

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/ADG(Trf)/TRF-565/PESCO-2021/8764-8766 June 2, 2022

Subject: DETERMINATION OF THE AUTHORITY IN THE MATTER OF PETITION FILED BY PESHAWAR ELECTRIC SUPPLY COMPANY LTD. (PESCO) FOR DETERMINATION OF ITS SUPPLY TARIFF OF POWER UNDER MYT REGIME FOR THE FY 2020-21 TO FY 2024-25 [CASE # NEPRA/TRF-565/PESCO-2021]

Dear Sir,

Please find enclosed herewith subject Determination of the Authority along with Annex-I, Annex-II, Annex-III, Annex-IV & Annex-V and additional note of Engr. Rafique Ahmed Shaikh, Member NEPRA (70 Pages) in Case No. NEPRA/TRF-565/PESCO-2021.

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 within 30 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision or refer the matter to the Authority for reconsideration, within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above

(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-565/PESCO-2021

DETERMINATION OF SUPPLY OF POWER TARIFF PETITION FOR

PESHAWAR ELECTRIC SUPPLY COMPANY LIMITED (PESCO) FOR THE FY 2020-21 – FY 2024-25

UNDER

NEPRA TARIFF (STANDARDS AND PROCEDURE) RULES - 1998

Islamabad

2 - 6 - 2022







Abbreviations

Abbreviations	The summation of the capacity cost in respect of all CpGencos for a billing period
CpGenCap	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
СТВСМ	Competitive Trading Bilateral Contracts Market
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	Maximum Demand Indicator 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



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DETERMINATION OF THE AUTHORITY IN THE MATTER OF PETITION FILED BY PESHAWAR ELECTRIC SUPPLY COMPANY LIMITED (PESCO) FOR DETERMINATION OF ITS SUPPLY OF POWER TARIFF FOR THE FY 2020-21 TO FY 2024-25

CASE NO. NEPRA/TRF-565/PESCO-2021

PETITIONER

Peshawar Electric Supply Company Limited (PESCO), WAPDA House Shami Road, Peshawar.

INTERVENER

M/s PTCL
M/s Telenor
M/s Pak Telecom Mobile Ltd.
M/s Nayatel
M/s CM Pak (Zong)

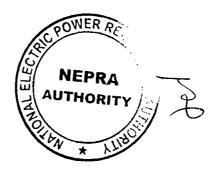
COMMENTATOR

M/s Deodar PMCL (Jazz)

REPRESENTATION

- i. Chief Executive Officer
- ii. Chief Commercial Officer
- iii. Director Finance
- iv. Technical Team







1. Background

- 1.1. The amendments in the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 was passed by the Parliament, which was published in the official Gazette on 30th April 2018 (the "Amendment Act"), resulting in restructuring of the energy sector. One of the fundamental changes as per the amendment Act is the introduction of a competitive retail energy sector, wherein, supply function has been segregated from the distribution license.
- 1.2. 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. The newly introduced section 23(E) of the Act, provides NEPRA with the powers to grant Electric Power Supply License for the supply of electric power. Section 23E(1), however, provides that the holder of a distribution license on the date of coming into effect of the Amendment Act, shall be deemed to hold a license for supply of electric power under this section for a period of five years from such date. Thus, all existing Distribution Licensees have been deemed to have Power Supplier Licenses, to ensure distribution licensees earlier performing both the sale and wire functions, can continue to do so. Section 23E, further states that the eligibility criteria for grant of license to supply electric power to be prescribed by the Federal Government, and shall include, provision with respect to a supplier of the last resort, as the case may be.
- 1.4. As per Section 23F (2)(b), the Supplier possess the right to make sales of electric power to consumers within their specified territories on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority.
- 1.5. In view thereof, Peshawar Electric Supply Company Limited (PESCO), 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 under the MYT Regime for a period of five years i.e. from FY 2020-21 to FY 2024-25, in terms of Rule 3 (1) of Tariff Standards & Procedure Rules-1998 (hereinafter referred as "Rules").
- 1.6. The Petitioner, inter alia, has requested for a Supply of Power cost for the five years period as detailed below;

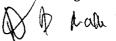
Requested	Revenue	Requirement	- Supply	of Power

Description	Unit	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
				Projected		
Units Purchases	GWh	15,206	15,632	16.070	16,519	16,982
Units to be Sold	GWL	9,450	9,875	10,320	10,784	11,269
Power Purchase Cost	Mh Rs.	199,200	207,121	215,492	223,839	232,654
O&M	Mh Rs.	9,072	9,979	11.045	12.462	13,955
Depreciation	Mhn Rs.	333	380	424	462	486
Return on Regulatory Asset Base (RoRB)	Mln Rs.	1,239	1,431	1,681	1.880	1,982
Provision for Bad Debt	Mln Rs.	7,363	6,962	8,189	8,663	8,962
Other Income	Mh Rs.	(1,189)	(1,308)	(1.439)	(1,583)	(1,741)
PYA & Turnover Tax etc.	Mh Rs.	(772)	2,684	2.922	3.150	3,410
Total		16,046	20,128	22,822	25,034	27,054
Distribution Cost		22,013	24,571	27,623	31,056	34,076
Total Revenue Requirement Supply	Mln Rs.	237,260	251,820	265,937	279,929	293,784
Net Average Sale Rate	Rs./kWh	25.11	25.50	25.77	25.96	26.07



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. However, considering the fact that





the distribution license of the Petitioner is valid only till April 2022, the Authority decided to deliberate the term of the MYT period as a separate issue during the hearing. 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 initially scheduled on August 03, 2021, for which notice of admission / hearing along-with the title and brief description of the petition was published in newspapers on July 14, 2021 and also uploaded on NEPRA website; Individual notices were also issued to stakeholders/ interested parties. However, on the request of the Petitioner, the hearing was rescheduled on August 10, 2021.

3. <u>Issues of Hearing</u>

- 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 request of Petitioner to allow MYT for a period of five years is justified, considering the fact that its license is valid till April 2022?
 - ii. Whether the Petitioner has complied with the direction of the Authority given in earlier determination?
 - iii. Whether the projected energy (GWh) and projected power purchase cost is reasonable?
 - iv. Whether the requested O&M cost are justified?
 - v. Whether the requested Depreciation and RoRB based on requested WACC is justified?
 - vi. Whether the requested Prior Years Adjustment is justified?
 - vii. Whether the requested Financial Charges on TFCS are justified?
 - viii. Whether the requested provision for bad debt is justified?
 - ix. Whether the requested turnover tax and CPPA overhead are justified?
 - x. Whether the requested other income is justified?
 - xi. Whether there should be any bifurcation of O&M on the basis of controllable and uncontrollable basis?
 - xii. What should be the adjustment mechanisms during the MYT? Whether there should any efficiency factor (X Factor)? Or any adjustment for new hiring and cost related to extra ordinary events as requested by the Petitioner?
 - xiii. Whether the requests of the petitioner in its review motion against the tariff determination for the FY 2018-19 & FY 2019-20 are justified?
 - xiv. Whether the requested investment plan is justified?
 - xv. What are the basis used by the Petitioner for bifurcation of its costs into supply and distribution segments?
 - with reference to the request of Telecom companies to charge "B Industrial Supplier Category tariff instead of "A-2 Commercial" category tariff?



- xvii. Whether the existing fixed charges applicable to different consumer categories needs to be revised and requires any changes in mechanism for charging of such charges based on Actual MDI or Sanction Load or otherwise?
- xviii. Whether there should be any amendment in Terms and Conditions of Tariff (For Supply of Electric Power to Consumers by Supply Licensees) keeping in view the changes in Consumer Service Manual?
 - xix. Whether there should any Fixed Charges on consumer having net metering facility on which currently no fixed charges are applicable?
 - xx. Whether the request of Petitioner to allow MYT of five year is justified, especially keeping in view the term of license?
 - xxi. Whether the concerns raised by the intervener/commentator if any are justified?
- xxii. 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, IR has been filed by M/s PTCL, M/s Pak Telecom Mobile, M/s Telenor, M/s CM Pak (Zong), and M/s Nayatel. Written comments were also filed by M/s Deodar PMCL (Jazz). A brief of the concerns raised in the IR is as under;
 - Telecom Sector including Cellular Operators (CMOs) has been declared as an Industry vide Ministry of Industries notification dated 20.04.2004, therefore, for the purpose of charging of electricity, industrial tariff may be applied to CMOs instead of currently applicable Commercial tariffs.
- 4.2. The Authority during the tariff determinations of GEPCO for the FY 2019-20, on the request of Telenor regarding charging of Industrial tariff from Telecom Operators decided as under; "The Authority observed that the issue highlighted by the commentator M/s Telenor Pakistan regarding applicability of Industrial tariff to Cellular Mobile Operator (CMOs) pertains to all the DISCOs including K-Electric as CMOs are operating all over Pakistan, therefore, the issue requires deliberations involving all stakeholders i.e. DISCOs, CMOs, Ministry of Energy, MolT etc. The Authority noted that proceedings regarding Tariff petitions filed by all XWDISCOs for the FY 2018-19 and FY 2019-20, except GEPCO, have already been completed, therefore, the Authority has decided to consider the request of M/s Telenor as a separate issue during the proceedings for the upcoming tariff Petitions of DISCOs for the FY 2020-21 & onward".
- 4.3. In view thereof, in the instant tariff Petition, the subject matter has been discussed as a separate issue.
- 5. During the hearing, the Petitioner was represented by its Chief Executive Officer alongwith 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;

