



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

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No. NEPRA/R/ADG(Trf)/TRF-524/GEPCO-2019/46493-46495
December 24, 2020

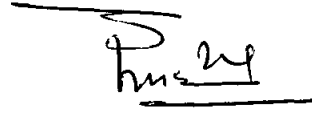
Subject: Determination of the Authority in the matter of Petition filed by Gujranwala Electric Power Company Ltd. (GEPCO) for Determination of its Distribution Tariff for the FY 2018-19 [Case # NEPRA/TRF-524/GEPCO-2019]

Dear Sir,

Please find enclosed herewith subject Determination of the Authority (35 Pages) in Case No. NEPRA/TRF-524/GEPCO-2019.

2. The Determination 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.

Enclosure: As above


24/12/20
(Syed Safeer Hussain)

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

CC:

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

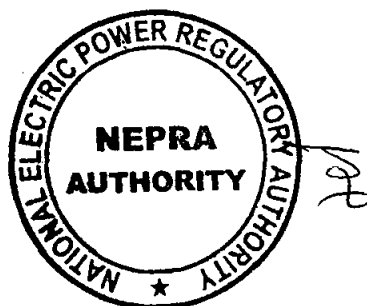


**National Electric Power Regulatory Authority
(NEPRA)**

PETITION NO: NEPRA/TRF-524/GEP-2020

**DETERMINATION OF DISTRIBUTION TARIFF PETITION
FOR
GUJRANWALA ELECTRIC POWER COMPANY LIMITED (GEP)
FOR THE FY 2018-19
UNDER
NEPRA TARIFF (STANDARDS AND PROCEDURE) RULES - 1998**

Islamabad
24
December , 2020



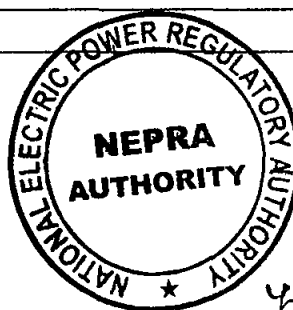
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Abbreviations

CpGenCap	The summation of the capacity cost in respect of all CpGencos for a billing period minus the amount of liquidated damages received during the months
ADB	Asian Development Bank
AMI	Advance Metering Infrastructure
AMR	Automatic Meter Reading
BoD	Board of Director
BTS	Base Transceiver Station
CAPM	Capital Asset Pricing Model
CDP	Common Delivery Point
COSS	Cost of Service Study
CPPA (G)	Central Power Purchasing Agency Guarantee Limited
CWIP	Closing Work in Progress
DIIP	Distribution Company Integrated Investment Plan
DISCO	Distribution Company
DM	Distribution Margin
DOP	Distribution of Power
ELR	Energy Loss Reduction
ERC	Energy Regulatory Commission
ERP	Enterprise resource planning
FCA	Fuel Charges Adjustment
FY	Financial Year
GIS	Geographical Information System
GOP	Government of Pakistan
GWh	Giga Watt Hours
HHU	Hand Held Unit
HT/LT	High Tension/Low Tension
HSD	High Speed Diesel
IGTDP	Integrated Generation Transmission and Distribution Plan
IESCO	Islamabad Electric Supply Company Limited
KIBOR	Karachi Inter Bank Offer Rates
KSE	Karachi Stock Exchange
KV	Kilo Volt
kW	Kilo Watt
kWh	Kilo Watt Hour
LPC	Late Payment Charges
MDI	Maximum Demand Indicator
MMBTU	One million British Thermal Units
MoWP	Ministry of Water and Power
MVA	Mega Volt Amp
MW	Mega Watt





NEPRA	National Electric Power Regulatory Authority
NOC	Network Operation Centre
NTDC	National Transmission & Despatch Company
O&M	Operation and Maintenance
OGRA	Oil and Gas Regulatory Authority
PEPCO	Pakistan Electric Power Company
PESCO	Peshawar Electric Supply Company Limited
PDEIP	Power Distribution Enhancement Investment Program
PDP	Power Distribution Program
PPA	Power Purchase Agreement
PPAA	Power Procurement Agency Agreement
PPP	Power Purchase Price
PYA	Prior Year Adjustment
R&M	Repair and Maintenance
RAB	Regulatory Asset Base
RE	Rural Electrification
RFO	Residual Fuel Oil
RLNG	Re-gasified Liquefied Natural Gas
RoE	Return on Equity
RORB	Return on Rate Base
ROR	Rate of Return
SBP	State Bank of Pakistan
SOT	Schedule of Tariff
STG	Secondary Transmission Grid
SYT	Single Year Tariff
T&D	Transmission and Distribution
TFC	Term Finance Certificate
TOU	Time of Use
TOR	Term of Reference
TPM	Transfer Price Mechanism
USCF	The fixed charge part of the Use of System Charges in Rs./kW/Month
UOSC	Use of System Charges
WACC	Weighted average cost of capital
WAPDA	Water and Power Development Authority
XWDISCO	Ex-WAPDA Distribution Company





**DETERMINATION OF THE AUTHORITY IN THE MATTER OF PETITION FILED BY
GUJRANWALA ELECTRIC POWER COMPANY LIMITED (GEPCO) FOR DETERMINATION OF
ITS DISTRIBUTION TARIFF FOR THE FY 2018-19**

CASE NO. NEPRA/TRF-524/GEPCO-2020

PETITIONER

Gujranwala Electric Power Company Limited (GEPCO), 565-A Model Town, Gujranwala.

INTERVENER

NIL

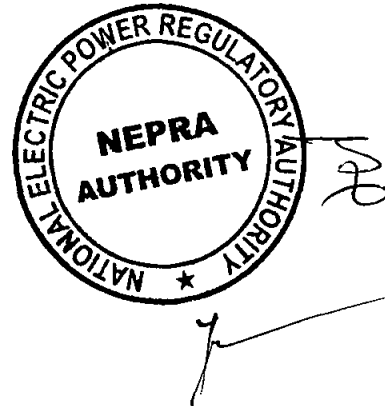
COMMENTATOR

Telenor Pakistan (Private) Limited, Gulberg Greens, Islamabad.

REPRESENTATION

- | | |
|--------------------------|----------------------------|
| i. Muhammad Amin | Chief Executive Officer |
| ii. Iyaz Ahmad | Finance Director |
| iii. Tariq Mahmood Amjad | Manager Finance/CPC |
| iv. Muhammad Akhtar Ali | Manager GSO |
| v. Muhammad Asif | Deputy Manager Finance/CPC |

Asif



1. Background

- 1.1. The amendments in the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 was passed by the National Assembly on 15th March, 2018, which was published in the official Gazette on 30th April 2018 (the "**Amendment Act**"), resulting in restructuring of the energy sector.
- 1.2. As per the amended Act, function of sale of electric power traditionally being performed by the Distribution Licensees has been amended under Section 21(2)(a), whereby 'sale' of electric power has been removed from the scope of 'Distribution Licensee' and transferred to 'Supply Licensee'.
- 1.3. Section 23E of the Act, provides NEPRA with the powers to grant Electric Power Supply License for the supply of electric power. Section 23E(1), however, provides that the holder of a distribution license on the date of coming into effect of the Amendment Act, shall be deemed to hold a license for supply of electric power under this section for a period of five years from such date. Thus, all existing Distribution Licensees have been deemed to have Power Supplier Licenses, to ensure distribution licensees earlier performing both the sale and wire functions, can continue to do so. Section 23E, further states that the eligibility criteria for grant of license to supply electric power to be prescribed by the Federal Government, and shall include, provision with respect to a supplier of the last resort, as the case may be.
- 1.4. In view thereof, Gujranwala Electric Power Company Limited (GEPCO), hereinafter called "the Petitioner", being a Distribution as well as deemed Supplier filed separate tariff petitions for the determination of its Distribution and Supply of Electric Power Tariff for the FY 2018-19 in terms of Rule 3 (1) of Tariff Standards & Procedure Rules-1998 (hereinafter referred as "Rules").
- 1.5. The Petitioner in its petition, inter alia, has requested for a distribution cost of Rs.18,580 million for the FY 2018-19 i.e. Rs.1.8572/kWh based on projected sales of 10,004 GWh as detailed below;

Description	Units	FY 2018-19
Investment	[Mln Rs]	4,524
Units Received	GWh	11,100
Requested Units Lost	GWh	1,096
Requested Losses	%	9.87%
Units Sold	GWh	10,004
O&M	[Mln Rs]	12,599
Depreciation		2,070
RORB		4,789
Other Income		-878
Total Revenue Requirement of Wire Business	[Mln Rs]	18,580
Distribution Margin	Rs./kWh	1.8572

2. Proceedings

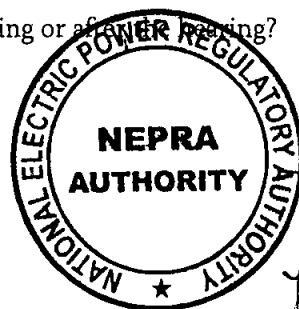
- 2.1. In terms of rule 4 of the Tariff standard and Procedure Rules, 1998 (hereinafter referred to as "Rules"), the petition was admitted by the Authority. Since the impact of any such adjustments has to be made part of the consumer end tariff, therefore, the Authority, in order to provide an opportunity 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 scheduled on September 09, 2020, for which notice of admission / hearing along-with the title and brief description of the petition was published in newspapers on August 26, 2020 and also uploaded on NEPRA website; Individual notices were also issued to stakeholders/ interested parties.

3. Issues of Hearing

- 3.1. 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 Petitioner has complied with the direction of the Authority given in its earlier determination?
 - ii. Whether the basis used by the Petitioner for bifurcation of its costs into supply and distribution segments are justified?
 - iii. As provided in NEPRA Amendment Act, 2018, GEPCO as Distribution Licensee shall be deemed to hold Supply License also for a period of 5-years. In this regard, GEPCO is required to explain its organizational restructuring in respect of segregation of responsibilities for Distribution Business and Sale Business?
 - iv. As per NEPRA Amendment Act, 2018, obligations of procurement of assets including meters (for satisfying its services) and disconnection / reconnection services (on demand of Supplier) are with Distribution Licensee whereas procedure for metering, billing, collection of approved charges and recovery of arrears are the obligations of Supply Licensee. In this scenario, GEPCO is required to state the mode and manner being developed and followed for appropriate coordination between Distribution Licensee and Supply Licensee?
 - v. Whether the projected energy to be sold is reasonable?
 - vi. Whether the projected Net Distribution Margin (excluding RoRB) is justified?
 - vii. Whether the projected Return on Regulatory Asset base (RORB) for the FY 2018-19 is justified?
 - viii. Whether the distribution margin should be recovered on Rs./kW or Rs./kWh basis?
 - ix. Whether the requested T&D loss target is reasonable?
 - x. Why GEPCO did not submit its five year IGTDP as per requirements under NEPRA Consumer End Tariff Methodology for approval of the Authority? GEPCO is required to submit IGTDP on prescribed formats immediately.
 - xi. Whether the requested investment without submission of five Year IGTDP as required is justified? Petitioner must provide the project wise detailed report along with rationale against the requested investment.
 - xii. Whether the ToU meters installed on Residential connections have the capability to record MDI?
 - xiii. As per Amendment Act, 2018, responsibilities of DISCO and Supplier have been bifurcated. GEPCO is required to submit overall organogram which broadly describe its role/functions as DISCO and Supplier.
 - xiv. Whether the concerns raised by the intervener/ commentator if any are justified?
 - xv. Any other issue that may come up during or after the hearing?



