

TRIBAL AREAS ELECTRICITY SUPPLY COMPANY PESHAWAR

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Office of the
Chief Executive Officer
TESCO
213-WAPDA House, Shami Road
Peshawar

No. 6969-71/CEO/TESCO

Dated: 27/09/20

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


F/A

Subject: PETITION FOR DETERMINATION OF USE OF SYSTEM CHARGES/WHEELING CHARGES FOR FY 2023-24

Ref: Your Office Letter No. NEPRA/DG(TARIFF)/TRF-100/33896-05 DATED 22/09/2023

With reference to your letter cited above and in pursuance of Regulation 7 of NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations 2022, TESCO is submitting the Petition for determination of Use of System Charges ("UoSC Petition") after incorporating the revised tariff numbers as determined by NEPRA for FY 2023-24. It may kindly be noted that the instant petition includes TESCO Cost of Service Study ("COS Study") as Annexure-2 thereto, forming fundamental basis for the instant UoSC Petition. The documents being submitted herewith also include the affidavit as per the regulator requirements.

In this matter, any clarification or additional information Mr. Hammad Ammer Hashmi DG MIRAD TESCO can be contacted on cell phone # 0330-5059090 or email dgmiradtesco@gmail.com/dg.mirad@tesco.gov.pk.


Chief Executive Officer
TESCO H/Q Peshawar

DA. As Above

Copy to:

1. Director General MIRAD TESCO, for information
2. Director Finance TESCO, for information

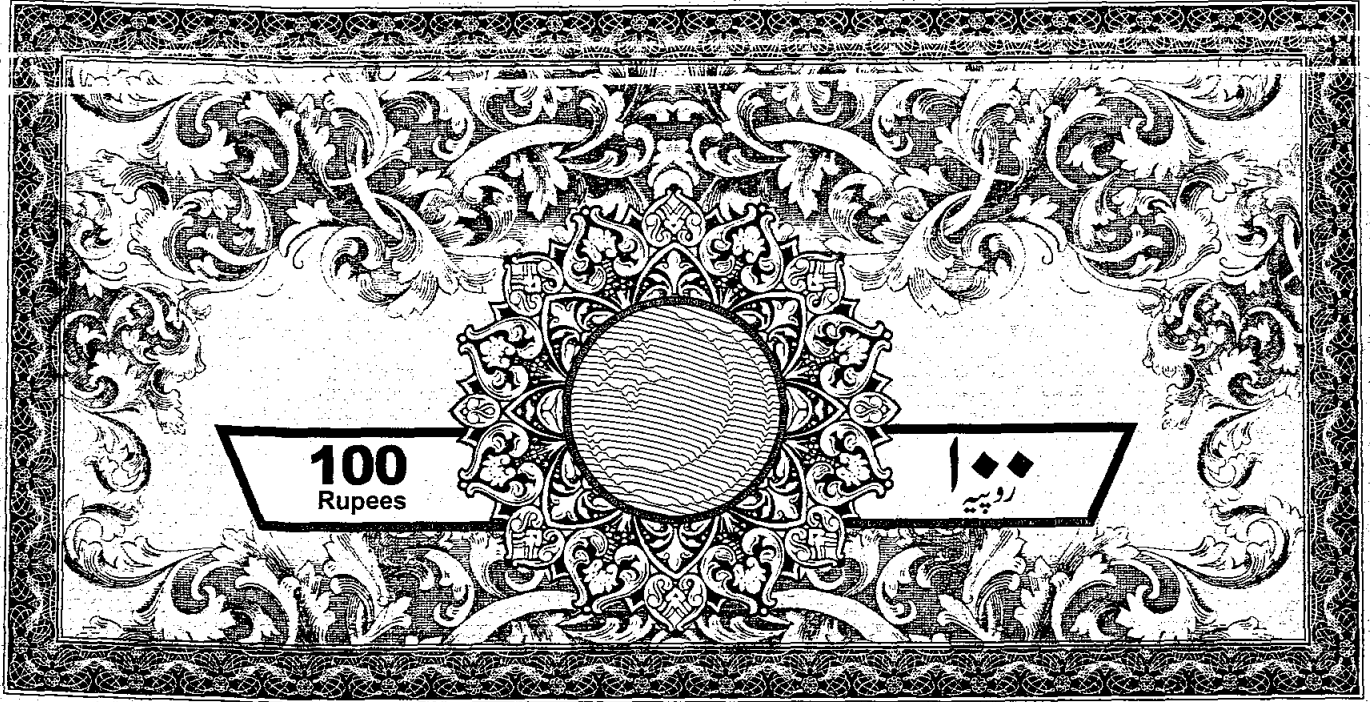
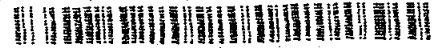
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☒ For nec action ☐ for information

1. DG (Lic.)	2. DG (Admn./HR)
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5. DG (Trf.)	6. Dir. (Fin.)
7. Dir. (Tech.)	8. Consultant
9. LA	10. Dir. (IT)

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

 PS (R)

REGISTRAR OFFICE
Diary No. 13785
D-10: 03-10-23

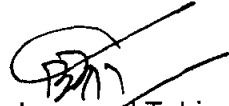


AFFIDAVIT

I Engr. Qazi Muhammad Tahir S/O Qazi Muhammad Tufail Chief Executive Officer, TESCO having CNIC No. 13101-9101070-9, do hereby, solemnly affirm and testify that the contents of the application for filling the 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 the Annexed documents are true and correct to the best of my knowledge, belief on the basis of confirmations provided by the concerned formations but before me, and further declare that

1. I am the Chief Executive Officer of TESCO and fully aware of the affairs 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. Qazi Muhammad Tahir
Chief Executive Officer
TESCO

TRIBAL AREAS ELECTRIC SUPPLY COMPANY



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

TESCO H/Q WAPDA HOUSE SHAMI ROAD

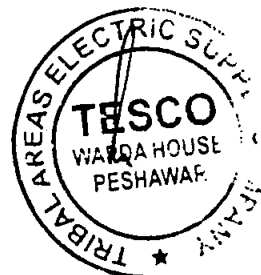
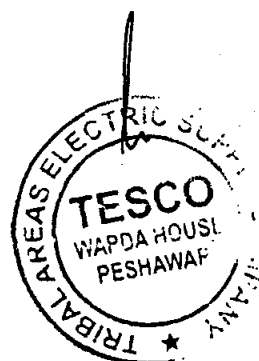
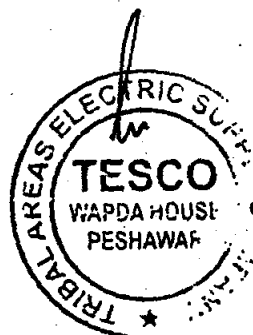


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1. Petition Summary

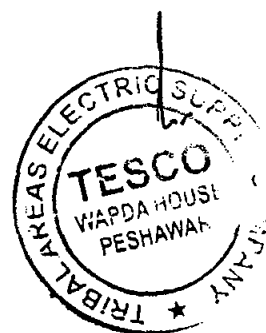
1.1. Details of the Petitioner

1.1.1 Introduction

Tribal Areas Electric Supply Company (TESCO) incorporated as a Public Limited Company on 3rd July 2002, is responsible for the delivery of electricity to 445,220 consumers of all 7 Merged Tribal Districts formerly known as FATA and all FR-Regions of Pakistan as set out in TESCO's Distribution License no. 22/DL/2013, granted by NEPRA under the NEPRA Act on August 12, 2013. The major objectives of the company include ensuring uninterrupted and stable power supply to all its customers along with state-of-the-art customer care as well as establishing and operating reliable electricity distribution networks.

Under the provisions of Regulation of Generation, Transmission & Distribution of Electric Power (Amendment) Act, 2018, TESCO is deemed to hold a "Power Supply" License 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.

After the approval of Competitive Trading and Bilateral Contracts Market (CTBCM) by the honorable Authority on November 12, 2020 several implementation actions were taken. This included issuance of License for the Market Operator (MO) promulgation of several Regulations to ensure smooth implementation of CTBCM and create balance in roles, rights and obligations of the stakeholders in the CTBCM.



1.1.2 License Details:

TESCO is a licensed public utility responsible for Distribution & Supply of electricity to its consumers. TESCO has been granted a Distribution License bearing No. 22/DL/2013 by National Electric Power Regulatory Authority (NEPRA) on August 12, 2013, which will expire on 11th August 2033. Under Sub-section 23E (1) of NEPRA Act, 1997 (Amended Act of 2018), TESCO is deemed to hold a license for supply of electric power for a period of 5 years. TESCO, has already submitted an application for grant of Electric Power Supply License vide Letter No. 2456-61 dated 26/4/2023 to NEPRA.

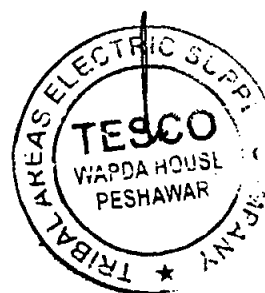
TESCO, in accordance with the requirement of Sub-section 21(b) and Sub-section 21(c) of NEPRA Act, 1997 (Amended Act of 2018) and regulation 7 of NEPRA Open Access (Interconnection and Wheeling of electric power) Regulations, 2022, is required to prepare and submit a separate petition to the Authority for determination of its Use of System Charges.

1.1.3 Key Representatives:

Chief Executive Officer TESCO, Director General MIRAD TESCO, Director Finance TESCO, Director Commercial are key representatives in support of the Use of System charges Petition (individually or jointly), and also to appear before NEPRA as and when required.

2. 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:



In compliance with the Clause 4.4, Clause 5.5.2(f), Clause 5.5.2(g), Clause 5.5.4, Clause 5.6.5 and Clause 5.6.7 of NE Policy, Section 21(b), Section 21(C) of NEPRA Act, 1997 (Amended Act of 2018) and in compliance with the regulation 7 of NEPRA 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 i.e. 2nd Nov 2022, shall submit a separate petition to the Authority for determination of its use of system charges.

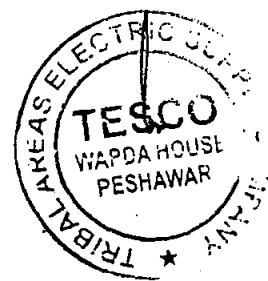
Open access envisages non-discriminatory access to the transmission and distribution network. It enables the eligible Bulk Power Consumers to procure power at competitive price, to meet their demand, from suppliers other than supplier of last resort. Therefore, determination of open access charges is necessary to ensure financial viability of distribution companies.

2.1. Directions in National Electricity Policy

The National Electricity Policy, 2021 issued under Section 14A of the NEPRA Act, 1997 (Amended Act of 2018) was prepared by the Government of Pakistan for the development, reform, improvement and sustainability of the power market and power sector.

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

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



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

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

Clause 5.5.2(f) of National Electricity Policy states:

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

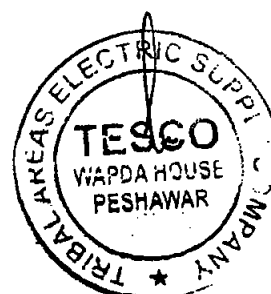
Clause 5.5.2(g) of National Electricity Policy states:

“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 states:

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

Clause 5.6.5 of National Electricity Policy states:



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

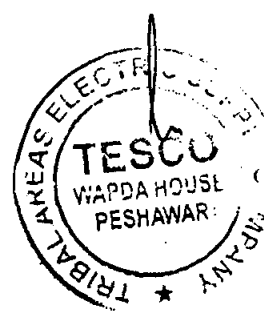
Clause 5.6.7 of National Electricity Policy states:

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

2.2. Legal and Regulatory Framework

The approved design of Competitive Trading and Bilateral Contract 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.

As directed in Clause 5.5.4 of the said National Electricity Policy, 2021, the honorable Authority promulgated / specified several Regulations to ensure effective implementation of the market regime in Pakistan. This included promulgation of National



Electric Power Regulatory Authority Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 ("Open Access Regulations").

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

As per Section 2(ii) of the NEPRA Act 1997 (Amended Act of 2018):

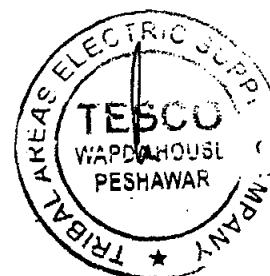
"Bulk-power consumer means a consumer who purchases or receives electric power, at one premises, in an amount of one megawatt or more or in such other amount and voltage level and with such other characteristics as the Authority may specify and the Authority may specify different amounts and voltage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

Important definitions provided in Regulation 2 of Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022 ("Open Access Regulations")

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 an electric power supplier for supply of electric power to its consumer(s); or a captive generating plant for delivery of the electric power from generation facility to the destination of its use; or 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,*



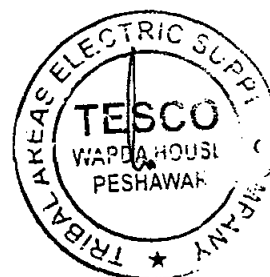
metering service provider services and any other charges as determined by the Authority that may arise due to advent of the open access and market liberalization."

Regulation 5 (Obligation to provide open access) of Open Access Regulations is reproduced hereunder:

- (1) "A network licensee shall establish, operate and maintain its distribution system or transmission system, as the case may be, in a manner that ensure non-discriminatory open access in accordance with the Act, these regulations, Market Commercial Code, Grid Code, Distribution Code and other applicable documents."*
- (2) "A network licensee shall, on an annual basis, prepare an open access report demonstrating compliance with these regulations and licence terms and conditions, with the detail of its open access users, available and planned capacity, any issues identified in provision of open access, and any instances where open access was denied along with justification thereof. The said report shall also be made available on the website of the network licensee."*
- (3) "The report required under sub-regulation (2) shall be prepared and submitted to the Authority within a period of one month from the date of end of respective financial year and shall also be made available on the website of the network licensee."*
- (4) "The distribution company shall develop the use of system agreement in accordance with the minimum provisions provided in Schedule I within ninety days of the notification of these regulations and shall obtain the approval of the Authority and publish the same in its website."*

Regulation 7 (Filing of petition and determination of use of system charges) of Open Access Regulations is reproduced hereunder:

"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."

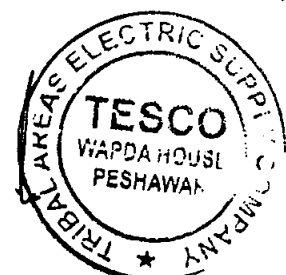
Regulation 8 (Wheeling of electric power) of Open Access Regulations is reproduced hereunder:

"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."

3. Technical and Financial Attributes

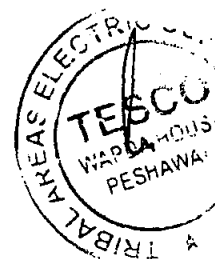
Adjoining the purposes of CTBCM, directions of the National Electricity Policy, 2021 and stipulations of the legal and regulatory framework; following understandings are inferred:

- i) The network licensee, the TESCO 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 TESCO is entitled for recovery of use of system charges in line with use of system agreement, as determined by the honorable Authority.
- iii) The use of system charges shall include:
 - a. Transmission Use of System Charges (NTDC, PGC) irrespective of the placement of BPC and the respective generator.
 - b. System Operator Charges
 - c. Metering Service Provider Charges
 - d. Market Operator Charges
 - e. Distribution Margin Charges w.r.t. to the voltage level (132kV, 11kV, others) 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, 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 TESCO, these shall not form part of use of system charges to be recovered directly by TESCO.
 - 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.
 - 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. Stranded Asset Cost and Cross-Subsidy charges are relevant costs that needs to be incorporated into the use of system charges and if these issues are not properly considered, it would have huge financial implications on the regulated consumers or the same would be borne by the GoP.
 - f. 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,

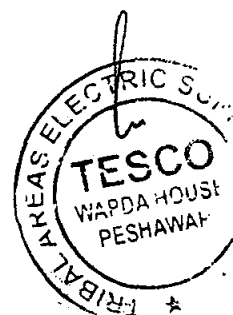


will not be charged separately. However, for the purposes of transparency of charges, the impact of such losses may be separately disclosed.

- g. The use of system charges, including the Distribution Margin Charges, as requested by TESCO 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 and will be charged at the same level, which is charged to regulated consumer as determined by NEPRA with its subsequent adjustments.
- h. TESCO will also charge, wheeling charges by PESCO as part of its UoSC, as determined by NEPRA.
- i. The use of system charges shall be with reference to the voltage level (132/66 kV, 11/33 kV, others) for the applicable consumer categories of all possible BPCs. The component-wise Cost of Service Annexure-1 and consequent assessment, as detailed above, of component-wise Use of System Charges for the applicable BPCs is provided.
- j. 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 OR NTDC through TESCO
2.	System Operator Charge / Fee	System Operator through NTDC.
3.	MSP Charge / Fee	MSP through NTDC
4.	Distribution Use of System Charge	TESCO as Distribution Licensee
5.	Cross Subsidy Surcharge	TESCO as SOLR (Supply Licensee)
6.	Stranded Capacity Costs	TESCO as SOLR (Supply Licensee)



4. Features of Petition:

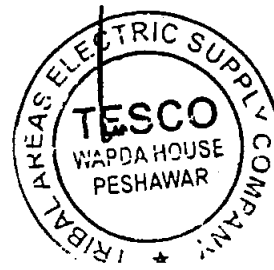
4.1. Basis of Use of System Charges:

The instant petition for determination of use of system charges has been developed based on guidelines provided in the NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations, 2022. Therefore, TESCO has carried out Cost of Service Study for the FY 2022-23 Annexure-2 to arrive at cost reflective tariffs giving proper price signals for its eligible consumers.

4.2. 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 pertinent 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 in line with the NTDC. 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 in 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.

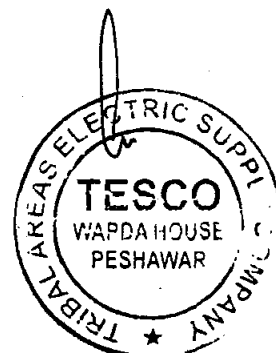
It is worth mentioning here that the proposed tariff rates as per Three (3) options narrated above are attached at Annexure-1.

4.3. 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.

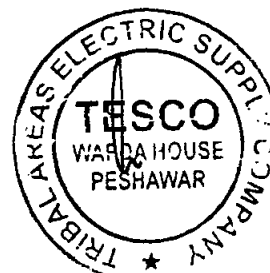
4.4. Applicable Categories / Eligible BPCs

While, in terms of existing stipulation contained in the NEPRA Act, the Bulk Power Consumer (BPC) 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 determine and the Authority may determine different amounts and voltage levels and with such other characteristics for different areas. The following tariff categories has been considered while working out the proposed of use of service charges.



TESCO: Petition for Determination of UoSC (FY 2023-24)

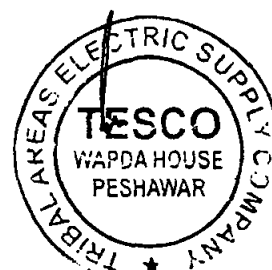
Sr. No.	Consumption Category	Tariff Category	Voltage Level	Remarks
1.	General	A-2 & A-3	N/A	As per the existing tariffs, no kW sanctioned load quantification or connection voltage is applicable to A-2 and A-3 tariff categories. Accordingly, these are not considered BPC for the purposes of this petition. However, these costumers, 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.
2.	Industrial Consumer ranging from 500 kW to 5 MW. [extendable to 7.5 MW under conditions]	B-3	11/33 kV	B 3 consumer ranges from 500 kW to 5 MW.[Extendable to 7.5 MW under conditions] It is clarified here that the consumers of this category below 1MW shall not be treated as eligible BPCs for CTBCM. The use of system charges indicated for B-3 category will apply in case of eligible BPC.
3.	Industrial	B-4	66/132 kV and above	Currently there is no B-4 consumer in TESCO Service Territory. Accordingly, the Cost-of-Service assessment could not be made. However, the use of system charges for B-4 category of consumers are assessed in the analogy of B-3 adjusted with differential costs.



TESCO: Petition for Determination of UoSC (FY 2023-24)

4.	Bulk Supply. Ranging from 500 kW to 5 MW. [extendable to 7.5 MW under conditions]	C-2(b)	11/33 kV	<p>Bulk Supply consumer ranges from 500 kW to 5 MW. [Extendable to 7.5 MW under conditions]</p> <p>Although the Bulk Supply C-2 customers are at 11/33 KV connection level. It is clarified here that the consumers of this category below 1MW shall not be treated as eligible BPCs for CTBCM. The use of system charges indicated for C-2 category will apply in case of BPC at one premises.</p> <p>Further, the consumers falling under the resale shall not be considered as eligible BPC.</p>
5.	Bulk Supply	C-3(b)	66 kV and above	<p>Currently there is no C-3 consumer in TESCO Service Territory. Accordingly, the Cost of Service assessment could not be made. However, the use of system charges for B-4 category of consumers are assessed in the analogy of C-2 adjusted with differential costs.</p>

6.	Housing Colonies attached to Industries	H	N/A	<p>Currently there is no H consumer in TESCO Service Territory. Accordingly, the Cost of Service assessment could not be made.</p>
7.	Azad Jammu & Kashmir	K	N/A	<p>Currently there is no K consumer in TESCO Service Territory. Accordingly, the Cost of Service assessment could not be made.</p>



5. Further Consideration

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

5.1. Government Subsidies

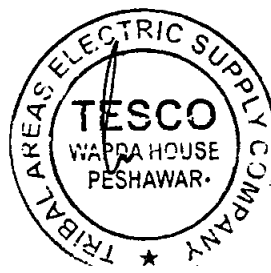
Any subsidy provided by the Government to the industrial or any other eligible BPC, as applicable, will be dealt with according to the directions and terms and conditions thereof as decided by the Government. However, for the purposes of this petition, such subsidies are not considered.

