



Faisalabad Electric Supply Company Limited

DIRECTOR GENERAL MIRAD FESCO HQ

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No. 3906 /GENERAL

Dated: 02.10.2023

F/A

The registrar, NEPRA,
NEPRA Tower,
Attaturk Avenue (East),
G-5/1, Islamabad

RECEIVED OFFICE
Date: 02.10.23
14008

Subject: **PETITION FOR DETERMINATION OF USE OF SYSTEM CHARGES / WHEELING CHARGES**

Ref:-
1. Your office letter No. NEPRA/DG(Tariff)/TRF-100/33375-84 dated 13-09-2023.
2. Your office letter No. NEPRA/ADG(Tariff)/TRF-100/33896-05 dated 22-09-2023.

As desired vide your letters referred above and in pursuance of Regulation 7 of NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022; we are pleased to submit attached herewith petition for determination of Use of System Charges ("UoSC Petition") after incorporating FESCO interim tariff as determined by NEPRA dated 14-07-2023 for the FY 2023-24. It may kindly be noted that the instant petition is being filed in compliance of afore mentioned letters on the basis of FESCO interim tariff determined by NEPRA subject to amendment upon final determination of FESCO MYT 2023-24 to 2027-28 if deemed necessary. The petition includes FESCO Cost of Services Study ("COS Study") FY 2023-24 as Annex-2 thereto, forming fundamental basis for the instant UoSC Petition. The documents are being submitted herewith as per regulatory requirements.


In this matter, for any clarification or additional information Mr. Muhammad Aamir, DG MIRAD FESCO can be contacted on cell Phone # 0320-0520201 or email miradfesco@gmail.com

DA/as above


Director General (MIRAD)
FESCO Faisalabad

CC

1. General Manager (Technical) FESCO
2. General Manager (C&CS) FESCO
3. SO to Chief Executive Officer FESCO
4. Chief Financial Officer FESCO
5. Master File

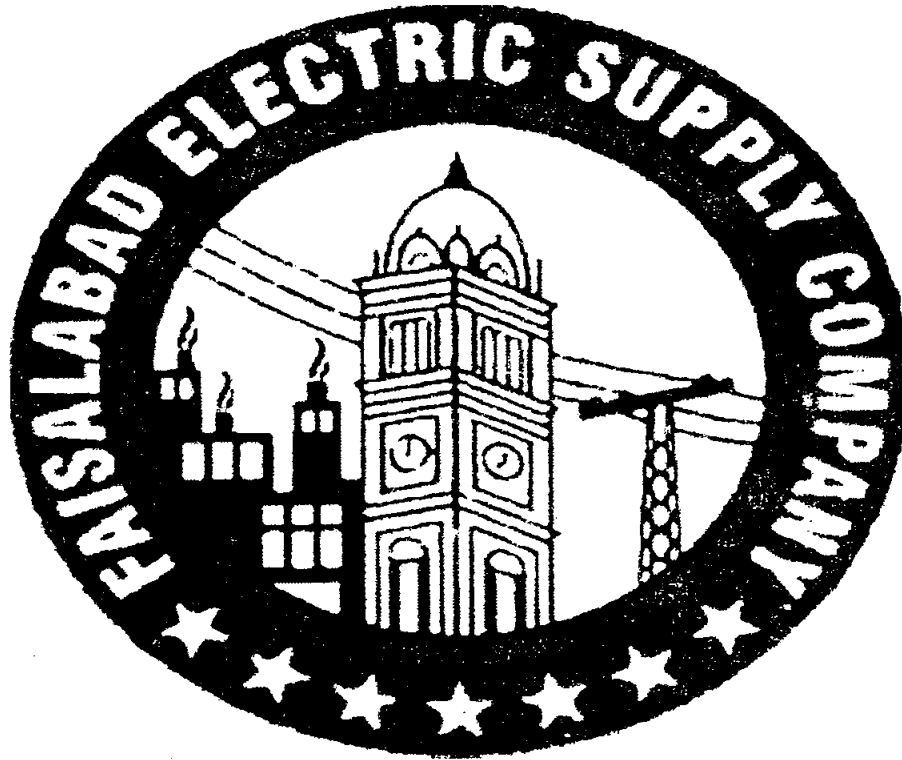


Forwarded please:	
<input checked="" type="checkbox"/> For nec action	<input type="checkbox"/> for information
1. DG (Lic.)	2. DG (Admn./HR)
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5. DG (Trf.)	6. Dir. (Fin.)
7. Dir. (Tech.)	8. Consultant
9. LA	10. Dir. (IT)

For kind information please
1. Chairman
2. M (Tech.)
3. M (Lic.)
4. M (Trf. & Fin.)
5. M (Law)

CC: BCM

FY 2023-24



**Petition for Determination of
Use of System Charges
FY 2023-24**

October __, 2023

FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED

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FAISALABAD ELECTRIC SUPPLY COMPANY (FESCO) LTD.

BACKGROUND

As a result of restructuring of Faisalabad Electric Supply Company (FESCO) was incorporated on March 21, 1998 and obtained certificate for commencement of business on March 26, 1998 with registered office, West Canal Road, Abdullahpur, Faisalabad. The FESCO is responsible for provision of the electricity distribution and supply services to over 5.16 million consumers of eight (08) civil districts of Punjab Province (Faisalabad, Jhang, Chiniot, Toba Tek Singh, Sargodha, Jauharabad, Mianwali and Bhakkar), Pakistan as set out in FESCO's Distribution License No. DL/02/2023, granted by NEPRA under the NEPRA Act on May 09, 2023. The Company is headed by a Chief Executive Officer (CEO) and FESCO Board of Directors.

Under the provisions of Regulation of Generation, Transmission & Distribution of Electric Power (Amendment) Act, 2018, FESCO is deemed to hold a license for supply of electric power to perform the function of sale of electric power in addition to existing licensee as Distribution Company. The Distribution function now shall, under Section 20 of the act, be limited to ownership, operation, management or control of distribution facilities for the movement or delivery to the consumers of electric power. The deemed licensee status to engage in Supply of Electric Power, in terms of proviso to Section 23E (1) of the Act, has expired on May 01, 2023, however, FESCO has already submitted a petition with the Authority for grant of Licence for supply of electric power.

After the approval of Competitive Trading and Bilateral Contracts Market (CTBCM) by the honorable Authority on November 12, 2020 (No. NEPRA/R/DL/LAM-01/40691-98) several implementation actions were taken. This included issuance of License for the Market Operator (MO), approval of Market Commercial Code (MCC) and promulgation of several Regulations to ensure smooth implementation of CTBCM and create balance in roles, rights and obligations of the stakeholders in the CTBCM.

GROUNDINGS OF PETITION:

Pursuant to the relevant directions of National Electricity Policy (“NE Policy”) read with regulation 7 of NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 (“Open Access Regulations”), following are the grounds for petition for determination of use of system charges:

- a. In compliance with the Clause 4.4, Clause 5.5.2(f), Clause 5.5.2(g), Clause 5.5.4 and Clause 5.6.5 and 5.6.7 of NE Policy and
- b. In compliance with the regulation 7 Open Access Regulations, each distribution licensee, in consultation with the respective supplier of last resort shall, within ninety days following the date of notification of Open Access Regulations, submit separate petition to the Authority for determination of use of system charges.

DIRECTIONS IN NATIONAL ELECTRICITY POLICY

The National Electricity Policy, 2021 issued under Section 14A of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (“The Act”) was prepared by the Government of Pakistan for the development, reform, improvement and sustainability of the power market and power sector.

The National Electricity Policy identifies the major goals sought to be achieved for the power sector, and in this respect, provides policy directions. It also provides the key guiding principles to develop subservient frameworks that will steer the decision making in the power sector to achieve identified goals.

Various sections of the said National Electricity Policy, 2021, as relevant to the instant case, are provided in the below lines.

Clause 4.4 (Financial Viability) of the National Electricity Policy provides that sustainability of the entire power sector pivots around the financial and commercial viability of its individual sub-sectors.

This will be done by:

- a) *promoting investments on least cost basis balanced with development in the underserved areas;*
- b) *having cost-reflective tariffs in transmission and distribution, to the extent feasible;*
- c) *timely passing of costs to the consumers, while netting off any subsidies funded by the Government; and*
- d) *Recovery of costs arising on account of open access, distributed generation, etc.*

CLAUSE 5.5.2(F) OF NATIONAL ELECTRICITY POLICY ALSO PROVIDES:

“Providing a level playing field to all market participants through uniform application of cross-subsidization and other grid charges to consumers of all suppliers;

Clause 5.5.2(g) of National Electricity Policy also provides:

“The Government shall take a decision on the recovery of costs that arise due to advent of the open access and market liberalization;”

Clause 5.5.4 of National Electricity Policy further directs:

“In order to ensure implementation of wholesale market design and its further evolution, the Regulator shall in a timely manner frame, modify and evolve regulatory framework for, inter alia, supply, procurement, open access / wheeling, competitive bidding, import of power, and ensure effective market monitoring and enforcement. Provided that after implementation of CTBCM, every transmission licensee and distribution licensee shall offer, to all market participants, non-discriminatory open access / wheeling to its respective transmission or distribution system and interconnection services in accordance with CTBCM on the terms determined under the policy and legal framework.”

Clause 5.6.5 of National Electricity Policy stipulates:

“The Regulator, in order to ensure liquidity of the power sector, provide a level playing field for the development of wholesale market and to facilitate prudent projects of the Government, may impose additional charge(s) which shall be deemed to be costs incurred by the distribution companies / electric power supplier(s). Such additional charge may take into account the sustainability, socio-economic objectives and commercial viability of the sector, affordability for the consumers and the policy of uniform tariff. Similarly, the Government may also incorporate, in the consumer-end tariff, any surcharge imposed by it, which shall also be deemed to be cost incurred by the distribution companies / electric power supplier(s) and shall be collected by them in discharge of their public service obligations.”

Clause 5.6.7 of National Electricity Policy directs:

“The Regulator will provide for recovery of costs arising on account of distributed generation and open access in the consumer-end tariff, as decided by the Government. Further, the Government may announce, from time to time, various concessional packages to incentivize additional consumption to minimize such costs.”

LEGAL AND REGULATORY FRAMEWORK

The approved design of Competitive Trading and Bilateral Contracting Market (CTBCM) provides the right of choice to the eligible Bulk Power Consumers (BPCs) to opt for any Supplier of Electric Power. The design, within the framework of the Act, also provides the concept of Competitive Supplier of electric power besides the Supplier of Last Resort, for the purposes of said right of choice to the BPCs within the said wholesale market design. The said right of choice, referred to as “open access”, envisages non-discriminatory access to the transmission and distribution network. It enables the eligible Bulk Power Consumers to procure power at competitive price, to meet their demand, from any supplier including the supplier of last resort. The foremost concern of DISCOs emanates from apprehended deprivation of base load, good payers and subsidizing consumers to the open access; and resultant evident adverse impact on financial and operational efficiencies. It is plausibly noted that, in addition to and in line with the above mentioned policy framework, the regulatory framework also provides suitable way forward and relief to the DISCOs to mitigate the said possible adverse impacts.

As narrated in Clause 5.5.2(g) of the said National Electricity Policy, 2021 Ministry of Energy (Power Division) Government of Pakistan has notified The Eligibility Criteria (Electric Power Supplier Licence) Rules, 2023 vide SRO 1107(1)2023 dated August 25, 2023. Clause 5 of said Rules stipulates

Billing, collection and deposit of certain charges.— (1) Any person who has been granted a Licence for supply of electric power as a competitive supplier by the Authority, shall bill and collect from its bulk power consumers, and make timely deposit to the relevant distribution licensee in the designated account, all the (i) grid charges including the amount of cross subsidy and (ii) other costs arising on account of market liberalization and advent of open access, namely, the capacity costs or stranded costs. The said charges shall be deposited by the competitive supplier on accrual basis, i.e. the amount actually billed to the consumers for the billing cycle.

(2) The Authority shall determine the (i) grid charges including the amount of cross subsidy and (ii) other costs arising on account of market liberalization and advent of open access, namely, the capacity costs or stranded costs in accordance with the provisions of the

National Electricity Policy, National Electricity Plan and such other economic and social policy objectives as may be provided by the Federal Government to the Authority, including the following, namely:—

(a) The grid charges shall include, but not limited to the use of transmission and distribution system charges, market and system operator fee, metering service charges and cross subsidy. Such grid charges shall be imposed on uniform basis upon all bulk power consumers, namely, bulk power consumers of competitive suppliers shall pay equal amount of such grid charges which are being paid by equally placed other bulk power consumers of the respective supplier of last resort;

(b) the costs arising on account of market liberalization and advent of open access shall be the capacity charges or stranded costs to be paid by all bulk power consumers of a competitive supplier and the amount of such capacity charges shall be the same as the total generation capacity charges recovered from the equally placed bulk power consumers of the suppliers of last resort either in a volumetric form (kWh) or through fixed charges and such charges shall continue to be paid in the said manner till such time as may be reviewed by the Federal Government as per the procedure laid down in sub-rule (3) of this rule;

(c) the above charges shall be imposed on uniform basis across the country till the time the uniform tariff is applicable, and thereafter shall be applicable as per the tariff of each distribution company holding the supplier of last resort Licence; and

(d) The periodic adjustment of any component of the above charges shall be made by the Authority from time to time similar to the periodic adjustment of tariff of other consumers of suppliers of last resort.

Moreover, as directed in Clause 5.5.4 of the said National Electricity Policy, 2021, the honorable Authority promulgated / specified several Regulations to ensure effective implementation of the market regime in Pakistan. This included promulgation of National Electric Power Regulatory Authority Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 (**"Open Access Regulations"**).

For the purpose of this petition for determination of Use of System Charges in terms of mentioned Open Access Regulations, following terms as defined in the legal and regulatory framework are reproduced as below:

As per Section 2(ii) of the Act 1997:

"bulk-power consumer" means a consumer who purchases or receives electric power, at one premises, in an amount of one megawatt or more or in such other amount and voltage level and with such other characteristics as the Authority may specify and the Authority may specify different amounts and voltage levels and with such other characteristics for different areas"

Important definitions provided in Regulation 2 of Open Access Regulations are provided below:

2(1)(m) "open access" means the access to a network licensee's system or its associated facilities for movement and delivery of electric power, subject to the terms and conditions as provided in the Act, these regulations and use of system agreement, on non-discriminatory basis to:

- (i) an electric power supplier for supply of electric power to its consumer(s); or
- (ii) a captive generating plant for delivery of the electric power from generation facility to the destination of its use; or
- (iii) any other person, including a licensee for delivery of electric power from a designated place to another designated place;

2(1)(n) "open access user" means any person who is availing open access under these regulations;

2(1)(r) "use of system charges" shall include all charges related to use of distribution system, use of transmission system, system operator services, market operator services, metering service provider services and any other charges as determined by the Authority **that may arise due to advent of the open access and market liberalization.**

Part-III (OPEN ACCESS) Regulation 5 (Obligation to provide open access) of Open Access Regulations is reproduced hereunder:

- (1) "A network licensee shall establish, operate and maintain its distribution system or transmission system, as the case may be, in a manner that ensure non-discriminatory open access in accordance with the Act, these regulations, Market Commercial Code, Grid Code, Distribution Code and other applicable documents.
- (2) A network licensee shall, on an annual basis, prepare an open access report demonstrating compliance with these regulations and Licence terms and conditions, with

the detail of its open access users, available and planned capacity, any issues identified in provision of open access, and any instances where open access was denied along with justification thereof. The said report shall also be made available on the website of the network licensee.

- (3) The report required under sub-regulation (2) shall be prepared and submitted to the Authority within a period of one month from the date of end of respective financial year and shall also be made available on the website of the network licensee.*
- (4) The distribution company shall develop the use of system agreement in accordance with the minimum provisions provided in Schedule I within ninety days of the notification of these regulations and shall obtain the approval of the Authority and publish the same in its website."*

Regulation 7 (Filing of petition and determination of use of system charges) of Open Access Regulations provides as under:

"Within ninety days following the date of notification of these regulations, each distribution licensee, in consultation with the respective supplier of last resort, shall prepare and submit separate petition to the Authority for determination of its use of system charges. Such petition shall be accompanied with a statement which will set out the basis upon which the use of system charges shall be calculated in such manner and with such details as shall be necessary."

Regulation 8 (Wheeling of electric power) of Open Access Regulations states under:

"An open access user shall be entitled to wheel electric power using system of network licensee subject to compliance with these regulations and the Market Commercial Code, upon coming into effect, and use of system agreement."

TECHNICAL AND FINANCIAL ATTRIBUTES

Adjoining the purposes of CTBCM, directions of the National Electricity Policy, 2021 and stipulations of the legal and regulatory framework; following understandings are inferred:

- i) The network licensee, the FESCO for the purposes of instant petition, is obligated to provide open access, to its network, to the open access users on non-discriminatory basis.
- ii) For the said obligation, the FESCO is entitled for recovery of use of system charges in line with use of system agreement, as determined by the honorable Authority.

iii) The use of system charges shall include:

- a. Transmission Use of System Charges (NTDC, PGC) irrespective of the placement of BPC and the respective generator.
- b. System Operator Charges
- c. Metering Service Provider Charges
- d. Market Operator Charges
- e. Distribution Margin Charges w.r.t. to the voltage level (132kV, 11kV etc) and consumer category wise for all possible BPCs.
- f. Cross-Subsidy Charges (consumer category wise for all possible BPCs)
- g. Stranded Cost/Capacity (consumer category wise for all possible BPCs)
- h. Technical Transmission and Distribution Losses

iv) With reference to the above elements of use of system charges, following clarification shall apply for clarity of application:

- a. Currently applicable Transmission Use of System (TUoS) Charges, as already determined by the honorable Authority, compositely represent the charges relating to Transmission Network Operator(s)/Licensee(s), System Operator and Metering Service Provider. Accordingly, the said TUoS Charges remain part of use of system charges till separate charges for each of the said service providers are separately determined by the honorable Authority.
- b. Market Operator Fee / Charges (MOF) will be recovered by Market Operator as per the mechanism provided in the Market Commercial Code. Accordingly, without prejudice to being part of Cost of Service of FESCO, these shall not form part of use of system charges to be recovered directly by FESCO.
- c. Cross subsidy will be assessed based on Cost of Service analysis for the applicable consumer categories of all possible BPCs, which is according to the principles of uniformity as provided in the National Electricity Policy (referred above).
- d. Subject to the decision of the Government on the recovery of costs that arise due to advent of the open access and market liberalization, the Stranded Capacity Costs will be included in the use of system charges.
- e. The use of system charges, including the Distribution Margin Charges, as requested by FESCO and to the extent approved by Authority, will be applicable with reference

APPLICABLE CATEGORIES / CLASSIFICATION OF ELIGIBLE BPCS

While, in terms of existing stipulation contained in the Act, a consumer who purchases or receives electric power, at one premises, in an amount of one megawatt or more is considered as Bulk Power Consumer, following position, with regard to consumer with one megawatt or more load at connection voltage 11 kV and above, is brought out for consideration:

Sr. No.	Consumption Category	Tariff Category	Voltage Level	Remarks
1.	General	A-2 & A-3	N/A	As per the existing tariffs, no kW sanctioned load quantification or connection voltage is applicable to A-2 and A-3 tariff categories. Accordingly these are not considered BPC for the purposes of this petition. However, these costumer, based on the sanctioned load, may be connected at 11 KV level, as required. Any such customer falling within the definition of BPC, and subject to the approval of the Authority, will be considered in the analogy of C2.
2.	Industrial Consumer ranging from 500 kW to 5 MW. [extendable to 7.5 MW under conditions]	B-3	11/33 kV	B 3 consumer ranges from 500 kW to 5 MW.[Extendable to 7.5 MW under conditions] It is clarified here that the consumers of this category below 1MW shall not be treated as eligible BPCs for CTBCM. The use of system charges indicated for B-3 category will apply in case of eligible BPC.
3.	Industrial	B-4	66/132 kV and above	For All Load at 66/132 KV
4.	Bulk Supply Ranging from 500 kW to 5 MW. [extendable to 7.5 MW under conditions]	C-2(b)	11/33 kV	Bulk Supply consumer ranges from 500 kW to 5 MW. [Extendable to 7.5 MW under conditions] Although the Bulk Supply C-2 customers are at 11/33 KV connection level. It is clarified here that the consumers of this category below 1MW shall not be treated as eligible BPCs for CTBCM. The use of system charges indicated for C-2 category will apply in case of BPC at one premises. Further, the consumers falling under the resale shall not be considered as eligible BPC.
5.	Bulk Supply	C-3(b)	66 kV and above	For All Load at 66/132 KV above 5000 MW

Note: Consumer of all or any of the above listed categories, found involved in resale of power beyond the point of supply, shall NOT be considered BPC irrespective of the applicable relevant sanctioned load and/or voltage of supply.