4. Filing Of Objections/ Comments

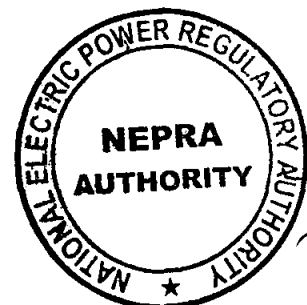
- 4.1. Comments/replies and filing of Intervention Request (IR), if any, were desired from the interested person/ party within 7 days of the publication of notice of admission in terms of Rule 6, 7 & 8 of the Rules. In response thereof, comments have been received from M/s Telenor Pakistan. A brief of the concerns raised by M/s Telenor Pakistan is as under;
- 4.2. The commentator while referring to the Telecom Policy of 2004, submitted that the Federal Government declared the Telecom Sector including Cellular Operators (CMOs) as an Industry vide notification dated 20.04.2004. The Ministry of Information Technology (MoIT) vide UO dated 18.06.2014 also endorsed the request of Telecom Sector including Cellular Operators to be classified as an Industrial undertaking under clause (b) of Section 2(29C) of the Income Tax Ordinance 2001. M/s Telenor accordingly requested NEPRA to recognize CMOs as an Industrial Undertaking so that CMOs are applied Industrial tariff instead of Commercial tariff, as NEPRA is in the process of determining Uniform tariff of DISCOs, including the current Petition filed by GEPCO.
- 4.3. GEPCO on the issue submitted during hearing that a Cellular Mobile Operator is not an industry as defined in the Part II of the Tariff Terms & Conditions of the Tariff by virtue of that Industry means "a bona fide undertaking or establishment engaged in manufacturing, value addition and / or processing of goods."
- 4.4. The Authority observed that the issue highlighted by the commentator pertains to all the DISCOs including K-Electric as CMOs are operating all over Pakistan, therefore, the issue requires deliberations involving all stakeholders i.e. DISCOs, CMOs, Ministry of Energy, MoIT etc. The Authority noted that proceedings regarding Tariff petitions filed by all XWDISCOs for the FY 2018-19 and FY 2019-20, except GEPCO, have already been completed, therefore, the Authority has decided to consider the request of M/s Telenor as a separate issue during the proceedings for the upcoming tariff Petitions of DISCOs for the FY 2020-21 & onwards.
- 4.5. The Authority also discussed the matter of delay in installation of pending connections during the hearing. However, the Petitioner did not submit any details with respect to the pending connections as of June 2019. The Authority while analyzing the DISCOs performance statistics report published by PEPCO noted that total applications pending for new connections in respect of the Petitioner were 39,087, which include 33,149 domestic, 3,359 commercial, 2,022 Agriculture, and 557 industrial applications. The Authority directs the Petitioner to provide electricity connections to all these pending applications without further delay and submit a quarterly progress report in this regard.
- 4.6. During the hearing, the Petitioner was represented by its Chief Executive Officer 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;

5. Whether the Petitioner has complied with the direction of the Authority given in its earlier determination?

- 5.1. The Authority gave certain directions to the Petitioner in its tariff determination for the FY 2017-18. The Authority understands that periodic monitoring of the directions given by the Authority is absolutely necessary in order to analyze the Petitioner's performance, therefore, the Authority has decided to have a half yearly review of the given directions, instead of discussing the same only during the tariff proceedings. However, the directions which are directly relevant to the tariff determination of the Petitioner are discussed hereunder;

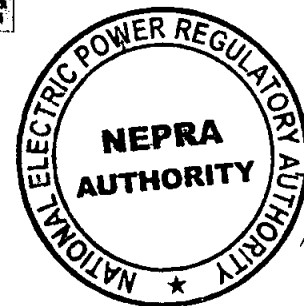
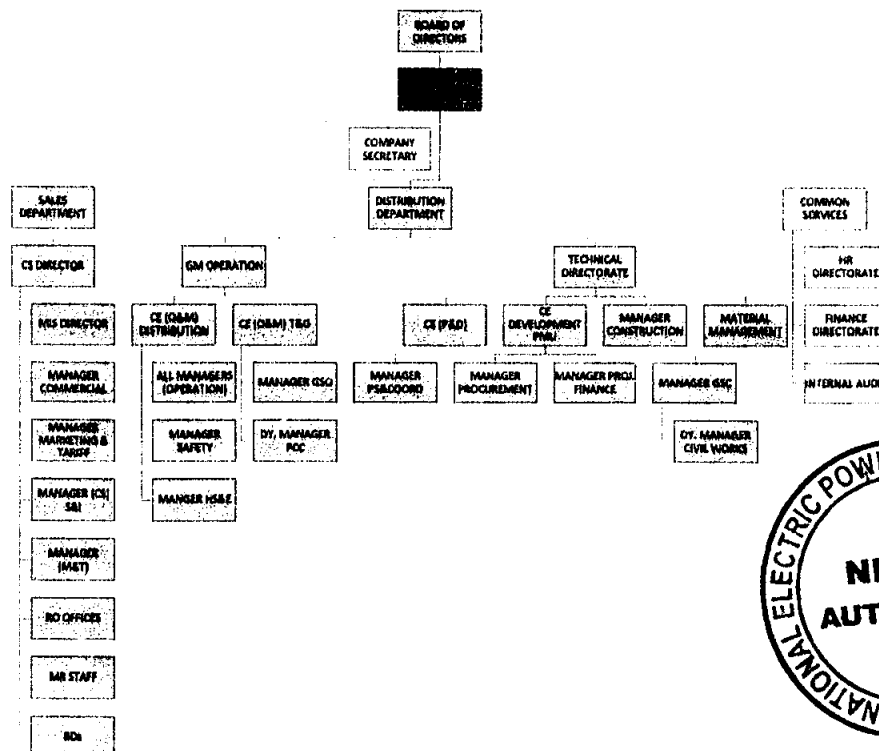
6. To spend at least 20% of the village electrification funds for improvement / up gradation of the grid and not to undertake any village electrification which would result in overloading of its system. The village electrification would only be undertaken without augmentation of the grid, if it already has spare MVAs.
- 6.1. The Authority in the Petitioner's determination for the FY 2015-16 observed that the impact of all the investments may get diluted, if the Petitioner carry out village electrification imprudently as imprudent village electrification may result in overloading and increasing the T&D losses.
- 6.2. In the past, the village electrification was restricted to poles, lines and distribution transformers only. Its impact on the existing grid or strengthening of the grid due to the additional load in the form of village electrification was totally ignored. In view thereof, the Authority directed the Petitioner to spend at least 20% of the village electrification funds for improvement / up-gradation of the grid. The Petitioner was further directed not to undertake any village electrification which would result in overloading of its system and the village electrification would only be undertaken without augmentation of the grid, if it already has spare MVAs.
- 6.3. PEPCO vide letter dated July 01, 2020, directed all the DISCOs to deduct 20% from the SAP funds. This action caused hue and cry amongst the different stakeholders and a meeting of Cabinet was convened on July 07, 2020, wherein it was decided that the practice of deducting 20% from SAP funds should be discontinued.
- 6.4. The same decision was communicated to NEPRA, which was subsequently discussed with the honorable Federal Minister of Energy with respect to its implications to the Sector. The Federal Minister assured that wherever grid augmentation is involved, the Ministry of Energy (Power Division) will ensure these funds to DISCOs to beef up the grid facilities.
- 6.5. The Authority keeping in view the decision of Cabinet dated July 07, 2020 and subsequent assurance by the Honorable Federal Minister of Energy, hereby directs the Petitioner to stop the existing practice of deducting 20% of SAP funds for grid augmentation and carry out the augmentation of the grid after coordinating with the Ministry of Energy.
7. To provide rational / justification for improper utilization of the consumer security deposit and receipt against deposit work and to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance.
- 7.1. The Authority during the tariff determination of the Petitioner for the FY 2015-16 and onward, noted that the Petitioner had insufficient cash balance as on 30th June 2015 against its pending liability of receipt against deposit works and consumer security deposits, which indicated that the amount received against the aforementioned heads has been utilized somewhere else and the Petitioner failed to provide details in this regard. The Authority observed that the amount collected as security deposit cannot be utilized for any other reason and any profit earned thereon has to be distributed to the consumers. Also, the amount collected under the head of receipt against deposit works has to be spent for the purpose for which it has been collected. The utilization of the money collected against deposit works and security deposits other than the works for which it has been received is illegal and unlawful. In view thereof, the Petitioner was directed to provide rational / justification for improper utilization of the money because the consumers have to face unnecessary delay for their applied connections.
- 7.2. The Petitioner during the instant hearing submitted that an amount of Rs.3.56 billion out of Security Deposits were paid to CPPA-G with the approval of PEPCO as loan on PEPCO

- repeated directions. Recovery till date has been made of Rs.1.8 Billion. However, no payment was made out of Receipts against Deposit Works.
- 7.3. The Authority while taking a serious notice of non-compliance of its directions by the Petitioner and lending of amount of Rs.3.56 billion to CPPA-G has decided to take up this matter separately with the Petitioner through M&E/Legal Department.
- 7.4. Similarly for the FY 2018-19, the Authority has again observed that the Petitioner as per its audited accounts has insufficient cash balance as on 30th June 2019, against its pending liability of receipt against deposit works and consumer security deposits, thus, indicating that the amount received against the aforementioned heads has been utilized somewhere else.
- 7.5. Accordingly, the Authority has decided, to include the amount of receipts against deposit works as a part of Deferred Credits for RAB for FY 2018-19, after excluding therefrom cash/ bank balances and amount of stores & Spares available with the Petitioner as on 30-06-2019.
- 7.6. The Petitioner is directed to ensure that in future consumer's deposits are not utilized for any other purpose and restrain from unlawful utilization of receipts against deposit works and security deposits, and ensure recovery of outstanding amount of loan from CPPA-G without further delay. The Petitioner is also directed to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance.
8. **To maintain a proper record of its assets by way of tagging each asset for its proper tracking and to provide explanation on the concerns raised by the Authority in terms of its R&M cost.**
- 8.1. The Authority in the previous tariff determinations of the Petitioner pertaining to the FY 2015-16, FY 2016-17 and FY 2017-18, observed that proper tagging of the assets is of utmost importance in order to enable the Petitioner to properly classify its cost in terms of capital or expense and accordingly, directed the Petitioner to maintain a proper record of its assets by way of tagging each asset for its proper tracking. In addition, the Petitioner was also directed to provide an explanation on the concerns raised by the Authority in terms of capitalization of costs which were being expensed out as R&M by the Petitioner. The Petitioner submitted during the hearing that the direction has been noted for compliance in future as ERP system is being implemented in GEPCO and the compliance regarding segregation of assets will be made accordingly in the Financial Statements.
- 8.2. The Authority in view thereof, has decided to take up this matter separately with the Petitioner through M&E/Legal Department, however, at the same time the Petitioner is gain directed to ensure proper tagging of its assets so that costs incurred are properly classified as per their nature and also to provide explanation on the concerns raised by the Authority in terms of its R&M costs.
9. **To submit its investment needs in respect of HHUs not later than 30th September, 2018**
- 9.1. In order to protect the interest of consumers in the matter of excessive billing, the Authority while considering the proposals floated by different XWDISCOs, during the proceedings of the tariff determination for the FY 2014-15 tariff determination process; agreed with the proposal submitted by PESCO regarding printing of snapshot of meter reading on the electricity bills of the consumers not only to enhance the level of confidence of the consumers but also to create an effective quality check on the Meter Readers.



