



ISLAMABAD ELECTRIC SUPPLY COMPANY

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No. 1059-1066/IESCO/MIRAD/DG/Admn

Dated 6/10/2023

The Registrar,
National Electric Power Regulatory Authority (NEPRA),
NEPRA Tower, Attaturk Avenue (East), G5/1,
Islamabad.

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

Reference: Letter No. NEPRA/DG (Tariff)/TRF-100/33375-84 Dated 13-09-2023

With reference to the Authority letter and In pursuance of Regulation 7 of NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 whereby, a distribution company shall prepare and submit a separate petition to the honorable Authority for determination of its Use of System Charges; we are pleased to submit attached herewith Petition for Use of System Charges (UoSC) prepared based on the NEPRA Authority Provisional determination of IESCO Tariff FY 2023-24, for kind consideration and approval of the Authority. It is worth mentioning that following are the points of concern regarding Provisional determine data of 2023-24 used for this Petition,

1. Impact of provisional figures compared with Multy Year Tariff Petition for the FY 2023-24 to 2027-28, due to differences are noted in PYA and other components of DM.
2. IESCO Accounts for FY 2022-23 are not yet finalized therefore we have to rely in provisional accounts and submitted to NEPRA along with Tariff Petition.
3. The depreciation amount is mentioned in the provisional Tariff Determination but the details of assets and computation of depreciation is not available required for Cost of Service and distribution of costs.

It may kindly be noted that the instant petition includes Cost of Service Study of IESCO (FY 2023-24) based on Provisional data 2022-23 as Annex-2, thereto forming fundamental basis for the instant petition.

For any clarification or additional information or any other matter relating to the said petition Mrs. Huma Ghazal (Director General MIRAD) IESCO (0319-5991223, email: dgmirad@gmail.com) is designated as focal person.

CHIEF EXECUTIVE OFFICER
IESCO ISLAMABAD

DA/ as above.

Copy to: -

1. General Manager (Development) IESCO for information.
2. Operation Director IESCO for information.
3. Chief Financial Officer, IESCO for information.
4. Chief Law Officer IESCO for information.
5. Chief Engineer (CSD) IESCO for information.
6. Chief Engineer (P & E) IESCO for information.
7. Master file.

Forwarded please:

☒ For nec action

☐ for information

1. DG (Lic.)	2. DG (Admn./HR)
3. DG (M&E)	4. DG (CAD)
5. DG (Trf.)	6. Dir. (Fin.)
7. Dir. (Tech.)	8. Consultant
9. LA	10. Dir. (IT)

For kind information please

1. Chairman

2. M (Lic.)

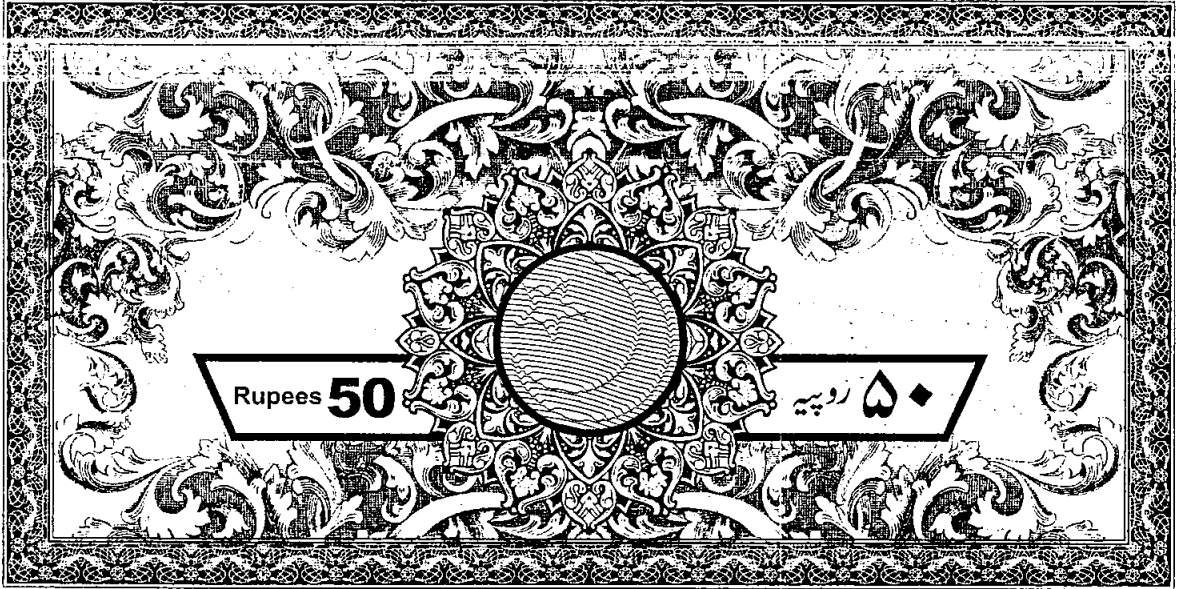
3. M (Law)

4. PM (Tech.)

5. M (Trf. & Fin)

REGISTRAR OFFICE
Diary No. 14069
Date: 9.10.23

Dy. Secy



AFFIDAVIT

I Dr. Muhammad Amjad Khan S/O Mukarram Khan, Chief Executive Officer Islamabad Electric Supply Company having CNIC No. 17301-1389963-5, duly authorized by the Board of Directors of Islamabad Electric Supply Company Limited in its 226th BOD Meeting held on September 27, 2023 vise Item No. 07 do hereby, Solemnly affirm and testify that the contents of the application for filling petition for determination of use of system charges, are in accordance with the NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 and that annexed documents are true and correct to the best of my knowledge, belief on the basis of confirmations provided by the concerned formation put before me; and further declare that:

1. I am Chief Executive Officer Islamabad Electric Supply Company (IESCO) and fully aware of the Company particularly to endorse petition for determination of use of system charges.
2. Whatsoever stated in the application and accompanied documents is true and nothing has been concealed.

Deponent

Engr. Muhammad Amjad Khan
Chief Executive Officer (IESCO)



17301-1389963-5
1548
06-10-2023
کہ اسمبر خان دہلوی کمر خان سگنی حدیث آباد لکھنؤ
بے بیان و ملحوظی کے لیے

MUHAMMAD MAJID WAHEED
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بازار ذیشان
82203-347301-1

نوٹ:
یہ اشتہار پیر کی ملکی سرکاری اراضی (CDA) کے
ریاستی اداروں کی ملکیت میں کسی دوسری اراضی کی
خرید و فروخت کے لئے جاری نہیں کیا گیا۔

Petition
for Determination of
Use of System Charges (UoSC)
FY 2023-24



ISLAMABAD ELECTRIC SUPPLY COMPANY LTD.

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ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO) Ltd.

Background

Islamabad Electric Power Company (IESCO), incorporated as a Public Limited Company, is responsible for the delivery of electricity to its 3.7 million customers spanning 06 districts of Punjab as set out in IESCO's Distribution License number 01/DL/2001 dated November 2, 2001 subsequently extended License number DL/01/2023 dated April 06, 2023 granted by NEPRA under the NEPRA Act. On May 14, 1998, as a result of the restructuring of WAPDA's Power Wing, IESCO assumed its official operations and is since then being headed by a Chief Executive Officer (CEO).

Under the provisions of Regulation of Generation, Transmission & Distribution of Electric Power (Amendment) Act, 2018, IESCO 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, be limited to ownership, operation, management or control of distribution facilities for the movement or delivery to consumers of electric power. The deemed licensee status is expiring on May 01, 2023 and, accordingly, IESCO has already submitted a petition for grant of license for supply of electric power with the Authority.

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.

Grounds 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 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 Regulation, 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 vent 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 as 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."

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 purchase 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 loss of base load, good paymaster 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 resource and relief to the DISCOs to mitigate the said possible adverse impacts.

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, 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 here under:

- (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 license 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 IESCO 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 IESCO 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 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 IESCO, these shall not form part of use of system charges to be recovered directly by IESCO.
 - 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. As the transmission and distribution losses will be charged to market participants of open access through the mechanism as explained in the Market Commercial

Code, therefore, such charges shall not be levied under these use of system charges as requested under this instant petition.

Explanation:

The use of system charges will be determined in terms of metered quantities (kWh or kW), in consideration of allowed %age of losses and also that arrangements under the Market Commercial Code the parties (the BPC, Competitive Supplier and/or Generator) shall be committing to the Capacity Obligation (including all losses and reserve margin up to bus-bar) through Firm Capacity, therefore, such transmission or distribution losses, as the case may be, will not be charged separately. However, for the purposes of transparency of charges, the impact of such losses may be separately disclosed.

- f. The use of system charges, including the Distribution Margin Charges, as requested by IESCO and to the extent approved by Authority, will be applicable with reference to those eligible Bulk Power Consumers (BPCs) who opt for supply from a competitive supplier, other than supplier of last resort.
- g. The use of system charges shall be with reference to the voltage level (132/66 kV, 11/33 kV) for the applicable consumer categories of all possible BPCs. The component-wise Cost of Service as per outcome detailed Cost of Service Study (Annex-2) and consequent assessment, as detailed above, of component-wise Use of System Charges for the applicable BPCs is provided at Annex - 1.
- h. Power Factor Penalty as provided in applicable documents shall remain applicable in addition to the Use of System Charges.
- i. Any taxes and surcharges as imposed by the Government shall be applicable.

Summarizing the above, following is the abstract of entitled entities for each element of the use of system charges:

Sr. No.	Use of System Charge Element	Entitled Entity
1.	Transmission Use of System Charge	NTDC and other TSPs through NTDC/NGC.
2.	System Operator Charge / Fee	System Operator through NTDC
3.	MSP Charge / Fee	MSP through NTDC
4.	Distribution Use of System Charge	IESCO as Distribution Licensee
5.	Cross Subsidy	IESCO as SOLR (Supply Licensee)
6.	Stranded Capacity Costs	IESCO as SOLR (Supply Licensee)

Basis of Use of System Charges

The instant petition for determination of use of system charges has been developed based on Cost of Service Study (FY 2022-23) carried out by IESCO through technical help of USAID forming integral part of this petition and provided separately as attached hereto as **Annex-2**.

Method for recovery of Use of System Charges

The instant petition is for determination of use of system charges for recovery of costs and charges relating to service providers (SO, TNO, TSP, DNO), stranded capacity costs and the cross-subsidy currently being contributed by the eligible BPCs. It is penitent to mention that most, if not all, costs and charges are fixed in nature, the natural mode of recovery should be the fixed (in terms of Rs. /kW/Month) charge. However, following options are available for consideration and determination:

- i) Use of system charges recovery in term of Rs. /kW/Month metered shall provide guaranteed stream of revenue to cover for costs which are fixed in nature. This may, however, over burden the relevant consumers thus undermining the very purpose of CTBCM and open access regime.
- ii) Use of system charges recovery in term of Rs. /kWh will render the service providers and the SOLR to face the revenue loss arising from low load factor of the eligible BPCs. On the other hand, the open access users shall be benefitted for any favorable Energy or Capacity Imbalance at the Market this option may not provide a balanced approach to promised sharing of risks and rewards under CTBCM regime.
- iii) Use of system charges recovery through a hybrid approach, i.e. partly through fixed charge in terms of Rs. /kW/Month (subject to minimum MDI compared to the contracted load) and partly in terms of Rs. /kWh may provide a balanced plausible approach for all the involved parties. It is submitted that, in order to ensure level playing field for consumers of SOLR and Competitive Supplier, the recovery of use of system charges may have same charging mechanism.

As already mentioned, **Annex-1** to this petition also include proposed rates to be charged under each of the three (2) options narrated above.

It is, however, noted that the methodology and process as per FACOS model, for the purpose of allocation of demand (kW or MW) related costs, allocate single system peak demand (of IESCO) to different categories to arrive at the allocation base. This allocation, irrespective of being rational, judicious and in line with international norms, results in less than actual (billable) MDIs of respective customers. Accordingly, taking the same MW demand as denominator for demand (MW) based rate making will result in higher per MW rates. In consideration thereof,

a second proposal (Proposal-2) for arriving at demand based rates as per option (i) above, i.e. whole cost recovery in terms of Rs. /kW and option (iii), hybrid partial cost recovery in terms of Rs./kW; has been developed **based on billable MDIs** of B-3, B-4 and C-2, C-3 customer categories and provided as **Annex-1A** herewith.

Mechanism for Adjustment/Indexation of Use of System Charges

Each component of use of system charges detailed in the instant petition shall be subject to periodic adjustment/indexations. Whenever these components are adjusted for regulated consumers of the suppliers of last resort, at the same time, the corresponding adjustment in the relevant component of the proposed Use of System Charges for eligible BPCs shall simultaneously be made.

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 customer, 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	B3 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 supply to industries for all loads of more than 500 kW receiving supply at 66 kV, 132kV and above.
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 1 MW 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 supply to industries for all loads of more than 500 kW receiving supply at 66 kV, 132kV and above.

6.	Housing Colonies attached to Industries	H	N/A	As per the existing tariffs, no kW sanctioned load quantification or connection voltage is applicable to H tariff category. Further, these connections are resale in nature. Accordingly, these are not considered BPC for the purposes of this petition.
7.	Azad Jammu & Kashmir	K	N/A	The supply feed for AJK customer category is more than 1 MW at 11 kV level. However, the same is primarily for resale purpose, therefore, not considered as BPC.

Note: Consumers of all or any of the above listed categories, 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 IESCO 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 the additional sanctioned/ contracted load (interim of MW) shall be consider to determine its status as BPC interim of the act. Incase, such BPC chose to exercise option for a competitive supplier, the Use of System charges shall apply in full.

