Financial Improvement Plan of IT Directorate	312	213	229	252	377	1383
I	HR Improvement Plan	210	190	190	210	210	1010
Total		15091	15923	17454	19805	16649	84,922



DIIP-31: SUMMARY OF ANNUL RECURRING COSTS

S/ No.	Description	Unit	Quantities					
			2023-24	2024-25	2025-26	2026-27	2027-28	Total
O&M Cost for FESCO Expansion & Rehabilitation								
2.	Existing O&M Cost	Rs. Million	27391	28761	30199	31,709	33294	151,354
	O&M Cost for New Schemes	Rs. Million	659	716	798	916	807	3889
	Total		28050	29477	30997	32,625	34101	155,243

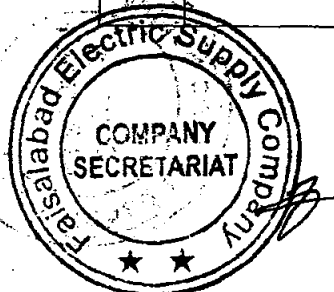
DETAILS OF COSTING

▪ **STG EXPANSION AND REHABILITATION**

DIIP-32: GRID STATIONS

Rs. In Million

S/ No.	Description	Total Cost	Total Capacity (MVA)	2023-24	2024-25	2025-26	2026-27	2027-28
1.	New							
a.	132 KV	16704.3	1454	3618.1	2673.0	3569.1	4114.1	2730.0
2.	Augmentation							
a.	132 KV	5039.5	468	1224.4	390.0	1472.0	1631.1	322.0
b.	66 KV	77.1	5				77.1	
3.	Extension (T/Bay)							
a.	132 KV	3323.6	419	343.90	348.0	502.9	805.8	1323.0
b.	66 KV		0					
4.	Extension (L/Bay)		-					
a.	132 KV	553.3	-	28.1	100	145.2	0	280.0
b.	66 KV		-					



TRANSMISSION LINES**DIIP-33: NEW LINE**

Rs. in Million							
S/ No.	Description	Total Cost	2023-24	2024-25	2025-26	2026-27	2027-28
1.	132 KV D/C	10964.81	1141.01	3616.8	1682.8	3204.1	1323.1
2.	132 KV SDT	378.1	-	-	-	-	378.1

DIIP-34: 2ND CIRCUIT STRINGING OF EXISTING SDT T/LINES

Rs. in Million							
S/ No.	Description	Total Cost	2023-24	2024-25	2025-26	2026-27	2027-28
1.	132 KV D/C	-	-	-	-	-	-
2.	132 KV SDT	-	-	-	-	-	-

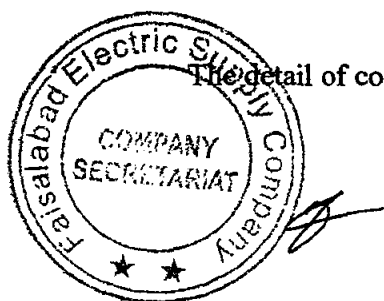
DIIP-35: RECONDUCTORING/ UP-GRADATION OF EXISTING T/LINES

Rs. in Million							
S/ No.	Description	Total Cost	2023-24	2024-25	2025-26	2026-27	2027-28
1.	132 KV D/C	167	-	-	167	-	-
2.	132 KV SDT	-	-	-	-	-	-

DIIP-36: CAPACITORS

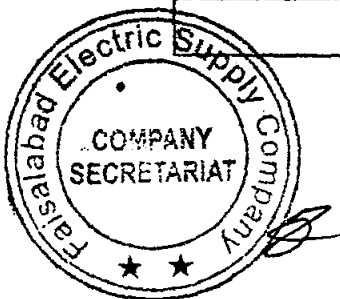
Rs. in Million							
S/ No.	Description	Total Cost	2023-24	2024-25	2025-26	2026-27	2027-28
1	Fixed Capacitors	1569	420	200	463	486	-
2	Switched Capacitors						

The detail of cost of Subprojects is attached as Annex-G



DIIP-37:DISTRIBUTION SYSTEM-EXPANSION AND REHABILITATIONDOP

S/ No.	Description	Rs. in Million					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A. Scope of work for 11 KV Expansion							
1.	New HT Lines	602.31	651.97	696.10	735.36	769.07	3454.80
	Number of Proposals						
	Length of New H.T Lines						
2.	Transformers						
	50 KVA	689.04	719.33	756.75	794.77	832.79	3792.69
	100 KVA	359.03	359.83	411.35	462.87	462.87	2055.97
	200 KVA	205.59	213.67	221.76	228.69	236.77	1106.49
	Other KVA	1468.44	1473.53	1791.23	1838.37	2113.98	8685.51
	Sub Total	2722.1	2766.36	3181.09	3324.70	3646.41	15640.66
3	Transformers						
	50 KVA	689.04	719.33	756.75	794.77	832.79	3792.69
	100 KVA	359.03	359.83	411.35	462.87	462.87	2055.97
B. Scope of work for LT Expansion							
1.	New LT Lines	236.03	250.82	264.07	278.86	297.04	1326.82
	Number of Proposals						
	Length of New H.T Lines						
2.	LT Capacitors						
	Different KVARs						
C. Service Connections							
1.	Single Phase	808.928	858.468	891.488	936.096	982.944	4477.924
2.	Three Phase	959.364	966.384	1059.228	1111.95	1167.39	5264.316
3.	TOU Meter	2.63	2.7878	3.0245	3.2612	3.3927	15.0962
	Sub Total	1770.922	1827.64	1953.741	2051.307	2153.727	9757.336

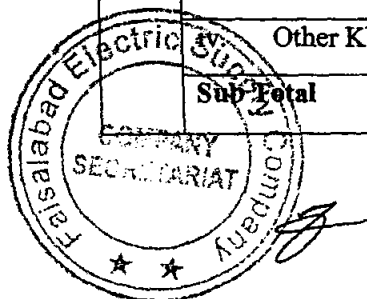


DIP 38: COST BREAK UP OF CIVIL WORKS OVER THE SPAN OF FIVE YEARS

Sr. No.	Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	Office (Future Expansion)	200	250	250	300	300	1300
2	Offices (Existing Setup)	150	175	200	210	220	955
3	Residential Buildings	100	100	150	170	200	720
4	Residences at new proposed Grid Stations	140	198	96	182	90	706
5	Residences, extension of CHB, Boundary walls, trenches and other works at existing Grid Stations	100	120	130	135	140	625
G. Total		690	843	826	997	950	4306

ELR

S/ No.	Description	RS. in Million					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A. Scope of work for 11 KV Distribution System Rehabilitation							
1.	New HT Lines						
	Number of Proposals						
	Bifurcation	350.12	356.0	439.71	550.0	766.53	2462.36
	Reconductoring	235.95	239.92	296.32	370.64	516.55	1659.4
	Re-Routing						
2.	Replacement of Over Loaded Transformers						
	i. 50 KVA	43.8	51.1	58.4	65.7	73.0	292.0
	ii. 100 KVA	60.37	70.44	80.50	90.56	100.62	402.5
	iii. 200 KVA	57.75	57.75	57.75	57.75	57.75	288.75
	iv. Other KVA						
	Sub Total	161.93	179.29	196.65	214.01	231.37	983.25
3.	Replacement of defective/ burnt Transformers						
	i. 50 KVA	45.14	52.57	59.99	67.42	74.84	300.0
	ii. 100 KVA	123.57	123.97	143.69	163.82	183.94	738.99
	iii. 200 KVA	21.36	24.83	24.83	24.83	27.72	123.58
	Other KVA						
	Sub Total	190.08	201.37	228.52	256.07	286.50	1162.54

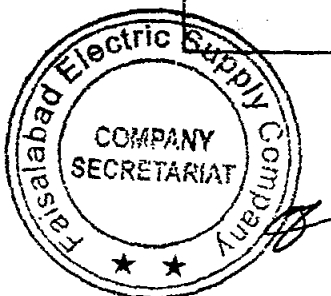


4.	Replacement of Old Transformers (Useable life expired)						
	100 KVA	363	362	362	362	362	1811
	200 KVA	442	442	442	442	442	2212
	Sub Total	805	804	804	804	804	4023
5.	11 KV Panel for Replacement/ Bifurcation of feeders	8.77	10.92	15.67	22.06	33.82	91.26
B. Scope of work for LT Rehabilitation							
1.	LT Line Rehabilitation						
	New L.T Line	31.1	34.98	38.87	42.76	46.65	194.37
	Reconductoring of LT Lines	5.64	5.80	5.97	6.03	6.07	29.52
4	Reliability Equipment						
	Sectionalizer	336	273	205.8	134.40	126	808.5
	Auto Reclosers	60	60	60	49.5	36	265.5
	Voltage Regulators (Single Phase Unit)	82.5	45	45	33.75	22.5	191.25
	Fault Locator	39.45	14.58	12.48	9.68	8.25	53.1
5	11 KV Panel						

The detail of cost of distribution Expansion and distribution rehabilitation plan for Best Case is attached as Annex-I

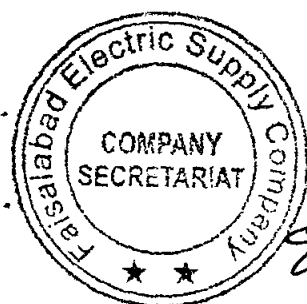
DIIP 38: COST BREAK UP OF CIVIL WORKS OVER THE SPAN OF FIVE YEARS

Sr. No.	Description	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	Office (Future Expansion)	200	250	250	300	300	1300
2	Offices (Existing Setup)	150	175	200	210	220	955
3	Residential Buildings	100	100	150	170	200	720
4	Residences at new proposed Grid Stations	140	198	96	182	90	706
5	Residences, extension of CHB, Boundary walls, trenches and other works at existing Grid Stations	100	120	130	135	140	625
G. Total		690	843	826	997	950	4306



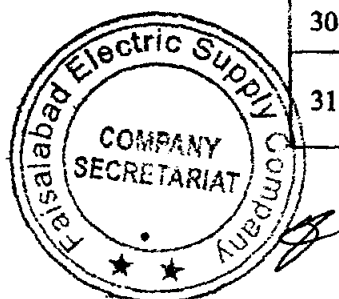
DIIP-39 : Vehicles

S/N	Description of Items	Rs. In Million					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
1.	Toyota Car Altis 1.8	18.00	12.00	0	0	0	30.00
2.	Toyota Car Altis 1.6	37.60	18.80	14.10	0	0	70.50
3.	Toyota Car (XLI)	27.20	17.00	27.20	13.60	17.00	102.00
4.	Suzuki Cultus Car	60.00	30.00	48.00	27.00	39.00	204.00
5.	Suzuki Mehran	20.00	16.00	16.00	12.00	10.00	74.00
6.	Suzuki Alto Car	18.00	14.40	14.40	10.80	9.00	66.60
7.	Vans	42.00	35.00	35.00	28.00	35.00	175.00
8.	Trucks	240.00	15.00	100.00	75.00	50.00	480.00
9.	Crane 40 Tons	200.00	175.00	125.00	125.00	125.00	750.00
10.	Crane 20 Tons	160.00	160.00	100.00	100.00	100.00	620.00
11.	Single Cabin Pickups	240.5	111.00	74.00	92.50	0	518.00
12.	Double Cabin Pickups	150.00	50.00	50.00	50.00	0	300.00
13.	Bucket Mounted Vehicle	450.00	375.00	300.00	225.00	225.00	1575.0
14.	Buses	25.50	25.50	25.50	8.50	0	85.00
15.	Tractor	5.10	3.40	3.40	0	0	11.90
16.	Fork Lifters	22.50	12.50	7.50	7.50	5.00	55.00
17.	Trailer 60-Ton	100.00	60.00	40.00	40.00	40.00	280.00
18.	Motorcycles	6.00	6.00	6.00	3.00	3.00	24.00
Sub Total		1802.4	1120.6	970.1	805.9	648	5347

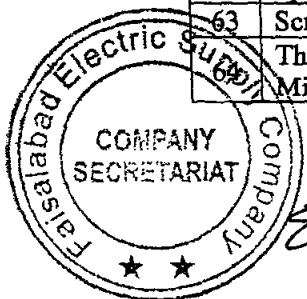


DIIP-40 :Tools & Plants (T&P)

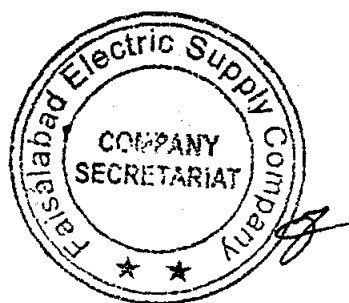
S #	Item Description	Rs in Millions					Total Amount
		2023-24	2024-25	2025-26	2026-27	2027-28	
A)	Tools & Plants						
1	Earthing Set	23.68	23.68	28.42	34.10	40.92	150.81
2	Earth Tester	21.54	25.85	31.02	37.22	44.67	160.30
3	Fiber Class Extension Ladder	24.00	30.00	36.00	42.00	48.00	180.00
4	Cuffing Hoist (750 Kg)	3.50	4.50	5.50	6.50	7.50	27.50
5	Cuffing Hoist (1500 Kg)	4.50	5.50	6.50	7.50	8.50	32.50
6	Clip On Volt Ampt Meter	3.14	3.93	4.71	5.49	6.28	23.55
7	Clip On Kw Meter	4.71	5.49	6.28	7.06	7.85	31.39
8	Chain Fullley Block (3 Ton)	4.00	5.00	6.00	7.00	8.00	30.00
9	First Aid Box	1.50	2.50	3.50	4.50	5.60	17.60
10	Pulling Grip (6-10)	1.26	1.88	2.51	3.14	3.76	12.55
11	Pulling Grip (12-15)	1.88	2.51	3.14	3.76	3.76	15.06
12	Adjustable Screw Wrench	4.80	6.00	7.20	8.40	9.60	36.00
13	Line Man Tool Bag	4.50	5.50	6.50	7.50	8.50	32.50
14	Torch 3 Cells	3.00	4.00	5.00	6.00	7.00	25.00
15	Mobile Disc Washing Plant For Transmission Lines	250.00	0.00	0.00	0.00	366.00	616.00
16	Thermovision Camera	7.00	8.47	10.25	12.40	15.01	53.12
17	Voltage Stabilizer, 230v Ac Pure Sinusoidal 3kva	0.40	0.48	0.59	0.71	0.86	3.04
18	Power Cable Semiconductor Screen Removal Kit	2.63	3.18	3.84	4.65	5.63	19.92
19	Secondary Injection Test Set With 0-100A Continuous Output Channel (Accuracy 0.1%), 02 No. Binary Input , Timer Start/ Stop And Provision Of 110VDC Supply With Min Continuous 60VA Burden With Display And Software	14.40	0.00	0.00	0.00	30.87	45.27
20	Primary Injection Test Set With 2400A Continuous, 5000A 3 Minute And Easily Portable	8.40	0.00	0.00	0.00	18.01	26.41
21	Dc Hi-Pot Set (80kv)	4.50	0.00	0.00	0.00	9.65	14.15
22	Phase Sequence Meter/ Tester	0.07	0.08	0.10	0.12	0.15	0.53
23	Working Gloves	2.45	2.96	3.58	4.33	5.24	18.56
24	Safety Hat In White (Insulated)	0.17	0.21	0.25	0.31	0.37	1.31
25	Lineman Safety Boot No.7	1.00	1.21	1.46	1.76	2.14	7.56
26	Lineman Safety Boot No.8	1.36	1.64	1.99	2.40	2.91	10.29
27	Lineman Safety Boot No.9	1.49	1.81	2.19	2.65	3.20	11.34
28	Lineman Safety Boot No.10	0.82	0.99	1.20	1.46	1.76	6.24
29	Winch Machine (10ton) For Transmission Line (Uk)	4.80	5.81	7.03	8.50	10.29	36.43
30	Steel Rope 3/4" For Winch Machine	2.10	2.54	3.07	3.72	4.50	15.94
31	Puller Machine (Zeck Pack SPW-13 Germany) + 2 Drums Of Steel Pilot Size 3/4"	0.09	0.11	0.13	0.16	0.19	0.68



S #	Item Description	Rs in Millions					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total Amount
32	Snatch Block / Ruler For Hand Line 2" 1 Ton (Canada Make)	0.25	0.30	0.37	0.45	0.54	1.91
33	Manual Hydraulic Press Machine With Die Set (70mm, 95mm, 120mm, 240mm, 500mm), Capacity 50-Ton	12.60	15.25	18.45	22.32	27.01	95.62
34	Nylon Rope 1"	1.30	1.57	1.90	2.29	2.78	9.83
35	Nylon Rope 3/4"	4.38	5.29	6.41	7.75	9.38	33.20
36	Strain Board Made In USA/Canada 14' Length	2.25	2.72	3.29	3.99	4.82	17.08
37	Hydraulic Conductor Cutter For Transmission Line	1.25	1.51	1.83	2.21	2.68	9.49
38	Torque Wrench 3/4"	0.01	0.01	0.01	0.01	0.02	0.06
39	Socket Set Complete 3/4"	0.02	0.02	0.03	0.04	0.04	0.15
40	Rain Coat (Medium)	0.23	0.27	0.33	0.40	0.48	1.71
41	Rain Coat (Large)	0.29	0.35	0.42	0.51	0.62	2.18
42	Generator 5KVA	2.50	0.00	3.66	0.00	5.36	11.52
43	Electric Grass Cutting Machines	0.50	0.00	0.73	0.00	1.07	2.30
44	Leather Safety Jacket for Oprater	1.33	1.61	1.95	2.36	2.86	10.11
45	Fair Escap Mask (Helmat Type)	0.15	0.18	0.22	0.26	0.32	1.13
46	Temporary Earthing Set For 132KV Transmission Line With 8' Length Rod, Duck Bill Clamp For Earth (PTE), T-Clamp For Earth (PTE), Copper Cable (1/2") For Earth Lead (PTE) (15 Feet Each Lead)	7.20	8.71	10.54	12.76	15.43	54.64
47	Power Cutter For Tree Cutting	0.80	0.00	1.17	0.00	1.71	3.68
48	Line Man Safety Belt Synthetic 40"	0.08	0.10	0.12	0.15	0.18	0.64
49	Cable Cutter (Sizes 19/.52, 19/.83 & 37/.83)	0.06	0.07	0.08	0.10	0.12	0.42
50	Fiber Glass Ladder 15 Feet	0.45	0.54	0.66	0.80	0.96	3.42
51	Adjustable Wrench 200 Mm	0.05	0.06	0.07	0.09	0.11	0.38
52	Adjustable Wrench 300 Mm	0.05	0.06	0.07	0.09	0.11	0.38
53	Rechargeable Torch (Heavy Duty)	0.14	0.17	0.21	0.26	0.31	1.09
54	Lineman/Alm Uniform(Medium)	0.15	0.18	0.22	0.27	0.32	1.14
55	First Aid Box	0.60	0.73	0.88	1.06	1.29	4.55
56	Dril Machine	0.18	0.22	0.26	0.32	0.39	1.37
57	Nose Plier	0.02	0.02	0.02	0.03	0.03	0.12
58	Measuring Tape 100 Ft	0.02	0.02	0.03	0.03	0.04	0.14
59	Grinder Machine	0.14	0.00	0.21	0.00	0.31	0.66
60	Hot Air Gun	0.02	0.03	0.03	0.04	0.05	0.18
61	Socket Goti Set 1/2"	0.05	0.05	0.07	0.08	0.10	0.34
62	Spanner Set	0.04	0.04	0.05	0.06	0.08	0.27
63	Screw Driver Champion Set	0.05	0.05	0.07	0.08	0.10	0.34
	Thermovision Gun (Day/Night) Minimum Range 25 Meters	2.00	2.42	2.93	3.54	4.29	15.18



S #	Item Description	Rs in Millions					Total Amount
		2023-24	2024-25	2025-26	2026-27	2027-28	
65	Polypropylene Rope 1/2"	0.52	0.63	0.76	0.92	1.11	3.95
66	Polypropylene Rope 3/4"	0.96	1.16	1.41	1.71	2.06	7.30
67	Polypropylene Rope 1"	1.40	1.69	2.04	2.47	2.99	10.60
68	Steel Rope 1/4"	0.11	0.13	0.15	0.19	0.23	0.80
69	Steel Sling 3/4" * 3'	0.35	0.42	0.51	0.62	0.75	2.66
70	Steel Sling 3/4" * 5'	0.47	0.57	0.69	0.83	1.00	3.55
71	DC Grounding /Earth Fault Relay 110V DC	2.00	2.42	2.93	3.54	4.29	15.18
72	Chain Block 750kg	0.28	0.34	0.41	0.50	0.60	2.12
73	Rope Ladder	0.05	0.06	0.07	0.09	0.10	0.36
74	Clamp On Ammeter With AC/DC Provision With Screen Backlight 0.01- 10A High Resolution	0.12	0.15	0.18	0.21	0.26	0.91
75	Lineman Safety Boot No.11	0.12	0.15	0.18	0.21	0.26	0.91
76	Arc Flash Suit	0.50	0.61	0.73	0.89	1.07	3.79
77	D.E.S / Oil Test Set, Min 80KV	1.50	1.82	2.20	2.66	3.22	11.38
78	Eye Protective Glass	0.20	0.24	0.29	0.35	0.43	1.52
79	Reflective Jacket	0.50	0.61	0.73	0.89	1.07	3.79
80	Nylon Sling 3/4" * 3'	0.33	0.40	0.48	0.58	0.71	2.50
81	Nylon Sling 3/4" * 5'	0.14	0.17	0.20	0.25	0.30	1.06
82	Cotton Inner Gloves	0.05	0.06	0.07	0.09	0.11	0.38
83	Warning Tape (Packets)	0.05	0.06	0.07	0.09	0.11	0.38
84	Warning Cone	0.51	0.61	0.74	0.89	1.08	3.83
85	Vacuum Cleaner	0.72	0.87	1.05	1.28	1.54	5.46
86	Conductor Grip Lynx	4.80	5.81	7.03	8.50	10.29	36.43
87	Conductor Grip Rail	7.80	9.44	11.42	13.82	16.72	59.20
88	Conductor Grip Earth	6.75	8.17	9.88	11.96	14.47	51.23
89	Ratchet Conductor Cutter Gear-Chain Type	1.20	1.45	1.76	2.13	2.57	9.11
B) PERSONAL PROTECTIVE T&P							
1	Safety Hat Insulated	3.00	4.00	5.00	6.00	7.00	25.00
2	Line Man Safety Belt	12.00	13.00	14.00	15.00	16.00	70.00
3	Protective Rubber Gloves	42.00	56.00	63.00	70.00	77.00	308.00
4	Protective Lather Globes	7.00	8.00	9.00	10.00	11.00	45.00
5	Line Man Safety Boots	35.00	42.00	56.00	63.00	70.00	266.00
6	Rain Coat	9.00	12.00	15.00	18.00	21.00	75.00
7	D-Operating Rod	6.00	8.00	10.00	12.00	14.00	50.00
8	Insulated Plyer	3.00	4.00	5.00	6.00	7.00	25.00
Sub Total		595.24	383.43	468.26	541.35	1060.95	3049.22
Total In Millions							3049.22

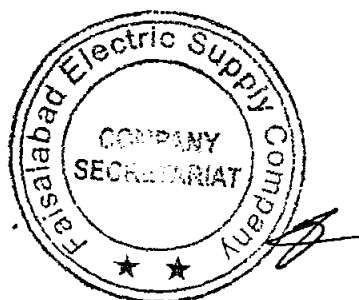


**A. CAPITAL EXPENDITURE AND ADDITIONAL OPERATING COSTS FOR
OTHER FUNCTIONAL IMPROVEMENT PLANS**

• SUMMARY OF ANNUAL CAPITAL EXPENDITURES COSTS

DHIP 41: TECHNICAL IMPROVEMENT PLAN

S/ No.	Description	Rs. in Million					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
GIS Mapping							
1.	HT Mapping (updtation) 100% LT Mapping up to consumer & Development of Web Based Application for future updation along with Hardware and Software	175	140	35	-	-	350
2.	Installation of SCADA system to connect FESCO 132 kv & 66 kv Grid Station with DCC & RCC.	200	800	1200	300	-	2500
3.	Capacity Building of Technical Services (TS) Department and purchase of required I.T tools/ software	150	250	200	100	100	800
Total		525	1190	1435	400	100	3650

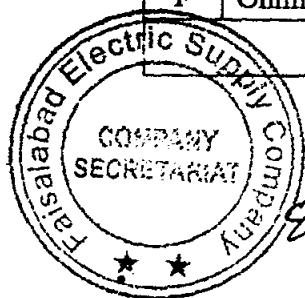


DIIP-42: COMMERCIAL IMPROVEMENT PLAN

S/ No.	Description	Rs. In Million					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	AMR /AMI Metering	387.97	348.16	430.00	430.00	430.00	2026.13
B	Electronic Metering	-	-	-	-	-	-
C	New CIS system						
D	HHUs for meter reading (Mobile Unit for Meter Reading)	-	-	-	-	-	-
E	Consumer Census	-	-	-	-	-	-
F	Anti-theft efforts						
G	IT infrastructure to support new initiatives	20	40	50	60	80	250
H	Others etc.						
	Total	408	388	480	490	510	2276.13

DIIP-43: FINANCIAL MANAGEMENT IMPROVEMENT OF IT DIRECTORATE

Sr. No.	Description	Amount (in Million)					Total
		2023-24	2024-25	2025-26	2026-27	2027-28	
A	ERP System Implementation (under O&M Head) Phase-I Phase-II	61	67	74	82	90	374
B	GAP Analysis of ERP system	10					10
C	Revamping the Internal Audit and Integration with Existing ERP System as Desk Audit (Hardware +Software)	20	3	3	3	3	32
D	Integrated Billing System (IBS Hardware and Other Support SLAs through PITC)	202	125	138	151	166	782
E	Implementation of IT and Security Policy in FESCO Along with HR Setup	12	13	15	16	18	73
F	Online House Allocation System	7	5				12
	Total	312	213	229	252	377	1383

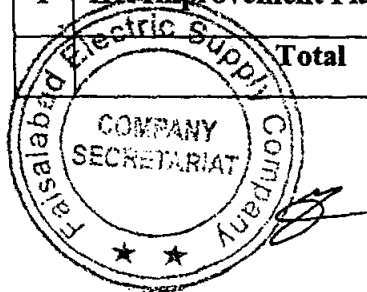


DIIP-44 : HUMAN RESOURCE IMPROVEMENT PLANS CAPITAL EXPENDITURE COSTS

S/ No.	Description	Rs. In Million					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	Revamping of Training Centres	100	40	30	10	-	180
B	Provision of Safety T&P and Promoting Safety Culture	10	12	18	20	20	80
C	Training of Employees through external training Institutions	50	70	80	100	100	400
D	Human Resource Information system Implementation	HCM ERP Module implemented successfully					
E	Conducting the Yard stick Study	-	-	-	-	-	-
F	IT Infrastructure to support new initiatives						
G	Improving the working Environment	50	60	70	80	90	350
H	Others etc.	-	-	-	-	-	-
	Total	210	182	198	210	210	1010

DIIP-45 : SUMMARY OF ANNUAL RECURRING COSTS

Item		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	STG	305	330	360	464	286	1745
B	Distribution of Power (DOP)	55	58	61	64	72	309
C	Energy Loss Reduction (ELR)	115	134	158	197	218	822
D	Vehicles and T&P	108	68	65	61	77	378
E	Civil works	31	38	37	45	43	194
F	Technical Improvement Plan	24	54	65	18	5	164
G	Commercial Improvement Plan	18	17	22	22	23	102
H	Financial Improvement Plan of IT Directorate	14	10	10	11	17	62
I	HR Improvement Plan	9	9	9	9	9	45
	Total	679	717	785	891	749	3822



SECTION-VII

BENEFITS AND FINANCIAL ANALYSIS

A. Expansion and Rehabilitation of Secondary Transmission and Distribution system

TANGIBLE BENEFITS

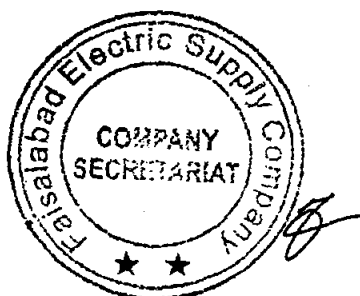
DIIP-46 : ABSTRACT OF MVA CAPACITY TO BE ADDED AND ADDITIONAL ENERGY TO BE SUPPLIED UNDER TRANSMISSION EXPANSION PLAN							
Description		Fiscal Year (Million Rs.)					
		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
MVA Capacity to be added	Current Year		652	618	373	626	261
	Cumulative		652	1270	1643	2269	2530
Additional Energy could be supplied @ 0.9 P.F 0.7 L.F and 50 % Loading (Million KWH)	Current Year		2878.606	2728.495	1646.810	2763.815	1152.325
	Cumulative		2878.606	5607.101	7253.911	10017.726	11170.051

S/ No.	Description		2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	Reduction in Losses (MW)	Current Year	0	0.15	0.10	0.10	0.05	0.05
		Cumulative	0	0.15	0.25	0.35	0.40	0.45
2	Energy Savings* @ 0.7 L.F (Million KWH)	Current Year	0	28.618	20.357	21.438	11.285	6.782
		Cumulative	0	28.618	48.975	70.413	81.698	88.480

*Reduction in Energy Loss/year = MW x 8760 x Loss Factor**

**Loss Factor = $0.3 \times \text{Load Factor} + 0.7 \times (\text{Load Factor})^2$

Loss Factor @ 0.7 L.F = 0.553

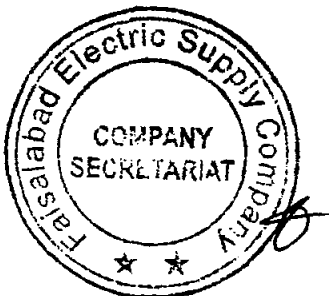


**DIIP-5:
INCREASE IN REVENUE AS RESULT OF ENERGY CONSUMPTION OF CONSUMERS TO
BE ADDED UNDER DISTRIBUTION EXPANSION PROGRAM**

Sr.	Energy Consumption of Customers To Be Added (Million kWh)			Av. Energy Sales Price (Rs. / kWh)	Av. Energy Purchase Price (Rs. / kWh)	Sales (Million Rs.)	Purchases (Million Rs.)	Potential Benefits (Million Rs.)
	Year	Sales	Purchase					
1	2024-25	987.38	1082	24.58	22.22	24,270	24,042	228
2	2025-26	2001	2189	26.18	23.66	52,386	51,792	594
3	2026-27	3142	3434	27.88	25.2	87,599	86,537	1,062
4	2027-28	4343	4741	29.7	26.84	128,987	127,248	1,739
5	2028-29	5637	6148	29.7	26.84	167,419	165,012	2,407

**DIIP-6:
INCREASE IN REVENUES AS RESULT OF POTENTIAL SAVING IN ENERGY
UNDER DISTRIBUTION REHABILITATION PROGRAM**

No	Year	No. of 11kv Feeders To Be Rehabilitated		No. of LT Proposals To Be Rehabilitated		Ave. Saving / Proposal (MkWh)		Potential Saving In Energy (MkWh)			Energy Rate / kWh (RS.) *	Potential Gross Benefits
		Current	Cumulative	Current	Cumulative	H.T	L.T	H.T	L.T	TOTAL		
1	2024-25	32	32	800	800	2.135	0.047	68.32	37.8	106.12	22.22	2,358
2	2025-26	34	66	850	1650	1.442	0.032	95.14	53.11	148.25	23.66	3,508
3	2026-27	36	102	900	2550	1.154	0.026	117.73	66.3	184.03	25.2	4,638
4	2027-28	38	140	950	3500	0.974	0.022	136.34	75.6	211.94	26.84	5,688
5	2028-29	40	180	980	4480	0.817	0.020	146.99	90.1	237.09	26.84	6,363

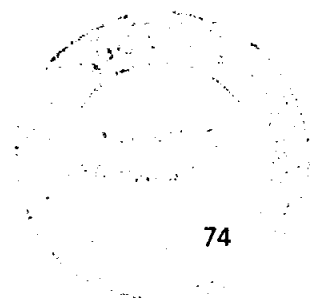
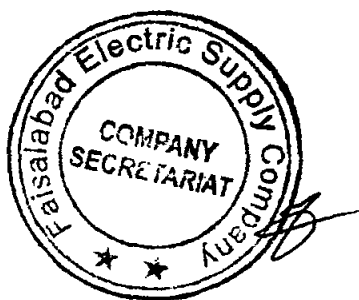


DIIP-49: PROJECTED T&D LOSSES

Fiscal Year	Energy Purchase	Energy Sale	Units Lost	%age Projected Losses	%age Increase/ Decrease
2021-22	17512.53	15918.79	1593.74	9.10%	
2022-23	18391	16765.24	1625.76	8.84%	
2023-24	19423	17725.43	1697.57	8.74%	-0.10%
2024-25	20357	18606.30	1750.70	8.60%	-0.14%
2025-26	21438	19615.77	1822.23	8.50%	-0.10%
2026-27	22571	20675.04	1895.96	8.40%	-0.10%
2027-28	23709	21729.30	1979.70	8.35%	-0.05%
Total %age Increase/ Decrease					-0.49%

NON TANGIBLE BENEFITS

- Improved customers services.
- Voltage profile improvement.
- Reliable and stable power supply.
- Increased MVA capacity to facilitate new domestic, commercial, Industrial and agricultural consumers.
- Sustainable economic & GDP growth.
- Improved living standard.
- Increase in per capita income.
- Jobs creation.



B. FINANCIAL ANALYSIS**ASSUMPTIONS:**

- Average Sale Rate FY 2022-23 has been assumed as Rs.22.88 kWh which is further indexed with reference to projected CPI.
- Average Purchase Rate (unadjusted) for FY 2022-23 has been assumed as Rs.19.42 kWh which further indexed with reference to projected CPI.
- It is assumed that the benefit will accrue from the following year of investment.
- The life of project has been assumed as 29 years.

Financial Analysis has been carried out for STG, DOP, ELR, AMI and combined DIIP Investment Plans, results are attached as *Annex-J*

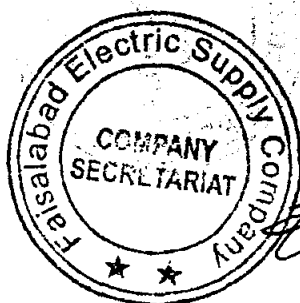
Description	NPV (Rs. Million)	IRR (%)	Benefit to Cost Ratio	Payback period (Years)
Secondary Transmission & Grids (STG)	5,325	19.31	1.18	8-Years, 01-Month,
Energy Loss Reduction (ELR)	18,347	47.39	2.36	05 Years, 05-Month
Distribution of Power (DoP)	5,010	30.82	1.96	06 Years, 05 Months
AMI / Smart Energy Meters	85	17.18	1.05	08Years, 08 Months
Overall - Investment Program	17,711	21.09	1.27	07 Years, 10 Month

Note;- The Financial Benefits relating to other projects like Vehicle & T&P, Civil Works, Technical, Financial and HR have not accounted for in overall investment program. However, costs thereof have been discounted.

SENSITIVITY ANALYSIS

The sensitivity analysis for following cases is attached as *Annex-K*.

1. 10% Cost increase
2. 10% benefit reduction
3. 10% Cost increase and 10% benefit reduction



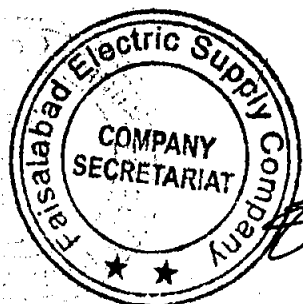
FESCO DISTRIBUTION INTEGRATED INVESTMENT PLAN(2023-24 to 2027-28)

SECTION-VIII

FINANCIAL STATEMENTS

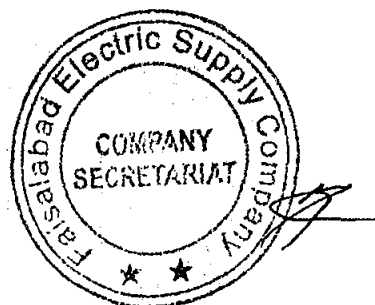
**FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED
STATEMENT OF PROFIT OR LOSS
FOR THE YEAR ENDED 30 JUNE 2022**

	2022 RUPEES	2021 RUPEES
SALE OF ELECTRICITY - NET	279,867,790,025	172,602,298,633
TARIFF DIFFERENTIAL SUBSIDIES	57,944,694,157	59,178,041,861
	<u>337,812,484,182</u>	<u>231,780,340,494</u>
COST OF ELECTRICITY	(316,040,275,362)	(193,010,195,017)
GROSS PROFIT	<u>21,772,208,820</u>	<u>38,770,145,477</u>
AMORTIZATION OF DEFERRED CREDIT	1,929,584,764	1,746,106,173
	<u>23,701,793,584</u>	<u>40,516,251,650</u>
DISTRIBUTION COST	(22,011,437,199)	(19,972,575,802)
ADMINISTRATIVE EXPENSES	(3,505,811,182)	(3,177,676,594)
CUSTOMER SERVICES COSTS	(2,574,506,691)	(2,340,465,447)
	<u>(28,091,755,072)</u>	<u>(25,490,717,843)</u>
(LOSS) / PROFIT FROM OPERATIONS	<u>(4,389,961,488)</u>	<u>15,025,533,807</u>
OTHER INCOME	6,124,505,889	5,196,569,488
FINANCE COST	(470,354,612)	(493,676,854)
PROFIT BEFORE TAXATION	<u>1,264,189,789</u>	<u>19,728,426,441</u>
TAXATION	(3,249,034,267)	(2,326,224,129)
(LOSS) / PROFIT AFTER TAXATION	<u>(1,984,844,478)</u>	<u>17,402,202,312</u>



FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED
STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2022

	2022 RUPEES	2021 RUPEES		2022 RUPEES	2021 RUPEES
EQUITY AND LIABILITIES			ASSETS		
SHARE CAPITAL AND RESERVES			NON-CURRENT ASSETS		
Authorized share capital			Property, plant and equipment	144,046,144,024	133,380,294,317
5 000 000 000 (2021: 5 000 000 000)	50,000,000,000	50,000,000,000	Intangible assets	2,306,605	27,244,458
ordinary shares of Rupees 10 each			Long term advances	52,737,251	90,714,193
Issued, subscribed and paid up share capital	10,000	10,000	Long term deposits	4,058,176	3,735,665
Deposit for shares	34,478,691,078	15,641,656,359		144,105,246,058	133,501,980,633
Surplus on revaluation of property, plant and equipment - net of deferred income tax	46,709,166,741	47,433,929,524			
Accumulated loss	(77,474,995,875)	(63,938,061,140)			
Total equity	3,712,871,944	(862,465,257)			
LIABILITIES			CURRENT ASSETS		
NON-CURRENT LIABILITIES			Stores, spares and loose tools	3,366,236,924	3,242,119,551
Long term financing	3,358,578,576	3,734,185,062	Trade debts	82,644,146,816	43,549,888,740
Staff retirement benefits	100,304,821,118	88,922,588,410	Loans and advances	73,049,817	76,536,028
Long term security deposits	10,963,989,417	9,853,110,791	Other receivables	25,535,189,068	16,869,636,480
Receipt against deposit works	18,100,335,897	11,913,082,510	Sales tax receivable	8,425,644,698	8,095,458,270
Deferred credit	35,194,177,385	31,881,516,681	Income tax	-	148,640,239
Deferred income tax liability	6,788,084,159	7,084,094,028	Receivable from the Government of Pakistan	6,965,309,257	33,614,145,065
	174,709,966,522	153,390,557,482	Accrued interest	247,866,218	45,717,548
CURRENT LIABILITIES			Cash and bank balances	30,469,423,825	27,883,154,500
Trade and other payables	116,269,492,182	109,219,721,022		157,726,866,623	133,525,253,421
Accrued mark-up	4,351,920,956	3,472,334,090			
Current portion of long term financing	2,182,701,203	1,807,094,717			
Provision for taxation	605,159,874	-			
	123,409,274,215	114,499,149,829			
TOTAL LIABILITIES	298,119,240,737	267,889,707,311			
CONTINGENCIES AND COMMITMENTS					
TOTAL EQUITY AND LIABILITIES	301,832,112,681	267,027,242,054	TOTAL ASSETS	301,832,112,681	267,027,242,054



SECTION-IX

INVESTMENT PLANS IMPLEMENTATION

I. BUSINESS PLANNING ORGANIZATION FOR PREPARATION OF INVESTMENT PLANS

Planning and Engineering Directorate of FESCO is mainly responsible for preparation of Investment plan by getting the needs of the system from various Departments of the FESCO. Information collected are analysed commercially and technically. Feasibility studies are prepared and planning process is started.

II. PLANNING AND DESIGN

Planning & Engineering Department of FESCO contains separate Sections for Transmission System Designing and Distribution System Designing headed by Chief Engineer Planning & Engineering. Load Flow, Short circuit and System Analysis studies are carried out using internationally acceptable software in Planning & Design Directorate.

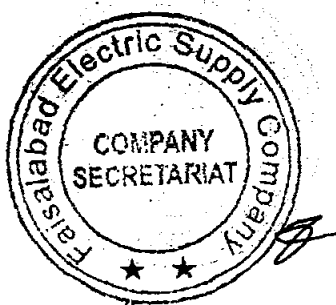
III. PROGRAM MANAGEMENT

Designed Projects after complete analysis and administratively approved from competent authorities are transmitted to the executing agencies of the FESCO, which are responsible for the final execution of the sub projects according to the Designed parameters.

IV. PROJECTS IMPLEMENTATION

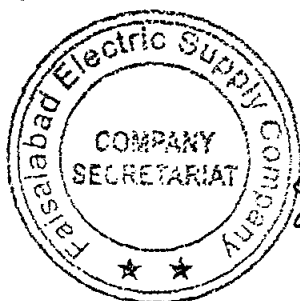
Subprojects regarding Secondary Transmission and Grids are executed by the Project Monitoring Unit which is headed by Chief Engineer. This unit include Manager (Procurement) Manager (Planning & Scheduling), Manager (Grid System Construction), Manager (Environment & Social Safeguard) and Manager (Project Financing).

Regarding the Subprojects of distribution expansion and rehabilitation, execution is done by Technical Directorate headed by G.M/Chief Engineer. This directorate include Manager (Project Construction), Manager (Procurement).



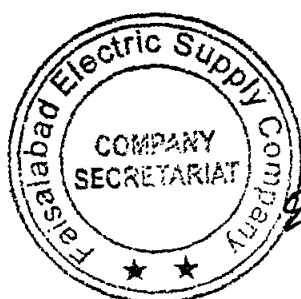
DIIP-50 : SUMMARY OF MANPOWER REQUIREMENTS TO IMPLEMENT THESE PLANS

S/ No.	Description	Quantities					
		2023-24	2024-25	2025-26	2026-27	2027-28	Total
A. Staff Required for Future Expansion							
1	Director/ Chief Engineer	0	0	0	0	0	0
2	Manager	4	0	0	0	0	4
3	Deputy Manager	23	0	0	0	0	23
4	Assistant Manager	84	2	1	3	1	91
5	Line Superintendent	386	8	4	7	3	408
6	Line Man	1352	22	20	15	10	1419
7	Assistant Line Man	2057	34	30	20	25	2166
8	SDC/UDC	90	3	2	2	2	99
9	Clerks	282	6	3	4	3	298
10	Driver	271	4	0	1	2	278
11	N/Qasid	166	3	1	1	1	172
12	Security Guards	187	4	2	2	2	197
13	Sweepers	87	2	1	1	1	92
14	Drafts Men	25	0	0	0	0	25
15	Tracers	29	0	0	0	0	29
16	Surveyors	5	0	0	0	0	5
17	Mali	33	2	1	1	0	37
18	Data Control Supervisors	12	2	1	0	0	15
19	Others	1835	18	22	18	30	1923
	Total	6928	110	88	75	80	7281



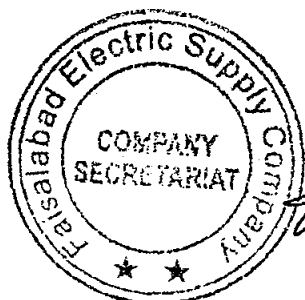
SECTION -X**DIIP-51: LINKAGE WITH PERFORMANCE STANDARDS**

Description	2022 (Baseline)	2024	2025	2026	2027	2028
SAIDI (Minutes)	35.53	34.6	34.3	34.0	33.6	33.0
SAIFI (No.)	1252	1223	1212	1201	1185	1170
Voltage (Kilo)	132/66/11/0.4					
Supply Restoration (hours)	2 hrs	2.00	2.00	2.00	2.00	2.00
Fatal accident	9	0	0	0	0	0
Non fatal accident	12	0	0	0	0	0
No. Of meters read manually	Remaining are being read by Mobile unit 1918146	0	0	0	0	0
New connections installation durations (day)	35 days	35 days	35 days	35 days	35 days	35 days
Reduction in billing related complaints (No.)	3984	3750	3640	3210	3105	2821
Transmission loss%	1.4	1.36	1.28	1.20	1.16	1.11
Distribution loss %	7.8	7.60	7.45	7.35	7.28	7.26
Technical loss %	9.10	8.74	8.60	8.50	8.40	8.35
Non technical losses %	0.3	0.3	0.2	0.3	0.2	0.3
Service to supply related complaints (hours)	½ to 1 depending upon site					
Meters replacement		67000	84000	91000	95000	113000
% reduction of amount in dead defaulters	48%	50%	50%	50%	50%	50%
Time taken to close financial books	3 month	3 month	3 month	2 month	2 month	2 month
Staff trained	1818	6000	6500	7000	7800	8500
Officer trained	300	400	400	4000	400	400
Officers trained in management courses	15	25	25	30	30	30



DIIP-52: TIME FRAME FOR REDRESSAL OF COMPLAINT

S/No.	Type of complaint	Response time
1.	Damaged Transformer Replacement	6 Hours
2.	Installation of New Connection	07 days
3.	Replacement of defective meters	24 Hours
4.	Billing Complaints	48 Hours
5.	Low Voltage	24 Hours
6.	New connection delayed Billing	24 Hours
7.	Unscheduled Load Shedding	30 Minutes
8.	Tripping	30 Minutes
9.	Fault on Line	02 Hours
10.	Non Delivery of Bill	24 Hours
11.	Miscellaneous	24 Hours



SECTION -XI

ENVIRONMENTAL AND SOCIAL ASSESSMENT MITIGATION PLAN

11. ENVIRONMENT AND SOCIAL SAFEGUARDS

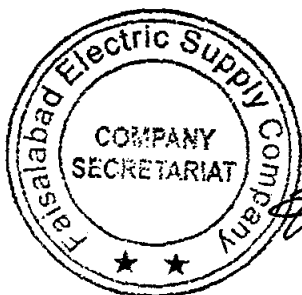
11.1 ENVIRONMENTAL SAFEGUARDS

Pakistan has had laws that contain provisions for environmental protection. These laws which were partially inherited from pre-independence days dealt with air and water quality, canal irrigation, land tenure and use, forest conservation, wildlife protection, energy development, pesticide use, noise, public health etc. Not only did these laws prove ineffective, punishment for violation was mild and easy to circumvent, but these laws also did not adequately cover the subject areas and several of these laws became outdated. Many aspects of environment degradation remained uncontrolled and under-regulated. Pakistan therefore responded to its environmental concerns by introducing laws, establishing environmental protection institutions, and developing human resources and technical capability through local resources and foreign assistance.

To cope with above mentioned requirements, **The Pakistan Environmental Protection Act (PEPA-97)** which provides national policy on the subject was promulgated in December 1997, which is single comprehensive law that provides the protection, conservation, rehabilitation, and improvement of the environment, for the prevention and control of pollution and promotion of sustainable development. The Act cover air, water, soil and noise pollution, also including hazardous waste disposal and motor vehicular pollution.

Section 12 of The Pakistan Environmental Protect Act (PEPA-97) lays down the requirements of Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA). This section states as under:

1. No proponent of a project shall commence construction or operation unless he has filed with the Government Agency designated by Federal Environmental Protection Agency or Provincial Environmental Protection Agencies, as the case may be, or, where the projects likely to cause an adverse environmental effect an environmental impact assessment and has obtained from the Government Agency approval in respect thereof.