- 9.2. In view of the aforementioned proposal regarding printing of snap shot of meter reading on the electricity bills, the Authority also considered the proposal of the Petitioner & MEPCO for allowing the cost of hand held meter reading units and principally decided to allow the cost of the hand held units to the Petitioner and directed it to submit its investment requirements for the implementation of the said plan along with the completion timelines.
- 9.3. The Petitioner, during hearing of the instant Petition submitted that Due to technical constraints of compatibility with central PITC System, non-availability of consumables, lack of operational flexibility and difficult interface, it has opted for snapshot reading through mobiles (cell phones) costing Rs.30 Million approximately and accordingly has achieved consumer satisfaction on accuracy. However, investment needed only for HHUs works out to Rs.136 Million approx. (1,600HHUs x 0.085 million)
- 9.4. The Authority during the proceedings of tariff petitions of XWDISCOs for the FY 2019-20 noted that XWDISCOs have implemented printing of snap shot on bills through mobile phones meter reading instead of HHUs. It was also explained by various XWDISCOs that mobile meter reading, through application developed by PITC, is successfully being carried out through Mobiles, and also the cost of mobile phones is much lower than then HHUs. The Authority considers that purpose of the direction was to ensure printing of meter snap shots on consumer bills to eliminate inefficiencies, which as per the submissions made by the Petitioner, are being done through mobile phones and at a lower cost. Thus, the direction of the Authority has been complied with, however, the Petitioner is directed to ensure visibility of the snapshots appearing on the bills and to keep the record of snapshots at-least for one year.
10. To transfer the already collected provision on the account of postretirement benefits into the Fund and also create separate accounts or fund (as the case may be) for each head of post retirement liability and transfer the amount in the post retirement liability in the fund or accounts (as the case may be)
- 10.1. The matter has been discussed in the ensuing paragraphs while deliberating the issue of Distribution Margin requested by the Petitioner.
11. To share the details of late payment charges recovered from consumers and any invoice raised by CPPA under the head of mark up on delayed payments for the FY 2014-15, FY 2015-16 and FY 2016-17 and to provide proper disclosure of LPS recovered from consumers in its financial statements
- 11.1. The Authority during the tariff determination of the Petitioner for the FY 2017-18 noted that CPPA-G did not raise any invoice to the Petitioner on account of late payment charges, therefore, the amount of LPS allowed in the FY 2014-15, FY 2015-16, and FY 2016- 17 shall be adjusted once the CPPA-G raises the late payment invoice.
- 11.2. The Petitioner has not shared any details with respect to the invoices raised by CPPA (G) under the head of mark-up on delayed payments for the respective periods. The Authority, therefore, again directs the Petitioner to provide the required details of late payment charges recovered from the consumers and invoices raised by CPPA (G) under the head of mark-up on delayed payments for the period from FY 2014-15 to FY 2019-20, in its next tariff petition.
12. To provide project wise detail of actual investments made during last five years along-with its cost/benefit analysis report and the technical / financial savings achieved.
- 12.1. The matter has been discussed in the ensuing paragraphs while deliberating the issue of Investments requested by the Petitioner.

13. Whether the basis used by the Petitioner for bifurcation of its costs into supply and distribution segments are justified?
14. As provided in NEPRA Amendment Act, 2018, GEPCO as Distribution Licensee shall be deemed to hold Supply License also for a period of 5-years. In this regard, GEPCO is required to explain its organizational restructuring in respect of segregation of responsibilities for Distribution Business and Sale Business?
15. As per NEPRA Amendment Act, 2018, obligations of procurement of assets including meters (for satisfying its services) and disconnection / reconnection services (on demand of Supplier) are with Distribution Licensee whereas procedure for metering, billing, collection of approved charges and recovery of arrears are the obligations of Supply Licensee. In this scenario, GEPCO is required to state the mode and manner being developed and followed for appropriate coordination between Distribution Licensee and Supply Licensee?
16. As per Amendment Act, 2018, responsibilities of DISCO and Supplier have been bifurcated. GEPCO is required to submit overall organogram which broadly describe its role/functions as DISCO and Supplier?
- 16.1. As explained in earlier paragraphs, the function of sale of electric power traditionally being performed by the Distribution Licensees has been amended through NEPRA Act, 2018, whereby 'Sale' of electric power has been removed from the scope of Distribution Licenses and transferred to 'Supply Licensee'.
- 16.2. In light of the aforementioned provisions of the Act, the Petitioner was required to bifurcate its costs in terms of Distribution and Supply Function and provide basis thereof.
- 16.3. The Petitioner during the hearing submitted that Bifurcation of costs into Supply and Distribution business is based on the guidelines sought from NEPRA. The Petitioner provided the following organogram in this regard;



- 16.4. Regarding allocation of costs into Distribution and Supply of Power Function, the Petitioner submitted as under;

Specific costs attributable to Power Supply Business

- ✓ **Power Purchase Price:**
Entire Power Purchase Price has been allocated to Power Supply Business.
- ✓ **Salaries, Wages & Other Benefits:**
Salaries & Wages of Meter Readers, Bill Distributors, Meter Inspectors, Meter Reader Supervisors, and Staff of Revenue Offices along with the services of MIS Directorate (Computer Centers) and Customer Services Directorate.
- ✓ **Bill Collection Charges and Late Payment Surcharges :**
Revenue as well as Cost has been allocated to Power Supply Business.
- ✓ **Provision for Bad debts**

Specific costs attributable to Distribution Business

- ✓ Rent, Rates & taxes
- ✓ Advertisement expenses

Common Costs:

- ✓ **Salaries, wages & other benefits:**
- ✓ **Percentage Share of Power Supply Business:**
On the basis of No. of Employees = $2,597/12,296 = 21\%$
On the basis of total Cost (Salaries, Wages & Other Benefits) = $1,447/ 5,786 = 25\%$
Percentage share of Power Supply Business has been adopted at 25% of the total employee cost rather than headcount.
- ✓ **Repair & Maintenance (Based on Value of Non-current Assets):**
2% to Power Supply Business, remaining to Distribution Business
- ✓ **Transportation Expenses (Based on No. of Vehicles):**
5% to Power Supply Business, remaining to Distribution Business
- ✓ **Power, Light & Water (Based on Actual):**
10% to Power Supply Business, remaining to Distribution Business
- ✓ **Office, Supplies & Others (Based on Actual):**
70% to Power Supply Business, remaining to Distribution Business
- ✓ **Professional Fee (Based on Actual):**
70% to Power Supply Business, remaining to Distribution Business
- ✓ **Injuries & Damages (Based on Actual):**
15% to Power Supply Business, remaining to Distribution Business
- ✓ **Misc. Expenses (Based on Actual):**
10% to Power Supply Business, remaining to Distribution Business
- ✓ **Depreciation (Based on Value of Non-current Assets):**
2% to Power Supply Business, remaining to Distribution Business

- 16.5. The Authority understands that as per the Amended Act, the Distribution Licensee is responsible to provide distribution service within its territory on a non-discriminatory basis and develop, maintain and publicly make available, with the prior approval of the Authority, an investment program, meaning thereby, that installation/investment, operation, maintenance and controlling of distribution networks, form part of the Distribution License and activities like metering, billing and collection form part of the Supply License.

- 16.6. The Authority observed that the Petitioner has bifurcated its costs keeping in view the functions as provided in the Act, i.e. all non-sale elements of the Distribution segment (i.e.

installation/investment, operation, maintenance and controlling of distribution networks) as part of the Distribution License and all sale related activities (*metering, billing and collection*) as part of the Supply License.

- 16.7. The Petitioner has also shared its organizational restructuring program in respect of segregation of responsibilities for Distribution Business and Sale Business.
- 16.8. The Authority believes that after amendments in NEPRA Act, all the Public Sector Distribution companies are required to make organizational restructuring in terms of segregation of responsibilities of the Distribution and Sale functions and in order to ensure appropriate coordination between both functions. Hence, keeping in view the fact that it is operational issue and DISCOs are owned by the Federal Government, it would be more appropriate that a centralized restructuring plan at the level of Federal Government is prepared to be implemented by all the public sector DISCOs in order to have a uniformity and consistency in the structure.

17. Whether the projected energy to be sold is reasonable?

- 17.1. The Petitioner has requested purchases of 11,100 GWh for the FY 2018-19 and provided the following comparison of actual of FY 2017-18 & FY 2018-19

Description	2018-19 (Actual)	2017-18 (Actual)
Units Purchased	11,100	10,987
Units Lost (Mkwh)	1,096	1,100
Units sold	10,004	9,887
Units Lost %	9.87	10.01

- 17.2. The Petitioner also provided the following detail of its Power Purchase Price for the FY 2018-19;

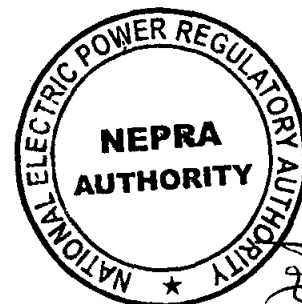
Particulars	2018-19 (Audited)	
	Rs. (Million)	Rs./KWh
Energy Cost	67,708	6.10
Variable Charges	3,396	0.31
Capacity Charges	52,228	4.70
Use of System Charges	3,879	0.35
Total	127,211	11.46

- 17.3. The Authority understands that the issue of Power Purchase Price being relevant with the Supply Business needs to be deliberated in detail under the Supply of Power Tariff Petition of the Petitioner for the FY 2018-19. Accordingly, the matter has been discussed there.