- (3) In case of complete power producer/ user supplying/ receiving electric power at same premises where IESCO 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 access shall be the capacity charges/ stranded costs to be paid by all the 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 Electric 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 and/ or Annex-1A and Annex-2 which contain detailed analysis

Islamabad Electric Supply Company (IESCO) Ltd.

(Annex-1)

Cost of Service & Proposed Use of System Charges for FY 2023-24 For Possible Eligible Bulk Power Consumers (One MW or More at One Premises)

(PROPOSAL -1)

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-1)			
Consumption Category	Industrial				Industrial				Industrial B-3 (1 MW or More)			
Tariff Category	B-3				B-3				MDI Based Volumetric Hybrid			
	Variable	Fixed		Total	Variable	Fixed		Total	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh				
Generation Cost - Energy	6.99			6.99	6.71			6.71	490	0.28		0.28
Generation Cost - Capacity		7,018	8.74	8.74		6,740	8.39	8.39	6,740	8.39	2,022	5.87
Transmission Charges		565	0.70	0.70		543	0.68	0.68	543	0.68	163	0.47
Market Operator's Fee		3.16	0.00	0.00		3.04	0.00	0.00	3.04			
Distribution Use of System		1,635	2.04	2.04		1,570	1.96	1.96	1,570	1.96	471	1.37
Total Applicable Costs	6.99	9,221	11.48	18.47	6.71	8,856	11.03	17.74	9,346	11.30	2,656	7.99
Impact of allowed losses					0.28	365	0.45	0.73	365	0.45	110	0.32
Total Cost of Service	6.99	9,221	11.48	18.47	6.99	9,221	11.48	18.47	9,711	11.75	2,765	8.31
Cross Subsidy				7.06				7.06	5,727	7.06		7.06
Average Applicable Tariff				25.53				25.53	15,438	18.81	2,765	15.37

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-1)			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-2(b) (1 MW or More)			
Tariff Category	C2(b)				C2(b)				MDI Based Volumetric Hybrid			
	Variable	Fixed		Total	Variable	Fixed		Total	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh				
Generation Cost - Energy	6.99			6.99	6.71			6.71	187	0.28		0.28
Generation Cost - Capacity		7,018	10.38	10.38		6,740	9.97	9.97	6,740	9.97	2,022.08	6.98
Transmission Charges		565	0.84	0.84		543	0.80	0.80	543	0.80	162.79	0.56
Market Operator's Fee		3	0.00	0.00		3	0.00	0.00	3.04			
Distribution Use of System		1,577	2.33	2.33		1,515	2.24	2.24	1,515	2.24	454.49	1.57
Total Applicable Costs	6.99	9,164	13.55	20.53	6.71	8,801	13.01	19.72	8,988	13.28	2,639	9.38
Impact of allowed losses					0.28	363	0.54	0.81	363	0.54	108.84	0.38
Total Cost of Service	6.99	9,164	13.55	20.53	6.99	9,164	13.55	20.53	9,351	13.82	2,748	9.76
Cross Subsidy				8.02				8.02	2,520	8.02		8.02
Average Applicable Tariff				28.55				28.55	11,871	21.84	2,748	17.77

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-1)			
Consumption Category	Industrial				Industrial				Industrial B-4			
Tariff Category	B4				B4				MDI Based Volumetric Hybrid			
	Variable	Fixed		Total	Variable	Fixed		Total	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh				
Generation Cost - Energy	6.78			6.78	6.71			6.71	64	0.07		0.07
Generation Cost - Capacity		6,808	9.21	9.21		6,740	8.77	8.77	6,740	8.77	2,022.08	6.14
Transmission Charges		548	0.74	0.74		543	0.80	0.80	543	0.80	162.79	0.56
Market Operator's Fee		3	0.00	0.00		3	0.01	0.01				
Distribution Use of System		1,005	1.36	1.36		995	2.90	2.90	995	2.90	298.64	2.03
Total Applicable Costs	6.78	8,364	11.32	18.09	6.71	8,281	12.48	19.19	8,343	12.54	2,484	8.80
Impact of allowed losses						83	0.11	(1.09)	83	0.11	24.84	0.08
Total Cost of Service	6.78	8,364	11.32	18.0949	6.71	8,364	12.59	18.09	8,425	12.65	2,508	8.87
Cross Subsidy				7.25				7.25	1,494	7.25		7.25
Average Applicable Tariff				25.34				25.34	9,919	19.90	2,508	16.12

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-1)			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-3(b)			
Tariff Category	C3(b)				C3(b)				MDI Based Volumetric Hybrid			
	Variable	Fixed		Total	Variable	Fixed		Total	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh				
Generation Cost - Energy	6.78			6.78	6.71			6.71	50	0.07		0.07
Generation Cost - Capacity		6,808	9.12	9.12		6,740	9.03	9.03	6,740	9.03	2,022.08	6.32
Transmission Charges		548	0.73	0.73		543	0.73	0.73	543	0.73	162.79	0.51
Market Operator's Fee		3	0.00	0.00		3	0.00	0.00				
Distribution Use of System		1,009	1.35	1.35		999	1.34	1.34	999	1.34	299.56	0.94
Total Applicable Costs	6.78	8,367	11.20	17.98	6.71	8,284	11.09	17.80	8,332	11.16	2,484	7.83
Impact of allowed losses						83		0.18	83		24.85	
Total Cost of Service	6.78	8,367	11.20	17.98	6.71	8,367	11.09	17.98	8,414	11.16	2,972	9.27
Cross Subsidy				10.56				10.56	3,891	10.56		10.56
Average Applicable Tariff				28.54				28.54	12,305	21.72	2,972	19.84

Director General
IESCO - Islamabad
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Islamabad Electric Supply Company (IESCO) Ltd. (Annex-1A)

Cost of Service & Proposed Use of System Charges for FY 2023-24 For Possible Eligible Bulk Power Consumers (One MW or More at One Premises)

(PROPOSAL -2)

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-2)			
Consumption Category	Industrial				Industrial				Industrial B-3 (1 MW or More)			
Tariff Category	B-3				B-3				MDI Based	Volumetric	Hybrid	
	Variable	Fixed	Total		Variable	Fixed	Total		Rs./KW/ Month	Rs./KWh	Rs./KW/ Month	Rs./KWh
	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh				
Generation Cost - Energy	6.99			6.987	6.71			6.71	690	0.61		0.61
Generation Cost - Capacity		7,018	8.74	8.738		6,593.50	8.39	8.39	6,594	8.39	1,978	5.87
Transmission Charges		565	0.70	0.703		530.82	0.68	0.68	531	0.68	159	0.47
Market Operator's Fee		3	0.00	0.004		2.97	0.00	0.00				
Distribution Use of System		1,635	2.04	2.036		1,536.12	1.96	1.96	1,536	1.96	461	1.37
Total Applicable Costs	6.987	9,221	11.481	18.468	6.710	8,663.42	11.027	17.74	9,350	11.63	2,598	8.33
Impact of allowed losses					0.28	557.90	0.45	0.73	558	0.45	167	0.32
Total Cost of Service	6.987	9,221	11.481	18.468	6.987	9,221.32	11.481	18.47	9,908	12.09	2,766	8.64
Cross Subsidy				7.06				7.06		7.06		7.06
Average Applicable Tariff				25.53				25.53	9,908	19.15	2,766	15.70

38%

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-2)			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-2(b) (1 MW or More)			
Tariff Category	C2(b)				C2(b)				MDI Based	Volumetric	Hybrid	
	Variable	Fixed	Total		Variable	Fixed	Total		Rs./KW/ Month	Rs./KWh	Rs./KW/ Month	Rs./KWh
	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh				
Generation Cost - Energy	6.99			6.987	6.71			6.710	182.13	0.277		0.277
Generation Cost - Capacity		7,018.10	10.38	10.376		6,593.50	9.97	9.965	6,593.50	9.965	1,978.05	6.976
Transmission Charges		565.01	0.84	0.835		530.82	0.80	0.802	530.82	0.802	159.25	0.562
Market Operator's Fee		3.16	0.00	0.005		2.97	0.00	0.004				
Distribution Use of System		1,577.42	2.33	2.332		1,481.98	2.24	2.240	1,481.98	2.240	444.59	1.568
Total Applicable Costs	6.987	9,163.69	13.548	20.535	6.710	8,609.28	13.012	19.722	8,788.43	13.284	2,581.89	9.382
Impact of allowed losses					0.28	554.41	0.54	0.813	554.41	0.536	166.32	0.38
Total Cost of Service	6.987	9,163.69	13.548	20.535	6.987	9,163.69	13.548	20.535	9,342.85	13.820	2,748.22	9.757
Cross Subsidy				8.02				8.02	5,278.35	8.016		8.016
Average Applicable Tariff				28.55				28.55	14,621	21.84	2,748	17.77

39%

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-2)			
Consumption Category	Industrial				Industrial				Industrial B-4			
Tariff Category	B4				B4				MDI Based	Volumetric	Hybrid	
	Variable	Fixed	Total		Variable	Fixed	Total		Rs./KW/ Month	Rs./KWh	Rs./KW/ Month	Rs./KWh
	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh				
Generation Cost - Energy	6.78			6.777	6.71			6.710	40.22	0.067		0.067
Generation Cost - Capacity		6,807.65	9.21	9.212		6,395.78	9.12	9.120	6,395.78	9.120	1,918.73	6.384
Transmission Charges		548.06	0.74	0.742		514.90	0.73	0.734	514.90	0.734	154.47	0.514
Market Operator's Fee		3.07	0.00	0.004		2.88	0.00	0.004				
Distribution Use of System		1,005.43	1.36	1.360		944.60	1.35	1.347	944.60	1.347	283.38	0.943
Total Applicable Costs	6.777	8,364.22	11.318	18.095	6.710	7,858.17	11.206	17.916	7,895.51	11.269	2,356.59	7.908
Impact of allowed losses					0.07	506.04	0.11	0.179	506.04	0.112	151.81	0.078
Total Cost of Service	6.777	8,364.22	11.318	18.095	6.777	8,364.22	11.318	18.095	8,401.56	11.381	2,508.40	7.987
Cross Subsidy				7.25				7.25	1,931.13	7.247		7.247
Average Applicable Tariff				25.34				25.34	10,333	18.628	2,508	15.23

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-2)			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-3(b)			
Tariff Category	C3(b)				C3(b)				MDI Based	Volumetric	Hybrid	
	Variable	Fixed	Total		Variable	Fixed	Total		Rs./KW/ Month	Rs./KWh	Rs./KW/ Month	Rs./KWh
	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh	Rs./KWh	Rs./KW/ Month	Rs./KWh	Rs./KWh				
Generation Cost - Energy	6.78			6.777	6.71			6.710		0.067		0.067
Generation Cost - Capacity		6,807.65	9.12	9.116		6,395.78	9.03	9.026	6,395.78	9.026	1,918.73	6.318
Transmission Charges		548.06	0.73	0.734		514.90	0.73	0.727	514.90	0.727	154.47	0.509
Market Operator's Fee		3.07	0.00	0.004		2.88	0.00	0.004				
Distribution Use of System		1,008.51	1.35	1.351		947.49	1.34	1.337	947.49	1.337	284.25	0.936
Total Applicable Costs	6.777	8,367.29	11.205	17.982	6.710	7,861.06	11.094	17.804	7,858.18	11.157	2,357.45	7.830
Impact of allowed losses					-	488.22	-	0.178	488.22	-	146.466	-
Total Cost of Service	6.777	8,367.29	11.205	17.982	6.710	8,349.28	11.094	17.982	8,346.40	11.157	2,942.64	9.275
Cross Subsidy				10.56				10.56	4,800.87	10.562		10.562
Average Applicable Tariff				28.54				28.54	13,147	21.72	2,943	19.84

Islamabad Electric Supply Company (IESCO) Ltd.

(Annex 2)

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.

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. kW of capacity, kWh 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. kW of capacity, kWh of energy and the number of customers) of each class.

(Annex-2)

Fundamental Assumptions**Table 1**

Description	FY 2023-24
Allowed Rate of Return (WACC) (NEPRA Determination)	10.33%
Capital Work in Progress ("CWIP")	Total CWIP
Working Capital Allowance to be included in Rate Base	NO
Prior Year Adjustment (Rs. In Millions)	0.00
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 %	6.00%
Model Year	FY 2023-24
Base Year	2022-23

Projections and Revenue Requirement for Financial Year 2023-24

(Annex-2)

The Revenue Requirement (RR) is the fundamental input to the Cost of Service of IESCO 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 IESCO.