OTHER IMPORTANT ASPECTS

Following paragraphs of the petition highlights other important aspects which shall be taken into account while determining the said charges.

GOVERNMENT SUBSIDIES

Any subsidy provided by the Government to the industrial or any other eligible BPC, as applicable, will be dealt with according to the directions and terms and conditions thereof as decided by the Government. However, for the purposes of this petition, such subsidies are not considered.

CAPTIVE POWER PRODUCERS AND USERS

- (1) A captive power producer / user using the FESCO network for wheeling of power to User destination will be considered "Market Participant" in terms of Market Commercial Code and will be dealt with accordingly. The use of system charges shall fully apply in manner applicable to any other eligible BPC.
- (2) The cases of captive generation and consumption points at the same location taking additional supply from the local supplier of last resort (SOLR) shall be considered a regulated consumer of the SOLR with applicable regulated tariff. The quantum of additional sanctioned / contracted load (in terms of MW) shall be considered to determine its status as BPC in terms of the Act. In case, such BPC choose to exercise option for a competitive supplier, the use of system charges shall apply in full.
- (3) In case of captive power producer / user supplying / receiving electric power at same premises where FESCO network is totally not used, the use of system charges shall NOT apply in any way or manner.

Applicability of Stranded Capacity Costs

The costs arising on account of market liberalization and advent of open access shall be the capacity charges/stranded costs to be paid by all eligible BPCs of a competitive supplier as detailed in this instant petition and the amount of such capacity charges shall be the same as the total generation capacity charges recovered from the equally placed bulk power consumers of the suppliers of last resort either in a volumetric form (kWh) and/or

through fixed charges and such charges shall continue to be paid till such time as may be decided by the Federal Government as per the National Electricity Policy.

Applicability of Use of System Charges on New Eligible BPCs

The Use of System Charges provided in the instant petition shall be applicable to all such BPCs who will opt to get supply of electric power from competitive supplier including the captive generator using the network to wheel its power to the destination of its use. Such charges shall be fully applicable to any new eligible BPC or incremental consumption, obtaining supply of electric power from competitive supplier without any exception.

Prayer:

In view of the above submissions, it is humbly requested that the Authority may kindly consider and determine the Use of System Charges as calculated in the attached Annex-1 which contain detailed analysis.

Annex-1

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Commercial				Commercial				Commercial A2 C (1 MW or More)			
Tariff Category	A2-C				A2-C				MDI Based	Volumetric	Hybrid	
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total				
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	7.46			7.46	6.74			6.74				-
Generation Cost - Capacity		7,220.35	15.30	15.30		6,524.66	13.83	13.83	6,524.66	13.83	1,957.40	9.68
Transmission Charges		582.33	1.23	1.23		526.22	1.12	1.12	526.22	1.12	157.87	0.78
Distribution Use of System		1,114.81	2.36	2.36		1,007.40	2.14	2.14	1,007.40	2.14	302.22	1.49
Total Applicable Costs	7.46	8,917.49	18.90	26.36	6.74	8,058.28	17.08	23.82	8,058.28	17.08	2,417.48	11.95
Impact of allowed losses					0.72	859.21	1.82	2.54	859.21	1.82	257.76	1.27
Total Cost of Service	7.46	8,917.49	18.90	26.36	7.46	8,917.49	18.90	26.36	8,917.49	18.90	2,675.25	13.23
Cross Subsidy				8.16				8.16	3,850.72	8.16		8.16
Average Applicable Tariff				34.52				34.52	12,768.21	27.06	2,675.25	21.39

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)			Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges				
Consumption Category	Industrial			Industrial				Industrial B-3 (1 MW or More)				
Tariff Category	B-3			B-3				MDI Based	Volumetric	Hybrid		
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed						Total
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	7.32			7.32	6.74			6.74				-
Generation Cost - Capacity		7,079.63	13.57	13.57		6,524.66	12.50	12.50	6,524.66	12.50	1,957.40	8.75
Transmission Charges		570.98	1.09	1.09		526.22	1.01	1.01	526.22	1.01	157.87	0.71
Distribution Use of System		1,108.29	2.12	2.12		1,021.41	1.96	1.96	1,021.41	1.96	306.42	1.37
Total Applicable Costs	7.32	8,758.91	16.79	24.10	6.74	8,072.30	15.47	22.22	8,072.30	15.47	2,421.69	10.83
Impact of allowed losses					0.57	686.61	1.32	1.89	686.61	1.32	205.98	0.92
Total Cost of Service	7.32	8,758.91	16.79	24.10	7.32	8,758.91	16.79	24.10	8,758.91	16.79	2,627.67	11.75
Cross Subsidy				6.74				6.74	3,519.07	6.74		6.74
Average Applicable Tariff				30.85				30.85	12,277.97	23.53	2,627.67	18.50

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Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Industrial				Industrial				Industrial B-4 (Above 5 MW or More)			
Tariff Category	B-4				B-4				MDI Based	Volumetric	Hybrid	
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total				
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	6.85			6.85	6.74			6.74				-
Generation Cost - Capacity		6,628.73	12.37	12.37		6,524.66	12.18	12.18	6,524.66	12.18	1,957.40	8.53
Transmission Charges		534.62	1.00	1.00		526.22	0.98	0.98	526.22	0.98	157.87	0.69
Distribution Use of System		512.08	0.96	0.96		504.04	0.94	0.94	504.04	0.94	151.21	0.66
Total Applicable Costs	6.85	7,675.43	14.33	21.18	6.74	7,554.92	14.10	20.85	7,554.92	14.10	2,266.48	9.87
Impact of allowed losses					0.11	120.51	0.22	0.33	120.51	0.22	36.15	0.16
Total Cost of Service	6.85	7,675.43	14.33	21.18	6.85	7,675.43	14.33	21.18	7,675.43	14.33	2,302.63	10.03
Cross Subsidy				9.50				9.50	5,089.75	9.50		9.50
Average Applicable Tariff				30.68				30.68	12,765.18	23.83	2,302.63	19.53

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-2 (a) (1 MW or More)			
Tariff Category	C-2(a)				C-2(a)				MDI Based	Volumetric	Hybrid	
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total				
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	7.32			7.32	6.74			6.74				-
Generation Cost - Capacity		7,079.63	27.63	27.63		6,524.66	25.46	25.46	6,524.66	25.46	1,957.40	17.82
Transmission Charges		570.98	2.23	2.23		526.22	2.05	2.05	526.22	2.05	157.87	1.44
Distribution Use of System		1,040.00	4.06	4.06		958.48	3.74	3.74	958.48	3.74	287.54	2.62
Total Applicable Costs	7.32	8,690.62	33.91	41.23	6.74	8,009.36	31.26	38.00	8,009.36	31.26	2,402.81	21.88
Impact of allowed losses					0.57	681.26	2.66	3.23	681.26	2.66	204.38	1.86
Total Cost of Service	7.32	8,690.62	33.91	41.23	7.32	8,690.62	33.91	41.23	8,690.62	33.91	2,607.19	23.74
Cross Subsidy				(3.64)				(3.64)	(932.03)	(3.64)		(3.64)
Average Applicable Tariff				37.60				37.60	7,758.58	30.28	2,607.19	20.10

FESCO – Petition for Determination Use of System Charges FY 2023-24 (October, 2023)

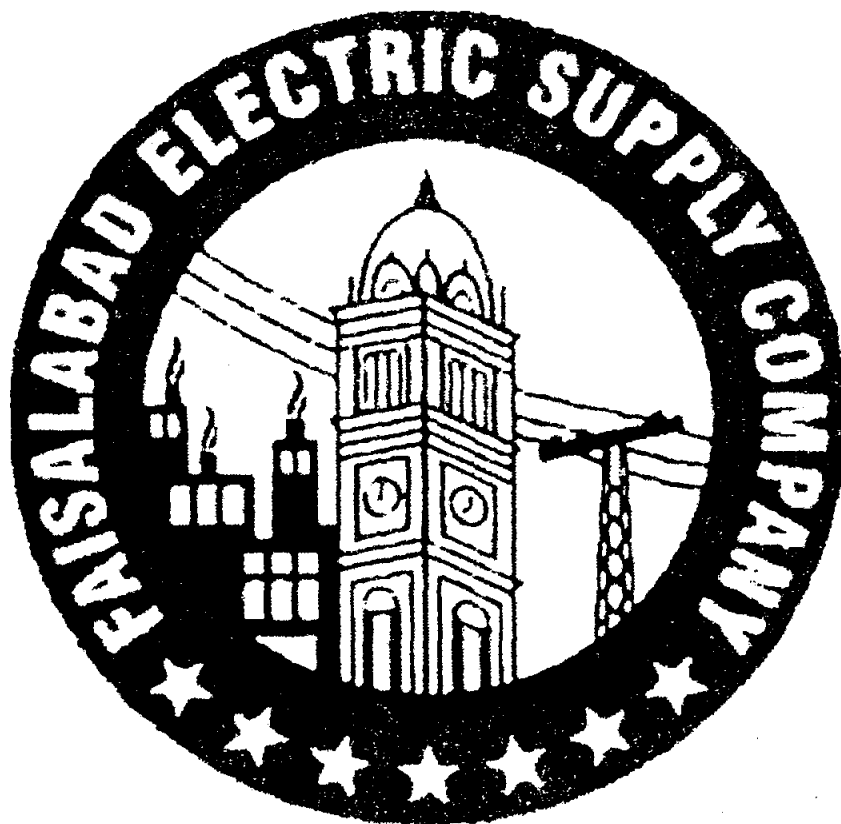
Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-2 (b) (1 MW or More)			
Tariff Category	C-2 (b)				C-2 (b)				MDI Based	Volumetric	Hybrid	
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total				
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	7.32			7.32	6.74			6.74				-
Generation Cost - Capacity		7,079.63	16.96	16.96		6,524.66	15.63	15.63	6,524.66	15.63	1,957.40	10.94
Transmission Charges		570.98	1.37	1.37		526.22	1.26	1.26	526.22	1.26	157.87	0.88
Distribution Use of System		1,081.43	2.59	2.59		996.66	2.39	2.39	996.66	2.39	299.00	1.67
Total Applicable Costs	7.32	8,732.05	20.92	28.24	6.74	8,047.54	19.28	26.03	8,047.54	19.28	2,414.26	13.50
Impact of allowed losses					0.57	684.51	1.64	2.21	684.51	1.64	205.35	1.15
Total Cost of Service	7.32	8,732.05	20.92	28.24	7.32	8,732.05	20.92	28.24	8,732.05	20.92	2,619.61	14.65
Cross Subsidy				5.48				5.48	2,286.26	5.48		5.48
Average Applicable Tariff				33.72				33.72	11,018.31	26.40	2,619.61	20.12

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-3 (a) (Above 5 MW or More)			
Tariff Category	C-3 (a)				C-3 (a)				MDI Based	Volumetric	Hybrid	
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total				
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	6.85			6.85	6.74			6.74				-
Generation Cost - Capacity		6,628.73	20.45	20.45		6,524.66	20.12	20.12	6,524.66	20.12	1,957.40	14.09
Transmission Charges		534.62	1.65	1.65		526.22	1.62	1.62	526.22	1.62	157.87	1.14
Distribution Use of System		471.71	1.45	1.45		464.30	1.43	1.43	464.30	1.43	139.29	1.00
Total Applicable Costs	6.85	7,635.06	23.55	30.40	6.74	7,515.19	23.18	29.92	7,515.19	23.18	2,254.56	16.23
Impact of allowed losses					0.11	119.87	0.37	0.48	119.87	0.37	35.96	0.26
Total Cost of Service	6.85	7,635.06	23.55	30.40	6.85	7,635.06	23.55	30.40	7,635.06	23.55	2,290.52	16.48
Cross Subsidy				12.89				12.89	4,178.53	12.89		12.89
Average Applicable Tariff				43.29				43.29	11,813.58	36.44	2,290.52	29.37

FESCO – Petition for Determination Use of System Charges FY 2023-24 (October, 2023)

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-3 (b) (Above 5 MW or More)			
Tariff Category	C-3 (b)				C-3 (b)				MDI Based	Volumetric	Hybrid	
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total				
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	6.85			6.85	6.74			6.74				-
Generation Cost - Capacity		6,628.73	16.61	16.61		6,524.66	16.35	16.35	6,524.66	16.35	1,957.40	11.45
Transmission Charges		534.62	1.34	1.34		526.22	1.32	1.32	526.22	1.32	157.87	0.92
Distribution Use of System		486.00	1.22	1.22		478.37	1.20	1.20	478.37	1.20	143.51	0.84
Total Applicable Costs	6.85	7,649.35	19.17	26.02	6.74	7,529.25	18.87	25.61	7,529.25	18.87	2,258.78	13.21
Impact of allowed losses					0.11	120.10	0.30	0.41	120.10	0.30	36.03	0.21
Total Cost of Service	6.85	7,649.35	19.17	26.02	6.85	7,649.35	19.17	26.02	7,649.35	19.17	2,294.80	13.42
Cross Subsidy				7.67				7.67	3,062.07	7.67		7.67
Average Applicable Tariff				33.69				33.69	10,711.41	26.84	2,294.80	21.09

FY 2023-24



FESCO Cost of Service Study

FY 2023-24

FAISALABAD ELECTRIC SUPPLY COMPANY LIMITED

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FESCO – Petition for Determination Use of System Charges (October, 2023) **Annex-2**
FAISALABAD Electric Power Company (FESCO) Ltd.

Cost of Service Study

A Cost of Service (COS) study is the fundamental tool for evaluating and establishing utility rates. With industry and technology changes, utilities are expanding the scope and use of COS studies and are preparing studies that distinguish full and partial requirements customer classes. This is due to the increasing presence of distributed energy resources and/or to accommodate customers' expectations of having more control over their usage and utility bills.

Cost of Service is the total cost incurred by a utility company/DISCO in providing services to its customers and the allocation of the same to customer classes and/or voltage levels.

Fully Allocated Cost of Service Study (FACOS) Model

FACOS is a model developed in MS Excel with the support of USAID for DISCO's to conduct Cost of Service Study. The methodology used to build the FACOS Model follows very closely the standards that are used internationally. The Model performs the standard three steps encompassed in most of Cost Studies, namely, functionalization, classification, and allocation.

Major Steps of Cost of Service Study

A class cost of service study begins with a detailed documentation of the numerous budgetary elements of the total revenue requirement. The detailed revenue requirements are the data inputs to the FACOS. At a high level, the FACOS process consists of the following three (3) basic steps:

- 1. Functionalization** – The identification of each cost element as one of the basic utility service "functions" (e.g. generation/Power Purchase Price, transmission, distribution and customer).
- 2. Classification** – The classification of the functionalized costs based on the billing component/determinant that each is associated with (e.g. KWs of capacity, KWhs of energy or number of customers).
- 3. Allocation** – The allocation of the functionalized and classified costs to customer classes, based on respective service requirements / parameters (e.g. KWs of capacity, KWhs of energy and the number of customers) of each class.

Fundamental Assumptions

Table 1

Description	FY 2023-24
Weighted Average Cost of Capital	13.19%
Capital Work in Progress ("CWIP")	CWIP 100%
Working Capital Allowance to be included in Rate Base	NO
Prior Year Adjustment (Rs. in Mill. Approved by NEPRA for FY 2023-24)	0
Demand Allocation Methodology (highest coincident peak in the year). Alternative is 12CP that means average of 12 months' coincident peak)	1 CP (Single Annual Peak)
Customer Growth %	5.00%
Model Year	FY 2023-24
Base Year	FY 2021-22

Projections and Revenue Requirement for Financial Year 2023-24

The Revenue Requirement (RR) is the fundamental input to the Cost of Service of FESCO for allocation to different categories of consumers based on Capacity (kW), Energy (kWh) and number of consumers. The **Table 2** below explains the basis and sources for arriving at Revenue Requirement (or overall Cost of Service) of FESCO.

Table 2

Description	FY 2023-24	Source
Units Purchases (MkWh)	16,965	Projections approved by NEPRA for FY 2023-24 vide Interim Tariff Decision No.NEPRA/DG(Trf)ITRF-605 & TRF-606/18241-47 dated 14-07-2023, Page No. 03, Clause 15
Units Sales (MkWh)	15,482	
Assessed T&D Losses	8.74%	
Consumer Growth	5.00%	
Average Monthly MDI (MW) (Non-coincidental at CDPs)	3,485	
Peak Demand (MW at 11 kv Conincident)	2,990	Peak Demand (July-2022). Allocated to customer categories after impact of losses at each voltage for calculation of fixed charge of Cost of Service
Energy Charge (Rs/kWh)	6.74	Calculated by using given Cost and quantitative parameters for cost allocation purposes.
Capacity Charge (Rs/kW/Month)	6,026.4	
T.UoSC & MoF (Rs/kW/Month)	486.04	
Energy Charges (Rs. M)	114,415	Projections approved by NEPRA for FY 2023-24 vide Interim Tariff Decision No.NEPRA/DG(Trf)ITRF-605 & TRF-606/18241-47 dated 14-07-2023, Page No. 03, Clause 15
Capacity Charges (Rs. M)	252,026	
T.UoSC (Rs. M)	20,326	
Power Purchase Price	386,767	
O&M Cost (Million Rs.)	32,470	Projections approved by NEPRA for FY 2023-24 vide Interim Tariff Decision No.NEPRA/DG(Trf)ITRF-605 & TRF-606/18241-47 dated 14-07-2023, Page No. 03, Clause 15
Depreciation (Million Rs.)	6,031	
RORB (Million Rs.)	10,309	
Other Income (Million Rs.)	(5,246)	
Prior Year Adjustment (Rs. M)	-	
Revenue Requirement (Rs. M)	430,331	
Cost per kWh (sold)	27.80	

Summary of Revenue Requirement

The extract of Revenue Requirement is provided in the **Table 3** below:

Table 3

Summary of Revenue Requirement	
Description	FY 2023-24 Rs. (M)
Energy Charges	114,415
Capacity Charges	252,026
T.UoSC & MoF	20,326
Power Purchase Price	386,767
O&M Cost	32,470
Depreciation	6,031
RORB	10,309
Other Income	(5,246)
Distribution Margin	43,564
Prior Year Adjustment	-
Revenue Requirement	430,331

Line Losses Charged on Voltage Levels

Line losses approved by NEPRA for FY 2023-24 as a percentage on purchased units is given in **Table 4**. Line losses as a percentage on received units at each voltage level are calculated on the basis of sales data of FY 2022-23.