18. Whether the projected Net Distribution Margin (excluding RoRB) is justified?

- 18.1. The Petitioner in its petition requested a net Distribution margin exclusive of RoRB of Rs.13,791 million for its distribution function for the FY 2018-19 as detailed hereunder;

Description	Rs. in Mln
	Distribution Business
O&M	12,599
Depreciation	2,070
Other Income	(878)
Total Revenue Requirement	13,791

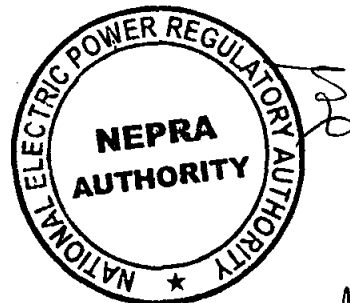


- 18.2. The O&M costs includes Employees cost (including Post-Retirement Benefit), Admin Expenses, Repair and Maintenance expenses, Travelling Expenses, Transportation Expenses, Management Fee and Miscellaneous expenses related to its distribution. The Petitioner submitted that for the FY 2018-19, the requested O & M, Depreciation and Other Income are justified being based on Actual Audited Results of FY 2018-19.
- 18.3. The Petitioner provided the following breakup of the requested amount under O&M costs along-with percentage allocation of the costs to its distribution function as under;

Operation & Maintenance	Distribution Business	
	%	Cost (Rs. in Mln)
1. Salaries, Wages & Other Benefits		
Salaries & Wages	75	4,340
Employees Benefits	75	1,381
Retirement Benefits	75	5,047
2. Travelling	75	250
3. Repair & Maintenance	98	950
4. Transportation	95	275
5. Other Expenses:		
Bills Collection	-	-
Rent & Rates	100	6
Power, Light & Water	90	39
Office Supplies & Others	30	37
Advertising	100	29
Professional Fee	30	49
Injuries & damages	85	151
Late Payment Surcharge-CPPAG	-	-
Provision for Bad Debts	-	-
Misc. Expenses	90	45
Grand Total		12,599

19. Salaries Wages & Other Benefits excluding Postretirement benefits

- 19.1. The Petitioner has requested an amount of Rs.10,768 under the head of Salaries & Other Benefits, comprising of Rs.5,721 million for Salaries & Wages (excluding post-retirement benefits) and Rs.5,047 million on account of Postretirement benefits for its Distribution Function for the FY 2018-19. The Petitioner submitted that its total actual amount of Salaries & Wages as per the Audited accounts for the FY 2018-19 is Rs.14,357 million (inclusive of Salaries & Wages of Rs.7,682 million and post-retirement benefits of Rs.6,729 million), out of which 75% cost has been allocated to the Distribution Function i.e. Rs.10,768 million. The Petitioner provided the following break-up of the cost;



Salaries & Wages (Audited)	FY 2018-19 Mln. Rs.
Basic Pay	3,547
Cash Medical Allowance	150
Conveyance Allowance	327
House Rent Allowance	256
Job Allowance	397
Livery Allowance	20
Qualification Pay/Technical Pay	30
Washing Allowance	45
Special Adhoc Relief	1,014
Overtime / Off-day Wages	618
Power, Light & Water	390
Awards & Gratuity	296
Medical Expenses	250
Education & Training	70
Misc.	218
Total	7,628

- 19.2. Considering the fact that the period i.e. FY 2018-19, for which the cost is being assessed, has already lapsed, therefore, the Authority has decided to consider the actual cost incurred by the Petitioner in this regard. It is also pertinent to mention that being a public sector company, the Petitioner is required to pay, its employees, the increases in salaries & wages announced by the Federal Government through Budget.
- 19.3. The Authority observed that as per the Audited Accounts for the FY 2018-19, submitted by the Petitioner, its actual total expenditure under Salaries, Wages and other benefits (*excluding postretirement benefits*) is Rs.7,627 million for both the distribution and supply functions. The Audited Accounts, however, do not provide any bifurcation of the Salaries, Wages and other benefits costs in terms of Distribution and Supply Functions. Therefore, the Authority, has allocated the total cost of Salaries, Wages and other benefits proportionately to the Distribution and Supply Functions, based on the figures of Salaries, Wages and other benefits requested in the Distribution and Supply Petitions. Accordingly, the cost of Salaries, Wages and other benefits (*excluding postretirement benefits*) for the FY 2018-19 pertaining to the distribution function works out as Rs.5,720 million.

20. Post-Retirement Benefits

- 20.1. The Authority considering the overall liquidity position in the power sector and in order to ensure that the Petitioner fulfils its legal liability with respect to the post-retirement benefits, directed the Petitioner to create a separate fund in this regard. Subsequently, this deadline was extended by the Authority. The rationale was that the creation of funds would ensure that the Petitioner records its liability more prudently since the funds would be transferred into a separate legal entity. In addition to that these independent funds would generate their own profits, if kept separate from the company's routine operations and in the longer run reducing the Distribution Margin and eventually consumer-end tariff.
- 20.2. Afterwards the Petitioner during proceedings of its tariff petition for the FY 2015-16 submitted that a separate Fund has been opened and Rs.100 million has been deposited in the Fund.
- 20.3. The Petitioner further in the tariff petition for the FY 2015-16, requested the Authority to allow provision for the postretirement benefits for FY 2015-16 as per the actuarial valuation report as

- on June 30, 2015. Similarly for the FY 2016-17 and FY 2017-18, the Petitioner again requested for allowing provision in respect of postretirement benefits.
- 20.4. The Authority noted that although the Petitioner complied with the direction of the Authority to the extent of creation of the separate Post Retirement Fund and transferred an amount of Rs.100 million into the fund, however, the Authority had been allowing provision for post-retirement benefits to the Petitioner as a part of its O&M cost till FY 2011-12. It was only from FY 2012-13 that the Authority decided to allow the actual amounts paid on account of pension benefits, due to non-compliance of the Authority's directions. Thus, any post retirement liability pre FY 2012-13 period, is with the Petitioner. In view thereof, the Authority directed the Petitioner in the tariff determination for the FY 2017-18, to also transfer the amount of already collected provision of postretirement benefits into the Fund.
- 20.5. The Petitioner in its instant Petition has not provided any update in the matter, however, requested an amount of Rs.5,047 million, under the head of Retirement benefits in the Distribution Tariff Petition.
- 20.6. The Authority, understands that payment of postretirement benefits to the retired employees is a compulsory obligation of the Petitioner which can be best fulfilled through a separate postretirement Fund having sufficient funds. However, failure of the Petitioner to deposit the amount of already collected provision of postretirement benefits into the Fund, would not absolve the Petitioner from its responsibility in this regard.
- 20.7. In view thereof, and considering the fact that FY 2018-19 has already lapsed, the Authority has decided to allow the actual payments made by the Petitioner on account of Post-retirement benefits as per the Audited Accounts provided by the Petitioner. The actual payments reflected in the Audited Accounts of the Petitioner is Rs.3,078 million for both the distribution and supply functions. Accordingly, the same amount is being allowed to the Petitioner for the FY 2018-19 for the postretirement benefits, including the impact of payments for the Ex- WAPDA employees retired before 1998 for both the distribution and supply functions.
- 20.8. Since, the Audited accounts submitted by the Petitioner do not provide any bifurcation of the post retirement cost in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of the cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate its costs in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.2,308 million, as Post retirement benefits for the FY 2018-19 for Distribution Function. The Petitioner is again directed to transfer the already collected provision of postretirement benefits into the Fund.
21. **Remaining Operation & Maintenance Costs**
- 21.1. For projections or assessment of OPEX costs, two commonly used approaches are Ex-Ante and the Ex-Post approach. In a regime where the allowed OPEX is determined Ex-Ante, there will inevitably be deviations between the allowed and actual expenses, in the form of efficiency savings or losses. Thus, resulting in two broad options, one that the utility bears all savings or losses, i.e. no action is taken by the Regulator. Secondly, the utility shares the savings or losses with consumers. The former approach provides the utility with a profit incentive to cut costs, but at the same time places the utility at greater financial risk in the face of losses. The latter somewhat dilutes efficiency incentives, but also limits the losses/gains for the utility and its customers.

- 21.2. The widely used approach is that no adjustments to allowed Revenues or OPEX allowances are made hence providing an incentive to the utility to improve its operations. However, considering the fact that FY 2018-19 already elapsed, the Authority considers it appropriate to use Ex-Post facto approach while determining O&M costs of the Petitioner for the FY 2018-19.

Repair & Maintenance Expenses

- 21.3. The Petitioner requested an amount of Rs.950 million under Repair & maintenance in its Distribution Petition for the FY 2018-19. The Petitioner submitted that as per its Audited accounts for the FY 2018-19, its total expenditure under the head of Repair & Maintenance is Rs.969 million, wherefrom, 98% i.e. Rs.950 million has been allocated to the Distribution Function. The Petitioner provided the following details in this regard;

Description	Rs. in Mln	%
Distribution Plant & Equipment	917	95%
Civil Works Division	43	4%
General Plant & Equipment	9	1%
Total	969	100%

- 21.4. The Authority in order to assess the request of the Petitioner, analyzed the same in comparison with the amount allowed to the Petitioner for the FY 2017-18 and the amount actually spent by the Petitioner. A comparison of the Petitioner's allowed vs actual R&M expenditure for the FY 2017-18, showed that the Petitioner's actual R&M cost for the FY 2017-18 was lower by around 27%, when compared with the total amount allowed by the Authority for supply and distribution function, as detailed hereunder;

R&M	
FY 2017-18	Rs. in Mln
Allowed	1082
Actual	788
Inc/ (Dec.)	-27%

- 21.5. One of the reasons for reduction in cost could be the direction of the Authority given to the Petitioner in its tariff determinations for FY 2017-18, wherein the Petitioner was directed to capitalize expenditures i.e. Replacement of Transformers/ Meters, instead of expensing out the same. The Petitioner probably have started reporting its actual R&M costs and to capitalize costs relating to replacement of Transformers/ Meters in line with the Authority's directions.
- 21.6. Similarly for the FY 2018-19, considering the fact that the period for which assessment is being made has already lapsed, the Authority has analyzed the actual expenditure incurred by the Petitioner for repair & Maintenance during the year. As per the Audited Accounts provided by the Petitioner, its actual expenditure under Repair & Maintenance is Rs.969 million for both its distribution and supply function, which is around 23% higher as compared to the actual cost incurred during the FY 2017-18.
- 21.7. The Authority understands that adherence to the service standards and improvement of customer services is only possible through continuous repair and maintenance of the distribution network. In view of the above discussion, based on comparison with other XWDISCOs, and keeping in view the inflationary impacts, the Authority considers the actual costs incurred by the Petitioner during the FY 2018-19 as reasonable and hence has decided to allow the same. Accordingly, the Petitioner is allowed the amount of Rs.969 million under the head of R&M for the FY 2018-19, for both its Distribution and Supply functions.

- 21.8. The Audited Accounts submitted by the Petitioner do not provide any bifurcation of the repair & maintenance cost in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of the cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate its costs in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.950 million for Repair & Maintenance for the FY 2018-19 for its Distribution Function.
- 21.9. The Authority observed that the Petitioner is being directed since FY 2015-16, to maintain a proper record of its assets by way of tagging each asset for its proper tracking. In addition, the Petitioner was also directed to provide an explanation on the concerns raised by the Authority in terms of its R&M cost, however, no such explanation has been received from the Petitioner. The petitioner is therefore once gain directed to maintain a proper record of its assets by way of tagging each asset for its proper tracking and also to provide explanation on the concerns raised by the Authority in terms of its R&M cost in the tariff determination for the FY 2015-16.