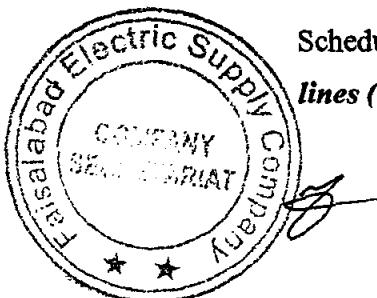
2. The Government Agency shall subject to standards fixed by the Federal Environmental Protection Agency,
 - a. Review the *Initial Environmental Examination (IEE)* and accord its approval, or require submission of an environmental impact assessment by the proponent; or
 - b. review the *Environmental Impact Assessment(EIA)* and accord its approval subject to such conditions as it may deem fit to impose, require that the environmental impact assessment be re-submitted after such modifications as may be stipulated or reject the project as being contrary to environmental objectives.

"Filing, Review and Approval of Environmental Assessment-Govt. of Pakistan November 1997" containing schedule A, B & C which lists the requirement of IEE or EIA. Federal Government Notification titled *"Guidelines for Preparation, Review of Environmental Reports Govt. of Pakistan November 1997"* has been consulted in this regard. FESCO has prepared its own Environmental Policy and is enforced since 2014.

11.1.1. EIA/IEE REQUIREMENTS

Pak-EPA in August 2000 issued *"Policy and Procedures for Filling, Review and Approval of Environmental Assessment"*, which includes schedules A, B & C defining projects in terms of the requirement of EIA and IEE .

- a. **Schedule A** defines projects which require an EIA. It deals with the list of major projects which have potential to affect a large number of peoples. The impact of such project may be irreversible and could lead to significant changes in land use and in social, physical and biological environment. Schedule A projects relating to Energy Sector are *"Major power transmission lines (above 66 KV) including grid stations"*.
- b. **Schedule B** defines projects which require an IEE. It deals with the projects where the range of environmental issues is comparatively narrow and issues can be understood and managed through less extensive mitigation measures. Schedule B Projects relating to Energy Sector are *"Electrical transmission lines (11 KV and smaller) and large distribution project"*.



- c. **Schedule C** combines everything not in Schedule A and B. Illustrative examples given in Schedule C projects are "*Project promoting energy efficiency*"

Thus DIIP FESCO Project is covered by Schedule A which requires preparation of a full ELA Report. Therefore Environmental Impact Assessment Report will be submitted to EPA Punjab for the Approval on the format given below (Reference: clause 2.3 Guide lines for Preparation review of Environmental Reports).

11.1.2 FORMAT OF EIA REPORT

A. EXECUTIVE SUMMARY

B. INTRODUCTION OF THE PROJECT

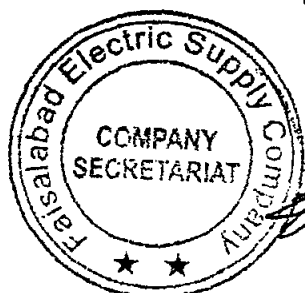
- Brief description of nature , size and location of project and other pertinent background information

C. DESCRIPTION OF PROJECT

- Type & category of Project
- Objectives of the Project
- Alternatives
- Location , project site layout land use , road access , topography , population , road access , topographic and vegetation
- Size or magnitude of operation including capital cost and associated risks.
- Proposed schedule of Implementation
- Detail of restoration and rehabilitation plan
- Government Approval

D. DESCRIPTION OF ENVIRONMENT

- Physical resources , topography , soil , climate , surface water groundwater , geology/seismology
- Ecological resources , fisheries , aquatic biology , wild life , forest , rare or endangered species
- Human life and economic development –population and communities , industries , infrastructure , institutions , transportation , land use power sources and transmission , agricultural and mineral development



- Quality of life value –Socioeconomic , public health , recreational resources , aesthetic value , archaeological or historical treasures and cultural values

E. **SCREENING OF POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

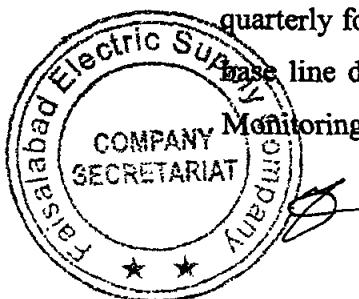
- Environmental Problems due to project location , design , construction , operation , enhancement measures and additional consideration
- Environmental Monitoring (Internal & External) program and institutional requirement
- Environmental Audit by third party

F. **CONCLUSION**

For similar Scope of Works of Tranche-III ADB Loan 2972-Pak, an Environmental Impact Assessment (EIA) Report was prepared by PMU FESCO and submitted to Environmental Protection Department (EPD) Punjab Lahore. EPD after site inspection of concerned District Officer Environment and public hearing granted the environmental approval. *As per approval, no Environmental Risk and Hazards are associated with the construction of new Grid Stations & Transmission Lines , conversion of 66 KV existing Grid Station to 132 KV and Augmentation/Extension Sub-Project.* The same process would be adopted for preparation of EIA Report. Site inspection of concern District Officers Environment will be arranged. After Public hearing, EPD will consider granting of Environmental approval.

As per requirement of Environmental Management & Monitoring Plan (EMMP), periodic monitoring for implementation of EMMP is required. Lump sum provision for Environmental Mitigation Measures is provided in report and detail will be provided in contract documents. From this type of provision , expenditure on testing of NEQS , Plantation of Trees as per requirement of Environmental Protection Department's approval, waste management, erosion control Environmental /Social Trainings , External & internal Monitoring and other associated measures , can be incurred.

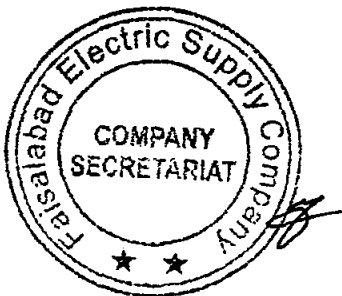
Environment & Social Internal Monitoring Mechanism will be strengthened to monitor the envisaged goals. Monitoring Reports be prepared quarterly for review of competent forum. These reports will include comparison of base line data of water Air and noise and monitoring data of NEQS parameters. Monitoring Staff will be equipped with requisite monitoring equipment e.g. Digital



Camera, pH Meter, Noise Meter, Digital Location Meter (longitude & latitude) , Ambient Air Quality Sampler/Tester . E&SS Cell be provided independent transportation and other facilities for frequent field visits.

Following Environmental concerns will be taken care of during implementation of DIIP project:-

- No waste solvents, petroleum product, toxic chemicals or solutions will be disposed of in city drainage system. These types of wastes shall be taken to an approved disposal facility.
- Construction activities will not cause the release of Sulphur Hexafluoride SF6
- Hazardous and toxic waste will be collected as per FESCO Waste Management Plan. Suitable Metal Containers will be used to collect the waste.
- Approved site Specific Environmental Management Plan (SSEMP).
- Construction activities will be executed in such a way that no blasting at project site is required to control noise level.
- All stakeholders including contractor will be trained to deal with environmental hazardous. Awareness campaign regarding NEQS will be launched for all stakeholders.
- Labour/work force will be required to use PPEs.
- Labour/work force will be provided safe drinking water
- All Occupational Health and Safety (OHS) measures will be considered during construction activities. First Aid Box be made available at site. Construction Area will be cordoned off with reflecting tapes to avoid OHS hazardous. Safety instruction sign boards will be erected at site of work
- Environmental Grievances Redressal Mechanism will be enforced.
- Training of Labour/workforce and FESCO staff will be arranged for effective implementation of EMMP and other environmental mitigation measures.



11.2 SOCIAL SAFEGUARDS

Objective of Social Safeguards are "Avoid, minimize or mitigate Land Acquisition and Resettlement (LAR)".

- Avoid: Implement the project on freely available land
- Minimize: - Seek Project or design alternatives
- Mitigation: - Enhance, at least restore, livelihood of displaced persons (DPs) and improve living standard of DPs.

Minimal land acquisition and resettlement or livelihood impacts are expected from construction of new substations or transmission lines, conversion of 66 KV Existing Grid Stations to 132 KV, Augmentation & Extension Projects.

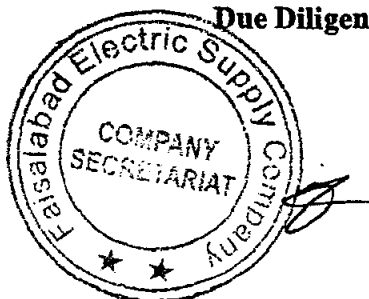
11.2.1 NEW GRID STATIONS:-

Efforts will be made to construct the new Grid Stations on Government / FESCO land and voluntary donations from FESCO's clients. In case of non-availability of Govt. land in the vicinity, land acquisition and resettlement for such substations is expected to be carried out through mechanism of willing buyer and willing seller that will not trigger Govt and Donors Policy. In these cases, a Due Diligence Report (DDR) will be prepared by providing evidence that the land was acquired through the mechanisms specified above, but no LARP will be required.

In case land for construction of substation, is to be acquired through the provision of Land Acquisition Act 1894, then Land Acquisition and Resettlement Plans (LARPs) will be prepared and implemented by making compensation to affected persons. LARPs will be updated for any change in design and scope of work.

11.2.2 CONVERSION OF GRID STATIONS:-

Conversion of 66 KV to 132 KV Grid Stations will take place within walled boundaries of existing grid stations. As such no Land Acquisitions and Resettlement will be involved. No LARPs will be prepared and implements. Only Due Diligence Report (DDR) will be prepared by providing evidence of land.



11.2.3 AUGMENTATION & EXTENSION SUB PROJECTS:-

Augmentation & Extension Sub Project of existing Grid Stations will take place within walled boundaries of existing grid stations. In case of Augmentation, procured Power Transformers will be replaced on existing foundations whereas in case of extension, additional foundation bays will be constructed. As such no Land Acquisitions and Resettlement will be involved. No LARPs will be prepared and implemented. Only **Due Diligence Report (DDR)** will be prepared by providing evidence of land on which existing grid station is to be constructed.

11.2.4 132 KV TRANSMISSION LINE SUB PROJECTS:

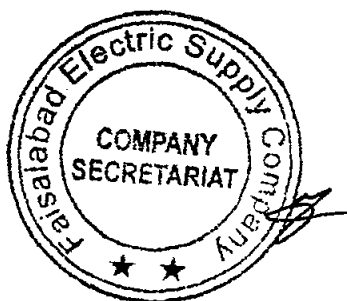
According to provisions of Telegraph Act & existing practice by Government, no land compensation will be paid for land falling under the towers. Affected Persons will be compensated through crop/tree/infrastructure compensation. For sub-projects entailing the construction of Transmission lines where poles are to be sited within public road corridors—no land acquisition and resettlement will be needed, nor allowed under the Land Acquisition and Resettlement Framework (LARF).

11.2.4.1 132 KV TRANSMISSION LINES PASSING THROUGH CULTIVATED AREAS.

For each Transmission Lines passing through cultivated area, LARPs are to be prepared, implemented and monitored through vigorous monitoring. LARPs on the specified format be prepared, updated & implemented for payment of compensation to affected persons.

11.2.4.2 DISPLACED PERSONS:-

Displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.



REPLACEMENT COST:-

The calculation of replacement cost will be based on the following (i) fair market value (ii) transaction costs (iii) interest accrued (iv) transitional and restoration costs and (v) other applicable payments if any. Where market conditions are absent or in a formative stage, the borrower/client will consult with the displaced persons and host populations to obtain adequate information about recent land transactions, land value by types, land titles, land use, cropping patterns and crop production, availability of land in the project area and region and other related information. The borrower/client will also collect baseline data on housing, house types, and construction materials. Qualified and experienced experts will undertake the valuation of acquired assets in applying method of valuation, depreciation of structures and assets should not be taken into account.

11.2.4. BASE LINE SURVEY CONSIDERATIONS:

During Base Line Surveys, assessment of damages of assets will be made for the following:-

Built-up Property i.e Residential Houses/Dera, Tube wells, Peter Engine Pumps, Hand Pumps,

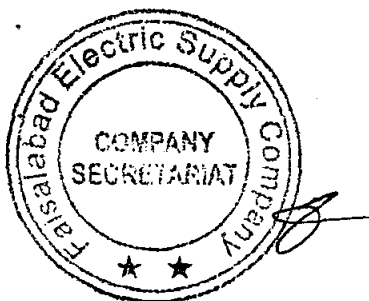
Commercial Assets i.e Brick Kiln, Poultry Farms, Fish Farms, Shops, Flour Machines

Economic Trees. Trees having height 4 meter or more & girth 15-20 cm coming in corridor of influence of Transmission Lines will be removed. Kikar, Shisham, Sufaida, Beri, Simble etc. have low economic values and treated as fire wood. A single tree yield on average about 400 kg of firewood. Firewood value differs from kind of trees. Cost of compensation of fire wood will be paid on the basis of prevailing market rates. Bohr Tree has a high cultural value & will be avoided as possible.

Fruit Trees e.g. Mango, Dates, Jamin, Citrus, bears high economic value and will be paid on the rates provided by Govt Agencies.

Infrastructure. During base line survey possible damages to infrastructure e.g. Metaled Road, Katcha Village Track, Water Courses, Canal/Distributaries, Drainage Channel, Railway Line, Gas Pipelines, Telephone Lines & Transmission Lines will be made. Damaged infrastructure will be rehabilitated.

Cultural Property. Grave yards, mosques, shrine or site of archaeological importance comes under cultural property and will be avoided.



11.2.5 FORMAT OF LAND ACQUISITION & RESETTLEMENT PLAN**A. Introduction of the Project** including background and description of project**B. Project Compensation & Rehabilitation Frame Work**

- i. Policy provisions, Eligibility and Entitlement
- ii. Land Classification
- iii. Assessment of compensation.

C. Assessment of Impacts

- i. Resettlement Field Surveys
- ii. Minimization of Impacts
- iii. Impacts of the Sub Project – Impact of Towers & Transmission Lines

D. Socio-Economic Profile of Affected Peoples

- i. Census of Affected Household –Field Methodology, indigenous Peoples,
- ii. Data of affected households including housing, livelihood/income, poverty

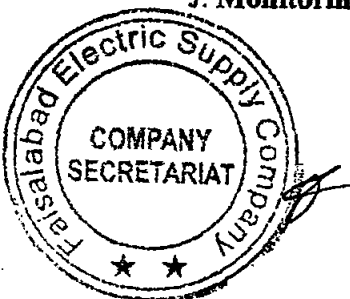
E. Institutional Arrangements

- i. Internal & External Monitoring
- ii. Consultation & Disclosure
- iii. Public Consultation for undertaking LARPs
- iv. Compensation option discussed

F. Conclusion & Disclosure of LARPs.**G. Grievance Redressal Mechanism****H. Budget & Estimate of LARPs**

- i. Basis for compensation
- ii. Determining the rate of compensation
- iii. Rehabilitation
- iv. Budget for Land & Assets Acquisition

I. Implementing Schedule & Cut of Date:—Compensation eligibility will be limited by the cut-off date on completion of the final census after the line route survey is finalized. The DHs (that settle in the affected areas and/or make changes in the land use patterns) after this cut-off-date will not be eligible for compensation. They will, however, be given a three months' notice requesting them to vacate the premises/corridor and dismantle the affected structures and/or other establishments (if any) prior to project implementation.

J. Monitoring & Evaluation

11.2.6 CONSIDERATION FOR MINIMIZATION OF IMPACTS REGARDING FINALIZATION OF LAY OUT PLAN & PROFILE OF TRANSMISSION LINES

FESCO usually takes all possible steps to safeguard against and minimize the likely adverse impacts on local communities in the design and implementation of its STG Project, involving construction of grid stations and transmission lines. Accordingly, the following specific actions will be applied to avoid and minimize the likely resettlement impacts of Transmission Lines sub-projects

Alignment of the transmission line and tower to tower spans are altered slightly to avoid both the compact housing and commercial areas and scattered farm-houses;

A minimum clearance under the line required is 7 m, which is maintained for the whole line, even by providing 2 m to 6 m leg and/or body extension to the towers where required; and,

In urban reaches, the broad-based (7m x 7m) towers will be replaced by narrow-based (1m X 1m) tabular poles, which to be constructed along outer fringes of a road's ROW, to further minimize the impacts on people.

Any built-up structures falling in the outer fringes of the total 30m Rows are not removed, only those falling directly under the live power cables are removed and relocated.

Transmission Line should not pass through Abadies

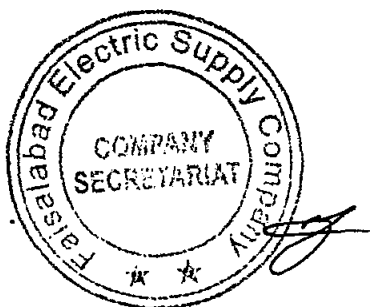
Transmission Lines should be away from Mosque, School, Hospital, other sensitive Area of ecological importance.

Transmission Line rout should be away from locations of Archaeological importance

Transmission Line should not disturb ecology, wet land & Estuaries

Planted Forests be avoided so that minimum trees are involved.

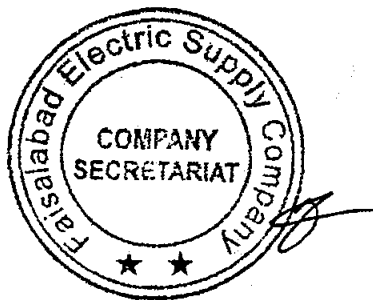
Constructed Deras be avoided No Indigenous People are found in the proposed FESCO Subproject; however Indigenous People should not be disturbed during execution of Subprojects.



11.2.7

RECOMMENDATIONS

- PD (GSC) staff (Qanoon go, Patwari and LAO) is not well trained to carry out different types of social surveys which are essential to full fill the LARP. On job training need to be provided to FESCO staff.
- Compensation must be paid to displaced persons as soon as possible.
- After the start of civil work compensation must be paid to DPs for foundation stage at least.
- On the revision of profile & lay out, site specific Land Acquisition and Resettlement Plans (LARPs) be updated and got approved from Competent Authority.
- Environment & Social Safeguard Cell (E&SS) FESCO need strengthening in respect of logistics & staffing. E & SS Cell staff be provided meaningful trainings from reputed institutions and as well as on job training to improve the skills & capacity to perform high quality work.



ANNEX-F

**~~Applicable documents~~
In support and information
Set out in Schedule III
For Electric Power Supply.**

No. Feeders along with No. of Consumers and their Sanctioned Load

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
1	KOT ESSA SHAH	001601	5,332	15,486
2	KALORA	001602	4,974	13,704
3	KOT AMIR	001603	3,369	8,924
4	PIR KOT	001604	3,361	13,025
5	NOORAY WALA	001605	7,727	19,991
6	RASUL PUR	001606	7,050	17,190
7	SHAH JEWANA	001607	4,554	11,954
8	SARGODHA ROAD	001608	6,486	17,591
9	KAREE WALA	001609	6,229	17,070
10	KOT KHAN	001611	7,723	17,114
11	DOSERA	001612	2,779	7,881
12	KOT SULTAN	001613	2,772	9,172
13	SOBHAGA	001614	1,899	5,315
14	SHEIKHAN	001615	5,784	14,832
15	MASSAN	001616	7,781	17,692
16	CRESCENT TEXTILE	002801	1,091	7,419
17	USMAN TOWN	002804	1,133	9,134
18	MILLAT ROAD	002805	6,293	22,042
19	B.L.INDUSTRIAL	002808	1,126	12,209
20	SHAFI DYEING	002810	2	835
21	SEVEN J.B	002812	5,544	21,646
22	RAM DEWALI	002813	6,003	26,665
23	SARGODHA ROAD	002814	3,823	17,907
24	MILLAT TOWN	002816	3,333	17,640
25	GARDEN MOHALLAH	002817	0	0
26	NAWAZ TOWN	002818	1,131	14,370
27	SARGODHA SPINNING	002819	28	782
28	ALI TOWN	002820	6,084	20,260
29	GHOUSIA ABAD	002821	3,176	11,353
30	SAMANA	002822	3,816	19,146
31	JAGUAR	002823	1	1,800
32	DAWOOD	002824	3	4,630
33	SANDAL	002825	8,266	26,282
34	RASOOLPUR	002826	5,642	20,886
35	UNIVERSITY TOWN	002827	233	1,547
36	NOOR PUR	002828	8,065	25,154
37	MOTOR WAY CITY	002829	580	3,310
38	KALASH	002830	1	4,880
39	AZHAR CORPORATION	002831	1	2,150
40	FDA CITY - 06	002832	382	1,648
41	SITARA TEXTILE	002833	3	6,281
42	RASHID USMAN CLOTH	002834	5	6,497
43	Abu Bakar Block	002835	2,317	8,725
44	Al-Hamra Fabrics	002836	1	2,520
45	Zafar Fabrics	002837	1	1,300
46	Usman Block	002842	485	1,815
47	RAILWAY ROAD	004702	9,253	22,947
48	CITY	004705	5,512	15,749

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
49	MONGI ROAD	004706	5,450	15,116
50	PANSARA ROAD	004707	4,472	19,227
51	JHANG ROAD	004708	8,247	22,584
52	LAL SHAH	004709	4,793	12,746
53	SCARP	004710	14,176	35,706
54	MALRI	004711	1,769	12,164
55	HAMZA BOARD	004712	1	2,000
56	MOCHIWALA ROAD	004713	9,747	26,668
57	GOHER INTERNATIONAL (PVT)	004714	1	2,129
58	DAWAKHARY	004715	9,184	23,184
59	TOBA ROAD	004716	4,462	11,625
60	SHALIMAR	004717	8,461	20,353
61	SHAH SWARIA	004718	3,818	10,487
62	KATHORE	004719	12,556	32,895
63	HASSAN LIMITED	004720	2	2,948
64	ASHRAF COLONY	004721	6,365	16,612
65	GULBERG	004722	1,898	9,956
66	EID GAH ROAD	004723	4,363	10,850
67	BASHIR ABAD ROAD	004724	7,462	17,696
68	MUREED WALA ROAD	004725	8,883	21,892
69	PARRAYWAL	004726	6,645	15,233
70	MAQBOOL PUR	004727	2,504	7,678
71	RAMZAN SHAHEED	004728	4,410	10,324
72	TRIMMU	006101	8,340	22,023
73	WARYAM	006102	5,514	14,915
74	RUSTAM	006103	5,671	13,728
75	SUFI TEXTILE	006104	2	1,954
76	BAILLA SARBANA	006105	7,356	16,267
77	H.B.SHAH	006106	2,201	5,902
78	MAJHI SULTAN	006108	5,256	12,362
79	NATIONAL POWER PLANT	006109	1	3
80	CME CORPORATION	006110	2	4,803
81	TRIMMU BARRAGE	006111	84	679
82	ASHABA SHARIF	006112	3,458	8,554
83	BURALA	007301	5,377	14,226
84	FAISALABAD ROAD	007302	8,455	24,479
85	GOGERA	007303	11,539	32,127
86	JUTE MILL	007304	1	0
87	KACHARY ROAD	007305	7,900	23,942
88	LAYALLPUR CHEMICAL	007306	2	600
89	ALI PUR BUNGALOW	007307	11,740	32,705
90	RODALA	007308	9,333	25,258
91	CRESCENT COTTON	007310	4	4,289
92	ASLAM TEXTILE MILL	007311	2	2,235
93	NEW AWAGAT	007312	10,660	36,426
94	COLLEGE ROAD	007313	9,844	29,100
95	BUCHKEY ROAD	007314	3,633	10,893
96	NEW DANNA-BAD	007315	7,360	19,977
97	LAHORE ROAD(5 STAR)	007316	2,620	6,898
98	ARKANA(NEW RODALA)	007317	9,122	24,250
99	THERAJ	007318	4,004	12,196
100	BUCHANAN ROAD	007319	5,762	15,792
101	CANAL ROAD	007320	8,653	24,316
102	AL-HABIB	007321	6,400	17,103

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
103	240/MORE	007322	6,224	17,656
104	WASEER	007323	83	3,817
105	ISLAMPURA	007324	5,412	15,643
106	ASHIQ SHAHEED	007325	5,405	15,362
107	S/TOWN	007601	8,889	25,096
108	KABLI GATE	007602	10,686	26,947
109	MOHAR	007603	9,158	27,477
110	PAK KWAIT TEXTILE	007605	3	4,541
111	SALLY TEXT. MILL	007606	1	0
112	HAMOKA	007608	7,635	19,049
113	SARGODHA ROAD	007609	7,462	20,560
114	WATTOO	007610	8,220	18,986
115	AWAN TOWN	007612	3,818	10,631
116	HADALI	007613	6,211	15,672
117	HABIB JUTE MILL	007614	2	1,063
118	BOLA	007617	4,136	10,071
119	SANDRAL	007619	8,121	20,299
120	SUGAR MILL ROAD	007620	3,219	10,629
121	BILLU FARM	007621	4,566	11,089
122	MANGWAL	007622	9,443	25,743
123	MAIN BAZAR KHUSHAB	007623	10,222	24,219
124	KATHA ROAD	007624	7,572	20,633
125	FAWARA CHOWK	007625	5,507	14,732
126	DHQ JAUHARABAD	007626	1	520
127	PINDI KORA	007627	2,357	6,036
128	CIVIL LINE	007629	5,721	16,249
129	BAGH	007801	9,567	22,565
130	JHANG CITY	007802	2,675	8,029
131	RAIL BAZAR	007803	8,616	20,628
132	KURIANA	007804	8,003	19,691
133	MADOKI	007806	4,170	11,702
134	MEGHIANA	007807	10,757	25,482
135	CIVIL LINE	007808	4,351	15,203
136	REWAZ	007809	7,222	18,540
137	MAHNI SHARIF	007810	5,176	12,867
138	ALI ABAD	007811	6,183	23,988
139	UJALA	007812	4	4,100
140	SUGAR MILL	007816	2	2,503
141	SUPREME GUM	007817	1	24
142	MILLAT	007818	6,411	15,520
143	SATELLITE TOWN	007820	7,095	20,380
144	BLOCK SHAH	007821	9,821	23,875
145	GHAZI SHAH	007822	9,809	24,343
146	GOJRA ROAD	007824	6,218	17,306
147	COLLEGE ROAD	007825	7,822	18,906
148	IMRAN SHAHEED	007826	5,396	15,100
149	AYUB CHOWK	007827	3,904	10,037
150	DHQ HOSPITAL	007828	4	843
151	MARZI PURA	007829	4,867	13,241
152	SHAHEED ROAD	007830	5,483	11,083
153	KHALID ABAD	007902	4,848	14,456
154	LAKAR MANDI	007903	2,782	12,698
155	LIAQAT ABAD	007904	7,774	23,477
156	MUHAMMAD PURA	007905	6,094	18,231

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
157	NAZAMABAD	007906	1,285	7,833
158	BAKAR MANDI	007908	1,344	8,859
159	SADHAR	007909	487	11,494
160	JHANG ROAD	007910	3,977	13,042
161	Kamalabad	007912	9,723	29,418
162	SAR SHAMIR	007913	5,013	23,604
163	DHANDRA	007914	2,482	15,718
164	SABZI MANDI	007916	1,619	17,304
165	Datta	007917	1,845	15,025
166	Jinnah	007918	2,028	13,059
167	SHEIKH COLONY	007919	3,301	13,365
168	ATTOMIC ENERGY	007920	5,476	19,232
169	ILYAS PARK	007921	10,975	33,344
170	AFGHANABAD	007922	4,383	13,784
171	ISLAMPURA	007923	3,090	16,932
172	ALI HOUSING	007924	6,479	18,829
173	TAHIR PURA	007925	1,016	14,360
174	NIAB-2 (BUNDLE 029611)	007926	3	1,610
175	KAUSARABAD	007927	4,555	14,672
176	CHILDREN HOSPITAL	007928	2	2,515
177	JUDGE WALA	007929	1,243	9,551
178	AL-REHMAN	007930	6,034	19,474
179	SHADAB	007931	4,856	13,427
180	RASALA ROAD	007932	6,243	22,651
181	ABC ROAD	007933	5,796	17,066
182	GULSHAN-E-HAYAT	007934	4,993	15,411
183	AIR AVENUE	007935	4,531	12,619
184	FOREST	009301	5,323	14,456
185	HAVELI	009302	6,335	19,592
186	KAMALIA CITY	009303	6,700	16,284
187	MAGNEJA	009304	3,854	13,643
188	RAVI	009305	6,419	18,701
189	SUGAR MILL	009306	2,228	8,263
190	CIVIL LINE	009307	11,401	29,087
191	JAKHAR	009308	5,061	13,984
192	PATLI	009309	3,907	11,731
193	QADER BUX	009310	2,134	9,571
194	RAILWAY ROAD	009311	6,006	15,058
195	CITY-1	009312	4,328	12,260
196	HANIF SHAHEED	009313	2,032	8,996
197	KALARA	009314	4,885	13,618
198	SHEIKH BURHAN	009315	8,815	22,752
199	BODI SHAH	009316	2,861	8,859
200	NASEEM SHAHEED	009317	3,354	8,805
201	RAJANA ROAD	009318	1,262	4,694
202	GHULAM MUHAMMAD SHAHEED	009319	1,862	6,377
203	MADNIABAD	009320	6,450	16,778
204	MUKHIANA	010801	4,674	11,811
205	SHERA ABAD	010802	4,497	12,077
206	SATTIANA	010803	2,858	9,688
207	SHABBIR ABAD	010804	5,546	14,197
208	PAKHRA SULTAN	010805	7,452	19,090
209	NASIR ABAD	010806	2,643	7,943
210	KHARORA BAQIR	010807	456	1,841

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
211	DHUNDAY SHAH	010808	3,779	9,731
212	BALLO SHAHABAL	010809	313	2,573
213	FAROOQA	011501	4,785	15,427
214	GHAZNI	011502	12,766	30,234
215	SAHIWAL	011503	6,931	18,916
216	MOCHI WALA	011504	9,116	22,860
217	RADHAN	011505	11,181	29,976
218	VIJH	011506	7,966	21,170
219	LAKHIWAL	011507	12,182	30,705
220	OLD CHIDROO	013401	1,302	5,213
221	GULMIRI	013402	8,051	22,925
222	BALLO KHEL	013403	5,313	14,480
223	WATTA KHEL	013404	9,589	25,998
224	DILLELY WALI	013405	0	0
225	MUSA KHEL	013406	502	1,752
226	P.A.F. BASE	013407	2	2,403
227	P.A.F COLONY	013408	1	2,460
228	SAWANSE	013409	2,447	7,703
229	OLD SHER WALA	013410	2,223	9,277
230	ABBA KHEL	013412	4,627	12,881
231	SHAHBAZ KHEL	013414	0	0
232	MUSLIM BAZAR	013415	10,353	25,672
233	YARU KHEL	013416	7,020	20,272
234	KHAWAJABAD	013417	113	346
235	CIVIL LINE	013418	7,178	20,556
236	RAKKHI	013419	900	5,729
237	CENTRAL JAIL	013420	121	1,256
238	Narwala Road	014301	1,057	3,218
239	FAIZ ABAD	014302	7,862	25,799
240	GH.MUHAMMAD ABAD	014303	9,809	31,815
241	KASHMIR ROAD	014304	7,440	23,105
242	MARZI PURA	014305	7,644	22,689
243	QADAR ABAD	014306	780	7,379
244	RAZA ABAD	014307	8,580	27,856
245	REHMANABAD	014308	1,916	10,238
246	SIDDU PURA	014309	8,918	28,227
247	SUBHAN ABAD	014310	551	8,188
248	Prokianwala	014311	2,468	14,654
249	Mustafa	014312	2,740	8,181
250	MADINA	014313	5,372	20,172
251	Ahmad Abad	014314	941	8,406
252	Ali	014315	2,850	8,674
253	SHAHZPUR	014316	4,809	18,120
254	MASHA-ALLAH PAPER BOARD MILL	014317	4	1,143
255	SINDHU	014318	2,362	13,272
256	ILYAS	014319	5,587	21,046
257	LYALLPUR OIL REFINERY	014320	1	761
258	SADIQA ABAD	014321	2,130	10,423
259	Touseef Enterprise	014322	2	3,975
260	ALLUWALI	016001	6,425	14,079
261	HARNOLI	016002	7,888	22,225
262	KALLURKOT	016003	1,965	4,238
263	LIAQAT ABAD	016004	4,755	10,734
264	ZAMEY WALA	016005	4,039	9,519

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
265	DUBB	016006	8,586	20,744
266	NASEER WALA	016007	3,365	7,526
267	DANISH SCHOOL HARNOLI	016008	66	603
268	AHMED COTTON FACTORY	016009	2	1,189
269	KHAN BROTHERS COTTON	016010	1	1,050
270	NEW HARNOLI	016011	9,011	19,574
271	PIPLAN	016012	7,971	17,394
272	MARRI	019205	4,716	12,739
273	S.K.T CITY	019211	0	0
274	A.T.M	019213	0	0
275	BILAL T.MILL	019217	2	3,067
276	INDUS LAYALLPUR	019218	2	5,018
277	KOHISTAN	019222	2	1,259
278	RAFI COTTON INDUSTRIES	019224	2	2,218
279	ATM	019225	2	3,693
280	BILAL TEXTILE	019227	2	2,500
281	RANA TEXTILE MILLS	019228	2	2,895
282	AL-FAISAL	020501	1,012	10,875
283	AL-MASOOM	020502	3,163	13,757
284	Nawabanwala	020503	5,015	17,250
285	NEW IQBAL COLONY	020504	2,715	7,618
286	MIANI	020505	12,226	35,938
287	SAMUNDRI ROAD	020506	2,581	11,732
288	NISAR COLONY	020507	7,128	21,385
289	AMIN ABAD	020508	4,439	14,901
290	College Road	020509	220	1,210
291	MUHAMMAD ALI STREET	020510	1,848	10,329
292	GULSHAN-E-IQBAL	020513	6,302	22,307
293	MALIK GHEE MILLS	020514	3	755
294	ALBARKAT	020515	0	0
295	PEPSI	020517	3	5,753
296	CHENAB GARDEN	020518	1,027	3,272
297	DASUHA	020519	6,350	23,876
298	AHMAD NAGAR	020520	6,400	18,719
299	SAMANABAD	020521	4,481	14,246
300	MUZAFFAR COLONY	020522	7,622	24,068
301	SOHAILABAD	020523	7,576	21,937
302	BARKATPURA	020524	5,863	17,347
303	4-SEASONS	020525	1,612	5,299
304	ILYAS GARDEN	020526	3,209	16,879
305	NIAMOANA	020527	6,037	19,582
306	PHILCO	020528	1	1,300
307	GENERAL HOSPITAL	020529	1	559
308	CHISHTIA PARK	020530	6,794	22,308
309	MASOODABAD	020531	3,649	10,531
310	ADHI KOT	022601	3,176	7,900
311	NOOR PUR	022602	6,803	16,956
312	RAHDARI	022603	9,152	22,076
313	BITTA	022604	3,563	8,984
314	CROUT 9.EXPRESS	022605	1	826
315	CHAN	022606	11,347	28,783
316	SAAHIL WOOD	022607	3	1,206
317	A.P.SIAL	022701	7,213	16,702
318	F.NO.1(RUNGPUR)	022702	2,511	5,719

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
319	F.NO.2(SAMMANDNA)	022703	4,232	9,468
320	F.NO.3(PIR A/REHMAN)	022704	6,902	15,103
321	F.NO.4(KALLACHI)	022705	7,312	16,809
322	F.NO.5(YASMINE)	022706	4,914	11,697
323	KASOONA/G.M.RAJA	022707	3,444	12,990
324	ASHIANA	023101	1	4,000
325	BHABRA	024201	6,579	17,910
326	TAKHAT HAZARA	024203	4,584	12,330
327	MIDH RANJHA	024204	4,611	12,178
328	MELA	024206	3,922	12,913
329	BUCHAN KALAN	024208	3,507	10,735
330	PINDI RAWAN	024209	4,141	11,145
331	BHERA NOON	024301	4,448	11,555
332	LAK SAKASAR	024302	5,296	15,829
333	KOT MOMAN	024303	5,744	17,819
334	NOON TEXTILE MILL	024304	2	3,585
335	LILIANI	024306	10,584	29,330
336	CITY	024307	10,128	29,132
337	DEOWAL	024308	6,000	26,136
338	SATGHARA	024309	2,972	8,436
339	KHIZAR ABAD	024310	3,493	9,529
340	EXPRESS	024311	4,077	10,740
341	PURANA BHALWAL	024312	9,071	25,942
342	QUDRATABAD	024313	6,586	21,612
343	SAKHI SULEMAN	024314	9,444	24,320
344	BHALWAL INDUSTRIAL EST.	024315	2	5,044
345	NOON SUGER MILL	024316	1	1,000
346	DESGHEER	024317	2,544	7,132
347	CHANAB BAZAR	024318	9,484	27,026
348	BHAWANA	024401	8,122	21,805
349	BUKHARIAN	024402	4,451	13,231
350	KHANWANA	024403	5,718	17,206
351	TAJA BAIR WALA	024404	4,702	15,437
352	JAMIA ABAD	024405	3,161	9,970
353	MUNARA	024406	3,833	11,514
354	MANGUANA	024407	4,369	12,397
355	INAYAT ALI SHAH	024408	2,465	9,213
356	AHMAD NAGAR	024409	3,916	11,480
357	Amin Pur Road	024410	2,452	7,724
358	MUHAMMAD SHARIF	024411	2,543	8,072
359	KUNDIAN	025003	6,555	16,996
360	WAPDA COLONY	025005	1	2,480
361	KHANQ SIRAJIA	025008	6,186	13,784
362	GERNAILY ROAD	025009	7,339	17,808
363	CRESENT BOARD	025201	4	4,140
364	DRY PORT	025204	7,381	27,583
365	SUPER	025206	189	625
366	MUSLIM TOWN	025207	2,736	8,808
367	JAKHRA	025501	8,365	23,511
368	P.A.F	025502	2	2,403
369	CANTT	025503	10,680	28,395
370	DARKHANA	025504	9,418	26,361
371	JADALA	025505	558	2,220
372	P.A.F COLONY	025507	2	863

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
373	WALI FEEDS	025508	1	1,388
374	NOOR NAGAR	025509	7,372	14,701
375	KHIKHA BANGLA	025510	5,680	13,588
376	SAKESAR	025903	0	0
377	FAZIL	027501	1,827	4,851
378	JANDAN WALA	027502	6,205	13,754
379	RAKH KHASOR	027503	2,296	5,231
380	HAITOO	027504	10,632	21,474
381	RAKH JANDAWALA	027505	6,380	11,827
382	ALI KHEL	027506	8,549	16,869
383	KASHMIR WOOD	027507	1	4,000
384	KMI WOOD INDUSTRIES	027508	1	4,750
385	FRONTIER PLATINUM WOOD IND.	027509	1	4,800
386	GULBURG	029604	5,286	19,835
387	PAK.AIR FORCE	029607	27	5,341
388	GARDANA	029609	1,936	12,947
389	GULFISHAN	029610	4,885	18,455
390	NIAB	029611	124	2,152
391	MOHABBAT KHEL	029801	5,340	15,116
392	KALA BAGH	029802	6,828	15,500
393	MANDA KHEL	029803	4,110	11,693
394	CADET COLLEGE	029804	3	529
395	TABBI SAR	029805	4,761	8,284
396	JALAL PUR	029806	3,369	9,909
397	CHOKERA	030608	0	0
398	THAL	032202	2,710	8,512
399	BOMBAY WALA	032203	4,779	11,082
400	MANKERA	032204	7,784	19,798
401	ALYAS & SONS WOOD IND.	032205	1	3,580
402	KOTLA	033101	2,185	7,000
403	MURID WALA	033102	5,080	15,164
404	RAJANA	033103	5,544	17,369
405	LASSURI	033104	5,753	18,314
406	DARYA BALL	033105	2,733	9,196
407	NOOR MAHAL	033106	4,252	13,733
408	SONDH	033107	10,945	32,362
409	11 KV BANGLA	033108	2,964	8,949
410	11 KV MAMUN KANJAN-2	033109	1,308	3,532
411	TORRIANWALA	033110	9,426	27,499
412	KHALID	033111	8,439	24,061
413	ASLAM SHAHEED	033112	1,665	7,256
414	DIN PUR	033113	6,380	18,156
415	ISLAM PURA	033114	3,796	11,357
416	D/KHAN	033301	1,401	3,727
417	D/WALA	033302	12,121	28,609
418	KHANSAR	033303	8,274	18,876
419	MAIBALE	033304	16,389	37,514
420	PECTO CHIP BOARD	033305	2	3
421	ANGAR DAGAR	033306	7,668	18,036
422	NIA.LAHORE	033401	7,701	19,483
423	SAEED ABAD	033402	5,306	15,087
424	PACCA ANNA	033403	9,485	24,707
425	H.A.R	033404	4	2,283
426	PANSERA	033405	5,353	15,423

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
427	MUKHTAR TEXTILE	033406	1	1,200
428	SAEED ABAD NO. 2	033408	5,403	15,299
429	NIA LAHORE NO. 2	033409	7,192	19,193
430	GOJRA MORE	033410	4,794	13,165
431	SHAHPUR	033411	2,512	5,936
432	ARUTTI	034501	6,986	24,854
433	JANAIJ WALA	034502	7,747	23,604
434	HYDER SHAH	034503	11,161	34,043
435	SANDEELIAN WALI	034504	9,360	29,320
436	ACCORD T.MILL	034505	4	2,130
437	SCARP	034507	1	3
438	WAHGHAI	034508	5,822	19,222
439	GHOUSIA ABAD	034509	10,519	29,645
440	KAMALIA ROAD	034510	7,480	24,460
441	PIR MAHAL CITY	034511	10,210	29,727
442	DARKHANA ROAD JORRA	034512	3,737	12,070
443	IQBAL ASHRAF SHAHEED	034513	5,622	19,030
444	MAI SUFOORAN	034514	5,931	19,454
445	VANJARI	035201	3,175	10,906
446	MAKKAR WAL	035202	1	882
447	SULTAN KHAIL	035203	4,553	14,595
448	DALA MEER WALA	035204	2,680	9,248
449	CIRCUIT HOUSE	036301	3,724	13,321
450	DOWN STREEM	036303	7,318	21,946
451	SULEMAN PURA	036304	5,109	14,802
452	HYDERABAD ABAD	036305	8,462	24,414
453	MAQM-E-HAYAT	036306	4,959	14,905
454	SHAHEEN/P.A.F.	036307	5	200
455	PAK ARMY	036308	2	2,400
456	SULKI BRANCH	036309	7,398	21,530
457	TARIQ ABAD	036310	7,194	19,111
458	KATCHARY BAZAR	036311	4,335	9,772
459	RURAL	036312	10,845	32,077
460	PATHA MANDI ROAD	036315	5,399	12,541
461	URBAN AREA	036316	5,803	17,581
462	KARKHANA BAZAR	036318	2,888	8,799
463	ISTIQLALABAD	036319	4,310	15,434
464	REMOUNT DEPOT SRG	036320	239	881
465	EIDGAH ROAD	036321	4,438	12,268
466	DHQ HOSPITAL	036322	1	1,800
467	FATIMA JINNAH COLONY	036323	8,077	21,772
468	CHARNALI	036324	10,679	29,276
469	WATER SUPPLY ROAD	036325	5,164	14,378
470	MADINA COLONY	036326	9,603	26,190
471	HILAL-E-AHMER	036327	4,199	11,833
472	CMH	036328	2	1,003
473	TUBEWELL SUPPLY	036329	15	225
474	BANS BAZAR	036330	4,232	6,937
475	CHAK SABANA	036605	8,836	25,861
476	SHAMAS MILL	037101	2	2,500
477	SADIQ NEHANG	037301	5,243	12,066
478	S.KOT CITY	037302	10,132	23,285
479	S.KOT ROAD	037303	7,384	19,912
480	SIDHNAI	037304	9,813	22,441

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
481	AZAD PUR	037305	2	992
482	RAKH BHANGOO	037306	7,434	16,374
483	SCARP	037308	3,835	9,013
484	GAGH	037309	2,991	6,209
485	SULTAN BAHADAR	037310	10,751	25,417
486	DUBKALAN	037311	10,617	24,698
487	JALAL ABAD	038203	8,142	21,747
488	WARIS PURA ROAD	038301	7,590	24,759
489	ROSHAN WALA	038302	4,617	25,972
490	SHADI PURA	038305	4,546	17,829
491	D.TYPE COLONY	038306	5,815	17,053
492	KORIAN ROAD	038307	3,334	13,285
493	MUJAHID ABAD	038309	4,576	20,381
494	T.T.SINGH CITY	038501	6,394	17,694
495	GHALA MANDI	038502	4,949	12,923
496	RASALA	038503	4,418	12,230
497	JANIWALA	038504	6,309	16,638
498	CHENAB FIBERS	038505	3	2,105
499	DULLAM	038506	8,278	23,494
500	NOOR PUR	038507	4,641	12,871
501	WARYAM ROAD	038508	4,359	13,337
502	DISTRICT JAIL	038509	1	186
503	KALOOR-2	039501	4,117	12,346
504	ALLAH KHEL	039502	4,044	10,418
505	TRAG	039503	2,290	6,719
506	I.S.L	039505	0	0
507	KAMAR MUSHANI CITY FED	039506	4,654	12,459
508	ALI KHEL	039507	2,715	8,335
509	Ghazi Wall	039508	1,367	5,306
510	PEOPLES COLONY	042001	9,499	29,850
511	BABAR CHOWK	042002	1	95
512	KHAYABAN COLONY	042003	4,129	17,326
513	KOHINOOR MILL-1	042004	8,628	25,735
514	JAIL ROAD	042006	2,281	13,680
515	SATIANA ROAD	042007	19	57
516	FERTILIZER	042008	4,750	16,865
517	NATHERI ROAD	042009	330	1,726
518	D.GROUND	042010	4,588	17,812
519	SCARP COLONY	042011	3,354	13,293
520	NATIONAL COLONY	042012	6,338	21,233
521	KTM-II	042013	46	138
522	KHIZRA	042014	3,338	13,888
523	NAMAT COLONY	042015	6,233	17,740
524	Ghousia Road	042017	1,459	8,129
525	KHIDER WALA	042101	4,111	12,857
526	Peer Salah-Ud-Din	042102	2,778	8,749
527	RAVI	042103	6,466	21,926
528	SHERZA	042104	3,130	10,620
529	Kalarwala	042105	4,303	15,842
530	SUGAR MILL	042106	3,265	10,915
531	KANJAWANI	042107	6,024	18,526
532	TSML(TANDLIANWALA SUGAR MILLS LTD)	042108	1	975
533	ZAFAR CHOWK	042109	6,832	20,022
534	JHANIAN SHAH	042201	4,752	12,161

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
535	KAKRANI	042202	7,591	19,403
536	BHONE SUGAR MILLS	042203	1	1,004
537	JABBA	042301	8,475	19,281
538	KATHWAI	042302	6,764	16,145
539	UNGARH	042303	3,636	7,827
540	NAUSHERA CITY	042304	10,709	24,785
541	ARMY EXP. SODHI-JAY-WALI	042305	1	4,000
542	SHADMAN	043101	119	2,522
543	GULISTAN COLONY	043102	88	681
544	YASRIB	043103	3,162	12,309
545	JUBLEE	043104	2,941	14,985
546	MANZOOR PARK	043105	7,756	23,622
547	D.H.Q.	043106	589	5,039
548	HAIJVERY PARK	043108	2,823	8,990
549	FESCO COLONY	043109	389	2,047
550	NISHAT MILL-1	043110	1	4,950
551	JHUMRA ROAD	043111	2	16
552	ABDULLAH PUR	043112	2,375	9,014
553	RAFHAN MILL	043113	3,491	17,185
554	MARAFCO	043114	1,523	7,407
555	TARIQ ABAD	043115	6,165	21,891
556	SANAT SINGH ROAD	043116	2	86
557	MANSOOR ABAD	043118	6,631	19,307
558	FAROOQABAD	043119	5,921	18,103
559	CIVIL LINE	043121	1,381	9,108
560	CANAL ROAD	043122	1,668	14,474
561	ZIA TOWN	043124	0	0
562	NEW MADINA	043125	4,078	13,923
563	FATEH ABAD	043126	1,531	6,567
564	PESSI	043127	5	825
565	SOSAN ROAD	043128	2,501	13,310
566	RASOOLPARK	043129	2,795	9,142
567	CARDIOLOGY	043130	1	2,732
568	KOHINOOR CITY	043132	214	5,405
569	ISLAMIA PARK	043133	2	11
570	RAJA ROAD	043134	56	1,508
571	SEED COLONY	043135	1,585	6,409
572	HAQ BAHOO	043136	2	18
573	AMIN TOWN (URBAN)	043137	793	5,948
574	MADNI	043138	14,084	44,824
575	BEST EXPORT (INDEPENDENT)	043139	3	1,925
576	DEEPU BAZAR	043140	2,615	8,646
577	MODEL CITY	043141	1,828	5,917
578	NATIONAL SILK MILL	043142	1	2,498
579	DASTAGEER COLONY	043143	1,878	5,476
580	DAJAL	043901	9,152	22,930
581	BHAKKAR-1	043902	7,424	20,425
582	SARAI KRISHNA	043903	11,811	30,419
583	CITY	043905	3,544	11,933
584	PIR ASHAB	043906	1,074	2,826
585	KOTLA JAM	043907	7,247	20,012
586	INAYAT ABAD	043908	9,614	23,593
587	JAHAN KHAN	043909	9,885	25,525
588	KHERY WALA	044101	5,316	14,120