Table 4

Losses FY 2023-24						
Voltage Level	0.2 kV	0.4 kV	11 kV	132kV	Total	Source
Losses %age on purchased units	1.40%		5.77%	1.57%	8.74%	Target as per Nepra Determination is 8.74%. Therefore, losses for FY 2023-24 are taken as 8.74%.
Losses %age on received units	1.65%		5.86%	1.57%	8.74%	calculated as applied on units received at each voltage level.
Losses %age charged on purchased units	8.87%		7.34%	1.57%		Reversed calculated to show affective %age of losses vs. units purchased for each voltage level.

Overall the effective %age of energy losses, i.e. (total kWh purchases – total kWh sold)/total kWh purchased remains 8.74% as per target.

Customer Classification by Voltage Level

While the Cost of Service study is based on allocation of the Revenue Requirement on Classes (categories) of the consumers at different voltage levels; the **Table 5** below provides mapping of existing categories of consumers on the basis of applicable voltage levels.

Table 5

Classification by Voltage Level

	1	2	3	4
Voltage	132/66kV	11kV	0.4kV	0.2 kV
Customer Class	B4	B3	A1b	A1a
	C3a	C2a	A2b	A2a
	C3b	C2b	A2c	B1a
		H1	A3a	C1a
		H2	B1b	E1i
		K1a	B2a	E1ii
		K1b	B2b	E2
			C1b	
			C1c	
			D1a	
			D1b	
			D2a	
			D2b	
			G1	
			G2	

FESCO Tariff determined by NEPRA in July-2023.

Tariffs for various categories of FESCO consumers as determined by NEPRA vide their determination No.NEPRA/R/DG(TRF)/TRF-605 &TRF-606/18241-47 dated 14-07-2023 are provided in

FESCO – Petition for Determination Use of System Charges (October, 2023) **Annex-2**

NEPRA Determined Interim Tariff (14-07-2023)

TARIFF CATEGORIES		Fixed Charges Rs./KW/M	Variable Charges Rs./kWh
A1 (a)	RESIDENTIAL -A1		
i	Up to 50 Units Life line		7.00
ii	51-100 units Life line		11.74
iii	01-100 Units		12.74
iv	101-200 Units		15.06
v	01-100 Units		18.98
vi	101-200 Units		24.45
vii	201-300 Units		27.64
viii	301-400Units		31.03
ix	401-500Units		33.24
x	501-600Units		34.66
xi	601-700Units		35.80
xii	Above 700 Units		40.72
A1(b)	Time of Use (TOU) - Peak		39.89
	Time of Use (TOU) - Off-Peak		33.57
E-1(i)	Temporary E-1 (i)		40.03
	COMMERCIAL - A2		
A2 (a)	Commercial - For peak load requirement up to 5 kW		35.77
A2 (b)	Sanctioned load 5 kw and above	500	37.45
A2 (c)	Time of Use (TOU) - Peak (A-2)	500	39.43
	Time of Use (TOU) - Off-Peak	500	33.34
A2 (d)	Electric Vehicle Charging Station		36.16
E-1 (ii)	Temporary E-1 (ii)		30.52
	INDUSTRIAL		
B1(a)	B1		32.23
B1(b)	B1- TOU (Peak)		35.79
	B1 - TOU (Off-peak)		30.23
B2 (a)	B2	500	31.73
B2 (b)	B2 - TOU (Peak)	500	35.73
	B2 - TOU (Off-peak)	500	30.02
B3	B3 - TOU (Peak)	460	35.73
	B3 - TOU (Off-peak)	460	29.93
B4	B4 - TOU (Peak)	440	35.73
	B4 - TOU (Off-peak)	440	29.83
E-2	Temporary E-2		33.31
	BULK		
C1 (a)	C1(a) up to 5 kW		36.45
C1 (b)	C1(b) exceeding 5 kW	500	35.95
C1 (c)	Time of Use (TOU) - Peak	500	39.37
	Time of Use (TOU) - Off-Peak	500	32.77
C2 (a)	C2 Supply at 11 kV	460	35.75
C2 (b)	Time of Use (TOU) - Peak	460	39.37
	Time of Use (TOU) - Off-Peak	460	32.57
C3 (a)	C3 Supply above 11 kV	440	35.65
C3 (b)	Time of Use (TOU) - Peak	440	39.37
	Time of Use (TOU) - Off-Peak	440	32.47
	AGRICULTURAL TUBE WELLS - Tariff D		
D1 (a)	D1 Scarp		32.45
D2 (a)	D2 Agricultural Tube-wells	200	22.12
D1 (b)	Time of Use (TOU) - Peak	200	35.37
	Time of Use (TOU) - Off-Peak	200	28.12
D2 (b)	Time of Use (TOU) - Peak	200	22.12
	Time of Use (TOU) - Off-Peak	200	22.12
G	Public Lighting G		35.43
H	Residential Colonies H		35.43
K1	Special Contracts - Tariff K (AJK)		
K1 (i)	Time of Use (TOU) - Peak		
	Time of Use (TOU) - Off-Peak		
A3	General Service		35.34

below.

NEPRA Determined Interim Tariff (14-07-2023)

TARIFF CATEGORIES		Fixed Charges Rs./KW/M	Variable Charges Rs./kWh
A1 (a)	RESIDENTIAL - A1		
i	Up to 50 Units Life line		7.00
ii	51-100 units Life line		11.74
iii	01-100 Units		12.74
iv	101-200 Units		15.06
v	01-100 Units		18.98
vi	101-200 Units		24.45
vii	201-300 Units		27.64
viii	301-400Units		31.03
ix	401-500Units		33.24
x	501-600Units		34.66
xi	601-700Units		35.80
xii	Above 700 Units		40.72
A1(b)	Time of Use (TOU) - Peak		39.89
	Time of Use (TOU) - Off-Peak		33.57
E-1(i)	Temporary E-1 (i)		40.03
	COMMERCIAL - A2		
A2 (a)	Commercial - For peak load requirement up to 5 kW		35.77
A2 (b)	Sanctioned load 5 kw and above	500	37.45
A2 (c)	Time of Use (TOU) - Peak (A-2)	500	39.43
	Time of Use (TOU) - Off-Peak	500	33.34
A2 (d)	Electric Vehicle Charging Station		36.16
E-1 (ii)	Temporary E-1 (ii)		30.52
	INDUSTRIAL		
B1(a)	B1		32.23
B1(b)	B1- TOU (Peak)		35.79
	B1 - TOU (Off-peak)		30.23
B2 (a)	B2	500	31.73
B2 (b)	B2 - TOU (Peak)	500	35.73
	B2 - TOU (Off-peak)	500	30.02
B3	B3 - TOU (Peak)	460	35.73
	B3 - TOU (Off-peak)	460	29.93
B4	B4 - TOU (Peak)	440	35.73
	B4 - TOU (Off-peak)	440	29.83
E-2	Temporary E-2		33.31
	BULK		
C1 (a)	C1(a) up to 5 kW		36.45
C1 (b)	C1(b) exceeding 5 kW	500	35.95
C1 (c)	Time of Use (TOU) - Peak	500	39.37
	Time of Use (TOU) - Off-Peak	500	32.77
C2 (a)	C2 Supply at 11 kV	460	35.75
C2 (b)	Time of Use (TOU) - Peak	460	39.37
	Time of Use (TOU) - Off-Peak	460	32.57
C3 (a)	C3 Supply above 11 kV	440	35.65
C3 (b)	Time of Use (TOU) - Peak	440	39.37
	Time of Use (TOU) - Off-Peak	440	32.47
	AGRICULTURAL TUBE WELLS - Tariff D		
D1 (a)	D1 Scarp		32.45
D2 (a)	D2 Agricultural Tube-wells	200	22.12
D1 (b)	Time of Use (TOU) - Peak	200	35.37
	Time of Use (TOU) - Off-Peak	200	28.12
D2 (b)	Time of Use (TOU) - Peak	200	22.12
	Time of Use (TOU) - Off-Peak	200	22.12
G	Public Lighting G		35.43
H	Residential Colonies H		35.43
K1	Special Contracts - Tariff K (AJK)		
K1 (i)	Time of Use (TOU) - Peak		
	Time of Use (TOU) - Off-Peak		
A3	General Service		35.34

Results from FACOS Model

Revenue Requirement Allocation (in Percentage)

While developing the Fully Allocated Cost of Service Model, the detailed study for allocation of cost of service and rate base (for each component) to cost drivers (energy, demand and customer) was developed. Overall summary of the allocation is given in below **Table 6**

Table 6

Revenue Requirement Allocation %age				
Description	Energy	Demand	Customer	Total
Energy Charges	100%	-	-	100%
Capacity Charges	-	100%	-	100%
T.UoSC	-	100%	-	100%
O&M Cost	-	79%	21%	100%
Depreciation	-	77%	23%	100%
RORB	-	90%	10%	100%
Other Income	-	76%	24%	100%
Prior Year Adjustment	-	-	-	-

Revenue Requirement Allocation to Energy, Demand and Customer.

Based on the allocation percentages given in above table, the revenue requirement allocated to energy, demand and customer (cost triggers) is shown in **Table 7** below.

Table 7

Revenue Requirement Allocation Rs. (M)				
Description	Energy	Demand	Customer	Total
Energy Charges	114,415	-	-	114,415
Capacity Charges	-	252,026	-	252,026
T.UoSC	-	20,326	-	20,326
Power Purchase Price	114,415	272,352	-	386,767
O&M Cost	-	25,640	6,830	32,470
Depreciation	-	4,620	1,411	6,031
RORB	-	9,307	1,002	10,309
Other Income	-	(4,009)	(1,237)	(5,246)
Distribution Margin	-	35,558	8,006	43,564
Prior Year Adjustment	-	-	-	-
Revenue Requirement	114,415	307,910	8,006	430,331

Revenue as per NEPRA Tariff by Customer Category and Voltage Level

The **Table 8** below provides detailed category-wise estimated revenue and average (Rs./kWh) thereof. Whereas the **Table 9** is summary of the said category-wise estimated revenue based on the supply Voltage level of relevant customer category, with average rate (Rs./kWh) thereof. As already mentioned, the calculation of revenue is based on NEPRA Tariff determined vide No. NEPRA/DG (TRF)/TRF-605 & TRF-606/18241-47 dated 14-07-2023 already provided in (

FESCO – Petition for Determination Use of System Charges (October, 2023) Annex-2

NEPRA Determined Interim Tariff (14-07-2023)

TARIFF CATEGORIES		Fixed Charges Rs./KW/M	Variable Charges Rs./kWh
A1 (a)	RESIDENTIAL - A1		
i	Up to 50 Units Life line		7.00
ii	51-100 units Life line		11.74
iii	01-100 Units		12.74
iv	101-200 Units		15.06
v	01-100 Units		18.98
vi	101-200 Units		24.45
vii	201-300 Units		27.64
viii	301-400Units		31.03
ix	401-500Units		33.24
x	501-600Units		34.66
xi	601-700Units		35.80
xii	Above 700 Units		40.72
A1(b)	Time of Use (TOU) - Peak		39.89
	Time of Use (TOU) - Off-Peak		33.57
E-1(i)	Temporary E-1 (i)		40.03
	COMMERCIAL - A2		
A2 (a)	Commercial - For peak load requirement up to 5 kW		35.77
A2 (b)	Sanctioned load 5 kw and above	500	37.45
A2 (c)	Time of Use (TOU) - Peak (A-2)	500	39.43
	Time of Use (TOU) - Off-Peak	500	33.34
A2 (d)	Electric Vehicle Charging Station		36.16
E-1 (ii)	Temporary E-1 (ii)		30.52
	INDUSTRIAL		
B1(a)	B1		32.23
B1(b)	B1- TOU (Peak)		35.79
	B1 - TOU (Off-peak)		30.23
B2 (a)	B2	500	31.73
B2 (b)	B2 - TOU (Peak)	500	35.73
	B2 - TOU (Off-peak)	500	30.02
B3	B3 - TOU (Peak)	460	35.73
	B3 - TOU (Off-peak)	460	29.93
B4	B4 - TOU (Peak)	440	35.73
	B4 - TOU (Off-peak)	440	29.83
E-2	Temporary E-2		33.31
	BULK		
C1 (a)	C1(a) up to 5 kW		36.45
C1 (b)	C1(b) exceeding 5 kW	500	35.95
C1 (c)	Time of Use (TOU) - Peak	500	39.37
	Time of Use (TOU) - Off-Peak	500	32.77
C2 (a)	C2 Supply at 11 kV	460	35.75
C2 (b)	Time of Use (TOU) - Peak	460	39.37
	Time of Use (TOU) - Off-Peak	460	32.57
C3 (a)	C3 Supply above 11 kV	440	35.65
C3 (b)	Time of Use (TOU) - Peak	440	39.37
	Time of Use (TOU) - Off-Peak	440	32.47
	AGRICULTURAL TUBE WELLS - Tariff D		
D1 (a)	D1 Scarp		32.45
D2 (a)	D2 Agricultural Tube-wells	200	22.12
D1 (b)	Time of Use (TOU) - Peak	200	35.37
	Time of Use (TOU) - Off-Peak	200	28.12
D2 (b)	Time of Use (TOU) - Peak	200	22.12
	Time of Use (TOU) - Off-Peak	200	22.12
G	Public Lighting G		35.43
H	Residential Colonies H		35.43
K1	Special Contracts - Tariff K (AJK)		
K1 (i)	Time of Use (TOU) - Peak		
	Time of Use (TOU) - Off-Peak		
A3	General Service		35.34

Table 8

FY 2023-24						
Customer Category	MDI MW	Sales (GWh)	Fixed Charge Rs. (M)	Variable Charge Rs. (M)	Total Revenue Rs.(M)	Rs./kWh
Residential -- A1(a)	1,507	6,744	-	161,498	161,498	23.95
Residential -- A1(b)	38	172	-	5,968	5,968	34.78
Commercial -- A2(a)	80	390	-	13,936	13,936	35.77
Commercial -- A2(b)	0	0	0.48	7	8	39.93
Commercial -- A2(c)	73	412	-	14,233	14,233	34.52
Commercial -- A2(d)	0	0	-	1	1	30.52
Industrial -- B1(a)	6	37	-	1,202	1,202	32.23
Industrial -- B2(a)	0	0	0.05	0	0	65.67
Industrial -- B1(b)	60	363	-	11,261	11,261	31.04
Industrial -- B2(b)	323	2,218	-	68,505	68,505	30.88
Industrial -- B3	335	2,096	-	64,650	64,650	30.85
Industrial -- B4	194	1,244	-	38,172	38,172	30.68
Bulk Supply -- C1(a)	0	0	-	4	4	36.45
Bulk Supply -- C1(b)	0	1	1.55	32	34	37.67
Bulk Supply -- C2(a)	0	0	0.12	2	2	37.60
Bulk Supply -- C3(a)	1	3	19.35	90	110	43.29
Bulk Supply -- C1(c)	3	16	-	553	553	33.86
Bulk Supply -- C2(b)	21	103	-	3,480	3,480	33.72
Bulk Supply -- C3(b)	17	82	-	2,772	2,772	33.69
Agricultural --D1(a)	2	13	-	429	429	32.45
Agricultural --D2(a)	0	0	-	0	0	22.12
Agricultural --D2(b)	218	1,225	-	27,099	27,099	22.12
Agricultural --D1(b)	5	38	-	1,102	1,102	28.69
Temporary Supply -- E1(i)	0	1	-	39	39	40.03
Temporary Supply -- E1(ii)	5	26	-	954	954	36.16
Temporary Supply -- E2	5	28	-	919	919	33.31
Public Lighting -- G	3	18	-	648	648	35.43
Residential Colonies -- H	1	5	-	165	165	35.43
Azad Jammu Kashmir - K1a	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	-	-	-	-	-	-
A3 General	39	246	-	8,705	8,705	35.34
Total	2,933	15,482	21.54	426,426	426,447	27.54

Table 9

FY 2023-24						
Customer Class	MDI MW	Sales (GWh)	Fixed Charge Rs. (M)	Variable Charge Rs. (M)	Total Revenue	Rs./kWh
0.2 kV	1,603	7,226	-	178,981	178,981	24.77
0.4 kV	762	4,724	2.07	138,113	138,115	29.24
11 Kv	356	2,204	0.12	68,297	68,297	30.99
132 kv	211	1,329	19.35	41,034	41,054	30.89
G. TOTAL	2,933	15,482	22	426,425	426,447	27.54

Cost of Service Functionalized Rates (Tariff Wise)

Based on the allocation of overall Revenue Requirement of FESCO to customers categories, the resultant functional amounts (Rs. in million) for each customer category are summarized at Table 10 below. Currently there is no customer at 132kv in FESCO. Cost of Service at 132kv will be discussed later in this document.

Table 10

FY 2023-24										
Classes	Volt. Level	No. of Customers	Energy	Demand	Generation Cost		Transm	Distribution		Total Cost
			GWh	MW	Energy (Rs.M)	Demand (Rs.M)	Cost (Rs.M)	Demand (Rs.M)	Cust. Cost (Rs.M)	
Residential -- A1(a)	0.2kV	4,713,079	6,744	1,507	50,333	130,580	10,531	17,967	7,584	216,996
Residential -- A1(b)	0.4kV	29,290	172	38	1,281	3,278	264	451	44	5,318
Commercial -- A2(a)	0.2kV	453,686	390	80	2,908	6,895	556	949	438	11,746
Commercial -- A2(b)	0.4kV	27	0	0	1	5	0	1	0	8
Commercial -- A2(c)	0.4kV	18,480	412	73	3,077	6,308	509	868	106	10,868
Commercial -- A2(d)	0.4kV	4	0	0	0	0	0	0	0	1
Industrial -- B1(a)	0.2kV	10,024	37	6	278	538	43	74	42	976
Industrial -- B2(a)	0.4kV	2	0	0	0	0	0	0	0	0
Industrial -- B1(b)	0.4kV	31,676	363	60	2,708	5,166	417	711	93	9,094
Industrial -- B2(b)	0.4kV	14,834	2,218	323	16,555	27,972	2,256	3,849	570	51,202
Industrial -- B3	11kV	449	2,096	335	15,336	28,435	2,293	3,912	539	50,516
Industrial -- B4	132kV	22	1,244	194	8,524	15,396	1,242	952	238	26,351
Bulk Supply -- C1(a)	0.2kV	25	0	0	1	2	0	0	0	3
Bulk Supply -- C1(b)	0.4kV	23	1	0	7	15	1	2	0	26
Bulk Supply -- C2(a)	11kV	3	0	0	0	2	0	0	0	3
Bulk Supply -- C3(a)	132kV	4	3	1	17	52	4	3	0	77
Bulk Supply -- C1(c)	0.4kV	132	16	3	122	290	23	40	4	480
Bulk Supply -- C2(b)	11kV	56	103	21	755	1,751	141	241	27	2,915
Bulk Supply -- C3(b)	132kV	3	82	17	564	1,367	110	84	16	2,141
Agricultural -- D1(a)	0.4kV	1,125	13	2	99	139	11	19	3	271
Agricultural -- D2(a)	0.4kV	655	0	0	0	0	0	0	0	0
Agricultural -- D2(b)	0.4kV	53,271	1,225	218	9,143	18,848	1,520	2,593	315	32,420
Agricultural -- D1(b)	0.4kV	432	38	5	287	403	33	55	10	788
Temporary Supply -- E1(i)	0.2kV	369	1	0	7	14	1	2	1	25
Temporary Supply -- E1(ii)	0.2kV	2,358	26	5	197	403	33	55	30	718
Temporary Supply -- E2	0.2kV	72	28	5	206	460	37	63	31	797
Public Lighting -- G	0.4kV	2,053	18	3	136	262	21	36	5	460
Residential Colonies -- H	11kV	154	5	1	34	69	6	10	1	120
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	32,485	246	39	1,838	3,375	272	464	63	6,014
Total		5,364,796	15,482	2,933	114,415	252,026	20,326	33,403	10,161	430,331

FESCO – Petition for Determination Use of System Charges (October, 2023) **Annex-2**

Based on the cost drivers (energy, demand & customers) based allocation of overall Revenue Requirement of FESCO to the customers categories, the resultant functional (generation, transmission, MO Fee & Distribution) rates (in terms of Rs./kWh, Rs./kW/Month and Rs./Customer / Month, as applicable) are summarized at **Table 11** below.