5.2. Captive Power Producers and Users

- i) A captive power producer / user using the TESCO 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, except the Cross-Subsidy and Stranded Capacity cost, shall fully apply.
- ii) The cases of captive generation and consumption points at the same location taking additional supply from the local supplier of last resort (SOLR) shall be considered a regulated consumer of the SOLR with applicable regulated tariff. The quantum of additional sanctioned / contracted load (in terms of MW) shall be considered to determine its status as BPC in terms of the Act. In case, such BPC choose to exercise option for a competitive supplier, the use of system charges shall apply in full.

5.3. Applicability of Stranded Capacity Costs

The costs arising on account of market liberalization and advent of open access shall be the capacity charges/stranded costs to be paid by all eligible BPCs of a competitive supplier as detailed in this instant petition and the amount of such capacity charges shall be the same as the total generation capacity charges recovered from the



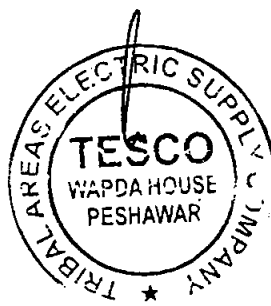
equally placed bulk power consumers of the suppliers of last resort either in a volumetric form (kWh) and/or through fixed charges and such charges shall continue to be paid till such time as may be decided by the Federal Government as per the National Electricity Policy.

5.4. Applicability of Use of System Charges on New Eligible BPCs

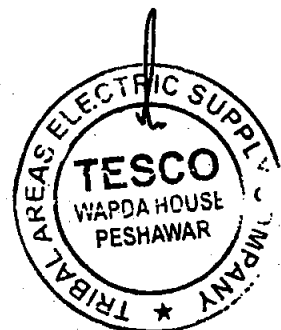
The Use of System Charges provided in the instant petition shall be applicable to all such BPCs who will opt to get supply of electric power from competitive supplier including the captive generator using the network to wheel its power to the destination of its use. Such charges shall be fully applicable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

Prayer:

"In view of the grounds and facts mentioned above, it is respectfully prayed that while admitting and allowing this petition, the TESCO's Use of System Charges may very graciously be determined as estimated in Annexure-1 and Annexure-2 which contain detailed analysis".



Annexure - 1



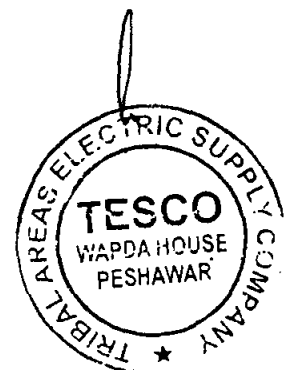
TRIBAL AREAS ELECTRIC SUPPLY COMPANY
Revised Proposed Use of System Charges Annexure-1
For Eligible Bulk Power Consumers of 1MW or Above

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Industrial				Industrial				Industrial B-3 (1 MW or More)			
Tariff Category	B-3				B-3							
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total	MDI Based	Volumetric	Hybrid	
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	6.997			6.997	6.418			6.418	243.68	0.578		0.578
Generation Cost - Capacity		9,550.17	23.910	23.910		9,034.31	20.791	20.791	9,034.31	20.791	2,710.29	14.554
Transmission Charges		780.25	1.852	1.852		738.11	1.699	1.699	738.11	1.699	221.43	1.189
Market Operator's Fee												
Distribution Use of System		442.96	1.051	1.051		419.03	0.964	0.964	419.03	0.964	125.71	0.675
Total Applicable Costs	6.997	10,773.38	26.813	33.810	6.418	10,191.45	23.454	29.872	10,435.13	24.032	3,057.43	16.996
Impact of allowed losses					0.578	581.93	3.359	3.937	581.93	3.359	174.58	2.351
Total Cost of Service	6.997	10,773.38	26.813	33.810	6.997	10,773.38	26.813	33.810	11,017.06	27.391	3,232.01	19.347
Cross Subsidy				7.200				7.200	3,034.11	7.200		7.200
Average Applicable Tariff				41.010				41.010	14,051.17	34.592	3,232.01	26.548

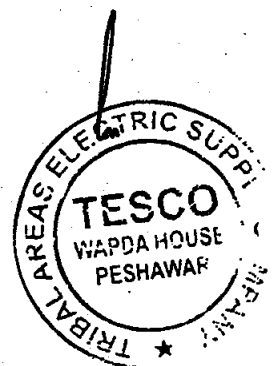
Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges (Proposal-1)			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C-2(b) (1 MW or More)			
Tariff Category	C2(b)				C2(b)							
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total	MDI Based	Volumetric	Hybrid	
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	6.997			6.997	6.418			6.418	242.00	0.578		0.578
Generation Cost - Capacity		9,550.17	23.261	23.261		9,034.31	20.935	20.935	9,034.31	20.935	2,710.29	14.655
Transmission Charges		780.25	1.865	1.865		738.11	1.710	1.710	738.11	1.710	221.43	1.197
Distribution Use of System		442.65	1.058	1.058		418.74	0.970	0.970	418.74	0.970	125.62	0.679
Total Applicable Costs	6.997	10,773.07	26.183	33.180	6.418	10,191.16	23.616	30.034	10,433.15	24.194	3,057.35	17.110
Impact of allowed losses					0.578	581.92	2.567	3.145	581.92	2.567	174.57	1.80
Total Cost of Service	6.997	10,773.07	26.183	33.180	6.997	10,773.07	26.183	33.180	11,015.07	26.762	3,231.92	18.907
Cross Subsidy				10.280				10.280	4,301.89	10.280		10.280
Average Applicable Tariff				43.460				43.460	15,316.96	37.042	3,231.92	29.187

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Industrial				Industrial				Industrial B-4 (1 MW or More)			
Tariff Category	B-4				B-4							
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total	MDI Based	Volumetric	Hybrid	
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	6.939			6.939	6.418			6.418	219.29	0.520		0.520
Generation Cost - Capacity		9,766.822	22.477	22.477		9,034.310	20.791	20.791	9,034.31	20.791	2,710.29	14.554
Transmission Charges		797.955	1.836	1.836		738.109	1.699	1.699	738.11	1.699	221.43	1.189
Distribution Use of System		453.004	1.043	1.043		419.029	0.964	0.964	419.03	0.964	125.71	0.675
Total Applicable Costs	6.939	11,017.78	25.356	32.294	6.418	10,191.45	23.454	29.872	10,410.73	23.974	3,057.43	16.938
Impact of allowed losses					0.520	826.33	1.902	2.422	826.33	1.902	247.90	1.331
Total Cost of Service	6.939	11,017.78	25.356	32.294	6.939	11,017.78	25.356	32.294	11,237.07	25.876	3,305.33	18.269
Cross Subsidy				8.196				8.196	4,303.45	8.196		8.196
Average Applicable Tariff				40.490				40.490	14,690.51	34.072	3,305.33	26.465

Cost Assessment Level	Cost of Service (Inclusive of Energy Loss Impact)				Cost of Service (Separated Energy Loss Impact)				PROPOSED Use of System Charges			
Consumption Category	Bulk Supply				Bulk Supply				Bulk Supply C3(b) (1 MW or More)			
Tariff Category	C3(b)				C3(b)							
Functional Cost Element	Variable	Fixed		Total	Variable	Fixed		Total	MDI Based	Volumetric	Hybrid	
	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kWh	Rs./kW/ Month	Rs./kWh	Rs./kW/ Month	Rs./kWh
Generation Cost - Energy	8.023			8.023	6.418			6.418	671.47	1.605		1.605
Generation Cost - Capacity		11,292.89	26.17	26.169		9,034.31	20.94	20.935	9,034.31	20.935	2,710.29	14.655
Transmission Charges		922.64	2.14	2.138		738.11	1.71	1.710	738.11	1.710	221.43	1.197
Market Operator's Fee												
Distribution Use of System		464.75	1.08	1.077		418.74	0.97	0.970	418.74	0.970	125.62	0.679
Total Applicable Costs	8.023	12,680.27	29.384	37.407	6.418	10,191.16	23.616	30.034	10,862.62	25.221	3,057.35	18.136
Impact of allowed losses					1.605	2,489.11	5.768	7.373	2,489.11	5.768	746.73	4.038
Total Cost of Service	8.023	12,680.27	29.384	37.407	8.023	12,680.27	29.384	37.407	13,351.74	30.989	3,804.08	22.174
Cross Subsidy				10.933				10.933	4,575.06	10.933		10.933
Average Applicable Tariff				48.340				48.340	17,926.80	41.922	3,804.08	33.106



Annexure - 2

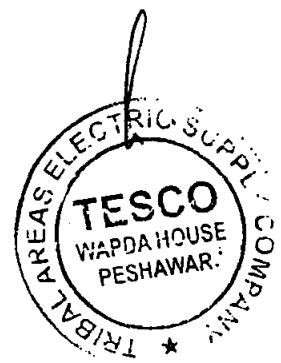


TRIBAL AREAS ELECTRIC SUPPLY COMPANY



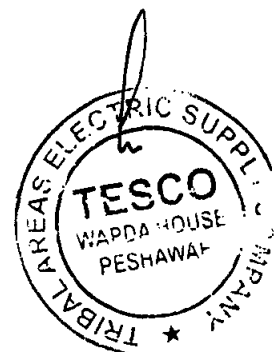
Cost of Service Study FY 2023-24

TESCO H/Q WAPDA HOUSE SHAMI ROAD



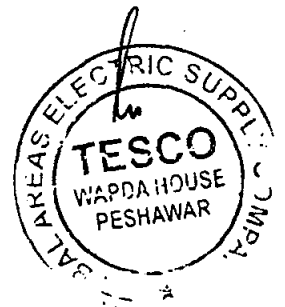
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Tribal Areas Electric Supply Company

Cost of Service Study for FY 2023-24

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 DISCOs to conduct Cost of Service Study. The methodology used to build the FACOS Model follows very closely the standards that are used internationally. The Model performs the standard three steps encompassed in most of Cost Studies, namely, functionalization, classification, and allocation.

Major Steps of Cost of Service Study

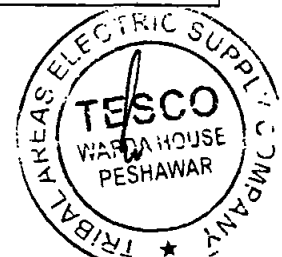
A class cost of service study begins with a detailed documentation of the numerous budgetary elements of the total revenue requirement. The detailed revenue requirements are the data inputs to the FACOS. At a high level, the FACOS process consists of the following three (3) basic steps:

1. **Functionalization** – The identification of each cost element as one of the basic utility services "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.

Fundamental Assumptions

Table 1

Description	FY 2023-24
Allowed Rate of Return (WACC) (It has been determined by NEPRA as per indexation adjustment for FY 2023-24)	21.14%
Capital Work in Progress ("CWIP")	CWIP 100%
Working Capital Allowance to be included in Rate Base	NO
Prior Year Adjustment (Rs. in Million)	-510
Demand Allocation Methodology	1 CP
Customer Growth %	0.24%
Model Year	FY 2023-24
Base Year	FY 2021-22

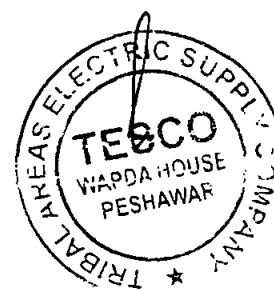


Projections and Revenue Requirement for Financial Year 2023-24

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

Table 2

DESCRIPTION	MODEL YEAR
	FY 2023-24
Proj. Units Purchased (MkWh)	1,787
Proj. Units Sold (MkWh)	1,626
Determined T&D Losses	9.01%
Average Monthly MDI (MW)	860
Energy Purchase Price (Rs/kWh)	6.60
Capacity Purchase Price (Rs/kW/Month)	6,066
UoS Rate (Rs/kW/Month)	495.60
POWER PURCHASE PRICE	PKR
Energy Charge	11,789,061,690
Capacity Charge	62,601,636,000
Transmission Charge + MoF	5,114,592,000
TOTAL	79,505,289,690
DISTRIBUTION MARGIN	
Pay & Allowances	1,292,000,000
Provision for Retirement Benefits	297,000,000
Maintenance	27,000,000
Traveling allowance	28,000,000
Vehicle maintenance	29,000,000
Other expenses + Wheeling Charges	741,000,000
TOTAL O&M COST	2,414,000,000
Less: Other Income	(277,000,000)
Depreciation	520,000,000
Return on Assets	657,095,511
TOTAL DISTRIBUTION MARGIN	3,314,095,511
Prior Year Adjustment	(510,000,000)
TOTAL REVENUE REQUIREMENT	82,309,385,201
AVERAGE TARIFF (Rs/kWh)	
Power Purchase Price-Unadj.	44.49
Power Purchase Price-Adjusted	48.90
Distribution Margin	2.04
Prior Year Adjustment	-0.31
AVERAGE TARIFF (Rs/kWh)	50.62



Summary of Revenue Requirement

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

Table 3

Summary of Revenue Requirement	
Description	FY 2023-24 Rs.
Energy Charges	11,789,061,690
Capacity Charges	62,601,636,000
UoSC + MoF	5,114,592,000
Power Purchase Price	79,505,289,690
O&M Cost	1,748,000,000
Wheeling Charges by PESCO	666,000,000
Depreciation	520,000,000
RORB	657,095,511
Other Income	-277,000,000
Distribution Margin	3,314,095,511
Prior Year Adjustment	-510,000,000
Revenue Requirement	82,309,385,201

Line Losses Charged on Voltage Levels

Line losses taken from TESCO MYT determination for FY 2020-21 to FY 2024-25

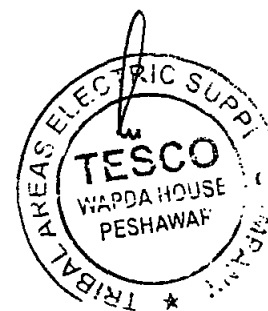
Table 4

Voltage Level	0.2 kV	0.4 kV	11 kV	132kV	Total
Losses %age	3.30%	4.21%	1.5%		9.01%

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



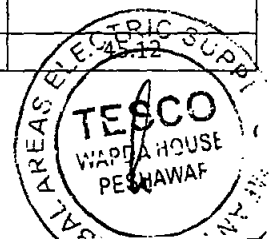
Classification by Voltage Level				
Voltage	132/66k V	11kV	0.4k V	0.2 kV
Customer Class	B4	B3	A1b	A1a
	C3a	C2a	A2b	A2a
	C3b	C2b	A2c	B1a
		H1	A3a	C1a
		H2	B1b	E1i
		K1a	B2a	E1ii
		K1b	B2b	E2
			C1b	
			C1c	
			D1a	
			D1b	
			D2a	
			D2b	
			G1	
			G2	

TESCO Tariff determined by NEPRA in July-2023

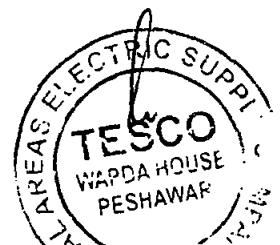
Tariffs for various categories of TESCO consumers as determined by NEPRA vide their Letter No. No. NEPRA/RIDG(Trf)/TRF-100/19271-19290 dated July, 25th 2023 are provided in **Table 6** below.

Table 6

TARIFF CATAGORIES		25-Jul-23	
		Fixed Charges	Variable Charges
		Rs/kW/M	Rs/kWh
A1 (a)	RESIDENTIAL -A1		
i	Up to 50 Units Life line		7.00
ii	51-100 units Life line		11.74
iii	01-100 Units (Protected)		13.51
iv	101-200 Units (Protected)		15.83
v	01-100 Units		28.45
vi	101-200 Units		33.92
vii	201-300 Units		37.11
viii	301-400Units		40.50
ix	401-500Units		42.71
x	501-600Units		44.13
xi	601-700Units		45.29
xii	Above 700 Units		50.23
A1(b)	Time of Use (TOU) - Peak		49.36
	Time of Use (TOU) - Off-Peak		43.04
E-1(i)	Temporary E-1 (i)		49.50
	COMMERCIAL - A2		
A2 (a)	Commercial - For peak load requirement up to 5 kW		



A2 (b)	Sanctioned load 5 kw and above	500	46.80
A2 (c)	Time of Use (TOU) - Peak (A-2)		48.72
	Time of Use (TOU) - Off-Peak	500	42.75
E-1 (ii)	Temporary E-1 (ii)		45.51
A2 (d)	Electric Vehicles		46.80
	INDUSTRIAL		
B1(a)	B1		41.54
B1(b)	B1- TOU (Peak)		45.10
	B1 - TOU (Off-peak)		39.54
B2 (a)	B2	500	41.04
B2 (b)	B2 - TOU (Peak)		45.04
	B2 - TOU (Off-peak)	500	39.33
B3	B3 - TOU (Peak)		45.04
	B3 - TOU (Off-peak)	460	39.33
B4	B4 - TOU (Peak)		45.04
	B4 - TOU (Off-peak)	440	39.24
E-2	Temporary E-2		42.62
	BULK		
C1 (a)	C1(a) up to 5 kW		45.80
C1 (b)	C1(b) exceeding 5 kW	500	45.30
C1 (c)	Time of Use (TOU) - Peak		48.72
	Time of Use (TOU) - Off-Peak	500	42.12
C2 (a)	C2 Supply at 11 kV	460	45.10
C2 (b)	Time of Use (TOU) - Peak		48.72
	Time of Use (TOU) - Off-Peak	460	41.92
C3 (a)	C3 Supply above 11 kV	440	45.00
C3 (b)	Time of Use (TOU) - Peak		48.72
	Time of Use (TOU) - Off-Peak	440	41.82
			27.37
	AGRICULTURAL TUBE WELLS - Tariff D		
D1 (a)	D1 Scarp		41.80
D1 (b)	Time of Use (TOU) - Peak		44.72
	Time of Use (TOU) - Off-Peak		37.47
D2(a)	Agricultural Tube Wells		31.47
D2 (b)	Time of Use (TOU) - Peak		31.47
	Time of Use (TOU) - Off-Peak	200	31.47
G	Public Lighting G		44.80
H	Residential Colonies H		44.80
K1	Special Contracts - Tariff K (A)K)		
K1 (i)	Time of Use (TOU) - Peak		
	Time of Use (TOU) - Off-Peak		
A3	General Service		44.73



Results from FACOS Model

Revenue Requirement Allocation (in Percentage)

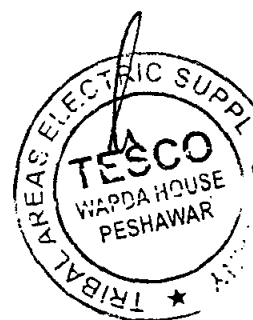
While developing the Fully Allocated Cost of Service Model, the detailed study for allocation of cost of service and rate base (for each component) to cost drivers (energy, demand and customer) was developed. Overall summary of the allocation is given in below

Revenue Requirement Allocation to Energy, Demand and Customer.