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
589	R/SULTAN	044102	7,729	16,715
590	B/SULTAN	044103	12,152	28,184
591	HABIB SHAHEED	044104	6,652	14,983
592	GM RAJA	044105	7,322	17,639
593	KOT BAHADAR SHAH	044106	6,610	16,974
594	T-1 (JABBOANA)	044201	7,224	15,838
595	T-2 (UCHGULAMAM)	044202	6,928	16,032
596	RASHID PUR	044203	4,612	11,960
597	RAKH DIGANA	044204	8,106	16,779
598	MARI SHAH SAKHEERA	044206	3,698	8,388
599	18-HAZARI	044207	10,098	21,314
600	LASHARI	044208	3,210	6,820
601	KALABAGH DAM	045801	1,992	4,885
602	TUBEWELL	045802	7	19
603	GULLEN KHAIL	045803	6,924	14,452
604	CEMENT FACTORY	045804	2	50,000
605	ANTIBIOTICS PVT. LTD.	045805	6,576	16,919
606	PAI KHEL LIFT IRRIG. SCHEME	045806	5	1,926
607	JINNAH BARRAGE	045807	234	1,073
608	BANIAN TREE	045808	3	608
609	AGRITECH LTD	045809	1	4,900
610	BAKHSHAY KHEL	045810	1,471	2,973
611	JHAMARA	045901	12,535	37,407
612	TANDLIANWALA CITY	045902	3,828	12,572
613	PINDI SHEIKH MUSA	045903	6,568	21,688
614	R/Shah	045904	9,295	29,092
615	Alam Shah	045905	3,283	11,648
616	KATRIAN	045906	11,219	32,346
617	BAHLAK	045908	4,086	13,871
618	SAMUNDRI ROAD	045909	3,597	12,775
619	MAHI CHOWK	045910	7,421	21,497
620	JANGLE SARKAR	045911	5,488	16,759
621	TAYYABA TOWN	045912	804	2,433
622	BEST CHIP BOARD	045913	2	717
623	SHAHMEERWALA	045914	2,777	8,468
624	Raza Abad	045915	5,847	19,644
625	Ijaz Town	047501	1,911	8,609
626	Qudratabad	047503	2,029	9,258
627	Raja Chowk	047504	9,743	26,613
628	ALLIED HOSPITAL (BUNDLE 082406)	047505	1	3,450
629	11KV JALAL STREET	047506	2,955	15,176
630	STATE BANK 1	047507	2,715	10,895
631	SAHIL	047508	1,026	5,717
632	ISMAIL ROAD	047509	874	6,848
633	MODEL TOWN	047510	4,288	13,149
634	NEW CIVIL LINE	047511	7,325	22,270
635	RASUL PUR	047512	650	6,261
636	SADAR BAZAR	047513	7,416	21,541
637	FAISAL	047514	1,948	13,880
638	GULSHAN COLONY	047515	5,949	17,422
639	QAIM SAIN	047516	1,655	9,913
640	AGRI-UNIVERSITY	047517	657	5,356
641	CITY	047518	3,426	10,220
642	PUNJ PULLY ROAD	047519	663	7,391

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
643	SAREENA	047520	1	2,100
644	STATE LIFE	047521	3	1,626
645	AKBARABAD	047522	1,940	11,348
646	Ali Road	047523	1,762	9,623
647	MUNIRABAD	047524	4,841	17,680
648	IQBAL STADIUM	047525	1	1,600
649	ISLAM NAGAR	047526	6,664	20,767
650	EID GAH ROAD	047527	1,379	11,994
651	NEW JINNAH COLONY	047528	4,813	18,624
652	NEW TAJ COLONY	047529	4,897	17,137
653	NEW REHMAT TOWN	047530	7,261	24,184
654	SAEED ABAD	047531	11,527	34,128
655	RASHEEDA ABAD	047532	6,971	26,443
656	CRESTEX	047533	2	4,781
657	GENERAL HOSPITAL	047535	49	2,353
658	KHAYABAN GARDEN	047536	768	2,850
659	CRESTEX-2	047537	2	4,903
660	IQBAL TOWN	047538	4,413	12,317
661	Moon / Emque / Kashif	047539	2	2,640
662	RANI WAH	052301	5,882	16,324
663	FATEH KHAN	052302	2,063	6,526
664	DINGA	052304	7,130	19,647
665	NABBAH	052305	8,649	23,107
666	ALI PUR	052306	4,650	14,843
667	ISLAM PUR	052401	8,549	23,978
668	MUSLIM BAZAR	052402	4,084	13,506
669	GILL WALA	052403	9,278	25,297
670	SUN FLOW	052404	1	2,129
671	CHAKIAN	052405	3,651	10,365
672	LUDEWALA	052406	4,531	13,255
673	IQBAL COLONY (NEW)	052407	3,518	9,944
674	MOEN INDUSTRIES	052408	1	744
675	QARTABA TOWN	052409	4,403	13,174
676	AL-KARAM FLOUR MILL	052410	1	1,150
677	AJNALA ROAD	052411	7,023	21,692
678	QAZI TOWN	052412	3,930	9,990
679	BEHAL	052501	8,894	22,639
680	NUTAK	052502	8,223	20,380
681	DHANDLA	052503	4,804	12,445
682	A (BARANA)	052601	3,104	10,361
683	B (PEOPLES BHUTTA)	052602	4,177	13,396
684	EL-3 (SILLANWALI)	052603	5,326	13,511
685	EL-4 (NOURING)	052604	6,009	14,555
686	SHAHEEN ABAD	052605	2,138	5,440
687	AWANABAD	052606	2	18
688	MANGOWANA	052607	10,156	25,471
689	THATHI BALA RAJA	052609	3,078	9,503
690	PANJAY WALA	052610	5,800	14,605
691	CHANAN PURA	052611	9,776	22,735
692	MUHAMMAD WALA	052612	3,447	10,695
693	WAN BUCHRAN	058101	5,613	15,997
694	COLEY WALA	058102	3,346	11,454
695	MUZAFFAR PUR	058103	4,888	16,398
696	NARI	058104	2,821	10,982

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
697	MOHAR LIFT	058107	3	605
698	NEW CHIDROO	058108	2,390	8,077
699	ABDUL RAZAQ SHAHEED	058109	9,291	22,159
700	PHULRWAN	058501	9,867	26,832
701	ABDAL	058502	4,070	10,664
702	HUJJAN	058503	6,885	18,373
703	PIND MACCO	058505	2,520	7,115
704	MIANI	058506	3,016	7,790
705	RATTO KALA	058507	7,429	18,626
706	MELOWALL	058510	5,141	13,573
707	ARMY REMOUNT	058513	382	1,283
708	PEER	058514	2,097	6,930
709	BARNALA	059502	1,637	8,027
710	RASUL PUR	059503	4,393	16,851
711	JHUMRA CITY	059504	12,140	35,113
712	DAR-UL-EHASAN	059505	14,212	40,106
713	ZESHAN TEXTILE	059507	3,944	11,162
714	SULTAN NAGAR	059508	9,016	26,893
715	SCARP NO. 1.	059509	3,910	12,204
716	SCARP NO. 2	059510	8,105	21,903
717	PARCO	059511	2	2,492
718	CANAL	059512	8,612	24,176
719	SADAQAT/KAMAL FEEDER	059513	2	93
720	FAISALABAD STEEL	059514	1	1,943
721	SADAQAT KAMAL	059518	0	0
722	NOOR WALAY	059520	8,578	26,247
723	Pakka Dalla	059521	10,897	30,256
724	PADHRAR	059704	5,374	14,167
725	WARCHA	059801	3,506	12,409
726	GUNJAL	059802	9,367	23,251
727	CITY	059803	8,565	24,674
728	RURAL	059804	1,771	8,631
729	SAKESAR QUAIDABAD	059805	2	2,354
730	OKHLI MOHLA	059806	7,781	23,086
731	BANDIAL	059807	5,180	14,907
732	FATEHPUR	059808	2,042	13,458
733	SATELLITE TOWN	060101	6,581	23,684
734	DIV.PUBLIC SCHOOL	060103	4,778	14,890
735	LAHORE ROAD	060104	5,633	21,830
736	MILLAT ABAD	060105	6,122	18,753
737	CENTRAL AMM. DEPOT	060106	2	1,600
738	SARGODHA BY PASS ROAD	060109	74	1,592
739	NEW SATELLITE TOWN	060110	6,925	21,767
740	SMALL INDUS.ESTATE	060111	1,677	11,910
741	CHAK ASSIANWALA	060112	3,493	9,779
742	NISHTERABAD	060113	2	39
743	NEELAM	060114	5,788	20,557
744	N.D.C.	060115	2	1,003
745	11 KV CITRO PAK	060116	1	4,699
746	DEFENCE	060117	1	2,000
747	GUNIANWALA	060118	9,948	27,946
748	BABE-E-HARAM	060119	3,965	12,102
749	ROSE VALLEY	060120	122	393
750	ANWARABAD	060121	3,800	11,191

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
751	IFTIKHAR INDUSTRY	060122	2	1,537
752	CANAL PALM	060123	54	179
753	GULBURG CITY	060124	347	1,101
754	CHUKERA	060125	3,905	10,444
755	FAWARA CHOWK	061801	7,107	20,473
756	SIR-SYED	061802	5,655	18,991
757	GOU SHALA	061803	6,557	18,957
758	MOMAN ABAD	061804	5,013	14,575
759	BISMILLAH PUR	061805	3,226	15,768
760	BILAL	061806	4,907	14,189
761	DARUL EHSAN	061807	78	474
762	JHAL KHANUANA	061808	2	6
763	RAILWAY ROAD	061809	57	403
764	KATCHARY ROAD	061810	4,933	12,453
765	Tata Bazar	061812	6,298	17,040
766	MAQBOOL ROAD	061813	1,239	5,903
767	JHANG BAZAR	061814	5,017	8,294
768	DOST STREET	061815	7,457	20,641
769	P/COLONY NO.02	061816	4,946	15,063
770	CHAUDHRY STREET	061817	426	8,046
771	KARIM TOWN	061818	6,862	19,845
772	GOAL KARYANA	061819	2,866	5,339
773	ZULFIQAR COLONY	061820	4,291	15,571
774	HALAL ROAD	061821	8	1,006
775	DR.TARIQ RASHID	061822	1	1,978
776	MUHAMMADI CHOWK	061823	4,393	13,545
777	IMAM BARGAH ROAD	061824	4,176	10,659
778	WASA	061826	1	797
779	REHMANIA TOWN	061827	3,491	10,870
780	COLLEGE ROAD	061828	2,574	7,822
781	BERAN WALA	064101	10,426	28,791
782	Badshahi Masjid	064102	7,307	20,019
783	Mozam Shah	064103	6,659	18,391
784	JHANG ROAD	064104	5,314	16,392
785	LHR ROAD	064105	4,000	13,842
786	CHENAB NAGAR	064106	8,928	27,327
787	RAJOA	064107	2,819	8,990
788	TUBEWELL (WASA)	064121	22	1,776
789	ABDULLAH FIBERS	064122	2	2,510
790	HINDUANA	064123	9,754	30,231
791	Shah Burhan	064124	4,534	13,176
792	Jhumra Road	064125	6,881	21,859
793	ASIAN	064126	6,425	20,569
794	Dawer	064127	4,721	13,512
795	EXPRESS WASA	064128	11	1,737
796	IQBAL RICE MILLS	064129	1	2,000
797	AHMAD STRAW BOARD	064130	2	1,572
798	JHOKE MALIAN	064131	3,276	10,385
799	Usmanabad	064132	5,009	14,891
800	FAISALABAD ROAD	064133	2,557	14,659
801	SAKHI ABDUL WAHAB	064134	7,915	22,840
802	CITY	064135	3,338	8,754
803	JANI SHAH	064136	2,683	9,653
804	D.H.Q HOSPITAL	064137	1	492

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
805	MUSLIM BAZAR	064138	3,460	9,657
806	SITARA CHEMICAL	064801	1	45,000
807	MASOOD TEXTILE	064901	1	7,950
808	CITY KURRIANWALA	067301	11,714	36,321
809	FAKHAR ABAD	067302	5,939	21,542
810	LATHIANWALA	067303	2,150	14,659
811	LAHORE ROAD	067304	3,062	14,734
812	ARZOO TEXTILE MILL	067305	2	3,267
813	CHAUDHARIWALA	067306	1,611	5,952
814	JARANWALA ROAD	067307	1,056	9,656
815	HUSSAIN SPINNING	067308	4	5,105
816	M.K.SONS	067309	3	3,894
817	RAFIQUE SPINING MILLS	067310	5	5,021
818	INTERLOOP	067311	1	4,985
819	M.K.S (NEW)	067312	3	4,918
820	BEST EXPORT	067313	1	48
821	BISMILLAH/MAGNA	067314	2	6,000
822	FIRDOUS	067315	277	7,624
823	CHAWLA	067316	3	4,937
824	WAPDA CITY NO.1	067317	2,654	10,741
825	SABUANA	067318	4,261	14,627
826	HASSAN SPINNING NO.2	067319	1	4,320
827	FOREST PARK	067320	7,257	26,678
828	FAROOQ SPINNING MILL	067321	1	1,623
829	NIAGRA	067322	1	4,226
830	Zafar Fabrics	067323	1	2,500
831	U.E.T. FAISALABAD	067324	1	935
832	Kamal Mills	067325	3	5,267
833	NIMRA TEXTILE	067326	1	1,050
834	ZA CORPORATION	067327	2	4,983
835	ATOMIC NO.2	067402	1	27,900
836	HYDERABAD CITY	068601	5,922	14,188
837	MAHANI	068603	5,078	11,704
838	NEW RAFHAN	070101	3	8,773
839	PIONEER CEMENT	070301	1	42,000
840	CHASHMA HPPP	070401	4	8,680
841	J.K.TECH. MILLS	073901	1	18,000
842	GULSHAN-E-MADINA	075903	527	2,059
843	11 KV BHAKKAR-3 (ALAMA)	075904	9,058	23,505
844	11 KV MAJOKA	075905	3,449	8,329
845	11 KV JAIL	075906	27	681
846	11 KV SIAL	075907	7,279	17,487
847	UMAR FAROOQ ROAD	075908	8,511	20,742
848	M.M ROAD	075911	12,175	31,086
849	NPP-1 PROJECT	077901	1	19,000
850	C.N.P.P.	077902	1	16,000
851	NEW DIJKOT	079001	11,345	32,702
852	DIJKOT CITY	079002	12,779	36,319
853	MAAN PUR TOWN	079003	6,085	21,204
854	ALBARKAT	079004	11,511	31,347
855	NEW KHANUANA	079005	0	0
856	GOJRA ROAD	079006	7,670	20,450
857	Jagat Pur	079007	2,352	6,003
858	MARI INDUS	079301	7,325	16,717

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
859	INDUSTRIAL ESTATE-I	082401	159	9,153
860	INDUSTRIAL ESTATE-II	082402	192	12,748
861	MERAN WALA	082403	6,372	25,331
862	WASA	082404	3	4,958
863	LASANI TOWN	082405	3,728	22,030
864	P.M.C	082406	2	3,593
865	BAHADRY WALA	082407	12,074	39,987
866	MANSOORAN	082408	7,853	22,397
867	SITARA SAPNA CITY	082409	604	3,052
868	INDUSTRIAL E-3	082410	200	17,119
869	AFTAB TEXTILE	082411	1	1,080
870	RIAZ-UL-JANNAH	082412	964	3,308
871	FAZAL-E-RABBI TEXTILE	082413	2	2,299
872	S.T.S	082414	1	2,326
873	BORAYWAL ROAD	082415	1,820	11,583
874	SHEIKHUPURA ROAD	085301	7,140	25,112
875	S.O.S. VILLAGE	085302	4,187	16,860
876	HAMDARD UNIVERSITY	085303	1,346	5,187
877	BAGGH-E-WALA	085304	8,194	25,780
878	GATTI	085305	7,408	24,620
879	CHENAB LIMITED	085306	1	3,950
880	WAPDA ACADEMY	085307	342	1,570
881	ASHRAFABAD	085308	2,445	14,827
882	GHAZIABAD	085309	5,528	20,196
883	CHENAB ENGINEERING	085310	1	4,005
884	BHAIWALA	085311	9,186	31,302
885	REHMATABAD	085312	6,485	20,015
886	RAZA TOWN	085313	0	0
887	NATIONAL TEXTILE UNIVERSITY (NTU)	085314	2	868
888	MANAWALA	085315	4,032	11,796
889	UMER GARDEN	085316	777	3,929
890	YOUSAFABAD	085317	8,103	23,647
891	MISAQ-UL-MALL	085318	48	2,130
892	JOHAR COLONY	085319	9,728	28,532
893	Mughal Pura	085320	3,129	10,705
894	CHENAB COLLEGE	085601	3,230	11,212
895	FAIZABAD	085602	3,590	15,863
896	RAILWAY ROAD	085603	6,737	19,345
897	MOCHI WALA	085604	6,434	17,014
898	BHOJOANA	085605	3,909	11,061
899	IQBAL SONS FLOOR MILLS	085606	1	719
900	ASHRAF SHAHEED	085607	9,481	22,760
901	KOT SAI SINGH	085608	4,662	17,048
902	IFTIKHAR SHAHEED	085609	8,140	18,712
903	PAKKAY WALA	085610	4,354	10,853
904	MELAD CHOWK	085611	5,678	13,690
905	HIRA PAPER MILL	085612	1	1,250
906	Paradise City	085613	225	869
907	MAI HEER	085614	2,754	6,655
908	PALM VILLAS	085615	111	550
909	SHEIKH ALI	085616	1,521	4,883
910	IHSAN FABRIC	086201	2	2,592
911	ZAHID JEE	086202	2	4,565
912	PRIDE SPINNIG MILLS	086203	26	7,241

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
913	JOHAL	086204	4,255	23,471
914	ZIARAT	086205	12,303	37,357
915	NAGRA SPINNING MILLS	086206	2	3,498
916	HABEEB HASEEB	086207	4	4,608
917	ASIM TEXTILE	086208	4	4,984
918	ISHAQ	086209	2	4,870
919	SHAHBAZ GARMENTS	086210	1	3,989
920	BIBI JANN	086211	1	2,880
921	IDEAL SPINNING	086212	4	6,038
922	AL-ZAMIN	086213	4	4,605
923	F-5 (SITARA)	086215	9,505	27,427
924	AMTEX SPINNING	086217	1	3,000
925	FAISAL SPINNING MILL	086218	1	2,609
926	ALLAHU AKBAR/KHURSHID	086219	2	6,168
927	Arshad Textile Mills	086220	1	4,701
928	MAKKUANA	086701	11,584	38,782
929	GULLAB	086702	3,922	20,502
930	LAL KOTHI	086703	7,846	30,319
931	AKBAR	086704	2,769	17,012
932	S-II	086705	3,403	19,286
933	KARARWALA	086706	1,661	13,907
934	JARANWALA ROAD	086708	2,701	19,006
935	SULTANI	086709	3	4,346
936	BORSTAL JAIL	086710	7	608
937	EDEN VALLEY	086711	2,298	7,723
938	NAZIR SHAEEED	086712	7,310	24,381
939	DHAREMA	087301	9,686	27,613
940	BHALWAL ROAD	087302	3,506	9,445
941	GRID COLONY	087303	29	112
942	VEGOWAL	087304	4,053	11,060
943	REFHAN MAIZE	089001	1	8,000
944	COLLEGE ROAD	090801	3,965	14,013
945	49 TAIL	090802	7,348	19,908
946	SARGODHA TEXTILE	090803	1	2,200
947	JAIL ROAD	090804	5,644	19,910
948	UNIVERSITY ROAD	090805	3,581	12,310
949	PULL-111	090806	8,096	23,555
950	KERANA HILL	090808	3,058	12,437
951	ASTANA-E-FAZAL	090809	12,249	32,382
952	CANAL PARK	090810	5,890	21,601
953	CADET COLLEGE	090811	4,062	14,148
954	RAILWAY ROAD	090812	4,496	15,590
955	PIRACHA COTTON FACTORY	090813	1	874
956	KHAYABAN-E-NAVEED	090814	536	1,638
957	JAMIA SARGODHA	090815	2	2,122
958	MALL OF SRG	090816	1	3,788
959	A.A. SPINNING MILL	091501	1	10,700
960	DABANWALA	091801	6,346	16,535
961	CIVIL LINE	091802	6,113	16,993
962	ALHAR	091803	5,345	14,970
963	SHAHZADA	091804	8,093	20,047
964	JALAL PUR	091805	8,488	23,054
965	NAGRA	091806	8,334	23,567
966	AKAL WALA ROAD	091807	5,125	14,299

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
967	JHANG ROAD	091808	2,567	7,662
968	TUFAIL SHAH	091809	4,431	10,987
969	WAQAS SHAHEED	091810	4,948	14,209
970	UAF	091811	1	1,322
971	RAJANA ROAD	091812	2,129	7,909
972	ALI ABAD	094701	4,273	11,710
973	NEW SATIANA	094702	5,530	14,961
974	JASUWANA BANGALOW	094703	10,153	26,625
975	MADOWANA	094704	1,217	10,259
976	SATIANA VILLAGE	094705	10,013	27,555
977	SUMMANDRI ROAD	094706	8,410	21,981
978	NEELI BAR	094707	3	1,525
979	ZAHID JEE	094708	5	1,028
980	RAVI	094709	5,994	16,919
981	WANHAR INDUSTRIES	094710	2	2,340
982	AL-MUSTAFA SHAHEED	094711	6,653	17,781
983	AL-MAHMOOD	094712	1,508	10,747
984	NOOR SHAH	094801	6,455	23,019
985	KARIM BUKHSH	094802	3,332	13,344
986	BHUSSI KATHIA	094803	5,491	17,038
987	NEW SABZI MANDI	095301	650	9,747
988	AL-FARID	095302	11,193	29,838
989	MALIKABAD	095303	4,245	16,107
990	MANSOOR WALA	095304	3,160	16,730
991	THEKRIWALA	095305	7,750	23,009
992	ALKHALIQ	095306	7,512	21,239
993	IONA	095307	2	4,313
994	FAG TEXTILE	095308	2	4,850
995	SOHAL	095309	8,270	26,042
996	KAMAL SPINNING	095310	1	1,600
997	KAMAL FABRICS	095311	1	1,251
998	MUZAFAR SHAHEED	095312	2,937	11,515
999	BHOLA PIR	095313	7,017	19,649
1000	HUSSAIN ABAD	095314	1,643	12,914
1001	PARADISE	095315	3,364	11,478
1002	MUJTABA SAUD	095316	1	1,020
1003	ZAITOON TAXTILE	095317	1	4,630
1004	CHAK UMER	095701	5,903	18,665
1005	KALRA	095702	14,325	38,142
1006	SHAH PUR	095703	5,314	14,490
1007	BIRBAL	095704	6,416	17,665
1008	CHAK MUHAMMAD KHAN	095705	10,178	28,747
1009	YOUSAF SUGAR MILL	095706	2	1,572
1010	JAIL ROAD	095708	5,249	15,271
1011	LALIAN (AHMAD NAGAR)	097601	729	4,307
1012	A (SANGRA)	097602	3,550	12,688
1013	B (RIAZ ABAD)	097603	3,249	10,349
1014	C (WALLAH)	097604	3,639	12,710
1015	E (KAMANWALA)	097605	12,797	36,357
1016	F (CHANNI REHAN)	097606	3,463	11,145
1017	D (LANGAR MAKHDUM)	097607	6,309	19,370
1018	D (LALIAN CITY)	097608	13,304	36,144
1019	AWAIS QARNI S.M	097609	3	872
1020	NEW DAWAR	097610	11	90

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
1021	FACTORY AREA	097611	2	274
1022	NOOR SHAHEED	097612	1,033	3,445
1023	JABANA	097613	1,120	3,244
1024	PAEC-C-II	098301	1	18,000
1025	FAROOQ	098401	6,580	21,188
1026	SALOONI JHAL	098402	6,986	21,295
1027	FARID	098403	6,886	19,455
1028	DIJKOT ROAD	098404	5,440	18,759
1029	GARH	098405	8,778	27,663
1030	SAMUNDRI	098406	8,656	27,905
1031	NARADADA	098407	9,983	29,218
1032	SHARIF ABAD	098409	6,554	20,023
1033	SAYEIAN WAZIR ALI	098410	7,449	22,481
1034	KATCHERY BAZAR	098411	6,550	16,254
1035	466 ROAD	098412	8,625	23,334
1036	RASIANA	098413	8,092	20,366
1037	VAC-1	099501	77	11,073
1038	GARMENTS CITY	099502	8	2,417
1039	SADAQAT TEXTILE	099503	2	244
1040	GOHAR WEAVING	099504	2	2,669
1041	GLOBAL	099505	4	1,706
1042	BHAMANI WALA	099506	5,782	17,820
1043	TRICON	099507	1	3,000
1044	CHAWALA ENTERPRISES	099508	1	2,500
1045	SAMIRA FABRICS	099509	2	2,017
1046	Ahmad Jamal	099510	1	4,500
1047	SHAHKOT ROAD	099511	35	4,170
1048	NEW SHAHENABAD	101001	6,127	18,980
1049	AL QAMAR	101002	85	9,276
1050	SHALIMAR	101003	2,412	16,415
1051	NEW AWANABAD	101004	75	8,187
1052	NEW NISHTERABAD	101005	1,590	10,648
1053	WALAYAT SHAH	101006	2,504	15,116
1054	AAHLI RAWAN	101007	3,826	15,012
1055	STONE VALLEY	101008	97	9,399
1056	JINNAH	101009	5,810	12,836
1057	GULBAHAR COLONY	101201	5,615	18,502
1058	AWAN WALA	101202	3,026	10,112
1059	MAKKAH CITY	101203	8,836	25,068
1060	NEW KHANUANA	101204	5,930	26,556
1061	BABAR CHOWK	101205	5,236	17,376
1062	SATIANA ROAD	101206	8,023	27,536
1063	GARDEN COLONY	101207	7,093	25,018
1064	FATEH TEXTILE	101208	9	1,224
1065	KHYABAN-E-GREEN	101209	374	1,150
1066	KAREEM GARDEN	101210	1,139	4,599
1067	A-4 PGSHF	101211	771	2,744
1068	HARIANWALA	101212	1,420	6,208
1069	ZAM ZAM	101213	54	6,231
1070	T&N PAKISTAN (PVT) LIMITED	101214	1	870
1071	AL-RAHEEM VALLY	101215	4,101	11,720
1072	Sitara Park City	101216	465	1,442
1073	SOSAN ROAD	101403	3	15
1074	REFHAN	101404	22	66

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
1075	FLYING CEMENT COMPANY	101501	1	24,812
1076	MSC	101801	2,313	12,709
1077	NEW INTERLOOP	101802	1	3,500
1078	FIVE STAR	101803	104	6,301
1079	PHULLEHWALA	101804	8,175	25,913
1080	M.K.B	101806	1	71
1081	Five Star Foods	101807	1	4,950
1082	KAMAL TEXTILE MILLS (K.T.M)	101808	1	4,200
1083	KAMAL LIMITED	101809	1	4,950
1084	ITTEHAD TEXTILE	101810	2	4,266
1085	KAMRAN TEXTILE MILL	101811	1	2,492
1086	NOOR FATIMA	101812	1	2,901
1087	RASHEED FABRICS	101813	5	4,616
1088	ARSHAD CORPORATION	101814	2	3,370
1089	REHMAN/MAGNA MILLS	101815	2	4,000
1090	MOEEN/JUBLIEE	101816	3	2,354
1091	HAR/AA	101817	3	4,347
1092	IMAGE TEXTILE	101818	1	2,122
1093	M.J/ GOHAR	101819	2	2,394
1094	Socks and Socks	101820	0	0
1095	JEWAN SHAH	102101	6,479	23,375
1096	TAHIR RAFIQ	102102	1	3,200
1097	SARFRAZ	102103	1	3,000
1098	WASA-2	102104	29	2,857
1099	AL-MURTAZA	102105	5,268	16,095
1100	M/S TAYYAB TEXTILE MILLS	102106	1	2,989
1101	AHMAD ENTERPRISES	102107	1	1,200
1102	ARYAN INDUSTRY	102108	1	2,000
1103	KASHMIR WOOD INDUSTRIES	102109	1	4,864
1104	ABDULLAH FIBERS (PVT) UNIT NO.2	102110	1	3,000
1105	AL-REHMAN	102111	3	2,526
1106	FAST NATIONAL UNIVERSITY	102112	1	290
1107	New Beranwala	102113	1,099	4,163
1108	BHERA CITY	106501	11,163	30,247
1109	ZAIN PUR	106502	5,102	15,923
1110	CHAN	106503	4,968	12,639
1111	MIANI-2	106504	6,369	16,321
1112	WADHAN	106505	6,820	16,539
1113	KHADIM STEEL MILLS	107001	2	20,000
1114	SAJJAD ESTATE	107701	75	11,331
1115	NEW DRY PORT	107702	3,802	19,716
1116	NEW JANDANWALA	107703	6,463	18,567
1117	CITI HOUSING	107704	27	879
1118	A.Z. APPAREL	107705	1	3,000
1119	KAY & EMMS	107706	2	2,505
1120	Burj	107707	5,745	16,204
1121	Dhanola Industrial	107708	152	5,650
1122	AL-BAHADAR	107901	1,868	6,859
1123	KOT FAZAL	107902	2,693	8,833
1124	GARH FATEH SHAH	107903	4,801	15,095
1125	SHAHEEN FEEDER	107904	863	3,122
1126	KHAI	107905	2,583	8,807
1127	132 KV PAEC UNIT NO C-3 C-4	109801	1	36,000
1128	INTERLOOP	110001	1	17,215

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
1129	SUFI DI KOTHI	110101	2,480	8,322
1130	MUNIR SHAHEED	110102	2,448	7,427
1131	LUNDIANWALA	110103	2,810	8,901
1132	NAMDAR	110104	3,524	10,341
1133	AL-AWAN	110105	2,518	7,721
1134	ZAHD GEE TEXTILE	110702	1	4,950
1135	AL-HAFIZ CRYSTOPLST	110703	2	2,770
1136	FIEDMC	110704	249	21,021
1137	MULTAN CHEMICAL	110705	1	4,900
1138	GHANI HILAL FEED	110706	5	4,574
1139	ZR GREEN	110707	1	948
1140	PABC	110708	2	5,740
1141	BRIGHTO CHEMICALS	110709	1	1,430
1142	KAMAL LIMITED	110710	1	4,950
1143	KING KONG	110711	1	1,080
1144	COCA COLA	110712	1	4,795
1145	CHENSIN ENTERPRISES	110713	1	1,000
1146	KARSS PAINTS	110714	3	2,846
1147	MALIK MIJ	110715	5	3,259
1148	PA Chem Global	110716	1	1,500
1149	GHANI CERAMICS	110717	1	4,800
1150	A.T.H	110718	3	3,600
1151	Deli-JW	110719	4	6,352
1152	Allama Iqbal Industrial Estate	110720	1	69
1153	ORIENT MATERIAL	110722	1	4,818
1154	IBRAHIM FIBRES	111001	1	16,000
1155	NEW CHANAB NAGAR	113401	5,370	20,674
1156	NEW FACTORY AREA	113402	4,774	14,426
1157	PATHAN KOT	113403	2,349	7,957
1158	NEW RIAZ ABAD	113404	1,632	5,671
1159	NEW AHMED NAGAR	113405	3,260	10,685
1160	COLLEGE ROAD	113406	6,736	19,655
1161	MUSLIM COLONY	113407	5,682	16,435
1162	BANGLA	114001	3,219	11,193
1163	MAMUNKANJAN CITY	114002	6,337	18,926
1164	GHOUSIA COLONY	114003	5,766	17,026
1165	KHAWAJA HABIB ULLAH	114004	1,816	6,741
1166	ALAWAL	114005	3,281	11,769
1167	KHUDA YAR	114006	2,637	9,096
1168	ZIA TOWN	114701	2,119	11,615
1169	RAZA TOWN	114702	4,869	17,450
1170	HAMDARD	114703	2,215	12,794
1171	FAISAL	114704	4,397	14,605
1172	NEW AMIN TOWN	114705	3,760	14,062
1173	MALIK PUR ROAD	114706	856	6,823
1174	JHUMRA ROAD	114707	1,286	8,800
1175	PARADISE	114708	2,197	13,381
1176	LYALLPUR GALLERIA	114709	1	3,025
1177	GRAND ATRIUM	114710	1	1,366
1178	208 CHAK ROAD	114711	3,511	15,003
1179	UNITED INDUSTRIES LTD	114712	1	3,005
1180	MOBILINK	114713	1	2,200
1181	Quran Academy Road	114714	1,243	5,542
1182	PAF BASE MUSHAF	115801	1	12,640

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
1183	SHEHBAZ KHEL	116801	6,262	15,743
1184	DILLAY WALI	116802	6,792	17,736
1185	D.H.Q HOSPITAL	116803	22	1,427
1186	MOCHH	116804	7,894	19,207
1187	SAMAND WALA 1	116805	2	25
1188	SAMAND WALA 2	116806	2	2,084
1189	BHARYON WALA	116807	3,032	9,354
1190	NEW KHAWAJABAD	116808	3,515	10,351
1191	AMINPUR CITY	117001	10,229	30,799
1192	NEW LANGRANA	117002	7,748	23,539
1193	GATTI	117003	3,324	10,484
1194	KHURDPUR	117004	4,342	12,943
1195	29 MORR	117005	1,619	5,066
1196	CHINIOT ROAD	117006	2,681	8,022
1197	JAMIA ABAD	117007	1,889	5,955
1198	JHAL KHANUANA	117701	3,129	9,276
1199	DAR-UL-EHSAN	117702	781	5,955
1200	KHAN STREET	117703	351	5,974
1201	LCM	117704	298	3,216
1202	DATA STREET	117705	1,015	10,998
1203	SALEEMI CHOWK	117706	3,534	9,636
1204	GATEWAY CHOWK	117707	1,930	6,925
1205	SARFRAZ COLONY	117708	1,325	9,609
1206	HILAL ROAD	117709	2,940	10,117
1207	SHAREEF PURA	117710	650	6,296
1208	KHAWAJA GARDEN	117711	5,599	16,351
1209	IDEAL CHOWK	117712	1,889	4,739
1210	CIRCULAR ROAD	117713	3,982	7,793
1211	RAIL BAZAR	117714	4,102	10,804
1212	MONTGOMERY	117715	3,795	7,154
1213	Boostan-E-Zahra	117716	1,188	5,253
1214	FAROOQ ABAD	117901	6,915	17,897
1215	PECTO CHIP BOARD	117902	3	3,983
1216	O/G CITY	117903	6,759	16,439
1217	KHOKHAR	117904	2,877	7,284
1218	KOHAWAR	117905	4,370	11,135
1219	CHAK MIANA	119201	4,736	13,643
1220	TALIB WALA	119202	6,072	17,465
1221	K WAL	119203	13,523	37,168
1222	MANGI	119204	13,400	35,015
1223	HADDA	119205	2,919	8,831
1224	GULLA PUR	119206	7,455	20,821
1225	MATELLA	119207	5,678	15,579
1226	BHAGTANWALA	119208	14,569	41,687
1227	T.S.MILL	119209	13	1,836
1228	AHMAD WALA	119210	5,085	15,721
1229	SIAL MORE	119211	6,240	19,962
1230	FIRST TREET	119901	1	9,985
1231	KALOOR KOT CITY	121101	10,142	22,955
1232	AKARIANWALA	121102	2,495	5,769
1233	MUSA KHEL CITY	121301	5,156	14,858
1234	NAMAL	121302	6,339	15,873
1235	DALILI WALA	121303	2,027	6,528
1236	CHEENA	121401	7,053	18,245

SR#	FEEDERNAME	FEEDER CODE	NO. OF CONSUMERS	SANC LOAD (KW)
1237	NEW PIR ASHAB	121402	2,892	7,299
1238	NOTAK CITY	121403	4,173	10,059
1239	JAHAN KHAN 2	121404	1,145	2,775
1240	KHAN PUR	121405	1,775	4,188
1241	MACHIWAL	123001	5,121	10,344
1242	KOT SHAKIR	123002	5,482	11,138
1243	PARCO PUMPING STATION-06	123201	1	5,003
1244	Sanat Singh Road	123601	2,868	15,233
1245	Haq Bahu	123602	6,695	18,204
1246	Islamia Park	123603	6,133	19,625
1247	Gulistan Colony	123605	5,520	16,014
1248	Shadman	123606	5,554	14,499
1249	Raja Road	123607	3,425	9,929
1250	Hajvery Park	123608	144	3,400
1251	MITHA TIWANA	124301	7,182	18,716
1252	BIJJAR	124302	3,956	9,268
1253	JABBI	124303	5,658	14,316
1254	ESA KHEL	124601	6,342	16,121
1255	MALOOK	124602	4,693	11,361
1256	I.S.L.	124603	1	1,000
1257	NEW NISHAT HUYNDAI	124801	6	7,720
1258	TIME CERAMICS No.2	124802	2	5,400
1259	HAYAT KIMYA No.2	124803	3	6,549
1260	OBHAL	124901	3,304	6,397
1261	LAGHARI	124902	2,251	4,733
1262	JAMLI	124903	4,134	8,860
1263	Magna Textile	125501	1	3,370
1264	11 KV MATCO FOODS	125502	2	2,760
1265	Green Crockery	125503	1	4,500
1266	Zumar Textile	125504	1	4,870
1267	GOHAR TEXTILE	125601	1	9,200
1268	FDA CITY-10	126101	1	3
1269	RIAZ NAGAR	126401	2,416	7,490
1270	Nawab Sher	126402	2,738	7,220
1271	Sadaqat Textile LTD	126801	1	7,500
1272	132 KV BEST FIBRES	127801	1	11,000
1273	DEAD DEFAULTER BATCH	666666	56,551	266,831
1274	Un-identified	888888	17	47
1275	WAPDA DEPT	999999	0	0
FESCO TOTAL			4,971,732	16,322,098

[illegible]

Mapping Cell P&D Directorate FESCO

Annex- F(ii)

Consumer Class / Category, Sub Category on the baiss of Sanctioned load and voltage level			
TARIFF CODE	TARIFF NAME	TARIFF DESCRIPTION	TRF CATEGORY
1	A-1a(01)	Sanctioned load less than 5kW	A
2	A-1a(02)	DOMESTIC FATA CONSUMER	A
3	A-1b(03)T	TOD DOMESTIC	A
4	A-2a(04)	(COMMERCIAL)	A
5	A-2b(05)	COMMERCIAL	A
6	A-2c(06)T	Time of use exceeding 5kW	A
7	B1(07)	(INDUSTRIAL UPTO 70 KW)	B
8	B1(08)	(INDUSTRIAL UPTO 70 KW FOR CINEMAS,	B
9	B1b(09)T	To be shifted B2 (TOD) Tariff-12	B
10	B2a(10)	(INDUSTRIAL FROM 71 KW TO 500 KW)	B
11	B2a(11)	(INDUSTRIAL FROM 71 KW TO 500 KW FOR	B
12	B2b(12)T	OD (INDUSTRIAL FROM 71 KW TO 500 KW FOR	B
13	B3(13)	(INDUSTRIAL FROM 501 KW TO 5000 KW)	B
14	B3(14)T	TOD	B
15	K-2(15)	SPECIAL TARIFF FOR SHORT CIRCUIT TESTING	K
16	B4(16)	(INDUSTRIAL ABOVE 5001 KW)	B
17	B4(17)T	B-4 (II) TOD	B
19	C-1a(19)	(BULK SUPPLY AT 400 VOLTS)	C
25	C-1b(25)	(BULK SUPPLY AT 400 VOLTS)	C
26	C-1c(26)T	unknown	C
28	C-2a(28)	(BULK SUPPLY AT 11 KV & 33 KV)	C
29	C-2b(29) T	Time of use	C
35	K-1a(35)	BULK SUPPLY AT 11-33 KV(ONLY FOR AJK	K
36	K-1b(36)T	unKnown	K
37	C-3a(37)	(BULK SUPPLY AT 66 KV & 132 KV)	C
38	C-3b(38)T	unknown	C
41	D-1a(41)	Agriculture T/Wells load Above 5kW	D
42	D-1a(42)	Agriculture / Scarp Tube well	D
43	D-1a(43)T	Special 3 span meter	D
44	D-1a(44)T	Special 3 span meter	D
45	D-1b(45)T	unknown	D
46	D-1a(46)	(RECLAMATION & DRAINAGE TUBEWELLS)	D
47	D-2(47)T	(TUBEWELLS & LIFT IRRIGATION PUMPS IN	D
48	D-2(48)T	(TUBEWELLS & LIFT IRRIGATION PUMPS IN	D
49	D-2(49)	(TUBEWELLS & LIFT IRRIGATION PUMPS IN	D
50	D-2b(50)T	Agricultural Tubewells TOD above 5 KW	D
51	D-2b(51)T	FLAT RATE (UN-METERED SUPPLY) TO PRIVATE	D
52	D-2(52)	(TUBEWELLS & LIFT IRRIGATION PUMPS IN	D
53	D-2b(53)T	Agricultural Tubewells TOD above 5 KW	D
54	D-2b(54)T	Agricultural Tubewells TOD above 5 KW	D

Consumer Class / Category, Sub Category on the basis of Sanctioned load and voltage level			
TARIFF CODE	TARIFF NAME	TARIFF DESCRIPTION	TRF CATEGORY
56	E-1ii(56)	(TEMPORARY COMMERCIAL)	E
58	E-2(58)	(TEMPORARY INDUSTRIAL UP TO 70 KW)	E
59	C-1a(59)	(TEMPORARY INDUSTRIAL TO LICENCES &	E
60	C-2a(60)	TEMPORARY SUPPLY TO LICENCES &	E
61	C-3a(61)	(TEMPORARY BULK SUPPLY TO RAILWAYS,	E
66	A-3a(66)	GENERAL SERVICES	A
68	A-2d(68)	Electric vehicle charging station	A
72	G-1(72)	(STREET LIGHTS)	G
73	G-2(73)		G
76	H-1(76)	(RESIDENTIAL COLONIES HAVING TRANSFORMER	H
79	H-2(79)	(RESIDENTIAL COLONIES HAVING WAPDA	H
82	I(82)	(RAILWAY TRACTION)	I
85	J(85)	CO-GENERATION	J

Annex-F(III)



Registrar

**National Electric Power Regulatory Authority
Islamic Republic of Pakistan**

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph: +92-31-9216500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/ADG(Tariff)/TRF-339/8834-8836

June 2, 2022

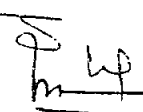
Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST
FILED BY FAISALABAD ELECTRIC SUPPLY COMPANY LTD.
(FESCO) FOR ADJUSTMENT/INDEXATION OF TARIFF FOR THE
FY 2021-22 UNDER THE MYT [CASE # NEPRA/TRF-339]**

Dear Sir,

Please find enclosed herewith subject Decision of the Authority along with revised Annex-I, I-A, II, III, IV, V and A (HSE targets) and additional note of Engr. Rafique Ahmed Shaikh, Member NEPRA (54 Pages).

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision or refer the matter to the Authority for reconsideration, within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above


20622
(Syed Safeer Hussain)

Secretary
Ministry of Energy (Power Division)
'A' Block, Pak Secretariat
Islamabad

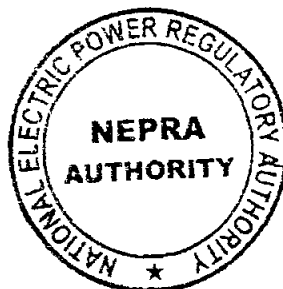
CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.

**DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST FILED BY FAISALABAD
ELECTRIC SUPPLY COMPANY (FESCO) FOR ADJUSTMENT / INDEXATION OF TARIFF FOR THE
FY 2021-22 UNDER THE MYT**

1. Back Ground

- 1.1. The Authority determined tariff of Faisalabad Electric Supply Company Limited (FESCO) (herein referred to as "Petitioner") under Multi Year Tariff (MYT) regime, for a period of five years i.e. from FY 2015-16 to FY 2019-20, vide tariff determination dated December 31, 2015. FESCO, being aggrieved from the aforesaid determination, filed a Motion for Leave for Review (MLR) which was accordingly disposed-off vide decision dated May 11, 2016. Subsequently, a reconsideration request u/s 31(4) of the then applicable Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 was filed by the Federal Government, which was also decided by the Authority on July 01, 2016 and the decision was intimated to the Federal Government for notification in the official gazette.
- 1.2. FESCO filed a writ petition in Islamabad High Court (IHC) Islamabad against the aforementioned decisions of the Authority. Pursuant to the directions of the Honorable IHC, vide judgment dated June 22, 2017, the tariff of FESCO was re-determined by the Authority on September 18, 2017 and was intimated to the Federal Government for notification in the official gazette. The same was notified by the Federal Government on March 22, 2018.
- 1.3. Accordingly the Authority has already determined indexation/adjustment of FESCO till FY 2020-21, as per the prescribed adjustment mechanism in the MYT determination of the Petitioner.
- 1.4. Here it is pertinent to mention that amendments in the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 was passed by the Parliament, which was published in the official Gazette on 30th April 2018 (the "Amendment Act"), resulting in restructuring of the energy sector. One of the fundamental changes as per the amendment Act is the introduction of a competitive retail energy sector, wherein, supply function has been segregated from the distribution license.
- 1.5. As per the amended Act, function of sale of electric power traditionally being performed by the Distribution Licensees has been amended under Section 21(2)(a), whereby 'sale' of electric power has been removed from the scope of 'Distribution Licensee' and transferred to 'Supply Licensee'. The newly introduced section 23(E) of the Act, provides NEPRA with the powers to grant Electric Power Supply License for the supply of electric power. Section 23E(1), however, provides that the holder of a distribution license on the date of coming into effect of the Amendment Act, shall be deemed to hold a license for supply of electric power under this section for a period of five years from such date. Thus, all existing Distribution Licensees have been deemed to have Power Supplier Licenses, to ensure distribution licensees earlier performing both the sale and wire functions, can continue to do so. Section 23E, further states that the eligibility criteria for grant of license to supply electric power to be prescribed by the Federal Government, and shall include, provision with respect to a supplier of the last resort, as the case may be.



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- 1.6. As per Section 23F (2)(b), the Supplier possess the right to make sales of electric power to consumers within their specified territories on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority.
- 1.7. FESCO now in line with the adjustment mechanism provided in its notified MYT determination, and as per the amended NEPRA Act, has filed its request for adjustment/ indexation of different components of its revenue requirement for the FY 2021-22, along-with break-up of costs in terms of Distribution and Supply functions.
- 1.8. The Authority, however, noted that the Distribution license of the Petitioner is valid only till 01.03.2022. The Petitioner during the hearing submitted that they are in the process of filing request for renewal of its distribution license and expects the same to be renewed by the Authority, in order to ensure continuous, safe and reliable supply of electric power to the consumers; extension in the term of Distribution license is mandatory and would be in the interest of consumers and the Industry as a whole.
- 1.9. The matter has been discussed as separate issue in the ensuing paragraph.
- 1.10. A Summary of the adjustments request submitted by the Petitioner is as under;

Description	Rs. In Millions		
	Distribution of power (DoP)	Supply of power (SoP)	Total (DoP+SoP)
Salaries, Wages & Other benefits	9,458	3,323	12,781
Post Retirement Benefits	7,628	2,680	10,308
Repair & Maintenance	555	31	586
Other O&M	1,415	497	1,912
Lump Sum Grant	37	13	50
Accommodation	11	4	15
Scholarship	8	3	11
Package for Families of Covid-19 victims	6	2	8
Gross O&M Cost	19,118	6,553	25,671
Transfer to AUC	(723)		
Net O&M Cost	18,395	6,553	24,948
Return on Regulatory Asset Base	6,397	-	6,397
Depreciation	5,068	-	5,068
Supplier's Profit	-	3,134	3,134
Less: Other income	(2,813)	(727)	(3,540)
Net distribution/supply margin	27,047	8,992	36,039
Prior Year Adjustment	5,607	8,281	13,888
Total Amount Requested	32,654	17,273	49,927

2. Hearing

- 2.1. Since the impact of any such adjustments has to be made part of the consumer end tariff, therefore, the Authority, in order to provide an opportunity of hearing to all the concerned and meet the ends of natural justice, decided to conduct a hearing in the matter.
- 2.2. Hearing in the matter was held on December 01, 2021, for which advertisement was published in newspapers on November 20, 2021. Separate notices were also sent to the stakeholders for inviting comments from the interested/ affected parties. Salient features and details of the proposed adjustments along-with notice of hearing were also uploaded on NEPRA's Website for information of all concerned.