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- 6. Whether the request of Petitioner to allow MYT for a period of five years is justified, considering the fact that distribution license is valid till April 2022?
- 6.1. The Authority noted that the Petitioner has filed its MYT Petition for a period of five years i.e. FY 2020-21 to FY 2024-25, however, the Distribution license of the Petitioner is valid only till 30.04.2022 and supply license till April 2023. In view thereof, the Authority decided to deliberate the matter during the hearing.
- 6.2. The Petitioner during the hearing submitted that they are in the process of filing request for renewal of its distribution license and expects the same to be renewed by the Authority, considering the fact that PESCO is operating in 25 districts of KPK, covering over 74,000 KMs of land, and serving around 3.9 million consumers. The Petitioner further added that to ensure continuous, safe and reliable supply of electric power to the consumers, extension in the term of Distribution license is mandatory and would be in the interest of consumers and the Industry as a whole.
- 6.3. The Authority, considering the fact that the Petitioner has already filed request for renewal of its distribution license, which is under process with the Authority, has decided to consider the instant tariff Petition of the Petitioner under the MYT tariff regime. However, the Authority is also aware of the fact that under Section 21 (2) (a) of the NEPRA Act, the word "exclusive" has been omitted, meaning thereby that the Petitioner does not possess the exclusive right for provision of distribution services in its specified territory. Thus, the grant of tariff under the MYT regime shall in no way be construed as a basis for claiming any exclusivity in the licensed territory of the Petitioner. The terms & conditions, given by the Authority, in the new license of the Petitioner would be applicable during the MYT control period and the MYT would be governed by the terms & conditions of the new license.
- 7. <u>Directions given to the Petitioner in its previous Tariff determination</u>
- 7.1. The Authority gave certain directions to the Petitioner in its tariff determination for the FY 2019-20. The same have been discussed in detail in the MYT Distribution of Power Tariff Determination of the Petitioner, therefore, need not to be discussed here again. The Authority also 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. Further, the directions given by the Authority in the MYT Distribution tariff determination of the Petitioner, have been reproduced in the instant decision for compliance by the Petitioner.
- 8. Whether the projected energy (GWh) and projected power purchase cost is reasonable?
- 8.1. The Petitioner, for the FY 2020-21 till FY 2024-25 has proposed the following purchases during the MYT period;

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Mkwh	15,206	15,632	16,070	16,519	16,982
Cost (Mln Rs.)	199,200	207,121	215,492	223,839	232,653

8.2. The Petitioner submitted that growth of 2.8% has been projected in the FY 2020-21 over the actual purchases of 14,792 GWh in the FY 2019-20.

8.3. The Petitioner further submitted that sales growth of 4.5% has been projected du MYT period as detailed below;





Projected Sales

	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Mkwh	9,450	9,875	10,320	10,784	11,269

8.4. The Petitioner provided the following basis of its projections;

	Average Growth				
Description	Energy Sale	Energy Purchase			
Average Growth Rate for Last 10 Years	3.44%	3.80%			
Target Reduction in T&D Losses for MYT	1.04%	1.04%			
Growth Rate used in MYT	4.50%	2.80%			

- 8.5. The Authority, observed that for the FY 2021-22, variations in the Power Purchase Price (PPP) for the 1st quarter of the FY 2021-22 i.e. Jul. to Sep. 2020 have already been allowed to the Petitioner vide the Authority's decision dated 09.05.2022 and for the 2nd quarter of FY 2021-22, the Petitioner has already filed its PPP adjustment requests with the Authority, which are at an advance stage of the proceedings and would be processed as per the prescribed mechanism. Therefore, for the purpose of instant Petition, the PPP of the Petitioner for the FY 2021-22 shall be the PPP that remained notified during the FY 2021-22, and on which the Petitioner has been / would be allowed quarterly adjustments, thus any reassessment of PPP for the FY 2021-22 is not required.
- 8.6. Although, variations in the PPP of the Petitioner are being actualized through quarterly adjustment mechanism, however, the existing PPP references, against which the variations are being allowed, were determined by the Authority keeping in view the FY 2020-21. The Authority understands that these references now require up-dation / revision as large amount of new capacities e.g. Coal, Nuclear, Hydel etc. along-with HVDC transmission line have since been added in the system, and also to cater for the impact of PKR vs US\$ devaluation, hike in fuel prices and CPI indexations. This revision of PPP references would minimize the impact of future monthly fuel charges adjustments & quarterly variations and will provide a more predictable tariff to the consumers.
- 8.7. Here it is pertinent to mention that the NEPRA Guidelines for determination of consumer end tariff (Methodology and Process) notified vide SRO dated 16.01.2015, prescribes submission of Procurement Plan by CPPA-G and approval of Power Purchase Cost by the Authority. Accordingly, CPPA-G, submitted its Power Purchase Price forecast report for the FY 2021-30, which outlines end consumer tariff outlook up-to FY 2030, and electricity price projections based on IGCEP.
- 8.8. As per the Report, CPPA-G has projected total generation of 136,867 GWh for the FY 2021-22, with the certain assumptions of fuel prices and other parameters i.e. exchange rate, CPI, USCPI, LIBOR and KIBOR etc. However, considering the fact that adjustments in PPP pertaining to the FY 2021-22 are already being processed as per the notified tariff, therefore, the projections by CPPA-G for FY 2021-22 are not relevant and by the time the instant tariff determination would be notified, the PPP reference for the FY 2022-23 will be relevant.

8.9. The Authority is cognizant of the fact that major component of the consumer-end tariff is the Power Purchase Price, which accounts for around 90% of total consumer-end tariffwer.

Therefore, projection of PPP is of utmost importance, as all future monthly fuel parties.

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

=	[ul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Total
Energy Gwh	16,107	16,018	14,326	11,208	8,185	8,657	8,928	7,966	9,803	11,455	14,221	15,687	142,563
NT DC Losses	490.06	505.01	461.88	383.63	316.93	334.75	352.97	293.81	354.90	372.49	425.67	459.25	4,751
Sale to IPPs	22.91	22.78	20.37	15.94	11.64	12.31	12.70	11.33	13.94	16.29	20.22	22.31	203
Energy Delivered to DISCOs	15,594	15,491	13,844	10,809	7,856	8,310	8,563	7,661	9,434	11,066	13,775	15,206	137,609

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





				P	rojected U	nits to be	Sold to Di	SCOs GW	h				
DISCOs	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Total
IESCO	1,536	1,482	1,267	959	711	815	844	690	779	889	1,241	1,526	12,739
LESCO	3,010	2,983	2,888	2,190	1,485	1,600	1,698	1,482	1,861	2,125	2,580	3,125	27,027
GEPCO	1.621	1,507	1,454	1,017	669	696	678	619	825	967	1,254	1,512	12,820
FESCO	1,942	1,961	1,787	1,359	908	937	970	924	1,181	1,385	1,736	1,933	17,023
MEPCO	2.644	2,835	2,335	1,687	1,034	1,015	1,084	1,052	1,486	1,857	2,428	2,440	21,897
PESCO	1,851	1,886	1,471	1,167	994	1,158	1,222	1,014	1,060	1,265	1,619	1,815	16,532
HESCO	701	619	577	505	324	306	304	290	425	564	676	666	5,957
QESCO	712	657	585	553	516	535	512	475	534	616	664	680	7,041
SEPCO	562	551	501	350	227	224	223	192	264	403	561	520	4,577
TESCO	185	191	187	205	196	206	209	183	201	204	197	197	2,361
K-Electric	818	818	792	818	792	818	818	739	818	792	818	792	9,636
Total	15.594	16,491	13,844	10,809	7,856	8,310	8,563	7,661	9,434	11,066	13,775	15,206	137,609

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

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

8.19. Here it is pertinent to mention that the aforementioned energy charge includes variable O&M charges, however, variable O&M charges are not made part of monthly fuel charges adjustment and are adjusted as part of quarterly / biannual adjustments.