Table 11

FY 2023-24										
Classes	Volt. Level	No. of Customers	Energy	Demand	Generation Cost		Transm	Distribution		Total Rs./ kWh
			GWh	MW	Energy (Rs/kWh)	Demand (Rs/kW/ Month)	(Rs/kW /Month)	(Rs/kW/M onth)	(Rs./ Cust/ Month)	
Residential -- A1(a)	0.2kV	4,713,079	6,744	1,507	7.46	7,220.35	582.33	993.46	134.10	32.18
Residential -- A1(b)	0.4kV	29,290	172	38	7.46	7,220.35	582.33	993.46	125.57	30.99
Commercial -- A2(a)	0.2kV	453,686	390	80	7.46	7,220.35	582.33	993.46	80.48	30.15
Commercial -- A2(b)	0.4kV	27	0	0	7.46	7,220.35	582.33	993.46	150.94	41.41
Commercial -- A2(c)	0.4kV	18,480	412	73	7.46	7,220.35	582.33	993.46	478.12	26.36
Commercial -- A2(d)	0.4kV	4	0	0	7.46	7,220.35	582.33	993.46	93.44	37.33
Industrial -- B1(a)	0.2kV	10,024	37	6	7.46	7,220.35	582.33	993.46	348.71	26.17
Industrial -- B2(a)	0.4kV	2	0	0	7.46	7,220.35	582.33	993.46	13.57	28.76
Industrial -- B1(b)	0.4kV	31,676	363	60	7.46	7,220.35	582.33	993.46	245.48	25.07
Industrial -- B2(b)	0.4kV	14,834	2,218	323	7.46	7,220.35	582.33	993.46	3,204.71	23.08
Industrial -- B3	11kV	449	2,096	335	7.32	7,079.63	570.98	974.10	99,945	24.10
Industrial -- B4	132kV	22	1,244	194	6.85	6,628.73	534.62	409.81	897,645.75	21.18
Bulk Supply -- C1(a)	0.2kV	25	0	0	7.32	7,220.35	582.33	993.46	414.16	25.46
Bulk Supply -- C1(b)	0.4kV	23	1	0	7.46	7,220.35	582.33	993.46	838.74	28.49
Bulk Supply -- C2(a)	11kV	3	0	0	7.32	7,079.63	570.98	974.10	425.83	41.23
Bulk Supply -- C3(a)	132kV	4	3	1	6.85	6,628.73	534.62	409.81	9,595.23	30.40
Bulk Supply -- C1(c)	0.4kV	132	16	3	7.46	7,220.35	582.33	993.46	2,647	29.35
Bulk Supply -- C2(b)	11kV	56	103	21	7.32	7,079.63	570.98	974.10	-	28.24
Bulk Supply -- C3(b)	132kV	3	82	17	6.85	6,628.73	534.62	409.81	415,499.45	26.02
Agricultural -- D1(a)	0.4kV	1,125	13	2	7.46	7,220.35	582.33	993.46	252.00	20.52
Agricultural -- D2(a)	0.4kV	655	0	0	7.46	7,220.35	582.33	993.46	0.13	67.92
Agricultural -- D2(b)	0.4kV	53,271	1,225	218	7.46	7,220.35	582.33	993.46	492.88	26.46
Agricultural -- D1(b)	0.4kV	432	38	5	7.46	7,220.35	582.33	993.46	1,908.29	20.50
Temporary Supply -- E1(i)	0.2kV	369	1	0	7.46	7,220.35	582.33	993.46	246.54	25.96
Temporary Supply -- E1(ii)	0.2kV	2,358	26	5	7.46	7,220.35	582.33	993.46	1,048.36	27.21
Temporary Supply -- E2	0.2kV	72	28	5	7.46	7,220.35	582.33	993.46	35,688.48	28.90
Public Lighting -- G	0.4kV	2,053	18	3	7.46	7,220.35	582.33	993.46	190.86	25.17
Residential Colonies -- H	11kV	154	5	1	7.32	7,079.63	570.98	974.10	646.02	25.74
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	32,485	246	39	7.46	7,220.35	582.33	993.46	162.51	24.41
Total/Average		5,364,796	15,482	2,933	7.39	7,160.62	577.52	949.05	157.84	27.80

The above detailed functional rates recapitulated, in terms of Rs./kW/Month, for each function is given in table **Table 12** below.

Table 12

FY 2023-24										
Classes	Volt. Level	No. of Customers	Energy	Demand	Generation Cost		Transm (Rs/kW /Month)	Distribution		Total Rs./kW/ Month
			GWh	MW	Energy (Rs/kW/ Month)	Demand (Rs/kW/ Month)		(Rs/kW/M onth)	(Rs./ kW/ Month)	
Residential -- A1(a)	0.2kV	4,713,079	6,744	1,507	2,783.15	7,220.35	582.33	993.46	419.35	11,998.64
Residential -- A1(b)	0.4kV	29,290	172	38	2,821.03	7,220.35	582.33	993.46	97.21	11,714.38
Commercial -- A2(a)	0.2kV	453,686	390	80	3,044.94	7,220.35	582.33	993.46	458.80	12,299.88
Commercial -- A2(b)	0.4kV	27	0	0	1,948.38	7,220.35	582.33	993.46	67.14	10,811.66
Commercial -- A2(c)	0.4kV	18,480	412	73	3,521.58	7,220.35	582.33	993.46	121.35	12,439.07
Commercial -- A2(d)	0.4kV	4	0	0	2,216.90	7,220.35	582.33	993.46	76.39	11,089.43
Industrial -- B1(a)	0.2kV	10,024	37	6	3,734.76	7,220.35	582.33	993.46	562.74	13,093.64
Industrial -- B2(a)	0.4kV	2	0	0	3,120.86	7,220.35	582.33	993.46	107.55	12,024.54
Industrial -- B1(b)	0.4kV	31,676	363	60	3,784.84	7,220.35	582.33	993.46	130.43	12,711.41
Industrial -- B2(b)	0.4kV	14,834	2,218	323	4,273.22	7,220.35	582.33	993.46	147.26	13,216.61
Industrial -- B3	11kV	449	2,096	335	3,818.33	7,079.63	570.98	974.10	134.20	12,577.23
Industrial -- B4	132kV	22	1,244	194	3,670.26	6,628.73	534.62	409.81	102.27	11,345.69
Bulk Supply -- C1(a)	0.2kV	25	0	0	3,781.60	7,220.35	582.33	993.46	581.12	13,158.86
Bulk Supply -- C1(b)	0.4kV	23	1	0	3,160.60	7,220.35	582.33	993.46	108.91	12,065.65
Bulk Supply -- C2(a)	11kV	3	0	0	1,875.22	7,079.63	570.98	974.10	65.90	10,565.84
Bulk Supply -- C3(a)	132kV	4	3	1	2,221.46	6,628.73	534.62	409.81	61.90	9,856.52
Bulk Supply -- C1(c)	0.4kV	132	16	3	3,035.46	7,220.35	582.33	993.46	104.60	11,936.20
Bulk Supply -- C2(b)	11kV	56	103	21	3,054.05	7,079.63	570.98	974.10	107.33	11,786.10
Bulk Supply -- C3(b)	132kV	3	82	17	2,734.31	6,628.73	534.62	409.81	76.19	10,383.65
Agricultural -- D1(a)	0.4kV	1,125	13	2	5,128.48	7,220.35	582.33	993.46	176.73	14,101.35
Agricultural -- D2(a)	0.4kV	655	0	0	1,090.49	7,220.35	582.33	993.46	37.58	9,924.21
Agricultural -- D2(b)	0.4kV	53,271	1,225	218	3,502.61	7,220.35	582.33	993.46	120.70	12,419.45
Agricultural -- D1(b)	0.4kV	432	38	5	5,138.16	7,220.35	582.33	993.46	177.06	14,111.36
Temporary Supply -- E1(i)	0.2kV	369	1	0	3,778.43	7,220.35	582.33	993.46	569.32	13,143.89
Temporary Supply -- E1(ii)	0.2kV	2,358	26	5	3,524.89	7,220.35	582.33	993.46	531.12	12,852.14
Temporary Supply -- E2	0.2kV	72	28	5	3,231.61	7,220.35	582.33	993.46	486.93	12,514.68
Public Lighting -- G	0.4kV	2,053	18	3	3,761.26	7,220.35	582.33	993.46	129.61	12,687.01
Residential Colonies -- H	11kV	154	5	1	3,474.17	7,079.63	570.98	974.10	122.10	12,220.98
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	32,485	246	39	3,932.61	7,220.35	582.33	993.46	135.52	12,864.27
Total		5,364,796	15,482	2,933	3,250.80	7,160.62	577.52	949.05	288.71	12,226.69

Unbundled Rates Rs./kWh (Tariff Wise)

The functional allocation of Revenue Requirement of FESCO (Generation, Transmission, MO Fee and Distribution Cost) to customers categories, in Rs./kWh are shown in **Table 13** below.

Table 13

FY 2023-24							
Customer Category	Voltage level	Sales GWh	Demand MW	Generation Rs./kWh	T. UoS Rs./kWh	D. UoS Rs./kWh	Total Rate Rs./kWh
Residential -- A1(a)	0.2kV	6,744	1,507	26.83	1.56	3.79	32.18
Residential -- A1(b)	0.4kV	172	38	26.57	1.54	2.89	30.99
Commercial -- A2(a)	0.2kV	390	80	25.16	1.43	3.56	30.15
Commercial -- A2(b)	0.4kV	0	0	35.12	2.23	4.06	41.41
Commercial -- A2(c)	0.4kV	412	73	22.77	1.23	2.36	26.36
Commercial -- A2(d)	0.4kV	0	0	31.77	1.96	3.60	37.33
Industrial -- B1(a)	0.2kV	37	6	21.89	1.16	3.11	26.17
Industrial -- B2(a)	0.4kV	0	0	24.73	1.39	2.63	28.76
Industrial -- B1(b)	0.4kV	363	60	21.70	1.15	2.22	25.07
Industrial -- B2(b)	0.4kV	2,218	323	20.07	1.02	1.99	23.08
Industrial -- B3	11kV	2,096	335	20.89	1.09	2.12	24.10
Industrial -- B4	132kV	1,244	194	19.23	1.00	0.96	21.18
Bulk Supply -- C1(a)	0.2kV	0	0	21.29	1.13	3.05	25.46
Bulk Supply -- C1(b)	0.4kV	1	0	24.51	1.38	2.60	28.49
Bulk Supply -- C2(a)	11kV	0	0	34.95	2.23	4.06	41.23
Bulk Supply -- C3(a)	132kV	3	1	27.30	1.65	1.45	30.40
Bulk Supply -- C1(c)	0.4kV	16	3	25.22	1.43	2.70	29.35
Bulk Supply -- C2(b)	11kV	103	21	24.28	1.37	2.59	28.24
Bulk Supply -- C3(b)	132kV	82	17	23.46	1.34	1.22	26.02
Agricultural --D1(a)	0.4kV	13	2	17.97	0.85	1.70	20.52
Agricultural --D2(a)	0.4kV	0	0	56.88	3.99	7.06	67.92
Agricultural --D2(b)	0.4kV	1,225	218	22.85	1.24	2.37	26.46
Agricultural --D1(b)	0.4kV	38	5	17.95	0.85	1.70	20.50
Temporary Supply -- E1(i)	0.2kV	1	0	21.73	1.15	3.09	25.96
Temporary Supply -- E1(ii)	0.2kV	26	5	22.75	1.23	3.23	27.21
Temporary Supply -- E2	0.2kV	28	5	24.14	1.34	3.42	28.90
Public Lighting -- G	0.4kV	18	3	21.79	1.16	2.23	25.17
Residential Colonies -- H	11kV	5	1	22.23	1.20	2.31	25.74
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-
A3 General	0.4kV	246	39	21.17	1.11	2.14	24.41
Total		15,482	2,933	23.67	1.31	2.81	27.80

Volumetric Rates at Each Customer Category

The above functional rates combined in terms of the nature (Fixed or Variable) and resultant rates in terms of Rs./kW/Month and/or Rs./kWh are provided in **Table 14** below.

Table 14

FY 2023-24							
Customer Category	Voltage Level	Sales GWh	Allocated Cost Rs. (M)		Fixed Charge Rs/kW/Month	Variable Charge Rs/kWh	Total Rate Rs/kWh
			Fixed Cost	Variable Cost			
Residential -- A1(a)	0.2kV	6,744	159,078	57,917	8,796	8.59	32.18
Residential -- A1(b)	0.4kV	172	3,993	1,325	8,796	7.72	30.99
Commercial -- A2(a)	0.2kV	390	8,400	3,346	8,796	8.59	30.15
Commercial -- A2(b)	0.4kV	0	6	1	8,796	7.72	41.41
Commercial -- A2(c)	0.4kV	412	7,685	3,183	8,796	7.72	26.36
Commercial -- A2(d)	0.4kV	0	1	0	8,796	7.72	37.33
Industrial -- B1(a)	0.2kV	37	656	320	8,796	8.59	26.17
Industrial -- B2(a)	0.4kV	0	0	0	8,796	7.72	28.76
Industrial -- B1(b)	0.4kV	363	6,293	2,801	8,796	7.72	25.07
Industrial -- B2(b)	0.4kV	2,218	34,077	17,125	8,796	7.72	23.08
Industrial -- B3	11kV	2,096	34,641	15,875	8,625	7.58	24.10
Industrial -- B4	132kV	1,244	17,589	8,762	7,573	7.04	21.18
Bulk Supply -- C1(a)	0.2kV	0	2	1	8,796	8.44	25.46
Bulk Supply -- C1(b)	0.4kV	1	19	7	8,796	7.72	28.49
Bulk Supply -- C2(a)	11kV	0	2	0	8,625	7.58	41.23
Bulk Supply -- C3(a)	132kV	3	59	18	7,573	7.04	30.40
Bulk Supply -- C1(c)	0.4kV	16	353	126	8,796	7.72	29.35
Bulk Supply -- C2(b)	11kV	103	2,133	782	8,625	7.58	28.24
Bulk Supply -- C3(b)	132kV	82	1,561	579	7,573	7.04	26.02
Agricultural -- D1(a)	0.4kV	13	169	102	8,796	7.72	20.52
Agricultural -- D2(a)	0.4kV	0	0	0	8,796	7.72	67.92
Agricultural -- D2(b)	0.4kV	1,225	22,961	9,458	8,796	7.72	26.46
Agricultural -- D1(b)	0.4kV	38	491	297	8,796	7.72	20.50
Temporary Supply -- E1(i)	0.2kV	1	17	8	8,796	8.59	25.96
Temporary Supply -- E1(ii)	0.2kV	26	491	227	8,796	8.59	27.21
Temporary Supply -- E2	0.2kV	28	561	237	8,796	8.59	28.90
Public Lighting -- G	0.4kV	18	319	141	8,796	7.72	25.17
Residential Colonies -- H	11kV	5	85	35	8,625	7.58	25.74
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-
A3 General	0.4kV	246	4,112	1,902	8,796	7.72	24.41
Total		15,482	305,755	124,577	8,687	8.05	27.80

Note: Variable Cost in Table 14 includes energy cost and customer services cost.

Revenue, Cost of Service and Subsidies (Tariff Category Wise)

Based on assessment of revenue and the cost of service for each category of consumer, as per the details provided herein before, the Subsidy or Cross Subsidy (the difference between revenue and cost) in terms of million rupees against each customer tariff category is provided in Table 15 below. It may be noted that the negative figure means the customer is subsidized (revenue less than cost) whereas the positive figure shows that the customer is cross subsidizing (revenue more than cost). Average, in terms of Rs./kWh, assessment of subsidy or cross-subsidy, as the case may be, is also arrived in the last column of Table 16 below.