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2.3. For the purpose of hearing, and based on the pleadings, following issues were framed to be considered during the hearing and for presenting written as well as oral evidence and arguments;

- i. Whether the request of the Petitioner for adjustment of FY 2021-22 is justified keeping in view the fact its Licenses are expiring in March 2022.
- ii. Whether the requested amount of adjustment/indexation for the FY 2021-22 is justified?
- iii. Whether there should be any amendment in Terms and Conditions of Tariff (For Supply of Electric Power to Consumers by Supply Licensees) keeping in view the changes in Consumer Service Manual?

3. Filing of objections/ comments:

3.1. Comments/replies and filing of Intervention Request (IR), if any, were desired from the interested person/ party within 7 days of the publication of notice of admission in terms of Rule 6, 7 & 8 of the Rules. In response thereof, IR has been filed by M/s PTML (Ufone), M/s PTCL and M/s NAYATEL and comments were filed by CM PAK Zong. A brief of the concerns raised in the IR is as under;

Telecom Sector including Cellular Operators (CMOs) has been declared as an Industry vide Ministry of Industries notification dated 20.04.2004, therefore, for the purpose of charging of electricity, industrial tariff may be applied to CMOs instead of currently applicable Commercial tariffs.

3.2. The Authority during the tariff determinations of GEPCO for the FY 2019-20, on the request of Telenor regarding charging of Industrial tariff from Telecom Operators decided as under;

"The Authority observed that the issue highlighted by the commentator M/s Telenor Pakistan regarding applicability of Industrial tariff to Cellular Mobile Operator (CMOs) pertains to all the DISCOs including K-Electric as CMOs are operating all over Pakistan, therefore, the issue requires deliberations involving all stakeholders i.e. DISCOs, CMOs, Ministry of Energy, MoT etc. The Authority noted that proceedings regarding Tariff petitions filed by all XWDISCOs for the FY 2018-19 and FY 2019-20, except GEPCO, have already been completed, therefore, the Authority has decided to consider the request of M/s Telenor as a separate issue during the proceedings for the upcoming tariff Petitions of DISCOs for the FY 2020-21 & onward".

3.3. In view thereof, in the instant tariff adjustment request of FESCO, the subject matter has been discussed as a separate issue.

3.4. During the hearing, the Petitioner i.e. FESCO was represented by its CEO along-with its technical and financial teams.

3.5. On the basis of pleadings, evidence/record produced and arguments raised during the hearing, issue-wise findings are given as under;

Directions given to the Petitioner in the MYT Determination



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4.1. The Authority gave certain directions to the Petitioner in the MYT determination and subsequent adjustment/ indexation decisions. The Authority understands that periodic monitoring of the directions given by the Authority is absolutely necessary in order to analyze the Petitioner's performance, therefore, the Authority has decided to have a half yearly review of the given directions, instead of discussing the same only during the tariff proceedings. Here it is pertinent to mention that the directions which are directly relevant to the tariff determination of the Petitioner have been discussed in detail in the adjustment/ indexation decision of the Petitioner for the FY 2020-21, thus, needs not to be discussed here again.

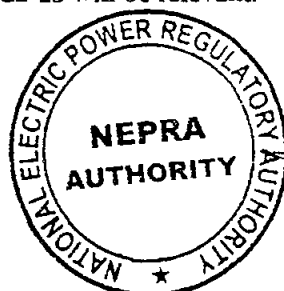
5. Whether the notified PPP references needs to be revised or otherwise?

5.1. The Authority, observed that for the FY 2021-22, variations in the Power Purchase Price (PPP) for the 1st quarter of the FY 2021-22 i.e. Jul. to Sep. 2020 have already been allowed to the Petitioner vide the Authority's decision dated 09.05.2022 and for the 2nd quarter of FY 2021-22, the Petitioner has already filed its PPP adjustment requests with the Authority, which are at an advance stage of the proceedings and would be processed as per the prescribed mechanism. Therefore, for the purpose of instant Petition, the PPP of the Petitioner for the FY 2021-22 shall be the PPP that remained notified during the FY 2021-22, and on which the Petitioner has been / would be allowed quarterly adjustments, thus any reassessment of PPP for the FY 2021-22 is not required.

5.2. Although, variations in the PPP of the Petitioner are being actualized through quarterly adjustment mechanism, however, the existing PPP references, against which the variations are being allowed, were determined by the Authority keeping in view the FY 2020-21. The Authority understands that these references now require up-dation / revision as large amount of new capacities e.g. Coal, Nuclear, Hydel etc. along-with HVDC transmission line have since been added in the system, and also to cater for the impact of PKR vs US\$ devaluation, hike in fuel prices and CPI indexations. This revision of PPP references would minimize the impact of future monthly fuel charges adjustments & quarterly variations and will provide a more predictable tariff to the consumers.

5.3. Here it is pertinent to mention that the NEPRA Guidelines for determination of consumer end tariff (Methodology and Process) notified vide SRO dated 16.01.2015, prescribes submission of Procurement Plan by CPPA-G and approval of Power Purchase Cost by the Authority. Accordingly, CPPA-G, submitted its Power Purchase Price forecast report for the FY 2021-30, which outlines end consumer tariff outlook up-to FY 2030, and electricity price projections based on IGCEP.

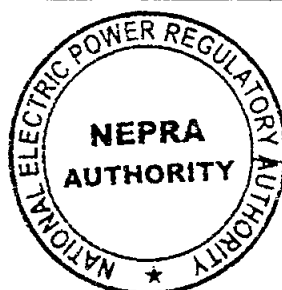
5.4. As per the Report, CPPA-G has projected total generation of 136,867 GWh for the FY 2021-22, with the certain assumptions of fuel prices and other parameters i.e. exchange rate, CPI, USCPI, LIBOR and KIBOR etc. However, considering the fact that adjustments in PPP pertaining to the FY 2021-22 are already being processed as per the notified tariff, therefore, the projections by CPPA-G for FY 2021-22 are not relevant and by the time the instant tariff determination would be notified, the PPP reference for the FY 2022-23 will be relevant.



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- 5.5. The Authority is cognizant of the fact that major component of the consumer-end tariff is the Power Purchase Price, which accounts for around 90% of total consumer-end tariff. Therefore, projection of PPP is of utmost importance, as all future monthly fuel charges adjustments as well as quarterly adjustments are worked out based on the projected notified PPP references.
- 5.6. In view thereof, the Authority by adopting a forward looking approach, has projected the revised PPP references keeping in view the ground realities for the FY 2022-23. For the purpose of determining the new PPP references, the Authority has made its own projections of PPP references for the FY 2022-23 by first projecting the total amount of generation that would be required and then estimating the plant wise generation along-with fuel prices and other assumptions etc., as discussed in detail in the ensuing paras.
- 5.7. The Authority observed that as per the IGCEP approved vide decision dated 24.09.2021, the total generation has been projected as 142,563 GWh for the FY 2020-23, with peak demand of 25,779 MW. The Projected Generation as per the IGCEP for the FY 2022-23 is around 9% higher as compared to the actual generation of FY 2020-21 i.e. 130,652 GWh, meaning thereby that there would be around 4.5% growth in generation during each of the FY 2021-22 and FY 2022-23.
- 5.8. However, it is pertinent to mention here that K-Electric during the FY 2020-21 withdrew energy of 6,118 GWhs from the National Grid, however, for the FY 2022-23, the share of energy to wish obtained by K-Electric from National Grid has been assumed as 1100 MW i.e. 9,636 GWhs. The same in terms of generation, after grossing up for the allowed level of NTDC and HVDC losses works out as 9,989 GWhs. Thus, out of total projected generation of 142,563 GWhs as per the IGCEP, share of K-Electric would be 9,968 GWhs and the remaining generation of 132,385 would be for the XWDISCOs, after accounting for sale to IPPs.
- 5.9. The aforementioned projected generation has been allocated to each of the XWDISCO in proportion to its actual units purchased for the period from July 2020 to July 2021. However, for K-Electric as explained above, the energy to be drawn from National Grid has been assumed as 1100 MW flat for each month, keeping in view the current scenario, whereby KE is allowed to draw 1100 MW from the National Grid. For the purpose of energy delivered to DISCOs, actual NTDC losses with maximum cap of 2.5% (energy delivered through NTDC network) and HVDC losses as approved by the Authority have been considered.
- 5.10. Accordingly, the generation as per the approved IGCEP, for the FY 2022-23 i.e. 142,563 GWh, which after adjustment of allowed T&T losses of NTDC/ HVDC and sale to IPPs (as per previous trend), results in projected energy of 137,609 GWh, delivered to DISCOs including K-Electric and would be available with DISCOs for sale to consumers, as detailed below;

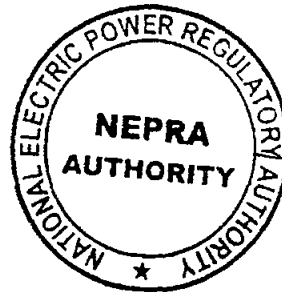
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Total
Energy Gwh	16,107	16,018	14,326	11,208	8,185	8,657	8,928	7,966	9,803	11,455	14,221	15,687	142,563
NTDC Losses	490.06	505.01	461.88	383.63	316.93	334.75	352.97	293.81	354.90	372.49	425.67	459.25	4,751
Sale to IPPs	22.91	22.78	20.37	15.94	11.54	12.31	12.70	11.33	13.94	16.29	20.22	22.31	203
Energy Delivered to DISCOs	15,594	15,491	13,844	10,809	7,856	8,310	8,563	7,661	9,434	11,066	13,775	15,206	137,609



- 5.11. The energy delivered to DISCOs has been allocated to each XWDISCO on monthly basis in proportion to their actual units purchased for the period from July 2020 to July 2021. For K-Electric, actual units purchased have been considered at 1100 MW flat for the FY 2022-23. Thus, resulting in following DISCO wise projected allocation of energy;

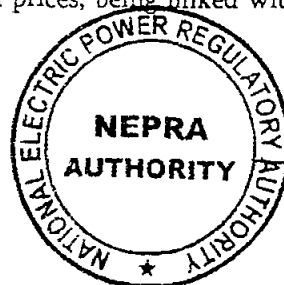
DISCOs	Projected Units to be Sold to DISCOs GWh												Total
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	
IESCO	1,536	1,482	1,257	959	711	815	844	690	779	689	1,241	1,526	12,739
LESCO	3,010	2,983	2,868	2,190	1,485	1,600	1,698	1,482	1,861	2,125	2,580	3,125	27,027
GEPCO	1,621	1,507	1,454	1,017	868	696	678	619	825	967	1,254	1,512	12,820
FESCO	1,942	1,951	1,787	1,358	908	937	970	924	1,181	1,385	1,736	1,933	17,023
MEPCO	2,944	2,935	2,335	1,687	1,034	1,015	1,084	1,052	1,486	1,857	2,428	2,440	21,897
PESCO	1,861	1,886	1,471	1,157	994	1,158	1,222	1,014	1,060	1,265	1,619	1,815	16,532
HESCO	701	619	577	505	324	306	304	290	425	564	676	666	5,957
QESCO	712	657	585	553	516	535	512	475	534	616	664	680	7,041
SEPCO	562	551	501	350	227	224	223	192	284	403	561	520	4,577
TESCO	185	191	187	205	196	206	209	183	201	204	197	197	2,361
K-Electric	818	818	792	818	792	818	818	739	818	792	818	792	9,536
Total	16,594	16,491	13,844	10,809	7,866	8,310	8,563	7,561	9,434	11,066	13,776	16,206	137,609

- 5.12. Since the power generated from different sources is procured by the Central Power Purchasing Agency (CPPA (G)) on behalf of XWDISCOs as per the rates so determined by the Authority and subsequently reflected in the respective Power Purchase Agreements (PPAs). The overall power purchase cost constitutes a pool price which is transferred to the DISCOs according to the prescribed mechanism and notified by the Federal Government in the Official Gazette. The Power Purchase Price so projected, in turn formulates the reference values for the monthly fuel adjustments & biannual PPP adjustment with respect to T&D losses, Capacity and Transmission Charges.
- 5.13. From all the available sources of generation of electricity, i.e. Hydel, Gas, Nuclear, Local and imported Coal, Solar, Wind, and Bagasse etc., a total of 142,563 GWh power is expected to be generated during the FY 2022-23. Here it is also important to mention that while projecting generation, the plants have been projected to be operated as per Merit order, keeping in view the projected prices of different fuels. The average prices for different fuels have been assumed as Rs.3,183/mmmbtu for RLNG, Rs.2,078/mmmbtu for imported coal, Rs.1,466 /mmmbtu for local coal, and Rs.1,000 /mmmbtu for local gas. All prices have been considered exclusive of GST. Assumptions and criteria for projection of fuel prices for each of the fuel has been discussed in detail in the ensuing paragraphs.
- 5.14. Accordingly, the estimated/projected source-wise generation and the estimated cost of electricity generation is given in the following table;

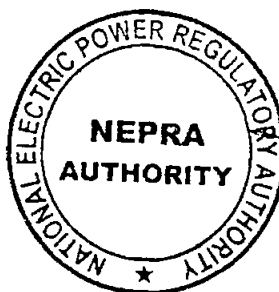


Source	Generation MkWh	Share	EPP Rs. Mln	CPP Rs. Mln	EPP + CPP Rs. Mln	EPP Rs./kWh	CPP Rs./kWh	EPP + CPP Rs./kWh
Hydel	44,859	31.47%	5,566	232,775	238,341	0.12	5.19	5.31
RFO	-	0.00%	-	70,300	70,300	-	-	-
Coal	39,202	27.50%	754,465	361,638	1,116,103	19.25	9.22	28.47
Gas	12,685	8.90%	107,105	57,377	164,482	8.44	4.52	12.97
RLNG	15,036	10.55%	336,262	122,730	458,991	22.36	8.16	30.53
Bagasse	1,012	0.71%	7,225	8,794	16,019	7.14	8.69	15.84
Wind	5,611	3.94%	-	116,087	116,087	-	20.69	20.69
Solar	1,163	0.82%	-	24,671	24,671	-	21.22	21.22
Nuclear	22,281	15.63%	21,065	304,219	325,284	0.95	13.65	14.60
Import	498	0.35%	9,269	3,144	12,413	18.60	6.31	24.91
SPPs	217	0.15%	1,428	-	1,428	6.59	-	6.59
Total	142,563	100.00%	1,242,385	1,301,735	2,544,120	8.71	9.13	17.85

- 5.15. Here it is pertinent to mention that the aforementioned energy charge includes variable O&M charges, however, variable O&M charges are not made part of monthly fuel charges adjustment and are adjusted as part of quarterly / biannual adjustments.
- 5.16. As per the above table, around 31.47% of total generation is expected from Hydel sources, 27.50% from Coal (both local & imported), and 15.63% from Nuclear. RLNG would contribute around 10.55% of the total generation, with around 8.9% by indigenous gas. Other Renewables i.e. Wind, Solar & Bagasse and Imports/SPPs share would be around 6%. Meaning thereby that variation in generation mix and prices of Coal, and RLNG/ Gas would have greater impact on the generation cost, thus, ultimately affecting the consumer-end tariff.
- 5.17. Regarding projection of fuel prices i.e. RLNG, Local & Imported Coal, Local Gas etc., various reports from different sources as given hereunder have been analyzed;
- US Energy Information Administration, Short-Term Energy Outlook October 2021
 - World Bank Commodities Price Forecast
 - IMF, World Economic Outlook Database
 - Bloomberg (Various Analyst Firms forecast)
 - Standard Chartered Bank Report
 - Argus Media
- 5.18. Based on the information available in the aforementioned reports, the Authority has projected the following fuel prices in terms of RLNG, Local & Imported Coal, and Gas, for the purpose of Power Purchase Price;
- 5.19. The Authority noted that as per the RLNG price notification issued by OGRA, RLNG prices in Pakistan are benchmarked with Brent Crude Oil Prices and are determined as a slope (%) of price of crude oil. In addition to this price, Port charges, PSO import related actual costs, PSO/ PLL Margin and Terminal Charges etc. are added to the price. The said prices are also adjusted with the Transmission Losses and other miscellaneous costs. Thus, the RLNG prices in Pakistan are not only affected by the international prices, being linked with crude oil, but also by the exchange rate parity.

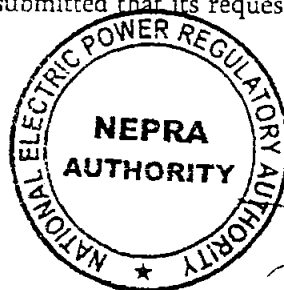


- 5.20. Therefore, to have a fair projection of RLNG prices, the Authority considered the projections of Brent Crude oil prices by various reliable sources i.e. Short Term Energy Outlook published by US Energy Information Administration, World Bank Commodities Price Forecast report, IMF-World Economic Outlook Database and various analyst firm forecasts.
- 5.21. The 2nd factor for determination of price of RLNG is the slope that is applied on the price of Crude oil. To have a fair assessment of the applicable slope, the actual slope on which RLNG has been procured by PSO and PLL including spot purchases, during the last 12 months period has been analyzed. Accordingly, by applying the % slope on the projected prices of Crude Oil, the Delivered Ex-Ship (DES) prices of RLNG have been worked out. Here it is pertinent to mention that beside slope, certain additional charges like PSO/PLL Margin, other import related costs, terminal charges etc. are also applicable on CIF price of RLNG. Accordingly, the Authority keeping in view the projected prices of crude oil, % slope, and impact of rupee devaluation, has projected RLNG prices as Rs.3,183/mmbtu.
- 5.22. For indigenous gas, the Authority considering the existing price, has projected the same as Rs.1,000/mmbtu for the power purchase price projections.
- 5.23. Regarding price of imported coal, the Authority observed that majority of coal used by coal power plants operating in Pakistan, is imported from South Africa and to some extent from Indonesia, therefore, for the purpose of projection of coal prices, the price forecasts given by World Bank Commodities Price Forecast, Argus-McCloskey etc. have been considered. Accordingly, based on these reports and keeping in view the impact of devaluation of Pak Rupee, and by incorporating therein the Marine Insurance, Handling Loss, Other Charges (Port Handling Charges, Customs Duties & Cess, L/C Charges), Inland Freight etc., the price for imported coal works out as average Rs.2,078/mmbtu.
- 5.24. For projection of local coal prices for Thar coal, the Authority has considered the coal price determination made by Thar Coal Energy Board (TCEB) for Block-II. As per the TCEB determination, reference tariff determined for the 4th year includes variable cost of US\$ 15.10 /Ton and fixed cost of US\$ 50.58/Ton. The said total reference total cost determined by TCEB has been indexed with US CPI and US\$ /PKR exchange rate to work out the projected coal price for the FY 2022-23, which works out as Rs.1,466 mmbtu. The same has been considered while projecting the PPP references.
- 5.25. Based on the above discussion, the source wise estimated/projected generation and the estimated cost of electricity generation is given in the following table;



Source	Generation MkWh	Share	EPP Rs. Min	CPP Rs. Min	EPP + CPP Rs. Min	EPP Rs./kWh	CPP Rs./kWh	EPP + CPP Rs./kWh
Hydel	44,859	31.47%	5,566	232,775	238,341	0.12	5.19	5.31
RFO	-	0.00%	-	70,360	70,360	-	-	-
Coal	39,202	27.50%	754,465	361,638	1,116,103	19.25	9.22	28.47
Gas	12,685	8.90%	107,105	57,377	164,482	8.44	4.52	12.97
RLNG	15,036	10.55%	336,262	122,730	458,991	22.36	8.16	30.53
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Solar	1,163	0.82%	-	24,671	24,671	-	21.22	21.22
Nuclear	22,281	15.63%	21,065	304,219	325,284	0.95	13.65	14.60
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SPPs	217	0.15%	1,428	-	1,428	6.59	-	6.59
Total	142,563	100.00%	1,242,385	1,301,735	2,544,120	8.71	9.13	17.85
Add: NTDC/ HVDC & CPPA-G Cost			119,212					
Less: NTDC/ HVDC Losses (4,751)								
Less: Sale to IPPs (203)			(4,055)					
5.26. PPP Adjusted	137,609		1,238,330	1,420,946	2,659,277	9.00	10.33	19.32

- 5.27. The generation cost is transferred to the DISCOs according to the Transfer Price Mechanism (TPM) as prescribed by the Authority.
- 5.28. According to the above mechanism, Rs.162,459 million and Rs.14,876 million is the share of the Petitioner on account of CpGenCap and UoSC (NTDC/ HVDC) & Market Operator Fee respectively for the FY 2022-23. The overall fixed charges comprising of CpGenCap and UoSC (NTDC/HVDC) & Market Operator Fee in the instant case works out as Rs.177,335 million, which translate into Rs.4,343/kW/month based on projected average monthly MDI of the Petitioner i.e. 3,403 MW or Rs.10.42/kWh on units purchased basis.
- 5.29. The total annual PPP of the Petitioner for the FY 2022-23 in the instant case works out as Rs.330,577 million. With the projected purchase of 17,023 GWh for the same period, the average PPP of the Petitioner turns out to be as Rs.19.42/kWh (Annex-IV), whereas, the national average determined PPP works out as Rs.19.32/kWh after accounting for the allowed level of NTDC/ HVDC losses and sale to IPPs. Similarly, the National Average Energy Purchase Price (PPP) works out as Rs.9.00/kWh. On the basis of allowed level of T&D losses of 8.84% for the Petitioner for the 5th Year of the MYT, the adjusted PPP of the Petitioner is assessed as Rs.21.30/kWh.
6. Issues: Whether the request of the Petitioner for adjustment of FY 2021-22 is justified keeping in view the fact its Licenses are expiring in March 2022.
- 6.1. The Petitioner on the issue has submitted that is a going concern and will continue its operations in the future. The Petitioner also submitted that it already filed an application for extension in its Distribution License for another period of twenty 20 years vide letter No.1647 dated 28.10.2021.
- 6.2. Further the Petitioner submitted that under Section 23 E(1) of Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (amended 2018), FESCO shall be deemed to hold a license for supply of Electric Power for a period of five years i.e upto April 2023. In addition to the above the Petitioner submitted that its request for adjustments of FY



2021-22 is justified in anticipation of renewal of distribution license by the Authority after 1st March, 2022.

6.3. The Authority noted that the Petitioner has filed its adjustment request for FY 2021-22 i.e. till June 2022, however, the Distribution license of the Petitioner is valid only till 1.03.2022. In view thereof, the Authority decided to deliberate the matter during the hearing.

6.4. The Authority, considering the fact that the Petitioner has already filed request for renewal of its distribution license, which is under process with the Authority, has decided to consider the distribution tariff request of the Petition under the MYT tariff regime. However, the Authority is also aware of the fact that under Section 21 (2) (a) of the NEPRA Act, the word "exclusive" has been omitted, meaning thereby that the Petitioner does not possess the exclusive right for provision of distribution services in its specified territory. Thus, the grant of distribution tariff under the MYT regime shall in no way be construed as a basis for claiming any exclusivity in the licensed territory of the Petitioner. The terms & conditions, given by the Authority, in the new Distribution license of the Petitioner would be applicable during the MYT control period and the MYT would be governed by the terms & conditions of the new license.

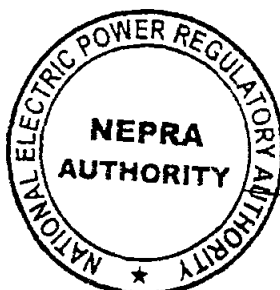
7. Issue: Whether the requested amount of adjustment/indexation for the FY 2021-22 is justified?

7.1. The Authority has allowed FESCO a Multiyear tariff for a control period of 5 years starting from July 2018 till June 2023, wherein a mechanism for adjustment/ indexation of different components of the revenue requirement has been prescribed.

7.2. A summary of the adjustment/ indexation request of the Petitioner along-with the adjustment/ indexation mechanism provided in the MYT determination of the Petitioner is as under;

Rs. In Millions			
Description	Distribution of power (DoP)	Supply of power (SoP)	Total (DoP+SoP)
Salaries, Wages & Other benefits	9.458	3.323	12.781
Post Retirement Benefits	7.628	2.680	10.308
Repair & Maintenance	555	31	586
Other O&M	1.415	497	1.912
Lump Sum Grant	37	13	50
Accommodation	11	4	15
Scholarship	8	3	11
Package for Families of Covid-19 victims	6	2	8
Gross O&M Cost	19,118	6,553	25,671
Transfer to AUC	(723)		
Net O&M Cost	18,395	6,553	24,948
Return on Regulatory Asset Base	6.397	-	6.397
Depreciation	5.068	-	5.068
Supplier's Profit	-	3.134	3.134
Less: Other income	(2.813)	(727)	(3,540)
Net distribution/supply margin	27.047	8.992	36.039
Prior Year Adjustment	5.607	8.281	13,888
Total Amount Requested	32,654	17,273	49,927

O&M EXPENSE



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- 7.3. The O&M part of Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor). Accordingly the O&M will be indexed every year according to the following formula:

$$O \& M_{(Rev)} = O \& M_{(Ref)} \times [1 + (\Delta CPI - X)]$$

Where:

- O&M_(Rev) = Revised O&M Expense for the Current Year
O&M_(Ref) = Reference O&M Expense for the Reference Year
ΔCPI = Change in Consumer Price Index published by Pakistan Bureau of
X = Efficiency factor

- 7.4. Regarding Efficiency Factor, the Authority decided that;

".....keeping in view the Petitioner's request of keeping it at zero% for the first two years, the Authority has decided to implement the same from the 3rd year of the control period.In addition, the Authority in order to save the Petitioner from any negative adjustment on account of O&M cost, has decided that the efficiency factor X, in any year of the control period, should not be greater than 30% of increase in CPI for the relevant control year...."

RORB

- 7.5. RORB assessment will be made in accordance with the following formula/mechanism:

$$RORB_{(Rev)} = RORB_{(Ref)} \times \frac{RAB_{(Rev)}}{RAB_{(Ref)}}$$

Where:

- RORB_(Rev) = Revised Return on Rate Base for the Current Year
RORB_(Ref) = Reference Return on Rate Base for the Reference Year
RAB_(Rev) = Revised Rate Base for the Current Year
RAB_(Ref) = Reference Rate Base for the Reference Year

DEPRECIATION EXPENSE

- 7.6. Depreciation expense for future years will be assessed in accordance with the following formula/mechanism:

$$DEP_{(Rev)} = DEP_{(Ref)} \times \frac{GFAIO_{(Rev)}}{GFAIO_{(Ref)}}$$

Where:

- DEP_(Rev) = Revised Depreciation Expense for the Current Year
DEP_(Ref) = Reference Depreciation Expense for the Reference Year
GFAIO_(Rev) = Revised Gross Fixed Assets in Operation for the Current Year
GFAIO_(Ref) = Reference Gross Fixed Assets in Operation for Reference Year



OTHER INCOME

- 7.7. Other income will be assessed in accordance with the following formula/mechanism:

$$OI_{(Rev)} = OI_{(1)} + (OI_{(1)} - OI_{(0)})$$

Where:

- $OI_{(Rev)}$ = Revised Other Income for the Current Year
 $OI_{(1)}$ = Actual Other Income as per latest Financial Statements.
 $OI_{(0)}$ = Actual/Assessed Other Income used in the previous year.

Salaries & Wages – para 17.14 of the re-determination decision dated Sep. 18, 2017

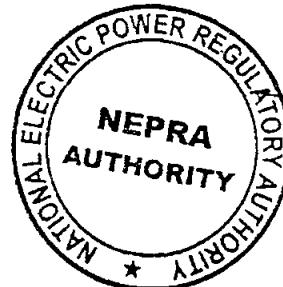
“.....the Authority has decided to allow the impact of increases in salaries & wages, as announced by GOP, in the tariff for the respective year, till the time, FESCO remains in the public sector.....”

Post-Retirement Benefits – para 19.3.4 of the Determination dated Dec 31, 2015

“....the Authority, has decided to allow the provision for the post-retirement benefits based on last three years average provision as per its financial statements. The provision for FY 2015-16 based on last three years' average is being allowed including the impact of the employees retired before unbundling of WAPDA.....It would be mandatory for the Petitioner to deposit the whole amount into separate funds and accounts (as the case may be). If the Petitioner fails to transfer the whole amount of post-retirement benefits, the Authority would adjust the deficit payments in the next year's provision and from thereon, only actual amounts paid and amount transferred into the fund would be allowed. In case of complete failure to transfer any amount into the fund, the Authority would only allow actual payments, rather than provision.....

- 7.8. Here it is pertinent to mention that the Petitioner initially requested an amount of Rs.49,927 million, however, during the hearing the Petitioner has revised its request to the tune of Rs.45,724 million. The Revised request of the Petitioner on account of its O&M costs, Other Income, RoRB, Prior Period Adjustments for the FY 2020-21 is reproduced hereunder;

Description	DoP	SoP	Total
Pay & Allowances	9,822	2,959	12,781
Post Retirement Benefits	7,628	2,680	10,308
Repair & Maintenance	545	41	586
Other O&M	1,085	827	1,912
Lump Sum Grant	37	13	50
Accommodation	11	4	15
Scholarship	8	3	11
Package for Families of Covid-19 victims	6	2	8
MIRAD Pay & Allowances incl other O&M	-	32	32
Gross O&M Cost	19,142	6,561	25,703
Transfer to AUC	-723	-	-723
Net O&M Cost	18,419	6,561	24,980
Return on Regulatory Asset Base	6,397	-	6,397
Depreciation	5,068	-	5,068
Supplier's Profit	-	3,134	3,134
Less: Other Income	-3,847	-1,039	-4,886
Net distribution/ Supply Margin	26,037	8,656	34,693
Prior Year Adjustment	2,750	8,281	11,031
Total Amount Requested	28,787	16,937	45,724
Unit Sales (M kWh)	15,609	15,609	15,609
Rs./kWh	1.84	1.09	2.93

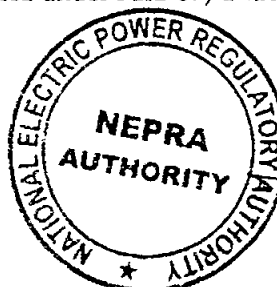


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O&M costs

Description	Reference Cost 2019-20			Adjustment/Index 2021-22		
	DoP	SoP	Total	Dist	Supply	Total
Salaries , wages & other benefits	7,535	2,270	9,805	9,822	2,959	12,781
Retirement Benefits	9,044	2,332	11,376	7,628	2,680	10,308
Repair & Maintenance	462	35	518	545	41	586
Other O&M	927	721	1,648	1,085	827	1,912
Sub Total	17,988	5,359	23,347	19,080	6,507	25,587
Lump Sum Grant (PM Assistance Package)	-	-	-	37	13	50
House Rent/Accommodation (PM Package)	-	-	-	11	4	15
Scholarship (PM Assistance Package)	-	-	-	8	3	11
Package for families of Covid 19 victims	-	-	-	6	2	8
Sub Total	-	-	-	62	22	84
MIRAD (Pay & Allow & other O&M)	-	-	-	-	32	32
Total O&M Cost	17,988	5,359	23,347	19,142	6,561	25,703
Less: Transfer to AUC	-	-	-	723	-	723
Net Total	17,988	5,359	23,347	18,419	6,561	24,980

- 7.9. The Petitioner regarding MIRAD Cost has submitted that pursuant to Ministry of Energy (Power Division), Islamabad letter No.PF-05(04)/2012 dated 01.12.2020 conveyed by Managing Director (PEPCO) vide letter dated 09.12.2020 BOD FESCO in its 208th / 2nd Extra Ordinary General Meeting (EOGM) held on 14.01.2021 approved the Market Implementation & Regulatory Affairs Department (MIRAD).
- 7.10. To justify its request, the Petitioner submitted that the department will become a dedicated central interface between DISCOs and the competitive electricity market equipped with staff having specialized knowledge and competency and supported by necessary infrastructure to inter-alia administer the market operations including bilateral contracts portfolio management, short and medium-term demand forecasting, transmission planning, and overseeing legal and regulatory affairs. MIRAD will perform the activities pertaining to Competitive Trading Bilateral Contract Market (CTBCM).
- 7.11. Further the Petitioner submitted that the creation of MIRAD had been made in the backdrop of shifting the existing Power Market from Single Buyer Model to a Competitive Wholesale Power Market after the decision of FCC in 2015. National Electric Power Regulatory Authority (NEPRA) also approved a detailed design and implementation plan of the Competitive Trading Bilateral Contract Market (CTBCM) to make a competitive wholesale electricity market in November 12, 2020. The Petitioner submitted the following has been approved from its Board of Directors (BoD);
- Complete structure of MIRAD already endorsed by MOE (Power Division) and PEPCO.
 - Relocation / transfer of existing 09 positions (mentioned under Para-06) to the MIRAD. But the abilities, qualifications and suitability of these personnel will be strictly checked and analyzed appropriately by the mechanism approved by the BOD.
 - Creation of 11 new positions (mentioned under Para-07) under MIRAD.



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- iv. An additional annual budget of Rs.25.447 million for the running expenditure of newly created positions including 40% incentive and 6.654 Million for other O&M.
 - v. Head of MIRAD to be recruited / inducted from the Market following the open competitive recruitment process, in which DISCOs personnel can also apply.
 - vi. The recruitment of the remaining staff of the MIRAD will first be done through a recruitment process from within the DISCOs that would result in qualified and suitable personnel transferred to MIRAD.
 - vii. Remaining positions of MIRAD will be recruited from Market on merit basis.
- 7.12. Further, the Petitioner submitted that the structure of MIRAD has a total of 20 managerial positions of different cadres ranging from BPS-20 to BPS-17. The break-up of these positions is given hereunder;

Sr #	Name of Post	BPS	No. of Posts	Fin Impact (PKR Mln.)
a.	Head of Department DG (MIRAD)	20	1	2.65
b.	Manager	19	3	7.01
c.	Deputy Manager	18	6	7.07
d.	Assistant Manager	17	10	8.71
Total			20	25.45
e.	Other O&M			6.65
Total				32.10

Depreciation

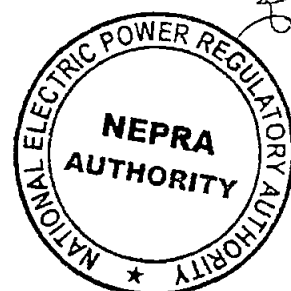
- 7.13. The Petitioner has requested Depreciation Rs. 5,068 million for the FY 2021-22. The Petitioner provided that the depreciation is based on projected investment of Rs. 19,131 millions;

$$\text{DEP(Rev)} = \text{DEP(Ref)} \times \text{GFAIO(Rev)} / \text{GFAIO(Ref)}$$

$$\text{DEP(Rev)} = 4,382 \times 109,245 / 94,468 = 5,068 \text{ Million}$$

- 7.14. The Petitioner provided the following detailed working in this regard;

	Audited	Mln. Rs. Adjusted (Distribution)
Gross Fixed Assets in Operation (GFAIO) – Opening Balance	88,541	95,656
Add: Addition/Transfer/Deletion in Fixed Assets (Net)	7,115	14,777
Fixed Assets in Operation – Closing Balance	95,656	110,433
Less: Value of Land	1,188	1,188
GFAIO excluding Land	94,468	109,245
Depreciation Expense	4,382	5,068



RoRB

- 7.15. The Petitioner has requested an amount of Rs. 6,397 million for RoRB, by submitting that the RORB For FY 2021-22 is based on projected investment of Rs.19,131 million as detailed below;

$$\text{RORB(Rev)} = \text{RORB(Ref/Adj.)} \times \text{RAB(Rev)} / \text{RAB(Ref)}$$

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$$\text{RORB(Rev)} = 5,382 \times 52,695/45,069 = 6,291$$

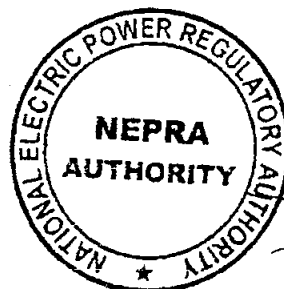
$$\text{RORB(Rev) on adjusted WACC} = 6,276 \times 12.14\%/11.94\% = 6,397 \text{ Million}$$

7.16. The Petitioner provided the following workings in this regard;

Mln Rs.		
	Audited	Adjusted (Distribution)
Gross Fixed Assets in Operation – Op. Balance	88,541	95,656
Add: Addition/Transfer in Fixed Assets (Net)	7,115	14,777
Fixed Assets in Operation – Closing Balance	95,656	110,433
Less: Accumulated Depreciation	-34,156	-37,477
Net Fixed Assets in Operation	61,501	72,956
Add: Assets Under Construction(AUC) – Cl. Balance	17,811	22,165
Total Fixed Assets	79,312	95,121
Less: Deferred Credits	31,882	37,160
Regulatory Assets Base	47,429	57,961
Average Regulatory Assets Base (RAB)	45,069	52,695
WACC	11.94%	12.14%
RORB = RAB * WACC	5,382	6,397

Supplier Margin

- 7.17. The Petitioner has requested Supplier Margin of Rs.3,134 million for the FY 2021-22. The Petitioner to justify its claim submitted that through the amended NEPRA Act, 2018, the distribution and sales of electric power functions earlier rested with FESCO under Distribution License No. 02/DL/2002 granted by NEPRA under Section-21 of NEPRA Act 1997 have been separated. Under the amended Act, 2018, Distribution of Electric Power has been separated from Supply of Electric Power. Further the Petitioner submitted that the Supplier Margin will cover mainly the Power Supply Business O&M Costs and return/ profit for establishing and maintaining the supply business setup, discharging other obligations. It further submitted that according to Para 16(2) of the NEPRA Guidelines for determination of consumer end tariff (Methodology and process) issued vide SRO # 34 (1)/2015, dated 16th January, 2015, tariff should allow the licensee, a rate of return, which promotes continued reasonable investment in equipment and facilities for improved and efficient service.
- 7.18. The Petitioner also submitted that it is important that returns provided to the Company commensurate with the risks associated with the sector. The rate of return should provide for a return which is proportionate with the prevailing cost of funds being incurred by the Company and with the risk involved in delivering the utility services. The regulator has not provided any guidelines regarding allowing Return to the Power Supply Business.
- 7.19. Based on the above the Petitioner has requested Supply Margin assumed @ 1.5% of the Power Purchase Price (projected) to be invoiced to Power Supply Business for the FY 2021-22, as detailed below;



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Description	PKR Mln.
Energy Transfer Charges	100,995
Capacity Transfer Charges	99,750
Use of System Charges + MoF	8,218
Total	208,963
Supplier's Profit Rate	1.50%
Supplier Profit	3,134

Other Income

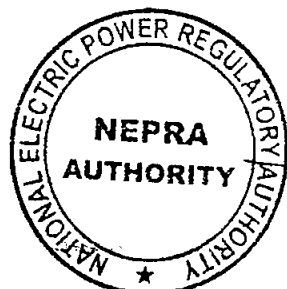
- 7.20. The Petitioner has requested Rs. 3,450 million in its request for Other Income, however, during the hearing the Petitioner revised the figure to Rs.4,886 million.
- 7.21. The Authority noted that as per the DISCO annual performance report of NEPRA the impact of losses for the past five years is as under;

Period	Actual Losses %	Notified Losses %	Breach %	Impact of Breach Rs. mln	Impact of Notified Rs. mln	Impact of Actual Rs. mln
FY 2016	10.2	9.5	0.7	657	8,912	9,569
FY 2017	10.6	9.5	1.1	1,195	10,322	11,517
FY 2018	10.5	9.7	0.8	1,058	13,182	14,240
FY 2019	9.8	10.2	-0.4	(1,032)	24,017	22,985
FY 2020	9.6	10.1	-0.5	(1,252)	25,292	24,040

8. The Authority, as per the mechanisms prescribed in the MYT of the Petitioner, for adjustment / indexation of different components of revenue requirement, and based on the information submitted by the Petitioner, has worked out the following adjustments for the Petitioner for the FY 2021-22;

Description	Proposed FY 2020-21 Rs. Mln	Indexation/Adjustment Basis	Indexed /Adjusted Cost FY 2021-22 Rs. Mln
Pay & Allowances	10,580	GoP Increases & Annual Increment	12,666
Post Retirement Benefits	8,775	Provision as Audited accounts FY 2019-20	9,653
Repair & Maintenance	551	CPI of May 2021 - X Factor i.e. 30% of CPI	593
Other O&M Expenses	1,752	CPI of May 2021 - X Factor i.e. 30% of CPI	1,885
Depreciation	4,204	Allowed investment for FY 2021-22	4,520
RORB	6,254	Allowed Investment for FY 2021-22	7,252
O. Income	(6,739)	As per Mechanism	(4,215)
Margin	25,378		32,353

- 8.1. Here it is pertinent to mention that the Authority, under para 36.34 of the Petitioner's determination dated Mar. 08, 2016, allowed adjustments on account of variation in KIBOR on biannual basis. However, considering the fact that FY 2021-22 has already lapsed and actual KIBOR numbers as of 2nd July 2021 and 7th January 2022 are available, therefore, while allowing the RoRB for the FY 2021-22, the adjustment on account of variation in KIBOR for the FY 2021-22 has been incorporated upfront. Thus, no further adjustment on account of variation in KIBOR for the FY 2021-22 shall be allowed subsequently.
- 8.2. **Regarding recruitment for MIRAD** and its inclusion of cost impact of hiring made for MIRAD by the Petitioner, details were requested from the Petitioner. The Petitioner has not provided the required information. The Petitioner is required to provide the financial impact for all the positions along with details of Position, Date of Hiring and their financial impact. Further, the information shall also include break up in terms of internal reallocation and new hiring for the FY 2020-21 & FY 2021-22 along with the next tariff adjustment/petition for consideration of the Authority.

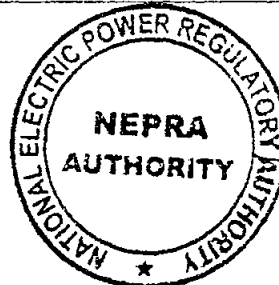


- 8.3. In view thereof, the Authority has decided to allow hiring for MIRAD in principal and allow the incremental financial impact of the same as part of PYA in the subsequent adjustment requests and would also be made part of reference cost for future indexations, once the Petitioner completes its recruitment process and submits complete details in this regard. Here it is pertinent to mention that impact of employees internally transferred to MIRAD has already been largely accounted for while assessing the salaries & wages cost.
- 8.4. Regarding request of the Petitioner to allow Supplier Profit, the Authority observed that the Petitioner has been allowed return on its Rate Base as per the Authority's approved WACC and the same has been included as part of the Petitioner's revenue requirement. Although, the function of sale of electric power traditionally being performed by the Distribution Licensees has been amended under Section 21(2)(a) of the Amended Act, however, the amended Act, also under proviso to Section 23E(1), provides that holder of a Distribution license on the date of coming into effect of the Amendment Act, shall be deemed to hold a license for supply of electric power for a period of five years from such date. Thus, all existing Distribution Licensees have been deemed to have Power Supplier Licenses, to ensure distribution licensees earlier performing both the sale and wire functions, would continue to do so. Hence, practically there is no change in the overall nature of operations or functions being performed by the existing DISCOs, therefore, allowing any separate margin to the Petitioner for its Supply function, considering the fact that it has been allowed return on its overall rate base, does not merit consideration.
- 8.5. Regarding request of the Petitioner for PM assistance package, the Authority in principle agrees to allow the Prime Minister Assistance Package as announced by the Federal Government for the families of employees who died during service. However, for the requested amount, the Authority considers that allowing any such costs, upfront would be unfair with the consumers, therefore, the Authority may consider such costs once the actual expenditure is incurred by the Petitioner. To justify the claim the Petitioner is required to provide employees name, CNIC number, designation, date of death, along with the financial impact, etc. in its next tariff petition/adjustment request for the Authority to consider.

9. Whether the requested Previous Year Adjustment is justified?

- 9.1. The Petitioner has requested the an amount of Rs.15,609 million on account of PYA and submitted the following on account of each head requested under the PYA;

Description	Dist.	Supply	Total
Excess deduction of Interim DM	24	-	24
Minimum Tax Paid during FY 2020-21		1,950	1,950
Un-favourable Consumer Mix Variance for FY 2020-21		2,703	2,703
Suppl. Charges (billed by CPIPA-G) in excess of LPS for FY 2020-21		2,482	2,482
Supplementary Charges paid by MOF 2020-21		188	188
Under-Recovered DM for the FY 2020-21	2,857	-	2,857
Actuarial Gain/Loss Charged to OCI for FY 2020-21	2,597	913	3,510
Remaining impact of PM Assistance package & Assistance Package for Covid-19 death (592-418)	129	45	174
Total PYA for FY 2020-21	5,607	8,281	13,888
Proj. Unit Sales (MkWh) for FY 2021-22	15,609	15,609	15,609
Rs./kWh	0.36	0.53	0.89



Excess adjustment of Interim Distribution Margin (DM):

- 9.2. The Petitioner submitted that it was allowed Interim Distribution Margin of Rs.1,748 million, and the Authority adjusted back the total amount of Rs.1,748 million, whereas, FESCO actually recovered Rs.1,724 million. Thus, the extra amount of Rs.24 million adjusted back by NEPRA may be allowed.

Description	PKR Mln.
Adjusted by Authority	1,748
Recovered by FESCO	1,724
Excess adjusted	24

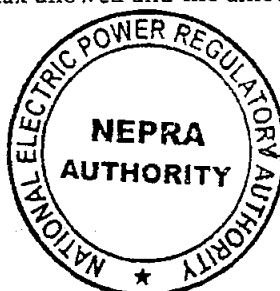
- 9.3. The Authority observed that the understanding of the Petitioner in the matter is not correct. The entire amount of Interim DM allowed for the FY 2018-19, was adjusted by the Authority in the indexation/ adjustment decision of the Petitioner for the FY 2019-20, as the final DM for the FY 2018-19 was later on allowed. However, at the same time the Authority also decided that any under/ over recovery of the allowed Interim DM would be adjusted subsequently. Consequently, the Petitioner has already been allowed an adjustment in this regard amounting to Rs.103 million as per of PYA while deciding its indexation/ adjustment request for the FY 2020-21.

Minimum Tax Paid during FY 2020-21:

- 9.4. The Petitioner has submitted that the as per MYT determination dated December 31, 2015 (Para 26.21 to 26.23) it has been allowed a post-tax cost of debt and any tax paid by the company shall be passed on to the consumers on actual basis as prior year adjustment after submission of documentary proof to NEPRA.
- 9.5. The Petitioner requested that minimum tax of Rs.1,950 Million for the FY 2020-21, be allowed as per detail given hereunder.

CPR No.	Date	Tax Paid
IT-20200930-0101-1523131	30.09.2020	700
IT-20201231-0101-1682684	31.12.2020	350
IT-20210330-0101-1774193	30.03.2021	400
IT-20210629-0101-1651073	29.06.2021	500
Total		1,950

- 9.6. Regarding claim of Rs.1,950 million as adjustment for advance Tax for the FY 2020-21, the Authority has already allowed the same in the indexation / adjustment request of the Petitioner for the FY 2020-21, thus need not to be discussed here again.
- 9.7. The Authority while going through the financial statements of the DISCOs including the Petitioner, has observed that significant amount of tax refund is appearing from FBR. In view thereof, the Authority has decided to allow actual tax paid by the Petitioner net off of the amount of Tax Refund outstanding from FBR, if any, once the Petitioner provides detail of actual tax assessments vis a vis tax paid for the last five years. Accordingly, the Petitioner is directed to provide details of actual tax assessments, tax allowed and the amount of tax paid for the last five years..