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

Table 7

Revenue Requirement Allocation Rs. (M)				
Description	Energy	Demand	Customer	Total
Energy Charges	11,789,061,690	-	-	11,789,061,690
Capacity Charges	-	62,601,636,000	-	62,601,636,000
T.UoSC & MOF	-	5,114,592,000	-	5,114,592,000
	-	-	-	-
Power Purchase Price	11,789,061,690	67,716,228,000	-	79,505,289,690
O&M Cost	-	1,561,889,267	852,110,733	2,414,000,000
Depreciation	-	415,400,746	104,599,254	520,000,000
RORB	-	540,922,201	116,173,311	657,095,511
Provision of bad debt	-	-	-	-
Other Income	-	(226,724,934)	(50,275,066)	(277,000,000)
Distribution Margin	-	2,291,487,279	1,022,608,232	3,314,095,511
Prior Year Adjustment	-	(329,292,269)	(180,707,731)	(510,000,000)
Revenue Requirement	11,789,061,690	69,678,423,010	841,900,501	82,309,385,201



Revenue as per NEPRA Tariff by Customer Category and Voltage Level

The Table 8 below provides detailed category-wise estimated revenue and average (Rs./kWh) thereof. Whereas the Table 9 is summary of the said category-wise estimated revenue based on the supply Voltage level of relevant customer category, with average rate (Rs./kWh) thereof. As already mentioned, the calculation of revenue is based on NEPRA determination vide their Letter No. No. NEPRA/RIDG(Trf)/TRF-100/19271-19290 dated July, 25th 2023

Table 8

Customer Class	Voltage	Sales GWh	Demand MW	Revenue as per NEPRA Tariff		Total	Rs. /kWh
				Fixed (Rs.M)	Variable (Rs. M)		
Residential -- A1(a)	0.2kV	1,180.98	431.72	-	44,432.29	44,432.29	37.62
Residential -- A1(b)	0.4kV	0.14	0.04	-	6.22	6.22	43.83
Commercial -- A2(a)	0.2kV	4.72	1.40	-	213.05	213.05	45.12
Commercial -- A2(b)	0.4kV	0.00	0.14	-	-	-	-
Commercial -- A2(c)	0.4kV	1.63	0.45	-	72.37	72.37	44.26
Industrial -- B1(a)	0.2kV	0.30	0.06	-	12.60	12.60	41.54
Industrial -- B2(a)	0.4kV	0.03	0.01	0.68	1.38	2.06	61.35
Industrial -- B1(b)	0.4kV	0.18	0.04	-	7.24	7.24	40.14
Industrial -- B2(b)	0.4kV	104.47	23.71	-	4,174.04	4,174.04	39.95
Industrial -- B3	11kV	278.11	55.00	-	11,058.81	11,058.81	39.76
Industrial -- B4	132/66kV	0.00	0.00	-	-	-	-
Bulk Supply -- C1(a)	0.2kV	0.06	0.02	-	2.86	2.86	45.80
Bulk Supply -- C1(b)	0.4kV	1.91	0.42	5.58	86.45	92.03	48.22
Bulk Supply -- C2(a)	11kV	0.20	0.00	0.13	9.22	9.35	45.72
Bulk Supply -- C3(a)	132/66kV	0.00	0.00	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	6.40	1.86	-	271.10	271.10	42.38
Bulk Supply -- C2(b)	11kV	12.91	2.57	-	555.15	555.15	43.02
Bulk Supply -- C3(b)	132/66kV	0.00	0.00	-	-	-	-
Agricultural --D1(a)	0.4kV	1.14	0.34	-	47.82	47.82	41.80
Agricultural --D2(a)	0.4kV	16.04	4.00	-	504.72	504.72	31.47
Agricultural --D2(b)	0.4kV	5.51	1.40	-	173.49	173.49	31.47
Agricultural --D1(b)	0.4kV	0.00	0.00	-	-	-	-
Temporary Supply -- E1(i)	0.2kV	0.00	0.00	-	-	-	-
Temporary Supply -- E1(ii)	0.2kV	0.00	0.01	-	-	-	-
Temporary Supply -- E2	0.2kV	0.00	0.00	-	-	-	-
Public Lighting -- G	0.4kV	0.00	0.05	-	-	-	-
Residential Colonies -- H	11kV	0.00	0.00	-	-	-	-
Azad Jammu Kashmir - K1a	11kV	0.00	0.00	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	0.00	0.00	-	-	-	-
A3 General	0.4kV	11.25	2.29	-	503.04	503.04	44.73
Total		1,626	526	6.39	62,131.85	62,138.24	38.22

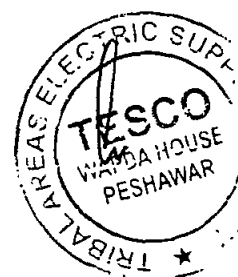
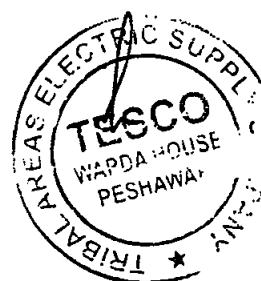


Table 9

FY 2022-23					
Customer Class	Sales (GWh)	MDI	Tariff Revenue		
			Fixed Charges (M.PKR)	Variable Charges (M.PKR)	Rs./ kWh
0.2 kV	1,186	433	0.000	45,213.342	38.120
0.4kV	149	35	6.260	5,295.329	35.608
11kV	291	58	0.127	11,623.180	39.912
132 kV	0	0	0.000	0.000	
Total	1,626	526	6.387	62,131.851	38.211

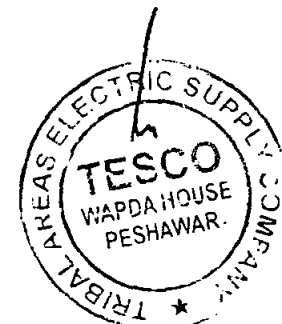


Cost of Service Functionalized Rates (Tariff Wise)

Based on the allocation of overall Revenue Requirement of TESCO to customers categories, the resultant functional amounts (Rs. in million) for each customer category are summarized at 10 below. Currently there is no customer at 132kv in TESCO.

Table 10

Classes	Volt. Level	No. of Customers	Energy	Demand	Generation Cost		Transm	Distribution		Total Cost
			GWh	MW	Energy (Rs.M)	Demand (Rs.M)	Cost (Rs.M)	Demand (Rs.M)	Cust. Cost (Rs.M)	
Residential -- A1(a)	0.2kv	402,542	1,180.98	431.72	8,627.94	51,663.85	4,220.84	2,195.44	104.28	66,812.35
Residential -- A1(b)	0.4kv	37	0.14	0.04	1.04	4.79	0.39	0.20	0.01	6.43
Commercial -- A2(a)	0.2kv	28,779	4.72	1.40	34.50	167.53	13.69	7.12	0.42	223.25
Commercial -- A2(b)	0.4kv	5	-	0.14	-	16.42	1.34	0.70	-	18.46
Commercial -- A2(c)	0.4kv	172	1.63	0.45	11.94	58.75	4.93	2.84	0.15	78.61
Industrial -- B1(a)	0.2kv	3,180	0.30	0.06	2.22	7.18	0.59	0.31	0.03	10.31
Industrial -- B2(a)	0.4kv	249	0.03	0.01	0.25	0.72	0.06	0.03	0.00	1.06
Industrial -- B1(b)	0.4kv	24	0.18	0.04	1.32	4.79	0.39	0.20	0.02	6.71
Industrial -- B2(b)	0.4kv	811	104.47	23.71	763.25	2,837.70	231.84	120.61	9.20	3,962.60
Industrial -- B3	11kv	58	278.11	55.00	1,945.81	6,303.11	514.97	267.86	24.49	9,056.24
Industrial -- B4	132/66 kv	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(a)	0.2kv	2	0.06	0.02	0.44	1.79	0.15	0.08	0.01	2.46
Bulk Supply -- C1(b)	0.4kv	23	1.91	0.42	13.94	50.26	4.11	2.14	0.17	70.61
Bulk Supply -- C2(a)	11kv	1	0.20	-	1.43	-	-	-	0.02	1.45
Bulk Supply -- C3(a)	132/66 kv	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kv	42	6.40	1.86	46.73	222.58	18.18	9.46	0.56	297.51
Bulk Supply -- C2(b)	11kv	6	12.91	2.57	90.30	294.53	24.06	12.51	1.14	422.54
Bulk Supply -- C3(b)	132/66 kv	-	-	-	-	-	-	-	-	-
Agricultural -- D1(a)	0.4kv	351	1.14	0.34	8.36	40.69	3.32	1.73	0.10	54.20
Agricultural -- D2(a)	0.4kv	5,078	16.04	4.00	117.17	478.66	39.11	20.34	1.41	656.70
Agricultural -- D2(b)	0.4kv	3	5.51	1.40	40.28	167.53	13.69	7.12	0.49	229.10
Agricultural -- D1(b)	0.4kv	-	-	-	-	-	-	-	-	-
Temporary Supply -- E1(i)	0.2kv	-	-	-	-	-	-	-	-	-
Temporary Supply -- E1(ii)	0.2kv	3	-	0.01	-	0.67	0.05	0.03	-	0.75
Temporary Supply -- E2	0.2kv	-	-	-	-	-	-	-	-	-
Public Lighting -- G	0.4kv	5	-	0.05	-	6.06	0.50	0.26	-	6.81
Residential Colonies -- H	11kv	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1a	11kv	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kv	-	-	-	-	-	-	-	-	-
A3 General	0.4kv	2,067	11.25	2.29	82.16	274.03	22.39	11.65	0.99	391.22
Total		443,439	1,626	526	11,789.06	62,601.64	5,114.59	2,660.61	143.48	82,309.39



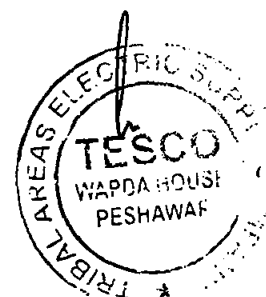
TESCO – Cost of Service Study FY 2023-24 Annex-2

Based on the cost drivers (energy, demand & customers) based allocation of overall Revenue Requirement of TESCO to the customers categories, the resultant functional (generation,

transmission, MO Fee & Distribution) rates (in terms of Rs./kWh, Rs./kW/Month and Rs./Customer / Month, as applicable) are summarized at **Table 11** below.

Table 11

FY 2023-24										
Classes	Volt. Level	No. of Customers	Energy	Demand	Generation Cost		Transm	Distribution		Total Rs./ kWh
			GWh	MW	Energy (Rs/kWh)	Demand (Rs/kW/ Month)	(Rs/kW /Month)	(Rs/kW/Month)	(Rs./ Cust/ Month)	
Residential -- A1(a)	0.2kV	402,542	1,180.98	431.72	7.31	9,972.54	814.74	423.78	22	56.57
Residential -- A1(b)	0.4kV	37	0.14	0.04	7.31	9,972.10	814.73	423.83	28	45.30
Commercial -- A2(a)	0.2kV	28,779	4.72	1.40	7.31	9,972.10	814.73	423.83	1	47.28
Commercial -- A2(b)	0.4kV	5	-	0.14	-	9,972.10	814.73	423.83	-	-
Commercial -- A2(c)	0.4kV	172	1.63	0.45	7.31	10,879.68	913.01	525.65	71	48.08
Industrial -- B1(a)	0.2kV	3,180	0.30	0.06	7.31	9,972.10	814.73	423.83	1	34.01
Industrial -- B2(a)	0.4kV	249	0.03	0.01	7.31	9,972.10	814.73	423.83	1	31.40
Industrial -- B1(b)	0.4kV	24	0.18	0.04	7.31	9,972.10	814.73	423.83	56	37.23
Industrial -- B2(b)	0.4kV	811	104.47	23.71	7.31	9,972.10	814.73	423.83	945	37.93
Industrial -- B3	11kV	58	278.11	55.00	7.00	9,550.17	780.25	405.84	35,260	32.56
Industrial -- B4	132/66 kV	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(a)	0.2kV	2	0.06	0.02	7.00	9,972.10	814.73	423.83	229	39.39
Bulk Supply -- C1(b)	0.4kV	23	1.91	0.42	7.31	9,972.10	814.73	423.83	603	37.00
Bulk Supply -- C2(a)	11kV	1	0.20	-	7.00	-	-	-	1,797	7.08
Bulk Supply -- C3(a)	132/66 kV	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	42	6.40	1.86	7.31	9,972.10	814.73	423.83	1,109	46.51
Bulk Supply -- C2(b)	11kV	6	12.91	2.57	7.00	9,550.17	780.25	405.79	16,675	32.74
Bulk Supply -- C3(b)	132/66 kV	-	-	-	-	-	-	-	-	-
Agricultural -- D1(a)	0.4kV	351	1.14	0.34	7.31	9,972.10	814.73	423.83	24	47.38
Agricultural -- D2(a)	0.4kV	5,078	16.04	4.00	7.31	9,972.10	814.73	423.83	23	40.95
Agricultural -- D2(b)	0.4kV	3	5.51	1.40	7.31	9,972.10	814.73	423.83	13,093	41.56
Agricultural -- D1(b)	0.4kV	-	-	-	-	-	-	-	-	-
Temporary Supply -- E1(i)	0.2kV	-	-	-	-	-	-	-	-	-
Temporary Supply -- E1(ii)	0.2kV	3	-	0.01	-	9,972.10	814.73	423.83	-	-
Temporary Supply -- E2	0.2kV	-	-	-	-	-	-	-	-	-
Public Lighting -- G	0.4kV	5	-	0.05	-	9,972.10	814.73	423.83	-	-
Residential Colonies -- H	11kV	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	2,067	11.25	2.29	7.31	9,972.10	814.73	423.83	40	34.79
Total		443,439	1,626	526	7.25	9,927.02	811.04	421.91	27	50.62



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

Table 12

FY 2023-24										
Classes	Volt. Level	No. of Customers	Energy	Demand	Generation Cost		Transm (Rs/kW /Month)	Distribution		Total Rs./kW/ Month
			GWh	MW	Energy (Rs/kW/ Month)	Demand (Rs/kW/ Month)		(Rs/kW/Mont h)	(Rs./ kW/ Month)	
Residential -- A1(a)	0.2kV	402,542	1,181	432	1,665.43	9,972.54	814.74	423.78	20.13	12,896.62
Residential -- A1(b)	0.4kV	37	0	0	2,160.67	9,972.10	814.73	423.83	26.05	13,397.38
Commercial -- A2(a)	0.2kV	28,779	5	1	2,053.36	9,972.10	814.73	423.83	24.82	13,288.83
Commercial -- A2(b)	0.4kV	5	-	0	-	9,972.10	814.73	423.83	-	11,210.65
Commercial -- A2(c)	0.4kV	172	2	0	2,211.99	10,879.68	913.01	525.65	26.98	14,557.31
Industrial -- B1(a)	0.2kV	3,180	0	0	3,077.09	9,972.10	814.73	423.83	37.19	14,324.94
Industrial -- B2(a)	0.4kV	249	0	0	3,412.36	9,972.10	814.73	423.83	41.14	14,664.16
Industrial -- B1(b)	0.4kV	24	0	0	2,745.21	9,972.10	814.73	423.83	33.10	13,988.97
Industrial -- B2(b)	0.4kV	811	104	24	2,682.18	9,972.10	814.73	423.83	32.34	13,925.17
Industrial -- B3	11kV	58	278	55	2,948.20	9,550.17	780.25	405.84	37.11	13,721.58
Industrial -- B4	132kV	-	-	-	-	-	-	-	-	-
Single P. Supply C1(a)	0.2kV	2	0	0	2,428.02	9,972.10	814.73	423.83	30.64	13,669.31
Single P. Supply C1(b)	0.4kV	23	2	0	2,766.28	9,972.10	814.73	423.83	33.35	14,010.29
Single P. Supply C2(a)	11kV	1	0	-	-	-	-	-	-	-
Single P. Supply C3(a)	132kV	-	-	-	-	-	-	-	-	-
Single P. Supply C1(c)	0.4kV	42	6	2	2,093.60	9,972.10	814.73	423.83	25.24	13,329.50
Single P. Supply C2(b)	11kV	6	13	3	2,927.86	9,550.17	780.25	405.79	36.86	13,700.94
Single P. Supply C3(b)	132kV	-	-	-	-	-	-	-	-	-
Agricultural --D1(a)	0.4kV	351	1	0	2,048.41	9,972.10	814.73	423.83	24.70	13,283.76
Agricultural --D2(a)	0.4kV	5,078	16	4	2,441.06	9,972.10	814.73	423.83	29.43	13,681.15
Agricultural --D2(b)	0.4kV	3	6	1	2,397.35	9,972.10	814.73	423.83	28.90	13,636.91
Agricultural --D1(b)	0.4kV	-	-	-	-	-	-	-	-	-
Temp. Supply - E1(i)	0.2kV	-	-	-	-	-	-	-	-	-
Temp. Supply- E1(ii)	0.2kV	3	-	0	-	9,972.10	814.73	423.83	-	11,210.65
Temp. Supply - E2	0.2kV	-	-	-	-	-	-	-	-	-
Public Lighting -- G	0.4kV	5	-	0	-	9,972.10	814.73	423.83	-	11,210.65
Res. Colonies -- H	11kV	-	-	-	-	-	-	-	-	-
AJK - K1a	11kV	-	-	-	-	-	-	-	-	-
AJK - K1b	11kV	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	2,067	11	2	2,989.84	9,972.10	814.73	423.83	36.05	14,236.54
Total		443,439	1,626	526	1,869.44	9,927.02	811.04	421.91	22.75	13,052.16

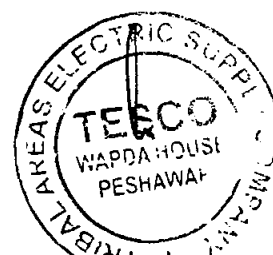


Unbundled Rates Rs./kWh (Tariff Wise)

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

Table 13

FY 2023-24							
Customer Category	Voltage level	Sales GWh	Demand MW	Generation Rs./kWh	T. UoSC Rs./kWh	D. UoSC Rs./kWh	Total Rate Rs./kWh
Residential -- A1(a)	0.2kV	1,180.98	431.72	51.05	3.57	1.95	56.57
Residential -- A1(b)	0.4kV	0.14	0.04	41.02	2.75	1.52	45.30
Commercial -- A2(a)	0.2kV	4.72	1.40	42.79	2.90	1.60	47.28
Commercial -- A2(b)	0.4kV	-	0.14	-	-	-	-
Commercial -- A2(c)	0.4kV	1.63	0.45	43.24	3.02	1.83	48.08
Industrial -- B1(a)	0.2kV	0.30	0.06	30.98	1.93	1.09	34.01
Industrial -- B2(a)	0.4kV	0.03	0.01	28.66	1.74	1.00	31.40
Industrial -- B1(b)	0.4kV	0.18	0.04	33.84	2.17	1.22	37.23
Industrial -- B2(b)	0.4kV	104.47	23.71	34.47	2.22	1.24	37.93
Industrial -- B3	11kV	278.11	55.00	29.66	1.85	1.05	32.56
Industrial -- B4	132/66kV	-	-	-	-	-	-
Single Point Supply -- C1(a)	0.2kV	0.06	0.02	35.73	2.35	1.31	39.39
Single Point Supply -- C1(b)	0.4kV	1.91	0.42	33.64	2.15	1.21	37.00
Single Point Supply -- C2(a)	11kV	0.20	-	7.00	-	0.09	7.08
Single Point Supply -- C3(a)	132/66kV	-	-	-	-	-	-
Single Point Supply -- C1(c)	0.4kV	6.40	1.86	42.10	2.84	1.57	46.51
Single Point Supply -- C2(b)	11kV	12.91	2.57	29.82	1.86	1.06	32.74
Single Point Supply -- C3(b)	132/66kV	-	-	-	-	-	-
Agricultural --D1(a)	0.4kV	1.14	0.34	42.87	2.91	1.60	47.38
Agricultural --D2(a)	0.4kV	16.04	4.00	37.15	2.44	1.36	40.95
Agricultural --D2(b)	0.4kV	5.51	1.40	37.69	2.48	1.38	41.56
Agricultural --D1(b)	0.4kV	-	-	-	-	-	-
Temporary Supply -- E1(i)	0.2kV	-	-	-	-	-	-
Temporary Supply -- E1(ii)	0.2kV	-	0.01	-	-	-	-
Temporary Supply -- E2	0.2kV	-	-	-	-	-	-
Public Lighting -- G	0.4kV	-	0.05	-	-	-	-
Residential Colonies -- H	11kV	-	-	-	-	-	-
Azad Jammu Kashmir - K1a	11kV	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	-	-	-	-	-	-
A3 General	0.4kV	11.25	2.29	31.67	1.99	1.12	34.79
Total		1,626	526	45.75	3.15	21.39	50.62



Volumetric Rates at Each Customer Category

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

Table 14

FY 2023-24							
Customer Category	Voltage Level	Sales GWh	Allocated Cost Rs. (M)		Fixed Charge Rs/kW/Month	Variable Charge Rs/kWh	Total Rate Rs/kWh
			Fixed Cost	Variable Cost			
Residential -- A1(a)	0.2kV	1180.98	58,080.12	8,732.23	11,211	7.39	56.57
Residential -- A1(b)	0.4kV	0.14	5.38	1.05	11,211	7.39	45.30
Commercial -- A2(a)	0.2kV	4.72	188.34	34.91	11,211	7.39	47.28
Commercial -- A2(b)	0.4kV	0.00	18.46	-	11,211	-	-
Commercial -- A2(c)	0.4kV	1.63	66.52	12.09	12,318	7.39	48.08
Industrial -- B1(a)	0.4kV	0.30	-	-	-	-	34.01
Industrial -- B2(a)	0.2kV	0.03	8.07	2.24	11,211	7.39	31.40
Industrial -- B1(b)	0.4kV	0.18	0.81	0.25	11,211	7.39	37.23
Industrial -- B2(b)	0.4kV	104.47	5.38	1.33	11,211	7.39	37.93
Industrial -- B3	0.4kV	278.11	3,190.15	772.45	11,211	7.39	32.56
Industrial -- B4	11kV	0.00	7,085.94	1,970.31	10,736	7.08	-
Bulk Supply -- C1(a)	132/66kV	0.06	-	-	-	-	39.39
Bulk Supply -- C1(b)	0.2kV	1.91	2.02	0.44	11,211	7.08	37.00
Bulk Supply -- C2(a)	0.4kV	0.20	56.50	14.11	11,211	7.39	7.08
Bulk Supply -- C3(a)	11kV	0.00	-	1.45	-	7.08	-
Bulk Supply -- C1(c)	132/66kV	6.40	-	-	-	-	46.51
Bulk Supply -- C2(b)	0.4kV	12.91	250.22	47.29	11,211	7.39	32.74
Bulk Supply -- C3(b)	11kV	0.00	331.10	91.43	10,736	7.08	-
Agricultural -- D1(a)	132/66kV	1.14	-	-	-	-	47.38
Agricultural -- D2(a)	0.4kV	16.04	45.74	8.46	11,211	7.39	40.95
Agricultural -- D2(b)	0.4kV	5.51	538.11	118.58	11,211	7.39	41.56
Agricultural -- D1(b)	0.4kV	0.00	188.34	40.76	11,211	7.39	-
Temporary Supply -- E1(i)	0.4kV	0.00	-	-	-	-	-
Temporary Supply -- E1(ii)	0.2kV	0.00	-	-	-	-	-
Temporary Supply -- E2	0.2kV	0.00	0.75	-	11,211	-	-
Public Lighting -- G	0.2kV	0.00	-	-	-	-	-
Residential Colonies -- H	0.4kV	0.00	6.81	-	11,211	-	-
Azad Jammu Kashmir - K1a	11kV	0.00	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	0.00	-	-	-	-	-
A3 General	0.4kV	11.25	308.07	83.15	11,211	7.39	34.79
Total		1,626	70,377	11,933	11,211	15.19	50.62

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

Based on assessment of revenue and the cost of service for each category of consumer, as per the details provided herein before, the Subsidy or Cross Subsidy (the difference between revenue and cost) in terms of million rupees against each customer tariff category is provided in **Table 15** below. It may be noted that the negative figure means the customer is subsidized (revenue less than cost)



whereas the positive figure shows that the customer is cross subsidizing (revenue more than cost). Average, in terms of Rs./kWh, assessment of subsidy or cross-subsidy, as the case may be, is also arrived in the last column of Table 15 below.