Travelling Expenses

- 21.10. The Petitioner has requested an amount of Rs.250 million under Travelling Expenses for its Distribution Function for the FY 2018-19. The Petitioner regarding Traveling expenses submitted that actual Travelling expenses of Rs.333 million for the FY 2018-19 as per the Audited Accounts, have been apportioned on the basis of 75% allocation to Distribution Business because being paid on the basis of BPS, and thus are directly proportional to the employees' regularly paid salaries & wages.
- 21.11. The Authority, considering the fact that FY 2018-19 has already lapsed, decided to analyze the actual expenditure incurred by the Petitioner under the head "Travelling". As per the Audited Accounts of the Petitioner for the FY 2018-19, its actual expenditure under travelling for the FY 2018-19 is Rs.332.67 million for both its Distribution and Supply Functions. A comparison of the same with the amount allowed to the Petitioner for the FY 2017-18, showed that its actual Travelling cost for the FY 2018-19 has increased by around 12%, as detailed hereunder;

Travelling	Rs. in Mln
Allowed FY 2017-18	298
Actual FY 2018-19	333
Inc/ (Dec.)	12%

- 21.12. In view of the foregoing discussion, submissions made by the Petitioner, the fact that cost for the FY 2018-19 largely includes the inflationary impact over the allowed cost for the FY 2017-18, and comparison with other XWDISCOs, the Authority considers the cost incurred for Travelling expenses for the FY 2018-19 i.e. Rs.333 million as reasonable and hence the same is allowed to the Petitioner for the FY 2018-19 for both its Distribution and Supply Functions.
- 21.13. The Audited Accounts submitted by the Petitioner do not provide any bifurcation of the Travelling cost in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of the cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate its costs in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.250 million as travelling costs for the FY 2018-19 for its Distribution Function.

Vehicle Expenses

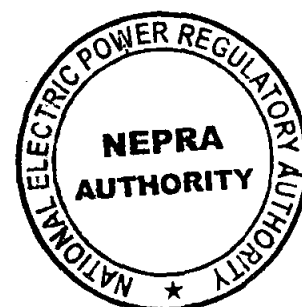
- 21.14. The Petitioner has requested an amount of Rs.275 million for its Distribution Function, under Transportation expenses in the Petition for the FY 2018-19 which includes vehicle repair costs,

- fuel & oil and License & Insurance. The Petitioner submitted that actual Transportation Expenses of the FY 2018-19 as per the Audited Account amounting to Rs.290 million have been apportioned on the basis of No. of Operational Vehicles used by the both business areas respectively. The Petitioner accordingly has allocated 95% of the actual cost to Distribution Function and 5% to Supply of Power Function.
- 21.15. The Authority, considering the fact that FY 2018-19 has already lapsed, analyzed the actual expenditure incurred by the Petitioner under the head "Transportation". As per the Audited Accounts of the Petitioner for the FY 2018-19, its actual expenditure under Transportation for the FY 2018-19 is around Rs.290 million for both its Distribution and Supply Functions. A comparison of the same with the amount allowed to the Petitioner for the FY 2017-18, showed that its actual transportation cost for the FY 2018-19 i.e. Rs.290 million, is around 32% higher than the allowed figure of Rs.219 million for the FY 2017-18.
- 21.16. The Authority keeping in view the previous trend of the Petitioner, trend of fuel prices, inflationary impacts, and comparison with other XWDISCOs, considers that the actual cost of Rs.290 million incurred by the Petitioner for the FY 2018-19 is on the higher side. The Authority accordingly keeping in view the inflation, fuel prices trend and comparison with other DISCOs has decided to allow the Petitioner an increase of around 15% over the amount allowed for Transportation expenses for the FY 2017-18. The Petitioner is thus allowed an amount of Rs.252 million as Transportation expenses for the FY 2018-19 for both its Distribution and Supply Functions.
- 21.17. The Audited Accounts submitted by the Petitioner do not provide any bifurcation of the Travelling cost in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate its costs in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.239 million as Transportation costs for the FY 2018-19 for its Distribution Function.

Other Miscellaneous Expenses

- 21.18. The Petitioner requested an amount of Rs.356 million under Other expenses in its Petition for the FY 2018-19 for its Distribution Function. The Petitioner submitted that Other Expenses include Rent & taxes, Power, Light & Water, Office Supplies & Others, Advertisements, Injuries & Damages and Professional Fees etc. The Petitioner submitted the following details in this regard;

	Rs. in Mln
Other Expenses	FY 2018-19
Rent & Rates	6
Power, Light & Water	39
Office Supplies & Others	37
Advertising	29
Professional Fee	49
Injuries & damages	151
Misc. Expenses	45
Total	356



- 21.19. The Petitioner regarding Rents & Rates has requested Rs.6 million and stated that Rent & Rates purely pertains to the rentals paid for GEPCO's Complaint Offices located in various subdivisions hence, are entirely allocated to the GEPCO's Distribution Business.
- 21.20. The Petitioner regarding Power, Light & Water submitted that the total amount for the FY 2018-19 is Rs.43 Million under Distribution and supply business, out of which 90% allocated to the GEPCO's Distribution Business and 10% to Power Supply Business based on actual data of FY 2018-19. Accordingly, the Petitioner has requested Rs. 39 million under Distribution business.
- 21.21. The Petitioner regarding Office Supplies & Others submitted that total amount for the FY 2018-19 is Rs.124 million under Distribution and supply business. The Petitioner regarding apportionment of the said cost submitted that Office Supplies & Others are 30% allocated to the Distribution Business and 70% to the Power Supply Business based on actual data. The Petitioner while justifying the said cost submitted that main expenditure under this head pertains to procurement and printing of electricity bills and related CPs at GEPCO Computer Centers as well as in Revenue Offices. Accordingly, the Petitioner has requested Rs.37 million under Distribution business.
- 21.22. The Petitioner regarding Advertisement Expenses stated that the total amount for the FY 2018-19 is Rs.29 million. The Petitioner regarding apportionment stated that advertisement expenses are 100% allocated to the GEPCO's Distribution Business based on actual data for the FY 2018-19 being relating to procurement / development tendering, shut down notices etc.
- 21.23. The Petitioner regarding professional fee has stated that the total amount for the FY 2018-19 is Rs.162 million. The Petitioner regarding apportionment has stated that Professional Fee of Rs.162 million is allocated 70% to the Power Supply Business and 30% to Distribution Business based on actual data. The professional fee includes fees of lawyers, Licensing Fee, PITC Fee and CPPA-G Fee. Accordingly, the Petitioner requested Rs.49 million under Distribution business.
- 21.24. The Petitioner regarding Injuries & Damages expense stated that the total amount for the FY 2018-19 is Rs.178 million. The Petitioner allocated 85% of the Injuries & Damages expense to the Distribution Business and 15% to the Power Supply Business, on the basis of figures of actual expenditure pertaining to relevant offices. Accordingly, the Petitioner has requested Rs.151 million under Distribution business.
- 21.25. The Petitioner regarding Misc. Expense stated that the total amount for the FY 2018-19 is Rs.50 million (Telephone, Postage, and Auditor's Fee etc.), out of which 90% is the share of Distribution Function and 10% of the Supply Function based on the actual audited expenditure of FY 2018-19. Accordingly, the Petitioner has requested Rs.45 million under Distribution business.
- 21.26. Considering the fact that FY 2018-19 has already lapsed, the Authority, analyzed the actual expenditure incurred by the Petitioner under the head "Other Expenses". As per the Audited Accounts of the Petitioner for the FY 2018-19, its actual expenditure under this head is around Rs.967 million for both its Distribution and Supply Functions. "The reported expenses include an amount of Rs.184 million as "Other Charges".
- 21.27. No detail regarding nature of such expenses has been provided, therefore, the same have not been considered while assessing the Other Expenses of the Petitioner for the FY 2018-19.
- 21.28. Similarly, the provision for long outstanding reconciling items with banks, allowance for credit losses, slow moving stores & spares and advances written off, included in the total Other Expenses totaling to Rs.112 million have also not been accounted for being identified costs to be passed on to the consumers.

- 21.29. Regarding inclusion of Late payment charges billed by CPPA-G, the Authority observed that it had already allowed DISCOs in their earlier tariff determinations to retain the amount of late payment charges recovered from the consumers to be netted off against any late payment charges invoiced by CPPA-G. The Authority accordingly while making assessment of Other Income of the Petitioner for the FY 2018-19 did not include the amount of LPS recovered from the consumers, thus, no separate cost on account of late payment charges billed by CPPA-G is being allowed to the Petitioner for the FY 2018-19.
- 21.30. Accordingly, based on the above discussion, and after taking into account the aforementioned disallowed amounts from the actual expenses of the Petitioner for the FY 2018-19, the Petitioner prudent costs of total Other Expenses works out as Rs.671 million for the FY 2018-19 for both its Distribution and Supply Functions.
- 21.31. The Audited Accounts submitted by the Petitioner do not provide any bifurcation of the Other expenses in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of the cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate its costs in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.141 million as Other Expenses for the FY 2018-19 for its Distribution Function.
- 21.32. The Authority also noted that DISCOs were allowed PEPCO fee in past as part of other expenses and observed that each DISCO is an independent entity having its own board of Directors, thus, allowing any cost on the pretext of PEPCO Management fee is not logical. Further, the then Ministry of Water & Power, itself in the Peshawar High Court submitted that PEPCO shall be dissolved after June 2011. In view thereof, the cost of PEPCO fee has not been considered while assessing the Other Expenses of the Petitioner.
- 21.33. The Petitioner is also directed to provide details of PEPCO Management Fees, if any, claimed previously so that same could be adjusted in the subsequent tariff determinations.

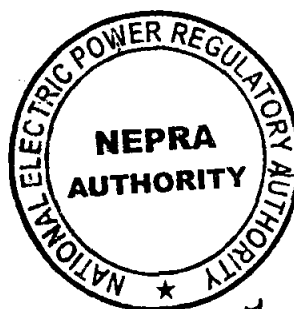
Depreciation

- 21.34. The Petitioner requested an amount of Rs.2,070 million under Depreciation Charges, in its Petition for the FY 2018-19 for the Distribution Function. The Petitioner regarding depreciation charges submitted that its total actual expenditure for the FY 2018-19 is Rs.2112 million, out of which 98% has been allocated to the Distribution Function.
- 21.35. The Petitioner has provided that the position of its total net assets (after depreciation) as on 30.06.2019 is as follows:

Description	Million Rupees
Capital Work in Progress	6,401
Operating Assets	43,546
Total Assets	49,947

- 21.36. The Petitioner has further stated that the Operating Assets include Land of Rs.456 million and breakup of remaining Depreciable Operating Assets is as follows:

Description	Million Rupees	%
Distribution Equipment	41,315	95.88%



Mobile Plant	141	0.33%
Buildings	1,228	2.85%
Furniture	11	0.03%
Vehicles	395	0.91%
Total Depreciable Assets	43,090	100%

- 21.37. The Petitioner further submitted that Distribution Equipment is 95.88% of total depreciable assets hence, 2% depreciation has allocated to Power Supply Business and 98% depreciation to Distribution Business. The Petitioner accordingly requested Rs.2,070 million under Distribution business.
- 21.38. Considering the fact that the period i.e. FY 2018-19, for which the cost is being assessed, has already lapsed, the Authority has decided to consider the actual cost incurred by the Petitioner in this regard for the FY 2018-19.
- 21.39. The Authority observed that as per the Audited financial accounts provided by the Petitioner for the FY 2018-19, its actual expenditure under depreciation is around Rs.2,112 million for both its Distribution and Supply Functions, calculated on actual depreciation rates for each category of Assets, as per the Company's policy, based on historical costs of the assets. After netting off the same with the depreciation adjustment/deletion during the year, the net actual depreciation amount works out as Rs.2,089 million, which is hereby allowed to the Petitioner for both its Distribution and supply functions.
- 21.40. After carefully examining the relevant details and information pertaining to the deferred credit and amortization, the Authority has assessed amortization of deferred credit to the tune of Rs.910 million for the FY 2018-19, thus, consumers would bear net depreciation of Rs.1,180 million.
- 21.41. The Audited accounts submitted by the Petitioner do not provide any bifurcation of the depreciation in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of the cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate its costs in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.2,048 million as Depreciation Expenses for the FY 2018-19 for its Distribution Function.