Table 2

Description	FY 2023-24	Source
Units Purchased (MkWh)	12,880	
Units Sold (MkWh)	11,938	
Assessed T&D Losses	7.31%	Determine by NEPRA.
Consumer Growth	6.00%	Over Prior FY 2022-23
Average Monthly MDI (MW) (Non-Coincidence at CDPs)	2,615	
Energy Purchase Price (Rs/kWh)	6.71	These rates are calculated from Provisional Tariff Determination FY 2023-24.
Capacity Charges (Rs/kW/Month)	5,130	
T.UoS Rate (Rs/kW/Month)	413	
MOF (Rs/kW/Month)	3.48	As approved by NEPRA
Energy Charges (Rs. M)	86,424	Calculated by using above rates
Capacity Charges (Rs. M)	160,979	
T.UoS Rate (Rs. M)	12,960	
MOF (Rs. M)	109	
Power Purchase Price (Rs. M)	260,473	
O&M Cost (Rs. M)	22,448	NEPRA Provisional MYT Determination FY 2023-24.
Depreciation (Rs. M)	5,057	
RORB (Rs. M)	9,475	
Other Income (Rs. M)	524	
Prior Year Adjustment (Rs. M)	-	
Revenue Requirement (Rs. M)	296,929	
Cost per KWH (Sold)	24.87	

(Annex-2)

Summary of Revenue Requirement

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

Table 3

Summary of Revenue Requirement	
Description	FY 2022-23 Rs. (M)
Energy Charges	86,424.49
Capacity Charges	160,979.40
T.UoS Rate	12,959.94
MOF	109.20
Power Purchase Price	260,473.03
O&M Cost	22,448.00
Depreciation	5,057.00
RORB	9,475.00
Other Income	524.00
Distribution Margin	36,456.00
Prior Year Adjustment	-
Revenue Requirement	296,929.03

Line Losses Charged on Voltage Levels

Line losses taken from IESCO Demand Forecast (Dec-2022) 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	0.4KV	11KV	132KV	Total
Losses %age on purchased units	5.19%		3.00%	0.99%	7.31%
Losses %age on received units	4.04%		2.77%	0.99%	
					Source
					Target as per Nepra Determination is 7.31%
					Calculated as applied on units received at each voltage level.

Overall the effective %age of energy losses, i.e. (total kWh purchases — total kWh sold)/total kWh purchased remains 7.31% as per target.

(Annex-2)

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				
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	

IESCO Tariff determined by NEPRA in July-2023

Tariffs for various categories of IESCO consumers as determined by NEPRA vide their determination No. NEPRA/DG(Tariff)/ TRF-607 & TRF-608 /8263-69 dated 14-07-2023 are provided in **Table 6** below.

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IESCO - MIZAD
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(Amex-2)

Table 6

NEPRA DETERMINED TARIFF (14-07-2023)			
TARIFF CATAGORIES		Fixed Charges	Variable Charges
		Rs/kW/M	Rs/kWh
A1 (a)	RESIDENTIAL - A1		
i	Up to 50 Units Life line		5.00
ii	51-100 units Life line		7.79
iii	01-100 Units		7.79
iv	101-200 Units		10.11
v	01-100 Units		13.78
vi	101-200 Units		19.25
vii	201-300 Units		22.44
viii	301-400Units		25.83
ix	401-500Units		28.04
x	501-600Units		29.46
xi	601-700Units		30.60
xii	Above 700 Units		35.52
A1(b)	Time of Use (TOU) - Peak		34.69
	Time of Use (TOU) - Off-Peak		28.37
E-1(i)	Temporary E-1 (i)		34.83
	COMMERCIAL - A2		
A2 (a)	Commercial - For peak load		30.54
A2 (b)	Sanctioned load 5 kw and above	500	32.22
A2 (c)	Time of Use (TOU) - Peak (A-2)		34.14
	Time of Use (TOU) - Off-Peak	500	28.17
	Electrical Vecicle Charging Stations		30.85
E-1 (ii)	Temporary E-1 (ii)		32.22
	INDUSTRIAL		
B1(a)	B1		27.04
B1(b)	B1- TOU (Peak)		30.60
	B1 - TOU (Off-peak)		25.04
B2 (a)	B2	500	26.54
B2 (b)	B2 - TOU (Peak)		30.54
	B2 - TOU (Off-peak)	500	24.83
B3	B3 - TOU (Peak)		30.54
	B3 - TOU (Off-peak)	460	24.74
B4	B4 - TOU (Peak)		30.54
	B4 - TOU (Off-peak)	440	24.54
E-2	Temporary E-2		28.12
	BULK		
C1 (a)	C1(a) up to 5 kW		31.22
C1 (b)	C1(b) exceeding 5 kW	500	30.72
C1 (c)	Time of Use (TOU) - Peak		34.14
	Time of Use (TOU) - Off-Peak	500	27.54
C2 (a)	C2 Supply at 11 kv	500	30.52
C2 (b)	Time of Use (TOU) - Peak		34.14
	Time of Use (TOU) - Off-Peak	460	27.34
C3 (a)	C3 Supply above 11 kv	440	30.42
C3 (b)	Time of Use (TOU) - Peak		34.14
	Time of Use (TOU) - Off-Peak	440	27.24
	AGRICULTURAL TUBE WELLS - Tariff D		
D1 (a)	D1 Scarp		27.22
D2 (a)	D2 Agricultural Tube-wells	200	16.89
D1 (b)	Time of Use (TOU) - Peak		30.14
	Time of Use (TOU) - Off-Peak	200	22.89
D2 (b)	Time of Use (TOU) - Peak		16.89
	Time of Use (TOU) - Off-Peak	200	16.89
G	Public Lighting G		30.22
H	Residential Colonies H		30.22
K1(i)	AJK Regular	440	27.44
K1 (ii)	AJK Time of Use (TOU) - Peak		33.14
	AJK Time of Use (TOU) - Off-Peak	440	26.24
K2	Rawat Lab		30.22
A3	General Service		30.10

(Annex-2)

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 7**.

Table 7

Revenue Requirement Allocation %age				
Discription	Energy	Demand	Customer	Total
Energy Charges	100%	-	-	100%
Capacity Charges	-	100%	-	100%
T.UoSC	-	100%	-	100%
MOF	-	100%	-	100%
O&M Cost	-	80%	20%	100%
Depreciation	-	85%	15%	100%
RORB	-	87%	13%	100%
Other Income	-	78%	22%	100%
Prior Year Adjustment	-	65%	35%	100%

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 8** below.

Table 8

Revenue Requirement Allocation Rs. (M)				
Discription	Energy	Demand	Customer	Total
Energy Charges	86,424	-	-	86,424
Capacity Charges	-	160,979	-	160,979
T.UoSC	-	12,960	-	12,960
MOF	-	109	-	109
Power Purchase Price	86,424	174,049	-	260,473
O&M Cost	-	17,958	4,490	22,448
Depreciation	-	4,298	759	5,057
RORB	-	8,243	1,232	9,475
Other Income	-	409	115	524
Distribution Margin	-	30,091	6,365	36,456
Prior Year Adjustment	-	-	-	-
Revenue Requirements	86,424	204,140	6,365	296,929

(Annex-2)

Revenue as per NEPRA Tariff by Customer Category and Voltage Level

The **Table 9** below provides detailed category-wise estimated revenue and average (Rs./kWh) thereof. Whereas the **Table 10** 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(Tariff)/ TRF- 607 & TRF 608/8263-69 dated 14-07-2023 already provided in (**Table 6**).

Table 9

FY 2023-24						
Consumer Category	MDI MW	Sales (GWh)	Fixed Charge Rs. (M)	Variable Charge Rs. (M)	Total Revenue Rs. (M)	Rs./KWH
Residential -- A1(a)	0.00	5,024	-	93,645	93,645	18.64
Residential -- A1(b)	0.00	714	-	21,126	21,126	29.58
Commercial -- A2(a)	0.00	454	-	13,880	13,880	30.54
Commercial -- A2(b)	0.84	1	5	20	25	40.17
Commercial -- A2(c)	459.30	874	-	25,594	25,594	29.30
Commercial -- A2(d)	0.00	-	-	-	-	-
Industrial -- B1(a)	0.00	2	-	60	60	27.04
Industrial -- B2(a)	0.05	0	-	5	5	26.54
Industrial -- B1(b)	0.00	57	-	1,471	1,471	25.69
Industrial -- B2(b)	310.70	511	-	13,057	13,057	25.53
Industrial -- B3	135.11	421	-	10,760	10,760	25.53
Industrial -- B4	171.91	520	-	13,169	13,169	25.34
Bulk Supply -- C1(a)	0.00	0	-	0	0	101,130.49
Bulk Supply -- C1(b)	1.82	1	11	34	45	40.46
Bulk Supply -- C2(a)	6.17	7	37	208	245	35.95
Bulk Supply -- C3(a)	0.00	-	-	-	-	-
Bulk Supply -- C1(c)	22.52	60	-	1,710	1,710	28.69
Bulk Supply -- C2(b)	165.01	467	-	13,329	13,329	28.55
Bulk Supply -- C3(b)	113.50	464	-	13,232	13,232	28.54
Agricultural -- D1(a)	0.00	0	-	3	3	27.22
Agricultural -- D2(a)	7.14	6	17	98	115	19.85
Agricultural -- D2(b)	34.54	25	-	426	426	16.89
Agricultural -- D1(b)	1.34	1	-	18	18	23.91
Temporary Supply -- E1(i)	0.00	4	-	151	151	34.83
Temporary Supply -- E1(ii)	0.00	31	-	942	942	30.85
Temporary Supply -- E2	0.00	0	-	1	1	28.12
Public Lighting -- G	0.00	89	-	2,677	2,677	30.22
Residential Colonies -- H	0.00	3	-	97	97	30.22
Azad Jammu Kashmir - K1a	0.00	5	-	148	148	27.44
Azad Jammu Kashmir - K1b	339.33	1,628	-	53,953	53,953	33.14
Rawat Lab - K2	0.00	0	-	11	11	30.22
A3 General	0.00	569	-	17,120	17,120	30.10
Total	1769	11,938	70	296,948	297,018	24.88

(Amended)

Table 10

FY 2023-24						
Consumer Class	MDI MW	Sales (GWh)	Fixed Charge Rs. (M)	Variable Charge Rs.(M)	Total Revenue Rs. (M)	Rs./KWH
0.2 KV	801	5516	90109	45129	135238	24.52
0.4 KV	635	2907	71493	22758	94252	32.42
11 KV	289	2532	30750	18842	49592	19.59
132 KV	110	983	10683	7055	17738	18.04
G. TOTAL	1836	11,938	203,035	93,785	296,820	24.86

Director General
ECCO - MPAD

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(Annex-2)

Cost of Service Functionalized Rates (Tariff Wise)

Based on the allocation of overall Revenue Requirement of IESCO to customer's categories, the resultant functional amounts (Rs. in million) for each customer category are summarized at Table 11 below.

Table 11

FY 2023-24									
Classes	Voltage Level	Energy	Demand	Generation Cost		Transmission	Distribution Cost		Total Cost
		GWH	MW	Energy (Rs. M)	Demand (Rs. M)	Cost (Rs. M)	Demand (Rs. M)	Customer (Rs. M)	
Residential -- A1(a)	0.2kV	5,024	190	37,022	16,844	1,356	3,135	4,084	62,449
Residential -- A1(b)	0.4kV	714	231	5,264	20,503	1,651	3,815	328	31,569
Commercial -- A2(a)	0.2kV	454	496	3,349	44,062	3,547	8,200	369	59,547
Commercial -- A2(b)	0.4kV	1	7	5	640	52	119	0	816
Commercial -- A2(c)	0.4kV	874	171	6,437	15,201	1,224	2,829	401	26,098
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	64	16	5,671	457	1,055	2	7,204
Industrial -- B2(a)	0.4kV	0	7	1	602	48	112	0	764
Industrial -- B1(b)	0.4kV	57	56	422	4,978	401	926	26	6,756
Industrial -- B2(b)	0.4kV	511	52	3,769	4,608	371	857	235	9,842
Industrial -- B3	11kV	421	44	2,945	3,683	297	666	192	7,784
Industrial -- B4	132/66kV	519.65	59	3,522	4,787	385	500	207	9,403
Bulk Supply -- C1(a)	0.2kV	0	0	0	36	3	7	0	45
Bulk Supply -- C1(b)	0.4kV	1	6	8	494	40	92	1	635
Bulk Supply -- C2(a)	11kV	7	1	48	50	4	9	3	113
Bulk Supply -- C3(a)	132/66kV	-	0	-	3	0	0	-	3
Bulk Supply -- C1(c)	0.4kV	60	9	439	770	62	143	27	1,442
Bulk Supply -- C2(b)	11kV	467	58	3,262	4,844	390	877	212	9,587
Bulk Supply -- C3(b)	132/66kV	464	52	3,142	4,226	340	441	185	8,336
Agricultural -- D1(a)	0.4kV	0	5	1	483	39	90	0	612
Agricultural -- D2(a)	0.4kV	6	13	43	1,182	95	220	3	1,542
Agricultural -- D2(b)	0.4kV	25	13	186	1,146	92	213	12	1,650
Agricultural -- D1(b)	0.4kV	1	8	5	743	60	138	0	947
Temporary Supply -- E1(i)	0.2kV	4	26	32	2,302	185	428	4	2,952
Temporary Supply -- E1(ii)	0.2kV	31	24	225	2,151	173	400	25	2,975
Temporary Supply -- E2	0.2kV	0	1	0	77	6	14	0	98
Public Lighting -- G	0.4kV	89	28	653	2,481	200	462	41	3,837
Residential Colonies -- H	11kV	3	1	22	59	5	11	1	99
Azad Jammu Kashmir - K1a	11kV	5	1	38	99	8	18	2	165
Azad Jammu Kashmir - K1b	11kV	1,628	155	11,374	13,040	1,050	2,360	740	28,570
Rawat Lab - K2	11kV	0	31	2	2,602	209	471	0	3,286
A3 General	0.4kV	569	29	4,191	2,617	211	487	261	7,769
TOTAL		11,938	1,836	86,424	160,979	12,960	29,096	7,360	296,892

(Annex-2)

Based on the cost drivers (energy, demand & customers) based allocation of overall Revenue Requirement of IESCO to the customer's categories, the resultant functional (generation, transmission, MOF, distribution) rates (in terms of Rs/kWh, Rs/kW/Month and Rs/customer/Month, as applicable) are summarized at Table 12 below.