8.20. As per the above table, around 31.47% of total generation is expected from Hydel sources 27.50% from Coal (both local & imported), and 15.63% from Nuclear. RLNG would contribute around 10.55% of the total generation, with around 8.9% by indigenous gas

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Other Renewables i.e. Wind, Solar & Bagasse and Imports/SPPs share would be around 6%. Meaning thereby that variation in generation mix and prices of Coal, and RLNG/ Gas would have greater impact on the generation cost, thus, ultimately affecting the consumer-end tariff.

- 8.21. Regarding projection of fuel prices i.e. RLNG, Local & Imported Coal, Local Gas etc., various reports from different sources as given hereunder have been analyzed;
 - ✓ US Energy Information Administration, Short-Term Energy Outlook October 2021
 - ✓ World Bank Commodities Price Forecast
 - ✓ IMF, World Economic Outlook Database
 - ✓ Bloomberg (Various Analyst Firms forecast)
 - ✓ Standard Chartered Bank Report
 - ✓ Argus Media
- 8.22. Based on the information available in the aforementioned reports, the Authority has projected the following fuel prices in terms of RLNG, Local & Imported Coal, and Gas, for the purpose of Power Purchase Price;
- 8.23. The Authority noted that as per the RLNG price notification issued by OGRA, RLNG prices in Pakistan are benchmarked with Brent Crude Oil Prices and are determined as a slope (%) of price of crude oil. In addition to this price, Port charges, PSO import related actual costs, PSO/ PLL Margin and Terminal Charges etc. are added to the price. The said prices are also adjusted with the Transmission Losses and other miscellaneous costs. Thus, the RLNG prices in Pakistan are not only affected by the international prices, being linked with crude oil, but also by the exchange rate parity.
- 8.24. Therefore, to have a fair projection of RLNG prices, the Authority considered the projections of Brent Crude oil prices by various reliable sources i.e. Short Term Energy Outlook published by US Energy Information Administration, World Bank Commodities Price Forecast report, IMF-World Economic Outlook Database and various analyst firm forecasts.
- 8.25. The 2nd factor for determination of price of RLNG is the slope that is applied on the price of Crude oil. To have a fair assessment of the applicable slope, the actual slope on which RLNG has been procured by PSO and PLL including spot purchases, during the last 12 months period has been analyzed. Accordingly, by applying the % slope on the projected prices of Crude Oil, the Delivered Ex-Ship (DES) prices of RLNG have been worked out. Here it is pertinent to mention that beside slope, certain additional charges like PSO/PLL Margin, other import related costs, terminal charges etc. are also applicable on CIF price of RLNG. Accordingly, the Authority keeping in view the projected prices of crude oil, % slope, and impact of rupee devaluation, has projected RLNG prices as Rs.3,183/mmbtu.
- 8.26. For indigenous gas, the Authority considering the existing price, has projected the same as Rs.1,000/mmbtu for the power purchase price projections.
- 8.27. Regarding price of imported coal, the Authority observed that majority of coal used by coal power plants operating in Pakistan, is imported from South Africa and to some extent from Indonesia, therefore, for the purpose of projection of coal prices, the price forecasts given by World Bank Commodities Price Forecast, Argus-McCloskey etc. have been considered. Accordingly, based on these reports and keeping in view the impact of devaluation of Pak Rupee, and by incorporating therein the Marine Insurance, Handling Loss, Other Charges (Port Handling Charges, Customs Duties & Cess, L/C Charges), Inland Freight etc., the Argustant for imported coal works out as average Rs.2,078/mmbtu.



- 8.28. For projection of local coal prices for Thar coal, the Authority has considered the coal price determination made by Thar Coal Energy Board (TCEB) for Block-II. As per the TCEB determination, reference tariff determined for the 4th year includes variable cost of US\$ 15.10 /Ton and fixed cost of US\$ 50.58/Ton. The said total reference total cost determined by TCEB has been indexed with US CPI and US\$ /PKR exchange rate to work out the projected coal price for the FY 2022-23, which works out as Rs.1,466 mmbtu. The same has been considered while projecting the PPP references.
- 8.29. Based on the above discussion, the source wise estimated/projected generation and the estimated cost of electricity generation is given in the following table;

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

Add; NTDC/ HVDC & CPPA-G Cost

119,212

 Less; NTDC/ HVDC Losses
 (4,751)

 Less; Sale to IPPs
 (203)

 PPP Adjusted
 137,609

(4,055) 1,238,330

1,420,946 2,659,277 9.00 10.33 19.32

- 8.30. The generation cost is transferred to the DISCOs according to the Transfer Price Mechanism (TPM) as prescribed by the Authority.
- 8.31. According to the above mechanism, Rs.165,291 million and Rs.15,116 million is the share of the Petitioner on account of CpGenCap and UoSC (NTDC/ HVDC) & Market Operator Fee respectively for the FY 2022-23. The overall fixed charges comprising of CpGenCap and UoSC (NTDC/HVDC) & Market Operator Fee in the instant case works out as Rs.180,407 million, which translate into Rs.4,356/kW/month based on projected average monthly MDI of the Petitioner i.e. 3,451 MW or Rs.10.91/kWh on units purchased basis.
- 8.32. The total annual PPP of the Petitioner for the FY 2022-23 in the instant case works out as Rs.329,147 million. With the projected purchase of 16,532 GWh for the same period, the average PPP of the Petitioner turns out to be as Rs.19.91/kWh (Annex-IV), whereas, the national average determined PPP works out as Rs.19.32/kWh after accounting for the allowed level of NTDC/ HVDC losses and sale to IPPs. Similarly, the National Average Energy Purchase Price (PPP) works out as Rs.9.00/kWh. On the basis of allowed level of T&D losses of 20.16% for the Petitioner for the 3rd Year of the MYT, the adjusted PPP of the Petitioner is assessed as Rs.24.94/kWh.

9. What are the basis used by the Petitioner for bifurcation of its costs into supply and distribution segments?

9.1. The Petitioner on the issue submitted that the Distribution Margin of Distribution (NOTOWER Sale Elements) comprises of Actual salaries and wages of GSO Circle, PD GSC and PD GSC, XEN Operations etc., since these circles / directorates are responsible for constant tion per

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- rehabilitation, augmentation and similar activities involved in Distribution (Non-Sale Elements) for providing electricity to the end consumers.
- 9.2. The XEN offices comprises of technical as well as administrative staff, the salaries of technical officer and officials such as XEN, SDO, line man, assistant line man, line supervisor etc. have been allocated to Distribution (Non-Sale Elements) on actual basis except for meter reader, bill distributer and meter reader supervisor, as the same has been allocated to Power Supply (Sale of Electric Power) as their job description relates to billing and recovery. Moreover, the expenditure of HQ, and other offices has been allocated on the most suitable basis to Distribution (Non-Sale Elements) or Power Supply (Sale of Electric Power).
- 9.3. The Petitioner during the hearing submitted the following regarding bifurcation into supply and distribution segments;

Description	Distribution	Supply	Overall	
Description	% Share	% Share	Total %	
O&M Costs:	[
Pay & Allowances	66%	34%	100%	
Travelling Expenses	71%	29%	100%	
Vehicle Running Expenses	76%	24%	100%	
Other Expenses	14%	86%	100%	
Repair & Maintenance	96%	4%	100%	
Total O&M Cost	65%	35%	100%	
Provision for bad debts	0%	100%	100%	
Depreciation	90%	10%	100%	
Return on Rate Base	80%	20%	100%	
Less: Other Revenues	69%	31%	100%	
Distribution Margin (D.M)	57%	43%	100%	

- 9.4. 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 billing and collection form part of the Supply License.
- 9.5. The Authority in the determination of PESCO for the FY 2019-20 decided the following; "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."
- 9.6. It is again desired that a centralized restructuring plan at the level of Federal Government is prepared, so that a uniform & consistent basis/ approach is adopted by all the DISCOs. Till such time, the submissions of the Petitioner are considered.
- 10. Whether the projected O&M is justified?
- 11. Whether the requested Depreciation and RoRB based on requested/WACC is justified)
- 12. Whether the requested other income is justified?