Table 15

FY 2023-24											
Customer Class	Voltage	Sales GWh	Demand MW	Revenue as per NEPRA Tariff			Cost of Service			Difference Subsidy M. PKR	subsidy Rs./kWh
				Demand Charge (M.PKR)	Energy Charge M.PKR	Total M. PKR	Demand Cost (M.PKR)	Energy Cost M.PKR	Total M. PKR		
Residential -- A1(a)	0.2kV	6,744	1,507	-	161,498	161,498	159,078	57,917	216,996	(55,498)	(8.23)
Residential -- A1(b)	0.4kV	172	38	-	5,968	5,968	3,993	1,325	5,318	650	3.79
Commercial -- A2(a)	0.2kV	390	80	-	13,936	13,936	8,400	3,346	11,746	2,190	5.62
Commercial -- A2(b)	0.4kV	0	0	0	7	8	6	1	8	(0)	(1.49)
Commercial -- A2(c)	0.4kV	412	73	-	14,233	14,233	7,685	3,183	10,868	3,364	8.16
Commercial -- A2(d)	0.4kV	0	0	-	1	1	1	0	1	(0)	(6.81)
Industrial -- B1(a)	0.2kV	37	6	-	1,202	1,202	656	320	976	226	6.06
Industrial -- B2(a)	0.4kV	0	0	0	0	0	0	0	0	0	36.92
Industrial -- B1(b)	0.4kV	363	60	-	11,261	11,261	6,293	2,801	9,094	2,167	5.97
Industrial -- B2(b)	0.4kV	2,218	323	-	68,505	68,505	34,077	17,125	51,202	17,303	7.80
Industrial -- B3	11kV	2,096	335	-	64,650	64,650	34,641	15,875	50,516	14,134	6.74
Industrial -- B4	132kV	1,244	194	-	38,172	38,172	17,589	8,762	26,351	11,821	9.50
Bulk Supply -- C1(a)	0.2kV	0	0	-	4	4	2	1	3	1	10.99
Bulk Supply -- C1(b)	0.4kV	1	0	2	32	34	19	7	26	8	9.17
Bulk Supply -- C2(a)	11kV	0	0	0	2	2	2	0	3	(0)	(3.64)
Bulk Supply -- C3(a)	132kV	3	1	19	90	110	59	18	77	33	12.89
Bulk Supply -- C1(c)	0.4kV	16	3	-	553	553	353	126	480	74	4.51
Bulk Supply -- C2(b)	11kV	103	21	-	3,480	3,480	2,133	782	2,915	565	5.48
Bulk Supply -- C3(b)	132kV	82	17	-	2,772	2,772	1,561	579	2,141	631	7.67
Agricultural -- D1(a)	0.4kV	13	2	-	429	429	169	102	271	158	11.93
Agricultural -- D2(a)	0.4kV	0	0	-	0	0	0	0	0	(0)	(45.80)
Agricultural -- D2(b)	0.4kV	1,225	218	-	27,099	27,099	22,961	9,458	32,420	(5,321)	(4.34)
Agricultural -- D1(b)	0.4kV	38	5	-	1,102	1,102	491	297	788	315	8.19
Temporary Supply -- E1(i)	0.2kV	1	0	-	39	39	17	8	25	14	14.07
Temporary Supply -- E1(ii)	0.2kV	26	5	-	954	954	491	227	718	236	8.95
Temporary Supply -- E2	0.2kV	28	5	-	919	919	561	237	797	122	4.41
Public Lighting -- G	0.4kV	18	3	-	648	648	319	141	460	187	10.26
Residential Colonies -- H	11kV	5	1	-	165	165	85	35	120	45	9.69
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	246	39	-	8,705	8,705	4,112	1,902	6,014	2,691	10.93
Total		15,482	2,933	22	426,426	426,447	305,755	124,577	430,331	(3,884)	(0.25)

Revenue, Cost of Service, Subsidy and Revenue to Cost Ratios

Revenue, Cost of Service and Subsidy in terms of million rupees for each category of the consumers is shown in **Table 16** below. The Table also provides the Revenue to Cost Ratio which shows that:

- If this ratio is less than one, the relevant customer class is subsidized, i.e. the tariff revenue is less than the allocated cost;
- If this ratio is greater than one, the relevant customer class is cross subsidizing, i.e. the tariff revenue is higher than the allocated cost; and
- If this ratio is equal to one, the customer class is at adequately priced vis-à-vis the allocated cost.

Table 16

FY 2023-24											
Customer Class	Voltage	Sales GWh	Demand MW	Revenue as per NEPRA Tariff		Cost of Service		Difference/Subsidy M. PKR		Revenue to Cost Ratio	
				Fixed (Rs.M)	Variable (Rs. M)	Fixed (Rs.M)	Variable (Rs. M)	Fixed Rs. M	Variable Rs. M	Fixed	Variable
Residential -- A1(a)	0.2kV	6,744	1,507	-	161,498	159,078	57,917	159,078	(103,580)	-	2.79
Residential -- A1(b)	0.4kV	172	38	-	5,968	3,993	1,325	3,993	(4,643)	-	4.50
Commercial -- A2(a)	0.2kV	390	80	-	13,936	8,400	3,346	8,400	(10,590)	-	4.17
Commercial -- A2(b)	0.4kV	0	0	0.48	7	6	1	6	(6)	0.07	4.85
Commercial -- A2(c)	0.4kV	412	73	-	14,233	7,685	3,183	7,685	(11,050)	-	4.47
Commercial -- A2(d)	0.4kV	0	0	-	1	1	0	0.54	(0.42)	-	3.95
Industrial -- B1(a)	0.2kV	37	6	-	1,202	656	320	656	(882)	-	3.75
Industrial -- B2(a)	0.4kV	0	0	0.05	0	0	0	(0)	(0)	1.61	4.11
Industrial -- B1(b)	0.4kV	363	60	-	11,261	6,293	2,801	6,293	(8,460)	-	4.02
Industrial -- B2(b)	0.4kV	2,218	323	-	68,505	34,077	17,125	34,077	(51,380)	-	4.00
Industrial -- B3	11kV	2,096	335	-	64,650	34,641	15,875	34,641	(48,775)	-	4.07
Industrial -- B4	132kV	1,244	194	-	38,172	17,589	8,762	17,589	(29,410)	-	4.36
Bulk Supply -- C1(a)	0.2kV	0	0	-	4	2	1	2	(3)	-	4.32
Bulk Supply -- C1(b)	0.4kV	1	0	1.55	32	19	7	17	(26)	0.08	4.66
Bulk Supply -- C2(a)	11kV	0	0	0.12	2	2	0	2	(2)	0.05	4.72
Bulk Supply -- C3(a)	132kV	3	1	19.35	90	59	18	40	(72)	0.33	5.06
Bulk Supply -- C1(c)	0.4kV	16	3	-	553	353	126	353	(427)	-	4.39
Bulk Supply -- C2(b)	11kV	103	21	-	3,480	2,133	782	2,133	(2,698)	-	4.45
Bulk Supply -- C3(b)	132kV	82	17	-	2,772	1,561	579	1,561	(2,192)	-	4.78
Agricultural --D1(a)	0.4kV	13	2	-	429	169	102	169	(327)	-	4.20
Agricultural --D2(a)	0.4kV	0	0	-	0	0	0	0	(0)	-	2.87
Agricultural --D2(b)	0.4kV	1,225	218	-	27,099	22,961	9,458	22,961	(17,640)	-	2.87
Agricultural --D1(b)	0.4kV	38	5	-	1,102	491	297	491	(806)	-	3.72
Temporary Supply -- E1(i)	0.2kV	1	0	-	39	17	8	17	(30)	-	4.66
Temporary Supply -- E1(ii)	0.2kV	26	5	-	954	491	227	491	(727)	-	4.21
Temporary Supply -- E2	0.2kV	28	5	-	919	561	237	561	(682)	-	3.88
Public Lighting -- G	0.4kV	18	3	-	648	319	141	319	(507)	-	4.59
Residential Colonies -- H	11kV	5	1	-	165	85	35	85	(130)	-	4.68
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	246	39	-	8,705	4,112	1,902	4,112	(6,803)	-	4.58
Total		15,482	2,933	21.54	426,426	305,755	124,577	305,733	(301,849)	0.00	3.42

Revenue, Cost of Service and Subsidies (Rs./kWh)

Revenue, Cost of Service and Subsidy in terms of Rs./kWh for each category of the consumers is shown in **Table 17** below. The Table also provides the Revenue to Cost Ratio.

Table 17

FY 2023-24						
Customer Class	Voltage	Sales GWh	Revenue Rs./kWh	Cost of Service Rs./kWh	Subsidy Rs./kWh	Revenue to Cost Ratio
Residential -- A1(a)	0.2kV	6,744	23.95	32.18	(8.23)	0.74
Residential -- A1(b)	0.4kV	172	34.78	30.99	3.79	1.12
Commercial -- A2(a)	0.2kV	390	35.77	30.15	5.62	1.19
Commercial -- A2(b)	0.4kV	0	39.93	41.41	(1.49)	0.96
Commercial -- A2(c)	0.4kV	412	34.52	26.36	8.16	1.31
Commercial -- A2(d)	0.4kV	0	30.52	37.33	(6.81)	0.82
Industrial -- B1(a)	0.2kV	37	32.23	26.17	6.06	1.23
Industrial -- B2(a)	0.4kV	0	65.67	28.76	36.92	2.28
Industrial -- B1(b)	0.4kV	363	31.04	25.07	5.97	1.24
Industrial -- B2(b)	0.4kV	2,218	30.88	23.08	7.80	1.34
Industrial -- B3	11kV	2,096	30.85	24.10	6.74	1.28
Industrial -- B4	132kV	1,244	30.68	21.18	9.50	1.45
Bulk Supply -- C1(a)	0.2kV	0	36.45	25.46	10.99	1.43
Bulk Supply -- C1(b)	0.4kV	1	37.67	28.49	9.17	1.32
Bulk Supply -- C2(a)	11kV	0	37.60	41.23	(3.64)	0.91
Bulk Supply -- C3(a)	132kV	3	43.29	30.40	12.89	1.42
Bulk Supply -- C1(c)	0.4kV	16	33.86	29.35	4.51	1.15
Bulk Supply -- C2(b)	11kV	103	33.72	28.24	5.48	1.19
Bulk Supply -- C3(b)	132kV	82	33.69	26.02	7.67	1.29
Agricultural -- D1(a)	0.4kV	13	32.45	20.52	11.93	1.58
Agricultural -- D2(a)	0.4kV	0	22.12	67.92	(45.80)	0.33
Agricultural -- D2(b)	0.4kV	1,225	22.12	26.46	(4.34)	0.84
Agricultural -- D1(b)	0.4kV	38	28.69	20.50	8.19	1.40
Temporary Supply -- E1(i)	0.2kV	1	40.03	25.96	14.07	1.54
Temporary Supply -- E1(ii)	0.2kV	26	36.16	27.21	8.95	1.33
Temporary Supply -- E2	0.2kV	28	33.31	28.90	4.41	1.15
Public Lighting -- G	0.4kV	18	35.43	25.17	10.26	1.41
Residential Colonies -- H	11kV	5	35.43	25.74	9.69	1.38
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-
A3 General	0.4kV	246	35.34	24.41	10.93	1.45
Sub Total		15,482	27.54	27.80	(0.25)	0.99

Revenue, Cost of Service and Subsidies (11 kV and Above)

The revenue cost of service and subsidies for customer categories that fall under 11kv are summarized at **Table 18** below.

Table 18

FY 2023-24											
Customer Class	Voltage	Sales GWh	Demand MW	Revenue as per NEPRA Tariff			Cost of Service			Difference Subsidy M. PKR	subsidy Rs./kWh
				Demand Charge (M.PKR)	Energy Charge M.PKR	Total M. PKR	Demand Cost (M.PKR)	Energy Cost M.PKR	Total M. PKR		
Commercial -- A2(c)	0.4kV	412	73	-	14,233	14,233	7,685	3,183	10,868	3,364	8.16
Industrial -- B3	11kV	2,096	335	-	64,650	64,650	34,641	15,875	50,516	14,134	6.74
Industrial -- B4	132kV	1,244	194	-	38,172	38,172	17,589	8,762	26,351	11,821	9.50
Bulk Supply -- C2(a)	11kV	0.06	0.02	0.12	2.24	2.35	2.11	0.47	2.58	(0.23)	(3.64)
Bulk Supply -- C2(b)	11kV	103	21	-	3,480	3,480	2,133	782	2,915	565	5.48
Bulk Supply -- C3(a)	132kV	3	1	19	90	110	59	18	77	33	12.89
Bulk Supply -- C3(b)	132kV	82	17	-	2,772	2,772	1,561	579	2,141	631	7.67

Revenue/kWh, Cost of Service/kWh and Subsidies/kWh (BPC only)

With regard to the above analysis, the following points are emphasized:

1. Currently, there is no 132/66 KV customer within FESCO, therefore, in the absence of real data, no values thereof could be assessed. A broad assessment of the Cost of Service of such customers can, however, be inferred based on analogy of other closest category of customers (e.g. B-3 for B-4 and C-2 for C-3) by incorporating differential of energy losses.
2. Although the Industrial B-3 and Bulk Supply C2 customers are at 11 KV connection level, however, any of these customers may not fall within the definition of BPC as contained in NEPRA Act, 1997, being less than 1 MW.
3. The customer categories A-2 and A-3, for purposes of cost of service assessment, have been considered at 0.4 KV level. However, these costumers, based on the sanctioned load, may be connected at 11 KV level, as required.
4. Consumer category for tariff H, i.e. housing colonies' attached to industries, despite being connected at 11 kV, cannot be considered as BPC for (i) principally being resale in nature and (ii) being less than 1 MW.
5. The supply feed for AJK customer category is primarily for resale purpose, therefore, not entitled for consideration as BPC.

Based on the above clarification, the abstract of Revenue (Rs./kWh), the Cost of Service (Rs./kWh) and resultant cross-subsidy (Rs./kWh) is appended at **Table 19** below.

Table 19

FY 2023-24						
Customer Class	Voltage	Sales GWh	Revenue Rs./kwh	Cost of Service Rs./kwh	Subsidy Rs./kwh	Revenue to Cost Ratio
Commercial -- A2(c)	0.4kV	412	34.52	26.36	8.16	1.31
Industrial -- B3	11kV	2,096	30.85	24.10	6.74	1.28
Industrial -- B4	132kV	1,244	30.68	21.18	9.50	1.45
Bulk Supply -- C2(a)	11kV	0.00	65.67	28.76	36.92	2.28
Bulk Supply -- C2(b)	11kV	103	33.72	28.24	5.48	1.19
Bulk Supply -- C3(a)	132kV	3	43.29	30.40	12.89	1.42
Bulk Supply -- C3(b)	132kV	82	33.69	26.02	7.67	1.29

Master Data for Results of FESCO's Cost of Service Study (FY 2023-24)

For interest of the readers to glance through overall master data for result of FESCO's Cost of Service Study (FY 2023-24), following Tables (**Table 20 to Table 26**) are added separately.

Final Remarks:

- The above Cost of Service Study Report (FY 2023-24) is a sincere human effort to arrive at judicious assessment of functional (generation, transmission, market operator, distribution and customer services) costs for each category of consumers demonstrating the needs and parameters associated with relevant category.
- The results of the study are to be used for the purposes of rate making of Use of System Charges for possible eligible Bulk Power Consumers.
- The Fully Allocated Cost of Service (FACOS) model used for the purpose of this study is realistically elaborate, professionally structured in line with international practices and reasonably accurate to provide equitable results in terms of costs associated with demonstrated needs of the customers. Human errors and omissions are, however, expected.
- The underlying assumptions made and considerations relied upon in carrying out this Cost of Service Study were adopted with all possible care and have been disclosed in details to the extent possible, without any prejudice.
- Inherent and unforeseen limitations of the FACOS model, assumptions made and consideration relied upon may not be as exhaustive as expected; accordingly, for the purposes of rate making of Use of System Charges, certain out of the model iterations may be necessary.
- While the Cost of Service is adequately (100%) covered by the determined tariffs, inherent cross subsidization and possibility of stranded costs need considerate, careful, concerted and continuous attention for proactive mitigation thereof.
- While currently certain classes of consumers are enjoying benefit of inter and intra tariff subsidies, the other categories of consumers are paying huge (13~59%) cross-subsidies. For a robust, vibrant and successful wholesale, and later retail, power market, minimization, if not elimination, of intra and inter tariff subsidies shall remain fundamental requirement.

Table 20

Cost of Service for FY 2023-24

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Cost (Rs. M)	Cost Rs./kWh sold	Cost Rs./kWh purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs.M)	Demand (Rs.M)	Cost (Rs.M)	Demand (Rs.M)	Cust. Cost (Rs.M)			
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	50,333	130,580	10,531	17,967	7,584	216,996	32.18	29.08
Residential -- A1(b)	0.4kV	172	190	38	42	1,281	3,278	264	451	44	5,318	30.99	28.01
Commercial -- A2(a)	0.2kV	390	431	80	88	2,908	6,895	556	949	438	11,746	30.15	27.24
Commercial -- A2(b)	0.4kV	0	0	0	0	1	5	0	1	0	8	41.41	37.42
Commercial -- A2(c)	0.4kV	412	456	73	81	3,077	6,308	509	868	106	10,868	26.36	23.82
Commercial -- A2(d)	0.4kV	0	0	0	0	0	0	0	0	0	1	37.33	33.74
Industrial -- B1(a)	0.2kV	37	41	6	7	278	538	43	74	42	976	26.17	23.64
Industrial -- B2(a)	0.4kV	0	0	0	0	0	0	0	0	0	0	28.76	25.99
Industrial -- B1(b)	0.4kV	363	401	60	66	2,708	5,166	417	711	93	9,094	25.07	22.65
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	16,555	27,972	2,256	3,849	570	51,202	23.08	20.86
Industrial -- B3	11kV	2,096	2,274	335	363	15,336	28,435	2,293	3,912	539	50,516	24.10	22.22
Industrial -- B4	132/66kV	1,244	1,264	194	197	8,524	15,396	1,242	952	238	26,351	21.18	20.85
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	1	2	0	0	0	3	25.46	23.01
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	7	15	1	2	0	26	28.49	25.75
Bulk Supply -- C2(a)	11kV	0	0	0	0	0	2	0	0	0	3	41.23	38.00
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	17	52	4	3	0	77	30.40	29.92
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	122	290	23	40	4	480	29.35	26.52
Bulk Supply -- C2(b)	11kV	103	112	21	22	755	1,751	141	241	27	2,915	28.24	26.03
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	564	1,367	110	84	16	2,141	26.02	25.61
Agricultural -- D1(a)	0.4kV	13	15	2	2	99	139	11	19	3	271	20.52	18.54
Agricultural -- D2(a)	0.4kV	0	0	0	0	0	0	0	0	0	0	67.92	61.38
Agricultural -- D2(b)	0.4kV	1,225	1,356	218	241	9,143	18,848	1,520	2,593	315	32,420	26.46	23.91
Agricultural -- D1(b)	0.4kV	38	43	5	5	287	403	33	55	10	788	20.50	18.52
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	7	14	1	2	1	25	25.96	23.46
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	197	403	33	55	30	718	27.21	24.59
Temporary Supply -- E2	0.2kV	28	31	5	6	206	460	37	63	31	797	28.90	26.12
Public Lighting -- G	0.4kV	18	20	3	3	136	262	21	36	5	460	25.17	22.75
Residential Colonies -- H	11kV	5	5	1	1	34	69	6	10	1	120	25.74	23.72
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	246	273	39	43	1,838	3,375	272	464	63	6,014	24.41	22.06
Total		15,482	16,965	2,933	3,219	114,415	252,026	20,326	33,403	10,161	430,331	27.80	25.37