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Sales Mix Variance:

- 9.8. Regarding Sales Mix variance, the Petitioner has requested an amount of Rs.2,703 million for the FY 2020-21.
- 9.9. The Authority noted that the Petitioner was directed through various emails to provide subsidy claims data as per the required format, for the FY 2020-21, in order to work out the impact of Sales Mix variance. However, the required information was not provided by the Petitioner. In view thereof, the Authority has decided not to consider the request of the Petitioner regarding sales mix variance of Rs.2,703 million in the instant adjustment request.

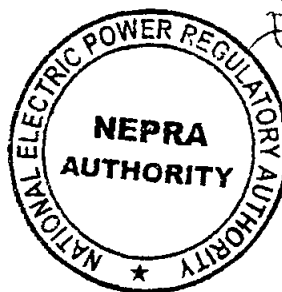
Excess Supplemental Charges

- 9.10. The Petitioner has submitted that CPPA-G billed Supplemental Charges of Rs.4,547 million to FESCO on account of late Payments to IPPs/Power generators during the FY 2020-21. The Late Payment Surcharge (LPS) collected by FESCO from consumers during the said year remained Rs.2,065 Million. Thus, CPPA-G billed excess amount of Rs.2,482 million than the LPS collected by FESCO. The Petitioner provided the following month wise invoices raised by CPPA-G in this regard as given below.

Sr #	Invoice No.	Period	PKR-Mln.
1	LPS/Jul-20/FESCO	Jul-20	613
2	LPS/Aug-20/FESCO	Aug-20	220
3	LPS/Sep-20/FESCO	Sep-20	373
4	LPS/Oct-20/FESCO	Oct-20	502
5	LPS/Nov-20/FESCO	Nov-20	277
6	LPS/Dec-20/FESCO	Dec-20	466
7	LPS/JAN-21/FESCO	Jan-21	274
8	LPS/Feb-21/FESCO	Feb-21	426
9	LPS/Mar-21/FESCO	Mar-21	176
10	LPS/Apr-21/FESCO	Apr-21	239
11	LPS/May-21/FESCO	May-21	245
12	LPS/June-21/FESCO	Jun-21	638
Total			4,547
Less: LPS Collected during FY 2020-21			2,065
Suppl. Charges (billed by CPPA-G) in excess:			2,482

- 9.11. The Authority in its decision dated 8.12.2020, in the matter of request filed by the Petitioner for adjustment/ indexation of Tariff for the FY 2019-20, directed the Petitioner to provide detail of invoices raised by CPPA-G on account of supplemental charges for the FY 2014-15 till FY 2019-20. The Petitioner in this regard has submitted the following details;

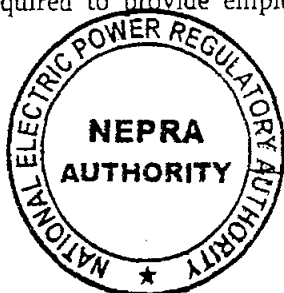
Year	LPS	Supplemental Charges	Rs. Mln
			LPS in Excess to Supp. Charges
2014-15	1,098	433	(665)
2015-16	1,112	101	(1,011)
2016-17	1,069	103	(966)
2017-18	1,280	609	(671)
2018-19	1,406	1,890	484
2019-20	1,681	3,004	1,323
Total	7,546	6,140	



- 9.12. The Authority observed that the issue of supplemental charges has been discussed in detail in the indexation/ adjustment decision of the Petitioner for the FY 2020-21 and also in the earlier determinations of the Petitioner, wherein the Authority has clearly stated that Supplemental charges are not allowed separately rather XWDISCOs are allowed to retain the amount of late Payment charges to off-set the impact of supplemental charges billed by CPPA-G, hence this cost is not allowed to the Petitioner. Here it is pertinent to mention that while accounting for LPS against Supplemental Charges, NEPRA individually accounts for the amount of LPS against each DISCO's supplemental charges as per the decision of the Authority.

PM Assistance Package

- 9.13. The Petitioner regarding P.M assistance Package requested an amount of Rs.418 Million on account of Prime Minister's Assistance Package for families of employees who died during service (from the date of its applicability from February, 2015 to December, 2019). The said amount was included in the Prior Period Adjustments as part of Annual Adjustment/Indexation of Distribution Margin for FY 2020-21 under Multiyear Tariff Regime, filed vide letter No.11656-59 dated 19.10.2020. The package comprised upon Rs.248 Million for Lump Sum Grant and Rs.170 Million for Marriage Grant. Public Hearing was held on April 22, 2021. However, determination/decision of the same is yet to be announced.
- 9.14. The Petitioner submitted that certain components of the Prime Minister's Assistance Package like House Rent and Scholarship were not claimed in the referred adjustments for FY 2020-21 due to non- availability of complete information regarding families of deceased employees. Furthermore BOD FESCO in its 203rd/32nd meeting held on 31.08.2020 & 205/34 meeting held on 29.10.2020 has adopted Assistance Package circulated by General Manager (HR) PEPCO vide O.M. No.MDP/GMHR/DSW/4506-22 dated 30.04.2020. Under the said package, families of FESCO employees who die due to Covid-19 while performing official duties will be allowed Rs.4 million (in each case).
- 9.15. The Petitioner submitted that it has updated the financial impact of PM's Assistance Package adopted by FESCO including Assistance Package for deceased victims of COVID-19 comes to Rs.592.23 Million. To redress the grievances of bereaved families of deceased employees, who approaching through different channels for payment of their entitled assistance package including direct application to FESCO management, complaints to Wafaqi Mohtasib, complaints at PM's Performance Delivery Unit (PMDU), FESCO vide letter No.950/CFO/FESCO/Budget-PMAP dated 29.09.2021 also requested NEPRA to allow an amount of Rs.592.23 Million separately before the main decision, for which response is awaited.
- 9.16. Regarding request of the Petitioner for PM assistance package, the Authority in principle agrees to allow the Prime Minister Assistance Package as announced by the Federal Government for the families of employees who died during service. However, for the requested amount, the Authority considers that allowing any such costs, upfront would be unfair with the consumers, therefore, the Authority may consider such costs once the actual expenditure is incurred by the Petitioner. To justify the claim the Petitioner is required to provide employees name, CNIC number,



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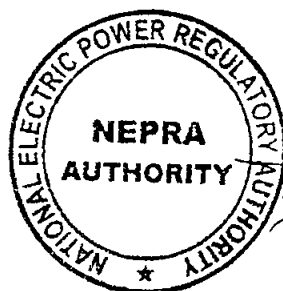
designation, date of death, along with the financial impact, etc. in its next tariff petition/adjustment request for the Authority to consider.

Actuarial Gain/Loss Charged to OCI for FY 2020-21

- 9.17. The Petitioner has submitted that an amount of Rs.3,510 million on account of actuarial loss for the FY 2020-21 charged to Other Comprehensive Income as a result of re measurement of Post-Retirement Benefits Obligations of FESCO employees. Breakup of which is given below.

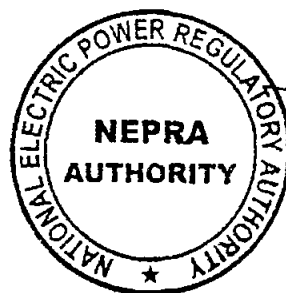
Pension	Free Supply	Leave Encashment	Free Medical	Total	
5,960	-	2,401	-	49	3,510

- 9.18. The Petitioner accordingly requested to allow the amount of Rs.3,510 million in the PYA of FY 2020-21.
- 9.19. Regarding Actuarial gain/ loss for post-retirement benefits, the Authority observed that amount of post-retirement benefits for the FY 2020-21 has been allowed to the Petitioner as per the amount "Charge for the Year" in the Audited Financial Statement of the Petitioner for the FY 2020-21.
- 9.20. The Prior Year Adjustment includes the impact of variation in the following, based on the Authority's allowed benchmarks of T&D losses and recoveries;
- ✓ Difference between the actual PPP billed and the amount recovered by the DISCO.
 - ✓ Difference between the assessed DM and the amount actually recovered.
 - ✓ Difference between previously assessed PYA and the amount actually recovered.
 - ✓ Difference between actual other income and the amount allowed
 - ✓ Variation due to Sales Mix.
- 9.21. It is important to highlight that variation between the PPP billed to DISCOs by CPPA-G and the amount recovered by the DISCOs, based on the Authority's allowed benchmarks of T&D losses and recoveries, are being accounted for separately through Quarterly/Bi-Annual Adjustment mechanism, therefore, the instant PYA includes only the remaining components.
- 9.22. Here it is pertinent to mention that while deciding the instant adjustment request i.e. FY 2021-22, the impact of under/ over recovery of the assessed DM for the FY 2020-21, has been included as part of PYA.
- 9.23. Based on the discussions made in the preceding paragraphs, the total PYA of the Petitioner under the MYT has been worked out as under;



*Decision of the Authority in the matter of request filed by FESCO for
Adjustment / Indexation of Tariff for the FY 2021-22 under the MYT*

Description	Rs. Mh: FESCO
1st & 2nd Qtr. FY 2018-19	
Allowed Amount	26,894
Qtr. Rs./kWh	1,5389
Recovered	27,469
Under/(Over) Recovery	(575)
3rd & 4th Qtr. FY 2018-19	
Allowed Amount	2,639
Qtr. Rs./kWh	0,1888
Recovered	2,484
Under/(Over) Recovery	155
Interim D.M FY 2018-19	
Allowed Amount	1,748
Qtr. Rs./kWh	0,1250
Recovered	1,645
Under/(Over) Recovery	103
1st Qtr. FY 2019-20	
Allowed Amount	(1,307)
Qtr. Rs./kWh	(0,094)
Recovered	(1,240)
Under/(Over) Recovery	(67)
Distribution Margin FY 2019-20	
Allowed	27,452
Recovered	19,500
Under/(Over) Recovery	7,952
Other Income FY 2019-20	
Allowed	(6,214)
Actual	(5,540)
Under/(Over) Recovery	674
Sales Mix Variances	
FY 2019-20	(383)
	(383)
Late Payment Charges in Excess to Supplemental charges FY 2014-15 to FY 2019-20	(3,313)
Distribution Margin FY 2020-21	
Allowed	27,452
Recovered	24,435
Under/(Over) Recovery	3,017
Total Prior Period Adjustment	11,756
Provision for Post Retirement Benefit	
Allowed	11,376
Benefit Paid	5,555
Transferred to Account	5,300
Under/(Over) Recovery	
Depreciation	
Allowed	4,137
Actual	2,819
Under/(Over) Recovery	(1,318)
RoRB (Investment)	
Allowed	6,182
Actual	5,751
Under/(Over) Recovery	(431)
Total MYT True Ups	(1,227)
Grand Total	10,529



9.24. The Authority in line with its earlier decision in the matter of negative FCA, has calculated the impact of negative FCA pertaining to the FY 2019-20 in the matter of lifeline consumers, domestic consumers (consuming up-to 300 units) and Agriculture Consumers which has been retained by

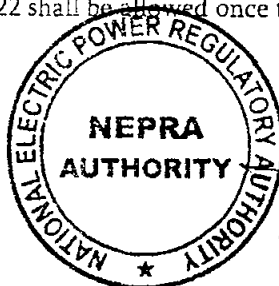
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the Petitioner. The Authority has also worked out the impact of positive FCAs not recovered by the Petitioner from life line consumers. The Authority also considered the relevant clauses of the S.R.O. 189 (1)/2015 dated March 05, 2015 issued by GoP and the amount of subsidy claims filed by the Petitioner for the FY 2019-20.

- 9.25. After considering all the aforementioned factors, the Authority observed that the Petitioner has retained a net amount of Rs.1,614 million on account of negative FCA for the FY 2019-20, pertaining to the lifeline consumers, domestic consumers (consuming up-to 300 units) and Agriculture Consumers, which is still lying with the Petitioner. The Authority also considered the amount of subsidy claims filed by the Petitioner for the FY 2019-20, which shows a net subsidy claim filed by the Petitioner.
- 9.26. The Authority in view of the above and in line with its earlier decisions, has decided not to adjust the impact of negative FCA across different consumer categories. Thus, the net negative FCA amount pertaining to the lifeline consumers, domestic consumers (consuming up-to 300 units) and Agriculture Consumers for the FY 2019-20 i.e. Rs.1,614 million, which is still lying with the Petitioner, must be adjusted by the Federal Government, against the overall Tariff Differential Subsidy claim in the matter of the Petitioner eventually reducing GOP's overall Tariff Differential Subsidy burden. The above working has been carried out based on the data/ information provided by PITC, as DISCOs have not submitted the required information. In case DISCOs own calculations are different from the aforementioned numbers, keeping in view the last slab benefits etc., the same may be shared with the Authority in its subsequent adjustment request. This decision of the Authority is only applicable under a subsidy regime, whereby aforementioned classes of consumers are receiving subsidy directly in their base tariff.
- 9.27. Here it is pertinent to mention that the impact of under/ over recovery of quarterly adjustments for the FY 2018-19 and 1st quarter of the FY 2019-20 has been worked out based on total units i.e. without adjusting the impact of life line units as DISCOs have neither submitted their workings in this regard nor provided break-up of category wise units sold for the period. In view thereof, the Petitioner is directed to provide its working in the matter along-with break-up of units sold for each category for the period from FY 2019-20 till FY 2021-22, for consideration of the Authority. Any adjustment in this regard would be adjusted subsequently as PYA.

True ups allowed in the MYT

- 9.28. The MYT determination also allows trueing up of certain costs allowed to the Petitioner during the tariff control period i.e. Depreciation, Investments and Kibor + Savings in spread as Prior Year Adjustments, as per the prescribed mechanism. Since the amount of Depreciation and Investments, while allowing indexation/ adjustment for the FY 2020-21, has been taken from the Audited accounts of the Petitioner for the FY 2020-21, therefore, no true up is required for for these components. Similarly, no adjustment on account of KIBOR for the FY 2020-21 and FY 2021-22 is required as the Authority while determining the RoRB for the FY 2020-21 and FY 2021-22, used the actual KIBOR numbers as of July and January for the respective year, thus, no further adjustment on account of variation in KIBOR for the FY 2020-21 and FY 2021-22 is to be allowed. However, true ups for the FY 2021-22 shall be allowed once the Audited accounts of the Petitioner for the FY 2021-22 is provided.



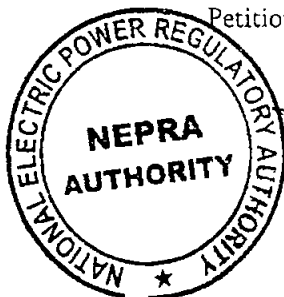
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- 9.29. Regarding adjustment of spread on KIBOR, since the audited accounts of the Petitioner are not available for the period under consideration, therefore, the Authority would consider the adjustment on account of spread on KIBOR once the Petitioner Audited accounts are available.
10. Whether the existing fixed charges applicable to different consumer categories needs to be revised and requires any changes in mechanism for charging of such charges based on Actual MDI or Sanction Load or otherwise?
- 10.1. The Petitioner during the hearing submitted that it has already requested NEPRA to revise the criteria of fixed charges on the basis of 50% of sanctioned load in case of no energy is consumed during the month. The Authority noted that other DISCOs also during proceedings of their tariff petitions supported applicability of fixed charges based on sanctioned loads.
- 10.2. The Authority also noted that as per the decision dated 01.11.2021 in the matter of Wheeling Costs to be included in the Tariff Determination of DISCOs, it was decided as under;

"Hybrid BPC

12.1. In future tariff determinations of DISCOs, for Hybrid BPCs, fixed charges shall be levied based on their sanctioned load or actual MDI, whichever is higher and will be applicable on such BPCs who retain DISCOs as deemed supplier. In the meanwhile, based on the above formula, NEPRA will determine it on case to case basis."

- 10.3. The Authority observed that as per the current tariff structure, certain consumer categories like Commercial, Industrial, Bulk and Agriculture are levied fixed charges, which are based on their actual MDI for the month. The Authority considers that the capacity charges of generation companies which are fixed in nature, as it has to be paid based on plant availability, are charged to DISCOs based on the actual MDIs of DISCOs. However, the present consumer end tariff design is of volumetric nature whereby major portion of the cost is charged / recovered from the consumers on units consumed basis i.e. per kWh and only a small amount is recovered on MDIs basis from the consumers.
- 10.4. In view of the above discussion, decision of the Authority dated 01.11.2021 in the matter of wheeling and to ensure that Hybrid BPCs, who keep DISCOs connection as backup, also share portion of the fixed costs, the Authority has decided to change the mechanism for levying of monthly fixed charges to various categories of consumers. The Fixed charges shall now be charged, based on 50% of the sanctioned load or actual MDI for the month, whichever is higher. However, in such cases, no minimum monthly charges would be billed even if no energy is consumed. The Authority has also decided to increase the rate of fixed charges currently applicable to certain categories i.e. from Rs.400/kW/M, 420/kW/M and 440/kW/M to Rs.440/kW/M, 460/kW/M, and 500/kW/M respectively. At the same time, the Authority not to overburden such consumers who are levied fixed charges, has adjusted their variable rate, to minimize the impact of increase in fixed charges.
- 10.5. Here it is pertinent to mention that Rs.162,459 million and Rs.14,876 million is the share of the Petitioner on account of CpGenCap and UoSC (NTDC/ HVDC) & Market Operator Fee



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respectively for the FY 2022-23. The overall fixed charges comprising of CpGenCap and UoSC (NTDC/HVDC) & Market Operator Fee in the instant case works out as Rs.177,335 million, which translate into Rs.4,343/kW/month based on projected average monthly MDI of the Petitioner. However, Fixed charges being billed to consumers is Rs.440/kW/M, 460/kW/M, and 500/kW/M for different categories based on 50% of the sanctioned load or actual MDI for the month, whichever is higher, which is around 11% of total projected fixed charges to be charged to the Petitioner by CPPA-G.

- 10.6. Here it is also pertinent to mention that once the CTBCM becomes operational, the Hybrid BPCs shall be treated in accordance with the prevailing Regulations at that time.

11. Whether there should be any amendment in Terms and Conditions of Tariff (For Supply of Electric Power to Consumers by Supply Licensees) keeping in view the changes in Consumer Service Manual?

- 11.1. The Authority observed that certain amendments have been approved in the NEPRA CSM, regarding extension of load for B-3 & C-2 from 5MW upto 7.5MW, after following due process of law. The same amendments are also required to be incorporated in the Tariff determination of DISCOs. Accordingly, the following changes are being made in the Terms & Conditions of Tariff:

"Considering the fact that the Authority, through CSM, has already allowed extension in load beyond 5MW upto 7.5MW whose connection is at least three (3) years old, therefore, for such consumers the applicable tariff shall remain as B-3 or C-2 as the case may be. However, while allowing extension in load, the DISCOs shall ensure that no additional line losses are incurred and additional loss, if any, shall be borne by the respective consumers."

12. Electric Vehicle Charging Stations

- 12.1. In order to provide an enabling regulatory regime for the Electric Vehicle Charging Stations ("EVCS") that would supplement the introduction and promotion of Electric Vehicles ("EV") in Pakistan, and provide a strong base for the growth of the EV charging infrastructure to support the development of this industry. The charging services for EV is going to involve setting up a dedicated facility that would require a dedicated infrastructure including AC/DC conversion, conductive charging system, charging connectors, plugs, inlets and socket outlets, cables, protection system and dedicated electricity supply system with dedicated connection and transformer.

- 12.2. Here it is pertinent mention that the National Electric Vehicle Policy 2019 requires the following;

"NEPRA shall develop a policy to enact EV tariffs and to ensure compliance with EV standards and specifications. The foremost of which are safety standards for EVs."

- 12.3. The Authority in view thereof, in exercise of powers under section 7 read with section 31 of NEPRA Act read with 3(1) of NEPRA Tariffs (Standards & Procedure) Rules, 1998 carried out proceedings to amend the terms and condition of XWDISCOs and KE's tariff for this purpose.



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During the proceedings the issues regarding tariff to be charged from electric vehicles by EVCS along-with proposed amendments in the tariff Terms & conditions for the purpose was discussed in detail.

- 12.4. Based on the outcome of the proceedings, the Authority has decided as under;

Amendment in Tariff Terms & Conditions

- ✓ In A-2 Commercial "1", following is added at the end;

"ix) Electric Vehicle Charging Stations"

- ✓ In A-2 Commercial "2", following is added;

"Electric Vehicle Charging Stations shall be billed under A-2(d) tariff i.e. Rs./kWh for peak and off-peak hours. For the time being, the tariff design is with zero fixed charges, however, in future the Authority after considering the ground situation may design its tariff structure on two part basis i.e. fixed charges and variable charges."

- ✓ In addition in A-2 Commercial, following is added;

"The Electric Vehicle Charging Station shall provide "charging service" to Electric Vehicle with a maximum cap as determined by the Authority from time to time. For the time being the Cap has been determined as Rs.50/kWh. The EVCS shall be billed by DISCOS under A-2(d) tariff. However, monthly FCAs either positive or negative shall not be applicable on EVCS."

Addition in Schedule of Tariff

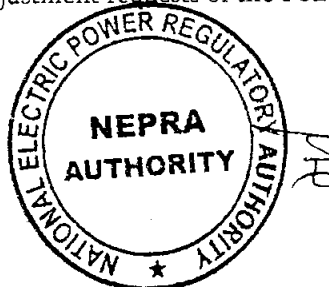
- ✓ In Schedule of Tariffs (SoTs), under A-2 General Supply Tariff - Commercial, a new tariff i.e. A-2(d) – Electric Vehicle Charging Station is added.

13. Whether the existing Tariff Terms and Conditions needs to be modified, especially with reference to the request of Telecom companies to charge "B Industrial Supply" Category tariff instead of "A-2 Commercial" category tariff?

- 13.1. The Authority during the tariff determinations of GEPCO for the FY 2019-20, on the request of Telenor regarding charging of Industrial tariff from Telecom Operators decided as under;

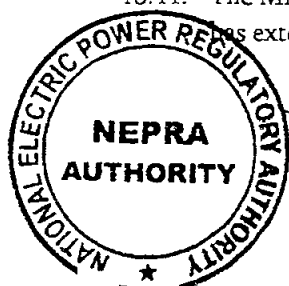
"The Authority observed that the issue highlighted by the commentator M/s Telenor Pakistan regarding applicability of Industrial tariff to Cellular Mobile Operator (CMOs) pertains to all the DISCOs including K-Electric as CMOs are operating all over Pakistan, therefore, the issue requires deliberations involving all stakeholders i.e. DISCOs, CMOs, Ministry of Energy, MoT etc. The Authority noted that proceedings regarding Tariff petitions filed by all XWDISCOs for the FY 2018-19 and FY 2019-20, except GEPCO, have already been completed, therefore, the Authority has decided to consider the request of M/s Telenor as a separate issue during the proceedings for the upcoming tariff Petitions of DISCOs for the FY 2020-21 & onward".

- 13.2. In view thereof, in the instant tariff adjustment requests of the Petitioner, the subject matter is being discussed as a separate issue.



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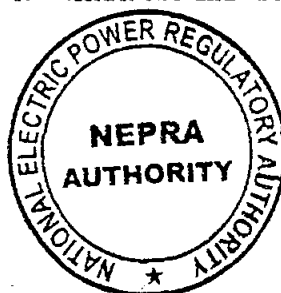
- 13.3. The Petitioner during the hearing submitted that Telecom sector is only providing the services to consumers not value addition, therefore A-2 commercial is accurate
- 13.4. Telecom companies in their comments/ Intervention Requests have submitted that Telecom Sector including Cellular Operators (CMOs) has been declared as an Industry vide Ministry of Industries notification dated 20.04.2004, therefore, for the purpose of charging of electricity, industrial tariff may be applied to CMOs instead of currently applicable Commercial tariffs.
- 13.5. M/s NAYatel and M/S PTCL both submitted that in line with the Telecom Policy of 2004, the Federal Government was pleased to declare Telecom sector including Cellular Operators as an "Industry" with immediate effect vide Gazette Notification dated 20.04.2004, issued by the Ministry of Industries and Production, Government of Pakistan.
- 13.6. The Ministry of Information Technology vide UO dated 16.06.2014 also endorsed the request of the Telecom Sector including CMOs to be classified as Industrial Undertaking under clause (b) of Section 2(29C) of the Income Tax Ordinance 2001.
- 13.7. In view of the above, it has been submitted that telecom companies along with other CMO's as an "Industrial Undertaking", so that "Industrial Tariff" is applied across the board to the Telecom Sector companies in Pakistan instead of "Commercial Tariff". Accordingly, it has been requested that issue of applicability of "Industrial Tariff" on Telecom Sector may be addressed and determined by the Authority, while determining the Uniform Tariff for DISCOs throughout Pakistan, including the current MYT indexation request of IESCO.
- 13.8. The Ministry of IT & T vide its letter dated 18.06.2014 addressed to FBR, submitted the following:
- ✓ *".... MoIT endorses the request of Telecom Industry, including Mobile Cellular Operators (CMOs) to be classified as "Industrial Undertaking" under clause (b) of section 2 (29C) of the Income Tax Ordinance 2001.*
 - ✓ *We will appreciate if the issue is examined and finalized in light of the aforementioned Cabinet decision and the subsequent notification issued in this regard by the Ministry of Industries & Production."*
- 13.9. The Ministry of Information Technology and Telecommunication, vide letter dated 29.04.2020, while referring to the meeting of the Committee on issues of CMOs constituted by the Prime Minister, held on 13.04.2020 stated that like any high tech industry, Telecom Operators use electricity for their infrastructure i.e. Data Centers, exchanges, points of presence (POPs), BTSs, Mobile Switching centers, Base Station Controllers (BSCs) etc. MoIT&T accordingly requested NEPRA to implement the Government orders.
- 13.10. DISCOs during the hearing submitted that as per tariff terms and conditions industrial connections required motive load and Telecom companies does not fall under this category of tariff.
- 13.11. The Ministry of Energy (MoE) vide comments dated 02.08.2021, submitted that the government has extended various reforms, packages & incentives, inter alia; Circular Debt Management Plan



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(CDMP), facilitative Ease of Doing Business architecture, strategizing increase in sales to high value consumer classes, Industrial Support package (ISP), flat peak & off-peak tariff scheme for industrial units and Zero-Rated Industrial (ZRI) package. Industrial tariff is applicable to the industries production facilities and the warehouses, which are used to transmit the products to the retailer/ distribution network, are considered as commercial value addition. Telecom companies being engaged in provision of telecom services through retail/ distribution network infrastructure, may be treated as commercial value-added activity for which consumer has to pay and, therefore, the same may be continued to be served electricity under commercial tariff category. In view of above, it has been submitted that any consideration of the Authority for the relocation of telecom companies from commercial category to industrial category may not be aligned with the economic objectives underlying the various industrial packages/concessions in field. Moreover, this relocation will result in the revenue gap and put extra burden on other consumers or fiscal space.

- 13.12. The Ministry of Finance (MoF) vide comments dated 30.07.2021, submitted that Telecom Companies/Cellular Mobile Companies Operators are basically involved in commercial activities and electricity cost is a pass through item. Further, Telecom Companies/Cellular Mobile Companies Operators fix their consumer end tariff without consulting the Regulator. Therefore, Finance Division is further of view that electricity supply to these companies for their infrastructure units under the category "A-2 Commercial" may be continued and they may not be considered for supply of electricity under the tariff category "B-2 Industrial Supply".
- 13.13. Here it is pertinent to mention that subsequent to the aforementioned Intervention Requests and Comments from the Telecom companies, separate tariff petitions have also been filed by M/s PTCL, M/s Telenor and M/s Pak Telecom Mobile Company (Ufone) Limited for change in tariff category of Telecom Operators from Commercial to Industrial.
- 13.14. Since the said Petitions are under consideration of the Authority, therefore, the Authority has decided to issue a separate additional decision on the issue once the proceedings on the aforementioned petitions are completed.
14. Whether there should any Fixed Charges on Residential & General Services Consumers, having net metering facility?
- 14.1. The Petitioner during the hearing submitted that at present no Fixed Charges are charged from all category of consumers (Residential, General Services, Commercial, Tube well & Industrial) having net metering facility. Accordingly, the Petitioner proposed that a certain amount of fixed charges per month on installed DG Facility for Net metering connections for use of system may be charged from all categories of consumers.
- 14.2. The Authority observed that the net metering regime is presently at a nascent stage as current installations are a negligible portion of total generation capacity of the power system, therefore, decided not to levy any fixed charges on Residential and General services net metering consumers.



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- 14.3. However, considering the steep rise in the Power Purchase cost of electricity coupled with stability in the prices of installing DG facilities, the Authority has decided to initiate proceedings for amendment in NEPRA (Alternative and Renewable Energy) Distributed Generation and Net Metering Regulations, 2015, for change in tariff payable by DISCOs to net metering consumers for excess energy delivered in the system.

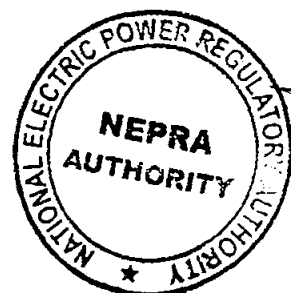
15. Upfront Indexation/adjustment for the FY 2022-23

- 15.1. The Authority also understands that by the time the instant decision is notified, the FY 2021-22 would have elapsed and the FY 2022-23 would have started. Meaning thereby that tariff indexation/adjustment for the FY 2022-23 would also have become due. In view thereof, and in order to ensure timely recovery of the allowed cost to the Petitioner, the Authority has decided to allow the indexation/adjustment for the FY 2022-23, upfront in the instant decision as per the adjustment /indexation mechanism provided in MYT determination of the Petitioner. However, the impact of under/ over recovery due to indexation/ adjustment for the FY 2021-22 would be allowed / adjusted subsequently as part of future PYA.

16. Revenue Requirement

- 16.1. In view of the discussion made in preceding paragraphs and accounting for the adjustments discussed above, the adjusted revenue requirement of the Petitioner, for the FY 2021-22 & FY 2022-23 is as under;

Description	Unit	Allowed FY 2021-22			Allowed FY 2022-23		
		DoP	SoP	Total	DoP	SoP	Total
Units Received	[MkWh]	15,278	15,278	15,278	17,023	17,023	17,023
Units Sold	[MkWh]	13,851	13,851	13,851	15,518	15,518	15,518
Units Lost	[MkWh]	1,427	1,427	1,427	1,505	1,505	1,505
Units Lost	[%]	9.34%	9.34%	9.34%	8.84%	8.84%	8.84%
Energy Charge						153,242	153,242
Capacity Charge						162,459	162,459
Transmission Charge & Market Operation Fee						14,876	14,876
Power Purchase Price	[Mln. Rs.]					330,577	330,577
Pay & Allowances		9,733	2,932	12,666	10,546	3,177	13,724
Post Retirement Benefits		7,143	2,510	9,653	7,143	2,510	9,653
Repair & Maintenance		552	41	593	603	45	649
Traveling allowance							
Vehicle maintenance		1,066	319	1,385	1,166	896	2,062
Other expenses							
O&M Cost		18,494	6,302	24,797	19,459	6,628	26,087
Depreciation		4,520	-	4,520	4,846	-	4,846
ROB		4,867	2,344	7,252	5,559	2,723	8,282
Min Tax							
O.Income		(3,318)	(896)	(4,215)	(3,318)	(896)	(4,215)
Distribution/Supplier Margin	[Mln. Rs.]	24,363	7,791	32,353	26,545	8,155	35,000
Prior Year Adjustment		2,625	7,904	10,529	2,625	7,904	10,529
Revenue Requirement	[Mln. Rs.]	27,188	15,695	42,883	29,170	346,937	376,106
Average Tariff	[Rs./kWh]						
Power Purchase Price- Unadj.							
Power Purchase Price- Adjusted							
Margin		1.77	0.56	2.34	1.71	0.54	2.26
PYA Adjustments		0.19	0.57	0.76	0.17	0.51	0.68
Average Tariff	[Rs./kWh]	1.96	1.13	3.10	1.88	22.36	24.24



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16.2. The above determined revenue shall be recovered from the consumers through the projected sales of 15,518 GWhs, as per Annex – II.

17. **ORDER**

17.1. From what has been discussed above, the Authority hereby approves the following adjustments in the MYT of the Petitioner Company for the Financial Year 2020-21:-

- I. Faisalabad Electric Supply Company Limited (FESCO), being a deemed supplier, is allowed to charge its consumers such tariff as set out in the schedule of tariff for FESCO annexed to the decision.
- II. In addition to compensation of losses as discussed above, FESCO, being a distribution licensee, is allowed to charge the users of its system a "Use of system charge" (UOSC) as under:

Description	For 132 kV only	For 11 kV only	For both 132kV & 11 kV
Asset Allocation	29.95%	43.01%	72.96%
Level of Losses	1.57%	6.21%	7.68%
UoSC Rs./kWh	0.53	0.85	1.42

- III. Responsible to provide distribution service within its service territory on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority,
- IV. To make its system available for operation by any other licensee, consistent with applicable instructions established by the system operator.
- V. To follow the performance standards laid down by the Authority for distribution and transmission of electric power, including safety, health and environmental protection instructions issued by the Authority or any Governmental agency [or Provincial Government;
- VI. To develop, maintain and publicly make available, with the prior approval of the Authority, an investment program for satisfying its service obligations and acquiring and selling its assets
- VII. To disconnect the provision of electric power to a consumer for default in payment of power charges or to a consumer who is involved in theft of electric power on the request of Licensee.
- VIII. The Petitioner shall comply with, all the existing or future applicable Rules, Regulations, orders of the Authority and other applicable documents as issued from time to time.

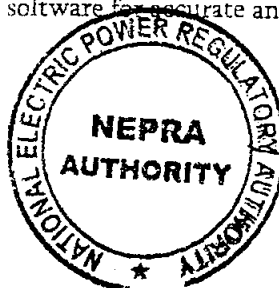
18. **Summary of Direction**

18.1. The summary of all the directions passed in this decision by the Authority are reproduced hereunder. The Authority hereby directs the Petitioner to;



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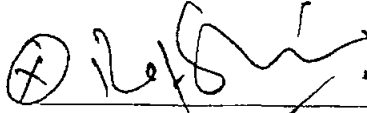
- To file next Multi-Year Tariff petition in line with notified Consumer End Tariff Guidelines 2015.
- To provide its working regarding Under/Over Recovery of quarterly adjustments along-with break-up of units sold for each category for the period from FY 2019-20 till FY 2021-22, for consideration of the Authority.
- To maintain a proper record of its assets by way of tagging each asset for its proper tracking.
- To provide detail of its actual tax assessments and the amount paid to FBR along-with the amount allowed by the Authority on account of tax payments since FY 2014-15 with its subsequent adjustment request.
- To provide its working in the matter along-with break-up of units sold for each category for the period from FY 2019-20 till FY 2021-22, for consideration of the Authority. Any adjustment in this regard would be adjusted subsequently as PYA.
- To take all the possible preventive measures to ensure no fatal accidents occur in future and improve its HSEQ performance. Detail objectives/targets of HSE are attached as Annex-A for compliance.
- To take all possible measures to facilitate consumers in terms of complaint handling, connection provision as per CSM and establish one window solutions.
- DISCOs shall ensure Open Access to all the relevant entities/licensees without discrimination and shall objectively evaluate and make available on the website of DISCO the network available capacity, current allocation of the capacity and the future investment required to be made part of distribution system planning.
- The DISCO through Market Implementation & Regulatory Affairs Department (MIRAD) shall prepare and develop the medium-term demand forecast, transmission plans and business plan for submission of the same to the Authority. All other departments of the DISCOs shall be obligated to provide their sub-plans to MIRAD for consolidation.
- MIRAD shall ensure effective reporting and monitoring of the allowed investment on monthly, quarterly and annual basis. The main components would include STG, DOP, ELR and Commercial Improvement.
- MIRAD shall be adequately staffed at all times as per the approved organochart for effective and efficient performance of its functions. MIRAD shall develop the dashboard for effective monitoring and reporting of above plans. The CEO along with the functional in-charge of each department will be responsible for presenting the above mentioned progress to the Authority and also submit the monthly, quarterly and annual progress reports in the matter.
- DISCO shall ensure Data Standardization for load forecasting and coordinate with PITC for auto retrieval and analysis of data for demand forecasts and use a software based on a modern language instead of Fox-Pro based software for accurate and reliable demand forecasts.



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- MIRAD shall undertake an exercise to identify and accurately use the data of captive consumers in the demand forecasts and ensure better coordination with local agencies/housing colonies/industrial consumers for potential upcoming demand for better and reliable demand forecasts.
 - To provide year wise detail of amounts deposited in the Fund, amount withdrawn along-with profit/interest earned thereon since creation of Fund.
19. Decision of the Authority and the Order part along with revised Annex-I, I-A, II, III, IV, V and A (HSE targets) attached with this decision, is hereby intimated to the Federal Government for notification in the official gazette in terms of section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

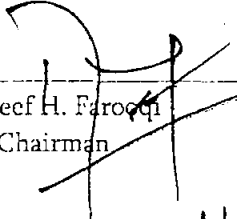
AUTHORITY



Rafique Ahmed Shaikh
Member

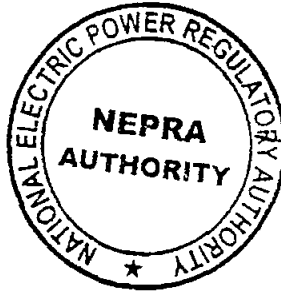


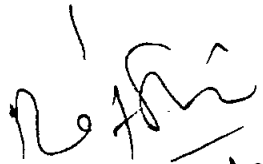
Engr. Maqsood Anwar Khan
Member

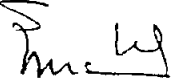


Tauseef H. Farooqi
Chairman

My additional note is attached herewith.




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Additional Note:

At the outset, the multi-year tariff determination which I am signing is for the control period from financial year 2020-21 to 2024-25; the two years of its control period have already been lapsed. Timely tariff determinations depend on submission of the petition by DISCOs within the given time. However, in sheer disregard of timelines given in the NEPRA Guidelines for Consumer End Tariff-2015 as well as the Authority's direction, DISCOs have failed to submit their petitions in timely manner which reflects their indifference to the regulatory discipline which ultimately cause suffering for the power sector as well as the end-consumers.

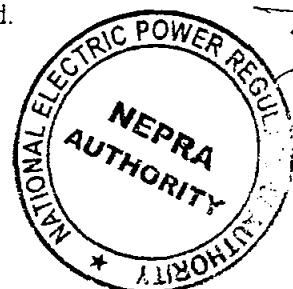
For the period from July, 2020, beyond the tariff control period of last determined tariff, the Authority has been issuing the quarterly adjustments under the given mechanism. Such adjustments, though covers the cost increase to larger extent but not suffice to cover the entire financial impact. Therefore, I am of the opinion that quarterly adjustments beyond the tariff control period are highly undesirable and should not be allowed.

This is a fact on record that NEPRA has been allowing huge amount to DISCOs under the head of investments for up-gradation of their infrastructure, however, DISCOs could not be able to improve their T&D losses and quality of supply corresponding to the allowed investment. Therefore, comprehensive audit of DISCOs is necessary to check the utilization of funds allowed under the head of investments.

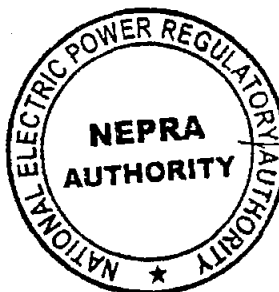
The overall recovery position of DISCOs is also below the desired level. Resultantly, the country is facing circular debt and despite certain bail out packages, the circular debt is on the rise which currently stands at more than Rs. 2.5 trillion. To get rid of the circular debt issue, immediate actions are needed which may include the structural changes in ownership and control of the DISCOs.

This has also been highlighted in the last many years that the performance of DISCOs has been marred with serious governance issues. Load shedding on account of Aggregate Technical and Commercial (AT&C) losses is one of the classic example of poor governance. Instead of improving their distribution network, checking the theft of electricity and improving the recovery, DISCOs have found an easy way of indiscriminate load shed at feeder level. This AT&C base load shedding is a stumbling block in improving the sales growth of Discos. This is a fact that sufficient generation capacity is available in the country, mostly on take or pay basis. The AT&C base load shedding is suffering the consumers in shape of not having the electricity as well as increased electricity cost due to payment of capacity payment of unutilized capacity. I am of the considered view that the burden of capacity payments due to underutilization of power plants caused by DISCO level load shedding should not be passed on to the consumers.

DISCOs are allowed sizeable amount for payments on account of pension and other post-retirement benefits which is being increased year on year basis. Although, under the agreed terms and conditions, these payments are binding but not a direct cost of product, i.e. generated electricity. Had the pension fund been established earlier in a timely manner to meet this obligation, the burden of these payments on consumers could have been avoided.



The present centralized control of DISCOs has shown its inherent tendency for inefficiency and unless developed as independent corporate entities, autonomous in their business decisions, DISCOs will continue to burden the power sector. Therefore, immediate actions are needed to revamp DISCOs and free them of centralized control. In my view, this is time to either privatize DISCOs or transit to public private partnership to run these entities as independent business in a competitive environment. The involvement of provincial governments may help in improving the governance of DISCOs especially in controlling electricity theft and improving the recovery.



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FUEL PRICE ADJUSTMENT MECHANISM

Actual variation in fuel cost component against the reference fuel cost component for the corresponding months will be determined according to the following formula

$$\text{Fuel Price variation} = \text{Actual Fuel Cost Component} - \text{Reference Fuel Cost Component}$$

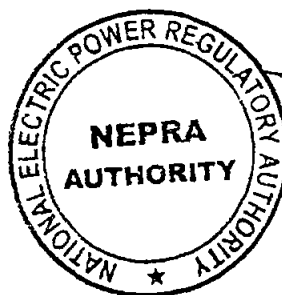
Where:

Fuel Price variation is the difference between actual and reference fuel cost component

Actual fuel cost component is the fuel cost component in the pool price on which the DISCOs will be charged by CPPA (G) in a particular month; and

Reference fuel cost component is the fuel cost component for the corresponding month projected for the purpose of tariff determination as per Annex-IV of the determination;

The fuel price adjustment determined by the Authority shall be shown separately in the bill of the consumer and the billing impact shall be worked out on the basis of consumption by the consumer in the respective month.



FUEL PRICE ADJUSTMENT MECHANISM

Actual variation in fuel cost component against the reference fuel cost component for the corresponding months will be determined according to the following formula

Fuel Price variation = Actual Fuel Cost Component - Reference Fuel Cost Component

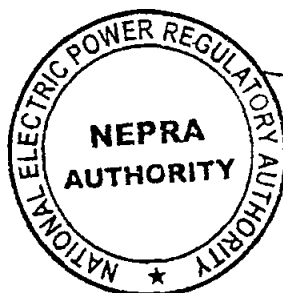
Where:

Fuel Price variation is the difference between actual and reference fuel cost component

Actual fuel cost component is the fuel cost component in the pool price on which the DISCOs will be charged by CPPA (G) in a particular month; and

Reference fuel cost component is the fuel cost component for the corresponding month projected for the purpose of tariff determination as per Annex-IV of the determination;

The fuel price adjustment determined by the Authority shall be shown separately in the bill of the consumer and the billing impact shall be worked out on the basis of consumption by the consumer in the respective month.



QUARTERLY ADJUSTMENT MECHANISM

Quarterly adjustment shall be the Actual variation in Power Purchase Price (PPP), excluding Fuel Cost Component, against the reference Power Purchase Price component and the impact of T&D losses on FCA, for the corresponding months and shall be determined according to the following formula;

$$\text{Quarterly PPP}_{(Adj)} = \text{PPP}_{(Actual)} \text{ (excluding Fuel cost)} - \text{PPP}_{(Recovered)} \text{ (excluding Fuel cost)}$$

Where;

PPP_(Actual) is the actual cost, excluding Fuel cost, invoiced by CPPA-G to XWDISCOs, adjusted for any cost disallowed by the Authority.

PPP_(Recovered) is the amount recovered based on reference rate in Rs./kWh, excluding fuel cost, as per the Annex-IV of the XWDISCOs determination that remained notified during the period.

Impact of T&D losses on FCA

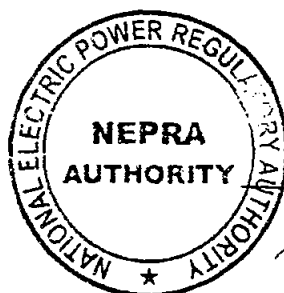
$$= \text{Monthly FCA allowed}_{(Rs./kWh)} \times \text{Actual units Purchase} \times \% \text{ T\&D losses}$$

Where;

Monthly FCA allowed _(Rs./kWh) is the FCA allowed by the Authority for the respective months of the concerned period.

T&D Loss % is percentage of T&D losses that remained notified during the period.

The sum of amounts so worked for each month of the Quarter shall be divided by the Projected units to be sold as determined by the Authority to work out Rs./kWh Quarterly adjustment.

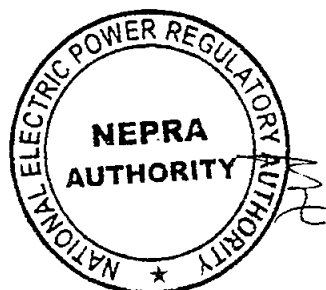


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Faisalabad Electric Supply Company (FESCO)
Estimated Sales Revenue on the basis of new Tariff

	Description	Sales		Revenue			Base Tariff		PYA 2021		Total Tariff	
		GWh	% Mix	Fixed Charge	Variable Charge	Total	Fixed Charge	Variable Charge	Amount	Variable Charge	Fixed Charge	Variable Charge
				Min. Rs.			Rs./kWh M	Rs./ kWh	Min. Rs.	Rs./ kWh	Rs./kWh M	Rs./ kWh
Residential												
Protected	For peak load requirement less than 5 kW											
	Up to 50 Units - Life Line	7	0.05%	-	37	37		5.00	-	-		5.00
	51-100 units - Life Line	8	0.05%	-	118	118		14.69	5	0.68		15.37
	01-100 Units	1517	9.78%	-	28,840	28,840		17.69	1,017	0.67		18.36
Un-Protected	101-200 Units	363	2.34%	-	7,141	7,141		19.69	239	0.68		20.35
	01-100 Units	423	2.73%	-	8,598	8,598		20.31	288	0.68		20.99
	101-200 Units	921	5.94%	-	21,845	21,845		23.50	626	0.68		24.18
	201-300 Units	1773	11.43%	-	42,582	42,582		24.01	1,206	0.68		24.69
	301-400 Units	985	6.35%	-	24,875	24,875		25.25	570	0.68		25.93
	401-500 Units	509	3.27%	-	13,050	13,050		25.69	345	0.68		26.37
	501-600 Units	290	1.87%	-	7,732	7,732		26.69	197	0.68		27.37
	601-700 Units	181	1.16%	-	5,005	5,005		27.69	123	0.68		28.37
	Above 700 Units	411	2.65%	-	11,778	11,778		28.69	279	0.68		29.37
	For peak load requirement exceeding 5 kW	0										
	Time of Use (TOU) - Peak	30	0.19%	-	837	837		27.69	21	0.68		28.37
	Time of Use (TOU) - Off-Peak	139	0.89%	-	2,819	2,819		20.31	94	0.68		20.99
	Temporary Supply	0	0.00%	-	7	7		28.69	0	0.68		29.37
Total Residential		7,557	48.70%	-	173,063	173,063			5,111			
Commercial - A2												
	For peak load requirement less than 5 kW	427	2.75%	-	10,545	10,545		24.67	295	0.68		25.36
	For peak load requirement exceeding 5 kW											
	Regular	1	0.01%	2	28	30	500	22.69	1	0.68	500	23.37
	Time of Use (TOU) - Peak	70	0.45%	-	1,925	1,925		27.69	47	0.68		28.37
	Time of Use (TOU) - Off-Peak	306	1.97%	1,025	6,613	7,638	500	21.58	208	0.68	500	22.27
	Temporary Supply	19	0.12%	-	471	471		24.67	13	0.68		25.36
	Electric Vehicle Charging Station	0	0.00%	-	4	4		25.00	0	0.68		25.68
	Total Commercial	824	5.31%	1,027	19,585	20,613			564			
General Services-A3												
Industrial		223	1.44%	-	5,518	5,518		24.71	152	0.68		25.39
	B1	78	0.50%	-	1,863	1,863		23.80	53	0.68		24.48
	B1 Peak	62	0.40%	-	1,729	1,729		27.69	42	0.68		28.37
	B1 Off Peak	346	2.24%	-	7,513	7,513		21.59	237	0.68		22.27
	B2	0	0.00%	0	7	8	500	23.69	0	0.68	500	24.37
	B2 - TOU (Peak)	381	2.45%	-	10,548	10,548		27.69	259	0.68		28.37
	B2 - TOU (Off-peak)	2081	13.41%	4,604	43,884	48,488	500	21.09	1,415	0.68	500	21.77
	B3 - TOU (Peak)	292	1.88%	-	8,081	8,081		27.69	198	0.68		28.37
	B3 - TOU (Off-peak)	1496	9.84%	2,171	33,846	35,817	460	22.49	1,017	0.68	460	23.17
	B4 - TOU (Peak)	85	0.55%	-	2,363	2,363		27.69	58	0.68		28.37
	B4 - TOU (Off-peak)	443	2.86%	641	9,876	10,517	440	22.29	301	0.68	440	22.97
	Temporary Supply	16	0.11%	-	440	440		28.69	11	0.68		27.37
	Total Industrial	5,283	34.05%	7,416	119,950	127,366			3,593			
Single Point Supply												
	C1(a) Supply at 400 Volts-less than 5 kW	0	0.00%	-	4	4		24.30	0	0.68		24.98
	C1(b) Supply at 400 Volts-exceeding 5 kW	1	0.01%	3	27	30	500	24.10	1	0.68	500	24.78
	Time of Use (TOU) - Peak	3	0.02%	-	79	79		27.69	2	0.68		28.37
	Time of Use (TOU) - Off-Peak	14	0.09%	31	303	334	500	21.09	10	0.68	500	21.77
	C2 Supply at 11 kV	0	0.00%	0	1	1	460	24.00	0	0.68	500	24.68
	Time of Use (TOU) - Peak	17	0.11%	-	483	483		27.69	12	0.68		28.37
	Time of Use (TOU) - Off-Peak	87	0.56%	157	1,952	2,109	460	22.49	59	0.68	460	23.17
	C3 Supply above 11 kV	5	0.03%	37	129	165	440	23.89	4	0.68	440	24.57
	Time of Use (TOU) - Peak	22	0.14%	-	614	614		27.69	15	0.68		28.37
	Time of Use (TOU) - Off-Peak	104	0.67%	180	2,321	2,500	440	22.29	71	0.68	440	22.97
	Total Single Point Supply	254	1.64%	408	5,913	6,320			173			
Agricultural Tube-wells - Tariff D												
	Scarp	12	0.07%	-	283	283		24.30	8	0.68		24.98
	Time of Use (TOU) - Peak	2	0.01%	-	51	51		27.69	1	0.68		28.37
	Time of Use (TOU) - Off-Peak	24	0.16%	12	516	528	200	21.09	17	0.68	200	21.77
	Agricultural Tube-wells	6	0.04%	5	143	148	200	24.30	4	0.68	200	24.98
	Time of Use (TOU) - Peak	197	1.27%	-	5,443	5,443		27.69	134	0.68		28.37
	Time of Use (TOU) - Off-Peak	1116	7.19%	2,150	23,540	25,691	200	21.09	759	0.68	200	21.77
Total Agricultural		1,357	8.74%	2,167	29,976	32,144			922			
Public Lighting - Tariff G		14	0.09%	-	402	402		27.97	10	0.68		28.65
Residential Colonies		5	0.03%	-	152	152		28.27	4	0.68		28.95
Grand Total 15,517.91 100.00% 11,018 354,558 365,577 10,529												

Note: The PYA 2021 column shall cease to exist after 1 year of notification of the instant decision.