Nous



- 13. What should be the adjustment mechanisms during the MYT? Whether there should any efficiency factor (X Factor)? Or any adjustment for new hiring and cost related to extra ordinary events as requested by the Petitioner?
- 14. Whether there should be any bifurcation of O&M on the basis of controllable and uncontrollable?
- 14.1. The Petitioner's requested O&M expenses includes salaries and other benefits of employees, repair and maintenance expenses, traveling allowance, vehicle maintenance allowance and other operating costs related to its distribution and supply business. A summary of the O&M requested by the Petitioner under the MYT control period for its Supply of Power function is as under:

Description	Unit	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
O&M	Mln Rs.	9,072	9,979	11,045	12,462	13,955
Depreciation	Mln Rs.	333	380	424	462	486
Return on Regulatory Asset Base (RoRB)	Mln Rs.	1,239	1,431	1,681	1,880	1,982
Provision for Bad Debt	Mln Rs.	7,363	6,962	8,189	8,663	8,962
Other Income	Mln Rs.	(1,189)	(1,308)	(1,439)	(1,583)	(1,741)
PYA & Turnover Tax etc.	Mln Rs.	(772)	2,684	2,922	3,150	3,410
Total		16,046	20,128	22,822	25,034	27,054

Salaries and wages:

- 14.2. The Petitioner submitted that Salaries & Wages including employee's retirement benefits is the major component of O&M expense. Since PESCO was incorporated as company in compliance with power sector reform policy of Government of Pakistan and the WAPDA employees working in Area Electricity Board Peshawar gradually become employees of the company in terms of the Man Power Transition Plan, therefore, PESCO had to maintain the GOP pay scales and the terms of employment for the employees which were prevalent in WAPDA.
- 14.3. The following additional increases are also made by the GoP in its annual budget for FY 2019-20 along with various other impacts:

Increase in Pay & Allowances announced for FY 2020-21:

- ✓ Expected increase in salaries.
- ✓ Enhancement of danger allowance from Rs.5,000 to 7,000 per month for line man.
- ✓ Impact of Additional recruitment.
- ✓ Enhancement of conveyance allowance to disable employees.
- ✓ Assistance package for families of employees who died due to COVID-19 while performing official duties.
- ✓ Adoption of transfer policy.
- ✓ 25% Disparity allowance announced by Federal Government since March-2021 onward.
- ✓ Hiring cost against Market Implementation Regulatory Affair Division (MIRAD) is included in Pay & Allowances.
- Cost of new hiring is claimed as an additional item as PESCO is operating with only 47% of existing staff and facing severe shortage of resources and if PESCO could not hire required staff the operations of the company would be unsustainable.
- Employees Retirement Benefits have been based on the average of annual increase in the last three years audited figures as per the assumption used by the Value Anwar

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Associates. Accordingly, pension increase of 8% and discount rate of 10% has been assumed

14.4. Keeping in view the above increases, the Petitioner stated that salaries and wages are based on the Audited Financial statement of PESCO for the FY 2019-20 and Provisional figure for FY 2020-21 and projected for FY 2021-22 to 2024-25 are as under:

Existing Strength (Actual Working):

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Description	Audited	Audited	Provisional	Projected	Projected	Projected	Projected
Pay & Allowances (Regular)	9,432	9,194	11.350	12.485	13.734	15.794	18.163
Pay & Allowances (Contract)	247	263	1.188	1.330	1.503	1.698	1,866
Post-Retirement Benefits including WAPDA Pensioners	8,173	8.613	8,972	9.906	11.097	12.438	13.583
Other Benefits	695	767	1.066	1,150	1,280	1.420	1,650
Total Salaries & Wages	18,547	18,837	22,576	24,871	27,614	31,350	35,262

- 14.5. The Petitioner submitted that above also includes the Budget for MIRAD under CTBCM.
- 14.6. The Petitioner also requested for new hiring cost as under;

New Recruitment

	Dec-21 Dec-22		Dec-23	Dec-24	Dec-25
Description	Provisional	Projected	Projected	Projected	Projected
New Hiring (Nos)	7,498	4,958	1,330	995	226
Cost (Mln. Rs.)*	2,466	1.574	405	225	74

- 14.7. The Petitioner stated that cost of new Recruitment is not included in the Salaries and Wages cost and is covered through adjustment factor as variable "N" in the O&M adjustment mechanism.
- 14.8. The Petitioner on the issue of MIRAD submitted the following;

Budget Approval of MIRAD:

- i. Distribution companies around the world are well-augmented with the necessary infrastructure and dedicated staff to perform efficient market operations within the competitive electricity markets. Similarly, the XW-DISCOs are required to have dedicated staff with specialized knowledge and competency to inter alia administer the bilateral contracts portfolio, manage the regulatory affairs pertaining to competitive markets and efficiently perform requisite market operations required in the competitive regime. Furthermore, it is also inevitable for DISCOs to perform short and medium-term demand forecasting accurately in power market envisaged for Pakistan.
- ii. To complement this important requirement, a dedicated department to act as an interface between the DISCOs and the Competitive Trading Bilateral Contracts Market (CTBCM) has been envisaged in the CTBCM Implementation Roadmap. Creation of this dedicated market department is also part of the CTBCM Detailed Implementation Plans submitted by DISCOs to NEPRA. This department will initially assist DISCOs in implementation of CTBCM planned activities of DISCOs and later perform competitive market related functions of DISCOs as envisaged in the approved plan. This department will become the provided by DISCOs and later perform competitive market related functions of DISCOs as envisaged in the approved plan. This department will become the provided by DISCOs and later perform competitive market related functions of DISCOs as envisaged in the approved plan.

dedicated central interface between DISCOs and the competitive electricity as ket equipped with staff having specialized knowledge and competency and supported by NEPRA

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necessary infrastructure to first implement and then administer the market operations including bilateral contracts portfolio management, short and medium term, demand forecasting, transmission planning, and overseeing legal and regulatory affairs.

- iii. To help DISCOs in this activity, CPPA-G being central facilitator, arranged consultative sessions for DISCOs in Dec 2019 and Feb 2020 wherein DISCOs had detailed joint deliberations on the suitable structure of the subject department. Consequently, DISCOs jointly prepared in consultation with CPPA and its international consultants, a proposal encapsulating structure of the department titled as "Market Implementation and Regulatory Affairs Department (MIRAD)" to be created within each DISCOs before the start of CTBCM.
- iv. The proposal has been endorsed by the Ministry of Energy (Power Division) vide letter No. PF No. PF-05(04)/2012 dated December 01, 2020 vide which MoE (PD) directed PEPCO to forward the proposed structure to DISCOs BoDs for approval of staffing and respective perks & privileges. Consequently, PEPCO has forwarded the structure endorsed by MoE (PD) vide letter dated December 09, 2020 to the BoDs of the DISCOs for approval and implementation of the same.
- v. The MoE (PD) has also recommended to sanction additional financial benefits to the staff positioned within the MIRAD (up to 40% of basic pay) as this will be a highly technical work and will require some incentive to recruit and retain competent staff.
- vi. The BoD PESCO in its 153rd meeting held on 10-02-2021 has principally approved the MIRAD department (17 New and 3 existing positions) with initial financial implication of Rs.47.136 Million plus 40% special allowance per annum.

Total Number of Management Positions in MIRAD

vii. The structure of MIRAD has a total of 20 managerial positions of different cadres ranging from BPS-20 to BPS-17. The break-up of these positions is as following:

Head of Department (BPS-20): 1 Position
Managers (BPS-19): 3 Positions
Deputy Managers (BPS-18): 6 Positions
Assistant Managers (BPS-17): 10 Positions

viii. Out of 20 positions, 03 Positions already exist in various quarters under the current sanctioned strength while 17 Positions are new and required to be created exclusively under MIRAD. The details pertaining to the existing positions and new positions is as under:

- i. Director General MIRAD (01 Position)
- ii. Manager Contract Management & Regulatory Affairs (01 Position-already Exists)
- iii. Manager Planning and Forecasting (01 Position)
- iv. Manager Legal / Contracts (01 Position)
- v. Deputy Manager Contract Management (01 Position Already Exists)
- vi. Deputy Manager Regulatory Affairs (01 Position)
- vii. Deputy Manager Demand Forecasting (01 Position)
- viii. Deputy Manager Transmission Planning (01 Position)
 - ix. Deputy Manager Finance (01 Position)
 - x. Deputy Manager Legal / Contracts (01 Position)
- xi. Assistant Manager Contract Management (02 Positions)







xii. Assistant Manager Transmission Planning (02 Positions)

xiii. Assistant Manager Demand Forecasting (01 Positions - Already Exists)

xiv. Assistant Manager Regulatory Affairs (01 Position)

xv. Assistant Manager Finance (02 Positions)

xvi. Assistant Manager Admin (01 Positions)

xvii. Assistant Manager Demand Forecasting (01 Positions)

14.9. The Petitioner also shared comparison of its sanctioned strength and actual working strength as under:

Description	Sanctioned Strength	Working Strength	Shortfall	% Shortfall
Qualified Professional	400	382	18	5%
Staff	27,868	12,839	15,029	54%
Total	28,268	13,221	15,047	53%