Other Income

- 21.42. The Petitioner has requested Rs.878 million as other income for the FY 2018-19 for its distribution function.
- 21.43. The Petitioner in the petition has stated that total amount for the FY 2018-19 is Rs.2,928 Million for both supply and distribution function, as per Audited Financial Statements including LPS of Rs.1,118 million. The Petitioner regarding apportionment has stated that 70% of other income is allocated to Power Supply Business and 30% to Distribution Business based on audited figures for the FY 2018-19. Accordingly, the Petitioner has requested Rs.878 million under Distribution business.
- 21.44. The Authority, considering the fact that FY 2018-19 has already lapsed, decided to consider the actual other income of the Petitioner for the FY 2018-19, which as per the audited accounts of the Petitioner is around Rs.1,810 million, including the amount of depreciation of deferred credit

but exclusive of the amount of late payment charges. The Authority in consistency with its earlier decision, on the issue, has not included the amount of LPS while assessing the other income for the FY 2018-19. The Petitioner is accordingly allowed other Income of Rs.1,810 million both for the Distribution and Supply Functions for the FY 2018-19, which does not include late payment charges but inclusive of amortization of deferred credit.

21.45. The Audited Accounts submitted by the Petitioner do not provide any bifurcation of the Other Income in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of the cost in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner has been adopted. Based on the said criteria, the Petitioner is allowed an amount of Rs.543 million as Other Income for the FY 2018-19 for its Distribution Function.

22. Why GEPCO did not submit its five year IGTDP as per requirements under NEPRA Consumer End Tariff Methodology for approval of the Authority? GEPCO is required to submit IGTDP on prescribed formats immediately.

23. Whether the requested investment without submission of five Year IGTDP as required is justified? Petitioner must provide the project wise detailed report along with rationale against the requested investment.

23.1. The Petitioner in its tariff petition, requested Investment of Rs.4,524 million for the FY 2018-19 as per the following break-up;

(Rs. in Mln.)

Description	2018-19
DOP	265
ELR	547
ERP	86
7 th STG	832
STG-ADB(GEPCO Own Sources)	339
Capital Contributions/Deposit	2,455
Customer Facilitation Program	-
Total	4,524

23.2. The Petitioner for the investment of Rs.4,524 million submitted the following financing arrangements;

(Rs. in Mln.)

Description	2018-19
Own Sources	1,730
Foreign Currency	339
Capital Contributions/Grants	2,455
Total	4,524

23.3. The Petitioner also during the hearing, provided the following details of additions in investments made during the FY 2018-19;

Description	2018-19
	Audited (Rs.)
STG-GRID	761,345,352
STG- LINES	561,589,415
Sub Total	1,322,934,767
11 Kv Distribution Lines	934,712,417
400 V Low Tension Lines	437,951,365
Distribution Transformer (11kv/400v)	1,545,930,747
Sub Total	2,918,594,529
Service Drops	350,026,584
Meters	268,081,296
Line T&P.	51,282,911
Sub Total	669,390,791
General Plant Assets	283,028,648
Land Building Civil Works	100,947,351
Grand Total	5,294,896,086

23.4. The Authority observed that the Petitioner was allowed an investment of Rs.2,775 million and Rs.3,200 million for the FY 2016-17 and FY 2017-18 respectively. The investment for the FY 2016-17 was allowed keeping in view the actual cost incurred by the Petitioner as the determination was issued after completion of FY 2016-17. For the FY 2017-18, the Petitioner has been able to utilize only 50% of the allowed investment i.e. Rs.1,617 million against allowed amount of Rs.3,200 million in FY 2017-18.

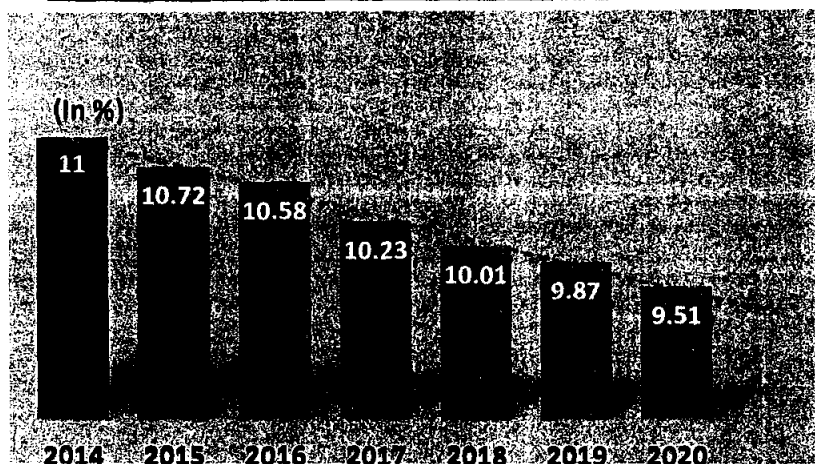
23.5. The Petitioner in the tariff determination for FY 2017-18 was also directed to provide:

- i. Cost/benefit analysis of investments made during last 05 years & technical/financial savings achieved.
- ii. Project wise detailed report for the investments allowed for the FY 2016-17 & 2017-18.

23.6. The Petitioner provided the following details in this regard during the hearing:

Assets Booked in Financial Statements	2017-18	2016-17
	Audited (Rs.)	Audited (Rs.)
STG-GRID	691,031,621	1,300,594,972
STG- LINES	392,773,317	653,372,691
Sub Total	1,083,804,938	1,953,967,663
11 Kv Distribution Lines	992,313,191	619,701,340
400 V Low Tension Lines	390,619,623	322,674,066
Distribution Transformer (11kv/400v)	1,091,208,581	1,466,849,013
Sub Total	2,474,141,394	2,409,224,420
Service Drops	266,473,174	157,732,053
Meters	217,279,959	187,996,089
Line T&P.	31,179,366	10,727,806
Sub Total	514,932,499	356,455,948
General Plant Assets	67,194,899	36,626,290
Land Building Civil Works	103,416,659	47,247,722
Grand Total	4,243,490,389	4,803,522,043

23.7. The Petitioner also, during the hearing, submitted that it has achieved a steep reduction in its T&D losses through investments made in previous years.



23.8. The Petitioner further shared the following details in terms of savings achieved through reduction in losses as a result of aforementioned investments;

Description	Unit	2017-18	2018-19	2019-20
NEPRA Loss Target	%	10.03	10.03	10.03
Actual Loss	%	10.01	9.87	9.51
Savings	%	0.02	0.16	0.52
Units Purchased	Mkwh	10,987	11,100	10,991
Savings in Units	Mkwh	2.2	17.76	57.15
Average Sale Rate (NEPRA)	Rs./Kwh	10.4	13.24	14.73
Savings	Mln. Rs.	23	235	842

23.9. The Authority, from the above information provided by the Petitioner, observed that the Petitioner has claimed improvements in losses resulting in units saved and thus achieving a cumulative savings of around Rs.1,100 million. The Authority considers that submissions made by the Petitioner requires detailed analyses and scrutiny, therefore, has decided to analyze the submissions of the Petitioner during half yearly review of the directions given to the Petitioner.

23.10. Notwithstanding the above, the Authority, understands the significance of the investments, in order to cater for the future demands, minimize network constraints / overloading, improve performance standard indices and reduction in T&D losses. The Authority observed that since the period i.e. FY 2018-19, for which the Investment is being requested has already lapsed, therefore it would be more appropriate to consider the actual investments made by the Petitioner during the FY 2018-19. As per the Petitioner's Audited Accounts for the FY 2018-19, it has carried out an investment of Rs.5,295 million (*including deposit works*) during the FY 2018-19, which is hereby allowed to the Petitioner. The Petitioner is directed to provide project wise report for the investments carried out for the FY 2018-19 along-with its cost/benefit analysis and technical/financial savings achieved by March 31, 2020.

24. Whether the requested T&D loss target is reasonable?

24.1. The petitioner in its tariff petitions, requested T&D losses of 9.87% for FY 2018-19. The break-up of requested T&D losses submitted by the Petitioner for both years is as under:

FY 2018-19		
Technical	Administrative	Total
9.87%	-	9.87%

- 24.2. The Petitioner also provided the following segregation of its T&D losses in respect of its technical losses as under:

Description	2018-19 (Audited)
Units Received at CDP Points	11,100
132kV transmission loss	0.97
Power Transformer Core Loss	0.27
Transmission Loss (%)	1.24
HT (11kV) Loss %	4.29
Dist. Transformer Loss %	1.144
LT + Service Loss %	3.19
Distribution Loss (%)	8.624
Total T&D Loss %	9.87
Unit Loss (Mkwh)	1,096
Units sold to Consumers	10,004

- 24.3. GEPCO, during the hearing, provided the following actual T&D losses of 9.87% for the FY 2018-19;

Description	2018-19 (Actual)
Units Purchased	11,100
Units Lost (Mkwh)	1,096
Units sold	10,004
Units Lost %	9.87

25. Transmission Losses:

- 25.1. The Authority noted that the Petitioner submitted its third party transmission loss study conducted by M/s PPI on dated 07.09.2012, during the proceedings of the Re-determination for the FY 2015-16. The Authority also observed that the Petitioner requested 1.51% (on actual basis) transmission losses which was lower than the results (2.064%) of third party transmission loss study, hence the Authority allowed 1.51% actual transmission losses to GESCO in its earlier determinations pertaining to the FY 2015-16, FY 2016-17 and FY 2017-18. It is also noted that the Third Party Transmission Loss Study was conducted in FY 2012-13 on the basis of GEPCO's transmission assets (132kV, 66kV and 33kV) statistics pertaining to FY 2011-12 which are tabulated as under:

Sr. #	Description	As on 30.06.2013
1	Grid Stations (Nos.)	49
2	Transmission line length (kMs)	2478

- 25.2. It is further observed that in the said study, the third party consultant, keeping in view the results of transmission losses of 2.064% for GEPCO, recommended the following:

"For GEPCO, the installation of switched shunt capacitor banks at 11kV levels to bring the power factor of distribution network as high as possible is very important as during peak conditions the low voltage on the network causes heavier loading on the lines in order to meet the load demand, thus causing high losses. In addition, to relieve the heavily loaded transmission lines and power transformers by installing more lines and transformers or re-conducting heavily loaded lines using Rail Conductor to bring the loading reasonably below the design level to operate the system

comfortably and with lower losses."