SCHEDULE OF ELECTRICITY TARIFFS
FOR PAKISTAN RAILWAY ELECTRIC SUPPLY COMPANY (PESCO)

A-1 GENERAL SUPPLY TARIFF - RESIDENTIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	A Rs./kWh	B Rs./kWh	C Rs./kWh	D Rs./kWh
1	a) For sanctioned load less than 5 kW	500.00	3.00	14.69	0.68	23.37
2	b) For sanctioned load 5 kW & above	500.00	17.69	19.69	0.68	20.36
3	c) Up to 50 Units - like time	500.00	20.31	20.31	0.68	20.36
4	d) 51 - 100 Units - like time	500.00	23.50	24.01	0.68	24.18
5	e) 101 - 200 Units	500.00	25.25	25.69	0.68	25.93
6	f) 201 - 300 Units	500.00	26.69	27.69	0.68	26.37
7	g) 301 - 400 Units	500.00	27.69	28.69	0.68	27.37
8	h) 401 - 500 Units	500.00	28.69	29.69	0.68	28.37
9	i) Above 500 Units	500.00	29.69	30.31	0.68	29.37
10	j) For sanctioned load 5 kW & above	500.00	30.31	30.31	0.68	30.99



As per Authority's decision only protected residential consumers will be given the benefit of one previous slab. Under tariff A-1, there shall be minimum monthly charges at the following rates even if no energy is consumed.

a) Single Phase Connections: Rs. 75/- per consumer per month
b) Three Phase Connections: Rs. 150/- per consumer per month

A-2 GENERAL SUPPLY TARIFF - COMMERCIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	A Rs./kWh	B Rs./kWh	C Rs./kWh	D Rs./kWh
1	a) For sanctioned load less than 5 kW	500.00	24.67	22.69	0.68	23.37
2	b) For sanctioned load 5 kW & above	500.00	21.59	27.69	0.68	22.37
3	c) Electric Vehicle Charging Station	500.00	25.00	25.00	0.68	23.68

Under tariff A-2, there shall be minimum monthly charges at the following rates even if no energy is consumed.
a) Single Phase Connections: Rs. 125/- per consumer per month
b) Three Phase Connections: Rs. 250/- per consumer per month

A-3 GENERAL SERVICES

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	A Rs./kWh	B Rs./kWh	C Rs./kWh	D Rs./kWh
1	a) General Services	500.00	24.71	24.71	0.68	25.39

Under tariff A-3, there shall be minimum monthly charges at the following rates even if no energy is consumed.

a) Single Phase Connections: Rs. 175/- per consumer per month
b) Three Phase Connections: Rs. 350/- per consumer per month

B INDUSTRIAL SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	A Rs./kWh	B Rs./kWh	C Rs./kWh	D Rs./kWh
1	a) Up to 25 kW (exceeding 25-300 kW (at 400 Volts))	500.00	23.80	23.80	0.68	24.48
2	b) Up to 25 kW (exceeding 25-300 kW (at 11.32 kV))	500.00	21.59	21.59	0.68	22.27
3	c) For All Loads up to 5000 kW (at 11.32 kV)	460.00	27.69	22.49	0.68	23.17
4	d) For All Loads (at 66.12 kV & above)	440.00	27.69	22.39	0.68	22.97

For B1 & B2 consumers there shall be a fixed minimum charge of Rs. 350 per month. Fixed Charges shall be billed based on 50% of sanctioned load or Actual MDI for the month which ever is higher. In such cases there would be no minimum monthly charges even if no energy is consumed.

C SINGLE POINT SUPPLY

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	A Rs./kWh	B Rs./kWh	C Rs./kWh	D Rs./kWh
1	a) For supply at 400/230 Volts	500.00	24.50	24.50	0.68	24.58
2	b) Sanctioned load less than 5 kW	500.00	24.10	24.10	0.68	24.78
3	c) For supply at 66 kV & above and sanctioned load above 5000 kW	440.00	23.89	23.89	0.68	24.57
4	Time of Use	500.00	27.69	21.09	0.68	21.77
5	For supply at 11.32 kV up to and including 5000 kW	460.00	27.69	22.39	0.68	23.17
6	For supply at 66 kV & above and sanctioned load above 5000 kW	440.00	27.69	22.39	0.68	22.97

Fixed Charges shall be billed based on 50% of sanctioned load or Actual MDI for the month which ever is higher.

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A



Note: The PYA 2021 column shall cease to exist after One (01) year of notification of the instant decision.

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs./kW/M	VARIABLE CHARGES Rs./kWh	PYA 2021 Rs./kWh	Total Variable Charges Rs./kWh
	Residential Colonies attached to industrial premises	A	B	C	D
		-	28.37	0.68	28.95

H - RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES

Under Tariff G, there shall be a minimum monthly charge of Rs.500/- per month per kW of lamp capacity installed.

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs./kW/M	VARIABLE CHARGES Rs./kWh	PYA 2021 Rs./kWh	Total Variable Charges Rs./kWh
	Street Lighting	A	B	C	D
		-	27.97	0.68	28.65

G - PUBLIC LIGHTING

Note: Tariff-F consumers will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of a new connection or at the beginning of the season. Once exercised, the option remains in force for at least one year.

125% of relevant industrial tariff

F - SEASONAL INDUSTRIAL SUPPLY TARIFF

For the categories of E-1(iii) above, the minimum bill of the consumers shall be Rs. 50/- per day subject to a minimum of Rs.500/- for the entire period of supply, even if no energy is consumed.

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs./kW/M	VARIABLE CHARGES Rs./kWh	PYA 2021 Rs./kWh	Total Variable Charges Rs./kWh
E-1(iii)	Residential Supply	-	28.69	0.68	29.37
E-1(ii)	Commercial Supply	-	24.67	0.68	25.35
E-2	Industrial Supply	-	26.69	0.68	27.37

E - TEMPORARY SUPPLY TARIFFS

Note: The consumers having sanctioned load less than 3 kW can opt for TOU metering.

Under this tariff, there shall be minimum monthly charges Rs.2000/- per consumer per month, even if no energy is consumed.

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs./kW/M	VARIABLE CHARGES Rs./kWh	PYA 2021 Rs./kWh	Total Variable Charges Rs./kWh
D-1(a)	SCARP less than 5 kW	-	24.30	0.68	24.98
D-2 (a)	Agricultural Tube Wells	200.00	24.30	0.68	24.98
D-2 (b)	SCARP 5 kW & above	200.00	27.69	0.68	28.37
D-2 (b)	Agricultural 5 kW & above	200.00	27.69	0.68	28.37
		Peak	Off-Peak	Peak	Off-Peak
		200.00	24.30	0.68	24.98
		200.00	27.69	0.68	28.37

D - AGRICULTURE TARIFF

SCHEDULE OF ELECTRICITY TARIFFS FOR FAISALABAD ELECTRIC SUPPLY COMPANY (FESCO)

Annes - IV

Description	July	August	September	October	November	December	January	February	March	April	May	June	Total
Units Purchased by DISCOs (GWh)	1,942	1,961	1,787	1,359	908	937	970	924	1,181	1,385	1,736	1,933	17,023

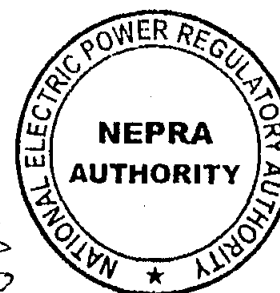
Rs./kWh

Fuel Cost Component	9.7441	9.8934	9.9114	9.1705	6.0762	9.3193	10.5541	7.2120	8.7122	8.3875	7.8281	7.5084	8.7915
Variable O&M	0.2198	0.2179	0.2288	0.2350	0.1599	0.2032	0.2433	0.1906	0.1935	0.2069	0.2031	0.2013	0.2107
Capacity	6.3841	6.3596	6.7822	9.9726	15.0989	14.1778	13.0127	14.6212	10.4718	10.9674	8.7716	8.2806	9.5437
UoSC	0.6893	0.6817	0.7059	0.9691	1.3216	1.2414	1.1647	1.2217	0.9743	0.8662	0.7377	0.7084	0.8739
Total PPP in Rs./kWh	17.0373	17.1527	17.6283	20.3471	22.6565	24.9417	24.9749	23.2456	20.3518	20.4281	17.5405	16.6986	19.4198

Rs. in million

Fuel Cost Component	18,919	19,404	17,707	12,459	5,518	8,733	10,241	6,662	10,287	11,618	13,593	14,512	149,656
Variable O&M	427	427	409	319	145	190	236	176	228	287	353	389	3,587
Capacity	12,395	12,473	12,117	13,549	13,712	13,286	12,627	13,506	12,365	15,192	15,231	16,005	162,459
UoSC	1,338	1,337	1,261	1,317	1,200	1,163	1,130	1,129	1,150	1,200	1,281	1,369	14,876
Total PPP in Rs./kWh	33,079	33,642	31,494	27,644	20,575	23,373	24,234	21,473	24,032	28,297	30,458	32,275	330,577

It is clarified that PPP is pass through for all the DISCOs and its monthly references would continue to exist irrespective of the financial year, unless the new SOT is revised and notified by the GoP



**TERMS AND CONDITIONS OF TARIFF
(FOR SUPPLY OF ELECTRIC POWER TO CONSUMERS BY DISTRIBUTION
LICENSEES)**

PART-I

GENERAL DEFINITIONS

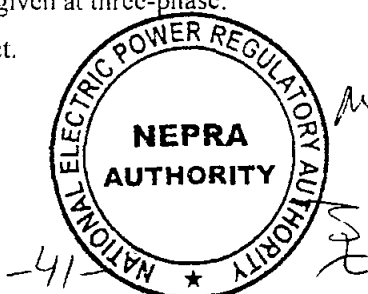
The Company, for the purposes of these terms and conditions means Faisalabad Electric Supply Company (FESCO) engaged in the business of distribution/supply of electricity within the territory mentioned in the licence granted to it for this purpose.

1. "Month or Billing Period", unless otherwise defined for any particular tariff category, means a billing month of 30 days or less reckoned from the date of last meter reading.
2. "Minimum Charge", means a charge to recover the costs for providing customer service to consumers even if no energy is consumed during the month.
3. "Fixed Charge" means the part of sale rate in a two-part tariff to be recovered on the basis of "Billing Demand" in kilowatt on monthly basis.
4. "Billing Demand" means the 50% of the sanction load or Actual maximum demand recorded in a month, whichever is higher, except in the case of agriculture tariff D2 where "Billing Demand" shall mean the sanctioned load.
5. "Variable Charge" means the sale rate per kilowatt-hour (kWh) as a single rate or part of a two-part tariff applicable to the actual kWh consumed by the consumer during a billing period.
6. "Maximum Demand" where applicable, means the maximum of the demand obtained in any month measured over successive periods each of 30 minutes' duration except in the case of consumption related to Arc Furnaces, where "Maximum Demand" shall mean the maximum of the demand obtained in any month measured over successive periods each of 15 minutes' duration.
7. "Sanctioned Load" where applicable means the load in kilowatt as applied for by the consumer and allowed/authorized by the Company for usage by the consumer.
8. "Power Factor" means the ratio of kWh to KVAh recorded during the month or the ratio of kWh to the square root of sum of square of kWh and kVARh,.
9. Point of supply means metering point where electricity is delivered to the consumer.
10. Peak and Off Peak hours for the application of Time Of Use (TOU) Tariff shall be the following time periods in a day:

	<u>* PEAK TIMING</u>	<u>OFF-PEAK TIMING</u>
Dec to Feb (inclusive)	5 PM to 9 PM	Remaining 20 hours of the day
Mar to May (inclusive)	6 PM to 10 PM	-do-
June to Aug (inclusive)	7 PM to 11 PM	-do-
Sept to Nov (inclusive)	6 PM to 10 PM	-do-

* To be duly adjusted in case of day light time saving

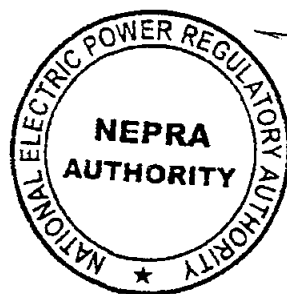
11. "Supply", means the supply for single-phase/three-phase appliances inclusive of both general and motive loads subject to the conditions that in case of connected or sanctioned load 5 kW and above supply shall be given at three-phase.
12. "Consumer" as defined in NEPRA Act.



13. "Charitable Institution" means an institution, which works for the general welfare of the public on no profit basis and is registered with the Federal or Provincial Government as such and has been issued tax exemption certificate by Federal Board of Revenue (FBR).
14. NTDC means the National Transmission and Despatch Company.
15. CPPA(G) means Central Power Purchasing Agency Guarantee Limited (CPPA)(G).
16. The "Authority" means "The National Electric Power Regulatory Authority (NEPRA)" constituted under the Regulation of Generation, Transmission and Distribution of Electric Power Act.

GENERAL CONDITIONS

1. "The Company shall render bills to the consumers on a monthly basis or less on the specific request of a consumer for payment by the due date.
2. The Company shall ensure that bills are delivered to consumers at least seven days before the due date. If any bill is not paid by the consumer in full within the due date, a Late Payment Charge of 10% (ten percent) shall be levied on the amount billed excluding Govt. tax and duties etc. In case bill is not served at least seven days before the due date then late payment surcharge will be levied after 7th day from the date of delivery of bill.
3. The supply provided to the consumers shall not be available for resale.
4. In the case of two-part tariff average Power Factor of a consumer at the point of supply shall not be less than 90%. In the event of the said Power factor falling below 90%, the consumer shall pay a penalty of two percent increase in the fixed charges determined with reference to maximum demand during the month corresponding to one percent decrease in the power factor below 90%.



PART-II

(Definitions and Conditions for supply of power specific to each consumer category)

A-1 RESIDENTIAL

Definition

"Life Line Consumer" means those residential consumers having single phase electric connection with a sanctioned load up to 1 kW.

The lifeline consumers to include residential Non-Time of Use (Non-ToU) consumers having maximum of last twelve months and current month's consumption ≤ 100 units; two rates for ≤ 50 and ≤ 100 units will continue.

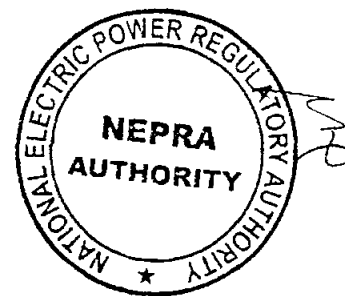
"Protected consumers" mean Non-ToU residential consumers consuming ≤ 200 kWh per month consistently for the past 6 months.

Residential Non-ToU consumers not falling under the protected category would be categorized under "Un-protected consumer category".

1. This Tariff is applicable for supply to;
 - i) Residences,
 - ii) Places of worship,
2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. A-1(a) tariff.
3. All new consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and shall be billed on the basis of tariff A-1(b) as set out in the Schedule of Tariff.
4. All existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and converted to A- 1(b) Tariff by the Company.

A-2 COMMERCIAL

1. This tariff is applicable for supply to commercial offices and commercial establishments such as:
 - i) Shops/Flower Nurseries/Cold Storage
 - ii) Hotels, Hostels and Restaurants.
 - iii) Petrol Pumps and Service Stations,
 - iv) Compressed Natural Gas filling stations,
 - v) Private Hospitals/Clinics/Dispensaries,
 - vi) Places of Entertainment, Cinemas, Theaters, Clubs;
 - vii) Guest Houses/Rest Houses,
 - viii) Office of Lawyers, Solicitors, Law Associates and Consultants etc.
 - ix) Electric Vehicle Charging Stations (EVCS)
2. Electric Vehicle Charging Stations shall be billed under A-2(d) tariff i.e. Rs./kWh for peak and off-peak hours. For the time being, the tariff design is with zero fixed charges, however, in future the Authority after considering the ground situation may design its tariff structure on two part basis i.e. fixed charges and variable charges.



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3. The Electric Vehicle Charging Station shall provide "charging service" to Electric Vehicle with a maximum cap as determined by the Authority from time to time. For the time being the Cap has been determined as Rs.50/kWh. The EVCS shall be billed by DISCOS under A-2(d) tariff. However, monthly FCAs either positive or negative shall not be applicable on EVCS.
4. Consumers under tariff A-2 having sanctioned load of less than 5 kW shall be billed under a Single-Part kWh rate A-2(a)
5. All existing consumers under tariff A-2 having sanctioned load 5 kW and above shall be billed on A-2(b) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariff A-2(c).
6. The existing and prospective consumers having load of 5 kW and above shall be provided T.O.U metering arrangement and shall be billed under tariff A-2(c).

A-3 GENERAL SERVICES

1. This tariff is applicable to;
 - i. Approved religious and charitable institutions
 - ii. Government and Semi-Government offices and Institutions
 - iii. Government Hospitals and dispensaries
 - iv. Educational institutions
 - v. Water Supply schemes including water pumps and tube wells other than those meant for the irrigation or reclamation of Agriculture land.

Consumers under General Services (A-3) shall be billed on single-part kWh rate i.e. A-3(a) tariff.

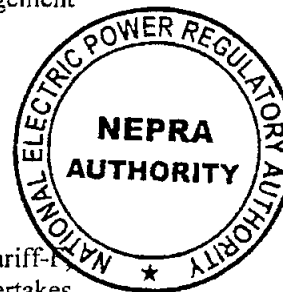
B INDUSTRIAL SUPPLY

Definitions

1. "Industrial Supply" means the supply for bona fide industrial purposes in factories including the supply required for the offices inside the premises and for normal working of the industry.
2. For the purposes of application of this tariff an "Industry" means a bona fide undertaking or establishment engaged in manufacturing, value addition and/or processing of goods.
3. This Tariff shall also be available for consumers having single-metering arrangement such as;
 - i) Poultry Farms
 - ii) Fish Hatcheries, fish farms, fish nurseries & Breeding Farms and
 - iii) Software houses

Conditions

An industrial consumer shall have the option, to switch over to seasonal Tariff-F, provided his connection is seasonal in nature as defined under Tariff-F, and he undertakes to abide by the terms and conditions of Tariff-F and pays the difference of security deposit rates previously deposited and those applicable to tariff-F at the time of acceptance of option for seasonal tariff. Seasonal tariff will be applicable from the date of commencement of the season, as specified by the customers at the time of submitting the option for Tariff-F. Tariff-F consumers will have the option to convert to corresponding Regular Industrial Tariff category and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.



B-1 SUPPLY AT 400 VOLTS THREEPHASE AND/OR 230 VOLTS SINGLE PHASE

1. This tariff is applicable for supply to Industries having sanctioned load upto 25 kW.
2. Consumers having sanctioned load upto 25 kW shall be billed on single-part kWh rate.
3. Consumers under tariff B-1 having sanctioned load of less than 5 kW shall be billed under a Single-Part kWh rate. However, B-1 consumers having sanctioned load of less than 5 kW may opt for ToU meter
4. The existing and prospective consumers having load of 5 kW and above shall be provided T.O.U metering arrangement and shall be billed under tariff B1(b).

B-2 SUPPLY AT 400 VOLTS

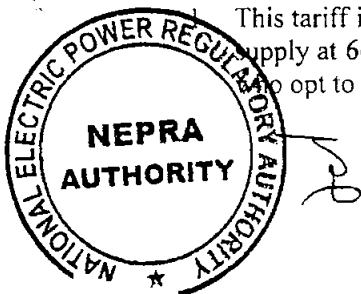
1. This tariff is applicable for supply to Industries having sanctioned load of more than 25 kW up to and including 500 kW.
2. All existing consumers under tariff B-2 shall be provided T.O.U metering arrangement by the Company and converted to B-2(b) Tariff.
3. All new applicants i.e. prospective consumers applying for service to the Company shall be provided T.O.U metering arrangement and charged according to the applicable T.O.U tariff.

B-3 SUPPLY AT 11 kV AND 33 kV

1. This tariff is applicable for supply to Industries having sanctioned load of more than 500 kW up to and including 5 MW and also for Industries having sanctioned load of 500 kW or below who opt for receiving supply at 11 kV or 33 kV.
2. The consumers may be allowed extension of load beyond 5MW upto 7.5MW from the DISCO's owned grid station subject to availability of load in the grid and capacity in the 11kV existing dedicated feeder. In such a case the consumer will bear 100% grid sharing charges including transmission line charges and 100% cost of land proportionate to load. However, only such consumers be allowed extension of load beyond 5MW upto 7.5MW whose connection is at least three (3) years old. While allowing extension in load, the DISCOs shall ensure that no additional line losses are incurred and additional loss, if any, shall be borne by the respective consumers.
3. If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
4. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the cost of service connection shall be regulated by the Eligibility Criteria laid down by the Authority read with Consumer Service Manual (CSM).
5. All B-3 Industrial Consumers shall be billed on the basis of T.O.U tariff given in the Schedule of Tariff.

B-4 SUPPLY AT 66 kV, 132 kV AND ABOVE

This tariff is applicable for supply to Industries for all loads of more than 5MW receiving supply at 66 kV, 132 kV and above and also for Industries having load of 5MW or below who opt to receive supply at 66 kV or 132 kV and above.



2. If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
3. If the Grid Station required for provision of supply falls within the purview of the dedicated system under the Eligibility Criteria laid down by the Authority read with CSM, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost of service connection shall be regulated by Eligibility Criteria laid down by the Authority read with CSM.
4. All B-4 Industrial Consumers shall be billed on the basis of two-part T.O.U tariff.

C BULK SUPPLY

"Bulk Supply" for the purpose of this Tariff, means the supply given at one point for self-consumption to mix-load consumer not selling to any other consumer such as residential, commercial, tube-well and others.

General Conditions

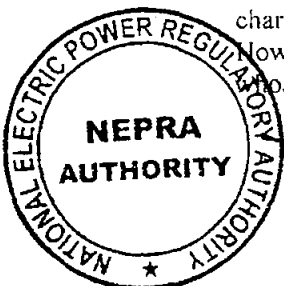
If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days no notice will be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days the fixed charges shall be assessed on proportionate basis for actual number of days between the date of old reading and the new reading.

C-1 SUPPLY AT 400/230 VOLTS

1. This Tariff is applicable to a consumer having a metering arrangement at 400 volts, having sanctioned load of up to and including 500 kW.
2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. C-1(a) tariff.
3. All new consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and shall be billed on the basis of Time-of-Use (T.O.U) tariff C-1(c) given in the Schedule of Tariff.
4. All the existing consumers governed by this tariff having sanctioned load 5 kW and above shall be provided T.O.U metering arrangements.

C-2 SUPPLY AT 11 kV AND 33 kV

1. This tariff is applicable to consumers receiving supply at 11 kV or 33 kV at one-point metering arrangement and having sanctioned load of more than 500 kW up to and including 5 MW.
2. The consumers may be allowed extension of load beyond 5MW upto 7.5MW from the DISCO's owned grid station subject to availability of load in the grid and capacity in the 11kV existing dedicated feeder. In such a case the consumer will bear 100% grid sharing charges including transmission line charges and 100% cost of land proportionate to load. However, only such consumers be allowed extension of load beyond 5MW upto 7.5MW whose connection is at least three (3) years old. While allowing extension in load, the



DISCOs shall ensure that no additional line losses are incurred and additional loss, if any, shall be borne by the respective consumers.

3. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the cost of service connection shall be regulated by the Eligibility Criteria laid down by the Authority read with CSM.
4. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff C-2(b) as set out in the Schedule of Tariff.
5. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to C-2(b).

C-3 SUPPLY AT 66 kV AND ABOVE

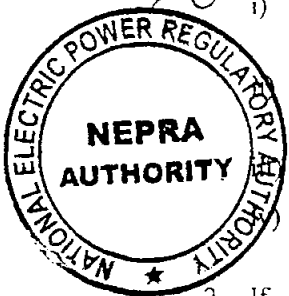
1. This tariff is applicable to consumers having sanctioned load of more than 5000 kW receiving supply at 66 kV and above.
2. If the Grid Station required for provision of supply falls within the purview of the dedicated system under the Eligibility Criteria laid down by the Authority read with CSM, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost of service connection shall be regulated by Eligibility Criteria laid down by the Authority read with CSM.
3. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to C-3(b).
4. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff C-3(b) as set out in the Schedule of Tariff.

D AGRICULTURAL SUPPLY

"Agricultural Supply" means the supply for Lift Irrigation Pumps and/or pumps installed on Tube-wells intended solely for irrigation or reclamation of agricultural land or forests, and include supply for lighting of the tube-well chamber.

Special Conditions of Supply

1. This tariff shall apply to:
 - i) Reclamation and Drainage Operation under Salinity Control and Reclamation Projects (SCARP):
Bona fide forests, agricultural tube-wells and lift irrigation pumps for the irrigation of agricultural land.
Tube-wells meant for aqua-culture.
Tube-wells installed in a dairy farm meant for cultivating crops as fodder and for upkeep of cattle.
2. If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this



acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.

3. The lamps and fans consumption in the residential quarters, if any, attached to the tube-wells shall be charged entirely under Tariff A-1 for which separate metering arrangements should be installed.
4. The supply under this Tariff shall not be available to consumer using pumps for the irrigation of parks, meadows, gardens, orchards, attached to and forming part of the residential, commercial or industrial premises in which case the corresponding Tariff A-1, A-2 or Industrial Tariff B-1, B-2 shall be respectively applicable.

D-1

1. This tariff is applicable to all Reclamation and Drainage Operation pumping under SCARP related installation.
2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. D-1(a) tariff given in the Schedule of Tariff.
3. All new consumers having sanctioned load 5 kW and above shall be provided TOU metering arrangement and shall be charged on the basis of Time-of- Use (T.O.U) tariff D-1(b) given in the Schedule of Tariff.
4. All the existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangements and shall be governed by D-1(a) till that time.

D-2

1. This tariff is applicable to consumers falling under Agriculture Supply excluding SCARP related installations.
2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. D-2(a) tariff given in the Schedule of Tariff.
3. All new consumers having sanctioned load 5 kW and above shall be provided TOU metering arrangement and shall be charged on the basis of Time-of- Use (T.O.U) tariff D-2(b) given in the Schedule of Tariff.
4. All the existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangements and shall be governed by D-2(a) till that time.

E-1 TEMPORARY RESIDENTIAL/COMMERCIAL SUPPLY

Temporary Residential/Commercial Supply means a supply given to persons temporarily on special occasions such as ceremonial, religious gatherings, festivals, fairs, exhibitions, political gathering, marriages and other civil or military functions. This also includes supply to touring cinemas and persons engaged in construction of house/buildings/plazas of single phase loads. A temporary electric power supply connection for the construction shall be provided by Distribution company initially for a period of six months which is further extendable on three month basis up to completion of the specific job/project for which the temporary connection was obtained. However, there is no minimum time period for provision of temporary connection. The temporary connection for illumination, lighting, weddings, festivals, functions, exhibitions, political gatherings or national and religious ceremonies, civil or military functions etc., testing of industrial equipment or any other emergent requirement of temporary nature, can be provided for specific time period not exceeding two weeks. The sanctioning officer shall ensure that the temporary connection will be utilized for temporary purpose only.

Special Conditions of Supply

This tariff shall apply to Residential and Commercial consumers for temporary supply.



2. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.

E -2 TEMPORARY INDUSTRIAL SUPPLY

“Temporary Industrial Supply” means the supply given to an Industry for the bonafide purposes mentioned under the respective definitions of “Industrial Supply”, during the construction phase prior to the commercial operation of the Industrial concern.

SPECIAL CONDITIONS OF SUPPLY

1. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.
2. Normally, temporary connections shall be allowed for a period of 3 months, which may be extended on three months basis subject to clearance of outstanding dues.

F SEASONAL INDUSTRIAL SUPPLY

“Seasonal Industry” for the purpose of application of this Tariff, means an industry which works only for part of the year to meet demand for goods or services arising during a particular season of the year. However, any seasonal industry running in combination with one or more seasonal industries, against one connection, in a manner that the former works in one season while the latter works in the other season (thus running throughout the year) will not be classified as a seasonal industry for the purpose of the application of this Tariff.

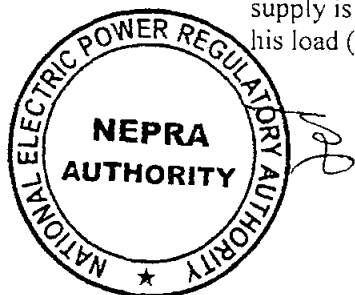
Definitions

“Year” means any period comprising twelve consecutive months.

1. All “Definitions” and “Special Conditions of Supply” as laid down under the corresponding Industrial Tariffs shall also form part of this Tariff so far as they may be relevant.

Special Conditions of Supply

1. This tariff is applicable to seasonal industry.
2. Fixed Charges per kilowatt per month under this tariff shall be levied at the rate of 125% of the corresponding regular Industrial Supply Tariff Rates and shall be recovered only for the period that the seasonal industry actually runs subject to minimum period of six consecutive months during any twelve consecutive months. The condition for recovery of Fixed Charges for a minimum period of six months shall not, however, apply to the seasonal industries, which are connected to the Company’s Supply System for the first time during the course of a season.
3. The consumers falling within the purview of this Tariff shall have the option to change over to the corresponding industrial Supply Tariff, provided they undertake to abide by all the conditions and restrictions, which may, from time to time, be prescribed as an integral part of those Tariffs. The consumers under this Tariff will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.
4. All seasonal loads shall be disconnected from the Company’s Supply System at the end of the season, specified by the consumer at the time of getting connection, for which the supply is given. In case, however, a consumer requires running the non-seasonal part of his load (e.g., lights, fans, tube-wells, etc.) throughout the year, he shall have to bring out



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separate circuits for such load so as to enable installation of separate meters for each type of load and charging the same at the relevant Tariff.

5. Where a "Seasonal Supply" consumer does not come forward to have his seasonal industry re-connected with the Company's Supply System in any ensuing season, the service line and equipment belonging to the Company and installed at his premises shall be removed after expiry of 60 days of the date of commencement of season previously specified by the consumer at the time of his obtaining new connection/re-connection. However, at least ten clear days notice in writing under registered post shall be necessary to be given to the consumer before removal of service line and equipment from his premises as aforesaid, to enable him to decide about the retention of connection or otherwise. No Supply Charges shall be recovered from a disconnected seasonal consumer for any season during which he does not come forward to have his seasonal industry re-connected with the Company's Supply System.

G PUBLIC LIGHTING SUPPLY

"Public Lighting Supply" means the supply for the purpose of illuminating public lamps. The supply under this tariff shall also be applicable for lamps used in public playgrounds and public parks.

Definitions

"Month" means a calendar month or a part thereof in excess of 15 days.

Special Conditions of Supply

The supply under this Tariff shall be used exclusively for public lighting installed on roads or premises used by General Public.

H RESIDENTIAL COLONIES ATTACHED TO INDUSTRIES

This tariff is applicable for one-point supply to residential colonies attached to the industrial supply consumers having their own distribution facilities.

Definitions

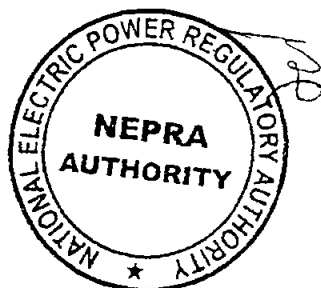
"One Point Supply" for the purpose of this Tariff, means the supply given by one point to Industrial Supply Consumers for general and domestic consumption in the residential colonies attached to their factory premises for a load of 5 Kilowatts and above. The purpose is further distribution to various persons residing in the attached residential colonies and also for perimeter lighting in the attached residential colonies.

"General and Domestic Consumption", for the purpose of this Tariff, means consumption for lamps, fans, domestic applications, including heated, cookers, radiators, air-conditioners, refrigerators and domestic tube-wells.

"Residential Colony" attached to the Industrial Supply Consumer, means a group of houses annexed with the factory premises constructed solely for residential purpose of the bonafide employees of the factory, the establishment or the factory owners or partners, etc.

Special Conditions of Supply

The supply under this Tariff shall not be available to persons who meet a part of their requirements from a separate source of supply at their premises.



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HSE Objectives/Targets

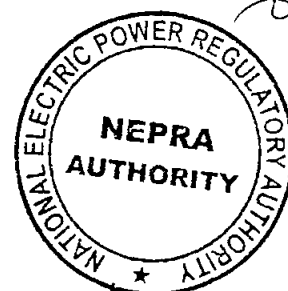
Definition

1. **Goal:** Goals are general guidelines that explain what needs to be achieved by the Licensee with management intervention, providing resources and support. Goals should be specific, measurable, attainable, realistic, and time-sensitive (SMART).
2. **Objective/Target:** Objectives/Targets define strategies or implementation steps to attain the identified goals. They are more specific and outline the "who, what, when, where, and how" of reaching the goals.
3. **KPI:** A Key Performance Indicator is a measurable value that demonstrates how effectively Licensee is achieving goals and objectives. Key Performance Indicators (KPIs) in numbers for the goals and objectives to review and monitor its status for effective implementation.

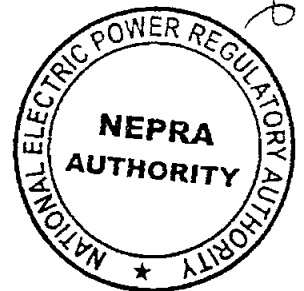
HSE Objectives/Targets

DISCO's HSE Goal: Improve public and employee safety to achieve zero fatality incidents.

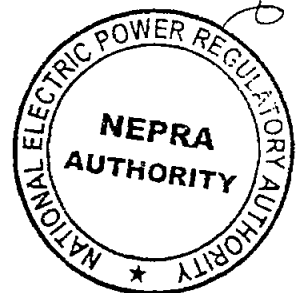
No.	Objective/Target	Key Performance Indicator
1.	Provide and maintain earthing/grounding to all HT/LT infrastructures, apparatus, and poles, along with stay wire. Earthing/grounding resistance shall be as per Distribution Design Code or manufacturer's instruction. In the absence of grounding instruction, the earthing resistance for HT/LT structures/ poles shall be not more than 5 Ohms and Distribution transformer shall be not more than 2.5 Ohms to determine the integrity of the grounding path to ensure protection from shock hazards. The earthing resistance for Grid Station/ Substation/ Switchyard equipment shall not be more than 2 Ohms. Verify integrity of fixed earthing/grounding by continuity and resistance measurement tests. In general, this cycle can range from 6 months to 3 years, depending on conditions and criticality. Wet locations testing should be 12 months and critical care shall be 6 months. Provide name	Earthing/grounding of infrastructures, apparatus, and poles, along with stay wire until June 30, 2022.
		Periodic verification of integrity of earthing/grounding.
		On the basis of periodic continuity and resistance measurement tests, continually repair/rectify deteriorated earthing/grounding system within one month.



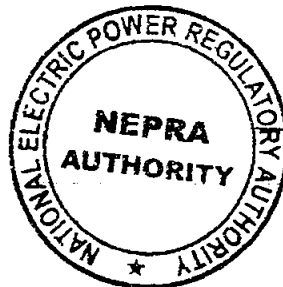
No.	Objective/Target	Key Performance Indicator
	plate/ tag to all structures/ poles/ equipment's with numbers for tracking of earthing/ grounding testing record, etc. Original record of testing with structures/ poles/ equipment's numbers shall be retained and preserved by licensee for three (03) years.	
2.	Replace all substandard RORA fuses in each subdivision with standard fuses in accordance with approved design such as a high rupturing capacity fuse of standard size and rating. Install only standard fuses every time.	Installation of standard fuses until June 30, 2022.
3.	Conduct annual survey in each subdivision to identify hazardous points, deteriorated systems, hardware and conductors. Implement rehabilitation program to rectify/replace hazardous points, deteriorated systems, hardware and conductors.	Survey report of each subdivision until the end of each fiscal year. On the basis of survey report, rectify/replace hazardous points, deteriorated systems, hardware and conductors within three months.
4.	Conduct survey in each subdivision to identify conductors in narrower/ congested areas having less clearance from houses/ buildings. Re-organize/re-position or Install insulated conductors (aerial bundled cables/conductors) to achieve minimum horizontal and vertical safe clearance.	Survey report of each subdivision until the end of each fiscal year. On the basis of survey report, re-organize/re-position or install insulated conductors within three months.
5.	Conduct survey to identify substandard/obsolete electromechanical relays/protections for abnormal conditions (short-circuits, overloading, ground fault, broken conductor features, etc.) whose failure can result in serious injuries. Replace substandard/obsolete electromechanical relays/protections with high speed digital/programmable relays/protections.	Survey report until the end of each fiscal year. On the basis of survey report, replace relays/ protections within three months.
6.	Conduct a need assessment for authorized workshops. Establish authorized workshops with repair facilities having	Workshop Need Assessment Report until June 30, 2022.



No.	Objective/Target	Key Performance Indicator
	testing facilities for transformer reliability and integrity to ensure fitness.	Established authorized workshops as per report until Dec 31, 2022.
7.	<p>Arrange and maintain stock of following special PPE at each subdivision and Grid station for authorized employees/ contractors while working or handling energized systems against approved "Permit to Work" under the continuous direction and supervision of the job in-charge.</p> <ol style="list-style-type: none"> 1. Full Face Shield (polycarbonate or similar non-melting type) 2. Insulated gloves with sleeves rated for the voltage involved. 3. Arc Flash Kit for Arc Flash Protection such as Category 4 Arc Flash Resistant Suite, Arc Flash Hood Arc-rated Gloves and Arc-rated Fall Protection while working at high voltages (more than 420 V). <p>Arrange training at each subdivision and Grid station for these special PPE for authorized employees/ contractors. Ensure use of these special PPE in each subdivisions.</p>	<p>Maintain stock of full face shield, insulated gloves with sleeves and arc flash kit until June 30, 2022.</p> <p>Training by supplier until June 30, 2022.</p> <p>Use of full face shield, insulated gloves with sleeves and arc flash kit at each subdivision and Grid station until June 30, 2022.</p>
8.	<p>Arrange and maintain stock of Full Body Harness with front work positioning belt (positioning lanyard) along with double lanyard for 100% tie at each subdivision and Grid station for authorized employees/ contractors while working on height more than 6 feet/1.8 meter above the ground or impact level.</p> <p>Full Body Harness with front work positioning belt (positioning lanyard) along with double lanyard for 100% tie shall be used at heights more than 6 feet/1.8 meter above the ground when climbing poles, towers and structures including working through mobile elevated aerial platform, man-baskets,</p>	<p>Maintain stock of Full Body Harness with front work positioning belt (positioning lanyard) along with double lanyard until June 30, 2022.</p> <p>Training by supplier until June 30, 2022.</p> <p>Use of Full Body Harness at each subdivision and Grid station until June 30, 2022.</p>



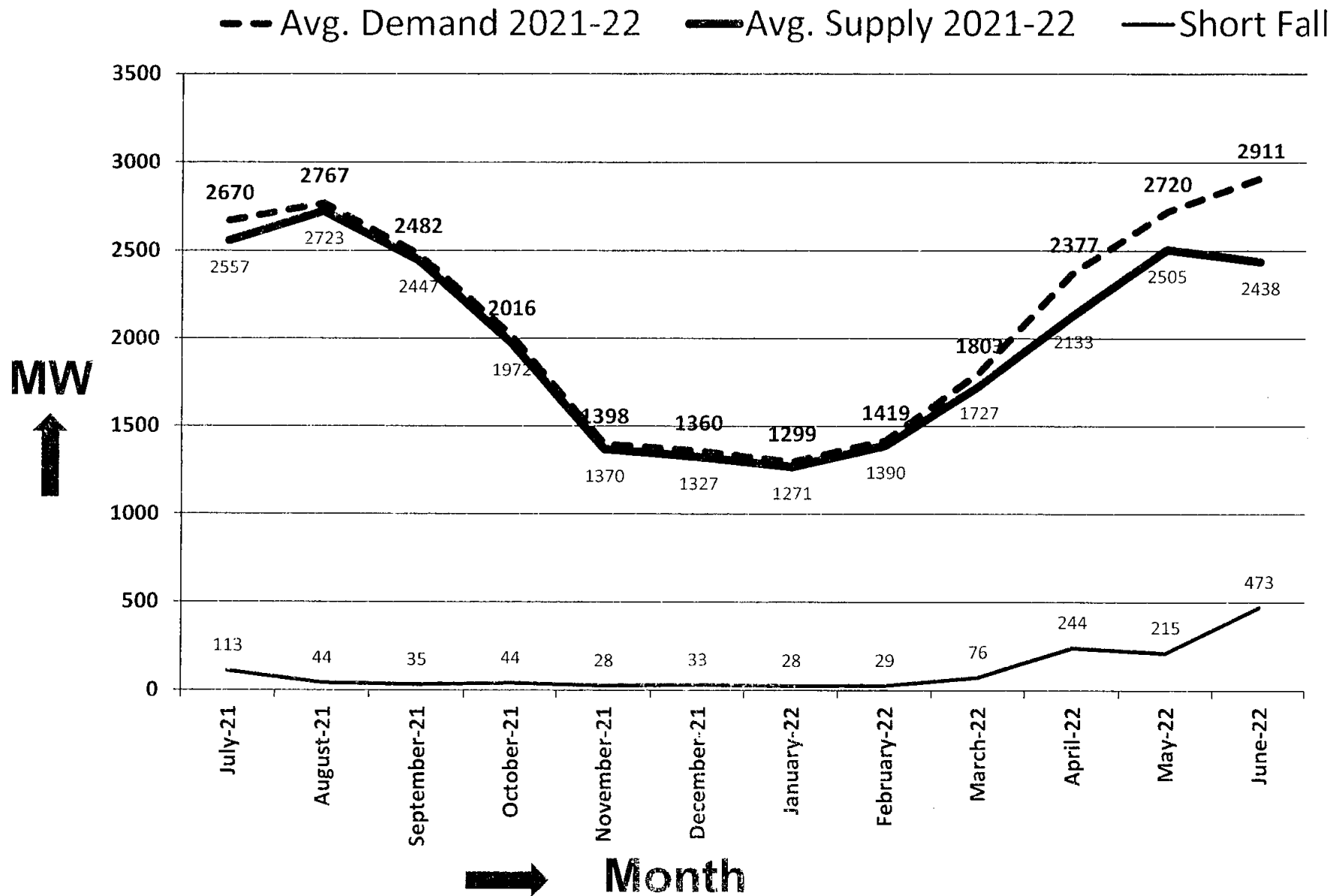
No.	Objective/Target	Key Performance Indicator
	<p>man-lift or bucket mounted vehicles. Full Body Harness with front work positioning belt is to allow an employee to be supported on an elevated vertical surface such as a wall or pole and to work with both hands free. Use of a body belt alone for fall arrest is prohibited. Full Body Harness with PVC coated hardware should be used when working in an explosive or electrically conductive environment. Anchor the safety harness lanyard on a rigged anchorage point at height, having a fall clearance safety factor of three (03) feet from impact level or ground level.</p> <p>Arrange training at each subdivision and Grid station for these special PPE for authorized employees/ contractors.</p> <p>Ensure use of these special PPE in each subdivision and Grid station.</p>	



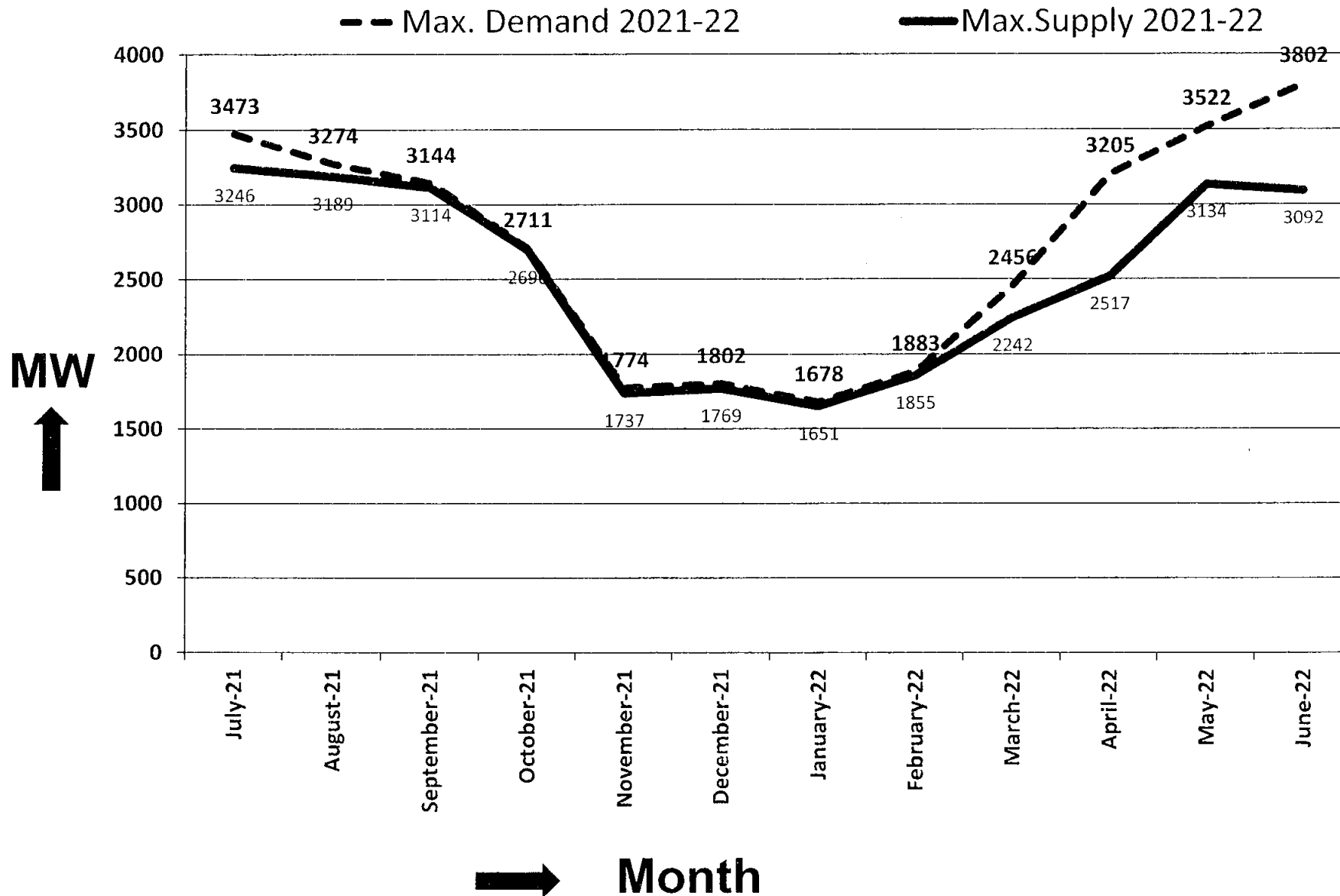
Handwritten signatures and initials: "H.A." and "D" with a checkmark.