Table 12

FY 2023-24

Customer Class	Voltage Level	No. of Customers	Energy	Demand	Generation Cost		Transm	MOF	Distribution		Total Rs./ kWh
			GWh	MW	Energy (Rs /kWh)	Demand (Rs /kW/ Month)	(Rs /kW/ Month)	(Rs /kW /Month)	(Rs /kW/ Month)	(Rs /Cust/ Month)	
Residential -- A1(a)	0.2kV	3,097,838	5,024	190	7.37	7,402	596	3.33	1,378	1,795	12.43
Residential -- A1(b)	0.4kV	140,469	714	231	7.37	7,402	596	3.33	1,378	118	44.19
Commercial -- A2(a)	0.2kV	453,156	454	496	7.37	7,402	596	3.33	1,378	62	131.02
Commercial -- A2(b)	0.4kV	45	1	7	7.37	7,402	596	3.33	1,378	3	1,285.10
Commercial -- A2(c)	0.4kV	36,625	874	171	7.37	7,402	596	3.33	1,378	195	29.88
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	5,239	2	64	7.37	7,402	596	3.33	1,378	2	3,233.24
Industrial -- B2(a)	0.4kV	455	0	7	7.37	7,402	596	3.33	1,378	1	3,996.52
Industrial -- B1(b)	0.4kV	7,928	57	56	7.37	7,402	596	3.33	1,378	39	117.96
Industrial -- B2(b)	0.4kV	4,836	511	52	7.37	7,402	596	3.33	1,378	377	19.24
Industrial -- B3	11kV	128	421	44	6.99	7,018	565	3.16	1,270	365	18.47
Industrial -- B4	132/66kV	12	520	59	6.78	6,808	548	3.07	711	295	18.09
Bulk Supply -- C1(a)	0.2kV	12	0	0	22,631.60	7,402	596	3.33	1,378	0	112,574,609.53
Bulk Supply -- C1(b)	0.4kV	155	1	6	7.37	7,402	596	3.33	1,378	8	565.92
Bulk Supply -- C2(a)	11kV	24	7	1	6.99	7,018	565	3.16	1,270	439	16.61
Bulk Supply -- C3(a)	132/66kV	-	-	0	-	6,808	548	3.07	711	-	-
Bulk Supply -- C1(c)	0.4kV	528	60	9	7.37	7,402	596	3.33	1,378	263	24.19
Bulk Supply -- C2(b)	11kV	145	467	58	6.99	7,018	565	3.16	1,270	307	20.53
Bulk Supply -- C3(b)	132/66kV	14	464	52	6.78	6,808	548	3.07	711	298	17.98
Agricultural -- D1(a)	0.4kV	217	0	5	7.37	7,402	596	3.33	1,378	1	4,987.54
Agricultural -- D2(a)	0.4kV	4,200	6	13	7.37	7,402	596	3.33	1,378	17	266.19
Agricultural -- D2(b)	0.4kV	2,990	25	13	7.37	7,402	596	3.33	1,378	75	65.33
Agricultural -- D1(b)	0.4kV	276	1	8	7.37	7,402	596	3.33	1,378	3	1,281.50
Temporary Supply -- E1(i)	0.2kV	2,465	4	26	7.37	7,402	596	3.33	1,378	11	680.89
Temporary Supply -- E1(ii)	0.2kV	7,511	31	24	7.37	7,402	596	3.33	1,378	85	97.41
Temporary Supply -- E2	0.2kV	83	0	1	7.37	7,402	596	3.33	1,378	3	2,387.63
Public Lighting -- G	0.4kV	2,576	89	28	7.37	7,402	596	3.33	1,378	121	43.30
Residential Colonies -- H	11kV	44	3	1	6.99	7,018	565	3.16	1,270	172	30.81
Azad Jammu Kashmir - K1a	11kV	2	5	1	6.99	7,018	565	3.16	1,270	174	30.57
Azad Jammu Kashmir - K1b	11kV	129	1,628	155	6.99	7,018	565	3.16	1,270	398	17.55
Rawat Lab - K2	11kV	2	0	31	6.99	7,018	565	3.16	1,270	0	9,403.60
A3 General	0.4kV	22,249	569	29	7.37	7,402	596	3.33	1,378	738	13.66
Total		3,790,356	11,938	1,836	7.24	7,306	588	3.29	1,321	334	24.87

(Annex-2)

The above detailed functional rates recapitulated, in terms of Rs./kW/Month, for each function is given in Table 13 below.

Table 13

FY 2023-24

Customer Class	Voltage	Sales GWh	Energy	Demand	Generation Cost		Transm	MOF	Distribution		Total Rs./ kWh/ Month
			GWh	MW	Energy (Rs /kW/ Month)	Demand (Rs /kW/ Month)	(Rs /kW/ Month)	(Rs /kW/ Month)	(Rs /kW/ Month)	(Rs /kW/ Month)	
Residential -- A1(a)	0.2kV	5,024	5,024	190	16,270	7,402	596	3.33	1,378	1,795	27,444
Residential -- A1(b)	0.4kV	714	714	231	1,900	7,402	596	3.33	1,378	118	11,398
Commercial -- A2(a)	0.2kV	454	454	496	563	7,402	596	3.33	1,378	62	10,004
Commercial -- A2(b)	0.4kV	1	1	7	54	7,402	596	3.33	1,378	3	9,437
Commercial -- A2(c)	0.4kV	874	874	171	3,135	7,402	596	3.33	1,378	195	12,709
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	21	7,402	596	3.33	1,378	2	9,403
Industrial -- B2(a)	0.4kV	0	0	7	17	7,402	596	3.33	1,378	1	9,398
Industrial -- B1(b)	0.4kV	57	57	56	628	7,402	596	3.33	1,378	39	10,046
Industrial -- B2(b)	0.4kV	511	511	52	6,055	7,402	596	3.33	1,378	377	15,811
Industrial -- B3	11kV	421	421	44	5,611	7,018	565	3.16	1,270	365	14,833
Industrial -- B4	132/66kV	520	520	59	5,009	6,808	548	3.07	711	295	13,373
Bulk Supply -- C1(a)	0.2kV	0	0	0	2	7,402	596	3.33	1,378	0	9,381
Bulk Supply -- C1(b)	0.4kV	1	1	6	124	7,402	596	3.33	1,378	8	9,511
Bulk Supply -- C2(a)	11kV	7	7	1	6,746	7,018	565	3.16	1,270	439	16,041
Bulk Supply -- C3(a)	132/66kV	-	-	0	-	6,808	548	3.07	711	-	8,070
Bulk Supply -- C1(c)	0.4kV	60	60	9	4,224	7,402	596	3.33	1,378	263	13,866
Bulk Supply -- C2(b)	11kV	467	467	58	4,726	7,018	565	3.16	1,270	307	13,889
Bulk Supply -- C3(b)	132/66kV	464	464	52	5,061	6,808	548	3.07	711	298	13,428
Agricultural -- D1(a)	0.4kV	0	0	5	14	7,402	596	3.33	1,378	1	9,394
Agricultural -- D2(a)	0.4kV	6	6	13	268	7,402	596	3.33	1,378	17	9,663
Agricultural -- D2(b)	0.4kV	25	25	13	1,202	7,402	596	3.33	1,378	75	10,656
Agricultural -- D1(b)	0.4kV	1	1	8	54	7,402	596	3.33	1,378	3	9,437
Temporary Supply -- E1(i)	0.2kV	4	4	26	103	7,402	596	3.33	1,378	11	9,493
Temporary Supply -- E1(ii)	0.2kV	31	31	24	775	7,402	596	3.33	1,378	85	10,239
Temporary Supply -- E2	0.2kV	0	0	1	29	7,402	596	3.33	1,378	3	9,411
Public Lighting -- G	0.4kV	89	89	28	1,948	7,402	596	3.33	1,378	121	11,449
Residential Colonies -- H	11kV	3	3	1	2,648	7,018	565	3.16	1,270	172	11,676
Azad Jammu Kashmir - K1a	11kV	5	5	1	2,675	7,018	565	3.16	1,270	174	11,706
Azad Jammu Kashmir - K1b	11kV	1,628	1,628	155	6,122	7,018	565	3.16	1,270	398	15,376
Rawat Lab - K2	11kV	0	0	31	7	7,018	565	3.16	1,270	0	8,863
A3 General	0.4kV	569	569	29	11,854	7,402	596	3.33	1,378	738	21,971
Total		11,938	11,938	1,836	3,922	7,306	588	3.29	1,321	334	13,474

Unbundled Rates Rs./kWh (Tariff Wise)

The functional allocation of Revenue Requirement of IESCO (Generation, Transmission, MO Fee and Distribution Cost) to customers categories, in Rs./kWh are shown in **Table 14** below.

Table 14
FY 2023-24

Customer Class	Voltage	Sales GWh	Demand MW	Generation Rs. /kWh	T. UoSC Rs. /kWh	MOF Rs. /kWh	D. UoSC Rs. /kWh	Total Rate Rs/ kWh
Residential -- A1(a)	0.2kV	5,024	189.63	10.72	0.27	0.00	1.44	12.43
Residential -- A1(b)	0.4kV	714	230.81	36.07	2.31	0.01	5.80	44.19
Commercial -- A2(a)	0.2kV	454	496.03	104.32	7.80	0.04	18.85	131.02
Commercial -- A2(b)	0.4kV	1	7.20	1,015.43	81.16	0.45	188.05	1,285.10
Commercial -- A2(c)	0.4kV	874	171.13	24.77	1.40	0.01	3.70	29.88
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	63.84	2,552.70	204.92	1.15	474.49	3,233.24
Industrial -- B2(a)	0.4kV	0	6.78	3,155.38	253.44	1.42	586.29	3,996.52
Industrial -- B1(b)	0.4kV	57	56.04	94.29	7.00	0.04	16.63	117.96
Industrial -- B2(b)	0.4kV	511	51.87	16.38	0.73	0.00	2.14	19.24
Industrial -- B3	11kV	421	43.73	15.72	0.70	0.00	2.04	18.47
Industrial -- B4	132/66 kV	520	58.60	15.99	0.74	0.00	1.36	18.09
Bulk Supply -- C1(a)	0.2kV	0	0.40	88,850,336.46	7,151,236.28	40,018.03	16,533,018.76	112,574,609.53
Bulk Supply -- C1(b)	0.4kV	1	5.56	447.83	35.46	0.20	82.43	565.92
Bulk Supply -- C2(a)	11kV	7	0.59	14.25	0.59	0.00	1.77	16.61
Bulk Supply -- C3(a)	132/66 kV	-	0.03	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	60	8.66	20.28	1.04	0.01	2.86	24.19
Bulk Supply -- C2(b)	11kV	467	57.52	17.36	0.84	0.00	2.33	20.53
Bulk Supply -- C3(b)	132/66 kV	464	51.73	15.89	0.73	0.00	1.35	17.98
Agricultural -- D1(a)	0.4kV	0	5.43	3,937.52	316.40	1.77	731.84	4,987.54
Agricultural -- D2(a)	0.4kV	6	13.30	211.28	16.42	0.09	38.40	266.19
Agricultural -- D2(b)	0.4kV	25	12.90	52.75	3.65	0.02	8.90	65.33
Agricultural -- D1(b)	0.4kV	1	8.36	1,012.59	80.93	0.45	187.53	1,281.50
Temporary Supply -- E1(i)	0.2kV	4	25.92	538.29	42.74	0.24	99.61	680.89
Temporary Supply -- E1(ii)	0.2kV	31	24.21	77.79	5.67	0.03	13.92	97.41
Temporary Supply -- E2	0.2kV	0	0.86	1,885.31	151.19	0.85	350.29	2,387.63
Public Lighting -- G	0.4kV	89	27.93	35.37	2.25	0.01	5.67	43.30
Residential Colonies -- H	11kV	3	0.70	25.50	1.49	0.01	3.81	30.81
Azad Jammu Kashmir - K1a	11kV	5	1.17	25.32	1.48	0.01	3.77	30.57
Azad Jammu Kashmir - K1b	11kV	1,628	154.84	15.00	0.64	0.00	1.90	17.55
Rawat Lab - K2	11kV	0	30.89	7,452.94	599.45	3.35	1,347.86	9,403.60
A3 General	0.4kV	569	29.47	11.97	0.37	0.00	1.31	13.66
TOTAL		11,938	1,836	20.72	1.09	0.01	3.05	24.87

(Annex-2)

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 15** below.