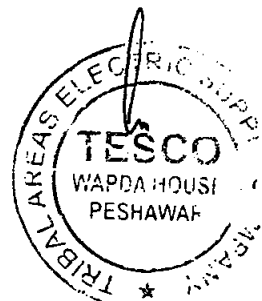
Table 15

FY 2023-24											
Customer Class	Voltage	Sales GWh	Demand MW	Revenue as per NEPRA Tariff		Total	Cost of Service		Total	Difference/ Subsidy M. PKR	Subsidy Rs. kWh
				Fixed (Rs.M)	Variable (Rs. M)		Fixed (Rs.M)	Variable (Rs. M)			
Residential -- A1(a)	0.2kV	1,180.98	431.72	-	44,432.29	44,432.29	58,080.12	8,732.23	66,812.35	(22,380.06)	(18.95)
Residential -- A1(b)	0.4kV	0.14	0.04	-	6.22	6.22	5.38	1.05	6.43	(0.21)	(1.47)
Commercial -- A2(a)	0.2kV	4.72	1.40	-	213.05	213.05	188.34	34.91	223.25	(10.20)	(2.16)
Commercial -- A2(b)	0.4kV	0.00	0.14	-	-	-	18.46	-	18.46	(18.46)	-
Commercial -- A2(c)	0.4kV	1.63	0.45	-	72.37	72.37	66.52	12.09	78.61	(6.24)	(3.82)
Industrial -- B1(a)	0.2kV	0.30	0.06	-	12.60	12.60	8.07	2.24	10.31	2.28	7.53
Industrial -- B2(a)	0.4kV	0.03	0.01	0.68	1.38	2.06	0.81	0.25	1.06	1.01	29.96
Industrial -- B1(b)	0.4kV	0.18	0.04	-	7.24	7.24	5.38	1.33	6.71	0.52	2.91
Industrial -- B2(b)	0.4kV	104.47	23.71	-	4,174.04	4,174.04	3,190.15	772.45	3,962.60	211.43	2.02
Industrial -- B3	11kV	278.11	55.00	-	11,058.81	11,058.81	7,085.94	1,970.31	9,056.24	2,002.57	7.20
Industrial -- B4	132/66kV	0.00	0.00	-	-	-	-	-	-	-	-
Bulk Supply -- C1(a)	0.2kV	0.06	0.02	-	2.86	2.86	2.02	0.44	2.46	0.40	6.41
Bulk Supply -- C1(b)	0.4kV	1.91	0.42	5.58	86.45	92.03	56.50	14.11	70.61	21.41	11.22
Bulk Supply -- C2(a)	11kV	0.20	0.00	0.13	9.22	9.35	-	1.45	1.45	7.90	38.64
Bulk Supply -- C3(a)	132/66kV	0.00	0.00	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	6.40	1.86	-	271.10	271.10	250.22	47.29	297.51	(26.41)	(4.13)
Bulk Supply -- C2(b)	11kV	12.91	2.57	-	555.15	555.15	331.10	91.43	422.54	132.61	10.28
Bulk Supply -- C3(b)	132/66kV	0.00	0.00	-	-	-	-	-	-	-	-
Agricultural -- D1(a)	0.4kV	1.14	0.34	-	47.82	47.82	45.74	8.46	54.20	(6.38)	(5.58)
Agricultural -- D2(a)	0.4kV	16.04	4.00	-	504.72	504.72	538.11	118.58	656.70	(151.97)	(9.48)
Agricultural -- D2(b)	0.4kV	5.51	1.40	-	173.49	173.49	188.34	40.76	229.10	(55.61)	(10.09)
Agricultural -- D1(b)	0.4kV	0.00	0.00	-	-	-	-	-	-	-	-
Temporary Supply -- E1(i)	0.2kV	0.00	0.00	-	-	-	-	-	-	-	-
Temporary Supply -- E1(ii)	0.2kV	0.00	0.01	-	-	-	0.75	-	0.75	(0.75)	-
Temporary Supply -- E2	0.2kV	0.00	0.00	-	-	-	-	-	-	-	-
Public Lighting -- G	0.4kV	0.00	0.05	-	-	-	6.81	-	6.81	(6.81)	-
Residential Colonies -- H	11kV	0.00	0.00	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1a	11kV	0.00	0.00	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	0.00	0.00	-	-	-	-	-	-	-	-
A3 General	0.4kV	11.25	2.29	-	503.04	503.04	308.07	83.15	391.22	111.82	9.94
Total		1,626	526	6.39	62,131.85	62,138.24	70,376.84	11,932.54	82,309.39	(20,171.15)	(12.41)

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

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

- If this ratio is less than one, the relevant customer class is subsidized, i.e. the tariff revenue is less than the allocated cost;

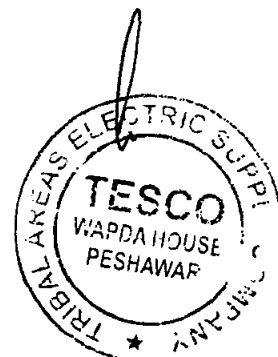


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- If this ratio is greater than one, the relevant customer class is cross subsidizing, i.e. the tariff revenue is higher than the allocated cost; and
- If this ratio is equal to one, the customer class is at adequately priced vis-à-vis the allocated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

Table 16

FY 2023-24														
Customer Class	Voltage	Sales GWh	Demand MW	Revenue as per NEPRA Tariff		Total	Cost of Service		Total	Difference/Subsidy - M. PKR		Revenue to Cost Ratio		Rs. /kWh
				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	1,180.98	431.72	-	44,432.29	44,432.29	58,080.12	8,732.23	66,812.35	58,080.12	(35,700.07)	-	5.09	37.62
Residential -- A1(b)	0.4kV	0.14	0.04	-	6.22	6.22	5.38	1.05	6.43	5.38	(5.17)	-	5.93	43.83
Commercial -- A2(a)	0.2kV	4.72	1.40	-	213.05	213.05	188.34	34.91	223.25	188.34	(178.14)	-	6.10	45.12
Commercial -- A2(b)	0.4kV	0.00	0.14	-	-	-	18.46	-	18.46	18.46	-	-	-	-
Commercial -- A2(c)	0.4kV	1.63	0.45	-	72.37	72.37	66.52	12.09	78.61	66.52	(60.28)	-	5.99	44.26
Industrial -- B1(a)	0.2kV	0.30	0.06	-	12.60	12.60	8.07	2.24	10.31	8.07	(10.35)	-	5.62	41.54
Industrial -- B2(a)	0.4kV	0.03	0.01	0.68	1.38	2.06	0.81	0.25	1.06	0.12	(1.13)	0.85	5.55	61.35
Industrial -- B1(b)	0.4kV	0.18	0.04	-	7.24	7.24	5.38	1.33	6.71	5.38	(5.91)	-	5.43	40.14
Industrial -- B2(b)	0.4kV	104.47	23.71	-	4,174.04	4,174.04	3,190.15	772.45	3,962.60	3,190.15	(3,401.58)	-	5.40	39.95
Industrial -- B3	11kV	278.11	55.00	-	11,058.81	11,058.81	7,085.94	1,970.31	9,056.24	7,085.94	(9,088.50)	-	5.61	39.76
Industrial -- B4	132/66kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(a)	0.2kV	0.06	0.02	-	2.86	2.86	2.02	0.44	2.46	2.02	(2.42)	-	6.46	45.80
Bulk Supply -- C1(b)	0.4kV	1.91	0.42	5.58	86.45	92.03	56.50	14.11	70.61	50.92	(72.34)	0.10	6.13	48.22
Bulk Supply -- C2(a)	11kV	0.20	0.00	0.13	9.22	9.35	-	1.45	1.45	(0.13)	(7.77)	-	6.37	45.72
Bulk Supply -- C3(a)	132/66kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Bulk Supply -- C1(c)	0.4kV	6.40	1.86	-	271.10	271.10	250.22	47.29	297.51	250.22	(223.81)	-	5.73	42.38
Bulk Supply -- C2(b)	11kV	12.91	2.57	-	555.15	555.15	331.10	91.43	422.54	331.10	(463.72)	-	6.07	43.02
Bulk Supply -- C3(b)	132/66kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Agricultural -- D1(a)	0.4kV	1.14	0.34	-	47.82	47.82	45.74	8.46	54.20	45.74	(39.36)	-	5.65	41.80
Agricultural -- D2(a)	0.4kV	16.04	4.00	-	504.72	504.72	538.11	118.58	656.70	538.11	(386.14)	-	4.26	31.47
Agricultural -- D2(b)	0.4kV	5.51	1.40	-	173.49	173.49	188.34	40.76	229.10	188.34	(132.73)	-	4.26	31.47
Agricultural -- D1(b)	0.4kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Temporary Supply -- E1(i)	0.2kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Temporary Supply -- E1(ii)	0.2kV	0.00	0.01	-	-	-	0.75	-	0.75	0.75	-	-	-	-
Temporary Supply -- E2	0.2kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Public Lighting -- G	0.4kV	0.00	0.05	-	-	-	6.81	-	6.81	6.81	-	-	-	-
Residential Colonies -- H	11kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1a	11kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
Azad Jammu Kashmir - K1b	11kV	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-
A3 General	0.4kV	11.25	2.29	-	503.04	503.04	308.07	83.15	391.22	308.07	(419.89)	-	6.05	44.73
Total		1,626	526	6.39	62,131.85	62,138.24	70,376.84	11,932.54	82,309.39	70,370.45	(50,199.31)	0.00	5.21	38.22

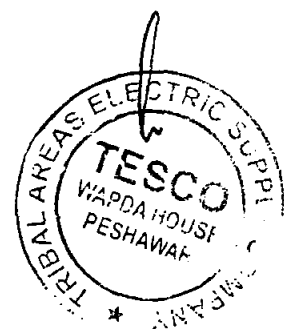


Revenue, Cost of Service and Subsidies (Rs./kWh)

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

Table 17

FY 2023-24						
Customer Class	Voltage	Sale GWh	Revenue Rs./kWh	Cost of Service Rs. /kWh	Subsidy Rs. / kWh	Revenue to Cost Ratio
Residential -- A1(a)	0.2kV	1,180.98	37.62	56.57	(18.95)	0.67
Residential -- A1(b)	0.4kV	0.14	43.83	45.30	(1.47)	0.97
Commercial -- A2(a)	0.2kV	4.72	45.12	47.28	(2.16)	0.95
Commercial -- A2(b)	0.4kV	0.00	0.00	-	-	-
Commercial -- A2(c)	0.4kV	1.63	44.26	48.08	(3.82)	0.92
Industrial -- B1(a)	0.2kV	0.30	41.54	34.01	7.53	1.22
Industrial -- B2(a)	0.4kV	0.03	61.35	31.40	29.96	1.95
Industrial -- B1(b)	0.4kV	0.18	40.14	37.23	2.91	1.08
Industrial -- B2(b)	0.4kV	104.47	39.95	37.93	2.02	1.05
Industrial -- B3	11kV	278.11	39.76	32.56	7.20	1.22
Industrial -- B4	132/66kV	0.00	0.00	-	-	-
Bulk Supply -- C1(a)	0.2kV	0.06	45.80	39.39	6.41	1.16
Bulk Supply -- C1(b)	0.4kV	1.91	48.22	37.00	11.22	1.30
Bulk Supply -- C2(a)	11kV	0.20	45.72	7.08	38.64	6.45
Bulk Supply -- C3(a)	132/66kV	0.00	0.00	-	-	-
Bulk Supply -- C1(c)	0.4kV	6.40	42.38	46.51	(4.13)	0.91
Bulk Supply -- C2(b)	11kV	12.91	43.02	32.74	10.28	1.31
Bulk Supply -- C3(b)	132/66kV	0.00	0.00	-	-	-
Agricultural --D1(a)	0.4kV	1.14	41.80	47.38	(5.58)	0.88
Agricultural --D2(a)	0.4kV	16.04	31.47	40.95	(9.48)	0.77
Agricultural --D2(b)	0.4kV	5.51	31.47	41.56	(10.09)	0.76
Agricultural --D1(b)	0.4kV	0.00	0.00	-	-	-
Temporary Supply -- E1(i)	0.2kV	0.00	0.00	-	-	-
Temporary Supply -- E1(ii)	0.2kV	0.00	0.00	-	-	-
Temporary Supply -- E2	0.2kV	0.00	0.00	-	-	-
Public Lighting -- G	0.4kV	0.00	0.00	-	-	-
Residential Colonies -- H	11kV	0.00	0.00	-	-	-
Azad Jammu Kashmir - K1a	11kV	0.00	0.00	-	-	-
Azad Jammu Kashmir - K1b	11kV	0.00	0.00	-	-	-
A3 General	0.4kV	11.25	44.73	34.79	9.94	1.29
Sub Total		1,626.00	38.22	50.62	(12.41)	0.75



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

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

1. Currently, there is no 132/66 KV customer within TESCO, therefore, in the absence of real data, no values thereof could be assessed. A broad assessment of the Cost of Service of such customers can, however, be inferred based on analogy of other closest category of customers (e.g. B-3 for B-4 and C-2 for C-3) by incorporating differential of energy losses.
2. Although the Industrial B-3 and Bulk Supply C2 customers are at 11 KV connection level, however, any of these customers may not fall within the definition of BPC as contained in NEPRA Act, 1997, being less than 1 kW.
3. The customer categories A-2 and A-3, for purposes of cost of service assessment, have been considered at 0.4 KV level. However, these customers, based on the sanctioned load, may be connected at 11 KV level, as required.

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

For interest of the readers to glance through overall master data for result of TESCO's Cost of Service Study (FY 2023-24), following Tables (Table 18 to Table 23) 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 (30~35%) 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.

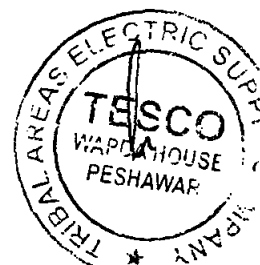


Table 18

FY 2023-24													
Tariff Category	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission Cost	Distribution Cost		Total Cost (Rs. M)	Cost Rs./kWh sold	Cost Rs./kWh Purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs.M)	Demand (Rs.M)	(Rs. M)	Demand (Rs.M)	Customer Cost (Rs.M)			
Residential -- A1(a)	0.2kV	1,180.985	1301.391	431.72	470.62	8627.94	51663.85	4220.84	2195.44	104.28	66812.351	56.573	51.339
Residential -- A1(b)	0.4kV	0.142	0.155	0.04	0.04	1.04	4.79	0.39	0.20	0.01	6.431	45.300	41.555
Commercial -- A2(a)	0.2kV	4.722	5.147	1.40	1.53	34.50	167.53	13.69	7.12	0.42	223.252	47.281	43.373
Commercial -- A2(b)	0.4kV	0.000	0.000	0.14	0.15	0.00	16.42	1.34	0.70	0.00	18.464	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0.45	0.49	11.94	58.75	4.93	2.84	0.15	78.609	48.080	44.106
Industrial -- B1(a)	0.2kV	0.303	0.331	0.06	0.07	2.22	7.18	0.59	0.31	0.03	10.314	34.011	31.200
Industrial -- B2(a)	0.4kV	0.034	0.037	0.01	0.01	0.25	0.72	0.06	0.03	0.00	1.056	31.395	28.800
Industrial -- B1(b)	0.4kV	0.180	0.197	0.04	0.04	1.32	4.79	0.39	0.20	0.02	6.715	37.228	34.151
Industrial -- B2(b)	0.4kV	104.473	113.886	23.71	25.85	763.25	2837.70	231.84	120.61	9.20	3962.602	37.929	34.794
Industrial -- B3	11kV	278.108	303.165	55.00	58.14	1945.81	6303.11	514.97	267.86	24.49	9056.242	32.564	29.872
Industrial -- B4	132/66kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0.02	0.02	0.44	1.79	0.15	0.08	0.01	2.460	39.390	36.134
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0.42	0.46	13.94	50.26	4.11	2.14	0.17	70.612	37.001	33.943
Bulk Supply -- C2(a)	11kV	0.205	0.223	0.00	0.00	1.43	0.00	0.00	0.00	0.02	1.449	7.085	31.779
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	1.86	2.03	46.73	222.58	18.18	9.46	0.56	297.514	46.514	42.669
Bulk Supply -- C2(b)	11kV	12.906	14.068	2.57	2.72	90.30	294.53	24.06	12.51	1.14	422.537	32.741	30.034
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Agricultural -- D1(a)	0.4kV	1.144	1.247	0.34	0.37	8.36	40.69	3.32	1.73	0.10	54.198	47.377	43.461
Agricultural -- D2(a)	0.4kV	16.038	17.483	4.00	4.36	117.17	478.66	39.11	20.34	1.41	656.695	40.946	37.561
Agricultural -- D2(b)	0.4kV	5.513	6.010	1.40	1.53	40.28	167.53	13.69	7.12	0.49	229.100	41.557	38.122
Agricultural -- D1(b)	0.4kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0.01	0.01	0.00	0.67	0.05	0.03	0.00	0.749	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0.05	0.06	0.00	6.06	0.50	0.26	0.00	6.813	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2.29	2.50	82.16	274.03	22.39	11.65	0.99	391.220	34.787	31.912
Total		1626	1787	526	571	11789.062	62601.636	5114.592	2660.613	143.482	82309.385	50.621	46.073

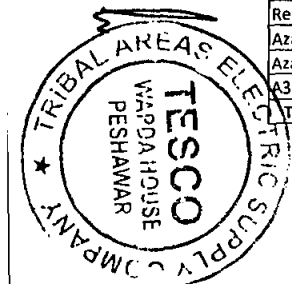


Table 19

FY 2023-24 (kW or kWh at Consumer)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission	Distribution Cost		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)	Demand (Rs./kW/M)	Customer Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	1180.985	1301.391	432	471	7.306	9972.541	814.738	423.780	20.130	11231.188	49.268	56.573
Residential -- A1(b)	0.4kV	0.142	0.155	0	0	7.306	9972.101	814.727	423.827	26.051	11236.706	37.994	45.300
Commercial -- A2(a)	0.2kV	4.722	5.147	1	2	7.306	9972.101	814.727	423.827	24.818	11235.473	39.975	47.281
Commercial -- A2(b)	0.4kV	0.000	0.000	0	0	0.000	9972.101	814.727	423.827	0.000	11210.655	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0	0	7.306	10879.678	913.014	525.649	26.980	12345.321	40.774	48.080
Industrial -- B1(a)	0.2kV	0.303	0.331	0	0	7.306	9972.101	814.727	423.827	37.192	11247.847	26.705	34.011
Industrial -- B2(a)	0.4kV	0.034	0.037	0	0	7.306	9972.101	814.727	423.827	41.143	11251.797	24.090	31.395
Industrial -- B1(b)	0.4kV	0.180	0.197	0	0	7.306	9972.101	814.727	423.827	33.099	11243.754	29.923	37.228
Industrial -- B2(b)	0.4kV	104.473	113.886	24	26	7.306	9972.101	814.727	423.827	32.339	11242.994	30.624	37.929
Industrial -- B3	11kV	278.108	303.165	55	58	6.997	9550.169	780.255	405.844	37.112	10773.380	25.567	32.564
Industrial -- B4	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0	0	6.997	9972.101	814.727	423.827	30.643	11241.298	32.393	39.390
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0	0	7.306	9972.101	814.727	423.827	33.353	11244.008	29.695	37.001
Bulk Supply -- C2(a)	11kV	0.205	0.223	0	0	6.997	0.000	0.000	0.000	0.000	0.000	0.000	6.997
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	2	2	7.306	9972.101	814.727	423.827	25.242	11235.897	39.208	46.514
Bulk Supply -- C2(b)	11kV	12.906	14.068	3	3	6.997	9550.169	780.255	405.791	36.856	10773.071	25.744	32.741
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Agricultural -- D1(a)	0.4kV	1.144	1.247	0	0	7.306	9972.101	814.727	423.827	24.698	11235.352	40.071	47.377
Agricultural -- D2(a)	0.4kV	16.038	17.483	4	4	7.306	9972.101	814.727	423.827	29.432	11240.086	33.640	40.946
Agricultural -- D2(b)	0.4kV	5.513	6.010	1	2	7.306	9972.101	814.727	423.827	28.905	11239.559	34.252	41.557
Agricultural -- D1(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0	0	0.000	9972.101	814.727	423.827	0.000	11210.655	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0	0	0.000	9972.101	814.727	423.827	0.000	11210.655	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2	2	7.306	9972.101	814.727	423.827	36.048	11246.703	27.481	34.787
Total		1626.00	1787	526	571	7.250	9927.017	811.043	421.905	22.753	11182.718	43.370	50.621