Number of Employees	Existing	Dec-21	Dec-22	Dec-23	Dec-24	Dec-25
		(Proj.)	(Proj.)	(Proj.)	(Proj.)	(Proj.)
1. Qualified Professionals	382	453	550	571	587	577
Engineers	289	342	439	460	476	466
Others	93	111	111	111	111	111
2. Staff	12,839	20,259	25,120	26,429	27,408	27,634
Technical	7,060	11,425	15,002	15,027	15,027	15,028
Clerical	1,029	1,730	1,922	2,114	2,301	2,326
Non-Technical	4,750	7,104	8,196	9,288	10,080	10,280
3. Total (1+2)	13,221	20,712	25,670	27,000	27,995	28,211
4. Retirements	817	761	888	880	845	783
5. Net Total (3-4)	13,221	19,951	24,782	26,120	27,152	27,428

14.10. The Petitioner in view of the above submitted that it is currently working on strength of 13,221 employees approximately out of which 382 are officers of different grades. The shortage of the staff is main cause of losses and system constraints being faced by PESCO at present. Now in the future plans under the MYT, i.e. from FY 2020-21 to FY 2024-25, a progressive recruitment of around 50% per year is proposed to complete the shortfall of staff. In this regard, a year-wise proposal, initially for the year Dec 2021 is projected including around 700-Grid System Operation staff, which is required for GSO of newly commissioned grids waiting for minimum required staff. Moreover, such arrangement will continue till Dec 2025. It is further pointed out that 3rd party analysis of yard stick is being carried out by PESCO at present and regulator may allow to re-negotiate future hiring after such study, and in the meantime, the number of appointments recommended are necessary.

Repair & maintenance expenses:

14.11.Regarding Repair and Maintenance expenses, the Petitioner submitted that the same have been assumed @ around 2% of the net Fixed Assets in operation. The Petitioner further stated that it has to maintain its old and over loaded system in order to ensure un-interrupted power supply to the consumers, moreover cost of material has also increased due to inflationary pressure. Therefore, Repair & Maintenance expenditure has been projected as Rs.1,150 million for the FY 2020-21, Rs.1,208 million for the FY 2021-22, Rs.1,268 million for the FY 2022-23, Rs.1,331 million for the FY 2023-24 & Rs.1,398 million for the FY 2025 for both the Distribution and Supply Functions and is required for the following;

✓ Repair of Power Trafos damaged at Grid Stations & controlling Breakers, Isolators etc.

Noth.



- ✓ Repairs and Maintenance of 3,722 KM Transmission Lines.
- ✓ Repair & Maintenance of 1,116 Nos. 11KV feeders.
- ✓ Repair & Maintenance of 37,220 KMs HT Lines.
- ✓ Repair & Maintenance of 45,311 KMs LT Lines.
- ✓ Repair & Maintenance of 78,759 Nos. of Distribution Transformers
- 14.12. For its Supply of Power Function, the Petitioner has projected the following cost under Repair & Maintenance Cost for the Tariff Control Period;

	Sup	ply of Po	wer Busi	ness_		
		Tarif	f Control P	eriod		Avg. for
Description	Test Year	Y2	Y3	Y4	Y5	Tariff
·	2020-21	2021-22	2022-23	2023-24	2024-25	Control
	Act/Pro.	Proj.	Proj.	Proj.	Proj.	Period
Repair and Maintenance	50	53	55	58	61	55

14.13. The Petitioner for the adjustment of above costs has proposed that this may be linked with the percentage of Fixed Assets (i.e. 2% of the net Fixed Assets) in operation and WPI.

Travelling expenses:

14.14. The Petitioner stated that Travelling expenses have been projected Rs.351 million, Rs.386 million, Rs.432 million, Rs.484 million & Rs.542 million for FY 2020-21 to FY 2024-25 respectively for both the Distribution and Supply Functions. However, for its Supply of Power Function, the following amounts have been proposed;

	Sup	ply of Po	wer Busi	ness				
Description		Tariff Control Period						
	Test Year	Y2	Y3	Y4	Y5	Tariff		
	2020-21	2021-22	2022-23	2023-24	2024-25	Control		
	Act/Pro.	Proj.	Proj.	Proj.	Proj	Pe riod		
Traveling Expenses	100	111	124	139	155	126		

14.15. The Petitioner has proposed to adjust the Travelling Expenses with CPI.

Vehicle running expenses:

- 14.16.Regarding Vehicle charges, the Petitioner stated that it has a fleet of more than 720 vehicles, most of the vehicles are old and have completed useful life of 10 years & need major overhauling. It further explained that financial position of PESCO does not allow us to replace them with new vehicles, thus, left with no option but to maintain them. Moreover, the cost of POL has increased manifolds & the cost of parts of vehicles is also increasing due to inflation. Apart from above, PESCO's distribution system is spread all over Khyber Pakhtunkhwa and it has to be maintained, hence PESCO requires funds for running of vehicles as well as for their maintenance.
- 14.17. The Petitioner has projected the following costs under vehicle running expenses for Supply of Power Function under the MYT control period from the FY 2020-21 to FY 2024-25;

Vehicle Running Expenses for Tariff Control Period







· · · · · · · · · · · · · · · · · · ·	Sup	ply of Po	wer Busi	ness				
Description		Tariff Control Period						
	Test Year	Y2	Y3	_Y4	Y5	Tariff		
•	2020-21	2021-22	2022-23	2023-24	2024-25	Control		
	Act/Pro.	Proj.	Proj.	Proj.	Proj.	Period		
Vehicle Expenses	60	66	73	80	88	73		

14.18. The Petitioner has proposed that adjustment in Vehicle Expenses may be linked with CPI.

Other Operating expenses:

14.19. The Other expenses include Rent, Rates and Taxes, Utility expenses, communications, office supplies, professional fees, auditor's remuneration, outsourced services, management fees, electricity bill collection expenses etc. The Petitioner has projected the following costs in this regard for its Supply of Power Function under the MYT control period from the FY 2020-21 to the FY 2024-25.

	Sup	ply of Po	wer Bus	iness				
		Tariff Control Period						
Description	Test Year	Y2	Y3	Y4	Y5	Tariff		
-	2020-21	2021-22	2022-23	2023-24	2024-25	Control		
	Act/Pro.	Proj.	Proj.	Proj.	Proj.	Period		
Other Expenses	1,208	1,319	1,432	1,557	1696	1,442		

14.20. The Petitioner has proposed that adjustment in Other Expenses may be linked with the CPI.

<u>Controllable & Uncontrollable Costs</u>

- 14.21.Regarding O&M expenses, the Petitioner submitted that these are one of the major unknowns for XWDISCOs in Pakistan due to many uncontrollable factors such as statutory implications arising out of increase in salaries (as announced by the Federal Government), increase in certain expenses due to growth in consumer base, this includes increase in maintenance expenses, meter reading expenses, whereas other expenses are directly linked to the rate of petroleum. The employees' cost includes costs related to salaries and benefits of all staff (administrative, operational and security).
- 14.22. The Petitioner further apprised that to ensure an efficient, coordinated, economical distribution system and to build, maintain and operate the system more systematically, it will be employing a highly skilled and technically proficient team to manage all aspects of the distribution of power to ensure that all key commercial interests of all stakeholders are maintained, protected and prioritized.
- 14.23. Accordingly, it has been requested stated that the O&M cost needs to be bifurcated into controllable and uncontrollable cost components. The Petitioner therefore submitted that 'Uncontrollable costs' be trued-up at the end of every year and the 'Controllable costs' should be indexed every year with CPI change less agreed efficiency factor, adjustable in last two years, to pass on the benefit of system efficiency to the consumers.

14.24. The Petitioner shared the following basis for the controlling and controlling costs;

Controllable Cost:

14.25. The controllable O&M costs are projected by assuming an inflation rate of 10% to 15% for each year of the tariff control period excluding the base year. The controllable controllab

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control period will also increase annually due to new projects (as envisaged in DM) and accordingly this new addition in per unit base cost of controllable component may be allowed in the related year in which project is planned to be completed and indexed subsequently as part of controllable cost component.