Table 21

Cost of Service for FY 2023-24 (Per KW or KWh Sold)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Fixed Cost (Rs./kW/M)	Fixed Cost Rs./kWh sold	Total Cost Rs./kWh Sold
		Sold	Purchase d	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	Cust. Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	7.46	7,220.35	582.33	993.46	419.35	9,215.49	24.71	32.18
Residential -- A1(b)	0.4kV	172	190	38	42	7.46	7,220.35	582.33	993.46	97.21	8,893.35	23.53	30.99
Commercial -- A2(a)	0.2kV	390	431	80	88	7.46	7,220.35	582.33	993.46	458.80	9,254.94	22.68	30.15
Commercial -- A2(b)	0.4kV	0	0	0	0	7.46	7,220.35	582.33	993.46	67.14	8,863.28	33.95	41.41
Commercial -- A2(c)	0.4kV	412	456	73	81	7.46	7,220.35	582.33	993.46	121.35	8,917.49	18.90	26.36
Commercial -- A2(d)	0.4kV	0	0	0	0	7.46	7,220.35	582.33	993.46	76.39	8,872.53	29.87	37.33
Industrial -- B1(a)	0.2kV	37	41	6	7	7.46	7,220.35	582.33	993.46	562.74	9,358.88	18.70	26.17
Industrial -- B2(a)	0.4kV	0	0	0	0	7.46	7,220.35	582.33	993.46	107.55	8,903.68	21.29	28.76
Industrial -- B1(b)	0.4kV	363	401	60	66	7.46	7,220.35	582.33	993.46	130.43	8,926.56	17.60	25.07
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	7.46	7,220.35	582.33	993.46	147.26	8,943.39	15.62	23.08
Industrial -- B3	11kV	2,096	2,274	335	363	7.32	7,079.63	570.98	974.10	134.20	8,758.91	16.79	24.10
Industrial -- B4	132/66kV	1,244	1,264	194	197	6.85	6,628.73	534.62	409.81	102.27	7,675.43	14.33	21.18
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	7.32	7,220.35	582.33	993.46	581.12	9,377.26	18.15	25.46
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	7.46	7,220.35	582.33	993.46	108.91	8,905.05	21.03	28.49
Bulk Supply -- C2(a)	11kV	0	0	0	0	7.32	7,079.63	570.98	974.10	65.90	8,690.62	33.91	41.23
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	6.85	6,628.73	534.62	409.81	61.90	7,635.06	23.55	30.40
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	7.46	7,220.35	582.33	993.46	104.60	8,900.74	21.88	29.35
Bulk Supply -- C2(b)	11kV	103	112	21	22	7.32	7,079.63	570.98	974.10	107.33	8,732.05	20.92	28.24
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	6.85	6,628.73	534.62	409.81	76.19	7,649.35	19.17	26.02
Agricultural --D1(a)	0.4kV	13	15	2	2	7.46	7,220.35	582.33	993.46	176.73	8,972.87	13.06	20.52
Agricultural --D2(a)	0.4kV	0	0	0	0	7.46	7,220.35	582.33	993.46	37.58	8,833.72	60.46	67.92
Agricultural --D2(b)	0.4kV	1,225	1,356	218	241	7.46	7,220.35	582.33	993.46	120.70	8,916.84	19.00	26.46
Agricultural --D1(b)	0.4kV	38	43	5	5	7.46	7,220.35	582.33	993.46	177.06	8,973.20	13.03	20.50
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	7.46	7,220.35	582.33	993.46	569.32	9,365.46	18.50	25.96
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	7.46	7,220.35	582.33	993.46	531.12	9,327.25	19.75	27.21
Temporary Supply -- E2	0.2kV	28	31	5	6	7.46	7,220.35	582.33	993.46	486.93	9,283.06	21.44	28.90
Public Lighting -- G	0.4kV	18	20	3	3	7.46	7,220.35	582.33	993.46	129.61	8,925.75	17.71	25.17
Residential Colonies -- H	11kV	5	5	1	1	7.32	7,079.63	570.98	974.10	122.10	8,746.81	18.42	25.74
A3 General	0.4kV	246	273	39	43	7.46	7,220.35	582.33	993.46	135.52	8,931.66	16.95	24.41
Total		15,482	16,965	2,933	3,219	7.39	7,160.62	577.52	949.05	288.71	8,975.89	20.41	27.80

Table 22

Cost of Service for FY 2023-24 (Per KW or KWh Purchased)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Fixed Cost (Rs./kW/M)	Fixed Cost Rs./kWh Purchased	Total Cost Rs./kWh Purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	Cust. Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	6.74	6,524.66	526.22	897.74	378.95	8,327.57	22.33	29.08
Residential -- A1(b)	0.4kV	172	190	38	42	6.74	6,524.66	526.22	897.74	87.85	8,036.47	21.26	28.01
Commercial -- A2(a)	0.2kV	390	431	80	88	6.74	6,524.66	526.22	897.74	414.59	8,363.21	20.50	27.24
Commercial -- A2(b)	0.4kV	0	0	0	0	6.74	6,524.66	526.22	897.74	60.67	8,009.29	30.68	37.42
Commercial -- A2(c)	0.4kV	412	456	73	81	6.74	6,524.66	526.22	897.74	109.66	8,058.28	17.08	23.82
Commercial -- A2(d)	0.4kV	0	0	0	0	6.74	6,524.66	526.22	897.74	69.03	8,017.65	26.99	33.74
Industrial -- B1(a)	0.2kV	37	41	6	7	6.74	6,524.66	526.22	897.74	508.52	8,457.14	16.90	23.64
Industrial -- B2(a)	0.4kV	0	0	0	0	6.74	6,524.66	526.22	897.74	97.18	8,045.80	19.24	25.99
Industrial -- B1(b)	0.4kV	363	401	60	66	6.74	6,524.66	526.22	897.74	117.86	8,066.48	15.91	22.65
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	6.74	6,524.66	526.22	897.74	133.07	8,081.69	14.12	20.86
Industrial -- B3	11kV	2,096	2,274	335	363	6.74	6,524.66	526.22	897.74	123.68	8,072.30	15.47	22.22
Industrial -- B4	132/66kV	1,244	1,264	194	197	6.74	6,524.66	526.22	403.38	100.66	7,554.92	14.10	20.85
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	6.61	6,524.66	526.22	897.74	525.13	8,473.75	16.40	23.01
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	6.74	6,524.66	526.22	897.74	98.42	8,047.04	19.00	25.75
Bulk Supply -- C2(a)	11kV	0	0	0	0	6.74	6,524.66	526.22	897.74	60.74	8,009.36	31.26	38.00
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	6.74	6,524.66	526.22	403.38	60.93	7,515.19	23.18	29.92
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	6.74	6,524.66	526.22	897.74	94.52	8,043.14	19.78	26.52
Bulk Supply -- C2(b)	11kV	103	112	21	22	6.74	6,524.66	526.22	897.74	98.92	8,047.54	19.28	26.03
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	6.74	6,524.66	526.22	403.38	74.99	7,529.25	18.87	25.61
Agricultural -- D1(a)	0.4kV	13	15	2	2	6.74	6,524.66	526.22	897.74	159.70	8,108.32	11.80	18.54
Agricultural -- D2(a)	0.4kV	0	0	0	0	6.74	6,524.66	526.22	897.74	33.96	7,982.58	54.63	61.38
Agricultural -- D2(b)	0.4kV	1,225	1,356	218	241	6.74	6,524.66	526.22	897.74	109.07	8,057.69	17.17	23.91
Agricultural -- D1(b)	0.4kV	38	43	5	5	6.74	6,524.66	526.22	897.74	160.00	8,108.62	11.78	18.52
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	6.74	6,524.66	526.22	897.74	514.47	8,463.09	16.72	23.46
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	6.74	6,524.66	526.22	897.74	479.94	8,428.56	17.85	24.59
Temporary Supply -- E2	0.2kV	28	31	5	6	6.74	6,524.66	526.22	897.74	440.01	8,388.63	19.37	26.12
Public Lighting -- G	0.4kV	18	20	3	3	6.74	6,524.66	526.22	897.74	117.12	8,065.74	16.00	22.75
Residential Colonies -- H	11kV	5	5	1	1	6.74	6,524.66	526.22	897.74	112.53	8,061.15	16.98	23.72
A3 General	0.4kV	246	273	39	43	6.74	6,524.66	526.22	897.74	122.46	8,071.08	15.32	22.06
Total		15,482	16,965	2,933	3,219	6.74	6,524.66	526.22	864.76	263.07	8,178.70	18.62	25.37

Table 23

Cost of Service for FY 2023-24 (Per KWh Sold)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Fixed Cost (Rs./kWh)	Fixed Cost Rs./kWh Sold	Total Cost Rs./kWh Sold
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kWh)	Cost (Rs./kWh)	Demand (Rs./kWh)	Cust. Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	7.46	19.36	1.56	2.66	1.12	24.71	24.71	32.18
Residential -- A1(b)	0.4kV	172	190	38	42	7.46	19.10	1.54	2.63	0.26	23.53	23.53	30.99
Commercial -- A2(a)	0.2kV	390	431	80	88	7.46	17.70	1.43	2.44	1.12	22.68	22.68	30.15
Commercial -- A2(b)	0.4kV	0	0	0	0	7.46	27.66	2.23	3.81	0.26	33.95	33.95	41.41
Commercial -- A2(c)	0.4kV	412	456	73	81	7.46	15.30	1.23	2.11	0.26	18.90	18.90	26.36
Commercial -- A2(d)	0.4kV	0	0	0	0	7.46	24.31	1.96	3.34	0.26	29.87	29.87	37.33
Industrial -- B1(a)	0.2kV	37	41	6	7	7.46	14.43	1.16	1.99	1.12	18.70	18.70	26.17
Industrial -- B2(a)	0.4kV	0	0	0	0	7.46	17.27	1.39	2.38	0.26	21.29	21.29	28.76
Industrial -- B1(b)	0.4kV	363	401	60	66	7.46	14.24	1.15	1.96	0.26	17.60	17.60	25.07
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	7.46	12.61	1.02	1.74	0.26	15.62	15.62	23.08
Industrial -- B3	11kV	2,096	2,274	335	363	7.32	13.57	1.09	1.87	0.26	16.79	16.79	24.10
Industrial -- B4	132/66kV	1,244	1,264	194	197	6.85	12.37	1.00	0.77	0.19	14.33	14.33	21.18
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	7.32	13.97	1.13	1.92	1.12	18.15	18.15	25.46
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	7.46	17.05	1.38	2.35	0.26	21.03	21.03	28.49
Bulk Supply -- C2(a)	11kV	0	0	0	0	7.32	27.63	2.23	3.80	0.26	33.91	33.91	41.23
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	6.85	20.45	1.65	1.26	0.19	23.55	23.55	30.40
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	7.46	17.75	1.43	2.44	0.26	21.88	21.88	29.35
Bulk Supply -- C2(b)	11kV	103	112	21	22	7.32	16.96	1.37	2.33	0.26	20.92	20.92	28.24
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	6.85	16.61	1.34	1.03	0.19	19.17	19.17	26.02
Agricultural -- D1(a)	0.4kV	13	15	2	2	7.46	10.51	0.85	1.45	0.26	13.06	13.06	20.52
Agricultural -- D2(a)	0.4kV	0	0	0	0	7.46	49.42	3.99	6.80	0.26	60.46	60.46	67.92
Agricultural -- D2(b)	0.4kV	1,225	1,356	218	241	7.46	15.39	1.24	2.12	0.26	19.00	19.00	26.46
Agricultural -- D1(b)	0.4kV	38	43	5	5	7.46	10.49	0.85	1.44	0.26	13.03	13.03	20.50
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	7.46	14.26	1.15	1.96	1.12	18.50	18.50	25.96
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	7.46	15.29	1.23	2.10	1.12	19.75	19.75	27.21
Temporary Supply -- E2	0.2kV	28	31	5	6	7.46	16.68	1.34	2.29	1.12	21.44	21.44	28.90
Public Lighting -- G	0.4kV	18	20	3	3	7.46	14.33	1.16	1.97	0.26	17.71	17.71	25.17
Residential Colonies -- H	11kV	5	5	1	1	7.32	14.91	1.20	2.05	0.26	18.42	18.42	25.74
A3 General	0.4kV	246	273	39	43	7.46	13.70	1.11	1.89	0.26	16.95	16.95	24.41
Total		15,482	16,965	2,933	3,219	7.39	16.28	1.31	2.16	0.66	20.41	20.41	27.80

Table 24

Cost of Service for FY 2023-24 (Per KWh Purchased)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Fixed Cost (Rs./kWh)	Fixed Cost Rs./kWh Purchased	Total Cost Rs./kWh Purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kWh)	Cost (Rs./kWh)	Demand (Rs./kWh)	Cust. Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	6.74	17.50	1.41	2.41	1.02	22.33	22.33	29.08
Residential -- A1(b)	0.4kV	172	190	38	42	6.74	17.26	1.39	2.38	0.23	21.26	21.26	28.01
Commercial -- A2(a)	0.2kV	390	431	80	88	6.74	15.99	1.29	2.20	1.02	20.50	20.50	27.24
Commercial -- A2(b)	0.4kV	0	0	0	0	6.74	24.99	2.02	3.44	0.23	30.68	30.68	37.42
Commercial -- A2(c)	0.4kV	412	456	73	81	6.74	13.83	1.12	1.90	0.23	17.08	17.08	23.82
Commercial -- A2(d)	0.4kV	0	0	0	0	6.74	21.97	1.77	3.02	0.23	26.99	26.99	33.74
Industrial -- B1(a)	0.2kV	37	41	6	7	6.74	13.04	1.05	1.79	1.02	16.90	16.90	23.64
Industrial -- B2(a)	0.4kV	0	0	0	0	6.74	15.60	1.26	2.15	0.23	19.24	19.24	25.99
Industrial -- B1(b)	0.4kV	363	401	60	66	6.74	12.87	1.04	1.77	0.23	15.91	15.91	22.65
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	6.74	11.40	0.92	1.57	0.23	14.12	14.12	20.86
Industrial -- B3	11kV	2,096	2,274	335	363	6.74	12.50	1.01	1.72	0.24	15.47	15.47	22.22
Industrial -- B4	132/66kV	1,244	1,264	194	197	6.74	12.18	0.98	0.75	0.19	14.10	14.10	20.85
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	6.61	12.63	1.02	1.74	1.02	16.40	16.40	23.01
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	6.74	15.41	1.24	2.12	0.23	19.00	19.00	25.75
Bulk Supply -- C2(a)	11kV	0	0	0	0	6.74	25.46	2.05	3.50	0.24	31.26	31.26	38.00
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	6.74	20.12	1.62	1.24	0.19	23.18	23.18	29.92
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	6.74	16.04	1.29	2.21	0.23	19.78	19.78	26.52
Bulk Supply -- C2(b)	11kV	103	112	21	22	6.74	15.63	1.26	2.15	0.24	19.28	19.28	26.03
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	6.74	16.35	1.32	1.01	0.19	18.87	18.87	25.61
Agricultural -- D1(a)	0.4kV	13	15	2	2	6.74	9.50	0.77	1.31	0.23	11.80	11.80	18.54
Agricultural -- D2(a)	0.4kV	0	0	0	0	6.74	44.66	3.60	6.14	0.23	54.63	54.63	61.38
Agricultural -- D2(b)	0.4kV	1,225	1,356	218	241	6.74	13.90	1.12	1.91	0.23	17.17	17.17	23.91
Agricultural -- D1(b)	0.4kV	38	43	5	5	6.74	9.48	0.76	1.30	0.23	11.78	11.78	18.52
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	6.74	12.89	1.04	1.77	1.02	16.72	16.72	23.46
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	6.74	13.81	1.11	1.90	1.02	17.85	17.85	24.59
Temporary Supply -- E2	0.2kV	28	31	5	6	6.74	15.07	1.22	2.07	1.02	19.37	19.37	26.12
Public Lighting -- G	0.4kV	18	20	3	3	6.74	12.95	1.04	1.78	0.23	16.00	16.00	22.75
Residential Colonies -- H	11kV	5	5	1	1	6.74	13.74	1.11	1.89	0.24	16.98	16.98	23.72
A3 General	0.4kV	246	273	39	43	6.74	12.38	1.00	1.70	0.23	15.32	15.32	22.06
Total		15,482	16,965	2,933	3,219	6.74	14.86	1.20	1.97	0.60	18.62	18.62	25.37

FESCO – Petition for Determination Use of System Charges (October, 2023) Annex-2

Table 25

FY 2023-24 (Impact of Losses on Per KW or KWh Basis)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Fixed Cost	Total Fixed Cost	Total Cost
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	Cust. Cost (Rs./kW/M)	(Rs./kW/ M)	(Rs./kWh)	(Rs./kWh)
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	0.72	695.69	56.11	95.72	40.41	887.92	2.38	3.10
Residential -- A1(b)	0.4kV	172	190	38	42	0.72	695.69	56.11	95.72	9.37	856.88	2.27	2.99
Commercial -- A2(a)	0.2kV	390	431	80	88	0.72	695.69	56.11	95.72	44.21	891.72	2.19	2.90
Commercial -- A2(b)	0.4kV	0	0	0	0	0.72	695.69	56.11	95.72	6.47	853.99	3.27	3.99
Commercial -- A2(c)	0.4kV	412	456	73	81	0.72	695.69	56.11	95.72	11.69	859.21	1.82	2.54
Commercial -- A2(d)	0.4kV	0	0	0	0	0.72	695.69	56.11	95.72	7.36	854.88	2.88	3.60
Industrial -- B1(a)	0.2kV	37	41	6	7	0.72	695.69	56.11	95.72	54.22	901.74	1.80	2.52
Industrial -- B2(a)	0.4kV	0	0	0	0	0.72	695.69	56.11	95.72	10.36	857.88	2.05	2.77
Industrial -- B1(b)	0.4kV	363	401	60	66	0.72	695.69	56.11	95.72	12.57	860.08	1.70	2.42
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	0.72	695.69	56.11	95.72	14.19	861.71	1.51	2.22
Industrial -- B3	11kV	2,096	2,274	335	363	0.57	554.97	44.76	76.36	10.52	686.61	1.32	1.89
Industrial -- B4	132/66kV	1,244	1,264	194	197	0.11	104.07	8.39	6.43	1.61	120.51	0.22	0.33
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	0.71	695.69	56.11	95.72	55.99	903.51	1.75	2.45
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	0.72	695.69	56.11	95.72	10.49	858.01	2.03	2.75
Bulk Supply -- C2(a)	11kV	0	0	0	0	0.57	554.97	44.76	76.36	5.17	681.26	2.66	3.23
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	0.11	104.07	8.39	6.43	0.97	119.87	0.37	0.48
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	0.72	695.69	56.11	95.72	10.08	857.60	2.11	2.83
Bulk Supply -- C2(b)	11kV	103	112	21	22	0.57	554.97	44.76	76.36	8.41	684.51	1.64	2.21
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	0.11	104.07	8.39	6.43	1.20	120.10	0.30	0.41
Agricultural -- D1(a)	0.4kV	13	15	2	2	0.72	695.69	56.11	95.72	17.03	864.55	1.26	1.98
Agricultural -- D2(a)	0.4kV	0	0	0	0	0.72	695.69	56.11	95.72	3.62	851.14	5.83	6.54
Agricultural -- D2(b)	0.4kV	1,225	1,356	218	241	0.72	695.69	56.11	95.72	11.63	859.15	1.83	2.55
Agricultural -- D1(b)	0.4kV	38	43	5	5	0.72	695.69	56.11	95.72	17.06	864.58	1.26	1.97
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	0.72	695.69	56.11	95.72	54.85	902.37	1.78	2.50
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	0.72	695.69	56.11	95.72	51.17	898.69	1.90	2.62
Temporary Supply -- E2	0.2kV	28	31	5	6	0.72	695.69	56.11	95.72	46.92	894.43	2.07	2.78
Public Lighting -- G	0.4kV	18	20	3	3	0.72	695.69	56.11	95.72	12.49	860.01	1.71	2.43
Residential Colonies -- H	11kV	5	5	1	1	0.57	554.97	44.76	76.36	9.57	685.66	1.44	2.02
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	246	273	39	43	0.72	695.69	56.11	95.72	13.06	860.58	1.63	2.35
Total		15,482	16,965	2,933	3,219	0.65	635.97	51.29	84.29	25.64	797.19	1.78	2.43