Annex- F(iv)

Demand & Supply 2021-22 (AVG.)



Demand & Supply 2021-22 (MAX.)



Annex- F (v)

Central Power Purchasing Agency
– Market Operator



**Final Report on
Compliance
With Capacity Obligations**

2022

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Executive Summary

CPPA-G has been granted the Market Operator License by the Authority. Along with its license, the Authority has also approved the Market Commercial Code that governs the market.

The Market Commercial Code requires CPPA-G to determine the Capacity Obligations for each Market Participant and verify compliance with such obligations. The Commercial Code also requires that the Market Operator shall publish a report titled “Compliance with Capacity Obligations Report”, which shall include calculations performed, the information being utilized and the results of the verification. The report shall contain separate sections for the ex-ante and ex-post verifications, and analysis and evaluations for each Market Participant individually along with a summary of the most important conclusions. The report is also required to be published on Market Operator website.

Before the CMOD, NEPRA has required to issue the “Compliance with Capacity Obligations Report” report on trial basis. In compliance to the trial run plan, this report is being issued comprising the data inputs, calculations performed, the results of the verifications and recommendations based on the results. The report contains verification of the following types of Capacity Obligations.

- i. Ex-post Capacity Obligations
- ii. Ex-ante Capacity Obligations

The Ex-post Capacity Obligations have been performed based on the results of the Balancing Mechanism for Capacity (BMC) for the year 2022. The Ex-ante Capacity obligations have been performed for the years 2023 up to 2027.

The Capacity Obligations have been determined based on the Power Market Survey (PMS) methodology based demand forecasts being provided by the Ex-WAPDA DISCOs in their role as Suppliers of Last Resort. The projects planned to be procured in the future by the EX-WAPDA DISCOs have been considered as the committed projects in the approved IGCEP 2021. The results of the verification are given in **Table 1** below.

Table 1: Capacity Obligations Compliance Matrix

#.	Market Participant ID	Market Participant Name	Ex-Post Compliance		Ex-Ante Compliance			
			2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
1	2	IESCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
2	3	IESCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
3	4	IESCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
4	5	GEPCO	Compliance	Compliance	Minor Non-Compliance	Serious Non-Compliance	Compliance	Compliance
5	6	IIESCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
6	7	SEPCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
7	8	MEPCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
8	9	PIESCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance
9	10	TESCO	Compliance	Compliance	Compliance	Minor Non-Compliance	Compliance	Compliance
10	11	QESCO	Compliance	Compliance	Compliance	Compliance	Compliance	Compliance

This report is being circulated as the final report on the compliance with capacity obligations.

Part 1: Introduction

As per approved design of the CTBCM and the provisions of the Market Commercial Code, all market participants representing demand must contribute, according to their share, to the secure and reliable supply of the power system by planning and contracting in advance enough available generation and reserve resources to meet their demand. The Balancing Mechanism for Capacity also contributes in achieving this objective. Also, the network service providers will contribute in achieving this objective by planning and ensuring network upgrade and expansion sufficiently in advance to ensure that the committed power is efficiently dispatched and there are no congestions and constraints in the network.

Capacity obligations is a very important aspect of the CTBCM as it ensures that sufficient capacity is procured in advance to meet the actual system needs to avoid any deficit or surplus in the future. Capacity obligations will be strictly observed, and non-compliance will be taken very seriously and will be dealt as per provisions of the Commercial Code.

For this trial run, the Capacity Obligations will only be calculated for the EX-WAPDA DISCOs in their role as Suppliers of Last Resort as they are the only market participants representing demand. As per the provisions of the commercial code, the Suppliers of Last Resorts are required to have enough capacity contracted in advance to cover 100% of their Capacity Obligations next 3 years, 80% for the 4th year and 60% for the 5th year.

Part 2: Data Inputs

The following data inputs are required to determine the Capacity Obligations:

- i. **Demand Forecast of the Market Participants:** This information was obtained from the respective market participants i.e. EX-WAPDA DISCOs.
- ii. **Existing Contracts of the Market Participants:** As currently only Legacy Generators are operating in the market, therefore the allocation factors given in the commercial code were utilized to establish the contracts between the Legacy Generators and EX-WAPDA DISCOs.
- iii. **Future Contracts/Projects of the Market Participants:** As only the EX-WAPDA DISCOs are currently the market participants having capacity obligations, therefore, the committed projects in the IGCEP 2021 were considered as the future/planned projects for the DISCOs.
- iv. **Capacity Obligations Percentage for each type of Market Participant:** The values given in the commercial code were utilized for this purpose.
- v. **Transmission Losses of NTDC:** This value was obtained from the latest tariff determination of NEPRA for NTDC.
- vi. **Reserve Margin:** The value given in the commercial code was utilized for this purpose.

Further details regarding the process to obtain this data from different sources are given below:

Part 3: Calculation Methodology

The following steps were performed in order to determine the Capacity Obligations and then verify where market participants are compliant with such obligations or not.

Step 1: Submission of Demand Forecast by the Market Participants and its review by the Market Operator

As per provisions of the Market Commercial Code, all EX-WAPDA DISCOs were required to submit their demand forecasts for the period 2023 up to 2027 for the calculation of capacity obligations. CPPA-G issued letters to all DISCOs to submit their demand forecast for the aforementioned period. In response to CPPA-G's request, all the EX-WAPDA DISCOs submitted their demand forecast via electronic mail.

CPPA-G reviewed the demand forecasts submitted by the EX-WAPDA DISCOs. During the review, the following points were observed:

- i. This forecast was developed by EX-WAPDA DISCOs by utilizing the Power Market Survey (PMS) methodology, which is based on the bottom-up approach.
- ii. The process of preparation of demand forecast was also facilitated by NTDC.
- iii. The forecast covers the horizon from year 2020-21 up to 2030-31.
- iv. 2020-21 has been taken as the base year and the forecast horizon is ten years up to 2030-2031.
- v. Table 1-1 of the submitted report contains the peak demand data which was utilized for determination of the Capacity Obligations.

As per the draft Capacity Obligations CCOP, the following checks were performed on the submitted information and the results are summarized in **Table 2** below.

Table 2: Verification Checks applied on Demand Forecast

#	Check	Compliance	Result
1	The demand forecast submitted by the Suppliers of Last Resort is consistent with the demand forecast submitted to the Authority in the latest approved Power Acquisition Programme;	There is no approved Power Acquisition Programme, so this check can't be performed.	N/A
2	The demand values for year 0 (current year) is consistent with the demand values registered in the previous year;	All DISCOs have assumed reasonable growth rates and the values are consistent	Passed
3	The demand values consistently increase or remain constant over the reporting period;	All DISCOs have reported consistently increasing demand.	Passed

#	Check	Compliance	Result
4	The demand growth rate of the Suppliers of Last Resort is consistent with the growth rates used by the Planner in the latest approved Indicative Generation Capacity Expansion Plan;	It was observed that both growth rates are consistent.	Passed
5	The load factor (average hourly consumed energy divided by the absolute maximum demand) is not lower than 0.25 nor higher than 0.80, except in the case of Traders with contracts involving Firm Capacity for Firm Export;	The Load Factor of All DISCOs is within the range as specified.	Passed
6	The absolute maximum demand and the maximum demand during System Peak Hours are not lower than 5% from the respective values registered in previous years, except in the case of Traders with Traders with contracts for Firm Export.	No DISCO have reported any decreasing trend in their demand forecasts.	Passed
7	The maximum demand during Peak Hours is not lower than 85% of the absolute maximum demand	All DISCOs have reported their peak during the System Peak Hours.	Passed
8	There should be consistency between the demand forecasts of the Competitive Suppliers and the forecasts prepared by the Suppliers of Last Resort, particularly in relation to the execution/extension of Bilateral Contracts which are finalized during the reporting period by both types of suppliers.	Since no competitive supplier exists at this time, therefore, this check can't be applied	N/A

As depicted in the above table, the submitted demand forecast passed all the checks and verifications and was utilized for the calculation of the Capacity Obligations. The values utilized for this purpose are given in **Table 3**.

Table 3: Peak Demand Forecast of EX-WAPDA DISCOs

Disco	Peak Demand (MW)					
	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
IESCO	2,332	2,479	2,657	2,881	3,110	3,353
LESCO	4,704	4,974	5,211	5,436	5,678	5,928
HESCO	1,245	1,292	1,341	1,389	1,436	1,481
SEPCO	1,040	1,069	1,099	1,130	1,161	1,193
GEPCO	2,739	2,880	3,045	3,218	3,398	3,584
MEPCO	4,469	4,747	5,022	5,292	5,563	5,840
PESCO	2,407	2,525	2,741	2,887	2,988	3,080
TESCO	476	498	524	550	580	612
QESCO	1,118	1,172	1,220	1,267	1,320	1,374
FESCO	3,359	3,660	3,886	4,086	4,322	4,569

Step 2: Calculation of Capacity Obligations

The Capacity Obligations for each Supplier of Last Resort have been calculated in accordance with the following formula as given in Chapter 10 of the Commercial Code:

$$CO_{BSI,p} = \frac{MD_{PHI,p}}{(1 - Tloss_p)} * (1 + RM_p) * OB\%_{BS,p} / 100.$$

Where:

- $CO_{BSI,p}$ is the Capacity Obligation of the Supplier of Last Resort “i” in the period “p” which will be verified by the Market Operator
- $MD_{PHI,p}$ is the Maximum Demand at System Peak Hours of the Supplier of Last Resort “i” in the period “p”. The value of $MD_{PHI,p}$ will be the forecasted Maximum Demand at System Peak Hours, submitted by the involved Supplier of Last Resort to the Market Operator, for the current year and all periods immediately thereafter;
- $OB\%_{BS,p}$ is the Capacity Obligation Percentage, applicable to Suppliers of Last Resort, corresponding to period “p”
- $Tloss_p$ is the value of the cap (expressed in percentage) on Transmission losses of NTDG as determined by the Authority in the latest tariff determination.
- RM_p is the Reserve Margin applicable to period “p”.

The following values were utilized in order to calculate the Capacity Obligations as per above formula:

1. The Maximum Demand at the System Peak Hours of each Supplier of Last Resort ($MD_{PHI,p}$) was obtained from the values given in **Table 3** above.
2. The Capacity Obligation Percentage, applicable to each Supplier of Last Resort ($OB\%_{BS,p}$) for each year was obtained from Table 4 of the Commercial Code. The same is reproduced below.

Table 4: Capacity Obligations of Suppliers of Last Resort

Period		Capacity Obligations (In % of the registered or forecasted Maximum Demand at System Peak Hours)
Ex-post compliance with the Capacity Obligations	Previous year ¹	100
	Current year ²	100
Ex-ante compliance with the Capacity Obligations	Year 1 ³	100
	Year 2	100
	Year 3	80
	Year 4	60

3. The value of the cap (expressed in percentage) on Transmission losses of NTDC as determined by the Authority in the latest tariff determination was obtained from the Authority Determination **NEPRA/R/ADG(TRF)/TRF-533/NTDC-2020/17537-17539 dated September 16,2022**. This value is equal to **2.639%**.
4. For Reserve Margin (RM_p), the value of 10% as given in Clause 9.2.4.3 of the Commercial Code was utilized.

The Capacity Obligations determined for each EX-WAPDA DISCO based on the data as described above have been given in **Table 5** below.

Table 5: Capacity Obligation of EX-WAPDA DISCOs

#.	Market Participant ID	Market Participant Name	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
1	2	IESCO	5,314	5,619	5,887	6,141	5,132	4,018
2	3	IESCO	2,634.7	2,800.81	3,001.92	3,255.00	2,810.98	2,272.96
3	4	FESCO	3,795.0	4,135.13	4,390.46	4,616.43	3,906.45	3,097.28
4	5	GEPCO	3,094.5	3,253.87	3,440.29	3,635.75	3,071.29	2,429.56
5	6	HESCO	1,406.6	1,459.72	1,515.08	1,569.31	1,297.93	1,003.95
6	7	SEPCO	1,175.0	1,207.77	1,241.67	1,276.69	1,049.37	808.72
7	8	MEPCO	5,049.1	5,363.24	5,673.94	5,978.99	5,028.13	3,958.87
8	9	PESCO	2,719.4	2,852.78	3,096.83	3,261.78	2,700.71	2,087.90
9	10	TESCO	537.7	562.65	592.02	621.40	524.23	414.87
10	11	QESCO	1,263.1	1,324.14	1,378.38	1,431.48	1,193.09	931.42

Step 3: Ex-ante Verification of Capacity Obligations

In order to check compliance with the Capacity Obligations calculated in Step 2 above, the following information was utilized:

- i. For Bilateral Contracts of the EX-WAPDA DISCOs, the Market Operator required all Ex-WAPDA DISCOs to submit information regarding contracts that they have bilaterally executed with the generation plants. Installed Capacities of all such projects were considered for checking compliance with the Capacity Obligations.
- ii. For the Legacy Contracts, the Firm Capacity Certificates were calculated using the provisions of Chapter 8 of the Commercial Code.
- iii. For allocation of the Firm Capacity certificates of Legacy Generators, the factors given in Table 8 of Commercial Code were utilized. The table is reproduced below (**Table 9**).

- iv. For future planned projects, the committed projects in the approved IGCEP 2021 were considered.

Step 3.1: Firm Capacity Certificates of existing Legacy Generators

Following assumptions were made while considering the firm capacities of the Legacy Generators:

- 1- There were plants whose availability was zero in the last three years even though their PPA is intact. The Firm Capacity of such plants has been considered Zero.
- 2- Retirements of existing Legacy Generators have been considered as per the approved IGCEP.
- 3- Due to the non-availability of data:
 - a. For Gulpur (MIRA), Capacity factor of Malakand-III is used.
 - b. Teenaga, Dawood, and Zephyr have been given the capacity factor of Jhimpir Wind Power Plant.
 - c. Bagasse firm capacity is taken the same as that of installed capacity.
 - d. AJ power and Harappa Solar are given a 0.22 capacity factor.

The Firm Capacities of the existing Legacy Generators have been given in **Table 6** below.

Table 6: Firm Capacities of Existing Legacy Generators

#	Projects	Technology	Initial Firm Capacity (MW)	#	Projects	Technology	Initial Firm Capacity (MW)
1	EPTL	Thermal	527.09	2	Gomal Zam	Hydel	7.87
3	FPCDL	Thermal	157.81	4	Rasul	Hydel	8.3
5	HPGCL	Thermal	161.79	6	Dargai	Hydel	14.56
7	HSR	Thermal	1158.22	8	Nandipur	Hydel	5.85
9	LPTL	Thermal	183.59	10	Shadiwal	Hydel	3.46
11	NEL	Thermal	196.7	12	Chichoki	Hydel	4.47
13	Balloki	Thermal	1000.9	14	Kuram garhi	Hydel	3.35
15	HBS	Thermal	1975.7	16	Renala	Hydel	0.97
17	NCPL	Thermal	170.89	18	Chitral	Hydel	0.97
19	NPL	Thermal	176.8	20	Jabban	Hydel	20.28
21	OPCL	Thermal	187.53	22	Jagran	Hydel	27.27
23	PQEPC	Thermal	1225.04	24	Malakand-III	Hydel	75.36
25	QATPL	Thermal	1033.06	26	New Bong Escape	Hydel	67.82
27	SPL	Thermal	139.28	28	Patrind	Hydel	129.09
29	SECL	Thermal	186.26	30	Daral khwar	Hydel	2
31	UCH-II	Thermal	335.68	32	Gul pur	Hydel	93

#.	Projects	Technology	Initial Firm Capacity (MW)	#.	Projects	Technology	Initial Firm Capacity (MW)
33	KAPCO	Thermal	1458.5	34	ACT	Wind	15.39
35	AEL	Thermal	10.796	36	Artistic	Wind	24.52
37	SABA	Thermal	101.6816475	38	FFCEL	Wind	18.91
39	HUBCO	Thermal	1158.249	40	FWEL-1	Wind	20.29
41	LIBERTY	Thermal	200.863	42	FWEL-2	Wind	21.88
43	FKPCL	Thermal	113.897	44	Gul ahmad	Wind	17.72
45	ROUSCH	Thermal	410.696	46	Hawa	Wind	26.28
47	KEL	Thermal	118.027	48	Jhimpir	Wind	27.4
49	AES Lalpir	Thermal	302.4822121	50	Master	Wind	23.04
51	AES Pakgen	Thermal	303.6291582	52	Metro	Wind	18.45
53	HCPC	Thermal	106.057	54	Sachal	Wind	20.47
55	UCH	Thermal	577.172	56	Sapphire	Wind	22.01
57	Guddu	Thermal	507.7416998	58	TGF	Wind	21.04
59	Guddu 747	Thermal	558.9548322	60	TGS	Wind	22.9
61	Jamshoro	Thermal	581.3000911	62	TGT	Wind	21.89
63	Nandipur	Thermal	445.9847094	64	Tricon-A	Wind	27.62
65	Muzaffargarh	Thermal	687.1857336	66	Tricon-B	Wind	27.07
67	Agar textile	SPP	2.12	68	Tricon-C	Wind	26.74
69	Lucky cement	SPP	29.7	70	UEP	Wind	41.15
71	Thatta Cement	SPP	45	72	Yunus	Wind	20.63
73	Al-noor sugar mill	SPP	36	74	ZEPL	Wind	21.7
75	kumhariwala	SPP	2.82	76	Tenaga	Wind	27.4
77	Noon Sugar	SPP	14	78	Dawood	Wind	27.4
79	Anoond	SPP	10	80	Zephyre	Wind	27.4
81	Omni	SPP	12.8	82	JDW-II	Bagasse	26
83	Tarbela	Hydel	3,478.00	84	JDW-III	Bagasse	27
85	Tarbela Ext 4	Hydel	1,410.00	86	RYKML	Bagasse	30
87	Mangla	Hydel	1,000.00	88	Chiniot Power	Bagasse	63
89	Ghazi Brotha	Hydel	1,081.04	90	Hamza Sugar	Bagasse	15

#.	Projects	Technology	Initial Firm Capacity (MW)	#.	Projects	Technology	Initial Firm Capacity (MW)
91	Warsak	Hydel	179.77	92	Thall Power	Bagasse	25
93	Chashma	Hydel	98.44	94	Almotz Industries	Bagasse	36
95	Jinnah	Hydel	19.18	96	Chanar Energy	Bagasse	22
97	Allai khwar	Hydel	80.21	98	Chashnupp - II	Nuclear	302.53
99	Khan khwar	Hydel	30.75	100	Chashnupp - III	Nuclear	311
101	Dubair Khwar	Hydel	111.6	102	Chashnupp - IV	Nuclear	304.58
103	Neelam Jhelam	Hydel	801.98	104	K-2	Nuclear	996.15
105	Golengole	Hydel	14.29	106	Quaid e Azam	Solar	28.75
107	Apollo	Solar	28.78	108	Crest Energy	Solar	29.47
109	Best Green	Solar	28	110	AJ Power	Solar	2.64
111	Harappa	Solar	3.96	112	Master Green	Wind	15.00
113	Tricom	Wind	15.00	114	Jhing	Hydel	12.24
115	Muralla HPP	Hydel	6.48	116	Pakpattan	Hydel	2.397
117	APL	Thermal	199.70	118	AGL	Thermal	150.29
119	CPH	Thermal	1038.34	120	EPQL	Thermal	193.83

Step 3.2 Firm Capacity Certificates of planned projects

As described above, the committed projects in the approved IGCEP-2021 have been considered as planned projects for the DISCOs. These projects have also been allocated among the EX-WAPDA DISCOs using the Allocation Factors as given in Table 10 of the Commercial Code. For the calculation of the Firm Capacities, the Equivalent Availability Factors as given in Table 1 of the Commercial Code (reproduced below) were utilized. For run-of-river hydro projects, a 0.85 Equivalent Availability Factor was utilized.

Table 7: Equivalent Availability Factors

Sr. No.	Generation Technology	Equivalent Availability Factor
1	Dispatchable Technologies	
1.1	Hydro with reservoir	0.92
1.2	Thermal (either liquid fuels, gas or coal fired)	0.92
1.3	Bagasse	0.92
1.4	Thermal Solar	0.87
1.5	Nuclear	0.87
2	Non-dispatchable Technologies	
2.1	Hydro run of river	Based on the feasibility study
2.2	Wind	0.30
2.3	Solar PV	0.22

The Firm Capacities of Planned Projects calculated by utilizing the above equivalent availability factors have been given in **Table 8** below.

Table 8: Firm Capacities of Planned Projects

#	Name of Committed Project	Fuel Type	Installed Capacity (MW)	Firm Capacity (MW)	Expected Schedule of Commissioning
1	Ranolia	Hydro	17	14.45	Dec-21
2	Lucky	Local Coal	660	607.2	Jan-22
3	Jabori	Hydro	10.2	8.67	Dec-21
4	Karora	Hydro	11.8	10.03	Mar-22
5	Metro_Wind	Wind	60	18	Dec-21
6	Lakeside	Wind	50	15	Dec-21
7	NASDA	Wind	50	15	Dec-21
8	Artistic_Wind_2	Wind	50	15	Dec-21
9	Din	Wind	50	15	Dec-21
10	Gul_Electric	Wind	50	15	Dec-21
11	Act_2	Wind	50	15	Dec-21
12	Liberty_Wind_1	Wind	50	15	Dec-21
13	Liberty_Wind_2	Wind	50	15	Dec-21
14	Indus_Energy	Wind	50	15	Dec-21
15	Zhenfa	Solar	100	22	Dec-21
16	Trimmu	CCGT_RLNG	1,263	1161.96	Jan-22
17	K-3	Nuclear	1,145	996.15	Jan-22
18	Thar TEL	Local Coal	330	303.6	Mar-22
19	Helios	Solar	50	11	Mar-22
20	HNDS	Solar	50	11	Mar-22
21	Meridian	Solar	50	11	Mar-22

#	Name of Committed Project	Fuel Type	Installed Capacity (MW)	Firm Capacity (MW)	Expected Schedule of Commissioning
22	Thar-I (SSRL)	Local Coal	1,320	1214.4	May-22
23	Jagran-II	Hydro	48	40.8	May-22
24	Thal Nova	Local Coal	330	303.6	Jun-22
25	Karot	Hydro	720	612	Jun-23
26	Access_Electric	Solar	11	2.42	Aug-22
27	Access_Solar	Solar	12	2.64	Aug-22
28	Jamshoro Coal (Unit-I)	Imported Coal	660	607.2	Oct-22
29	Lawi	Hydro	69	58.65	Apr-24
30	Gorkin Matiltan	Hydro	84	71.4	Jul-23
31	Zorlu	Solar	100	22	Jun-23
32	Siachen	Solar	100	22	Jun-23
33	Gwadar	Imported Coal	300	276	Jun-23
34	Siddiqsons	Local Coal	330	303.6	Jun-23
35	Suki Kinari	Hydro	884	751.4	Jun-23
36	Riali-II	Hydro	7	5.95	Jul-23
37	Safe	Solar	10	2.2	Sep-23
38	Western	Wind	50	15	Nov-23
39	Trans_Atlantic	Wind	48	14.4	Dec-23
40	Alliance	Bagasse	30	27.6	Dec-23
41	Bahawalpur	Bagasse	31.2	28.704	Dec-23
42	Faran	Bagasse	27	24.84	Dec-23
43	Hamza-II	Bagasse	30	27.6	Dec-23
44	HSM	Bagasse	26.5	24.38	Dec-23
45	Hunza	Bagasse	50	46	Dec-23
46	Indus	Bagasse	31	28.52	Dec-23
47	Ittefaq	Bagasse	31	28.52	Dec-23
48	Kashmir	Bagasse	40	36.8	Dec-23
49	Mehran	Bagasse	27	24.84	Dec-23
50	RYK_Energy	Bagasse	25	23	Dec-23
51	Shahtaj	Bagasse	32	29.44	Dec-23
52	Sheikhoo	Bagasse	30	27.6	Dec-23
53	TAY	Bagasse	30	27.6	Dec-23
54	Two_Star	Bagasse	50	46	Dec-23
55	Tarbela_Ext_5	Hydro	1,530	1300.5	May-24
56	Chapari Charkhel	Hydro	10.56	8.976	Mar-24
57	CASA	Cross Border Interconnection	1,000	1000	Aug-24
58	Kathai-II	Hydro	8	6.8	Dec-24

#	Name of Committed Project	Fuel Type	Installed Capacity (MW)	Firm Capacity (MW)	Expected Schedule of Commissioning
59	Dasu_1	Hydro	2,160	1836	Nov-25
60	Mohmand	Hydro	800	680	Apr-26
61	Koto	Hydro	40.8	34.68	Dec-21
62	Chianwali HPP	Hydro	5.38	4.573	Dec-21
63	Chamfall	Hydro	3.2	2.72	Mar-22
64	Deg Outfall	Hydro	4.04	3.434	Jun-22
65	Manjhand	Solar	50	11	Sep-23
66	Harpo	Hydro	34.5	29.325	Apr-27
67	Keyal Khwar	Hydro	128	108.8	Feb-27

Step 3.3: Allocation of Firm Capacity Certificates

The firm capacity certificates of installed and committed plants are allocated among DISCOs and KE. First, a fixed quantity of firm capacity certificates was subtracted for KE each year and then the remaining firm capacity certificates were allocated to DISCOs according to the allocation factor given in the commercial code. The Factors are reproduced in Table 10 below. According to the fixed quantity contract with KE, 14000 firm capacity certificates were subtracted from the year 2021-22. Similarly, 14000 firm capacity certificates were subtracted from the year 2022-23. From there onwards 20500 firm capacity certificates were subtracted each year. These values have been taken as incorporated by NTDC in the Power Market Survey (PMS) based consolidated demand forecast report for the NTDC System. The remaining Firm Capacity Certificates were allocated to each EX-WAPDA DISCO as per the Allocation Factors given in Table 9.

Table 9: Suppliers of Last Resort Allocation Factors

Supplier	Allocation Factor
LESCO	21.10%
GEPCO	9.82%
FESCO	13.09%
IESCO	10.15%
MEPCO	17.06%
PESCO	12.89%
HESCO	4.79%
QESCO	5.62%
TESCO	1.74%
SEPCO	3.73%
K-Electric	As per Bilateral Contract

The allocation of the Firm Capacity Certificates to EX-WAPDA DISCOs and KE as described above is presented in **Table 10**.

Table 10: Allocation of Firm Capacity Certificates

#.	Market Participant ID	Market Participant Name	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
1	2	LESCO	68,635	74,120	71,164	73,240	78,467	78,759
2	3	IESCO	33,017	35,655	34,233	35,232	37,746	37,886
3	4	FESCO	42,580	45,982	44,149	45,437	48,679	48,860
4	5	GEPCO	31,943	34,496	33,120	34,086	36,519	36,655
5	6	HESCO	15,581	16,826	16,155	16,627	17,813	17,879
6	7	SEPCO	12,133	13,103	12,580	12,947	13,871	13,923
7	8	MEPCO	55,494	59,928	57,538	59,217	63,443	63,679
8	9	PESCO	41,929	45,279	43,474	44,742	47,935	48,113
9	10	TESCO	5,660	6,112	5,869	6,040	6,471	6,495
10	11	QESCO	18,281	19,742	18,955	19,508	20,900	20,977
11	12	K-Electric	14,000	14,000	20,500	20,500	20,500	20,500

Step 3.4: Ex-ante Compliance with Capacity Obligations Report

For verification of compliance, the Capacity Obligations as calculated above are compared with the Firm Capacity Certificates allocated to each EX-WAPDA DISCO.

In case the value of the Firm Capacity Certificates allocated to an EX-WAPDA DISCO is above 98% of the Capacity Obligations of such EX-WAPDA DISCO, the obligations are considered fulfilled for that year. In case value of the Firm Capacity Certificates allocated to an EX-WAPDA DISCO is lower than 98% of the Capacity Obligation, the obligation is considered not fulfilled. The non-compliance is categorized as Minor and Serious Non-Compliance as per the following criteria:

1. **Minor Non-Compliance:** When the difference between the capacity obligation and credited capacity is below 5% during the year, it is categorized as minor non-compliant.
2. **Serious Non-Compliance:** When the difference between the capacity obligation and credited capacity is above 5% during the year, it is categorized as serious non-compliant.

The calculations performed as per the mechanism described above are presented in **Table 11** below.

Table 11: Ex-ante Compliance with Capacity Obligations

PESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	4527.98	4347.42	4474.26	4793.57	4811.37
Capacity Obligation (MW)	2852.78	3096.83	3261.78	2700.71	2087.90
Difference (MW)	1675.19	1250.59	1212.48	2092.86	2723.47
Difference (%)	58.72	40.38	37.17	77.49	130.44

IESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	3565.48	3423.30	3523.17	3774.61	3788.63
Capacity Obligation (MW)	2800.81	3001.92	3255.00	2810.98	2272.96
Difference (MW)	764.66	421.38	268.17	963.63	1515.66
Difference (%)	27.30	14.04	8.24	34.28	66.68

LESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	7411.97	7116.41	7324.03	7846.72	7875.87
Capacity Obligation (MW)	5619.70	5887.47	6141.68	5132.08	4018.53
Difference (MW)	1792.27	1228.94	1182.36	2714.65	3857.34
Difference (%)	31.89	20.87	19.25	52.90	95.99

FESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	4598.23	4414.87	4543.68	4867.94	4886.02
Capacity Obligation (MW)	4135.13	4390.46	4616.43	3906.45	3097.28
Difference (MW)	463.11	24.41	-72.75	961.49	1788.75
Difference (%)	11.20	0.56	-1.58	24.61	57.75

GEPCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	3449.55	3312.00	3408.63	3651.89	3665.45
Capacity Obligation (MW)	3253.87	3440.29	3635.75	3071.29	2429.56
Difference (MW)	195.68	-128.29	-227.12	580.60	1235.90
Difference (%)	6.01	-3.73	-6.25	18.90	50.87

MEPCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	5992.81	5753.84	5921.71	6344.32	6367.88
Capacity Obligation (MW)	5363.24	5673.94	5978.99	5028.13	3958.87
Difference (MW)	629.57	79.90	-57.28	1316.19	2409.01
Difference (%)	11.74	1.41	-0.96	26.18	60.85

SEPCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	1310.27	1258.02	1294.72	1387.12	1392.27
Capacity Obligation (MW)	1207.77	1241.67	1276.69	1049.37	808.72
Difference (MW)	102.50	16.35	18.03	337.75	583.55
Difference (%)	8.49	1.32	1.41	32.19	72.16

HESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	1682.62	1615.53	1662.66	1781.32	1787.93
Capacity Obligation (MW)	1459.72	1515.08	1569.31	1297.93	1003.95
Difference (MW)	222.90	100.44	93.35	483.39	783.98
Difference (%)	15.27	6.63	5.95	37.24	78.09

QESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	1974.18	1895.46	1950.76	2089.98	2097.74
Capacity Obligation (MW)	1324.14	1378.38	1431.48	1193.09	931.42
Difference (MW)	650.04	517.09	519.29	896.89	1166.32
Difference (%)	49.09	37.51	36.28	75.17	125.22

TESCO					
Year	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Credited Capacity (MW)	611.22	586.85	603.97	647.08	649.48
Capacity Obligation (MW)	562.65	592.02	621.40	524.23	414.87
Difference (MW)	48.58	-5.17	-17.43	122.84	234.61
Difference (%)	8.63	-0.87	-2.80	23.43	56.55

Based on the results depicted above, the compliance status for each EX-WAPDA DISCO for ex-ante Capacity Obligations has been depicted in **Table 12** below.

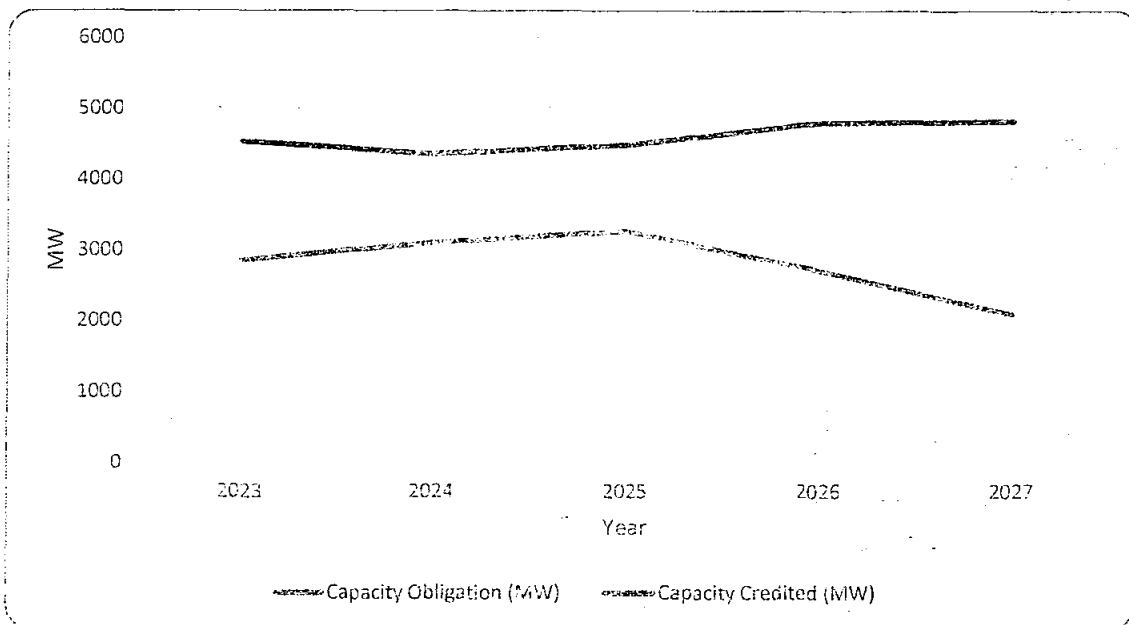
Table 12: Summary of Compliance with Capacity Obligations

#.	Market Participant ID	Market Participant Name	Ex-Ante Compliance				
			2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
1	2	LESCO	Compliance	Compliance	Compliance	Compliance	Compliance
2	3	IESCO	Compliance	Compliance	Compliance	Compliance	Compliance
3	4	FESCO	Compliance	Compliance	Compliance	Compliance	Compliance
4	5	GEPCO	Compliance	Minor Non-Compliance	Serious Non-Compliance	Compliance	Compliance
5	6	HESCO	Compliance	Compliance	Compliance	Compliance	Compliance
6	7	SEPCO	Compliance	Compliance	Compliance	Compliance	Compliance
7	8	MEPCO	Compliance	Compliance	Compliance	Compliance	Compliance
8	9	PESCO	Compliance	Compliance	Compliance	Compliance	Compliance
9	10	TESCO	Compliance	Compliance	Minor Non-Compliance	Compliance	Compliance
10	11	QESCO	Compliance	Compliance	Compliance	Compliance	Compliance

Part 4: Results

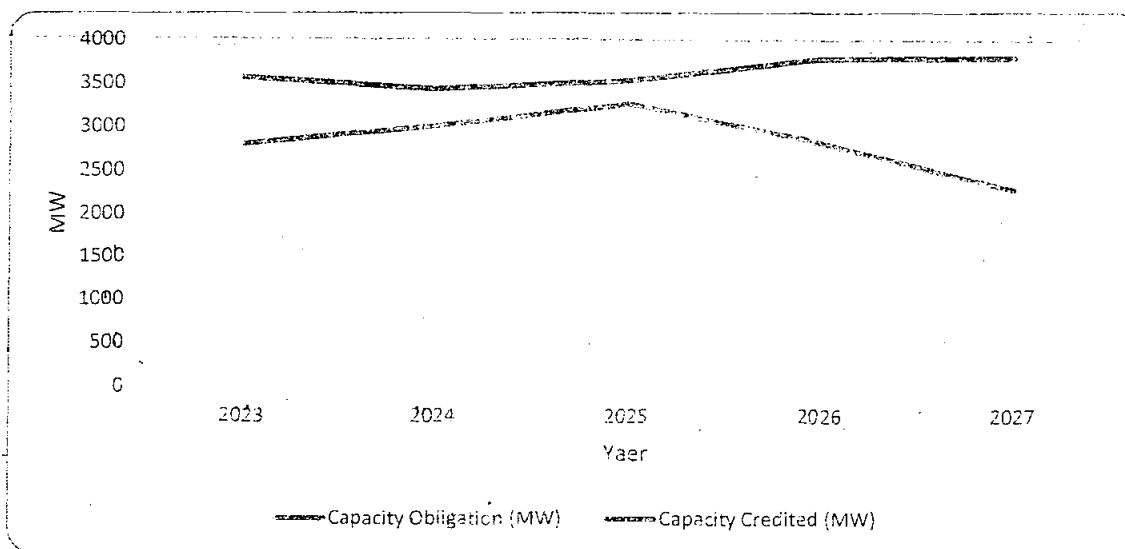
Based on the calculations performed above, detailed results have been prepared for each Market Participants. These results are being depicted in the following figures.

Figure 1: Results for PESCO



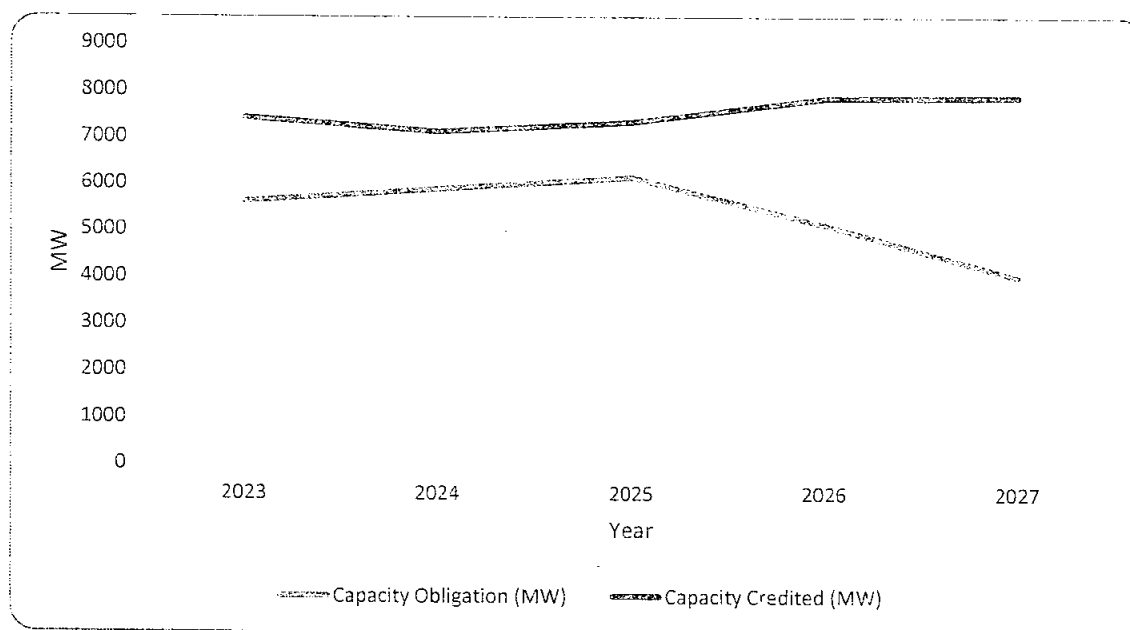
It can be observed from the above figure that PESCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

Figure 2: Results for IESCO



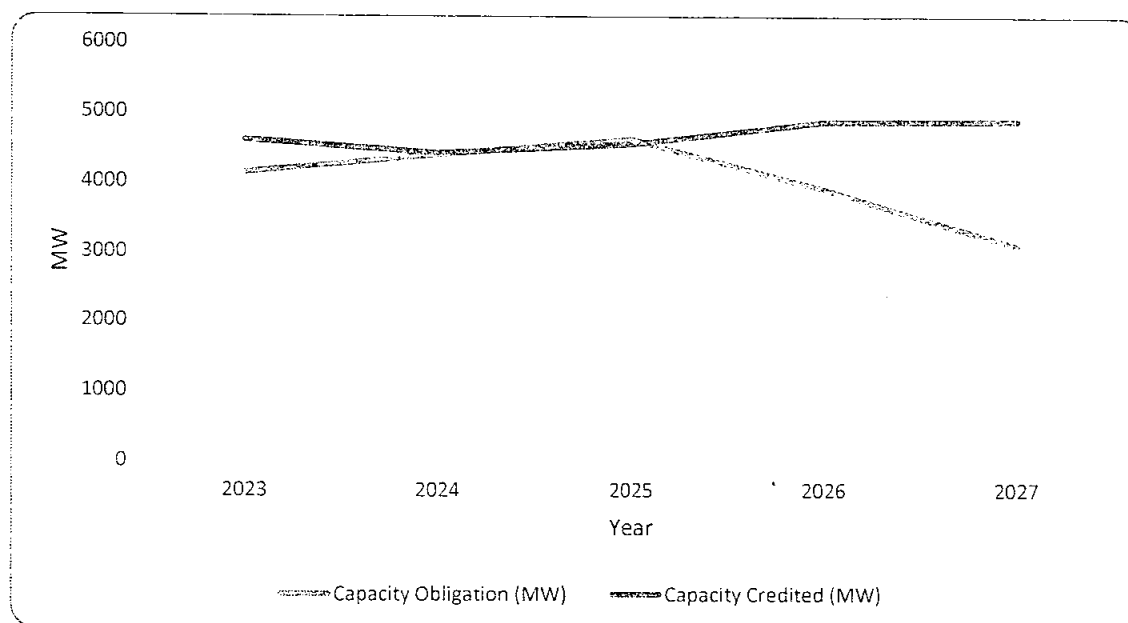
It can be observed from the above figure that IESCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

Figure 3: Results for LESCO



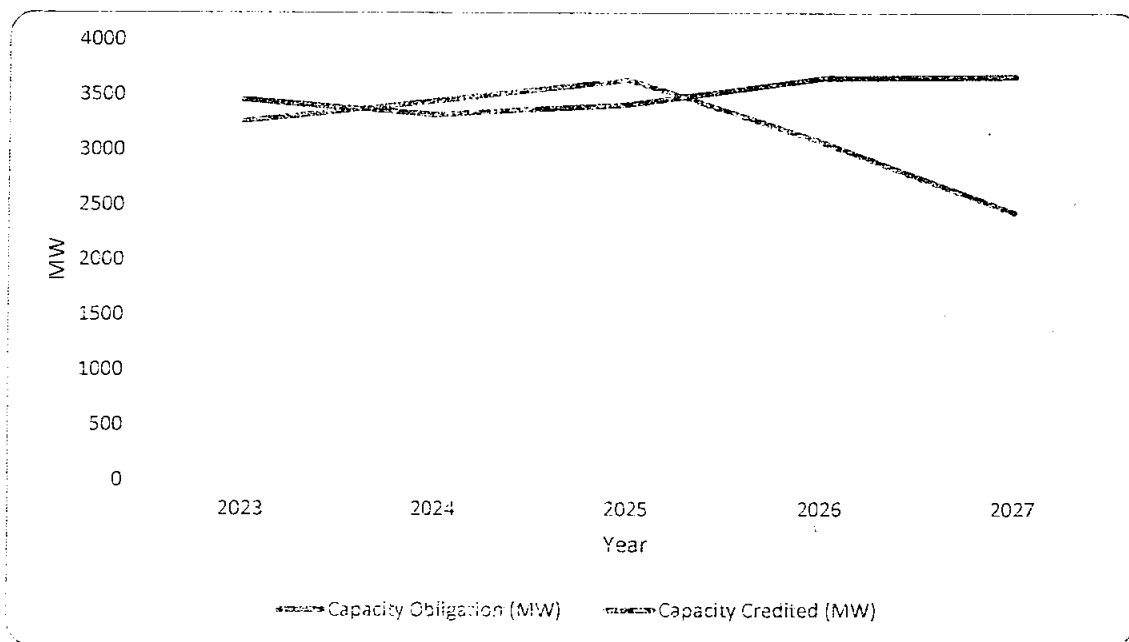
It can be observed from the above figure that LESCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

Figure 4: Results for FESCO

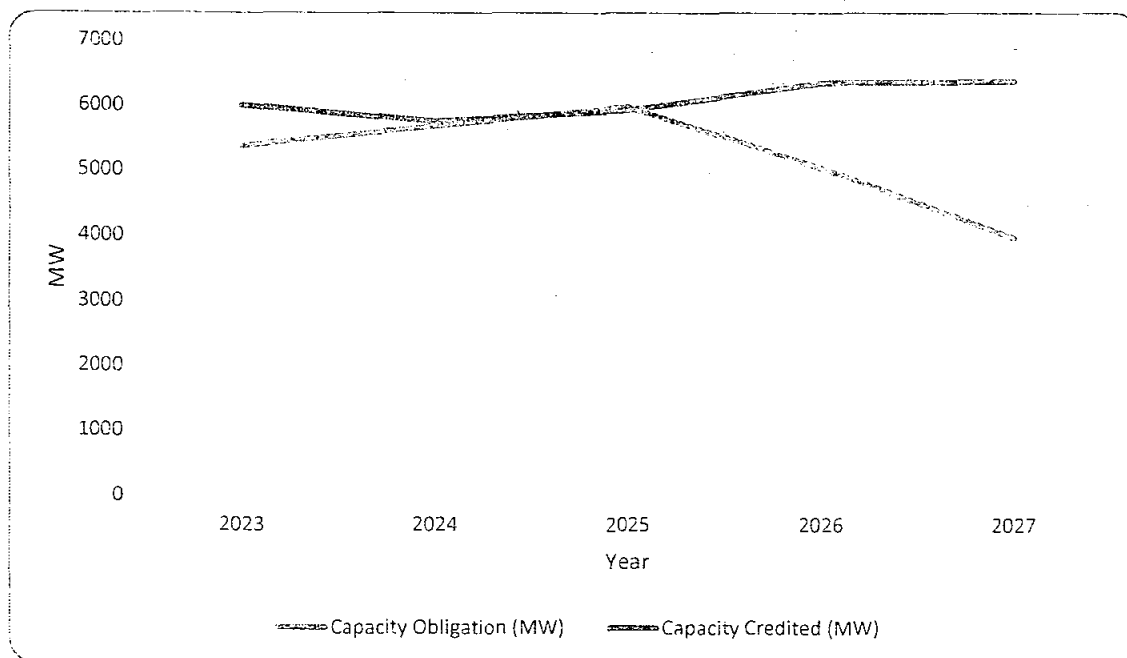


It can be observed from the above figure that FESCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

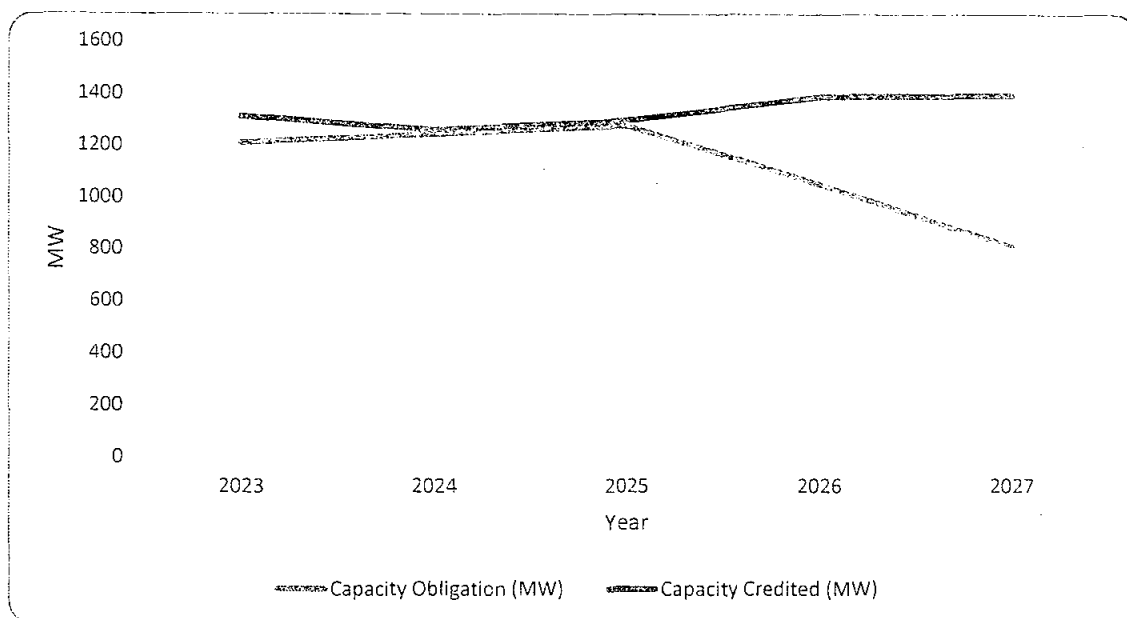
Figure 5: Results for GEPCO



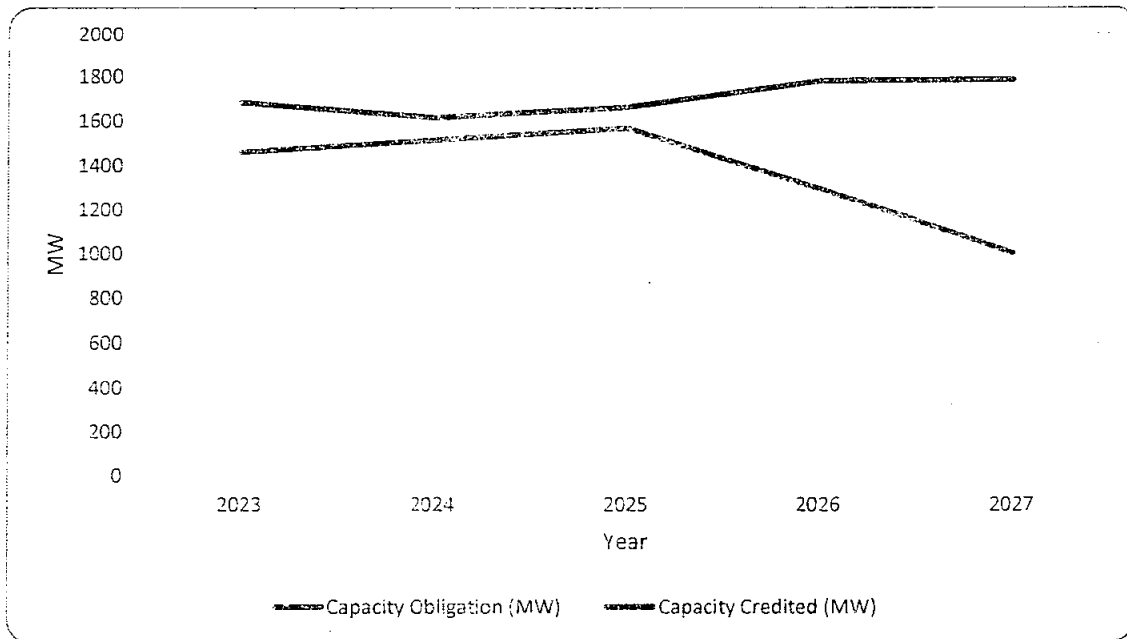
It can be observed from the above figure that GEPCO is found Minor Non-Compliant in year 2023-2024 as its Credited Capacity only covers 96.3% of its Capacity Obligation in that year. It is also found Serious Non-Compliant in year 2024-2025 as its credited capacity only covers 93.7% of its Capacity Obligations in that year. For all other years it is found compliant.