Uncontrollable Cost:

- 14.26. With regards to uncontrollable cost different growth rates are projected for different cost streams based on management experience. Uncontrollable cost factors could be affected by growth in employee benefits, consumer growth rates and growth in regulatory fee etc. The uncontrollable cost will also increase annually due to new projects (as envisaged in DIIP) and accordingly projected cost includes impact of new projects.
- 14.27. The Petitioner has bifurcated its costs in terms of controllable and uncontrollable as under;

Controllable Costs	Uncontrollable Costs
Travelling Expenses	Pay and Allowances - Existing
Office Supplies & Store handling	Rent, Rate & Taxes
Vehicle Expenses	Injuries & Damages
Power, Light & Water	Collection Expenses
Communication & Postage	Legal Charges
Advertising & Publicity	Management Fee
Subscription & Periodicals	Audit Charges
Misc. Expenses	
Bank Charges	
Insurance Premium	

Description	Test Year	Base Year		Control Period					
(Un-Controllable Costs)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025		
Pay and Allowances – Existing	18,547	18,837	22,576	24,871	27,614	31,350	35,262		
Rent, Rate & Taxes	199	54	170	187	215	247	284		
Injuries & Damages	37	82	130	137	143	150	158		
Collection Expenses	126	146	200	210	221	232	243		
Legal Charges	19	30	31	32	34	36	37		
Management Fee	127	177	320	352	387	426	469		
Audit Charges	3	1	5	5	5	5	5		
Sub Total	19,059	19,327	23,432	25,794	28,620	32,446	36,459		

15. Adjustment Mechanism:

- 15.1. The Petitioner for the adjustment of above costs has proposed for the following mechanism:
 - a. The base year FY 2019-20 does not reflect the true cost rather showing with employees of 13,221 Nos. with sanctioned posts of 28,268 Nos. and accordingly factor "N" is included to account for the new recruitments.
 - b. Adjustment in Salary & Pension (including pension part of post-retirement benefit) may be linked with the Increase announced by GoP in Annual Budget on actual basis.
 - c. 5% increase on account of Annual Increment may be allowed.

d. The remaining allowances / benefits may be adjusted on the basis of CPI for controllable costs and on the basis of actual in case of uncontrollable costs.

e. An additional variable "N" may be included to account for the New Recruitments was vacant positions and the same may be indexed as proposed above.

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- f. Another variable "Z" may also be included to account for the cost relating to extra ordinary events with financial implication of Rs.25 Million or more and the same may be indexed as well.
- g. The O&M part of Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor). Accordingly, the O&M be indexed every year according to the following formula:

 $O\&M_{Rev} = [O\&M_{Ref} \ (Controllable \ Cost) \ ^* \{1 + (\Delta CPI-X)\}] \ + \ Uncontrollable \ Cost \ (Actual) + N + \ Z \ (Actual) + N$

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

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

 ΔCPI = Change in Consumer Price Index published by Pakistan Bureau of Statistics latest available on 1st July against the CPI as on 1st July of the Reference Year in terms of percentage.

X = Efficiency factor

Where:

N = New Hiring including indexation of controllable and uncontrollable costs.

Z = Cost relating to extraordinary events including indexation with financial impact of Rs.25 Million or more.

- 15.2. The Authority observed that section 31(3) of the Amended NEPRA Act, inter alia, has prescribed that the following general guidelines shall be applicable to the Authority in the determination, modification or revision of rates, charges and terms and conditions for provision of electric power services;
 - ✓ "(a) tariffs should allow licensees the recovery of any and all cost prudently incurred to meet the demonstrated needs of their customers Tariff."
 - ✓ (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;
 - √ (d) tariffs should include a mechanism to allow licensees a benefit from and penalties for failure to achieve the efficiencies in the cost of providing the service and the quality of service;"
- 15.3. Further, as per NEPRA Determination of Consumer-end-Tariff (Methodology & Process) Guidelines, 2015, the Authority shall choose a base year for the purpose of determining the affected company's revenue requirement under multi-year tariff regime or annual tariff regime. "Base Year" has been defined as the year on which the annual or multiyear tariff projection is being made, which may be a historical financial year, for which the actual results/audited accounts are available. It may be a combination of actual results and projected results for the same financial year or it may be a pure projection of a future financial year.
- 15.4. Here it is also pertinent to mention that as per the approved tariff methodology the Ro Purchase Price is the only uncontrollable cost which is allowed a pass through item. other remaining costs are to be treated as controllable costs.

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- 15.5. Considering the fact that the MYT has been filed for the period pertaining to the FY 2020-21 to FY 2024-25, and the cost for the FY 2020-21 i.e. test year, is being assessed as reference cost during the MYT control period, the Authority has decided to consider the costs as per the Audited accounts of the Petitioner for the FY 2019-20 as base year.
- 15.6. The Authority considers that for projections or assessment of OPEX costs, the two commonly used approaches are the Ex-Ante approach 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 OPEX 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. The 2nd that the utility shares the savings or losses with consumers. The former 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. However, the widely used approach is that no adjustments to allowed Revenues or OPEX allowances are made in the next period to compensate for a deviation from allowed OPEX in the current period except for certain allowed adjustments in terms of CPI etc.
- 15.7. In view thereof, the head wise assessment of the Petitioner under each of the requested costs is as discussed hereunder.

Salaries, Wages and Other benefits (excluding post-retirement benefits)

- 15.8. The Authority noted that head of Salaries, Wages and Other Benefits include employees Pay & Allowances and Post-retirement benefits and accounts for around 90% of the Petitioner's total O&M costs excluding therefrom depreciation and provision for doubtful debts. The Authority understands that employees of XWDISCOs are hired on Government pay scales, thus, any salary increase announced by the Federal Government in Fiscal Budget is also applicable on the employees of XWDISCOs. Therefore, salaries & wages cost of employees can be considered as un-controllable cost for XWDISCOs as long as they remain in public sector.
- 15.9. Considering the fact that the cost for the FY 2020-21 is being assessed, which would be used as reference during the MYT control period, the Authority has decided to consider the costs as per the Audited accounts of the Petitioner for the FY 2019-20 as base year as explained in the preceding paras. It is also pertinent to mention that being a public sector company, the Petitioner is required to pay, its employees, increases in salaries & wages announced by the Federal Government through Budget. This also addresses the concern of the Petitioner in terms of salaries & wages cost being uncontrollable.
- 15.10. The total cost reflected in the Audited accounts of the Petitioner for the FY 2019-20, under Salaries & Wages (excluding postretirement benefits, discussed separately) is Rs.10,223 million. Accordingly, the said amount has been considered as base cost and by applying thereon the increases as approved by the Federal Government on Salaries and Wages in the Federal Budget for the FY 2020-21, the cost of Salaries & Wages (excluding postretirement benefits, discussed separately), for both the Distribution and Supply Functions works out as Rs.11,148 million. The same is hereby allowed to the Petitioner for the FY 2020-21 for both its distribution and Supply Functions as reference cost, to be adjusted in the remaining control period as per the adjustment mechanism prescribed in the instant determination OWER Ro

15.11. Since the Audited accounts of the Petitioner, do not provide bifurcation of the Sasties, Wages and other benefits costs in terms of Distribution and Supply Functions, therefore, for

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the purpose of allocation of total cost of Salaries, Wages and other benefits in terms of Distribution and Supply Functions, the criteria as adopted by the Petitioner has been used. Accordingly, the cost of Salaries, Wages and other benefits (excluding postretirement benefits) for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.3,790 million.

15.12. The assessed Salaries & Wages costs for the FY 2020-21 for the Supply of Power Function i.e. Rs.3,790 million, shall be considered as the reference cost for working out future Salaries & Wages expenses, in the remaining control period as per the adjustment mechanism prescribed in the instant determination.

Additional Recruitment

15.13. Regarding cost of new recruitment, the Authority observed that Salaries & Wages cost for the FY 2019-20, as per the Audited accounts of the Petitioner, have been considered as base cost, therefore, impact of any new recruitment already made till FY 2019-20 has been accounted for. For the proposed recruitment to be carried out in FY 2020-21 and onward, the Authority understands that allowing cost of additional hiring, upfront would be unfair with the consumers, without considering/ analyzing the benefits of such recruitment. The Authority understands that it will be in a better position to adjudicate on the issue once the Petitioner provides details of the actual cost incurred in this regard and substantiates the same with the quantified benefits accrued. In view thereof, the Authority has decided to consider the financial impact of any additional hiring during the midterm review, which will be carried out after expiry of 3rd year of the MYT control period. The mid-term review would be carried out, in case the Petitioner remains in the Public sector. This also addresses the concern of the Petitioner regarding inclusion of "N" factor.

Hiring for MIRAD

- 15.14. The Authority observed that detailed design and implementation plan of the Competitive Trading Bilateral Contract Market (CTBCM) has been approved on November 12, 2020 to make a competitive wholesale electricity market functional from May 2022. Pursuant thereto, DISCOs have created a Market Implementation & Regulatory Affairs Department (MIRAD). The department would be a dedicated central interface between DISCOs and the competitive electricity market equipped with staff having specialized knowledge and competency and supported by necessary infrastructure, inter-alia, to administer the market operations including bilateral contracts portfolio management, short and medium-term demand forecasting, transmission planning, and overseeing legal and regulatory affairs.
- 15.15.Regarding recruitment for MIRAD, the Petitioner has submitted that its BoD has principally approved the MIRAD department (17 New and 3 existing positions) with initial financial implication of Rs.47.136 million plus 40% special allowance per annum.
- 15.16. Accordingly, for inclusion of cost impact of hiring made for MIRAD by the Petitioner, details were requested from the Petitioner. The Petitioner shared its latest status of hiring made on account of MIRAD, whereby only one position i.e. DG MIRAD has been hired externally and the remaining positions have been filled through internal transfers. As per the submitted information, the recruitment process of MIRAD has still not been completed, however, the Petitioner has requested for the financial impact for all the positions.