Table 15
FY 2023-24

Customer Class	Voltage	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	5,024	21,342	41,106	9,379	8.18	12.43
Residential -- A1(b)	0.4kV	714	25,978	5,592	9,379	7.83	44.19
Commercial -- A2(a)	0.2kV	454	55,828	3,719	9,379	8.18	131.02
Commercial -- A2(b)	0.4kV	1	811	5	9,379	7.83	1,285.10
Commercial -- A2(c)	0.4kV	874	19,260	6,838	9,379	7.83	29.88
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	7,186	18	9,379	8.18	3,233.24
Industrial -- B2(a)	0.4kV	0	763	1	9,379	7.83	3,996.52
Industrial -- B1(b)	0.4kV	57	6,307	448	9,379	7.83	117.96
Industrial -- B2(b)	0.4kV	511	5,838	4,004	9,379	7.83	19.24
Industrial -- B3	11kV	421	4,648	3,136	8,856	7.44	18.47
Industrial -- B4	132/66kV	520	5,674	3,729	8,070	7.18	18.09
Bulk Supply -- C1(a)	0.2kV	0	45	0	9,379	25,264.95	112,574,609.53
Bulk Supply -- C1(b)	0.4kV	1	626	9	9,379	7.83	565.92
Bulk Supply -- C2(a)	11kV	7	63	51	8,856	7.44	16.61
Bulk Supply -- C3(a)	132/66kV	-	3	-	8,070	#DIV/0!	-
Bulk Supply -- C1(c)	0.4kV	60	975	467	9,379	7.83	24.19
Bulk Supply -- C2(b)	11kV	467	6,113	3,474	8,856	7.44	20.53
Bulk Supply -- C3(b)	132/66kV	464	5,009	3,326	8,070	7.18	17.98
Agricultural -- D1(a)	0.4kV	0	611	1	9,379	7.83	4,987.54
Agricultural -- D2(a)	0.4kV	6	1,497	45	9,379	7.83	266.19
Agricultural -- D2(b)	0.4kV	25	1,452	198	9,379	7.83	65.33
Agricultural -- D1(b)	0.4kV	1	941	6	9,379	7.83	1,281.50
Temporary Supply -- E1(i)	0.2kV	4	2,917	35	9,379	8.18	680.89
Temporary Supply -- E1(ii)	0.2kV	31	2,725	250	9,379	8.18	97.41
Temporary Supply -- E2	0.2kV	0	97	0	9,379	8.18	2,387.63
Public Lighting -- G	0.4kV	89	3,143	694	9,379	7.83	43.30
Residential Colonies -- H	11kV	3	75	24	8,856	7.44	30.81
Azad Jammu Kashmir - K1a	11kV	5	125	40	8,856	7.44	30.57
Azad Jammu Kashmir - K1b	11kV	1,628	16,456	12,114	8,856	7.44	17.55
Rawat Lab - K2	11kV	0	3,283	3	8,856	7.44	9,403.60
A3 General	0.4kV	569	3,316	4,452	9,379	7.83	13.66
Total		11,938	203,108	93,785	9,218	7.86	24.87

(Annex-2)

Revenue Volumetric Rates at Each Customer Category

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 16** 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 16

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	5,024	190	-	93,645	93,645	31,086	61,780	92,865	779	0.16
Residential -- A1(b)	0.4kV	714	231	-	21,126	21,126	37,837	8,115	45,952	(24,826)	(34.75)
Commercial -- A2(a)	0.2kV	454	496	-	13,880	13,880	81,315	5,589	86,904	(73,024)	(160.67)
Commercial -- A2(b)	0.4kV	1	7	5	20	25	1,181	7	1,188	(1,163)	(1,831.57)
Commercial -- A2(c)	0.4kV	874	171	-	25,594	25,594	28,053	9,924	37,977	(12,382)	(14.18)
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	64	-	60	60	10,466	27	10,493	(10,433)	(4,682.64)
Industrial -- B2(a)	0.4kV	0	7	-	5	5	1,111	2	1,113	(1,108)	(5,794.45)
Industrial -- B1(b)	0.4kV	57	56	-	1,471	1,471	9,187	651	9,838	(8,366)	(146.08)
Industrial -- B2(b)	0.4kV	511	52	-	13,057	13,057	5,187	5,811	10,997	2,060	4.03
Industrial -- B3	11kV	421	44	-	10,760	10,760	4,646	3,136	7,782	2,977	7.06
Industrial -- B4	132/66kV	520	59	-	13,169	13,169	5,672	3,729	9,401	3,768	7.25
Bulk Supply -- C1(a)	0.2kV	0	0	-	0	0	66	0	66	(66)	(163,868,240.94)
Bulk Supply -- C1(b)	0.4kV	1	6	11	34	45	911	13	924	(879)	(783.77)
Bulk Supply -- C2(a)	11kV	7	1	37	208	245	90	74	164	81	11.90
Bulk Supply -- C3(a)	132/66kV	-	0	-	-	-	4	-	4	(4)	-
Bulk Supply -- C1(c)	0.4kV	60	9	-	1,710	1,710	1,420	677	2,097	(388)	(6.50)
Bulk Supply -- C2(b)	11kV	467	58	-	13,329	13,329	8,803	5,062	13,865	(535)	(1.15)
Bulk Supply -- C3(b)	132/66kV	464	52	-	13,232	13,232	7,130	4,630	11,760	1,472	3.18
Agricultural -- D1(a)	0.4kV	0	5	-	3	3	891	1	892	(889)	(7,237.21)
Agricultural -- D2(a)	0.4kV	6	13	17	98	115	2,181	66	2,246	(2,131)	(367.82)
Agricultural -- D2(b)	0.4kV	25	13	-	426	426	2,115	287	2,402	(1,975)	(78.23)
Agricultural -- D1(b)	0.4kV	1	8	-	18	18	1,370	8	1,379	(1,361)	(1,842.58)
Temporary Supply -- E1(i)	0.2kV	4	26	-	151	151	4,248	53	4,302	(4,151)	(957.28)
Temporary Supply -- E1(ii)	0.2kV	31	24	-	942	942	3,970	376	4,345	(3,403)	(111.40)
Temporary Supply -- E2	0.2kV	0	1	-	1	1	142	1	142	(141)	(3,449.90)
Public Lighting -- G	0.4kV	89	28	-	2,677	2,677	4,578	1,006	5,585	(2,907)	(32.81)
Residential Colonies -- H	11kV	3	1	-	97	97	108	35	143	(46)	(14.27)
Azad Jammu Kashmir - K1a	11kV	5	1	-	148	148	179	58	238	(90)	(16.71)
Azad Jammu Kashmir - K1b	11kV	1,628	155	-	53,953	53,953	23,697	17,652	41,349	12,604	7.74
Rawat Lab - K2	11kV	0	31	-	11	11	4,728	4	4,732	(4,721)	(13,511.40)
A3 General	0.4kV	569	29	-	17,120	17,120	4,830	6,462	11,292	5,828	10.25
Total		11,938	1,836	70	296,948	297,018	287,201	135,236	422,438	(125,420)	(10.51)

(Annex-2)

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 17 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 17
FY 2023-24

Customer Class	Voltage	Sales GWh	Demand MW	Revenue As Per NEPRATariff		Cost of Service		Difference/ Subsidy		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	5,024	190	-	93,645	31,086	61,780	(31,086)	31,865	1.00	1.52
Residential -- A1(b)	0.4kV	714	231	-	21,126	37,837	8,115	(37,837)	13,011	1.00	2.60
Commercial -- A2(a)	0.2kV	454	496	-	13,880	81,315	5,589	(81,315)	8,291	1.00	2.48
Commercial -- A2(b)	0.4kV	1	7	5	20	1,181	7	(1,176)	13	0.00	2.84
Commercial -- A2(c)	0.4kV	874	171	-	25,594	28,053	9,924	(28,053)	15,671	1.00	2.58
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	1.00	1.00
Industrial -- B1(a)	0.2kV	2	64	-	60	10,466	27	(10,466)	33	1.00	2.20
Industrial -- B2(a)	0.4kV	0	7	-	5	1,111	2	(1,111)	3	1.00	2.34
Industrial -- B1(b)	0.4kV	57	56	-	1,471	9,187	651	(9,187)	821	1.00	2.26
Industrial -- B2(b)	0.4kV	511	52	-	13,057	5,187	5,811	(5,187)	7,246	1.00	2.25
Industrial -- B3	11kV	421	44	-	10,760	4,646	3,136	(4,646)	7,623	1.00	3.43
Industrial -- B4	132/66kV	520	59	-	13,169	5,672	3,729	(5,672)	9,440	1.00	3.53
Bulk Supply -- C1(a)	0.2kV	0	0	-	0	66	0	(66)	0	1.00	2.63
Bulk Supply -- C1(b)	0.4kV	1	6	11	34	911	13	(900)	22	0.01	2.70
Bulk Supply -- C2(a)	11kV	7	1	37	208	90	74	(53)	134	0.41	2.81
Bulk Supply -- C3(a)	132/66kV	-	0	-	-	4	-	(4)	-	1.00	1.00
Bulk Supply -- C1(c)	0.4kV	60	9	-	1,710	1,420	677	(1,420)	1,033	1.00	2.53
Bulk Supply -- C2(b)	11kV	467	58	-	13,329	8,803	5,062	(8,803)	8,267	1.00	2.63
Bulk Supply -- C3(b)	132/66kV	464	52	-	13,232	7,130	4,630	(7,130)	8,602	1.00	2.86
Agricultural -- D1(a)	0.4kV	0	5	-	3	891	1	(891)	2	1.00	2.40
Agricultural -- D2(a)	0.4kV	6	13	17	98	2,181	66	(2,163)	32	0.01	1.49
Agricultural -- D2(b)	0.4kV	25	13	-	426	2,115	287	(2,115)	140	1.00	1.49
Agricultural -- D1(b)	0.4kV	1	8	-	18	1,370	8	(1,370)	9	1.00	2.10
Temporary Supply -- E1(i)	0.2kV	4	26	-	151	4,248	53	(4,248)	98	1.00	2.83
Temporary Supply -- E1(ii)	0.2kV	31	24	-	942	3,970	376	(3,970)	567	1.00	2.51
Temporary Supply -- E2	0.2kV	0	1	-	1	142	1	(142)	1	1.00	2.29
Public Lighting -- G	0.4kV	89	28	-	2,677	4,578	1,006	(4,578)	1,671	1.00	2.66
Residential Colonies -- H	11kV	3	1	-	97	108	35	(108)	62	1.00	2.79
Azad Jammu Kashmir - K1a	11kV	5	1	-	148	179	58	(179)	89	1.00	2.53
Azad Jammu Kashmir - K1b	11kV	1,628	155	-	53,953	23,697	17,652	(23,697)	36,301	1.00	3.06
Rawat Lab - K2	11kV	0	31	-	11	4,728	4	(4,728)	7	1.00	2.79
A3 General	0.4kV	569	29	-	17,120	4,830	6,462	(4,830)	10,659	1.00	2.65
Total		11,938	1,836	70	296,948	287,201	135,236	(287,131)	161,711	0.00	2.20

(Annex-2)

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 18** below. The Table also provides the Revenue to Cost Ratio.

Table 18
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	5,024	18.64	18.48	0.16	1.01
Residential -- A1(b)	0.4kV	714	29.58	64.33	(34.75)	0.46
Commercial -- A2(a)	0.2kV	454	30.54	191.21	(160.67)	0.16
Commercial -- A2(b)	0.4kV	1	40.17	1,871.74	(1,831.57)	0.02
Commercial -- A2(c)	0.4kV	874	29.30	43.48	(14.18)	0.67
Commercial -- A2(d)	0.4kV	-	-	-	-	0.00
Industrial -- B1(a)	0.2kV	2	27.04	4,709.68	(4,682.64)	0.01
Industrial -- B2(a)	0.4kV	0	26.54	5,820.99	(5,794.45)	0.00
Industrial -- B1(b)	0.4kV	57	25.69	171.77	(146.08)	0.15
Industrial -- B2(b)	0.4kV	511	25.53	21.50	4.03	1.19
Industrial -- B3	11kV	421	25.53	18.46	7.06	1.38
Industrial -- B4	132/66kV	520	25.34	18.09	7.25	1.40
Bulk Supply -- C1(a)	0.2kV	0	101,130.49	163,969,371.42	(163,868,240.94)	0.00
Bulk Supply -- C1(b)	0.4kV	1	40.46	824.23	(783.77)	0.05
Bulk Supply -- C2(a)	11kV	7	35.95	24.05	11.90	1.49
Bulk Supply -- C3(a)	132/66kV	-	-	-	-	0.00
Bulk Supply -- C1(c)	0.4kV	60	28.69	35.19	(6.50)	0.82
Bulk Supply -- C2(b)	11kV	467	28.55	29.70	(1.15)	-
Bulk Supply -- C3(b)	132/66kV	464	28.54	25.37	3.18	1.13
Agricultural -- D1(a)	0.4kV	0	27.22	7,264.43	(7,237.21)	0.00
Agricultural -- D2(a)	0.4kV	6	19.85	387.67	(367.82)	0.05
Agricultural -- D2(b)	0.4kV	25	16.89	95.12	(78.23)	0.18
Agricultural -- D1(b)	0.4kV	1	23.91	1,866.49	(1,842.58)	0.01
Temporary Supply -- E1(i)	0.2kV	4	34.83	992.11	(957.28)	0.04
Temporary Supply -- E1(ii)	0.2kV	31	217.32	142.25	75.07	0.00
Temporary Supply -- E2	0.2kV	0	28.12	3,478.02	(3,449.90)	0.01
Public Lighting -- G	0.4kV	89	30.22	63.03	(32.81)	0.48
Residential Colonies -- H	11kV	3	30.22	44.49	(14.27)	0.68
Azad Jammu Kashmir - K1a	11kV	5	27.44	44.15	(16.71)	0.62
Azad Jammu Kashmir - K1b	11kV	1,628	33.14	25.40	7.74	1.30
Rawat Lab - K2	11kV	0	30.22	13,541.62	(13,511.40)	0.00
A3 General	0.4kV	569	30.10	19.85	10.25	1.52
Total		11,938	24.88	35.38	(10.51)	0.70

Director General
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(Annex-2)

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

The revenue, cost of service and subsidies for customer categories that fall under 11kV are summarized at **Table 19** below.