Table 20

FY 2023-24 (kW or kWh CDP)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission	Distribution Cost		Total Fixed Cost (Rs./kW/ M)	Fixed Cost Rs./kWh Purchased	Total Cost Rs./kWh Purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kW/M)	Cost (Rs./kW/M)	Demand (Rs./kW/M)	Customer Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	1180.985	1301.391	432	471	6.630	9148.281	747.397	388.753	18.466	10302.897	44.709	51.339
Residential -- A1(b)	0.4kV	0.142	0.155	0	0	6.702	9147.877	747.387	388.797	23.898	10307.959	34.854	41.555
Commercial -- A2(a)	0.2kV	4.722	5.147	1	2	6.702	9147.877	747.387	388.797	22.767	10306.828	36.671	43.373
Commercial -- A2(b)	0.4kV	0.000	0.000	0	0	0.000	9147.877	747.387	388.797	0.000	10284.061	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0	0	6.702	9980.440	837.551	482.203	24.750	11324.943	37.404	44.106
Industrial -- B1(a)	0.2kV	0.303	0.331	0	0	6.702	9147.877	747.387	388.797	34.118	10318.179	24.498	31.200
Industrial -- B2(a)	0.4kV	0.034	0.037	0	0	6.702	9147.877	747.387	388.797	37.742	10321.803	22.099	28.800
Industrial -- B1(b)	0.4kV	0.180	0.197	0	0	6.702	9147.877	747.387	388.797	30.363	10314.424	27.449	34.151
Industrial -- B2(b)	0.4kV	104.473	113.886	24	26	6.702	9147.877	747.387	388.797	29.666	10313.727	28.093	34.794
Industrial -- B3	11kV	278.108	303.165	55	58	6.418	9034.310	738.109	383.922	35.107	10191.448	23.454	29.872
Industrial -- B4	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0	0	6.418	9147.877	747.387	388.797	28.111	10312.171	29.716	36.134
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0	0	6.702	9147.877	747.387	388.797	30.596	10314.657	27.241	33.943
Bulk Supply -- C2(a)	11kV	0.205	0.223	0	0	6.418	0.000	0.000	0.000	0.000	0.000	0.000	6.418
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	2	2	6.702	9147.877	747.387	388.797	23.156	10307.217	35.968	42.669
Bulk Supply -- C2(b)	11kV	12.906	14.068	3	3	6.418	9034.310	738.109	383.872	34.865	10191.156	23.616	30.034
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Agricultural --D1(a)	0.4kV	1.144	1.247	0	0	6.702	9147.877	747.387	388.797	22.656	10306.717	36.759	43.461
Agricultural --D2(a)	0.4kV	16.038	17.483	4	4	6.702	9147.877	747.387	388.797	26.999	10311.060	30.859	37.561
Agricultural --D2(b)	0.4kV	5.513	6.010	1	2	6.702	9147.877	747.387	388.797	26.516	10310.577	31.421	38.122
Agricultural --D1(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0	0	0.000	9147.877	747.387	388.797	0.000	10284.061	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0	0	0.000	9147.877	747.387	388.797	0.000	10284.061	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2	2	6.702	9147.877	747.387	388.797	33.069	10317.130	25.210	31.912
Total		1626.00	1787	526	571	6.599	9136.820	746.484	388.321	20.941	10292.567	39.474	46.073

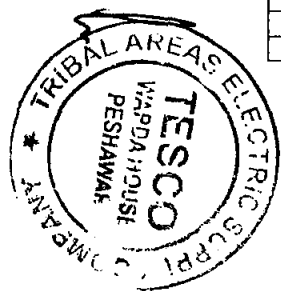


Table 21

FY 2023-24 (kWh at Consumer)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission	Distribution Cost		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)	Demand (Rs./kWh)	Customer Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	1180.985	1301.391	432	471	7.306	43.746	3.574	1.859	0.088	49.268	49.268	56.573
Residential -- A1(b)	0.4kV	0.142	0.155	0	0	7.306	33.718	2.755	1.433	0.088	37.994	37.994	45.300
Commercial -- A2(a)	0.2kV	4.722	5.147	1	2	7.306	35.480	2.899	1.508	0.088	39.975	39.975	47.281
Commercial -- A2(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0	0	7.306	35.933	3.015	1.736	0.089	40.774	40.774	48.080
Industrial -- B1(a)	0.2kV	0.303	0.331	0	0	7.306	23.676	1.934	1.006	0.088	26.705	26.705	34.011
Industrial -- B2(a)	0.4kV	0.034	0.037	0	0	7.306	21.350	1.744	0.907	0.088	24.090	24.090	31.395
Industrial -- B1(b)	0.4kV	0.180	0.197	0	0	7.306	26.538	2.168	1.128	0.088	29.923	29.923	37.228
Industrial -- B2(b)	0.4kV	104.473	113.886	24	26	7.306	27.162	2.219	1.154	0.088	30.624	30.624	37.929
Industrial -- B3	11kV	278.108	303.165	55	58	6.997	22.664	1.852	0.963	0.088	25.567	25.567	32.564
Industrial -- B4	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0	0	6.997	28.736	2.348	1.221	0.088	32.393	32.393	39.390
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0	0	7.306	26.336	2.152	1.119	0.088	29.695	29.695	37.001
Bulk Supply -- C2(a)	11kV	0.205	0.223	0	0	6.997	0.000	0.000	0.000	0.088	0.088	0.088	7.085
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	2	2	7.306	34.798	2.843	1.479	0.088	39.208	39.208	46.514
Bulk Supply -- C2(b)	11kV	12.906	14.068	3	3	6.997	22.822	1.865	0.970	0.088	25.744	25.744	32.741
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Agricultural --D1(a)	0.4kV	1.144	1.247	0	0	7.306	35.566	2.906	1.512	0.088	40.071	40.071	47.377
Agricultural --D2(a)	0.4kV	16.038	17.483	4	4	7.306	29.845	2.438	1.268	0.088	33.640	33.640	40.946
Agricultural --D2(b)	0.4kV	5.513	6.010	1	2	7.306	30.389	2.483	1.292	0.088	34.252	34.252	41.557
Agricultural --D1(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2	2	7.306	24.367	1.991	1.036	0.088	27.481	27.481	34.787
Total		1626.00	1787	526	571	7.250	38.500	3.146	1.636	0.088	43.370	43.370	50.621



Table 22

FY 2023-24 (kWh at CDP)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission	Distribution Cost		Total Fixed Cost (Rs./kWh)	Fixed Cost Rs./kWh Purchased	Total Cost Rs./kWh Purchased
		Sold	Purchased	at Meter	at CDP	Energy (Rs./kWh)	Demand (Rs./kWh)	Cost (Rs./kWh)	Demand (Rs./kWh)	Customer Cost (Rs./kWh)			
Residential -- A1(a)	0.2kV	1180.985	1301.391	432	471	6.630	39.699	3.243	1.687	0.080	44.709	44.709	51.339
Residential -- A1(b)	0.4kV	0.142	0.155	0	0	6.702	30.931	2.527	1.315	0.081	34.854	34.854	41.555
Commercial -- A2(a)	0.2kV	4.722	5.147	1	2	6.702	32.548	2.659	1.383	0.081	36.671	36.671	43.373
Commercial -- A2(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0	0	6.702	32.963	2.766	1.593	0.082	37.404	37.404	44.106
Industrial -- B1(a)	0.2kV	0.303	0.331	0	0	6.702	21.719	1.774	0.923	0.081	24.498	24.498	31.200
Industrial -- B2(a)	0.4kV	0.034	0.037	0	0	6.702	19.585	1.600	0.832	0.081	22.099	22.099	28.800
Industrial -- B1(b)	0.4kV	0.180	0.197	0	0	6.702	24.345	1.989	1.035	0.081	27.449	27.449	34.151
Industrial -- B2(b)	0.4kV	104.473	113.886	24	26	6.702	24.917	2.036	1.059	0.081	28.093	28.093	34.794
Industrial -- B3	11kV	278.108	303.165	55	58	6.418	20.791	1.699	0.884	0.081	23.454	23.454	29.872
Industrial -- B4	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0	0	6.418	26.361	2.154	1.120	0.081	29.716	29.716	36.134
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0	0	6.702	24.159	1.974	1.027	0.081	27.241	27.241	33.943
Bulk Supply -- C2(a)	11kV	0.205	0.223	0	0	6.418	0.000	0.000	0.000	0.081	0.081	0.081	6.499
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	2	2	6.702	31.922	2.608	1.357	0.081	35.968	35.968	42.669
Bulk Supply -- C2(b)	11kV	12.906	14.068	3	3	6.418	20.935	1.710	0.890	0.081	23.616	23.616	30.034
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Agricultural -- D1(a)	0.4kV	1.144	1.247	0	0	6.702	32.626	2.666	1.387	0.081	36.759	36.759	43.461
Agricultural -- D2(a)	0.4kV	16.038	17.483	4	4	6.702	27.378	2.237	1.164	0.081	30.859	30.859	37.561
Agricultural -- D2(b)	0.4kV	5.513	6.010	1	2	6.702	27.877	2.278	1.185	0.081	31.421	31.421	38.122
Agricultural -- D1(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2	2	6.702	22.353	1.826	0.950	0.081	25.210	25.210	31.912
Total		1626.00	1787	526	571	6.599	35.041	2.863	1.489	0.080	39.474	39.474	46.073



Table 23

FY 2023-24 (Cost of Losses on kW or kWh)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission	Distribution Cost		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)	Demand (Rs./kW/M)	Customer Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	1180.985	1301.391	432	471	0.676	824.260	67.340	35.027	1.664	928.291	4.558	5.234
Residential -- A1(b)	0.4kV	0.142	0.155	0	0	0.604	824.224	67.340	35.031	2.153	928.747	3.140	3.744
Commercial -- A2(a)	0.2kV	4.722	5.147	1	2	0.604	824.224	67.340	35.031	2.051	928.645	3.304	3.908
Commercial -- A2(b)	0.4kV	0.000	0.000	0	0	0.000	824.224	67.340	35.031	0.000	926.594	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0	0	0.604	899.238	75.463	43.446	2.230	1020.377	3.370	3.974
Industrial -- B1(a)	0.2kV	0.303	0.331	0	0	0.604	824.224	67.340	35.031	3.074	929.668	2.207	2.811
Industrial -- B2(a)	0.4kV	0.034	0.037	0	0	0.604	824.224	67.340	35.031	3.401	929.994	1.991	2.595
Industrial -- B1(b)	0.4kV	0.180	0.197	0	0	0.604	824.224	67.340	35.031	2.736	929.330	2.473	3.077
Industrial -- B2(b)	0.4kV	104.473	113.886	24	26	0.604	824.224	67.340	35.031	2.673	929.267	2.531	3.135
Industrial -- B3	11kV	278.108	303.165	55	58	0.578	515.859	42.146	21.922	2.005	581.932	2.113	2.691
Industrial -- B4	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0	0	0.578	824.224	67.340	35.031	2.533	929.127	2.677	3.256
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0	0	0.604	824.224	67.340	35.031	2.757	929.351	2.454	3.058
Bulk Supply -- C2(a)	11kV	0.205	0.223	0	0	0.578	0.000	0.000	0.000	0.000	0.000	0.007	0.586
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	2	2	0.604	824.224	67.340	35.031	2.086	928.680	3.241	3.845
Bulk Supply -- C2(b)	11kV	12.906	14.068	3	3	0.578	515.859	42.146	21.919	1.991	581.915	2.128	2.706
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Agricultural -- D1(a)	0.4kV	1.144	1.247	0	0	0.604	824.224	67.340	35.031	2.041	928.635	3.312	3.916
Agricultural -- D2(a)	0.4kV	16.038	17.483	4	4	0.604	824.224	67.340	35.031	2.433	929.026	2.780	3.384
Agricultural -- D2(b)	0.4kV	5.513	6.010	1	2	0.604	824.224	67.340	35.031	2.389	928.983	2.831	3.435
Agricultural -- D1(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0	0	0.000	824.224	67.340	35.031	0.000	926.594	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0	0	0.000	824.224	67.340	35.031	0.000	926.594	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2	2	0.604	824.224	67.340	35.031	2.980	929.573	2.271	2.875
Total		1626.00	1787	526	571	0.651	790.197	64.560	33.584	1.811	890.151	3.896	4.548

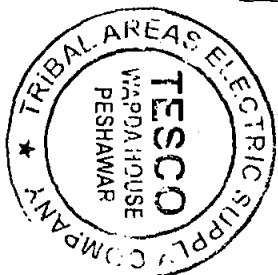
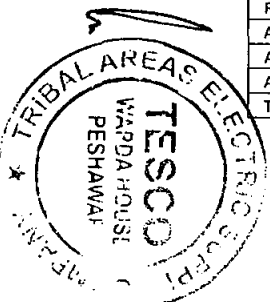


Table 24

FY 2023-24 (Cost of Losses on kWh)													
Classes	Voltage Level	Energy GWh		Demand MW		Generation Cost		Transmission	Distribution Cost		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)	Demand (Rs./kW/M)	Customer Cost (Rs./kW/M)			
Residential -- A1(a)	0.2kV	1180.985	1301.391	432	471	0.676	4.047	0.331	0.172	0.008	4.558	4.558	5.234
Residential -- A1(b)	0.4kV	0.142	0.155	0	0	0.604	2.787	0.228	0.118	0.007	3.140	3.140	3.744
Commercial -- A2(a)	0.2kV	4.722	5.147	1	2	0.604	2.933	0.240	0.125	0.007	3.304	3.304	3.908
Commercial -- A2(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Commercial -- A2(c)	0.4kV	1.635	1.782	0	0	0.604	2.970	0.249	0.143	0.007	3.370	3.370	3.974
Industrial -- B1(a)	0.2kV	0.303	0.331	0	0	0.604	1.957	0.160	0.083	0.007	2.207	2.207	2.811
Industrial -- B2(a)	0.4kV	0.034	0.037	0	0	0.604	1.765	0.144	0.075	0.007	1.991	1.991	2.595
Industrial -- B1(b)	0.4kV	0.180	0.197	0	0	0.604	2.193	0.179	0.093	0.007	2.473	2.473	3.077
Industrial -- B2(b)	0.4kV	104.473	113.886	24	26	0.604	2.245	0.183	0.095	0.007	2.531	2.531	3.135
Industrial -- B3	11kV	278.108	303.165	55	58	0.578	1.873	0.153	0.080	0.007	2.113	2.113	2.691
Industrial -- B4	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(a)	0.2kV	0.062	0.068	0	0	0.578	2.375	0.194	0.101	0.007	2.677	2.677	3.256
Bulk Supply -- C1(b)	0.4kV	1.908	2.080	0	0	0.604	2.177	0.178	0.093	0.007	2.454	2.454	3.058
Bulk Supply -- C2(a)	11kV	0.205	0.223	0	0	0.578	0.000	0.000	0.000	0.007	0.007	0.007	0.586
Bulk Supply -- C3(a)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk Supply -- C1(c)	0.4kV	6.396	6.973	2	2	0.604	2.876	0.235	0.122	0.007	3.241	3.241	3.845
Bulk Supply -- C2(b)	11kV	12.906	14.068	3	3	0.578	1.886	0.154	0.080	0.007	2.128	2.128	2.706
Bulk Supply -- C3(b)	132/66kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Agricultural --D1(a)	0.4kV	1.144	1.247	0	0	0.604	2.940	0.240	0.125	0.007	3.312	3.312	3.916
Agricultural --D2(a)	0.4kV	16.038	17.483	4	4	0.604	2.467	0.202	0.105	0.007	2.780	2.780	3.384
Agricultural --D2(b)	0.4kV	5.513	6.010	1	2	0.604	2.512	0.205	0.107	0.007	2.831	2.831	3.435
Agricultural --D1(b)	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(i)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E1(ii)	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Temporary Supply -- E2	0.2kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Public Lighting -- G	0.4kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Residential Colonies -- H	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1a	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Azad Jammu Kashmir - K1b	11kV	0.000	0.000	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
A3 General	0.4kV	11.246	12.259	2	2	0.604	2.014	0.165	0.086	0.007	2.271	2.271	2.875
Total		1626.00	1787	526	571	0.651	3.459	0.283	0.147	0.008	3.896	3.896	4.548



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,—

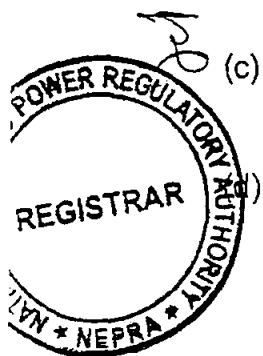
(a) "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Act No. XL of 1997), as amended from time to time;

(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;

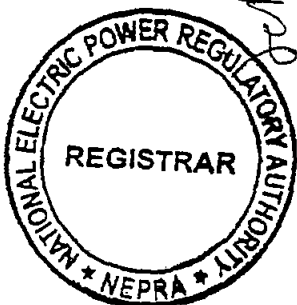
"Distribution Code" means the code prepared by the distribution licensees and approved by the Authority that defines the technical and operational standards and procedures for distribution licensees and all those connected to the distribution system;

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



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

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



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

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

PART II INTERCONNECTION

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

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

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

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

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

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

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

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

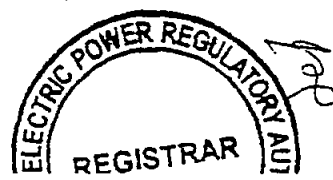
(a) The generation company may arrange the financing required for the construction of interconnection facilities by the network licensee. The network licensee and generation company shall enter into an agreement to mutually decide the terms and conditions for reimbursement of financing to the generation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

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

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

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

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PART III OPEN ACCESS

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

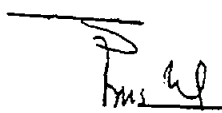
(4) The Authority shall give its decision in any matter referred to it under sub-regulations (3), within a period of three months after providing an opportunity of hearing to the concerned parties.

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

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

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

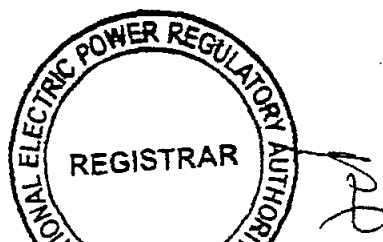



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(Syed Safer Hussain)
Registrar

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.

13/9/23
(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/R/DG(Trf)/TRF-573 & TRF-574 /TESCO-2022/ 82/7-23 July 14, 2023

Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST FILED BY TRIBAL ELECTRIC SUPPLY COMPANY LTD., (TESCO) FOR ADJUSTMENT/INDEXATION OF TARIFF FOR THE FY 2023-24 UNDER THE MULT YEAR TARIFF [CASE # NEPRA/TRF-573 & TRF-574/TESCO-2022]**

Dear Sir,

Please find enclosed herewith subject Decision of the Authority (42 Pages) in the matter of request filed Tribal Electric Supply Company (TESCO) for adjustment/indexation of tariff for the FY 2023-24 under the Mult Year Tariff in Case No. NEPRA/TRF-573 & TRF-574 /TESCO-2022.