15.17.In view thereof, the Authority has decided to allow hiring for MIRAD in principal and altower requests and would also be made part of reference cost for future indexations, once the practice of the pr

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Petitioner completes its recruitment process and submits complete details in this regard. Here it is pertinent to mention that impact of employees internally transferred to MIRAD has already been largely accounted for while assessing the salaries & wages cost.

P.M Assistance Package

15.18.Regarding request of the Petitioner for PM assistance package, the Authority in principle agrees to allow the Prime Minister Assistance Package as announced by the Federal Government for the families of employees who died during service. However, for the requested amount, the Authority considers that allowing any such costs, upfront would be unfair with the consumers, therefore, the Authority may consider such costs once the actual expenditure is incurred by the Petitioner. To justify the claim the Petitioner is required to provide employees name, CNIC number, designation, date of death, along with the financial impact, etc. in its next tariff petition/adjustment request for the Authority to consider.

Post-Retirement Benefits

- 15.19. The Petitioner submitted that Salaries & Wages also include employee's retirement benefits. Since PESCO was incorporated as company in compliance with power sector reform policy of Government of Pakistan and the WAPDA employees working in Area Electricity Board Peshawar gradually become employees of the company in terms of the Man Power Transition Plan, therefore PESCO had to maintain the GOP pay scales and the terms of employment for the employees which were prevalent in WAPDA. The Petitioner has stated that Employees Retirement Benefits have been based on the average of annual increase in the last three years audited figures as per the assumption used by the Valuer, Anwar Associates. Accordingly, pension increase of 8% and discount rate of 10% has been assumed.
- 15.20. The Petitioner accordingly requested the following amounts under the head of post-retirement benefits;

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Description	Audited	Prov.	Proj.	Proj.	Proj.	Proj.
Post-Retirement Benefits including WAPDA Pensioners	8,613	8,972	9,906	11,097	12,438	13,583

- 15.21. The Authority noted that the head of Post-retirement benefit includes employees' pension, free electricity and medical facility. The Authority also understands that employees of XWDSICSOs are hired on Government pay scales, thus, any pension increase announced by the Federal Government in the Budget is also applicable on the retired employees of XWDISCOs.
- 15.22. It is also pertinent to mention that the Authority in its previous determinations, considering the overall liquidity position in the power sector and in order to ensure that XWDISCOs fulfil their legal obligations with respect to the post-retirement benefits, directed the XWDISCOs to create a separate fund in this regard. The rationale behind creation of separate fund was to ensure that DISCOs record their liability prudently as the funds would be transferred into a separate legal entity, which would also generate its own profits, as it would be kept separate from the Company's routine operations, thus reducing the Distribution Margin and eventually consumer-end tariff in longer run.
- 15.23.In compliance with the Authority's direction, the Petitioner has created a separate Fund COWER RE its post-retirement benefits. Although, the Petitioner has created the Fund, however, the Authority is also cognizant of the operational performance of the Petitioner in terms of achieving the Regulatory Targets of T&D losses and Recoveries etc. The actual losses of the PRA

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- Petitioner for the FY 2019-20 remained at around 39% as compared to the allowed target of 21%. Similarly, the recovery ratio of the Petitioner during FY 2019-20 remained well below the allowed level of 100% recovery target.
- 15.24. The Authority keeping in view the operational performance of the Petitioner considers that at this point in time allowing provision for post-retirement benefits instead of actual payments made by the Petitioner, would not be in the interest of the consumers as any additional amount over & above the actual payments, would be eaten-up by the inefficiencies of the Petitioner and the Petitioner would not be able to deposit the excess amount in the Fund. However, if the Petitioner still manages to deposit any additional amount in the Fund, the Authority may consider to allow the same as PYA in the subsequent adjustment request.
- 15.25.In view thereof, the Authority has decided to considered the amount of actual payments as per the Audited accounts of the Petitioner for the FY 2019-20 as base cost and by applying thereon the increases as approved by the Federal Government on Pension Benefits in the Federal Budget for the FY 2020-21, the cost of post-retirement benefits for the FY 2020-21 for both the Distribution and Supply Functions works out as Rs.5,560 million. The same is hereby allowed to the Petitioner for the FY 2020-21 for both its distribution and Supply Functions as reference cost, to be adjusted in the remaining control period as per the adjustment mechanism prescribed in the instant determination.
- 15.26. Since the Audited accounts of the Petitioner, do not provide bifurcation of post-retirement benefits in terms of Distribution and Supply Functions, therefore, for the purpose of allocation of total cost of post-retirement benefits in terms of Distribution and Supply Functions, the criteria as adopted by the Petitioner has been used. Accordingly, the cost of post-retirement benefits for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.1,891 million.

Repair & Maintenance Costs

Power Function;

15.27. Regarding Repair and Maintenance expenses, the Petitioner has assumed the same @ around 2% of the net Fixed Assets in operation. The Petitioner while justifying its submissions stated that it has to maintain its old and over loaded system in order to ensure un-interrupted power supply to the consumers, moreover cost of material has also increased due to inflationary pressure. Accordingly, the Petitioner projected the Repair & Maintenance costs as Rs.1,150 million for FY 2020-21, Rs.1,208 million for FY 2021-22, Rs.1,268 million for FY 2022-23, Rs.1,331 million for FY 2023-24 & Rs.1,398 million for FY 2024-25 for both the Distribution and Supply Functions, with the following amounts pertaining to the Supply of

		Supply	of Power	Business	s				
	Nepra Determination	Audited Tariff Control Period						Avg. for	
Description		Base Year	Test Year	Y2	Y3	Y4	Y5	Tariff Control Period	
		2019-20	2020-21 Act/Pro.	2021-22 Proj.	2022-23 Proj.	2023-24 Proj.	2024-25 Proj.		
Repair And Maintenance	35	35	50	53	55	58	61	55	
%Increase/ (Decrease)			43%	6%	4%	5%	5%		

15.28. The Petitioner for the adjustment of above costs proposed that this may be linked with the percentage of Fixed Assets (i.e. 2% of the net Fixed Assets) in operation and WPI.

15.29. The Authority has carefully examined the Petitioner's request of linking the R&M cost as a percentage of Net Fixed Assets (NFAs). The Authority, while going through the actual





expenditure incurred by the Petitioner on account of R&M during the last three years as per its audited accounts, observed that the same works out as 1.28%, 1.35% and 1.43% of the NFAs for the FY 2017-18, FY 2018-19 and FY 2019-20 respectively. Moreover, the Petitioner has not provided any rationale or working to substantiate its request of setting R&M as 2% of NFAs except that it has to maintain old and over loaded system in order to ensure un-interrupted power supply to the consumers, and that cost of material has also increased due to inflationary pressure.

- 15.30. No doubt that the adherence to service standards and improvement of customer services is only possible through continuous repair and maintenance of distribution network, however, at the same time the Petitioner has also requested for huge CAPEX of Rs.76,746 million for making additional investment in Fixed Assets, resulting in new, expensive and efficient equipment, leading to overall reduction in R&M cost and increasing the total Assets base. Thus, the Petitioner idea if adopted would result in undue benefit to the Petitioner in the long run. In addition to aforementioned discussion, the Petitioner's request of annual adjustment in this regard is against the very sprit of multiyear tariff regime. It has also been noted that the Petitioner has not been able to spend more than Rs.788 million under the R&M head during the last three years.
- 15.31.In view of the foregoing and keeping in view the current approved tariff methodology, the Authority has decided to allow an amount of Rs.863 million under R&M head, for the FY 2020-21, after incorporating the inflationary impact on the R&M cost as per the audited accounts of the Petitioner for the FY 2019-20 for both the Distribution and Supply Functions. The same is hereby allowed to the Petitioner for the FY 2020-21 for both its distribution and Supply Functions.
- 15.32. Since the Audited accounts of the Petitioner, do not provide bifurcation of the R&M costs in terms of Distribution and Supply Functions, therefore, for the purpose of allocation of total cost of R&M costs in terms of Distribution and Supply Functions, the criteria as adopted by the Petitioner has been used. Accordingly, the cost of R&M for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.35 million.
- 15.33. The assessed repair and maintenance cost for the FY 2020-21 i.e. Rs.35 million for the Supply of Power Function, shall be considered as the reference cost for working out future repair and maintenance expenses, in the remaining control period as per the adjustment mechanism prescribed in the instant determination.