- 25.3. For the purpose of instant tariff Petition, GEPCO requested transmission losses of 1.24% for FY 2018-19. In this regard, the Authority notes that GEPCO claimed lower transmission losses as compared to the results (2.064%) of third party study due to the following additions in its transmission networks (132kV and 66kV) as recommended earlier by the third party consultant in last 4 years:

Sr. #	Description	2016	2017	2018	2019
1	No. of Grid Stations	58	59	60	60
2	MVA Capacity	4120	4434	4847	4952
3	Transmission line length (kMs)	2796	2801	2604	2604

- 25.4. Foregoing in view, the Authority accepts the request of the Petitioner for claiming lower transmission losses and accordingly allows transmission losses of **1.24%** for the FY 2018-19

26. Distribution Losses:

- 26.1. The Petitioner requested 8.624% distribution losses for the FY 2018-19, which included 4.29% losses in 11kV networks, 1.144% distribution transformer losses and 3.190% LT line losses.
- 26.2. The Authority, while considering the above distribution losses requested by the Petitioner, noted that the distribution losses of 8.624% for FY 2018-19 (claimed in instant tariff petition) are higher than the results (8.522%) of the third party distribution loss study conducted by M/s. PPI (which has already been accepted by the Authority during the proceedings of Re-Determination for FY 2015-16).
- 26.3. It is also noted that since the requested 11kV distribution losses of 4.29% are on higher side than the assessed 11kV losses (4.217%) by third party consultant therefore, the Authority decided to maintain the 11kV distribution loss results of the third party study and accordingly allows 4.217% 11kV distribution losses for GEPCO for FY 2018-19. For Distribution transformer losses, it is observed that GEPCO requested 1.144% losses which are higher than the assessed losses in Distribution transformers (1.127%) by third party consultant therefore, the Authority decided to maintain the Distribution transformers loss results of the third party study and accordingly allows 1.127% Distribution transformers losses for GEPCO for FY 2018-19. For LT losses, it is observed that GEPCO requested 3.190% losses for FY 2018-19 which are higher than the results (3.178%) of third party losses study. Therefore, the Authority decided to maintain the LT loss results of the third party study and accordingly allows 3.178% LT losses for GEPCO for FY 2018-19. Thus, allowed margin of distribution losses of **8.522%** included the following segregation:

11kV Losses	LT Losses	Total Distribution Losses
5.344%	3.178%	8.522%

Detailed Break-Up of Allowed T&D Losses for GEPCO for FY 2018-19:

Transmission Losses	Distribution Losses		Total T&D Losses
	11 kV Losses	LT Losses	
1.24%	5.344%	3.178%	9.762%
	8.522%		



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Summary of directions regarding T&D losses:

- 26.4. Considering T&D losses being of critical importance, the Authority directs the Petitioner to target high loss feeders to bring the overall losses down. A detailed plan be prepared and submitted to the Authority for monitoring the progress of GEPCO in this respect. The Petitioner is also directed to carry out detailed analysis about hard and soft areas relative to its claims in earlier studies.
- 26.5. The Authority considers that the Petitioner can minimize its technical losses through prudent planning and engineering design practices, therefore, is directed to implement such activities and submit its plans in this regard to the Authority.
- 26.6. The Petitioner is also directed to take remedial measures for achievement of performance standards as laid down in NEPRA Performance Standards (Distribution) Rules, 2005, for which a detailed plan be prepared, mentioning steps to be taken by the Petitioner, and submitted to the Authority accordingly.

27. Whether the projected Return on Regulatory Asset base (RORB) for the FY 2018-19 is justified?

- 27.1. The Petitioner has requested an amount of Rs.4,887 million as RoRB for the FY 2018-19, using a Rate of Return of 16%, as detailed below;

Description	2018-19 (Mln. Rs)
Gross Fixed Assets in Operation - Opening Bal	59,888
Addition in Fixed Assets	4,420
Gross Fixed Assets in Operation - Closing Bal	64,308
Less: Accumulated Depreciation	20,762
Net Fixed Assets in Operation	43,546
Add: Capital Work In Progress - Closing Bal	6,401
Investment in Fixed Assets	49,947
Less: Deferred Credits	18,576
Regulatory Assets Base	31,371
Average Regulatory Assets Base	30,554
Rate of Return	16.00%
Return on Rate Base	4,887

- 27.2. The Petitioner regarding Return on Equity submitted that NEPRA uses Capital Asset Pricing Model (CAPM) for calculation of Return on Equity (RoE) component of the WACC. The Authority uses Plain Vanilla WACC, taking tax shield as zero, and in case any tax is paid it is treated as pass through. The Authority for the FY 2017-18 determined RoE of 16.67%, wherein the Authority considered Market Risk Premium as 7% with a Beta of 1.10 and Risk Free Rate of 8.9652%. The same has been used to work out the RoE of 16.67%, as determined by the Authority.
- 27.3. The Petitioner regarding Cost of Debt submitted that the cost of debt is the interest rate on which it would get borrowing from the debt market / commercial banks i.e. a rate at which banks lend to their customers. The Authority for estimating the cost of debt for the FY 2017-18 considered 3 months KIBOR + 2.75% spread. The Petitioner submitted that based on the same criteria, the cost of debt, by using avg. KIBOR of June 2019 comes to 13% + 2.75% = 15.75%.
- 27.4. The Petitioner regarding apportionment of the requested RoRB submitted that 98% of the RORB is apportioned to Distribution Business and 2% to Power Supply Business based on assets pertaining to each area.

- 27.5. The Authority noted that Section 31(3) of the amended NEPRA Act prescribes that;
- (b) tariffs should generally be calculated by including a depreciation charge and a rate of return on the capital investment of each licensee commensurate to that earned by other investments of comparable risk;*
- (c) tariffs should allow licensees a rate of return which promotes continued reasonable investment in equipment and facilities for improved and efficient service;*
- 27.6. The Authority allows Return to DISCOs based on WACC as no separate financial charges are allowed. For calculation of Return of Equity (RoE) component of the WACC, the Authority uses the Capital Asset Pricing Model (CAPM), being the most widely accepted model, applied by Regulatory agencies all over the world to estimate the cost of capital for regulated utilities. Since the Authority uses Plain Vanilla WACC, hence the impact of tax shield is taken as zero, and in case any tax is actually paid by the Petitioner, it is treated as pass through.
- 27.7. As per the methodology, in case of negative equity the Authority would consider a minimum of 20% equity and any equity in excess of 30% would be considered as debt.
- 27.8. For assessment of the RoE component for the FY 2018-19, weighted average yield on 05 Years Pakistan Investment Bond (PIB) as of June 13, 2018 has been considered as risk free rate which is 8.4795%. The expected return on any investment is the sum of the risk-free rate and an extra return to compensate for the risk. This extra return or 'risk premium' is the difference between market rate of return and risk free rate. Generally, the return on stock market index is taken as a measure of market rate of return.
- 27.9. To have an appropriate measure of the market rate of return, analyzed KSE-100 Index return, over a period of 8 years, which remained at around 15%. We have also considered Analysts' consensus/ research houses estimates in this regard. The risk premium used by different leading brokerage houses of the country ranges between 6% – 7%. The rate of return on KSE-100 index remained at around 15%, which also, translates into risk premium of around 6.521% (*with risk free rate of 8.4795%, Weighted Average Yield of 5-Year PIB as of June 13, 2018*). Therefore, keeping in view the aforementioned, Market Risk Premium of 6.521% is considered as reasonable for calculation of cost of equity component.
- 27.10. The Authority, keeping in view the earlier studies in the matter, range of betas used by international Regulators, and request of the Petitioner, has decided to maintain a beta of 1.10 while assessing the RoE component of the Petitioner.
- 27.11. As regard the cost of debt, it is the interest rate on which a company would get borrowing from the debt market / commercial banks i.e. a rate at which banks lend to their customers. In order to have a fair evaluation of the cost of debt, the Authority has analyzed the financial statements of the DISCOs. The Authority noted that majority of loans obtained by XWDISCOs are relent loans, therefore, keeping in view the NEPRA (Benchmarks for Tariff Determination), Guidelines, 2018, and the loans obtained by K-Electric, the Authority considers cost of debt as 3 month's KIBOR + 2.00% spread as reasonable. Consequently, the cost of debt has been worked out as 8.93% i.e. 3 Months KIBOR of 6.93% as of 3rd July 2018 plus a spread of 2.00% (*200 basis points*).
- 1.1. Consequent to the aforementioned discussion, the Authority has re-worked the WACC as below;



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Cost of Equity;
$K_e = R_F + (R_M - R_F) \times \beta$
$= 8.4795\% + (15\% - 8.4795\% = 6.521\% \times 1.1) = 15.65\%$
Cost of Debt;
$K_d = 8.93\%$

27.12. Accordingly, the WACC has been worked out as under;

WACC;
$WACC = ((K_e \times (E / V)) + (K_d \times (D / V)))$
Where E/V and D/V are equity and debt ratios respectively taken as 30% and 70%;
$WACC = ((15.65\% \times 30\%) + (8.93\% \times 70\%)) = 10.95\%$

27.13. Thus, using rate of return of 10.95%, the Authority has assessed Rs.2,740 million as return on rate base as per the following calculations:

Description	FY 2017-18	FY 2018-19
Fixed Assets O/B	53,656	59,888
Addition	6,232	4,420
Fixed Assets C/B	59,888	64,308
Depreciation	18,672	20,762
Net Fixed Assets	41,216	43,546
Capital WIP C/B	5,577	6,401
Fixed Assets Inc. WIP	46,792	49,947
Less: Deferred Credits	24,104	22,572
Total	22,688	27,375
RAB		25,031
WACC		10.95%
RORB		2,740

27.14. The Audited accounts submitted by the Petitioner do not provide any bifurcation of the assets in terms of Distribution and Supply Functions, therefore, for the purpose of bifurcation of RoRB in terms of Distribution and Supply Functions, the same criteria as adopted by the Petitioner itself to bifurcate RoRB in Distribution and Supply functions has been adopted. Based on the said criteria, the Petitioner is allowed Rs.2,685 million as part of its RoRB for Distribution function for the FY 2018-19.