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

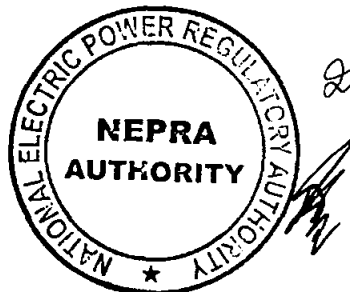
CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.
3. Secretary, Energy and Power Department, Government of Khyber Pakhtunkhwa, 1st Floor, A-Block, Abdul Wali Khan Multiplex, Civil Secretariat, Peshawar
4. Chief Executive Officer, NTDC, 414 WAPDA House, Shaharah-e-Quaid-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, Tribal Areas Electricity Supply Company Limited (TESCO) Room No. 213, 1st Floor, WAPDA House, Shami Road, Sakhi Chashma, Peshawar

**DECISION OF THE AUTHORITY IN THE MATTER OF REQUEST FILED BY TRIBAL AREAS
ELECTRIC SUPPLY COMPANY (TESCO) FOR ADJUSTMENT / INDEXATION OF TARIFF FOR THE
FY 2023-24 UNDER THE MYT**

1. Back Ground

- 1.1. The Authority determined separate tariffs of Tribal Areas Electric Supply Company Limited (TESCO) (herein referred to as "Petitioner") under Multi Year Tariff (MYT) regime, for a period of five years i.e. from FY 2020-21 to FY 2024-25, for both its Distribution and Supply of power functions vide tariff determinations dated June 02, 2022. Subsequently, a uniform tariff application u/s 31 (4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 was filed by the Federal Government, which was also decided by the Authority on July 22, 2022 and the decision was intimated to the Federal Government for notification in the official gazette. The tariff so determined was notified by the Federal Government vide SRO dated 25.07.2022.
- 1.2. The Petitioner now in line with the adjustment mechanism provided in its notified MYT determination, has filed its request for adjustment/ indexation of different components of its revenue requirement for the FY 2023-24, along-with break-up of costs in terms of Distribution and Supply functions.
- 1.3. 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.
- 1.4. 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. In view thereof, the Authority has decided to consider the instant adjustment/ indexation request of the Petitioner for both its Distribution and Supply of Power functions. Thus, the grant of supply tariff under the MYT regime 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 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.
- 1.5. A Summary of the adjustments request submitted by the Petitioner is as under;



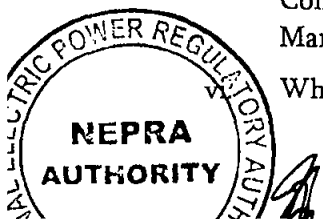
*Decision of the Authority in the matter of request filed by TESCO for
Adjustment / Indexation of Tariff for the FY 2023-24 under the MYT*

Description	Unit	Distribution Business	Power Supply Business	Total Revenue Requirement
Pay & Allowances	Rs. Mln	906	227	1,133
Post-Retirement Benefits	Rs. Mln	421	105	527
New Hiring	Rs. Mln	196	49	245
MIRAD Expenses	Rs. Mln	72	18	90
Repair & Maintenance	Rs. Mln	133	5	138
Travelling Allowance	Rs. Mln	33	8	41
Vehicle Maintenance	Rs. Mln	46	11	57
Other Expenses	Rs. Mln	114	29	143
Total O& M Costs	Rs. Mln	1,921	452	2,373
Depreciation	Rs. Mln	576	11	587
RORB	Rs. Mln	3,246	-	3,246
Other Income	Rs. Mln	- 779	-	- 779
Wheeling Charges	Rs. Mln	-	666	666
PYA	Rs. Mln	3,787	9,786	13,573
Revenue Requirement	Rs. Mln	8,752	10,915	19,667

2. Hearing

- 2.1. Since the impact of any such adjustments has to be made part of the consumer end tariff, therefore, the Authority, in order to provide an opportunity of hearing to all the concerned and meet the ends of natural justice, decided to conduct a hearing in the matter.
- 2.2. Hearing in the matter was held on April 12, 2023, for which advertisement was published in newspapers on March 29, 2023. Separate notices were also sent to the stakeholders for inviting comments from the interested/ affected parties. Salient features and details of the proposed adjustments along-with notice of hearing were also uploaded on NEPRA's Website for information of all concerned.
- 2.3. For the purpose of hearing, and based on the pleadings, following issues were framed to be considered during the hearing and for presenting written as well as oral evidence and arguments;
 - i. Whether the requested adjustments/indexation in tariff are in line with the MYT tariff determination and are justified?
 - ii. Whether the requested wheeling charges, new hiring cost, MIRAD expenses are justified and in line with MYT tariff determination and are justified?
 - iii. TESCO to present its Power Purchases Price (Energy & Cost) for the FY 2023-24, keeping in view the Section 32 of NEPRA Act and NEPRA Power Procurement Regulations?
 - iv. Whether the requested PYA, is justified?
 - v. Whether the existing Tariff Terms and Conditions needs to be modified (including the request of Cold Storage to charge "B Industrial Supply" Category tariff instead of "A-2 Commercial" category tariff), and keeping in view the amendments in Consumer Service Manual or otherwise?

Whether the existing fixed charges applicable to different consumer categories needs to



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be revised and requires any changes in mechanism for charging of such charges based on Actual MDI or Sanction Load or otherwise? Whether there should any Fixed Charges on consumer's categories who are currently not paying any fixed charges?

- vii. Whether the peak and off-peak rate design needs to be revised?
- viii. Any other issue that may come up during or after the hearing?

3. Filing of objections/ comments:

3.1. Comments/replies and filing of Intervention Request (IR), if any, were desired from the interested person/ party within 7 days of the publication of notice of admission in terms of Rule 6, 7 & 8 of the Tariff Rules. In response thereof, various commentators have filed their comments on the issue of mechanism of application of fixed charges and tariff to be applicable for cold storage. The same has been discussed under the relevant issue.

3.2. During the hearing, the Petitioner was represented by its CEO along-with its technical and financial teams. On the basis of pleadings, evidence/record produced and arguments raised during the hearing, issue-wise findings are given as under;

4. TESCO to present its Power Purchases Price (Energy & Cost) for the FY 2023-24, keeping in view the Section 32 of NEPRA Act and NEPRA Power Procurement Regulations?

4.1. 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 revenue requirement of the Petitioner, the PPP forecast for the FY 2023-24 as determined by the Authority, 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.

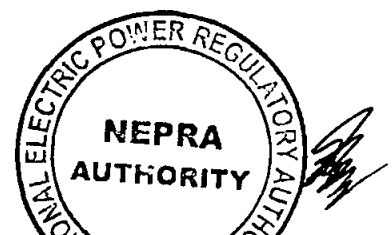
5. Whether the requested wheeling charges, new hiring cost, MIRAD expenses are justified and in line with MYT tariff determination and are justified?

6. Whether the requested adjustments/indexation in tariff are in line with the MYT tariff determination and are justified?

7. Whether the requested PYA, is justified?

7.1. The Petitioner submitted during the hearing that the requested adjustments are in line with the mechanism determined vide Tariff redetermination and NEPRA guidelines for determination of consumer end tariff (Methodology & Process).

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- 7.2. The Petitioner has requested the following adjustments on account of its Pay & Allowances, Post-Retirement benefits, O&M costs, Other Income, RoRB, and Prior Period Adjustments for the FY 2023-24;

Description	FY 2023-24 Projected Rs. Millions		
	Supply Business	Distribution Business	FY 2023-24 Total
Pay & Allowances	226.53	906.11	1132.64
Post-Retirement Benefits	105.35	421.39	526.73
New Hiring	48.98	195.91	244.88
MIRAD Expenses	18.09	72.37	90.46
Repair & Maintenance	4.69	133.1	137.79
Travelling Allowance	8.13	32.52	40.65
Vehicle Maintenance	11.43	45.72	57.15
Other Expenses	28.57	114.27	142.84
Total O & M Costs	451.77	1921.38	2373.14

- 7.3. The Petitioner submitted that projected Pay & Allowance have been indexed / adjusted for FY 2023-24 as follows:

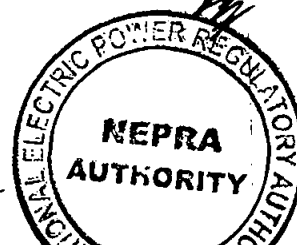
- Pay and Allowances, including employee's salaries and benefits, which are a major component of the O&M expenses of TESCO. TESCO comes under the umbrella of Ministry of Energy and has currently adopted the pay structure of BPS for its regular employees. Further any increase in salaries announced by the Federal Government is adopted by TESCO.
- Federal Government vide O.M. 2022-283 dated 1st July, 2022 has revised the pay scales of employees along with additional ad hoc relief allowance of 15%. Further 5% financial impact of annual increment, as already allowed by NEPRA, has to be considered for indexation/adjustment of pay and allowances for the FY 2023-24. The total cost under the head Pay & Allowances of the Supply business requested is Rs.226.53 million for FY 2023-24, while for the Distribution business is Rs.906.11 million for FY 2023-24, with total financial impact for Pay & Allowances of Rs.1132.64 million is requested for FY 2023-24 as indexation/adjustment.

- 7.4. Regarding Post-retirement benefits, it has been submitted that;

- The post-retirement benefits of TESCO's employees is paid at the same rate as announced by Federal Government. Further the post-retirement benefits also increase with the retirement of new employees.
- Federal Government vide O.M. 2022-486 dated 1st July, 2022 has announced an increase of 15% in the pension of pensioners. The total cost under the head Post-Retirement Benefits for Supply business requested is Rs.105.35 million for FY 2023-24 and Rs.421.39 million is requested for Distribution business for FY 2023-24, with total financial impact of Post-Retirement Benefits of Rs.526.73 million is requested for the FY 2023-24 as indexation/adjustment.

- 7.5. The Petitioner also requested new Hiring cost for the FY 2023-24 as follows:

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- For FY 2023-24, 21 officers and 505 officials will be hired to fill the vacant posts of TESCO. The total costs for New Hiring is requested as Rs.48.98 million for Supply business for FY 2023-24 and Rs.195.91 million for Distribution business, for the FY 2023-24.

7.6. Regarding MIRAD expenses, the Petitioner has submitted that;

- Currently 07 officers and 02 assistant directors on acting charge base, along with supporting staff working under TESCO MIRAD. In FY 2023-24, 03 Managers and 02 Dy. Directors will also be hired in TESCO MIRAD. Since MIRAD has a dedicated office and in order to better rationalize the costs of MIRAD, separate costs for MIRAD are requested for the FY 2023-24. These costs included pay & allowances, vehicle & maintenance, TA, Furniture and Fixtures, Office Rent, IT equipment, 40% MIRAD Allowance, POL, utility bills, two new Vehicles and software's as per requirements of CTBCM. These costs of MIRAD department have been bifurcated between supply and distribution business. Total costs for MIRAD expenses for the Supply business requested is Rs.18.09 million for FY 2023-24 and Rs.72.37 million for Distribution business for FY 2023-24. Total MIRAD costs of Rs.90.46 million is requested for FY 2023-24 as indexation/adjustment.

7.7. Regarding Other OPEX it has been submitted that;

- These are all those costs, which has not been covered under any other head as discussed above. The major components of other costs are Injuries and Damages, Consultancy Fees, ERP Charges, Safety Consultant Fees, Legal Fees, Board of Directors Fees, Rent, Advertising Fees, Telephone, Computer services, Power Light and Water and others. While determining the other expenses costs the CPI General of Dec 2022 24.5% has been used reduced by X-Factor of 30% resulting in 17.15% net inflation for other expenses costs. Total costs under the head of other expenses of Rs.28.57 million is requested for Supplier business for FY 2023-24, while Rs.114.27 million is requested for Distribution business for FY 2023-24. A total of Rs.142.84 million has been requested in other expenses for FY 2023-24 as indexation/adjustments.

7.8. The Petitioner regarding depreciation expense for the FY 2023-24, submitted as under;

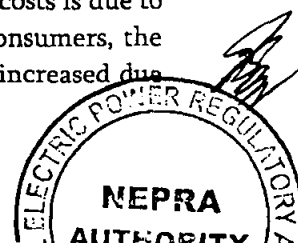
- The adjustment mechanism for Depreciation has been provided in the MYT Determination, which states that reference Depreciation charges would be adjusted every Year as per the following formula.

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

- The depreciation has been calculated according to the criteria prescribe by NEPRA. Rs.11.33 million is requested for Supply business for FY 2023-24, while Rs.575.59 million is requested for Distribution business for FY 2023-24. A total of Rs.587 million under head of depreciation is requested for FY 2023-24 as indexation/adjustment.

7.9. Regarding Repair & Maintenance, the Petitioner submitted that increment in the costs is due to its old and over loaded system. To ensure un-interrupted power supply to its consumers, the maintenance work is increased exponentially. Moreover, cost of material is also increased due

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to inflationary pressure and due to volatile economic conditions and financial instability. This made pressure on the cash flows of TESCO and the cost run off has occurred.

- There are other factors like repair & maintenance of high voltage transmission lines damaged due to floods, increase in 11kV feeders, added in the excess costs in repair and maintenance.
- Rs.4.69 million is requested under head of Repair & Maintenance for Supplier business for FY 2023-24, while Rs.133.10 million is requested for Distribution business for FY 2023-24. A total of Rs.137.79 million is requested for Repair and Maintenance expenses for the FY 2023-24 as indexation/adjustment.

7.10. Regarding Travelling Allowance, the petitioner submitted that:

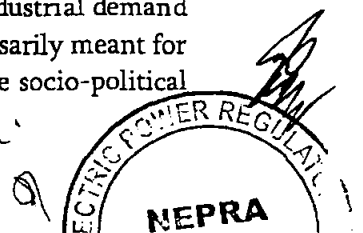
- Due to the system aging and excessive increase in the major overhauling of the system, excessive manpower is used for staying at far flung areas. Moreover, to train the existing manpower of TESCO, excessive training programs and courses were conducted which impacts in the excessive traveling and staying outstation of manpower. This has major impact in the TA bills, which is requested to be allowed. The impact while determining the Travelling Allowance costs the CPI General of Dec 2022 24.5% has been used reduced by X-Factor of 30% resulting in 17.15% net inflation for Travelling Allowance. Total cost under head Travelling Allowance Rs.8.13 million is request for Supplier business for FY 2023-24, while Rs.32.52 million is requested for Distribution business for FY 2023-24. A total of Rs.40.65 million under head travelling allowance is requested for FY 2023-24 as indexation/adjustment.

7.11. Regarding Vehicle Maintenance, the Petitioner submitted that

- It is important to mention that TESCO operations area is spread over 27,219 Squared KM and has to maintain a fleet of vehicles in operations. Further there has been substantially increase in the POL costs due to which the CPI for fuel for Dec 2022 49.45% has been considered. Total costs under head Vehicle Maintenance of Rs. 11.43 million is requested for Supply business for FY 2023-24, while Rs. 45.72 million is requested for the Distribution business for FY 2023-24. A total Rs. 57.15 million is requested for vehicle maintenance and POL for FY 2023-24 as indexation/adjustment.

7.12. Regarding RoRB, the Petitioner submitted that:

- NEPRA while determination of TESCO's Distribution tariff has not allowed RORB to TESCO. As a historical fact TESCO is receiving grants from federal/provincial government. Still TESCO has some strategic projects, which requires to be covered through own resources. These projects include upgradation of 66kV grid stations meeting the N-1 contingency criteria of important TESCO grids, bifurcation, trifurcation of 11 kV circuits, and replacement of overloaded transformers. Segregation of TESCO system from PESCO system as directed by NEPRA and decreasing cost of doing business, reduction in losses in the system. These projects are also necessary to cope with the upcoming industrial demand based on TESCO PMS study. The government funded projects are not necessarily meant for reduction in losses or to achieve the benchmark of NEPRA rather these are socio-political projects.

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- Further TESCO is going to initiate projects in FY 2023-24 in the light of TSEP and investment plan already approved by NEPRA in MYT. It is therefore requested to allow RORB of Rs.3246.16 for FY 2023-24.
- While working out the RORB, the RAB assets bases has been readjusted to the projected amount of FY 2023-24. At the same time 3 months KIBOR of Dec 30st 2022 has been considered i.e. 17% and 2% spread as allowed by NEPRA has been added.

7.13. On the issue of other income, the Petitioner mentioned that other income comprises of Rental and Service Income, Profit on deposits, amortization of deferred credits, miscellaneous income which is tabulated below. A total of Rs.778.77 million is requested for the Distribution business of FY 2023-24 as indexation/adjustment, as shown below:

Description	FY 2023-24 Projected In Rs. Million
Rental and service income	63.19
Profit on deposits	168.237
Amortization of deferred credit	352.704
Miscellaneous income	194.645
Total Other Income	778.777

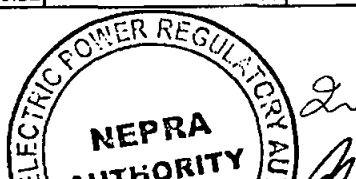
7.14. The Authority noted that the Petitioner has been allowed a Multiyear tariff for a control period of 5 years starting from July 2020 till June 2025, wherein a mechanism for adjustment/indexation of different components of the revenue requirement has been prescribed. The Authority also noted that adjustments/indexations till FY 2022-23 have already been Petitioner. Accordingly, in line with the prescribed mechanism and as per the amended NEPRA Act, the Petitioner filed its adjustment/indexation request with break-up of costs in terms of Distribution and Supply functions for the FY 2023-24 along-with its PYA workings.

7.15. On the issue of Wheeling Charges, the Petitioner submitted that:

- The Authority in the Tariff determination of Supply Tariff for FY 2019-20 approved the wheeling charges (Use of System Charges), as under:

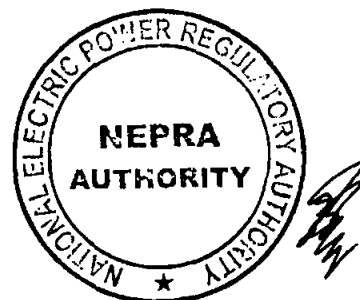
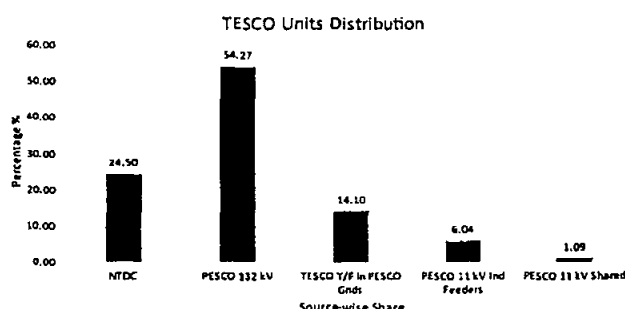
The Petitioner in its instant petition has requested an amount of Rs.2,550 million on account of wheeling charges. However, no further working/ supportive evidence and justification has been provided by the Petitioner. The Petitioner is using both 11kV and 132 kV transmission lines of PESCO, consequently the Wheeling charges payable to PESCO are calculated according to the use of system charges given in the tariff determination of PESCO for the FY 2019-20.

Description	For 132 kV Only	For 11 kV only	For Both 132 kV & 11 kV
Asset Allocation	25%	44%	69%
Level of Losses	3.00%	14.31%	16.88%
UoS/C Rs. /kWh	0.32	0.71	1.09



- The Petitioner further submitted that PESCO is raising wheeling charges based on straightaway Rs.1.09/kWh at all units received by TESCO. TESCO is receiving power from NTDC, WAPDA at 132 kV only and PESCO 132 kV & 11 kV feeders.
- The Units received by TESCO distribution here is,

Units Received Distribution



- Based on the above %, the Units received and subsequent rate raised by PESCO & actual calculated by TESCO are hereby given:

Wheeling Charges By PESCO FY 2020-21

Source	Percentage Share %	Total Units (kWh)	PESCO Claim of UoSC (PKR)	Actual UoSC (PKR)
NTDC-WAPDA	23.46%	522,429,781	3,032,768,914	-
PESCO 132 kV	53.06%	1,181,911,527		378,211,688
PESCO Ind Feeders	20.59%	458,646,015		146,766,725
PESCO 11 kV Shared	2.89%	64,324,144		70,113,317
Total	100.00%	2,227,311,467	3,032,768,914	595,091,730

Wheeling Charges for FY 2021-22

Source	Percentage Share %	Total Units (kWh)	PESCO Claim of UoSC (PKR)	Actual UoSC (PKR)
NTDC-WAPDA	24.50%	558,984,890.00	609,293,530.00	-
PESCO 132 kV	54.27%	1,238,546,170.00	1,350,015,326.00	396,334,775.00
PESCO Ind Feeders	20.14%	459,692,931.00	501,065,294.00	147,101,738.00
PESCO 11 kV Shared	1.09%	24,776,008.00	27,005,849.00	27,005,849.00
Total	100%	2,281,999,999.00	2,487,379,999.00	570,442,362.00

- Based on the above discussion, it is requested to allow wheeling charges as Rs.595.09 million for FY 2020-21 and Rs.570.442 million for FY 2021-22 as part of PYA. For FY 2023-24 Rs.665.981 million is requested to be allowed for the FY 2023-24 as part of indexation/adjustment.

7.16. The Authority noted that QESCO has been allowed a Multiyear tariff for a control period of 5 years starting from July 2020 till June 2025, wherein a mechanism for adjustment/ indexation of

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different components of the revenue requirement has been prescribed. The Authority also noted that adjustments/ indexations till FY 2022-23 have already been Petitioner. Accordingly, in line with the prescribed mechanism and as per the amended NEPRA Act, the Petitioner filed its adjustment/ indexation request with break-up of costs in terms of Distribution and Supply functions for the FY 2023-24 along-with its PYA workings.

- 7.17. A summary of the allowed adjustment/ indexation, as per the mechanism provided in the MYT determination of the Petitioner is as under;

O&M EXPENSE

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

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

Where:

O&M_(Rev) = Revised O&M Expense for the Current Year

O&M_(Ref) = Reference O&M Expense for the Reference Year

ΔCPI = Change in Consumer Price Index published by Pakistan Bureau of

X = Efficiency factor

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

"...The Authority in line with its decisions in the matter of XWDISCOs which have been allowed MYTs, has decided to keep the efficiency factor 'X', as 30% of increase in CPI for the relevant year of the MYT control period. The Authority has further decided to implement the efficiency factor from the 3rd year of the control period..."