Table 19

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		
Industrial B3	11kV	421	44	-	10,760	10,760	4,646	3,136	7,782	2,977	7.06
Industrial B4	132/66kV	520	59	-	13,169	13,169	5,672	3,729	9,401	3,768	7.25
Bulk Supply C2(a)	11kV	7	1	37	208	245	90	74	164	81	11.90
Bulk Supply C3(a)	132/66kV	-	0	-	-	-	4	-	4	(4)	-
Bulk Supply C2(b)	11kV	467	58	-	13,329	13,329	8,803	5,062	13,865	(535)	(1.15)
Bulk Supply C3(b)	132/66kV	464	52	-	13,232	13,232	7,130	4,630	11,760	1,472	3.18
Residential Col. H	11kV	3	1	-	97	97	108	35	143	(46)	(14.27)

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

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

1. 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.
2. 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.
3. 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.
4. The supply feed for AJK customer category is primarily for resale purpose, therefore, not entitled for consideration as BPC.

(Annex-2)

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 20 below.

Table 20

FY 2023-24					
Customer Class	Voltage	Sale GWH	Revenue Rs. /kWh	Cost of Service Rs. /kWh	Subsidy Rs. /kWh
Industrial B3	11kV	421	25.53	18.46	7.06
Industrial B4	132/66kV	520	25.34	18.09	7.25
Bulk Supply C2(b)	11kV	467	28.55	29.70	(1.15)
Bulk Supply C3(b)	132/66kV	464	28.54	25.37	3.18

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

For interest of the readers to glance through overall master data for result of IESCO's Cost of Service Study (FY 2023-24), following Tables (Table 21 to Table 27) 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, without any prejudice and have been disclosed in details to the extent possible.
- 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 substantially (99%) 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 (30 to 35%) 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.

Director General
IESCO - IRAD
Islamabad



Table 21: COST OF SERVICE FY 2023-24

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	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)	Cost (Rs.M)	Demand (Rs.M)	cust. Cost (Rs.M)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	37,022	16,844	1,356	7.59	3,135	4,084	62,449	12.43	11.32
Residential -- A1(b)	0.4kV	714	784	231	253	5,264	20,503	1,651	9.24	3,815	328	31,569	44.19	40.24
Commercial -- A2(a)	0.2kV	454	499	496	545	3,349	44,062	3,547	19.85	8,200	369	59,547	131.02	119.30
Commercial -- A2(b)	0.4kV	1	1	7	8	5	640	52	0.29	119	0	816	1,285.10	1,170.15
Commercial -- A2(c)	0.4kV	874	959	171	188	6,437	15,201	1,224	6.85	2,829	401	26,098	29.88	27.20
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	16	5,671	457	2.55	1,055	2	7,204	3,233.24	2,944.07
Industrial -- B2(a)	0.4kV	0	0	7	7	1	602	48	0.27	112	0	764	3,996.52	3,639.07
Industrial -- B1(b)	0.4kV	57	63	56	62	422	4,978	401	2.24	926	26	6,756	117.96	107.41
Industrial -- B2(b)	0.4kV	511	562	52	57	3,769	4,608	371	2.08	857	235	9,842	19.24	17.52
Industrial -- B3	11kV	421	439	44	46	2,945	3,683	297	1.66	666	192	7,784	18.47	17.74
Industrial -- B4	132/66kV	520	525	59	59	3,522	4,787	385	2.16	500	207	9,403	18.09	17.92
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	0	36	3	0.02	7	0	45	112,574,609.53	33,377.04
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	8	494	40	0.22	92	1	635	565.92	515.30
Bulk Supply -- C2(a)	11kV	7	7	1	1	48	50	4	0.02	9	3	113	16.61	15.95
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	3	0	0.00	0	-	3	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	439	770	62	0.35	143	27	1,442	24.19	22.03
Bulk Supply -- C2(b)	11kV	467	486	58	60	3,262	4,844	390	2.18	877	212	9,587	20.53	19.72
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	3,142	4,226	340	1.90	441	185	8,336	17.98	17.30
Agricultural -- D1(a)	0.4kV	0	0	5	6	1	483	39	0.22	90	0	612	4,987.54	4,541.45
Agricultural -- D2(a)	0.4kV	6	6	13	15	43	1,182	95	0.53	220	3	1,542	266.19	242.33
Agricultural -- D2(b)	0.4kV	25	28	13	14	186	1,146	92	0.52	213	12	1,650	65.33	59.13
Agricultural -- D1(b)	0.4kV	1	1	8	9	5	743	60	0.33	138	0	947	1,281.50	1,166.33
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	32	2,302	185	1.04	428	4	2,952	680.89	619.99
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	225	2,151	173	0.97	400	25	2,975	97.41	88.59
Temporary Supply -- E2	0.2kV	0	0	1	1	0	77	6	0.03	14	0	98	2,387.63	2,174.03
Public Lighting -- G	0.4kV	89	97	28	31	653	2,481	200	1.12	462	41	3,837	43.30	39.13
Residential Colonies -- H	11kV	3	3	1	1	22	59	5	0.03	11	1	99	30.81	29.59
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	38	99	8	0.04	18	2	165	30.57	29.35
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	11,374	13,040	1,050	5.87	2,360	740	28,570	17.55	0.01
Rawat Lab - K2	11kV	0	0	31	32	2	2,602	209	1.17	471	0	3,286	9,403.60	25,847.02
A3 General	0.4kV	569	625	29	32	4,191	2,617	211	1.18	487	261	7,769	13.66	12.44
Total		11,938	12,880	1,836	1,990	86,424	160,979	12,960	73	29,096	7,360	296,892	24.87	23.05

Table 22: COST OF SERVICE FY 2023-24 (kW or kWh at Consumer)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	Distribution		Total Fixed Cost (Rs./kW/ M)	Fixed Cost Rs./kWh sold	Total Cost Rs./kWh Sold
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	cust. Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	7.37	7,402	596	3.33	1,378	1,795	11,174	5.06	12.43
Residential -- A1(b)	0.4kV	714	784	231	253	7.37	7,402	596	3.33	1,378	118	9,497	36.83	44.19
Commercial -- A2(a)	0.2kV	454	499	496	545	7.37	7,402	596	3.33	1,378	62	9,441	123.65	131.02
Commercial -- A2(b)	0.4kV	1	1	7	8	7.37	7,402	596	3.33	1,378	3	9,382	1,277.73	1,285.10
Commercial -- A2(c)	0.4kV	874	959	171	188	7.37	7,402	596	3.33	1,378	195	9,574	22.51	29.88
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	7.37	7,402	596	3.33	1,378	2	9,381	3,225.87	3,233.24
Industrial -- B2(a)	0.4kV	0	0	7	7	7.37	7,402	596	3.33	1,378	1	9,380	3,989.15	3,996.52
Industrial -- B1(b)	0.4kV	57	63	56	62	7.37	7,402	596	3.33	1,378	39	9,418	110.59	117.96
Industrial -- B2(b)	0.4kV	511	562	52	57	7.37	7,402	596	3.33	1,378	377	9,756	11.87	19.24
Industrial -- B3	11kV	421	439	44	46	6.99	7,018	565	3.16	1,270	365	9,221	11.48	18.47
Industrial -- B4	132/66kV	520	525	59	59	6.78	6,808	548	3.07	711	295	8,364	11.32	18.09
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	22,631.60	7,402	596	3.33	1,378	0	9,379	112,551,977.94	112,574,609.53
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	7.37	7,402	596	3.33	1,378	8	9,387	558.55	565.92
Bulk Supply -- C2(a)	11kV	7	7	1	1	6.99	7,018	565	3.16	1,270	439	9,295	9.63	16.61
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	6,808	548	3.07	711	-	8,070	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	7.37	7,402	596	3.33	1,378	263	9,642	16.82	24.19
Bulk Supply -- C2(b)	11kV	467	486	58	60	6.99	7,018	565	3.16	1,270	307	9,164	13.55	20.53
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	6.78	6,808	548	3.07	711	298	8,367	11.20	17.98
Agricultural -- D1(a)	0.4kV	0	0	5	6	7.37	7,402	596	3.33	1,378	1	9,380	4,980.17	4,987.54
Agricultural -- D2(a)	0.4kV	6	6	13	15	7.37	7,402	596	3.33	1,378	17	9,396	258.82	266.19
Agricultural -- D2(b)	0.4kV	25	28	13	14	7.37	7,402	596	3.33	1,378	75	9,454	57.96	65.33
Agricultural -- D1(b)	0.4kV	1	1	8	9	7.37	7,402	596	3.33	1,378	3	9,382	1,274.13	1,281.50
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	7.37	7,402	596	3.33	1,378	11	9,390	673.52	680.89
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	7.37	7,402	596	3.33	1,378	85	9,465	90.04	97.41
Temporary Supply -- E2	0.2kV	0	0	1	1	7.37	7,402	596	3.33	1,378	3	9,382	2,380.26	2,387.63
Public Lighting -- G	0.4kV	89	97	28	31	7.37	7,402	596	3.33	1,378	121	9,500	35.94	43.30
Residential Colonies -- H	11kV	3	3	1	1	6.99	7,018	565	3.16	1,270	172	9,029	23.82	30.81
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	6.99	7,018	565	3.16	1,270	174	9,030	23.58	30.57
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	6.99	7,018	565	3.16	1,270	398	9,255	10.56	17.55
Rawat Lab - K2	11kV	0	0	31	32	6.99	7,018	565	3.16	1,270	0	8,857	9,396.62	9,403.60
A3 General	0.4kV	569	625	29	32	7.37	7,402	596	3.33	1,378	738	10,117	6.29	13.66
Total		11,938	12,880	1,836	1,990	7.24	7,306	588	3.29	1,321	334	9,552	17.63	24.87

(Annex-2)

Table 23: COST OF SERVICE FY 2023-24 (kW or kWh CDP)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	Distribution		Total Fixed Cost (Rs./kW/ M)	Fixed Cost Rs./kWh Purchased	Total Cost Rs./kW/h Purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	cust. Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	6.71	6,740	543	3.04	1,254	1,634	10,175	4.61	11.32
Residential -- A1(b)	0.4kV	714	784	231	253	6.71	6,740	543	3.04	1,254	108	8,648	33.53	40.24
Commercial -- A2(a)	0.2kV	454	499	496	545	6.71	6,740	543	3.04	1,254	57	8,597	112.59	119.30
Commercial -- A2(b)	0.4kV	1	1	7	8	6.71	6,740	543	3.04	1,254	3	8,543	1,163.45	1,170.16
Commercial -- A2(c)	0.4kV	874	959	171	188	6.71	6,740	543	3.04	1,254	178	8,718	20.49	27.20
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	6.71	6,740	543	3.04	1,254	2	8,542	311.69	318.40
Industrial -- B2(a)	0.4kV	0	0	7	7	6.71	6,740	543	3.04	1,254	1	8,541	30,165.52	30,172.23
Industrial -- B1(b)	0.4kV	57	63	56	62	6.71	6,740	543	3.04	1,254	36	8,576	96.55	103.26
Industrial -- B2(b)	0.4kV	511	562	52	57	6.71	6,740	543	3.04	1,254	343	8,883	8.61	15.32
Industrial -- B3	11kV	421	439	44	46	6.71	6,740	543	3.04	1,220	351	8,856	13.40	20.11
Industrial -- B4	132/66kV	520	525	59	59	6.71	6,740	543	3.04	704	292	8,281	0.09	6.80
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	6.71	6,740	543	3.04	1,254	0	8,540	461,117.20	461,123.91
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	6.71	6,740	543	3.04	1,254	7	8,547	53.36	60.07
Bulk Supply -- C2(a)	11kV	7	7	1	1	6.71	6,740	543	3.04	1,220	422	8,927	0.42	7.13
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	6,740	543	3.04	704	-	7,990	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	6.71	6,740	543	3.04	1,254	239	8,780	96.64	103.35
Bulk Supply -- C2(b)	11kV	467	486	58	60	6.71	6,740	543	3.04	1,220	295	8,801	10.69	17.40
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	6.71	6,740	543	3.04	704	295	8,284	1.31	8.02
Agricultural -- D1(a)	0.4kV	0	0	5	6	6.71	6,740	543	3.04	1,254	1	8,541	11,121.45	11,128.16
Agricultural -- D2(a)	0.4kV	6	6	13	15	6.71	6,740	543	3.04	1,254	15	8,555	229.97	236.58
Agricultural -- D2(b)	0.4kV	25	28	13	14	6.71	6,740	543	3.04	1,254	68	8,608	33.94	40.55
Agricultural -- D1(b)	0.4kV	1	1	8	9	6.71	6,740	543	3.04	1,254	3	8,543	3,599.89	3,606.50
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	6.71	6,740	543	3.04	1,254	10	8,551	577.54	584.25
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	6.71	6,740	543	3.04	1,254	78	8,618	2.90	9.51
Temporary Supply -- E2	0.2kV	0	0	1	1	6.71	6,740	543	3.04	1,254	3	8,543	70,865.14	70,871.35
Public Lighting -- G	0.4kV	89	97	28	31	6.71	6,740	543	3.04	1,254	110	8,651	0.78	7.49
Residential Colonies -- H	11kV	3	3	1	1	6.71	6,740	543	3.04	1,220	165	8,671	38.07	44.78
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	6.71	6,740	543	3.04	1,220	167	8,673	3,067.32	3,074.03
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	6.71	6,740	543	3.04	1,220	382	8,888	1.94	8.55
Rawat Lab - K2	11kV	0	0	31	32	6.71	6,740	543	3.04	1,220	0	8,506	9,832.35	9,839.06
A3 General	0.4kV	569	625	29	32	6.71	6,740	543	3.04	1,254	672	9,212	336.94	343.55
Total		11,938	12,880	1,836	1,990	6.71	6,740	543	3.04	1,218	308	8,812	13.73	20.44