Figure 6: Results for MEPCO

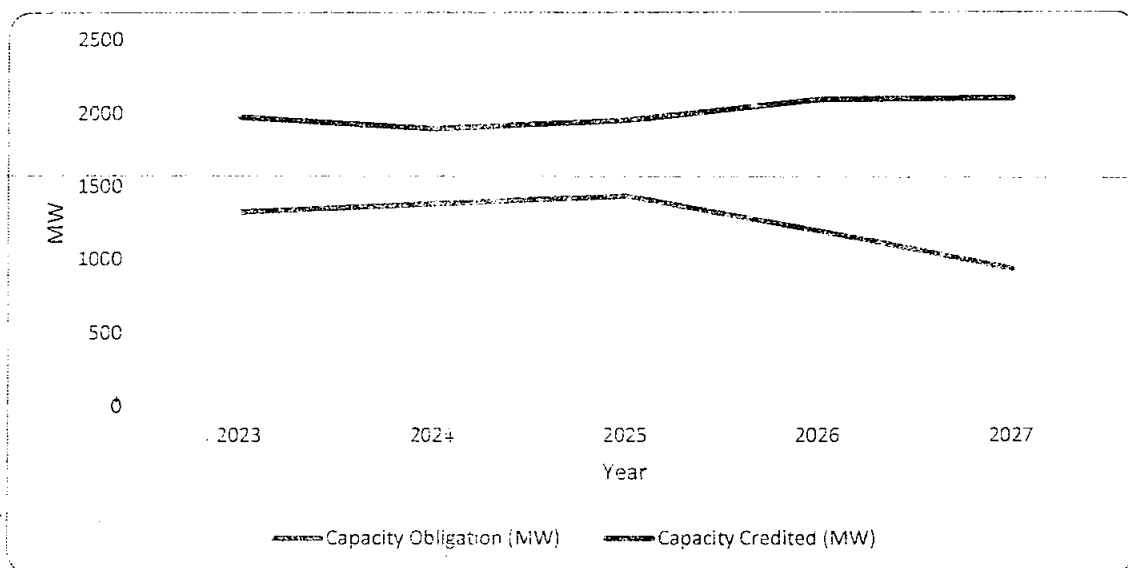
It can be observed from the above figure that MEPCO is compliant in all years as its Credited Capacity covers 98-100% of its Capacity Obligation in all years.

Figure 7: Results for SEPCO

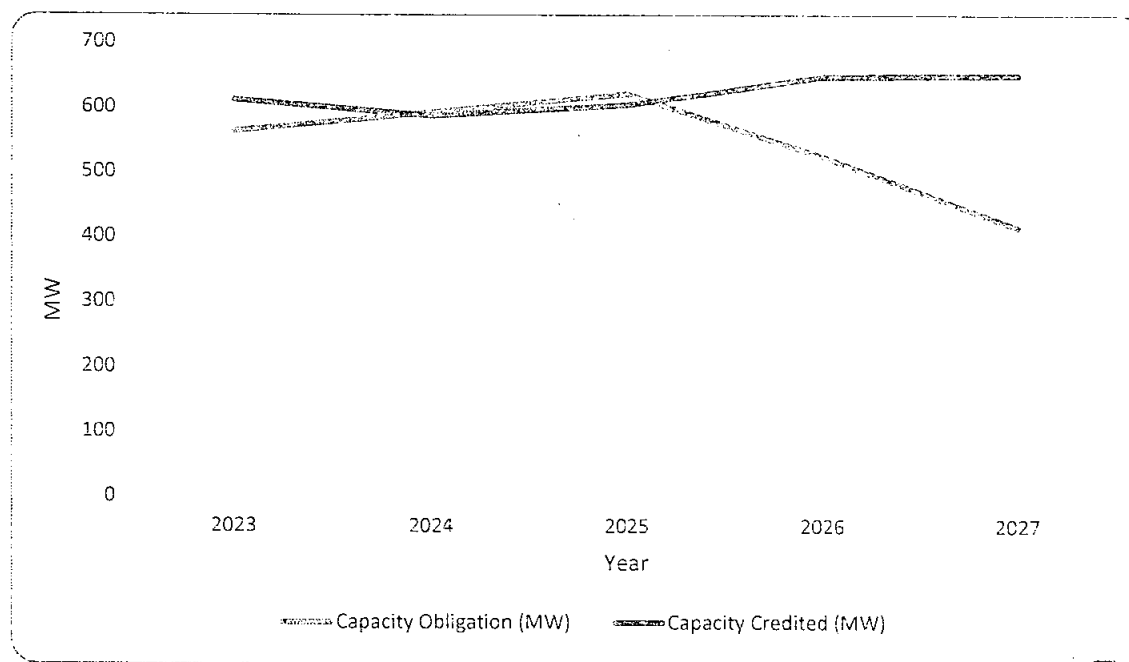
It can be observed from the above figure that SEPCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

Figure 8: Results for HESCO

It can be observed from the above figure that HESCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

Figure 9: Results for QESCO

It can be observed from the above figure that QESCO is compliant in all years as its Credited Capacity covers 100% of its Capacity Obligation in all years.

Figure 10: Results for TESCO

TESCO is found Minor Non-Compliant in year 2024-2025 as its Credited Capacity covers 95-97.2% of its Capacity Obligation in that year, while it is compliant for all the remaining years. The issue for TESCO will be resolved when we convert the allocation factors from energy-based allocation to capacity based allocation.

Part 5: Stakeholders Feedback

After circulating the Ex-ante capacity obligations report for 2022 among the market participants, we received following comments:

Summary of the comments received from GEPCO:

1. "Commercial Allocation Factors" should be reviewed and rationalized as despite surplus capacity available in the system, GEPCO is declared "Serious Non-compliant".
2. The year 2021-22 should be excluded from Ex-Ante and evaluated on Ex-Post basis according to the methodology mentioned in the Commercial Code Chapter 18.
3. The definition of current year should be reviewed and to consider the "Current year is financial year immediately next following the year in which compliance with the capacity obligation is being verified". This will provide time window to the market participant in violation for buying surplus available with over compliant market participant even within the legacy contracts.
4. It is suggested that the reserve margin may be dispensed with for the calculation of capacity obligation as the capacity obligation is already based on non-coincidental peak as per MTLF of each market participant and the allocated capacity is based on proportional sum of MDI, further adjusted for the availability factor.
5. The Capacity Obligation Report has been prepared on calendar year basis, which is inconsistent aligned with all other regulatory processes. Medium Term Demand Forecast, which forms the basis of the Capacity Obligation, IGCEP, Business Plan, consumer end tariff and all other regulatory processes are based upon fiscal year, Therefore, the Capacity Obligations shall also be determined on fiscal year basis.

CPPA-G agrees with the recommendations of the GEPCO and has amended the report for observation no 2, 3, and 5 above already. The other recommendations will be presented to the Authority in the final test run report for consideration.

Summary of the comments received from SEPCO:

SEPCO has compared the values used by the Market Operator from the Commercial Metering System with the values of their LDI meter system and has commented that the values doesn't match.

It is hereby clarified that CPPA-G uses the hourly consumption data from the CDP meters integrated with the SMS of the MSP which is different than the one reported by the LDI meters which are installed for management purposes only. Therefore, these two values shall not be compared.

Consultative Sessions:

One consultative session was arranged for MEPCO MIRAD team on their request in which the results were explained in detail and their queries were answered briefly. Another consultative session was arranged for all power sector entities including NEPRA in which the results were presented and queries were addressed.

Part 6: Recommendations

Based on the results, the following recommendations are formulated:

- i. It has been observed that DISCOs which are compliant with their Capacity Obligations have sufficient access amount of capacity in each year to share with the DISCOs that are in shortages.
- ii. Since all DISCOs have jointly procured generation through the Legacy Contracts, therefore, a mechanism shall be worked out to allocate the excess amount to those DISCOs which are in need of it.
- iii. This will avoid the risk of obligating DISCO to procure further capacity when there is sufficient margin available in the already contracted capacity.
- iv. If such re-allocation is allowed, then all DISCOs shall be considered compliant with their Capacity Obligations.
- v. A recommendation from GEPCO is to abolish the reserve margin as the Capacity Obligations are based on the individual peaks of the DISCOs which is already greater than the coincidental system peak.

Part 6: Ex-post Compliance with Capacity Obligations

In accordance with the provisions of the Commercial Code (Clause 9.1.1.3), the results of the Balancing Mechanism for Capacity shall be used to verify the ex-post compliance with the Capacity Obligation of each Market Participant. The Balancing Mechanism for Capacity has already been executed for year 2022 as per provisions of the Commercial Code.

For ex-post compliance with the Capacity Obligations, the Capacity demanded, and Capacity provided by Market Participants is evaluated based on the results of the BMC. If the Capacity Provided (Self-owned or through purchase in Contracts) by a Market Participant is greater than the Capacity Demanded (Self consumption or through selling Capacity in Contracts) by such Market Participant, then such Market Participants will have a positive imbalance. If the Capacity Provided by a Market Participant is less than the Capacity Demanded by such Market Participant, then such Market Participants will have a negative imbalance and will pay for the shortage as per the mechanism described in the Commercial Code.

The Market Participants with negative capacity imbalances are further evaluated in such a manner that where they were able to purchase the shortage in the BMC or not. If there was enough surplus Capacity in the Balancing Mechanism for Capacity to supply to all market participants which are in shortage and the Market Participants are willing to pay the amount as determined by the Market Operator, then the ex-post compliance of such market participants will be considered fulfilled. However, if there is not enough surplus capacity in the BMC to fulfill the requirement of the market participants having negative capacity imbalances or if the market participants having negative capacity imbalances don't submit the requisite security covers to the Market Operator, then the Capacity Obligations of such market participants will be considered as not fulfilled and all such non-compliance will be categorized as Serious-Non-Compliance and will be dealt accordingly.

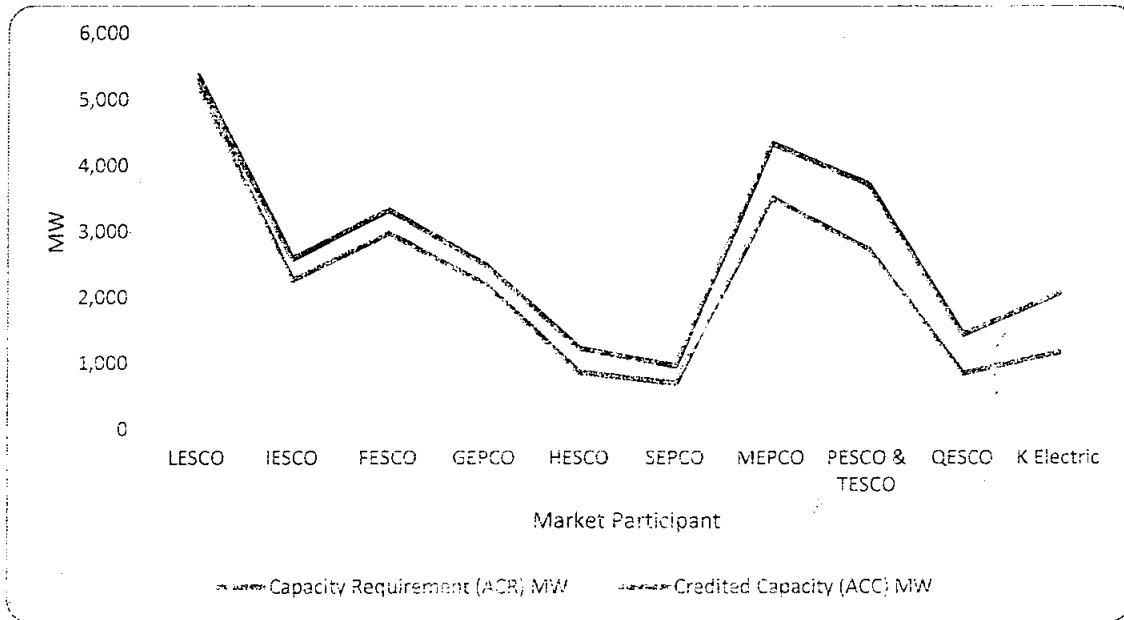
The results of the Balancing Mechanism for Capacity for the year 2022 are given in Error! Reference source not found. below.

Table 13: Results of BMC

#.	Market Participant ID	Market Participant Name	Capacity Requirement (ACR)	Credited Capacity (ACC)	Capacity Balance (CB)
			MW	MW	MW
1	2	LESCO	5,210	5,362	152
2	3	IESCO	2,256	2,579	323
3	4	FESCO	2,969	3,326	358
4	5	GEPCO	2,198	2,496	297
5	6	HESCO	848	1,217	370
6	7	SEPCO	690	948	258
7	8	MEPCO	3,510	4,335	826
8	9,11	PESCO & TESCO	2,736	3,718	982
9	10	QESCO	835	1,428	593
10	12	K Electric	1,157	2,050	893

The above results have been presented in graphical form in **Figure 11** below.

Figure 11: Results of BMC and EX-Post Compliance with Capacity Obligations



Since all the Market Participants are in a positive imbalance in the Balancing Mechanism of Capacity and there is no Market Participant with negative capacity imbalances. So, all the Market Participants are compliant in Ex-post Compliance with Capacity Obligations as depicted in **Table 14** below.

Table 14: Ex-Post Compliance with Capacity Obligations

#	Market Participant ID	Market Participant Name	Ex-Post Compliance 2022
1	2	LESCO	Compliance
2	3	IESCO	Compliance
3	4	FESCO	Compliance
4	5	GEPCO	Compliance
5	6	HESCO	Compliance
6	7	SEPCO	Compliance
7	8	MEPCO	Compliance
8	9	PESCO	Compliance
9	10	TESCO	Compliance
10	11	QESCO	Compliance



**ELECTRICITY DEMAND FORECAST
BASED ON
POWER MARKET SURVEY**

PERIOD 2021 to 2031

**PREPARED BY FESCO
WITH FACILITATION FROM
NTDC & CPPA**

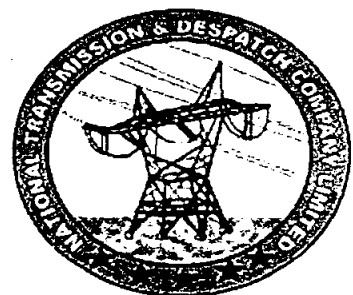
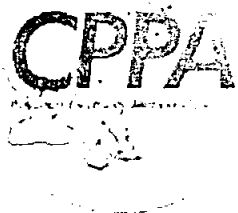


Table 1- 3 : Category Wise Sale – GWh without incorporating Load Shedding effect (Low Forecast)

Year	Domestic		Commercial		Public Light		Small Industries		M&L Industries		Tube Well		Bulk		Total	
	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R
2020-21	7310		751		13		457		4464		1268		238.0		14501	
2021-22	7667	4.9	782	4.1	14	2.2	465	1.7	4704	5.4	1375	8.5	238.0	0.0	15245	5.1
2022-23	8052	5.0	837	7.1	14	2.2	473	1.7	5310	12.9	1488	8.2	238.0	0.0	16412	7.7
2023-24	8479	5.3	898	7.3	14	2.2	481	1.8	5644	6.3	1610	8.2	239.0	0.4	17365	5.8
2024-25	8916	5.2	962	7.2	15	2.2	490	1.8	5858	3.8	1738	8.0	239.0	0.0	18219	4.9
2025-26	9366	5.0	1032	7.2	15	2.1	499	1.8	6190	5.7	1873	7.7	239.0	0.0	19213	5.5
2026-27	9847	5.1	1106	7.2	15	2.1	508	1.8	6524	5.4	2015	7.6	239.0	0.0	20253	5.4
2027-28	10314	4.7	1185	7.2	16	2.1	516	1.8	6860	5.2	2165	7.4	239.0	0.0	21296	5.1
2028-29	10817	4.9	1272	7.3	16	2.1	526	1.8	7362	7.3	2322	7.2	239.0	0.0	22553	5.9
2029-30	11329	4.7	1365	7.3	16	2.1	535	1.7	7906	7.4	2486	7.1	240.0	0.4	23877	5.9
2030-31	11849	4.6	1464	7.3	17	2.1	544	1.7	8511	7.7	2658	6.9	240.0	0.0	25283	5.9
Ave. Growth (2021-2031)	4.9%		6.9%		2.1%		1.8%		6.7%		7.7%		0.1%		5.7%	

Table 1- 4: Category Wise Sale (GWh)- Base Forecast

Year	Domestic		Commercial		Public Light		Small Industries		M&L Industries		Tube Well		Bulk		Total	
	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R	(GWh)	G.R
2020-21	7491		770		14		468		4575		1299		244		14861	
2021-22	7848	4.8	800	3.9	14	2.0	476	1.6	4815	5.3	1408	8.3	244	0.0	15604	5.0
2022-23	8229	4.9	855	6.9	14	2.0	483	1.6	5426	12.7	1520	8.0	244	0.0	16771	7.5
2023-24	8655	5.2	917	7.1	15	2.0	491	1.7	5762	6.2	1644	8.1	244	0.0	17727	5.7
2024-25	9094	5.1	982	7.1	15	2.1	500	1.7	5975	3.7	1773	7.9	244	0.0	18582	4.8
2025-26	9546	5.0	1051	7.1	15	2.1	508	1.7	6309	5.6	1909	7.7	244	0.0	19581	5.4
2026-27	10028	5.0	1126	7.1	16	2.1	517	1.7	6644	5.3	2052	7.5	244	0.0	20626	5.3
2027-28	10498	4.7	1206	7.1	16	2.1	526	1.7	6983	5.1	2203	7.4	244	0.0	21675	5.1
2028-29	11002	4.8	1294	7.3	16	2.0	535	1.7	7488	7.2	2361	7.2	244	0.0	22939	5.8
2029-30	11517	4.7	1387	7.2	17	2.0	544	1.7	8037	7.3	2527	7.0	244	0.0	24271	5.8
2030-31	12038	4.5	1487	7.2	17	2.0	553	1.7	8647	7.6	2701	6.9	244	0.0	25687	5.8
Ave. Growth (2021-2031)	4.9%		6.8%		2.0%		1.7%		6.6%		7.6%		0.0%		5.6%	

Table 1- 5 : Category Wise Demand – MW without incorporating Load Shedding effect - Low Forecast

Year	Domestic		Commercial		Public Light		Small Industries		M&L Industries		Tube Well		Bulk		Total	
	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R
2020-21	1656		191		6		40		911		262		62		2894	
2021-22	1736	4.9	199	4.1	6	2.2	41	1.7	974	7.0	284	8.4	62	0.0	3059	5.7
2022-23	1824	5.0	213	7.1	6	2.2	42	1.7	1146	17.6	308	8.1	62	0.0	3345	9.3
2023-24	1921	5.3	228	7.3	6	2.1	43	1.8	1231	7.4	333	8.1	63	1.6	3555	6.3
2024-25	2020	5.2	244	7.2	7	2.1	43	1.8	1284	4.4	359	7.9	63	0.0	3739	5.2
2025-26	2123	5.1	262	7.2	7	2.1	44	1.8	1368	6.6	387	7.7	63	0.0	3958	5.9
2026-27	2232	5.1	281	7.2	7	2.1	45	1.8	1452	6.1	416	7.6	63	0.0	4186	5.8
2027-28	2337	4.7	301	7.2	7	2.1	46	1.8	1537	5.8	446	7.4	63	0.0	4413	5.4
2028-29	2451	4.8	323	7.3	7	2.1	46	1.7	1664	8.3	479	7.2	63	0.0	4694	6.4
2029-30	2566	4.7	347	7.3	7	2.1	47	1.7	1802	8.3	512	7.1	63	0.0	4990	6.3
2030-31	2683	4.6	372	7.3	7	2.1	48	1.7	1953	8.4	548	6.9	63	0.0	5305	6.3
Ave. Growth (2021-2031)	4.9%		6.9%		2.1%		1.8%		7.9%		7.6%				6.2%	

Table 1- 6: Category Wise Demand (MW) - Base Forecast

Year	Domestic		Commercial		Public Light		Small Industries		M&L Industries		Tube Well		Bulk		Total	
	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R	(MW)	G.R
2020-21	1751		202		6		43		963		277		66		3060	
2021-22	1815	3.7	208	2.9	6	1.0	43	0.6	1019	5.8	297	7.2	65	-1.5	3198	4.5
2022-23	1864	2.7	217	4.7	6	-0.1	43	-0.5	1171	15.0	314	5.7	64	-1.5	3418	6.9
2023-24	1941	4.1	230	6.0	6	1.0	43	0.6	1243	6.2	336	6.9	63	-1.6	3592	5.1
2024-25	2026	4.4	245	6.4	7	1.4	43	1.0	1288	3.6	360	7.1	63	0.0	3750	4.4
2025-26	2109	4.1	260	6.1	7	1.1	44	0.8	1359	5.5	384	6.6	62	-1.6	3932	4.8
2026-27	2197	4.2	277	6.2	7	1.2	44	0.8	1430	5.2	409	6.6	62	0.0	4121	4.8
2027-28	2282	3.9	294	6.3	7	1.3	45	0.9	1500	4.9	436	6.5	61	-1.6	4309	4.6
2028-29	2369	3.8	312	6.3	7	1.1	45	0.8	1609	7.2	463	6.2	61	0.0	4539	5.3
2029-30	2458	3.7	332	6.3	7	1.1	45	0.8	1726	7.3	491	6.1	60	-1.6	4780	5.3
2030-31	2547	3.6	353	6.3	7	1.2	46	0.8	1854	7.4	520	5.9	60	0.0	5036	5.4
Ave. Growth (2021-2031)	3.8%		5.8%		1.0%		0.7%		6.8%		6.5%				5.1%	

Table 1- 17 : Monthly Peak Demand Forecast (Base Forecast)

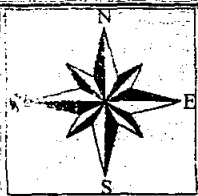
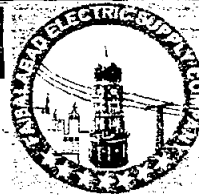
	July	August	September	October	November	December	January	February	March	April	May	June
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
2020-21	3165	3361	2770	2457	1730	1732	1676	1716	1868	2513	3052	3380
2021-22	3530	3272	2979	2720	1879	1893	1948	1833	2208	2659	3040	3558
2022-23	3840	3560	3241	2959	2044	2059	2119	1994	2402	2893	3307	3870
2023-24	4073	3776	3438	3138	2168	2184	2248	2115	2548	3069	3508	4105
2024-25	4279	3967	3611	3297	2278	2295	2362	2222	2677	3224	3685	4313
2025-26	4523	4193	3817	3485	2408	2425	2497	2349	2830	3408	3895	4559
2026-27	4777	4429	4032	3681	2543	2562	2637	2481	2989	3599	4114	4815
2027-28	5032	4665	4247	3877	2678	2698	2777	2613	3148	3791	4333	5072
2028-29	5340	4951	4507	4114	2842	2863	2947	2773	3341	4023	4599	5382
2029-30	5668	5255	4784	4367	3017	3039	3129	2944	3546	4271	4881	5713
2030-31	6015	5576	5076	4634	3202	3225	3320	3123	3763	4532	5180	6062

Table 1- 18: Monthly Energy Purchased (GWh) Forecast - Base Forecast

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)	(GWh)
2020-21	1756	1895	1606	1178	886	892	896	753	947	1245	1582	1616	15252
2021-22	1976	2132	1806	1324	997	1003	1008	847	1065	1400	1779	1817	17154
2022-23	2118	2285	1937	1420	1068	1076	1081	908	1142	1501	1908	1948	18391
2023-24	2237	2414	2045	1500	1128	1136	1142	959	1206	1585	2015	2058	19423
2024-25	2344	2530	2144	1572	1183	1191	1196	1005	1264	1662	2111	2156	20357
2025-26	2469	2664	2257	1655	1245	1254	1260	1058	1331	1750	2224	2271	21438
2026-27	2599	2805	2377	1743	1311	1320	1327	1114	1401	1842	2341	2391	22571
2027-28	2730	2946	2497	1830	1377	1387	1393	1170	1472	1935	2459	2511	23709
2028-29	2886	3114	2639	1935	1456	1466	1473	1237	1556	2045	2599	2654	25058
2029-30	3051	3292	2790	2045	1539	1549	1557	1307	1645	2162	2748	2806	26493
2030-31	3225	3480	2949	2162	1627	1638	1646	1382	1739	2286	2905	2967	28007

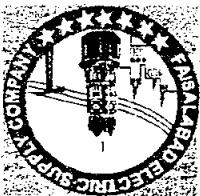
Annex - F

FESCO JURISDICTION MAP CIRCLE WISE

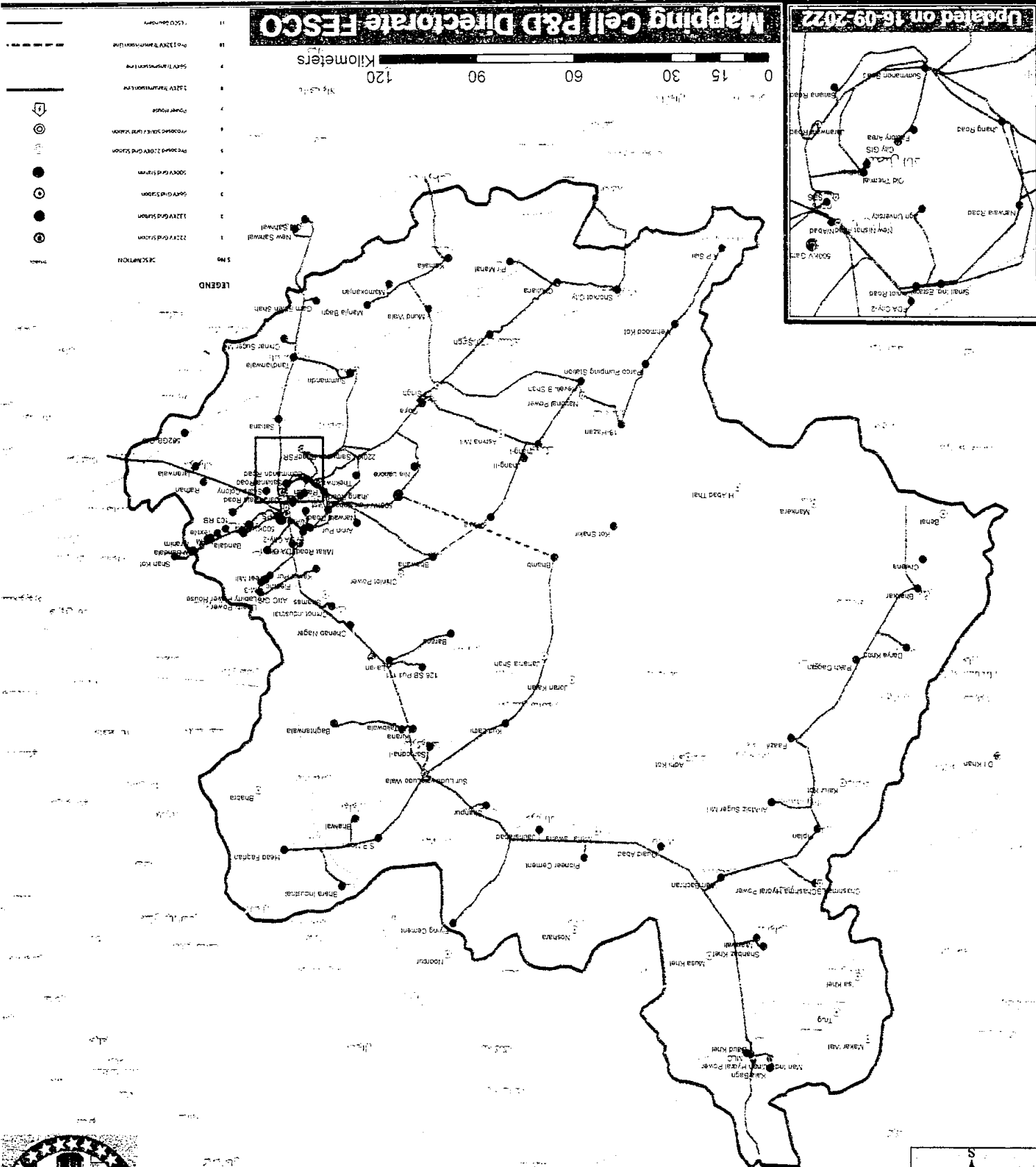
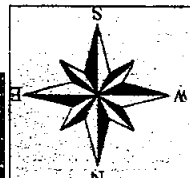


Mapping Cell P&D Directorate FESCO

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T&G NETWORK FESCO



**BILLING AND COLLECTION PROCEDURE (INCLUDING PROVISIONS OF
REMOTE METERING)
ELECTRICITY BILL**

Electricity bill shall generally contain the following information:

Information	Description
Billing Month	The month for which bill is being issued.
Name and Address	The name and address of the consumer.
Reference No	A dedicated number allotted to a consumer for identification.
Tariff	The applicable rates and charges approved by NEPRA for the category of connection.
Load	The load sanctioned for the connection.
Meter No	Billing meter, Net Metering.
Date of connection	The date on which the meter was installed.
Reading Date	The date on which the meter reading is taken.
Issue Date	The date on which bill is issued to the consumer.
Due Date	The date by which amount of the bill is to be paid. However, if the due date falls on a holiday, the due date shall be the next working day.
Present meter reading	The meter reading taken on the reading date.
Previous meter reading	The meter reading taken on the previous month reading date.
Exported/ Imported Units	In case of Net Metering.
Snap shots	The snap shot of present meter reading, peak/off peak including exported meter reading in case of net metering facility. In case of MCO, the snapshot of final reading of the previous meter shall also be printed.
Total units Consumed	The units consumed during a Billing Period or average consumption in case of defective meter.
Billing History	Details of billing by FESCO and payment by the consumer for the period of 12 months.

Total cost of Electricity	The cost as per applicable tariff of total units consumed or average consumption in case of defective meter.
Installments	Any amount to be paid as per installments allowed by the Competent Officer.
GST	The General Sales Tax levied by the Government of Pakistan.
Amount Payable within due date	Total current amount of all the payment items as mentioned in the bill including arrears amount, if any.
Deferred Amount	Amount deferred by FESCO.
Arrears	Unpaid amount of the bill.
Late Payment Surcharge (LPS)	The amount levied on account of non-payment of bill within due date.
Amount Payable after due date	Total of amount payable within due date including Late Payment Surcharge.
Fixed Charges	As defined in Tariff Terms & Conditions.
Variable Charges	As defined in Tariff Terms & Conditions.
Billing Demand	As defined in Tariff Terms & Conditions.
ED	Electricity Duty levied by the Provincial Government
Other Charges	Fuel Price Adjustment (FPA), Quarterly tariff adjustment (QTA), Financing Cost (FC) surcharge , Annual Distribution Margin Component (ADMC) ,PTV Fee, Withholding Tax, any other charge/surcharge levied by the Federal Government etc.
Payment of Bills	Banks and other Financial Institutions where the bills can be paid.
Other particulars	Name and address of consumer, name of division/sub-division/feeder, contact number for Complaint, Contact number of XEN/Sub Divisional Officer.
Address	Address Addresses of concerned sub-division, NEIRA head office /regional office, Electric Inspector/Provisional office of Inspection.

Note: FESCO shall not print any instruction on the bill in violation of the Act, Rules, Regulation, Codes and any other applicable document.

All the above mentioned information shall also be printed in Urdu on the bill.

In cases where accumulated readings are recorded, segregated bills shall be prepared keeping in view the number of months for which the readings have accumulated to give slab benefit/relief to the consumers.

The consumers are advised to read the "INSTRUCTIONS FOR THE PAYMENT OF BILLS" given on the Monthly Electricity bills for their knowledge and guidance.

TIME PERIOD FOR PAYMENT OF BILLS

The due date for payment of bills shall be within fifteen (15) days from the issue date of the bills. However, the consumers will have clear seven (7) days from the date of actual delivery of the bill for the purpose of payment. FESCO may develop alternative method for distribution /dispatch of electricity bill electronically (i.e. through e-mail, WhatsApp etc.).

PROCEDURE FOR BILLS DISTRIBUTION

The Bill Distributor shall deliver the bills at the premises of the consumers within a day of receipt of the bill for distribution.

Electricity bill shall be available on DISCO's (DISCO to insert its name) website for downloading & payment.

AM (O), DM (O) and SE (Operation) shall ensure delivery of bills within stipulated time.

COLLECTION /PAYMENT OF ELECTRICITY BILLS

All Commercial Bank Branches and Post Offices of the respective City/District where connection exists shall be collecting electricity bills from consumers who have been given option to deposit their electricity bills in any designated bank branch/post office. Online payment and payment through ATM Card/Credit Cards or through cross cheques at designated bank branches can also be made where possible. NADRA KIOSK are also authorized to collect electricity bills.

In order to avoid Late Payment Surcharge (LPS), consumers shall pay their bills within due date. Consumers can also make payments in Revenue Offices through crossed cheques! pay orders/ bank drafts. However, in order to avoid late payment surcharge, the cheque/bank draft/pay order, be deposited to the Revenue Office and the bank branch at least three days prior to due date so as to ensure realization within due date.

ABILITY TO ACCESS CONSUMER METERING SYSTEMS AND OTHER SERVICES / EQUIPMENT.

Meter reading of all the consumers of FESCO is carried out on a routine basis each month to record the consumption of energy consumed by each consumer during a given period (billing cycle/billing month). The meter reading is generally taken/recorded by the concerned staff of FESCO. For the purpose; the consumers of each sub division are divided into a number of batches and sub- batches. The meter reading program shall be prepared in such a way that the meters of a batch are normally read on the same dates each month. Meter readings of all types of connections are as under:

Designation	Load
Meter Reader	Up to 20 kW
Meter Reading Section Supervisor/LS	Above 20 kW to 40 kW
SDO/AM(O)	Above 40 kW to less than 500 kW
XEN/DM(O)	500 kW and above

Taking snapshots of meter readings of all consumer categories is mandatory. Meter readings are taken through mobile snapshots/hand held units to ensure correct readings. The snapshots of meter reading including Net Metering facility wherever applicable showing import and export units are printed on electricity bill. FESCO shall make available record of snapshots for twelve months for presenting before NEPRA, POI, Court of Law or any other competent forum if required for settlement of billing dispute, raised by any consumer.

Meter Readers shall also check the irregularities/discrepancies in the metering system at the time of reading meters / taking snap shots and report the same in the reading book/discrepancy book or through any other appropriate method as per the practice. The concerned officer/official will take corrective action to rectify these discrepancies.

If due to any force majeure it is not possible for FESCO to take actual meter reading, the consumer may provide meter reading snap to FESCO for carrying out actual billing or FESCO may issue a provisional bill on average basis i.e. consumption in corresponding month(s) of last year or average consumption of previous Eleven months whichever is lower. In such a case, bill along with a slab benefit will be issued as per actual meter reading upon normalization of the situation.

FESCO is being installed AMI energy meters from 15KW and above on all tariff categories in first phase and then 03KW up to 15KW, which reduces human intervention required in keeping track of the total power consumption of the users. An SMS is sent

directly to the user indicating the consumption and bill without the need of any individual from sub division office to physically visit the site to note down the readings by the use of AMI. This automation not only reduces the labor cost but also makes the system more efficient and accurate.

PERCENTAGE CHECKING

In order to ensure recording of correct meter reading, the percentage check over the readings already recorded by the officials will be carried out as under:

LINE SUPERINTENDENT IN CHARGE:

Line Superintendent In charge will carry out the following checks over the readings recorded by the Meter Readers, over and above the discrepancies already noted by him from the readings supplied by the Meter Reader.

Connection Type	% Check
General Supply/General services	5%
Industrial up to 20 kW load	15%
Agriculture Tube wells	15%

He will report to the SDO/AM (O) through the Meter Reading Section Supervisor the discrepancies in metering installation.

METER READING SECTION SUPERVISOR

Meter Reading Section Supervisor will exercise at least 15% check on Industrial and Agriculture Tube well Consumers having sanctioned load up to 20 kW and up to 20 number general supply/general service consumers per week, and report to the SDO/AM (O) any discrepancy noticed on the readings recorded by the Meter Reader(s) and Line Superintendent In-charge.

SDO/AM (O) SDO/AM (O)

Sub Divisional Officer (O)/Assistant Manager (O) will physically check at site readings of at least 2% of industrial, commercial and Agriculture Tube well connections with load up to 40 kW each month and at least 5 number other meters per day. Two meters to be checked should be those which the Meter Readers had read the previous day. He/she will initiate disciplinary action against the Meter Reader(s) who do not record correct meter reading as reported by LS Incharge/ Meter Reading Section Supervisor besides irregularities noticed by him.

EXECUTIVE ENGINEER/DEPUTY MANAGER (OPERATION)

Executive Engineer (Op)/DM (O) will physically check at site at least 10% readings of meters of industrial, agricultural and commercial consumers having sanctioned

load above 40 kW and up to 500 kW and at least 2 number other meters a day, one meter independently i.e. which has not been checked by the SDO/AM (O).

SUPERINTENDING ENGINEER/MANAGER (OPERATION)

SE/Manager (O) will physically check at site at least 15% meter readings of consumers having sanctioned load over 500 kW and at least 5 number other meters as below:

- (a) One meter checked by the SDO/AM (O)
- (b) One meter checked by XEN/DM (O)
- (c) Three other meters

The percentage check register should be maintained by Line Superintendent Incharge, Meter Reading Section Supervisor, SDO/AM (O), Executive Engineer/DM (O) and Superintending Engineer/Manager (O) for above checking:

Note: However the primary responsibility for correct meter reading will rest on the officer/official who is responsible for monthly meter reading in routine.

METER READING OF AMR

A separate batch has been created for the connections where AMR system are installed. Billing of such consumers is carried out as per schedule made by FESCO remotely.

EMERGENCY PROVISIONS AND PROTOCOL

To cater for any emergency situation, Customer Care Centers at Sub Divisional level have been established, wherein well-trained line staff and supervisors in three (3) shifts are available on 24/7 basis to attend any emergency situation and dedicated line staff has also deputed for carrying out preventive maintenance of HT/LT lines as well as transmission network.

Sufficient line material for maintenance work as well new installation work have been procured on annual basis by FESCO and are readily available at Regional / Warehouses / field stores and sub divisions to meet with any emergency situation which arrive at any time of the day.

BASIS OF COMMON SERVICE FOR COMMERCIAL AND RESIDENTIAL CONSUMERS AND THEIR ALLOCATION THEREOF:-

1. ELECTRICAL CONNECTIONS

FESCO shall provide the appropriate metering installation at the cost of the consumer for all types of consumer categories. However, in case of non-availability of the same with FESCO, against new connection, extension/reduction of load or replacement of defective meter, the consumer may be asked to procure the metering installation according to the specifications as approved by FESCO from the approved vendors/manufacturers of the DISCOs to avoid delay in provision of connection / replacement of metering installation. No meter rent shall be charged if the cost of metering installation has been borne by the consumer.

Metering installation of all categories of consumers shall be fixed at any convenient/proper place outside the premises of the consumer. It shall be the responsibility of the consumer to provide a safe and accessible location to FESCO for setting up of the metering installation at his/her premises. In such cases, safe custody of the metering installation is the responsibility of the consumer. In case, FESCO fixes the metering installation at its pole/structure then safe custody of the metering installation is the responsibility of FESCO.

In case of theft of metering installation or damage due to any accident (in case meter is installed at the premises), the information must be communicated immediately by the consumer in written form to the concerned sub divisional office of FESCO and FESCO name) may take further legal action and lodge FIR. FESCO shall immediately install another meter at site. In such case FESCO may recover the cost of the meter by issuing a demand notice or through regular electricity bills.

FESCO shall make its best endeavor to install the meters in accordance with the latest industry standards and workmanship to ensure safety and security of the metering installation.

The DISCO shall have the right at any time to change the place and position of the metering equipment to conform with the provision of the schedule of tariff enforce from time to time, Consumer Eligibility Criteria-2021, Grid Code and Distribution Code. However, the safe custody of metering installation is responsibility of DISCO if meter is shifted away from the premises.

The metering installation shall be fixed at a reasonable height from the ground level or at a level from where the meter reading/taking reading snapshot is possible without using climbing devices.

For Multi storey buildings (two or more occupants) the metering installation of all the consumers shall be fixed at any appropriate location of the building. Each meter shall be labeled with the name and reference number of the consumer.

FESCO may install back-up meter on all industrial connections and other connections having sanctioned load of 50 kW and above on request of the consumer. The cost will be borne by the consumer if backup meter is installed on consumer's request. In case of any defect in the billing meter, the back-up meter will be converted into billing meter and the bills shall be charged on the basis of consumption recorded on the back-up meter. Upon replacement of the impugned meter, the same will be treated as back up meter.

Should the consumer at any time requires the metering installation to be shifted to another place or position on the same premises, he/she shall apply to DISCO in person or online giving reasons thereof. Upon receipt of such request, a survey will be carried out within seven days for verification of alternative space. FESCO after its satisfaction may shift the metering installation upon deposit of shifting charges (i.e. Rs. 500/- for single phase connection and Rs. 1000/- for three phase connection along with the extra material cost, if any) by the consumer as demanded through a demand notice by DISCO (DISCO to insert its name).

2. PREVENTIVE / SCHEDULE MAINTENANCE

To keep the electrical power system in safe, stable and reliable operating condition, it is necessary that the system should be operated and maintained properly to retain its each component in or restore it to a state in which it can perform a required function. Hence, the preventive maintenance is used to be carried out in accordance with an established time schedule. Scheduled maintenance covers all measures aimed at retaining the design state of the technical equipment belonging to a system and may take place as and when required or in regular/fixed interval of time.

It is worth mentioning that an effective preventive maintenance program always minimizes emergency maintenance breakdowns and damages of infrastructure / grid station equipment.

3. CUSTOMER SERVICES / CONSUMER COMPLAINTS

FESCO is an electric power utility and quality service at affordable tariff rates to its customers is key to its long term success. FESCO fully understands that the same requires investment in its HR capital, upgradation of its processes and last but not the least investment in technology and infrastructure. Various steps have already been initiated to enhance Customer Service including, activation of 118 telephone number for lodging complaints and other customer related services throughout FESCO, upgradation and modernization of all Customer Services Centers of FESCO, training and mentoring of Customer Service Staff etc and we are gradually seeing the results of these efforts unfold in front of our eyes. However, in this case as well, it is important that FESCO continues its march with determination to achieve its key long term goal of a very high level of customer satisfaction and engagement.

4. ENSURE THE QUALITY POWER SUPPLY AS PER NEPRA

To provide uninterrupted power supply to customers enabling trade and industry, educational & social activities to flourish and enrich the Consumers, FESCO ensure the Standard Quality power supply parameters as per NEPRA. The parameters of electricity are maintained as per NEPRA permissible limit of Voltage, Frequency and Power to ensure the quality of power to be supplied.

METERING AND TESTING FACILITIES

Technical Services Directorate provides service to five (05) Operation Circles which carries out meter testing and checking. This Directorate has its divisional level setups at 1st Circle, 2nd Circle, Jhang Circle, Sargodha Circle and Mianwali Circle equipped with all metering testing facilities.

FESCO has recently established Mobile labs at circle level furnished with modern technology equipment e.g primary / secondary injection set, power analyzers, energy analyzers and portable phantom load and laptops to test meters at site for satisfaction of FESCO customers.

RESPONSIBILITIES OF METERING & TESTING DIRECTORATE

- Installation / handling of AMI Project
- Data retrieval of removed meters
- Replacement of defective meters above 40KW load
- Periodic checking
- Routine checking
- Lab testing of meters, CTs & PTs
- Rectification of faults within short time
- Lab & field checking
- Repairing & testing of transformers at Transformer Reclamation Workshop

Furthermore, three (03) Nos. Transformer Reclamation Workshops (TRW) established at Faisalabad, Sargodha and Mianwali under the umbrella of M&T Circle to carry the transformer repair work for the facilitation of the Operation circles for prompt restoration of supply of public of these area.