27.15. The Authority during the tariff determination of the Petitioner for the FY 2015-16, noted that the Petitioner has insufficient cash balance as on 30th June 2015 against its pending liability of receipt against deposit works and consumer security deposits, which indicated that the amount received against the aforementioned heads has been utilized somewhere else and the Petitioner failed to provide details in this regard. The Authority is of the view that the amount collected as security deposit cannot be utilized for any other reason and any profit earned thereon has to be distributed to the consumers. Also, the amount collected under the head of receipt against deposit works has to be spent for the purpose for which it has been collected. The utilization of the money

- collected against deposit works and security deposits other than the works for which it has been received is illegal and unlawful. In view thereof, the Petitioner in the tariff determination for the FY 2015-16, FY 2016-17 and FY 2017-18 was directed to provide rational / justification for improper utilization of the money because the consumers have to suffer unnecessary delay on this account.
- 27.16. Similarly for the FY 2018-19, the Authority has again observed that the Petitioner had insufficient cash balance as on 30th June 2019, against its pending liability of receipt against deposit works and consumer security deposits, thus, indicating that the amount received against the aforementioned heads has been utilized somewhere else for which no details have been provided. Thus, it would be unfair and unjust with the consumers to suffer due to the unlawful act of the Petitioner.
- 27.17. Accordingly, the Authority has decided, to include the amount of receipts against deposit works as a part of Deferred Credits for the assessment of RAB for FY 2018-19, after excluding therefrom the cash/ bank balances and the amount of stores & Spares available with the Petitioner as on June 30, 2019.
- 27.18. The Authority again directs the Petitioner to ensure that in future consumer's deposits are not utilized for any other purpose. The Petitioner is also directed to restrain from unlawful utilization of receipts against deposit works and security deposits, failing which, the proceedings under the relevant law may be initiated against the Petitioner. The Petitioner is also directed to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance.
- 27.19. Based on the discussion made in the preceding paragraphs, incorporating all the aforementioned increases, the Authority has assessed Rs.13,798 million on account of Distribution margin i.e. salaries, wages and other benefits including post-retirement benefits, traveling, Vehicle maintenance, other expenses, repair & maintenance, Depreciation, RoRB and other income for the FY 2018-19 as tabulated below;

Description	Unit	FY- 19
Pay & Allowances		5,720
Post Retirement Benefits		2,308
Repair & Maintenance		950
Traveling allowance		250
Vehicle maintenance		239
Other expenses		141
O&M Cost	(Mn. Rs.)	9,608
Depreciation		2,048
RORB		2,685
O.Income		(543)
Margin	(Mn. Rs.)	13,798

28. Whether the distribution margin should be recovered on Rs./kW or Rs./kWh basis?
- 28.1. The Petitioner during the hearing submitted that Distribution Margin should be recovered on Rs./kwh on actual units sold.
- 28.2. For allocation of distribution network costs, different approaches are being used worldwide, however, there is no universally accepted methodology for allocating grid costs, and a variety of

criteria have been adopted for this end. The most prominent classification is the distinction between capacity tariffs and volumetric tariffs or Hybrid Models, combining both Capacity and Volumetric tariffs. Capacity tariffs depend on the peak load as grid costs are mainly capacity driven, therefore, consumers with high peak loads pay the highest network costs, as the line or feeder is dimensioned to cope with the maximum power in kW or MW it is expected to carry at a certain point in time, not by the volume (kWh or MWh), it is expected to transmit over a certain time period. On the other hand, volumetric tariffs are charged for each kWh of electricity consumed from the grid and are easier to implement with conventional meters. Volumetric tariffs can be;

- ✓ proportionate: consumers pay per kWh, independent of volume level;
- ✓ progressive: the tariff per kWh increases with an increasing consumption level;
- ✓ regressive: the tariff per kWh decreases with an increasing consumption level; and,
- ✓ time-of-use: different tariffs in line with the available grid capacity (peak /off-peak).

- 28.3. The idea behind following any specific methodology for the cost recovery is that the DISCO, responsible for maintaining, developing and operating the distribution network, must be able to recuperate its prudently incurred costs. It must be reminded that DISCO is a natural monopoly, meaning that it is cheaper to have one company building and operating the distribution network rather to have multiple companies, duplicating the necessary lines and competing for consumers to connect to their network.
- 28.4. In view thereof, the Authority for the sake of simplicity, ease of understanding, and the fact that the majority of the meters installed at consumer end level do not have the capability to record the peak load of consumers and also keeping in view the request of the Petitioner to allow a Rs./kWh rate, has decided to adopt the Rs./kWh approach for recovery of the allowed revenue requirement of the Petitioner from its consumers.
- 28.5. Here it is also pertinent to mention that the Petitioner is allowed a revenue cap target, whereby, it is hedged against any volume risk, as they make allowed revenues independent of the number of users served and energy delivered. Thus, in case on any over/ under recovery of the allowed revenues based on the allowed benchmarks of T&D losses and recovery, would be adjusted in the subsequent tariff settings of the Petitioners.
29. Whether the ToU meters installed on Residential and General Service connections have the capability to record MDI? Whether there should any Fixed Charges on residential and General Services consumers?
- 29.1. The Petitioner during the hearing submitted that although the TOU meters have the capability to record MDI, however, the billing software records kWh only.
- 29.2. The Authority observed that currently no fixed charges are being levied on Domestic consumers and General Service Category, i.e. such consumers only pay variable charge @ Rs./kWh, based on the amount of actual energy consumed during the month.
- 29.3. Considering the increase in capacity charges coupled with demand exiting the system due to net metering etc., the Authority is cognizant that there is a need to levy certain fixed charges for those domestic and general services consumers who have installed net metering facility, however, as the issue requires further deliberation, therefore, the Authority has decided not to levy any fixed charges for such consumers.

30. Wheeling Issues

- 30.1. The Authority approved National Electric Power Regulatory Authority (Wheeling of Electric Power) Regulations, 2016 (the Regulations) vide SRO dated June 13, 2016, in order to facilitate wheeling of power in the country. However, different stakeholders voiced their concerns on the Regulations in terms of treatment of T&D losses during wheeling, imposition of Cross subsidies, treatment of Stranded costs if any, applicability of Use of System charges of NTDC, Hybrid BPCs, and Banked Energy etc.
- 30.2. The Authority accordingly made two additional issues of Cross Subsidy charge and Stranded cost under the instant petition, for which advertisement was published in the leading newspapers on September 9th, 2020 and hearing in this regard was held on 17th September, 2020. Here it is also pertinent to mention that to get an international view on these issues, the Authority has also engaged an international consultant through USAID.
- 30.3. The Authority considering the impact of the above issues on the power sector, considers that the matter requires further deliberations, and has therefore decided to issue a separate additional decision on the aforementioned proceedings.
- 30.4. Thus, the Use of System Charge (UoSC) determined by the Authority in the instant decision, as mentioned under the Order part, may be revised accordingly, if required in light of the decision of the Authority on the wheeling issues, which will be issued separately.

31. Order

- 31.1. In view of the discussion made in preceding paragraphs and accounting for the adjustments discussed above, the revenue requirement of the Petitioner, for the FY 2018-19, to the extent of its distribution function is summarized as under;

Description	Unit	FY-19
Pay & Allowances		5,720
Post Retirement Benefits		2,308
Repair & Maintenance		950
Traveling allowance		250
Vehicle maintenance		239
Other expenses		141
O&M Cost	[Mn. Rs.]	9,608
Depreciation		2,048
RORB		2,685
O.Income		(543)
Margin	[Mn. Rs.]	13,798
Average Tariff	[Rs./kWh]	1.3368

- 31.2. Gujranwala Electric Power Company Limited (GEPCO), being a distribution licensee, is allowed to charge its consumers, the following "Use of system charge" (UOSC);

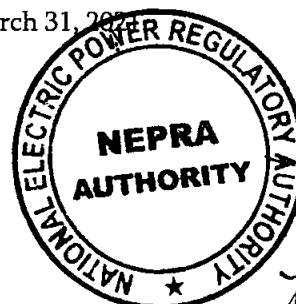
Description	For 132 kV Only	For 11 kV Only	For both 132 & 11 kV
Asset Allocation	39%	27%	66%
Level of Losses	1.24%	5.41%	6.58%
UoSC Rs./kWh	0.50	0.37	0.89

- 31.3. Use of System Charge (UoSC), as mentioned above, may be revised accordingly, if required in light of the decision of the Authority on the wheeling issues, which will be issued separately.
- 31.4. Responsible to provide distribution service within its service territory on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority,
- 31.5. To make its system available for operation by any other licensee, consistent with applicable instructions established by the system operator.
- 31.6. To follow the performance standards laid down by the Authority for distribution and transmission of electric power, including safety, health and environmental protection instructions issued by the Authority or any Governmental agency [or Provincial Government;
- 31.7. To develop, maintain and publicly make available, with the prior approval of the Authority, an investment program for satisfying its service obligations and acquiring and selling its assets
- 31.8. To disconnect the provision of electric power to a consumer for default in payment of power charges or to a consumer who is involved in theft of electric power on the request of Licensee.
- 31.9. 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.

2. Summary of Direction

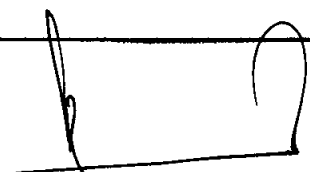
31.10.A summary of all directions passed in this determination by the Authority are reproduced hereunder. The Authority hereby directs the Petitioner to;

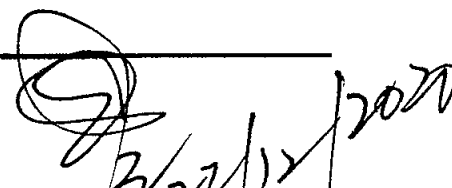
- i. File Multi Year Tariff Petition for a tariff control period of five year to avoid any delay in tariff determinations.
- ii. Transfer the already collected provision of postretirement benefits into the fund by June 30, 2021.
- iii. Maintain a proper record of its assets by way of tagging each asset for its proper tracking and also to provide explanation on the concerns raised by the Authority in terms of its R&M cost in the tariff determination for the FY 2015-16.
- iv. to provide details of PEPCO Management Fees, if any, claimed previously by March 31, 2021, so that same could be adjusted in the subsequent tariff determinations.
- v. Target high loss feeders to bring the overall losses down. A detailed plan be prepared and submitted to the Authority for monitoring the progress of GEPCO in this respect by March 31, 2021.
- vi. Take remedial measures for achievement of performance standards as laid down in NEPRA Performance Standards (Distribution) Rules, 2005.
- vii. The Petitioner can minimize its technical losses through prudent planning and engineering design practices, therefore, is directed to implement such activities and submit is plans in this regard to the Authority by March 31, 2021.
- viii. Carry out detailed analysis about the hard and soft areas relative to claims in earlier studies and submit report to the Authority by March 31, 2021.

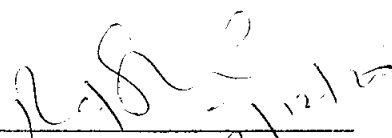


- ix. to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance for the FY 2020-21 & onward.
 - x. Segment reporting with clear break-up of costs in the financial statements for the FY 2019-20 and onward for Distribution and Supply Functions in light of the amended NEPRA Act.
 - xi. to immediately provide electricity connections to all the pending applications without further delay and submit a progress report in this regard by the end of each quarter.
 - xii. Stop the existing practice of deducting 20% of SAP funds for grid augmentation and carry out the augmentation of the grid after coordinating with the Ministry of Energy.
 - xiii. Restrain from unlawful utilization of receipts against deposit works and security deposits, failing which, the proceedings under the relevant law may be initiated against the Petitioner.
 - xiv. Provide the required details of late payment charges recovered from the consumers and invoices raised by CPPA (G) under the head of mark-up on delayed payments for the period from FY 2015-16 to FY 2018-19, in its next tariff petition.
 - xv. Provide project wise detailed report for the investment carried out along-with their cost/benefit analysis and technical/financial savings achieved by June 30, 2021.
- 31.11. The determination of the Authority is hereby intimated to the Federal Government for notification in the official gazette in terms of section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

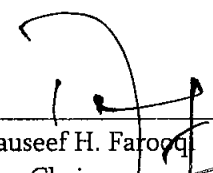

Engr. Bahadur Shah
Member


Rehmatullah Baloch
Member


Rafique Ahmed Shaikh
Member


Saif Ullah Chattha
Vice Chairman

22.12.2020


Tauseef H. Farooq
Chairman