(Annex-2)

Table 24: COST OF SERVICE FY 2023-24 (kWh at Consumer)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	Distribution		Total Fixed Cost (Rs./kWh)	Fixed Cost Rs./kWh Purchased	Total Cost Rs./kWh Sold
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kWh)	Cost (Rs./kWh)	Cost (Rs./kWh)	Demand (Rs./kWh)	cust. Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	7.37	3.35	0.27	0.00	0.62	0.81	5.06	5.06	12.43
Residential -- A1(b)	0.4kV	714	784	231	253	7.37	28.70	2.31	0.01	5.34	0.46	36.83	36.83	44.19
Commercial -- A2(a)	0.2kV	454	499	496	545	7.37	96.95	7.80	0.04	18.04	0.81	123.65	123.65	131.02
Commercial -- A2(b)	0.4kV	1	1	7	8	7.37	1,008.06	81.16	0.45	187.60	0.46	1,277.73	1,277.73	1,285.10
Commercial -- A2(c)	0.4kV	874	959	171	188	7.37	17.40	1.40	0.01	3.24	0.46	22.51	22.51	29.88
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	7.37	2,545.33	204.92	1.15	473.67	0.81	3,225.87	3,225.87	3,233.24
Industrial -- B2(a)	0.4kV	0	0	7	7	7.37	3,148.01	253.44	1.42	585.83	0.46	3,989.15	3,989.15	3,996.52
Industrial -- B1(b)	0.4kV	57	63	56	62	7.37	86.92	7.00	0.04	16.18	0.46	110.59	110.59	117.96
Industrial -- B2(b)	0.4kV	511	562	52	57	7.37	9.01	0.73	0.00	1.68	0.46	11.87	11.87	19.24
Industrial -- B3	11kV	421	439	44	46	6.99	8.74	0.70	0.00	1.58	0.45	11.48	11.48	18.47
Industrial -- B4	132/66kV	520	525	59	59	6.78	9.21	0.74	0.00	0.96	0.40	11.32	11.32	18.09
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	22,631.60	88,827,704.87	7,151,236.28	40,018.03	16,530,385.41	2,633.35	112,551,977.94	112,551,977.94	112,574,609.53
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	7.37	440.46	35.46	0.20	81.97	0.46	558.55	558.55	565.92
Bulk Supply -- C2(a)	11kV	7	7	1	1	6.99	7.27	0.59	0.00	1.32	0.45	9.63	9.63	16.61
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	7.37	12.91	1.04	0.01	2.40	0.46	16.82	16.82	24.19
Bulk Supply -- C2(b)	11kV	467	486	58	60	6.99	10.38	0.84	0.00	1.88	0.45	13.55	13.55	20.53
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	6.78	9.12	0.73	0.00	0.95	0.40	11.20	11.20	17.98
Agricultural -- D1(a)	0.4kV	0	0	5	6	7.37	3,930.15	316.40	1.77	731.38	0.46	4,980.17	4,980.17	4,987.54
Agricultural -- D2(a)	0.4kV	6	6	13	15	7.37	203.91	16.42	0.09	37.95	0.46	258.82	258.82	266.19
Agricultural -- D2(b)	0.4kV	25	28	13	14	7.37	45.39	3.65	0.02	8.45	0.46	57.96	57.96	65.33
Agricultural -- D1(b)	0.4kV	1	1	8	9	7.37	1,005.22	80.93	0.45	187.07	0.46	1,274.13	1,274.13	1,281.50
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	7.37	530.92	42.74	0.24	98.80	0.81	673.52	673.52	680.89
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	7.37	70.42	5.67	0.03	13.10	0.81	90.04	90.04	97.41
Temporary Supply -- E2	0.2kV	0	0	1	1	7.37	1,877.94	151.19	0.85	349.47	0.81	2,380.26	2,380.26	2,387.63
Public Lighting -- G	0.4kV	89	97	28	31	7.37	28.00	2.25	0.01	5.21	0.46	35.94	35.94	43.30
Residential Colonies -- H	11kV	3	3	1	1	6.99	18.52	1.49	0.01	3.35	0.45	23.82	23.82	30.81
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	6.99	18.33	1.48	0.01	3.32	0.45	23.58	23.58	30.57
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	6.99	8.01	0.64	0.00	1.45	0.45	10.56	10.56	17.55
Rawat Lab - K2	11kV	0	0	31	32	6.99	7,445.95	599.45	3.35	1,347.41	0.45	9,396.62	9,396.62	9,403.60
A3 General	0.4kV	569	625	29	32	7.37	4.60	0.37	0.00	0.86	0.46	6.29	6.29	13.66
Total		11,938	12,880	1,836	1,990	7.24	13.48	1.09	0.01	2.44	0.62	17.63	17.63	24.87

(Annex-2)

Table 25: COST OF SERVICE FY 2023-24 (kWh at CDP)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	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)	Cost (Rs./kWh)	Demand (Rs./kWh)	cust. Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	6.71	3.05	0.25	0.00	0.57	0.74	4.61	4.61	11.32
Residential -- A1(b)	0.4kV	714	784	231	253	6.71	26.14	2.10	0.01	4.86	0.42	33.53	33.53	40.24
Commercial -- A2(a)	0.2kV	454	499	496	545	6.71	88.28	7.11	0.04	16.43	0.74	112.59	112.59	119.30
Commercial -- A2(b)	0.4kV	1	1	7	8	6.71	917.91	73.90	0.41	170.82	0.42	1,163.45	1,163.45	1,170.16
Commercial -- A2(c)	0.4kV	874	959	171	188	6.71	15.85	1.28	0.01	2.95	0.42	20.49	20.49	27.20
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	6.71	2,317.68	186.59	1.04	431.31	0.74	2,937.36	2,937.36	2,944.07
Industrial -- B2(a)	0.4kV	0	0	7	7	6.71	2,866.45	230.77	1.29	533.43	0.42	3,632.36	3,632.36	3,639.07
Industrial -- B1(b)	0.4kV	57	63	56	62	6.71	79.15	6.37	0.04	14.73	0.42	100.70	100.70	107.41
Industrial -- B2(b)	0.4kV	511	562	52	57	6.71	8.20	0.66	0.00	1.53	0.42	10.81	10.81	17.52
Industrial -- B3	11kV	421	439	44	46	6.71	8.39	0.68	0.00	1.52	0.44	11.03	11.03	17.74
Industrial -- B4	132/66kV	520	525	59	59	6.71	9.12	0.73	0.00	0.95	0.39	11.21	11.21	17.92
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	6.71	26,336.36	2,120.26	11.86	4,901.06	0.78	33,370.33	33,370.33	33,367.04
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	6.71	401.07	32.29	0.18	74.64	0.42	508.59	508.59	515.30
Bulk Supply -- C2(a)	11kV	7	7	1	1	6.71	6.98	0.56	0.00	1.26	0.44	9.25	9.25	15.96
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	6.71	11.76	0.95	0.01	2.19	0.42	15.32	15.32	22.03
Bulk Supply -- C2(b)	11kV	467	486	58	60	6.71	9.97	0.80	0.00	1.80	0.44	13.01	13.01	19.72
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	6.71	9.03	0.73	0.00	0.94	0.39	11.09	11.09	17.80
Agricultural -- D1(a)	0.4kV	0	0	5	6	6.71	3,578.65	288.11	1.61	665.97	0.42	4,534.75	4,534.75	4,541.46
Agricultural -- D2(a)	0.4kV	6	6	13	15	6.71	185.67	14.95	0.08	34.55	0.42	235.67	235.67	242.38
Agricultural -- D2(b)	0.4kV	25	28	13	14	6.71	41.33	3.33	0.02	7.69	0.42	52.78	52.78	59.49
Agricultural -- D1(b)	0.4kV	1	1	8	9	6.71	915.32	73.69	0.41	170.34	0.42	1,160.17	1,160.17	1,166.88
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	6.71	483.44	38.92	0.22	89.97	0.74	613.28	613.28	619.99
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	6.71	64.12	5.16	0.03	11.93	0.74	81.98	81.98	88.69
Temporary Supply -- E2	0.2kV	0	0	1	1	6.71	1,709.98	137.66	0.77	318.22	0.74	2,167.37	2,167.37	2,174.08
Public Lighting -- G	0.4kV	89	97	28	31	6.71	25.50	2.05	0.01	4.74	0.42	32.72	32.72	39.43
Residential Colonies -- H	11kV	3	3	1	1	6.71	17.78	1.43	0.01	3.22	0.44	22.88	22.88	29.59
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	6.71	17.60	1.42	0.01	3.19	0.44	22.65	22.65	29.36
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	6.71	7.69	0.62	0.00	1.39	0.44	10.14	10.14	16.85
Rawat Lab - K2	11kV	0	0	31	32	6.71	7,151.16	575.72	3.22	1,294.06	0.44	9,024.60	9,024.60	9,031.31
A3 General	0.4kV	569	625	29	32	6.71	4.19	0.34	0.00	0.78	0.42	5.73	5.73	12.44
Total		11,938	12,880	1,836	1,990	6.71	12.50	1.01	0.01	2.26	0.57	16.34	16.34	23.05

Director General
Electricity
Government of Punjab
Lahore

(Annex-2)

Table 26: COST OF SERVICE FY 2023-24 (Cost of Losses on kW or kWh)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	Distribution		Total Fixed Cost (Rs./kW/ M)	Total Fixed Cost (Rs./kWh)	Total Cost (Rs./kWh)
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	cust. Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	0.66	662.05	53.30	0.30	123.20	160.53	999.38	0.45	1.11
Residential -- A1(b)	0.4kV	714	784	231	253	0.66	662.05	53.30	0.30	123.20	10.58	849.43	3.29	3.95
Commercial -- A2(a)	0.2kV	454	499	496	545	0.66	662.05	53.30	0.30	123.20	5.55	844.41	11.06	11.72
Commercial -- A2(b)	0.4kV	1	1	7	8	0.66	662.05	53.30	0.30	123.20	0.30	839.16	114.28	114.94
Commercial -- A2(c)	0.4kV	874	959	171	188	0.66	662.05	53.30	0.30	123.20	17.45	856.30	2.01	2.67
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	0.66	662.05	53.30	0.30	123.20	0.21	839.07	288.52	289.18
Industrial -- B2(a)	0.4kV	0	0	7	7	0.66	662.05	53.30	0.30	123.20	0.10	838.95	356.78	357.44
Industrial -- B1(b)	0.4kV	57	63	56	62	0.66	662.05	53.30	0.30	123.20	3.49	842.35	9.89	10.55
Industrial -- B2(b)	0.4kV	511	562	52	57	0.66	662.05	53.30	0.30	123.20	33.71	872.56	1.06	1.72
Industrial -- B3	11kV	421	439	44	46	0.28	277.85	22.37	0.13	50.28	14.45	365.07	0.45	0.73
Industrial -- B4	132/66kV	520	525	59	59	0.07	67.40	5.43	0.03	7.04	2.92	82.81	0.11	0.18
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	22,624.89	662.05	53.30	0.30	123.20	0.02	838.87	112,518,607.61	112,541,232.49
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	0.66	662.05	53.30	0.30	123.20	0.69	839.54	49.96	50.61
Bulk Supply -- C2(a)	11kV	7	7	1	1	0.28	277.85	22.37	0.13	50.28	17.38	368.00	0.38	0.66
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	67.40	5.43	0.03	7.04	-	79.89	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	0.66	662.05	53.30	0.30	123.20	23.51	862.37	1.50	2.16
Bulk Supply -- C2(b)	11kV	467	486	58	60	0.28	277.85	22.37	0.13	50.28	12.17	362.79	0.54	0.81
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	0.07	67.40	5.43	0.03	7.04	2.95	82.84	0.11	0.18
Agricultural -- D1(a)	0.4kV	0	0	5	6	0.66	662.05	53.30	0.30	123.20	0.08	838.93	445.42	446.08
Agricultural -- D2(a)	0.4kV	6	6	13	15	0.66	662.05	53.30	0.30	123.20	1.49	840.34	23.15	23.81
Agricultural -- D2(b)	0.4kV	25	28	13	14	0.66	662.05	53.30	0.30	123.20	6.69	845.54	5.18	5.84
Agricultural -- D1(b)	0.4kV	1	1	8	9	0.66	662.05	53.30	0.30	123.20	0.30	839.16	113.96	114.62
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	0.66	662.05	53.30	0.30	123.20	1.01	839.87	60.24	60.90
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	0.66	662.05	53.30	0.30	123.20	7.64	846.50	8.05	8.71
Temporary Supply -- E2	0.2kV	0	0	1	1	0.66	662.05	53.30	0.30	123.20	0.29	839.14	212.89	213.55
Public Lighting -- G	0.4kV	89	97	28	31	0.66	662.05	53.30	0.30	123.20	10.84	849.70	3.21	3.87
Residential Colonies -- H	11kV	3	3	1	1	0.28	277.85	22.37	0.13	50.28	6.82	357.44	0.94	1.22
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	0.28	277.85	22.37	0.13	50.28	6.89	357.51	0.93	1.21
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	0.28	277.85	22.37	0.13	50.28	15.77	366.39	0.42	0.69
Rawat Lab - K2	11kV	0	0	31	32	0.28	277.85	22.37	0.13	50.28	0.02	350.64	372.01	372.29
A3 General	0.4kV	569	625	29	32	0.66	662.05	53.30	0.30	123.20	65.98	904.84	0.56	1.22
Total		11,938	12,880	1,836	1,990	0.53	565.75	45.55	0.25	102.25	25.87	739.67	1.29	1.82