Table 26

FY 2023-24 (Impact of Losses on Per KWh Basis)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	Distribution		Total Fixed Cost (Rs./kWh)	Total Fixed Cost (Rs./kWh)	
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kWh)	Cost (Rs./kWh)	Demand (Rs./kWh)	Cust. Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	6,744	7,463	1,507	1,668	0.72	1.87	0.15	0.26	0.11	2.38	2.38	3.10
Residential -- A1(b)	0.4kV	172	190	38	42	0.72	1.84	0.15	0.25	0.02	2.27	2.27	2.99
Commercial -- A2(a)	0.2kV	390	431	80	88	0.72	1.71	0.14	0.23	0.11	2.19	2.19	2.90
Commercial -- A2(b)	0.4kV	0	0	0	0	0.72	2.66	0.21	0.37	0.02	3.27	3.27	3.99
Commercial -- A2(c)	0.4kV	412	456	73	81	0.72	1.47	0.12	0.20	0.02	1.82	1.82	2.54
Commercial -- A2(d)	0.4kV	0	0	0	0	0.72	2.34	0.19	0.32	0.02	2.88	2.88	3.60
Industrial -- B1(a)	0.2kV	37	41	6	7	0.72	1.39	0.11	0.19	0.11	1.80	1.80	2.52
Industrial -- B2(a)	0.4kV	0	0	0	0	0.72	1.66	0.13	0.23	0.02	2.05	2.05	2.77
Industrial -- B1(b)	0.4kV	363	401	60	66	0.72	1.37	0.11	0.19	0.02	1.70	1.70	2.42
Industrial -- B2(b)	0.4kV	2,218	2,455	323	357	0.72	1.22	0.10	0.17	0.02	1.51	1.51	2.22
Industrial -- B3	11kV	2,096	2,274	335	363	0.57	1.06	0.09	0.15	0.02	1.32	1.32	1.89
Industrial -- B4	132/66kV	1,244	1,264	194	197	0.11	0.19	0.02	0.01	0.00	0.22	0.22	0.33
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	0.71	1.35	0.11	0.19	0.11	1.75	1.75	2.45
Bulk Supply -- C1(b)	0.4kV	1	1	0	0	0.72	1.64	0.13	0.23	0.02	2.03	2.03	2.75
Bulk Supply -- C2(a)	11kV	0	0	0	0	0.57	2.17	0.17	0.30	0.02	2.66	2.66	3.23
Bulk Supply -- C3(a)	132/66kV	3	3	1	1	0.11	0.32	0.03	0.02	0.00	0.37	0.37	0.48
Bulk Supply -- C1(c)	0.4kV	16	18	3	4	0.72	1.71	0.14	0.24	0.02	2.11	2.11	2.83
Bulk Supply -- C2(b)	11kV	103	112	21	22	0.57	1.33	0.11	0.18	0.02	1.64	1.64	2.21
Bulk Supply -- C3(b)	132/66kV	82	84	17	17	0.11	0.26	0.02	0.02	0.00	0.30	0.30	0.41
Agricultural --D1(a)	0.4kV	13	15	2	2	0.72	1.01	0.08	0.14	0.02	1.26	1.26	1.98
Agricultural --D2(a)	0.4kV	0	0	0	0	0.72	4.76	0.38	0.66	0.02	5.83	5.83	6.54
Agricultural --D2(b)	0.4kV	1,225	1,356	218	241	0.72	1.48	0.12	0.20	0.02	1.83	1.83	2.55
Agricultural --D1(b)	0.4kV	38	43	5	5	0.72	1.01	0.08	0.14	0.02	1.26	1.26	1.97
Temporary Supply -- E1(i)	0.2kV	1	1	0	0	0.72	1.37	0.11	0.19	0.11	1.78	1.78	2.50
Temporary Supply -- E1(ii)	0.2kV	26	29	5	5	0.72	1.47	0.12	0.20	0.11	1.90	1.90	2.62
Temporary Supply -- E2	0.2kV	28	31	5	6	0.72	1.61	0.13	0.22	0.11	2.07	2.07	2.78
Public Lighting -- G	0.4kV	18	20	3	3	0.72	1.38	0.11	0.19	0.02	1.71	1.71	2.43
Residential Colonies -- H	11kV	5	5	1	1	0.57	1.17	0.09	0.16	0.02	1.44	1.44	2.02
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	246	273	39	43	0.72	1.32	0.11	0.18	0.02	1.63	1.63	2.35
Total		15,482	16,965	2,933	3,219	0.65	1.42	0.11	0.19	0.06	1.78	1.78	2.43

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**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
OPEN ACCESS (INTERCONNECTION AND WHEELING OF ELECTRIC POWER)
REGULATIONS, 2022**

NOTIFICATION

Islamabad, the ^{2nd} day of Nov, 2022

S.R.O. 1994. In exercise of the powers conferred by section 47 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Act No. XL of 1997) read with all other enabling provisions thereof, the National Electric Power Regulatory Authority is pleased to make the following regulations.—

1. Short title and commencement.— (1) These regulations shall be called the National Electric Power Regulatory Authority Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022.

(2) These regulations shall come into force and effect upon lifting or expiration of the moratorium on section 23A and 23B, whichever is earlier, pursuant to sub-section 3 of section 1 of the Act.

**PART I
GENERAL**

2. Definitions.— (1) In these regulations, unless there is anything repugnant in the subject or context,—

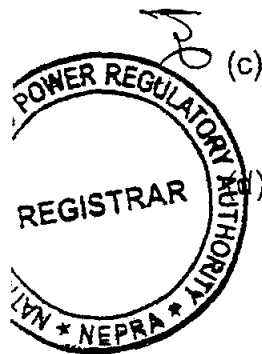
(a) "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Act No. XL of 1997), as amended from time to time;

(b) "applicable documents" means the rules, regulations, terms and conditions of any licence, registration, authorization, determination, any codes, manuals, directions, guidelines, orders, notifications, agreement or document issued or approved under the Act;

(c) "applicant" means any person who submits an application to the concerned network licensee for obtaining open access;

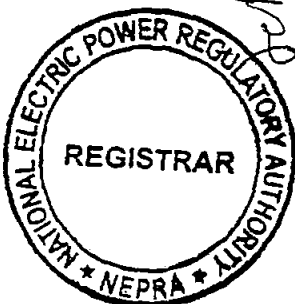
(d) "Distribution Code" means the code prepared by the distribution licensees and approved by the Authority that defines the technical and operational standards and procedures for distribution licensees and all those connected to the distribution system;

(e) "distribution system" includes the distribution facilities and electric lines or circuits, meters, interconnection facilities or other facilities operating at the distribution voltage, and shall also include any other electric lines, circuits,



transformers, sub-stations, interconnection facilities or other facilities determined by the Authority as forming part of the distribution system, whether or not operating at the distribution voltage;

- (f) "generation company" means a person engaged in the generation of electric power;
- (g) "generation facility" means the electrical facility used for the production of electric power and includes a generation facility owned by a captive generating plant, generation licensee or a generation company;
- (h) "Grid Code" means the code prepared by the national grid company and approved by the Authority or, when a separate entity is licensed as system operator, prepared by the system operator licensee under sections 23G and 23H of the Act and approved by the Authority;
- (i) "interconnection facilities" means any equipment, including the electrical lines or circuits, transformers, switchgears, safety and protective devices and meters used for interconnection services;
- (j) "Market Commercial Code" or "Commercial Code" means the commercial code prepared and maintained by the market operator pursuant to sections 23A and 23B of the Act and approved by the Authority from time to time;
- (k) "merchant generating plant" means a generation facility that is connected with the national grid without any bilateral contract to sell electric power or provide ancillary services in the electric power market in accordance with the Market Commercial Code;
- (l) "network licensee" means a transmission licensee or a distribution licensee, as the case may be;
- (m) "open access" means the access to a network licensee's system or its associated facilities for movement and delivery of electric power, subject to the terms and conditions as provided in the Act, these regulations and use of system agreement, on non-discriminatory basis to:
 - (i) an electric power supplier for supply of electric power to its consumer(s); or
 - (ii) a captive generating plant for delivery of the electric power from generation facility to the destination of its use; or
 - (iii) any other person, including a licensee for delivery of electric power from a designated place to another designated place;



- (n) "open access user" means any person who is availing open access under these regulations;
- (o) "system operator" means a person licensed under the Act to administer system operation and dispatch;
- (p) "transmission system" includes the transmission facilities and electric lines or circuits, meters, interconnection facilities or other facilities operating at the transmission voltage but shall not include—
 - (i) electrical circuits forming the immediate connection between generation facilities and the transmission grid to the extent that those circuits are owned by a generation company and are directly associated with that company's generation facilities; and
 - (ii) specified facilities operating at or above the minimum transmission voltage which the Authority, upon an application by a licensee under section 20 of the Act, determines that such facilities shall be owned and operated by a distribution licensee;
- (q) "use of system agreement" means the agreement between an open access user and the concerned distribution licensee covering subjects as specified in Schedule I to these regulations; and
- (r) "use of system charges" shall include all charges related to use of distribution system, use of transmission system, system operator services, market operator services, metering service provider services and any other charges as determined by the Authority that may arise due to advent of the open access and market liberalization.

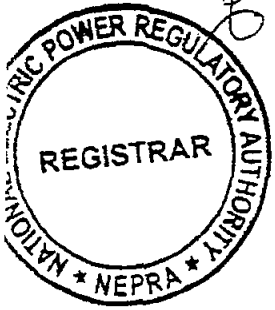
(2) Words and expressions used but not defined in these regulations shall have the same meanings as assigned to them in the Act and the applicable documents.

PART II INTERCONNECTION

3. Interconnection facilities.— (1) Any applicant whether a generator or a bulk power consumer or captive generating plant may apply to a network licensee for connection to the network licensee's system in accordance with the Distribution Code or Grid Code as the case may be.

(2) The network licensee shall decide any application filed under sub-regulation (1) in accordance with the Distribution Code or Grid Code, as the case may be.

(3) The approval of connection under regulation (2), shall be subject to compliance with the National Electric Power Regulatory Authority Consumer Eligibility Criteria



(Distribution Licensees) Regulations, 2022 and National Electric Power Regulatory Authority Consumer Eligibility Criteria (Electric Power Suppliers) Regulations, 2022 and other applicable documents.

4. Financing, construction and operation of the interconnection facilities.—

(1) Where a generation company intends to connect to a network licensee, the concerned network licensee shall be responsible for financing, construction, and operations of the interconnection facilities in accordance with the Grid Code or Distribution Code, as may be applicable, in accordance with its investment plan approved by the Authority.

(2) The network licensee may raise financing for the interconnection facilities from internal resources, local or foreign lenders or any other source including the generation company on mutually agreed terms, and may include such costs in relevant regulatory filings with the Authority. The inclusion of the interconnection facilities in the asset base of the network licensee shall depend on the terms and conditions of such financing or commercial agreements.

(3) In the event where network licensee shows its inability to construct the interconnection facilities due to technical and/or financial constraints following options may be exercised for the interconnection purposes:

(a) The generation company may arrange the financing required for the construction of interconnection facilities by the network licensee. The network licensee and generation company shall enter into an agreement to mutually decide the terms and conditions for reimbursement of financing to the generation company; or

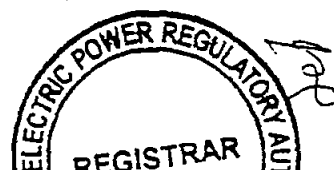
(b) A special purpose company, may construct, operate and maintain the dedicated network and interconnection facilities for connecting with the national grid after obtaining relevant licence from the Authority.

(4) The interconnection facilities referred to under sub-regulation (3) shall be in accordance with the relevant provisions of the Grid Code, Distribution Code and applicable documents.

(5) Nothing contained in sub-regulation (3) shall absolve the respective network licensee from its obligation to provide interconnection and open access in accordance with the Grid Code, Distribution Code, these regulations and other applicable documents and the mechanisms provided in sub-regulation (3) shall be exercised at the sole option of the generation company.

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PART III OPEN ACCESS

5. Obligation to provide open access.— (1) A network licensee shall establish, operate and maintain its distribution system or transmission system, as the case may be, in a manner that ensures non-discriminatory open access in accordance with the Act, these regulations, Market Commercial Code, Grid Code, Distribution Code and other applicable documents.

(2) A network licensee shall, on an annual basis, prepare an open access report demonstrating compliance with these regulations and licence terms and conditions, with the details of its open access users, available and planned capacity, any issues identified in provision of open access, and any instances where open access was denied along with justification therefor. The said report shall also be made available on the website of a network licensee.

(3) The report required under sub-regulation (2) shall be prepared and submitted to the Authority within a period of one month from the date of end of respective financial year and shall also be made available on website of the network licensee.

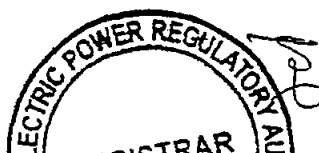
(4) The distribution company shall develop the use of system agreement in accordance with the minimum provisions provided in the Schedule I within ninety days of the notification of these regulations and shall obtain the approval of the Authority and publish the same on its website.

6. Execution of use of system agreement.— (1) Any person who has been granted a competitive supplier licence by the Authority or a person who has submitted an application to the Authority in this respect may approach the relevant distribution licensee in whose service territory the competitive supplier intends to supply electric power to the eligible bulk power consumers, for execution of use of system agreement as approved by the Authority:

Provided that where the bulk power consumer is connected directly to the transmission system of a transmission licensee, the use of system agreement shall be executed with the relevant distribution licensee in whose territory the bulk power consumer is located.

(2) Such request for execution of use of system agreement shall be accompanied by the following documents and information:

- (a) identification of the bulk power consumers, if applicable;
- (b) proposed commencement date of electric power supply to the bulk power consumers; and
- (c) any other necessary details as may be required by the distribution licensee.



(3) The distribution licensee shall acknowledge the receipt of the request within three days of the receipt thereof:

Provided that any request which is incomplete or not accompanied by the required information, shall be returned within three days of the filing thereof, identifying in writing the deficiencies, and allow a reasonable time to re-submit the request.

(4) The request, if found satisfactory, shall be accepted by the concerned distribution licensee within ten days of acknowledgement of receipt thereof.

(5) After acceptance of the request, the concerned distribution licensee and the competitive supplier shall execute the use of system agreement for collection and payment thereof within thirty days of such acceptance:

Provided that the use of system agreement shall be signed only when the competitive supplier has been granted an electric power supply licence by the Authority.

Provided further that the competitive supplier shall provide a security cover in terms of irrevocable standby letter of credit in favour of the concerned network licensee covering two months' estimated payment of use of system charges and charges on account of late payment thereof.

(6) The above stipulated provisions shall be *mutatis mutandis* applicable, where the captive generating plant is connected with the network licensee's system and availing open access.

7. Filing of petition and determination of use of system charges.— Within ninety days following the date of notification of these regulations, each distribution licensee, in consultation with the respective supplier of last resort, shall prepare and submit a separate petition to the Authority for determination of its use of system charges. Such petition shall be accompanied with a statement which will set out the basis upon which the use of system charges shall be calculated in such manner and with such details as shall be necessary.

8. Wheeling of electric power.— An open access user shall be entitled to wheel electric power using the system of network licensee subject to compliance with these regulations and the Market Commercial Code, upon coming into effect, and use of system agreement.

9. Collection and disbursement of use of system charges.— (1) An open access user shall pay use of system charges, as determined by the Authority from time to time, to the designated accounts as may be determined by the Authority.

(2) The distribution licensees, shall have appropriate back-to-back arrangements in place in order to disburse collected use of system charges

10. Complaint and dispute resolution.— (1) The network licensees shall make available a complaint-handling mechanism that provides open access users with expeditious, fair, transparent, inexpensive, accessible, speedy and effective dispute resolution without unnecessary cost or burden.

(2) Any dispute relating to open access shall be dealt with in accordance with the mechanism provided in the use of system agreement, Grid Code or Distribution Code, as the case may be.

(3) In the event the parties to a dispute are not able to resolve their dispute as per the procedure provided in sub-regulation (2), the matter shall be referred to the Authority.

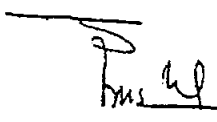
(4) The Authority shall give its decision in any matter referred to it under sub-regulations (3), within a period of three months after providing an opportunity of hearing to the concerned parties.

11. Repeal and savings.— (1) Upon the effectiveness of these regulations, the following regulations shall stand repealed.—

- (a) National Electric Power Regulatory Authority (Wheeling of Electric Power) Regulations, 2016;
- (b) National Electric Power Regulatory Authority (Interconnection for Renewable Generation Facilities) Regulations, 2015; and
- (c) National Electric Power Regulatory Authority (Sale of Electric Power by Renewable Energy Companies) Guidelines, 2015.

(2) Any wheeling agreement executed under National Electric Power Regulatory Authority (Wheeling of Electric Power) Regulations, 2016 prior to notification of these regulations shall be brought in conformity with these regulations prior to the date of effectiveness of these regulations.




02 X1 22
(Syed Safeer Hussain)
Registrar

SCHEDULE-I
"Use of System Agreement"
See regulation 2 (1) (p)

A use of system agreement shall *inter alia* provide for the following:

- (a) Detailed description/profile of parties along with addresses and authorised representatives;
- (b) Effective date and term;
- (c) Provisions on applicability (compliance with) and hierarchy of applicable documents;
- (d) Provision(s) establishing that open access charges will be in accordance with NEPRA tariff determinations;
- (e) Invoicing and payments of open access charges;
- (f) Arrangement in case of failure to provide open access;
- (g) Dispute resolution mechanisms;
- (h) Security cover in terms of cash or irrevocable standby letter of credit;
- (i) Provisions ensuring compliance of these regulations, the Grid Code, the Distribution Code as applicable;
- (j) Notice of Force Majeure Events;
- (k) Representations and Warranties;
- (l) Termination notice;
- (m) Conditions for Assignment of open access rights;
- (n) Provisions related to posting of notices and service address; and
- (o) Procedure of making amendments to the agreement.





OFFICE OF THE
REGISTRAR

F/C

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
ISLAMIC REPUBLIC OF PAKISTAN
NEPRA Tower, Ataturk Avenue (East) G-5/1, Islamabad
Phone: 2013200, Fax: 2600026
Website: www.nepra.org.pk, Email: info@nepra.org.pk

No. NEPRA/DG(Tariff)/TRF-100/ 33375-84

September 13, 2023


Chief Executive Officer Lahore Electric Supply Company (LESCO), 22-A, Queen's Road, Lahore	Chief Executive Officer Faisalabad Electric Supply Company (FESCO), Abdullahpur, Canal Bank Road, Faisalabad
Chief Executive Officer, Sukkur Electric Power Company Ltd. (SEPCO) Administration Block, Thermal Power Station, Old Sukkur.	Chief Executive Officer Hyderabad Electric Supply Company (HESCO) Old State Bank Building, G.O.R. Colony Hyderabad
Chief Executive Officer, Tribal Areas Electricity Supply Company (TESCO) WAPDA House, Shami Road, Peshawar	Chief Executive Officer Peshawar Electric Supply Company (PESCO), WAPDA House, Sakhi Chashma, Shami Road, Peshawar
Chief Executive Officer Quetta Electric Supply Company (QESCO), 14-A Zarghoon Road, Quetta	Chief Executive Officer Multan Electric Power Company (MEPCO) MEPCO Complex, WAPDA Colony, Khanewal Road, Multan
Chief Executive Officer Gujranwala Electric Power Company (GEPCO) 565/A, Model Town G.T. Road, Gujranwala	Chief Executive Officer Islamabad Electric Supply Company (IESCO), Street No. 40, G-7/4, Islamabad

Subject: - **PETITION FOR DETERMINATION OF USE OF SYSTEM CHARGES/
WHEELING CHARGES**

This is with reference to the petitions filed by XWDISCOs for determination of use of system/wheeling charges.