RORB

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

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

Where:

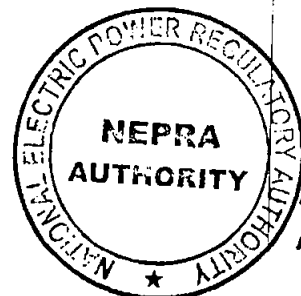
RORB_(Rev) = Revised Return on Rate Base for the Current Year

RORB_(Ref) = Reference Return on Rate Base for the Reference Year

RAB_(Rev) = Revised Rate Base for the Current Year

RAB_(Ref) = Reference Rate Base for the Reference Year

"In addition the allowed RAB for previous year will be trued up downward only, keeping in view the amount of investment allowed for the respective year. In case, the Petitioner ends up making higher investments than the allowed, the same would be the Petitioner's own commercial decision and would not be considered while truing up the RAB, unless due to any regulatory decisions/interventions/approved plans for which the Petitioner obtains



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prior approval of the Authority. In such case the Authority may also revise the efficiency targets in terms of T&D losses etc.

The Authority also understands that interest payment is an obligatory cash flow liability unlike discretionary dividend payment and considering the fact that any default may hamper the financial position of the Petitioner, hence the Authority has decided to cover the risk of floating KIBOR. Accordingly, fluctuation in the reference KIBOR would be adjusted biannually. In addition, the Authority has also decided to allow sharing of benefit by introducing a claw back mechanism for any savings resulting from cheaper financing by the Petitioner to the extent of 2.00% spread. If the Petitioner manages to negotiate a loan below 2.00% spread, the savings would be shared equally between the consumers and the Petitioner through PYA mechanism annually. In case of more than one loan, the saving with respect to the spread would be worked out by a weighted average cost of debt. The sharing would be only to the extent of savings only i.e. if the spread is greater than 2.00%, the additional cost would be borne by the Petitioner."

DEPRECIATION EXPENSE

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

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

Where:

$DER_{(Rev)}$	=	Revised Depreciation Expense for the Current Year
$DER_{(Ref)}$	=	Reference Depreciation Expense for the Reference Year
$GFAIO_{(Rev)}$	=	Revised Gross Fixed Assets in Operation for the Current Year
$GFAIO_{(Ref)}$	=	Reference Gross Fixed Assets in Operation for Reference Year

"In addition the allowed Depreciation for previous year will be trued up downward only, keeping in view the amount of investment allowed for the respective year. In case, the Petitioner ends up making higher investments than the allowed, the same would be the Petitioner's own commercial decision and would not be considered while truing up the depreciation expenses, unless due to any regulatory decisions/interventions/approved plans for which the Petitioner obtains prior approval of the Authority. In such case the Authority may also revise the efficiency targets in terms of T&D losses etc."

OTHER INCOME

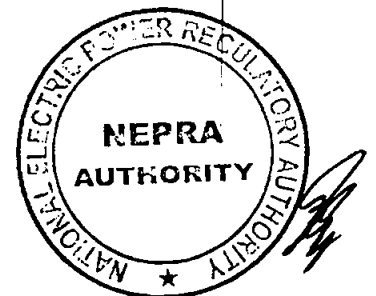
- 7.22. Other income will be assessed in accordance with the following formula/mechanism:

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

Where:

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

"...the other income would be trued up every year ..."



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Salaries & Wages

"The reference costs shall be adjusted every year with the increase announced by the GoP, being beyond the Petitioner's control, for the respective year till the time the Petitioner remains in the public sector. In addition a 5% increase as requested by the Petitioner would be allowed on the amount of Basic pay to account for the impact of annual increment..."

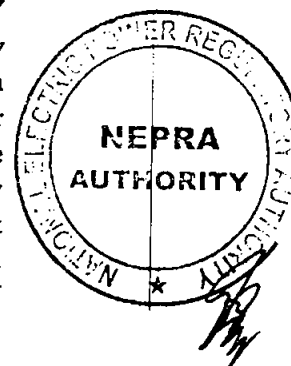
Post-Retirement Benefits

"... the allowed amount of post-retirement benefits would be adjusted every year with the Pension increase announced by the GoP for the respective year, till the time the Petitioner remains in the public sector. In case, the Petitioner is privatized during the MYT period, the allowed cost would be adjusted with CPI-X factor."

- 7.23. Regarding adjustment of Salaries, Wages & Other Benefits, the Authority observed that the Petitioner was allowed upfront Indexation/adjustment for FY 2021-22 and FY 2022-23, considering the fact by the time the given MYT's were to be notified by the Federal Government, the FY 2022-23, would have started. The relevant extract of the Authority's decision dated 02.06.2022, is as under;

Upfront Indexation/adjustment for the FY 2021-22 and FY 2022-23

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



- 7.24. With above upfront indexation, the Salaries, wages & Other Benefits determined for the FY 2022-23, have now become reference for indexation to be allowed for the FY 2023-24. However, it is also a fact that all these decisions were issued on 02.06.2022, when increases in Salaries, wages & Other Benefits announced in the Federal Budget for the FY 2022-23, were not available. Therefore, while allowing the salaries, wages & other benefits for the FY 2022-23, a projected increase in salaries, wages & other benefits was allowed. The Federal Government subsequently allowed various increases in salaries, wages & other Benefits for the FY 2022-23, vide notification dated 01.07.2022.
- 7.25. In view thereof, revised detail of salaries, wages & other benefits, after including therein the allowed increase as per the Federal Government notification dated 01.07.2022, were obtained from the Petitioner for the FY 2022-23. The same has been reported as Rs.990 million against the allowed amount of Rs.1,053 million. Accordingly, while assessing salaries, wages & other benefits for the FY 2023-24, the revised cost of Rs.990 million for the FY 2022-23, as provided by the Petitioner, has been used as reference. Further, the impact of differential due to revision

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of Salaries, wages & Other Benefits for the FY 2022-23, based on data provided by the Petitioner, has been adjusted as part of PYA, which works out as negative Rs.63 million.

7.26. Here it is pertinent to mention that TESCO has also claimed cost of new hiring made during the FY 2021-22 and FY 2022-23, however, as per the scope of MYT, TESCO was required to file a mid-term review for approval of new hiring cost by justifying the same through its prospective benefits. TESCO till date has not filed any such request, and accordingly, the impact of new hiring amounting to Rs.10.97 million, other than MIRAD, has been adjusted from Salaries & wages cost provided by the Petitioner for the FY 2022-23. Similarly, the request of the Petitioner to allow new hiring cost of around Rs.295 million for the FY 2023-24, is also not being acceded to, as the Petitioner has not filed the Midterm review for approval of new hiring cost along-with its prospective benefits.

7.27. Here it is also pertinent that ECC vide decision dated 21.09.2021 allocated GENCO employees to different DISCOs as under;

"It is proposed that 2,368 Pensioners of GENCOs may be adjusted in their pension disbursing DISCOs or WAPDA. Similarly, 1,753 employees of these plants would be adjusted in DISCOs. Pensions of these employees will be paid by the relevant DISCOs on their retirement according to rules of the relevant DISCOs. In turn the respective DISCOs and WAPDA would c/aim adjustment of the same from NEPRA in their tariffs."

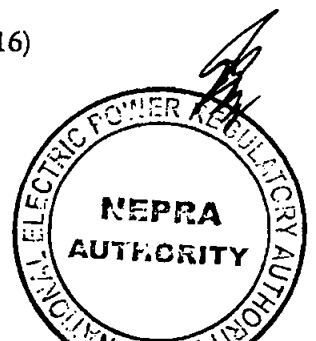
7.28. Although, TESCO has not separately claimed any cost on this account, however, since the Petitioner has submitted its revised detail of salaries, wages & other benefits for the FY 2022-23, therefore, it is presumed that cost of GENCO employees transferred to TESCO, if any, has also been included by the Petitioner in its revised cost of salaries, wages & other benefits for the FY 2022-23. Since the revised salaries, wages & other benefits cost as provided by the Petitioner, for the FY 2022-23, includes impact of all working employees, including MIRAD employees hired till date & TESCO employees allocated to the Petitioner if any, and has been used as reference for projection of salaries, wages & other benefits cost for the FY 2023-24, therefore, no further adjustment on account of MIRAD hiring and GENCO employees transferred to the Petitioner would be allowed.

7.29. Here it is also clarified that the revised amount being allowed under salaries, wages & other benefits for the FY 2022-23 shall be considered as upper cap, subject to downward adjustment only, once the Audited accounts of the Petitioner for FY 2022-23, are available.

7.30. Based on the above discussion & by taking into account the revised numbers for the FY 2022-23, the following increases as announced by the Federal Government in Budget 2024, have been incorporated to project Salaries, Wages & Other Benefits for the FY 2023-24;

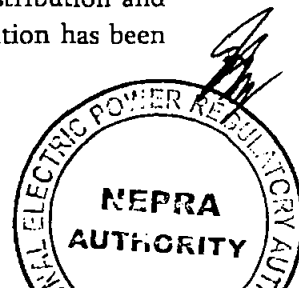
- Adhoc relief allowance @ 32.5% on avg. - 30% (BPS-17-22) & 35% (BPS 1-16)
- Annual increment @ 5% of basic pay for 7 months
- Adhoc relief allowance FY 2021-22 revised based on revised basic pay scale

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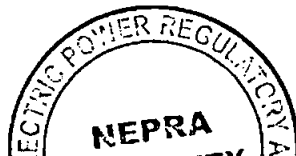


- 7.31. Accordingly, for the FY 2023-24, the total Salaries, Wages & Other Benefits (excluding post-retirement benefits) of the Petitioner have been worked out as Rs.1,292 million for both the distribution and supply of power functions.
- 7.32. In order to bifurcate the allowed cost of Salaries, Wages and other benefits costs in terms of Distribution and Supply Functions, the criteria adopted by the Authority in the MYT determination has been used.
- 7.33. Regarding Post-retirement Benefits, the Authority allowed actual payment of postretirement benefits in the MYT determination of the Petitioner and decided that the allowed amount of post-retirement benefits would also be adjusted every year with the Pension increase announced by the GoP for the respective year, till the time the Petitioner remains in the public sector.
- 7.34. In view of the above decision and as per the mechanism provided in the MYT determination of the Petitioner, after taking into account the increases announced by the Federal Government in Budget FY 2024, the post-retirement benefits of the Petitioner for the FY 2023-24 have been assessed as Rs.296 million. The same is being allowed to the Petitioner for the FY 2023-24, for both the distribution and supply of power functions. In order to bifurcate the allowed cost of Post-retirement benefits in terms of Distribution and Supply Functions, the criteria adopted by the Authority in the MYT determination has been used.
- 7.35. Regarding Other O&M expenses, the MYT tariff determination requires the same to be indexed with NCPI of December for the respective year after adjustment for the X factor i.e. 30% of CPI. Accordingly, for indexation of other O&M expenses for the FY 2023-24, the NCPI of December 2022 has been considered. The same as reported by Pakistan bureau of Statistics is 24.47%. With this NCPI, and after accounting for the X-factor, the Other O&M cost of the Petitioner for the FY 2023-24 works out as Rs.145 million based reference cost of Rs.124 million.
- 7.36. Here it is pertinent to mention that NEPRA has also imposed Supplier License fee on the Petitioner from FY 2021-22 onward, however, the said cost is not part of the reference cost allowed to the Petitioner under Other O&M expenses. Accordingly, while working out the other O&M cost of the Petitioner for the FY 2023-24, the fee billed by NEPRA on account of Supplier license has been included in the reference cost of Other O&M expenses for the FY 2022-23. Further, the fee for the FY 2021-22 and FY 2202-23, not previously allowed to the Petitioner has also been included as part of PYA. The amount on account of supplier license fee for the FY 2021-22 and FY 2202-23, included in the PYA, has been worked out as Rs.8.55 million & 11.9 million respectively.
- 7.37. Based on the above discussion, the total Other O&M cost of the Petitioner for the FY 2023-24, including Supplier License Fee, works out as Rs.159 million. The same is being allowed to the Petitioner for both the distribution and supply of power functions.
- 7.38. In order to bifurcate the allowed cost of Other O&M expenses in terms of Distribution and Supply Functions, the criteria adopted by the Authority in the MYT determination has been used.

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- 7.39. Regarding Depreciation expenses, the same are required to be worked out based on the Revised Gross Fixed Assets in Operation (GFAIO) for FY 2023-24, to be calculated based on Investment allowed for the FY 2023-24.
- 7.40. The revised Gross Fixed Assets in Operation of the Petitioner for the FY 2023-24 works out as Rs.14,985 million, after including therein the impact of allowed investment for the FY 2023-24 i.e. Rs.6,048 million. Accordingly, as per the allowed mechanism the total depreciation expense of the Petitioner for the FY 2023-24 works out as Rs.520 million. The same is being allowed to the Petitioner for both the distribution and supply of power functions.
- 7.41. In order to bifurcate the allowed cost of depreciation expenses in terms of Distribution and Supply Functions, the criteria adopted by the Authority in the MYT determination has been used.
- 7.42. In addition the mechanism given in the MYT, also provides that the allowed Depreciation for previous year will be trued up downward only, keeping in view the amount of investment allowed for the respective year. In view thereof, the depreciation cost allowed for the FY 2020-21 & FY 2021-22, has been adjusted as per the mechanism provided in the MYT.
- 7.43. Here it is clarified that the Authority is in the process of evaluating the investments actually carried out by the Petitioner, whether the same in line with the allowed investment plan or otherwise. Therefore, for the purpose of truing up of Depreciation expenses for the FY 2020-21 & FY 2021-22, depreciation expense as reported in Audited/ provisional financial statements of the Petitioner have been considered. Any adjustment based on the final evaluation of the Authority, if required, would be made in next adjustment/indexation request of the Petitioner.
- 7.44. Regarding RoRB, the reference RoRB is required to be adjusted every year based on the amount of RAB worked out for the respective year after taking into account the amount of investment allowed for that year, as per the mechanism provided in the MYT. It is important to mention here that the Authority while deciding the MLRs of GEPCO, MEPCO, SEPCO and PESCO, against their MYT determinations, allowed WACC by including 100% balance of CWIP in the RAB instead of allowing ROE component only to the extent of 30% of CWIP balance. In line with the aforementioned principle decision of the Authority, while working out the RoRB of the Petitioner, the same mechanism has been used.
- 7.45. Accordingly, the revised RAB of the Petitioner for the FY 2023-24, based on the Investment allowed for the FY 2023-24, and incorporating therein 100% balance of CWIP, works out as Rs.3,099 million. The average RAB of the Petitioner however, for the purpose of calculation of RoRB, works out as Rs.3,101 million for the FY 2023-24.
- 7.46. Here it is pertinent to mention that the Authority vide determination dated 02.06.2022, allowed adjustments on account of variation in KIBOR on biannual basis. Considering the fact that prevailing KIBOR rates are very high and the rates built in the reference are much lower, the Authority has decided to provisionally incorporate the prevailing KIBOR of 22% as of 07.06.2023 in the calculation of WACC for the FY 2023-24. By taking into account the KIBOR of 22%, the WACC for the FY 2023-24 works out as 21.14%, as per the formula given in the



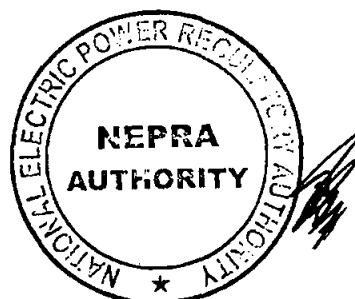
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MYT determination. The same would be adjusted subsequently once the actual KIBOR and Audited accounts of the Petitioner for the FY 2023-24, are available for true up of RORB.

- 7.47. Based on the above discussion, the total RoRB of the Petitioner for the FY 2023-24 works out as Rs.656 million. The same is being allowed to the Petitioner for both the distribution and supply of power functions.
- 7.48. In order to bifurcate the allowed RoRB in terms of Distribution and Supply Functions, the criteria adopted by the Authority in the MYT determination has been used.
- 7.49. In addition the mechanism also provides that the allowed RAB for previous year will be trued up downward only, keeping in view the amount of investment allowed for the respective year. Further, the variations on account of KIBOR are also required to be allowed on biannual basis. In view thereof, the RoRB cost allowed for the FY 2020-21 & FY 2021-22, has been trued up and made part of PYA of the Petitioner for the FY 2023-24, on both these accounts as under;

Description	TESCO
Allowed RORB FY 2021	-
Actual RORB FY 2021 (capped to the extent of allowed Investment)	110
True up Adj. as PYA	110
Allowed RORB FY 2022	-
Actual RORB FY 2022 (capped to the extent of allowed Investment)	221
True up Adj. as PYA	221

Description	TESCO
Allowed KIBOR FY 2021	7.03%
Actual KIBOR 02.07.2020	7.03%
Actual KIBOR 04.01.2021	7.30%
Allowed KIBOR FY 2022	7.03%
Actual KIBOR 02.07.2021	7.45%
Actual KIBOR 04.01.2022	10.52%

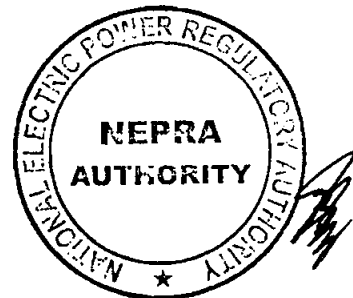


- 7.50. Here it is pertinent to mention, that amount of investments appearing in the financial statements has been restricted to the extent of allowed investment.
- 7.51. The Authority in MLR decision while allowing RORB on 100% balance of CWIP also directed DISCO to disclose the amount of Interest during Construction (IDC) separately in their financial statements. However, while going through the Financial Statements of the Petitioner, it was observed that the Petitioner has not separately disclosed the amount IDC. Therefore, the amount of adjustment being allowed as part of PYA is purely on provisional basis, subject to downward adjustment based on the amount of IDC reflected in the financial statements of the Petitioner. In case the Petitioner fails to reflect the amount of IDC in financial statements, the Authority may consider not to allow RORB on 100% balance of CWIP. The Petitioner is, therefore, again directed to provide the IDC amount for FY 2020-21 onward and reflect the same in its Audited Financial Statements as well.

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- 7.52. It is also clarified that the Authority is in the process of evaluating the investments actually carried out by the Petitioner, whether the same in line with the allowed investment plan or otherwise. Therefore, for the purpose of truing up of RAB for the FY 2020-21 & FY 2021-22, investments as reported in the Audited/ provisional financial statements of the Petitioner, have been considered. However, the amount of investment appearing in the financial statements has been restricted to the extent of allowed investment. Any adjustment based on the final evaluation of the Authority, if required, would be made in next adjustment/indexation request of the Petitioner
- 7.53. Regarding Other Income, the same has been adjusted as per the mechanism provided in the MYT determination for the FY 2023-24. The same for the FY 2023-24 works out as Rs.277 million for the Petitioner. Further, the MYT determination also provides truing up of Other Income every year. Accordingly, the allowed Other income for the FY 2021 & FY 2022, has also been trued up based on Audited/Provisional Financial statement of the Petitioner for the FY 2021 & FY 2022 resulting in positive adjustment of negative Rs.435 million and negative Rs.521 million respectively. The same has been made part of PYA for the FY 2023-24.
- 7.54. The Prior Year Adjustment includes the impact of variation in the following, based on the Authority's allowed benchmarks of T&D losses and recoveries;
- ✓ Impact of Negative/Positive FCAs not passed on/recovered
 - ✓ Under/Over Recovery of allowed Quarterly Adjustments
 - ✓ Under/Over Recovery of the assessed DM
 - ✓ Under/Over Recovery of the previously assessed PYA
 - ✓ Cost allowed in Motion for Leave for Review
 - ✓ Sales Mix Variance
 - ✓ Adjustment of excess LPS over supplemental charges
 - ✓ MYT True ups
- 7.55. The Petitioner has requested the following PYA for the FY 2023-24;

Total TESCO PYA in Rs. Mln			
Description	FY 2020-21	FY 2021-22	Total
RORB	1528.86	2128.97	3657.83
Wheeling Charges By PESCO	595.09	571.1	1166.19
Supplemental Charges Charged By CPPA-G	1122.89	1901.25	3024.14
Financial Impact New Hiring	0	8.26	8.26
MIRAD Expenses	0	54.95	54.95
Input Tax charges by CPPA-G	2266.52	4169.51	6436.02
PHPL Mark Up By CPPA-G	68.01	128.16	196.18
Increase in Repair and Maintenance	18.2	79.4	97.6
PYA Already Allowed	-528	-528	-1056
Total PYA	5071.57	8513.6	13585.17



- 7.56. The Petitioner regarding PYA has submitted the following;

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Hiring made in the FY 2021-22 and FY 2022-23

- In FY 2021-22 TESCO has hired Dy. Director Internal Audit and Dy. Director Legal as per the direction of the Board of Directors of TESCO to streamline the internal audit issues and to address the increasing legal matters of TESCO on different issues. TESCO has severe shortage of assistant directors and many posts of assistant directors remained vacant. In order to achieve the smooth operations of TESCO both Suppliers and Distribution business, the ministry of energy power division has allowed the Board of Directors of TESCO for new recruitment both for officers and officials, as per the approved yard stick. Accordingly, the recruitment process through proper procedures has been started during FY 2021-22 that was partially completed and 14 officers have been hired (2 in FY 2021-22 and 12 in FY 2022-23) by TESCO. Further for FY 2023-24, 21 officers and 505 officials will be hired to fill the vacant posts of TESCO.
- The financial impact of hiring made in FY 2021-22 and FY 2022-23 has been made part of PYA. The Salary structure of these officers will be lump sum based and independent of BPS pay scales. The total financial impact in PYA is for FY 2021-22 Rs.0.21 million for Supply business and 0.82 million for Distribution business, while for FY 2022-23 the financial impact in PYA is Rs.1.45 million of Supply business and Rs.5.79 million for Distribution business. The total impact on PYA is Rs.10.97 million.