(Annex-2)

Table 27: COST OF SERVICE FY 2023-24 (Cost of Losses on kWh)

Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transm	MOF	Distribution		Total Fixed Cost (Rs./kW/ M)	Total Fixed Cost (Rs./kWh)	Total Cost (Rs./kWh)
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	cust. Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	5,024	5,517	190	208	0.66	0.30	0.02	0.00	0.06	0.07	0.45	0.45	1.11
Residential -- A1(b)	0.4kV	714	784	231	253	0.66	2.57	0.21	0.00	0.48	0.04	3.29	3.29	3.95
Commercial -- A2(a)	0.2kV	454	499	496	545	0.66	8.67	0.70	0.00	1.61	0.07	11.06	11.06	11.72
Commercial -- A2(b)	0.4kV	1	1	7	8	0.66	90.16	7.26	0.04	16.78	0.04	114.28	114.28	114.94
Commercial -- A2(c)	0.4kV	874	959	171	188	0.66	1.56	0.13	0.00	0.29	0.04	2.01	2.01	2.67
Commercial -- A2(d)	0.4kV	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial -- B1(a)	0.2kV	2	2	64	70	0.66	227.65	18.33	0.10	42.36	0.07	288.52	288.52	289.18
Industrial -- B2(a)	0.4kV	0	0	7	7	0.66	281.55	22.67	0.13	52.40	0.04	356.78	356.78	357.44
Industrial -- B1(b)	0.4kV	57	63	56	62	0.66	7.77	0.63	0.00	1.45	0.04	9.89	9.89	10.55
Industrial -- B2(b)	0.4kV	511	562	52	57	0.66	0.81	0.06	0.00	0.15	0.04	1.06	1.06	1.72
Industrial -- B3	11kV	421	439	44	46	0.28	0.35	0.03	0.00	0.06	0.02	0.45	0.45	0.73
Industrial -- B4	132/66kV	520	525	59	59	0.07	0.09	0.01	0.00	0.01	0.00	0.11	0.11	0.18
Bulk Supply -- C1(a)	0.2kV	0	0	0	0	22,624.89	88,801,368.50	7,149,116.02	40,006.16	16,525,484.35	2,632.57	112,518,607.61	112,518,607.61	112,541,232.49
Bulk Supply -- C1(b)	0.4kV	1	1	6	6	0.66	39.39	3.17	0.02	7.33	0.04	49.96	49.96	50.61
Bulk Supply -- C2(a)	11kV	7	7	1	1	0.28	0.29	0.02	0.00	0.05	0.02	0.38	0.38	0.66
Bulk Supply -- C3(a)	132/66kV	-	-	0	0	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	60	65	9	10	0.66	1.15	0.09	0.00	0.21	0.04	1.50	1.50	2.16
Bulk Supply -- C2(b)	11kV	467	486	58	60	0.28	0.41	0.03	0.00	0.07	0.02	0.54	0.54	0.81
Bulk Supply -- C3(b)	132/66kV	464	468	52	52	0.07	0.09	0.01	0.00	0.01	0.00	0.11	0.11	0.18
Agricultural -- D1(a)	0.4kV	0	0	5	6	0.66	351.51	28.30	0.16	65.41	0.04	445.42	445.42	446.08
Agricultural -- D2(a)	0.4kV	6	6	13	15	0.66	18.24	1.47	0.01	3.39	0.04	23.15	23.15	23.81
Agricultural -- D2(b)	0.4kV	25	28	13	14	0.66	4.06	0.33	0.00	0.76	0.04	5.18	5.18	5.84
Agricultural -- D1(b)	0.4kV	1	1	8	9	0.66	89.91	7.24	0.04	16.73	0.04	113.96	113.96	114.62
Temporary Supply -- E1(i)	0.2kV	4	5	26	28	0.66	47.49	3.82	0.02	8.84	0.07	60.24	60.24	60.90
Temporary Supply -- E1(ii)	0.2kV	31	34	24	27	0.66	6.30	0.51	0.00	1.17	0.07	8.05	8.05	8.71
Temporary Supply -- E2	0.2kV	0	0	1	1	0.66	167.96	13.52	0.08	31.26	0.07	212.89	212.89	213.55
Public Lighting -- G	0.4kV	89	97	28	31	0.66	2.50	0.20	0.00	0.47	0.04	3.21	3.21	3.87
Residential Colonies -- H	11kV	3	3	1	1	0.28	0.73	0.06	0.00	0.13	0.02	0.94	0.94	1.22
Azad Jammu Kashmir - K1a	11kV	5	6	1	1	0.28	0.73	0.06	0.00	0.13	0.02	0.93	0.93	1.21
Azad Jammu Kashmir - K1b	11kV	1,628	1,695	155	161	0.28	0.32	0.03	0.00	0.06	0.02	0.42	0.42	0.69
Rawat Lab - K2	11kV	0	0	31	32	0.28	294.79	23.73	0.13	53.34	0.02	372.01	372.01	372.29
A3 General	0.4kV	569	625	29	32	0.66	0.41	0.03	0.00	0.08	0.04	0.56	0.56	1.22
Total		11,938	12,880	1,836	1,990	0.53	0.99	0.08	0.00	0.18	0.05	1.29	1.29	1.82

(Annex-2)

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F/B

**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.—

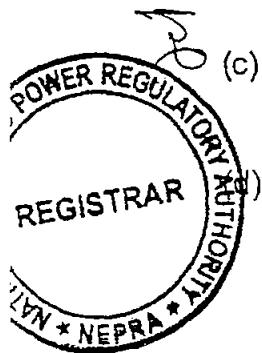
1. Short title and commencement.— (1) These regulations shall be called the National Electric Power Regulatory Authority Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022.

(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**

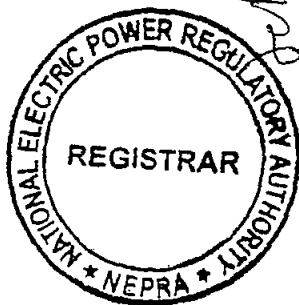
2. Definitions.— (1) In these regulations, unless there is anything repugnant in the subject or context,—

- (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.

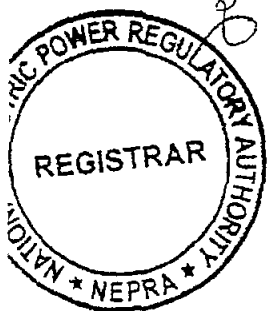
(2) Words and expressions used but not defined in these regulations shall have the same meanings as assigned to them in the Act and the applicable documents.

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:

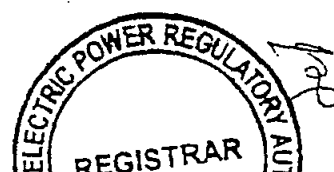
(a) The generation company may arrange the financing required for the construction of interconnection facilities by the network licensee. The network licensee and generation company shall enter into an agreement to mutually decide the terms and conditions for reimbursement of financing to the generation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

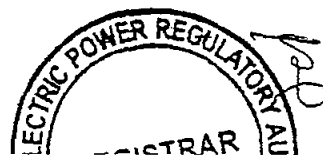
6. Execution of use of system agreement.— (1) Any person who has been granted a competitive supplier licence by the Authority or a person who has submitted an application to the Authority in this respect may approach the relevant distribution licensee in whose service territory the competitive supplier 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.

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(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.

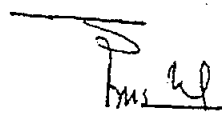
(4) The Authority shall give its decision in any matter referred to it under sub-regulations (3), within a period of three months after providing an opportunity of hearing to the concerned parties.

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.

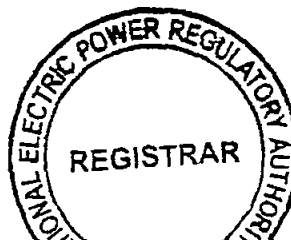



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(Syed Safeer Hussain)
Registrar

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.

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


(Haris Khan)
Deputy Director





Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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-607 & TRF-608/18263-69

July 14, 2023

Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST
FILED BY ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO) FOR
DETERMINATION OF INTERIM TARIFF FOR THE FY 2023-24 FOR
ITS DISTRIBUTION AND SUPPLY OF POWER FUNCTIONS
[CASE # NEPRA/TRF-607 & TRF-608/IESCO]**

Dear Sir,

Please find enclosed herewith subject Decision of the Authority (total 20 Pages) in the matter of Request filed by Islamabad Electric Supply Company (IESCO) 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, Islamabad Electric Supply Company Ltd. (IESCO)
Head Office St. 40, Sector G-7/4, Islamabad

DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST FILED BY ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO) 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 Islamabad Electric Supply Company Limited (IESCO) (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. IESCO 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 to determine Distribution and Supply tariff for FY 2023-24, for implementation w.e.f. 01.07.2023, on interim basis subject to adjustment after final determination as next Financial year is nearly to start enabling IESCO to pass the cost to its consumers for timely manner.
4. IESCO further submitted that as per sub rule (7) of Rule 4 of NEPRA (Tariff Standards and Procedure) Rules, 1998, the Authority may, while admitting a petition, allow the immediate application of the proposed tariff subject to order to refund for the protection of consumers, or for satisfactory security be provide for refund, while proceedings as pending before the Authority.
5. In view thereof, IESCO 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;

In *hath* *D*



"...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 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

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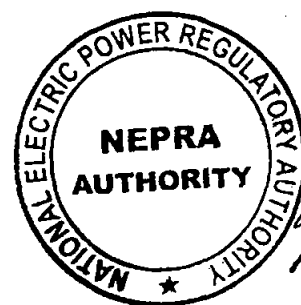


Decision of the Authority in the matter of request filed by IESCO for interim tariff

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]	12,880	12,880
Units Sold	[MkWh]	11,939	11,939
Units Lost	[MkWh]	942	942
Units Lost	(%)	7.31%	7.31%
Energy Charge			86,466
Capacity Charge			160,942
Transmission Charge & Market Operation Fee			12,959
Wire Business UoSC			32,340
Power Purchase Price	[Mln. Rs.]		292,707
Pay & Allowances		11,191	2,846
Post Retirement Benefits		3,704	793
Repair & Maintenance		1,496	208
Traveling allowance			
Vehicle maintenance		1,940	270
Other expenses			
O&M Cost		18,332	4,116
Depreciation		5,057	
RORB		9,475	
O.Income		(524)	
Margin	[Mln. Rs.]	32,340	4,116
Revenue Requirement	[Mln. Rs.]	32,340	296,823
PPP with Wire Business Cost-Unadj.		-	22.73
PPP with Wire Business Cost-adj.		-	24.52
Margin		2.71	0.34
PYA Adjustments		-	-
Average Tariff	[Rs./kWh]	2.71	24.86



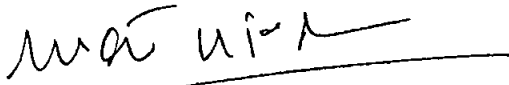
16. The above determined revenue shall be recovered from the consumers through the projected sales of 11,939 GWhs, as per Annex – II.
17. IESCO, being a supplier, is allowed to charge its consumers such tariff as set out in the schedule of tariff for IESCO annexed to the decision.
18. In addition to compensation of losses as discussed above, IESCO, 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	36.87%	36.82%	73.68%
Level of Losses	0.99%	5.70%	6.63%
UoSC Rs./kWh	0.99	1.29	2.34

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 filing 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.

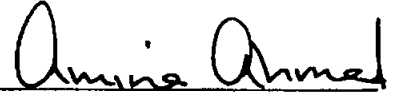
AUTHORITY

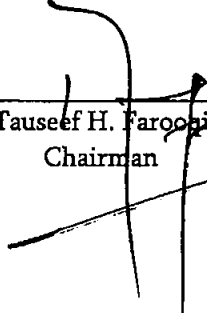


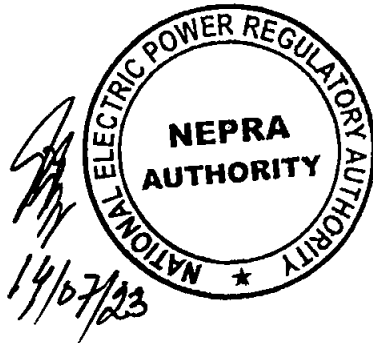
Mathar Niaz Rana (nsc)
Member

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

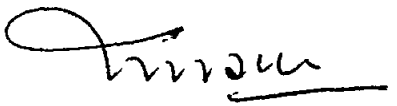
No. NEPRA/Dir (C & I)/2023/1434

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 filing 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

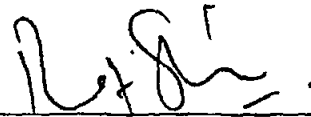
- b. Whether to direct DISCOs to file addendum after incorporating the revised Revenue Requirement for FY 2023-24 and GOP applicable tariff in this regard or otherwise? If the Authority decide to direct DISCOs for filing of addendum than approval is requested for draft DFA attached with working paper. 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)

No: NEPRA/R/TRF-100/ 33769

October 09, 2023

I O N


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

Please find enclosed herewith subject petition filed by Islamabad Electric Supply Company (IESCO) vide letter No. 1059-1066/IESCO/MIRAD/DG/Admn dated 06.10.2023 (received on 09.10.2023) 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. IESCO 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 12.10.2023.

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