2. The Tariff of FY 2023-24 has been determined by the Authority and subsequently notified by Federal Government vide SRO dated July 25, 2023.

3. Considering the fact that petitions filed by XWDISCOs for use of system/ wheeling charges were based on the revenue requirement/ tariff determined for the FY 2022-23, therefore the Authority has decided to return all such petitions. The Discos are hereby directed to file new petitions after incorporating the revised tariff numbers as determined by NEPRA for the FY 2023-24 and subsequently notified by the Federal Government.


13/9/23
(Haris Khan)
Deputy Director





National Electric Power Regulatory Authority

Islamic Republic of Pakistan

Registrar

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad
Ph: +92-51-9206500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/DG(Tariff)/TRF-605 & TRF-606/182611-47

July 14, 2023

Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST
FILED BY FAISALABAD ELECTRIC SUPPLY COMPANY (FESCO)
FOR DETERMINATION OF INTERIM TARIFF FOR THE FY 2023-24
FOR ITS DISTRIBUTION AND SUPPLY OF POWER FUNCTIONS
[CASE # NEPRA/TRF-605 & TRF-606/FESCO]**

Dear Sir,

Please find enclosed herewith subject Decision of the Authority (total 20 Pages) in the matter of Request filed by Faisalabad Electric Supply Company (FESCO) for Determination of interim tariff for the FY 2023-24 for its Distribution and Supply of Power Functions.

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

(Engr. Mazhar Iqbal Ranjha)

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.
3. Secretary, Energy Department., Government of the Punjab, 8th Floor, EFU House, Main Gulberg, Jail Road, Lahore,
4. Chief Executive Officer, NTDC, 414 WAPDA House, Shaharah-e-Qauid-e-Azam, Lahore
5. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
6. Chief Executive Officer, Faisalabad Electric Supply Company Ltd. Abdullahpur, Canal Bank Road, Faisalabad

DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST FILED BY FAISALABAD ELECTRIC SUPPLY COMPANY (FESCO) FOR DETERMINATION OF INTERIM TARIFF FOR THE FY 2023-24 FOR ITS DISTRIBUTION AND SUPPLY OF POWER FUNCTIONS

1. The Authority determined a multi-year 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, for both of its Distribution and supply functions which stand expired on 30.06.2023.
2. FESCO consequently has filed its Distribution and Supply of power tariff petitions for a control period of five years i.e. from FY 2023-24 to FY 2027-28 under the Multiyear Tariff (MYT) regime. The said petitions have been admitted by the Authority.
3. Subsequently, the Petitioner vide letter dated 05.06.2023 requested that since duration of its existing notified tariff is ending on 30.06.2023, and w.e.f. 01.07.2023 new tariff for the FY 2023-24 is required to be implemented. However, keeping in view the tariff determination process as per NEPRA Act, implementation of new tariff w.e.f. 01.07.2023 does not seem practicable.
4. FESCO further submitted that as per sub rule (7) of Rule 4 of NEPRA (Tariff Standards and Procedure) Rules, 1998, the Authority may allow the immediate application of the proposed tariff subject to any further adjustment as may subsequently be required. It also stated that simultaneous tariff determination for all DISCOs is also required, to maintain a uniform tariff across all consumer categories as per the NEPRA Act and policies in vogue.
5. In view thereof, FESCO has requested to determine its Distribution and Supply of Power Tariffs for the FY 2023-24 for implementation w.e.f. July 01, 2023 on interim basis subject to adjustment after final determination.
6. The Authority has carefully considered the request of the Petitioner for determination of tariff on interim basis. The Authority noted that time frame for determination of tariff application as provided in NEPRA Act under Section 31 (6) is four months, as reproduced below;

31 (6) The time frame for determination by the Authority on tariff petition shall not exceed four months after the date of admission of the tariff petition:

Provided that this time frame shall commence after the applicant has complied with all requirements of rules and regulations and the Authority has admitted the tariff petition.

7. The Authority also observed that sub rule 7 of Rule 4 of the NEPRA (Tariff Standards and Procedure) Rules, 1998 states that;

The Authority may, while admitting a petition, allow the immediate application of the proposed tariff subject to an order for refund for the protection of consumers, or for satisfactory security to be provided for refund, while the proceedings are pending before the Authority.



8. The Authority has also considered the request of the Ministry of Energy (MoE) vide letter dated May 18, 2023, submitting that;

"...Government intends to notify the annual rebasing of FY 2023-24, from July 1, 2023. Any delay in the tariff rebasing would result in financial loss to the power sector as well as it would constraint the payments to power producers. Further, timely notification of annual tariff rebasing is essential for the Government in order to meet its committed deadlines."

9. In view of the above discussion, the fact that MYT determination of the Petitioner requires considerable time in terms of conduct of hearing, verification & analysis of the data/information, and the policy of the Federal Government to maintain uniform tariff across all consumer categories, the Authority has decided to allow an interim tariff to the Petitioner for the FY 2023-24. The interim tariff being allowed shall be subject to adjustment and/or refund, based on the final determination of the Authority in the matter of MYT petitions of the Petitioner.

Order

10. In terms of Rule 4(7) of the NEPRA (Tariff Standards and Procedure) Rules, 1998, the Petitioner is hereby allowed the following interim tariff w.e.f. 01.07.2023, after incorporating CPI increase of December 2022 (as used in case of other DISCOs) over the allowed Margin for Distribution and Supply business for FY 2022-23.
11. The Interim tariff being allowed shall be subject to adjustment and/or refund, based on the final determination of the Authority in the matter of MYT petitions of the Petitioner.
12. In addition, the Authority noted that Power Purchase Price (PPP) forecast of the Petitioner as well for all XWDISCOs for the FY 2023-24 has since been determined by the Authority through a separate decision, detailing the assumptions of the forecast and relevant share of the Petitioner. In view thereof, the Authority does not see any rationale to discuss this issue again herein in the instant decision. However, for the purpose of calculation of overall interim revenue requirement of the Petitioner, the PPP forecast for the FY 2023-24 has been made part of the overall Revenue Requirement of the Petitioner. Further, Annex-I of the PPP decision, to the extent of the Petitioner, has been attached as Annex-IV with the instant decision. The PPP forecast of the Petitioner for the FY 2023-24 shall be used as reference for future adjustments of PPP including the monthly and quarterly adjustments.
13. Here it is pertinent to mention that as per the amendment NEPRA Act, function of sale of electric power, traditionally being performed by the Distribution Licensees, has been removed from the scope of Distribution Licensee and transferred to a Supply Licensee. Section 23E, of the amended Act, provides that holder of a distribution license on the date of coming into effect of the Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 shall be deemed to hold a license for supply of electric power under this section for a period of five years from such date.
14. The Authority noted that the Petitioner was a deemed supplier till 26.04.2023, in light of aforementioned section of NEPRA Act. The Petitioner, however, has submitted its supply of power license application, which is under consideration of the Authority. Thus, the grant of interim tariff shall in no way be construed as a basis for claiming supply license. The

Decision of the Authority in the matter of request filed by FESCO for interim tariff

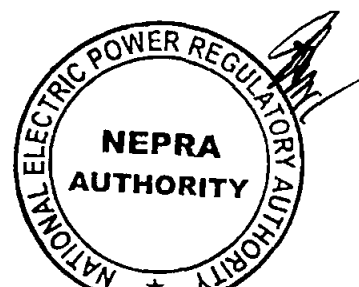
application for grant of Supply license would be processed separately after following the due process of law and in light of applicable documents. The terms & conditions to be given by the Authority, in the supply license would be applicable during the MYT control period and the MYT would be governed by the terms & conditions of the new license.

15. In view of the discussion made in preceding paragraphs, the interim revenue requirement for the FY 2023-24, subject to adjustment and/ or refund based on outcome of final MYT determination, is as under;

Description	Unit	Interim Revenue FY 2023-24	
		DoP	SoP
Units Received	[MkWh]	16,965	16,965
Units Sold	[MkWh]	15,482	15,482
Units Lost	[MkWh]	1,483	1,483
Units Lost	[%]	8.74%	8.74%
Energy Charge			114,414
Capacity Charge			252,025
Transmission Charge & Market			20,326
Operation Fee			33,040
Wire Business UoSC			33,040
Power Purchase Price	[Mln. Rs.]	-	419,806
Pay & Allowances		13,127	3,955
Post Retirement Benefits		8,891	3,124
Repair & Maintenance		751	56
Traveling allowance			
Vehicle maintenance		1,451	1,115
Other expenses			
O&M Cost		24,220	8,250
Depreciation		6,031	-
RORB		6,919	3,390
O.Income		(4,130)	(1,116)
Margin	[Mln. Rs.]	33,040	10,524
Revenue Requirement	[Mln. Rs.]	33,040	430,330
PPP with Wire Business Cost-Unadj.		-	24.75
PPP with Wire Business Cost-adj.		-	27.12
Margin		2.13	0.68
PYA			
Tariff	[Rs./kWh]	2.13	27.80


16. The above determined revenue shall be recovered from the consumers through the projected sales of 15,482 GWhs, as per Annex – II.
17. FESCO, being a supplier, is allowed to charge its consumers such tariff as set out in the schedule of tariff for FESCO annexed to the decision.
18. 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%	6.34%	7.81%
UoSC Rs./kWh	0.81	1.34	2.21



19. 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.
20. To file future monthly & quarterly adjustments on account of Power Purchase Price (PPP) based on the Annex-IV attached with the instant decision.
21. The Petitioner shall comply with the Tariff terms & Conditions for supply of electricity as annexed with decision as Annex-V.
22. Decision of the Authority, is hereby intimated to the Federal Government for filling of uniform tariff application in terms of section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.
23. The instant decision of the Authority and the Order part along with revised Annex-I, I-A, II, III, IV and V, be also notified in terms of section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, while notifying the uniform tariff application decision of the Authority.

AUTHORITY



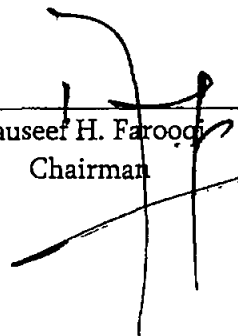
Mathar Niaz Rana (nsc)
Member

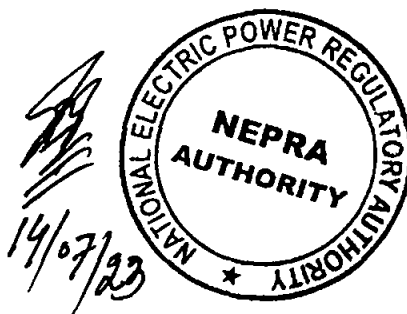
Rafique Ahmed Shaikh
Member

Engr. Maqsood Anwar Khan
Member



Ms. Amina Ahmed
Member


Tauseef H. Farooqi
Chairman



National Electric Power Regulatory Authority
(NEPRA)
(Coordination & Implementation Department)

F/E

No. NEPRA/Dir (C & I)/2023/1434

September 01, 2023

Subject: **APPROVED MINUTES/DECISION OF THE AUTHORITY REGULATORY MEETING RM 23-389 REGARDING PETITION FOR DETERMINATION OF USE OF SYSTEM CHARGES/ WHEELING CHARGES.**

Enclosed please find herewith the Minutes/Decision of the Authority Regulatory Meeting RM 23-389 held on August 15, 2023 (signed minutes received on 01.09.2023).

2. The sponsor and all concerned professionals are requested to submit progress/status report to take immediate necessary action in compliance of timeline prescribed by the Authority in the subject Minutes/Decision.


Director (C&I)

Distribution:

1. Registrar
2. DG (M&E)
3. DG (Tariff)
4. DG (Lic)
5. DG (CAD)
6. ADG (Legal)
7. SA (M&E)
8. Director (M & E)
9. Director (Technical)
10. Consultant (CTBCM)
11. Director (Tariff-II) /Sponsor
12. DD (Tariff)
13. AD Legal-Tariff

Copy to:

1. PS to Chairman
2. PS to M (Technical)
3. PS to M (Lic)
4. PS to M (Tariff and Finance)
5. PS to M (Law)

**National Electric Power Regulatory Authority
(NEPRA)**

Subject:- **MINUTES/DECISIONS OF THE AUTHORITY REGULATORY MEETING
RM 23-389 REGARDING PETITION FOR DETERMINATION OF USE OF SYSTEM
CHARGES/ WHEELING CHARGES.**

A meeting of the Authority on the subject was held on August 15, 2023. Following Members of the Authority, professionals and officers participated in the meeting:

<u>Authority</u>	
Mr. Waseem Mukhtar	Chairman
Mr. Rafique Ahmed Shaikh	Member (Technical)
Engr. Maqsood Anwar Khan	Member (Lic)
Mr. Mathar Niaz Rana (nsc)	Member (Tariff/Finance)
Miss Amina Ahmed	Member (Law)
<u>Participants</u>	
Mr. Imtiaz Hussain Baloch	DG (Licensing)
Mr. Sajid Akram	DG (Tariff)
Mr. Imran Kazi	SA (M&E)
Mr. Muhammad Ramzan	Director C&I
Mr. Mubashir Jalal Bhatti	Director (Tariff-II) / Sponsor
Mr. Salman Rehman	Director (Tariff-Hydro)
Mr. Shahzad Anwar	Dir (Technical)
Mr. Khawar Hanif	Director (M&E)
Mr. Irfan ul Haq	ALA (Licensing)
Mr. Abdullah Quershi	DD (Tariff)
Mr. M. Imran	DD (Tariff)
Ms. Sundas Khaqan	DD (C)

2. The Authority considered the working paper submitted by Director (Tariff-II) and DD (Tariff).
3. The Sponsor informed that NEPRA issued Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022, which was notified on November 02, 2022. Clause 7 of the notified regulations states as under;

Filing of petition and determination of use of system charges.— Within ninety days following the date of notification of these regulations, each distribution licensee, in consultation with the respective supplier of last resort, shall prepare and submit a separate petition to the Authority for determination of its use of system charges. Such petition shall be accompanied with a statement which will set out the basis upon which the use of system charges shall be calculated in such manner and with such details as shall be necessary.

In compliance to the Regulations, XWDISCOs filed their petitions for determination of Use of System charges/ wheeling charges, which were accordingly admitted by the Authority. To proceed further in the matter, the Authority decided to hold hearing in the matter, which was initially scheduled on May 22, 2023, however, DISCOs vide letter, dated May 16, 2023, requested for a consultative session prior to scheduling of hearing to review critical items like

PAP, Final Dry Run report, proposed amendment to Commercial Code, Use of System agreements and UoSC etc.

4. The Authority accepted the request for XWDISCOs and hearing in the matter was postponed accordingly. In light of request of XWDISCOs, consultative session was held and subsequently hearing in the matter was scheduled on July 11, 2023. However, Ministry of Energy (power division) requested to postpone the hearing owing to the reason that the Authority is in process of finalization of rebasing of consumer-end tariff for FY 2023-24 and the petitions for Use of System Charges under consideration of the Authority are based on NPERA determination/GoP applicable tariff for the FY 2022-23. The Authority in light of request of the MOE postponed the hearing accordingly.

5. The Sponsor mentioned that all the Petitions were admitted by the Authority vide RMs 23-151 to 23-161 (excluding RM 23-158). The minutes of admission of Petitions were issued by C&I department on 06.04.2023. Further NEPRA Act section 31(6) provides following time line for processing of petitions;

The time frame for determination by the Authority on tariff petition shall not exceed four months after the date of admission of the tariff petition:

Provided that this time frame shall commence after the applicant has complied with all requirements of rules and regulations and the Authority has admitted the tariff petition.

6. The Sponsor highlighted that the Authority issued determinations of consumer-end tariff for FY 2023-24, of all XWDISCOs on July 14, 2023, which were intimated to the Federal Government for filling of uniform Tariff application. Pursuant thereto, the Federal Government filed Motion with respect to uniform tariff and the same has been decided by the Authority on July 25, 2023. The Federal Government on July 26, 2023, has notified the consumer-end tariff of XWDISCOs for the FY 2023-24 w.e.f. July 01, 2023.

7. It was also informed that since the earlier petitions filed by XWDISCOs regarding determination of use of system charges/ wheeling charges are based on determinations of the Authority for FY 2022-23, which is no more applicable, thus requires to be either updated by incorporating the revised revenue requirement of FY 2023-24.

8. In view of the above, the Sponsor requested the Authority to decide on the following:

- a. Whether to return/dispose of the earlier petitions for use of system charges with direction to file new petition after incorporating the revised Revenue Requirement for FY 2023-24 and GOP applicable tariff in this regard or otherwise?

OR

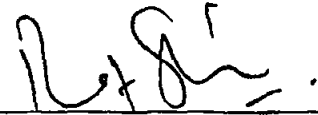
- b. Whether to direct DISCOs to file addendum after incorporating the revised Revenue Requirement for FY 2023-24 and GOP applicable tariff in this regard or otherwise? If the Authority decide to direct DISCOs for filing of addendum than approval is requested for draft DFA attached with working paper. The Authority in this case is also requested to extend the timelines for processing of Use of System Charges Petition by allowing to start Four month period for processing of such petitions from the date of provision of final information by XWDISCOs.

DECISION OF AUTHORITY REGULATORY MEETING RM 23-389 HELD ON AUGUST 15, 2023 REGARDING PETITION FOR DETERMINATION OF USE OF SYSTEM CHARGES / WHEELING CHARGES.

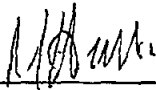
9. The Authority after detailed deliberations upon the working paper decided to return the earlier petitions filed by XWDISCOs for use of system charges/ wheeling charges, with the directions to file new tariff petitions after incorporating the revised tariff numbers as determined by NEPRA for the FY 2023-24 and subsequently notified by the Federal Government.



Mathar Niaz Rana (nsc)
Member



Rafique Ahmed Shaikh
Member



Engr. Maqsood Anwar Khan
Member



Amina Ahmed
Member



Waseem Mukhtar
Chairman

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
(REGISTRAR OFFICE)

F/P

No: NEPRA/R/TRF-100/ 33719

October 06, 2023

I O N


Subject: **PETITION FOR DETERMINATION OF USE OF SYSTEM CHARGES (UoSC) / WHEELING CHARGES - FESCO**

Please find enclosed herewith subject petition filed by Faisalabad Electric Supply Company (FESCO) vide letter No. 3906/General dated 02.10.2023 (received on 06.10.2023) for determination of Use of System Charges (UoSC)/Wheeling Charges under Regulation 7 of NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022. FESCO has submitted the subject petition while referring to NEPRA's letter No. NEPRA/DG(Tariff)/TRF-100/33375-85 dated 13.09.2023 whereby it was directed to file new petitions after incorporating the revised tariff numbers as determined by NEPRA for the FY 2023-24.

2. DG (Lic), ADG (Tariff), Director (Tech), Consultant (CTBCM) and ALA (Lic) are requested to go through the enclosed petition and offer their comments for submission of case before Authority regarding further processing of the subject petition.

3. Being time bound case, the comments may please be provided by 10.10.2023.

Encl: **As above**


(Haris Khan)
Deputy Director

1. DG (Licensing)
2. ADG (Tariff)
3. Director (Technical)
4. Consultant (CTBCM)
5. ALA (Lic)

CC:

1. Registrar
2. Master File

7