Hiring Already Made by TESCO						
S.No.	Nomenclature of the Posts	BPS	No of post	Date of Joining	FY 2021-22 Millions	FY 2022-23
1	Dy. Director I/A	18	1	Apr-22	0.311	1.54
2	Dy. Director Legal	18	1	Oct-21	0.715	2.19
3	SDO	17	9	Jan-23	0	5.42
4	Assistant Director (Admn)	17	1	Jan-23	0	0.6
5	Assistant Director (MIS /IT)	17	2	Jan-23	0	1.2
6	Total		14		1.02	10.97

MIRAD expenses

- NEPRA has approved detailed design and implementation plan of the Competitive Trading Bilateral Contract Market (CTBCM) on November 12, 2020, to make a competitive wholesale electricity market functional in near future. Pursuant thereto, TESCO have created a Market Implementation & Regulatory Affairs Department (MIRAD) which became operational from September 2021.
- Regarding recruitment for MIRAD, the Authority has decided to allow hiring for MIRAD in principal and direction has been made to recruit the adequate staff, equipment, and vehicles for the MIRAD department of TESCO. TESCO D.G. MIRAD was hired in September 2021 for proper operationalization along with adequate staff in MIRAD department.

The financial impact of hiring made in FY 2021-22 and FY 2022-23 has been made part of PYA. The Salary structure of the officers hired from the market is lump sum based



2 Nov '24

and independent of BPS pay scales. The officers internally transferred from different departments of TESCO are also charged (Salary and Benefits) under MIRAD department and accordingly their salaries along with benefits are made part of MIRAD expenses. The MIRAD expenses includes the salary of the staff, purchase of equipment, purchase of furniture and fixtures, rents and utility bills, POL, software and vehicles. The total financial impact in PYA is for FY 2021-22 and FY 2022-23 Rs.10.99 million for Supply business and 43.96 million for Distribution business with total financial impact of Rs.54.95 million is requested as PYA.

Repair & Maintenance expenses

- The total financial impact in PYA is for FY 2020-21 and FY 2021-22 is Rs.6.84 million for Supply business and Rs.90.76 million for Distribution business with total financial impact of Rs.97.60 million.

Description	Allowed FY 2020-21 Rs. Millions	Actual FY 2020-21 Rs. Millions	Over/ (Under)	Allowed FY 2021-22 Rs. Millions	Actual FY 2021-22 Rs. Millions	Over/ (Under)
Repair & Maintenance	19	37	18	21	89	68

RoRB

- NEPRA while determination of TESCO's Distribution tariff has not allowed RORB to TESCO. As a historical fact TESCO is receiving grants from federal/provincial government. Still TESCO has some strategic projects, which requires to be covered through own resources. These projects include up-gradation of 66kV grid stations meeting the N-1 contingency criteria of important TESCO grids, bifurcation, trifurcation of 11 kV circuits, and replacement of overloaded transformers. Segregation of TESCO system from PESCO system as directed by NEPRA and decreasing cost of doing business, reduction in losses in the system. These projects are also necessary to cope with the upcoming industrial demand based on TESCO PMS study. The government funded projects are not necessarily meant for reduction in losses or to achieve the benchmark of NEPRA rather these are socio-political projects. In order to achieve all the NEPRA benchmarks and to upgrade the aging and overloaded system of TESCO, it is submitted to the Authority that TESCO may please be allowed Rs.1,021.39 million for FY 2020-21 and Rs.1,528.86 million for FY 2021-22 as PYA, which were previously deferred by the Authority.
- Wheeling Charges of Rs.595.09 million for FY 2020-21 and Rs.570.442 million for FY 2021-22 as part of PYA.

Supplemental charges/ Input Tax/ PHPL Markup.

- CPPA-G has billed Rs.1,122.80 million and Rs.1,901.25 million supplemental charges for FY 2020-21 and FY 2021-22 respectively, while TESCO collected Rs.27.36 million and Rs.20.15 million from its meterized consumers as delayed payment surcharge in the same period. In case of domestic consumers LPS is not applicable. The Ministry of Finance is



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not issuing any amount against the delayed payment surcharge by CPPA-G to TESCO. TESCO may kindly be allowed the supplemental charges billed by CPPA-G or issue direction to CPPA-G not to charge this amount from TESCO.

- CPPA-G charges Input Tax Charges to TESCO, and PHPL Markup. As Sales Tax on electricity supplied within EX-FATA has been declared as exempt by Federal Government, TESCO cannot claim input tax adjustment on the electricity sold, resulting in loss to TESCO. CPPA-G has billed Rs.2266.52 million and Rs.4169.51 million as Input Tax to TESCO creating a liability. Against this input tax amount, TESCO has not been able to claim adjustment of the exempt supplies. After 25th Amendment to the constitution of Pakistan, where article 246 and 247 stood omitted and FATA/PATA regions were merged into Khyber Pakhtunkhwa. Further through Finance Act, 2019 residential, commercial and industrial unit's setup before 31st May, 2018 excluding steel and ghee or cooking oil industries, were exempted from tax till 30th June 2023. After the Finance Act 2019, TESCO cannot claim input tax against the output tax as supply of electricity to FATA Regions is treated as exempt supply. The financial position of TESCO does not allow to pay input tax from its pocket. NEPRA is requested to allow the above costs as part of power purchase.

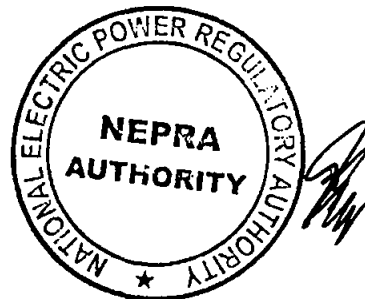
- 7.57. The Authority has considered the submissions of the Petitioner regarding PYA and point wise discussion is as under.
- 7.58. Regarding Input Tax, the Petitioner may take up the matter with CPPA-G and other relevant agencies as the same does not fall under the purview of NEPRA.
- 7.59. Regarding supplemental charges, the Authority earlier in the matter has decided to allow DISCOs to retain LPS to the extent of Supplemental charges billed by CPPA-G. In case supplemental charges billed by CPPA-G are lower than the LPS, than any amount of LPS over and above the supplemental charges are adjusted back as part of PYA on yearly basis. Any supplemental charges over and above the LPS are not allowed by the Authority. As the matter has already been decided by the Authority, therefore, the request of the Petitioner is out of scope of Annual adjustment/indexation, hence not justified. The Authority has decided to disallow the request.
- 7.60. Regarding submissions of the Petitioner to actualize the R&M costs for the previous years and revise the base rates accordingly, the Authority considers such requests are out of scope of the MYT adjustment/ indexation mechanism, hence declined.
- 7.61. Regarding request of the Petitioner to allow cost of hiring made in the FY 2021-22 and FY 2022-23, the matter has been discussed in the previous paragraphs under the head of Salaries & Wages, whereby the requested cost has been disallowed keeping in view the scope of the MYT determination.
- 7.62. Regarding request of the Petitioner to allow cost of MIRAD hiring, the matter has been discussed in the previous paragraphs under the head of Salaries & Wages, whereby the requested cost has been allowed and the previous cost has been made part of PYA.
- 7.63. Regarding RoRB, the request of the Petitioner has been considered in light of the MYT determination and the PYA has been calculated accordingly.

Mr. Mohi



- 7.64. The Authority had been allowing wheeling charges to the Petitioner in the past, however, the Petitioner did not provide any details of the amount actually billed by PESCO to the Petitioner on account of wheeling charges and the amount actually paid by the Petitioner to PESCO. Therefore, the Petitioner is directed to provide such details and also develop an understanding with PESCO regarding what should be the wheeling rate and submit the same for consideration of the Authority. In the meantime the Authority has decided not to allow the wheeling charges to the Petitioner on provisional basis.
- 7.65. Based on the above discussion, decisions of the Authority under various head of accounts in the earlier paras and in line with the scope of MYT, the PYA of the Petitioner for the FY 2023-24 has been worked out as under;

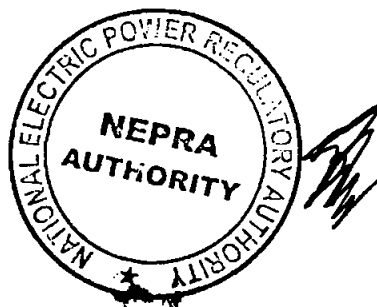
Description	TESCO
2nd & 3rd Qtr. FY 2019-20 (Oct.20 to Sep.21)	
Allowed Amount	- 104
Qtr. Rs./kWh	- 0.0604
Recovered	- 119
Under/(Over) Recovery	15
4th Qtr. FY 2019-20	
Allowed Amount	- 562
Qtr. Rs./kWh	- 0.3270
Recovered	- 639
Under/(Over) Recovery	77
1st & 2nd Qtr. FY 2020-21 (Oct. 21-Sept.22)	
Allowed Amount	- 1,450
Qtr. Rs./kWh	- 0.85
Recovered	- 1,657
Under/(Over) Recovery	207
3rd Qtr. FY 2020-21 (Oct.21-Sept.22)	
Allowed Amount	- 902
Qtr. Rs./kWh	- 0.5272
Recovered	- 1,030
Under/(Over) Recovery	128
4th Qtr. FY 2020-21 (Feb. Apr. 22)	
Allowed Amount	- 193
Qtr. Rs./kWh	- 0.4650
Recovered	- 221
Under/(Over) Recovery	28
1st Qtr. FY 2021-22 (Jun. Aug. 22)	
Allowed Amount	1,195
Qtr. Rs./kWh	2.7969
Recovered	1,157
Under/(Over) Recovery	38
2nd Qtr. FY 2021-22 (Jul. Sep. 22)	
Allowed Amount	4,504
Qtr. Rs./kWh	10.5396
Recovered	4,065
Under/(Over) Recovery	439



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*Decision of the Authority in the matter of request filed by TESCO for
Adjustment / Indexation of Tariff for the FY 2023-24 under the MYT*

Description	TESCO
3rd Qtr. FY 2021-22 (Sep. Nov. 22)	
Allowed Amount	4,394
Qtr. Rs./kWh	10.2834
Recovered	4,065
Under/(Over) Recovery	329
4th Qtr. FY 2021-22 (Oct. 22 Jan. 23)	
Allowed Amount	4,456
Qtr. Rs./kWh	6.0212
Recovered	3,279
Under/(Over) Recovery	1,177
1st Qtr. FY 2022-23 (Feb. Mar. 23)	
Allowed Amount	1,262
Qtr. Rs./kWh	3.6214
Recovered	752
Under/(Over) Recovery	510
2nd Qtr. FY 2022-23 (Apr. Jun. 23)	
Allowed Amount	1,262
Qtr. Rs./kWh	2.33
Recovered	
Under/(Over) Recovery	
D.M FY 2021-22	
Allowed Amount	879
Rate. Rs./kWh	1.97
Recovered	3,602
Under/(Over) Recovery	- 2,723
PYA 2019-20	
Allowed Amount	800
Rate. Rs./kWh	0.47
Sales till Feb.11 2022	1,858
Recovered	869
Under/(Over) Recovery	- 69
Excess LPS to be adjusted - FY 2020-21	
LPS Recovered from Consumers	-
Supplemental charges billed by CPPA	1,123
Net	1,123
Excess LPS to be adjusted - FY 2021-22	
LPS Recovered from Consumers	-
Supplemental charges billed by CPPA	1,901
Net	1,901
Adjustment in PYA	-
Other Costs - FY 2020-21 to FY 2022-23	
Pay & Allowance FY 2023 Adjustment	63
Turn over/Min. Tax	
Supplier NEPRA Fee- FY 2021-22	9
Supplier NEPRA Fee- FY 2022-23	12
Genco Pensioners FY 2022 & FY 2023	-
NTDC Pensioners	-
Total	42
Total	114



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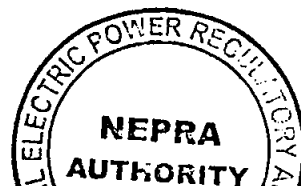
*Decision of the Authority in the matter of request filed by TESCO for
Adjustment / Indexation of Tariff for the FY 2023-24 under the MYT*

MYT True Ups		TESCO
FY 2020-21		
Depreciation		
Allowed		348
Actual		400
Under/(Over) Recovery		-
RoRB (Investment + KIBOR)		
Allowed		-
Actual		110
Under/(Over) Recovery		110
Other Income		
Allowed		- 967
Actual		- 1,402
Under/(Over) Recovery		- 435
FY 2021-22		
Depreciation		
Allowed		385
Actual		413
Under/(Over) Recovery		-
RoRB (Investment + KIBOR)		
Allowed		-
Actual		221
Under/(Over) Recovery		221
Other Income		
Allowed		- 798
Actual		- 1,319
Under/(Over) Recovery		- 521
Total MYT True Ups		- 624
G. Total PYA FY 2021-22 & FY 2022-23		- 510

8. Whether the peak and off-peak rate design needs to be revised?

- 8.1. The Authority observed that all DISCOs including the Petitioner during the hearing of their MYT adjustment/indexation request, submitted to continue with the existing mechanism of peak / off-peak hours and prevailing rate design.
- 8.2. Some commentators submitted that tariff be designed in such a way so as to encourage consumption during low load periods. Mr. Arif Bilwani, a consumer of K-Electric submitted that for industrial consumers, peak tariff rates may be abolished to encourage consumption and generate economic activity.

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- 8.3. The Authority keeping in view the submissions of DISCOs and points raised by the commentators, considers that the matter requires further deliberations. Further, the authority also understands that the existing infrastructure of DISCOs also needs to be evaluated in terms of its capability to cater for multiple peak /off peak rates and times during a billing cycle.
- 8.4. In view thereof, the Authority has decided to continue with the existing mechanism of peak / off-peak hours and prevailing rate design. At the same time, the Petitioner is directed to evaluate the different proposals of tariff design so as to make it more efficient and cost reflective with the objective to maximize the utilization of available capacity.

9. Whether the existing Tariff Terms and Conditions needs to be modified (including the request of Cold Storage to charge "B Industrial Supply" Category tariff instead of "A-2 Commercial" category tariff), and keeping in view the amendments in Consumer Service Manual or otherwise?

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

"Considering the fact that the Authority, through CSM has already allowed extension in load beyond 5 MW up to 7.5 MW, therefore, for such consumers the applicable tariff shall remain as B-3. However, while allowing extension in load, the DISCOs shall ensure that no additional line losses are incurred and additional loss, if any, shall be borne by the respective consumers."

- 9.2. Regarding change in tariff category of Cold Storage to charge "B Industrial Supply" Category tariff instead of "A-2 Commercial, the Authority noted that a large number of stakeholders raised their concerns in the matter. The Authority considering such large representations of the stakeholders decided to initiate separate proceedings in this regard. Accordingly, a separate hearing in the matter was held on 06.06.2023. Therefore, any amendments/modification in the terms & conditions for cold storage would be made based on the final outcome of the separate proceedings being carried out by the Authority.

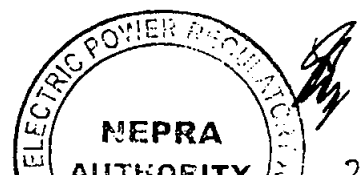
10. Whether the existing fixed charges applicable to different consumer categories need to be revised and require any changes in mechanism for charging of such charges based on Actual MDI or Sanction Load or otherwise?

Whether there should any Fixed Charges on consumer's categories who are currently not paying any fixed charges?

- 10.1. Regarding revision in applicable fixed charges on different consumer categories and change in mechanism of application of fixed charges based on actual MDI or sanction load or otherwise, the Authority noted that large number of stakeholders raised their concerns in the matter. The Authority considering such large representations of the stakeholders decided to initiate separate proceedings in this regard. Accordingly, a separate hearing in the matter was held on 06.06.2023. Therefore, any amendments/modification in the terms & conditions for application of fixed charges would be made based on the final outcome of the separate proceedings being carried out by the Authority.

11. Revenue Requirement

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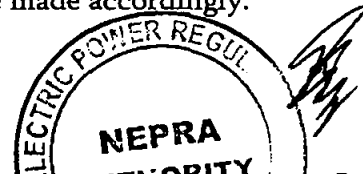
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- 11.1. In view of the discussion made in preceding paragraphs and accounting for the adjustments discussed above, the adjusted revenue requirement of the Petitioner, for the FY 2023-24 is as under;

Description	Unit	Allowed FY 2023-24	
		DOP	SOP
Units Received	[MkWh]	2,470	2,470
Units Sold	[MkWh]	2,247	2,247
Units Lost	[MkWh]	223	223
Units Lost	[%]	9.01%	9.01%
Energy Charge			16,295
Capacity Charge			62,602
Transmission Charge/ Market			5,114
Operator Fee			
Distribution Business Cost			2,238
Power Purchase Price	[Mln. Rs.]		86,249
Pay & Allowances		1,038	254
Post Retirement Benefits		225	72
Repair & Maintainance		24	3
Traveling allowance		20	8
Vehicle maintenance		18	11
Other expenses		23	52
O&M Cost	[Mln. Rs.]	1,347	400
Depreciation		512	8
RORB		656	-
O.Income		(277)	-
Margin	[Mln. Rs.]	2,238	408
Prior Year Adjustment (PYA)		-	(510)
Revenue Requirement	[Mln. Rs.]	2,238	86,147
PPP with Wire Business Cost-Unadj.		-	34.92
PPP with Wire Business Cost-adj.		-	38.38
Margin		1.00	0.18
PYA Adjustments		-	(0.23)
Average Tariff	[Rs./kWh]	1.00	38.33

- 11.2. The above determined revenue shall be recovered from the consumers through the projected sales of 2,247 GWhs, as per Annex – II.
- 11.3. The above assessment has been carried out based on the data/information provided by the Petitioner, which the Authority believes is correct and based on facts. In case of any deviation / misrepresentation observed at a later stage, the Petitioner shall be held responsible for the consequences arising out, under NEPRA Act, Rules and Regulations made thereunder. Any consequential adjustment, if required will be made accordingly.

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12. **ORDER**

12.1. From what has been discussed above, the Authority hereby approves the following adjustments in the MYT of the Petitioner Company for the Financial Year 2023-24:-

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

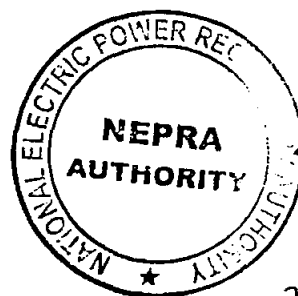
Description	For 132 kV only	For 11 kV only	For both 132kV & 11 kV
Asset Allocation	20.72%	36.21%	56.93%
Level of Losses	1.50%	5.54%	6.96%
UoSC Rs./kWh	0.23	0.43	0.67

- III. 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.
- IV. To file future monthly & quarterly adjustments on account of Power Purchase Price (PPP) based on the Annex-IV attached with the instant decision.
- V. The Petitioner shall comply with the Tariff terms & Conditions for supply of electricity as annexed with decision as Annex-V.

13. **Summary of Direction**

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

- To provide detail of its actual tax assessments and the amount paid to FBR along-with the amount allowed by the Authority on account of tax payments since FY 2014-15 with its subsequent adjustment request.
- To provide the reconciled date of sales mix with its reported revenue as per audited financial statement of the respective year.
- To provide proper details of GENCO employees allocated to it by providing proper employee wise details, their pay scales, terms of adoption, approvals of competent authority for such adoption and placement details along-with their financial impact.
- To provide the IDC amount for FY 2020-21 onward with subsequent adjustment request and reflect the same in its Audited Financial Statements as well.



14. Decision of the Authority, is hereby intimated to the Federal Government for filling of uniform tariff application in terms of section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.
15. 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

Mat Niaz

— Mathar Niaz Rana (nsc)
Member

— Rafique Ahmed Shaikh
Member

— Engr. Maqsood Anwar Khan
Member

Amina Ahmed
Ms. Amina Ahmed
Member



14/07/23

— Tauseef H. Farooq
Chairman



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

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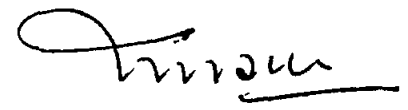
No. NEPRA/Dir (C & I)/2023/1434

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

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

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

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

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

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

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

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

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

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

OR

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

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

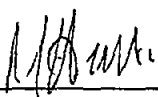
9. The Authority after detailed deliberations upon the working paper decided to return the earlier petitions filed by XWDISCOs for use of system charges/ wheeling charges, with the directions to file new tariff petitions after incorporating the revised tariff numbers as determined by NEPRA for the FY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



Mathar Niaz Rana (nsc)
Member



Rafique Ahmed Shaikh
Member



Engr. Maqsood Anwar Khan
Member



Amina Ahmed
Member



Waseem Mukhtar
Chairman

C

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
(REGISTRAR OFFICE)

F/F

No: NEPRA/R/TRF-100/ 33608

October 3, 2023

I O N


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

Please find enclosed herewith subject petition filed by Tribal Areas Electric Supply Company (TESCO) vide letter No. 6969-71/CEO/TESCO dated 27.09.2023 (received on 03.10.2023) 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. TESCO 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 06.10.2023.

Encl: **As above**


31/10/23
(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