Other O&M Expenses

15.34.Other O&M expenses includes Travelling costs, Vehicle Maintenance and other O&M expenses i.e. Rent, Rates & Taxes, Power, Light and Water, Communication, Bill Collection Charges, Office supplies, Director Fees, Auditor Remuneration, Professional Fees, Outside Service Employed, Management Fees, NEPRA License Fees, Advertisement & Publicity, Subscriptions & Periodicals, Representation & Entertainment, Insurance, Bank Charges, and other miscellaneous expense. The Petitioner projected its Other O&M costs including Travelling and Vehicle Maintenance costs as Rs.2,013 million for the FY 2020-21, Rs.2,204 million for the FY 2021-22, Rs.2,410 million for the FY 2022-23, Rs.2,637 million for the FY 2023-24 & Rs.2,892 million for the FY 2024-25 for both the Distribution and Supply Functions, with the following amounts pertaining to the Supply of Power Function;

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Supply of Power Function	2020-21	2021-22	2022-23	2023-24	2024-25
Description	Act/Pro.	Proj.	Proj.	Proj.	Proj.
Traveling Costs	100	111	124	139	155
Vehicle Fuel & Maintenance	60	66	73	80	88
Other O&M expenses	1,208	1,319	1,432	1,557	1,696
Total	1,368	1,496	1,629	1,776	1,939

- 15.35. The Petitioner has requested around 50% increase in its O&M expenses for the FY 2020-21 as compared to the FY 2019-20 and thereafter around 10-12% increase every year during the remaining MYT control period, on the proposed cost of the FY 2020-21. The Petitioner proposed that O&M part of Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor).
- 15.36. The Authority noted that as per the approved tariff methodology, all other operating expenses are part of O&M costs which are to be assessed through CPI-X formulae for the whole tariff control period. Accordingly, for the assessment pertaining to the FY 2020-21 (reference cost), the Authority has decided to accept the actual figures of the FY 2019-20 as such and allowed an inflationary increase of 9.49 % over the same and accordingly has assessed the other O&M expenses as Rs.1,252 million for both the Distribution and Supply of Power Function.
- 15.37. Since the Audited accounts of the Petitioner, do not provide bifurcation of the Other O&M costs in terms of Distribution and Supply of Power Functions, therefore, for the purpose of allocation of total cost of Other O&M costs in terms of Distribution and Supply Functions, the criteria as adopted by the Petitioner has been used. Accordingly, the cost of Other O&M costs for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.816 million.
- 15.38.By considering the figures as per financial statement, the Authority has incorporated all the costs including bill collection, building rent, NEPRA fee, insurance cost, rent, rates & taxes, and travelling etc. However, Management Fees of PEPCO, has not been considered as 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 Ministry of Energy (MoE), itself in the Peshawar High Court submitted that PEPCO shall be dissolved after June 2011. Accordingly, the cost of PEPCO fee, if any, has not been allowed to the Petitioner.
- 15.39. The aforementioned assessment for the FY 2020-21 shall be considered as reference for the Supply of Power Function for working out future Other Operating Expenses for remaining tariff control period to be adjusted as per the adjustment mechanism provided in the instant determination.

Depreciation

to the Supply of Power Function;

15.40. The Petitioner has submitted that Depreciation is calculated on the basis of the value of existing Assets plus the additions in assets during the year. It further stated that assets are depreciated on straight line method as per utility practice i.e. land @ 0 %, buildings and civil works @ 2%, Plant and machinery @ 3.5%, office equipment and mobile plant @ 10% and other assets @ 10%. Accordingly, based upon these assumptions the Petitioner has requested Rs.3,334 million for the FY 2020-21, Rs.3,796 million for the FY 2021-22, Rs.4,235 million for the FY 2022-23, Rs.4,615 million for the FY 2023-24 & Rs.4,895 million for the FY 2024 ONER R. 25 for both the Distribution and Supply Functions, with the following amounts pertaining

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		Sup	ply of Po	wer Busi	ness			
	Nepra Determination	Audited		Tari	ff Control P	eriod		Avg. for Tariff
Description		Base Year	Test Year	Y2	Y3	Y4	Y5	Control
	2019-20	2019-20	2020-21 Act/Pro.	2021-22 Proj.	2022-23 Proj.	2023-24 Proj.	2024-25 Proj.	Period
Depreciation	311	303	333	380	424	462	486	417
% Increase/ (Decrease)			10%	14%	12%	9%	5%	

- 15.41. The Petitioner has proposed that adjustment in Depreciation Expenses may be linked with the Gross Fixed Assets in operation.
- 15.42. The Authority noted that as per the Methodology, depreciation expense for the test year, which in the instant case is FY 2020-21, will be determined by applying depreciation charge on the Gross Fixed Assets in Operation, including new investment and will be considered reference for the tariff control period.
- 15.43. In order to make fair assessment of the depreciation expense, the Authority accounts for the investments approved for the year. After taking into account the new investments, the Gross Fixed Assets in Operation for the FY 2020-21 have been worked out as Rs.92,662 million. Accordingly, the depreciation charge for the FY 2020-21 has been assessed as Rs.3,206 million calculated on actual depreciation rates for each category of Assets as per the Company policy, which will be considered as reference cost for working out future depreciation Expenses for the remaining tariff control period, to be adjusted as per the mechanism provided in the instant determination.
- 15.44. After carefully examining the relevant details and information pertaining to the deferred credit and amortization as per the accounts for the FY 2019-20, the Authority has projected amortization of deferred credit to the tune of Rs.1,934 million for the FY 2020- 21. Accordingly, the consumers would bear net depreciation of Rs.1,272 million.
- 15.45. The actual depreciation reflected in the Audited accounts of the Petitioner for the FY 2019-20, do not provide bifurcation of depreciation cost in terms of Distribution and Supply Functions, therefore, for the purpose of allocation of depreciation cost in terms of Distribution and Supply Functions, the criteria as adopted by the Petitioner has been used. Accordingly, the depreciation cost for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.321 million.

RoRB

- 15.46. The Petitioner has submitted that NEPRA allowed WACC to PESCO 10.95% for FY 2018-19 and 15.02% for FY 2019-20 in its tariff determination for FY 2018-19 & FY 2019-20, PESCO has reservation on the calculation of allowed WACC of 10.95%. PESCO is of the opinion that return should be adequate enough to not only cover the cost of debt but also to cater for the exchange rate parity as well as reasonable return to the equity holders. The Petitioner further stated that as per amortization schedule provided by Economic Affairs Division (EAD) for ADB Trench-I, II, III & IV PESCO has to pay the interest charges as well the exchange risk and Principal repayments.
- 15.47.It also submitted that PESCO has no other source of revenue except Tariff to pay off the principal, interest and exchange risk payable to EAD except for consumer end Tariff and WER RE not allowed, it will in any way effect the consumers as the same will be passed in the form of deficit financing resulting in financial hardship to the consumers.

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15.48. The Petitioner accordingly requested the Authority to allow RORB @14.06% WACC, including debt as per following calculations and further projection is also being made for the tariff control period for both the Distribution and Supply Functions:

Description	<u>FY</u> 2019-20 Audited	<u>FY</u> 2020-21 Act/Proy.	FY 2021-22 Projected	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Gross Fixed Assets In Operation-Opening Balance	83 299	87,395	96,996	110.194	122.747	133,604
Addition in Fixed Assets	4,096	9.600	13,199	12,553	10.857	6,966
Gross Fixed Assets In Operation-Closing Balance	87,395	96.996	110,194	122,747	133.604	140.570
Less Accumulated Depreciation	32.191	35,525	39,321	43.556	48.171	53.030
Net Fixed Assets in Operation	55.204	61,471	70.874	79.191	85,433	87,540
Add: Capital Work in Progress-Closing Balance	19.756	20,369	21.211	22,013	22.706	23.150
Investment in Fixed Assets	74.960	81,840	92.085	101.204	108,138	110.690
Less Deferred Credits	32,776	35.894	36.244	37.479	38,145	39.708
Regulatory Assets Base	42.184	45,946	55.841	63.724	69,994	70.983
Average Regulatory Assets Base	41.400	44.066	50.893	59,782	66.859	70,488
Rate of Return	15.02%*	14.06%	14.06%	14.06%	14.06%	14.06%
Return on Rate Base	6,218	6,196	7,156	8,405	9,400	9,911

15.49. The Petitioner submitted the following amounts pertaining to its Supply of Power Function;

		Su	pply of l	Power B	usiness		
Description	NEPRA Determination FY-2019-20	2019-20 Actual	2020-21 Prov.	2021-22 Proj.	2022-23 Proj.	2023-24 Proj.	2024-25 Proj.
RORB	878	1.244	1.239	1,431	1,681	1,880	1,982

- 15.50. The Authority observed that as per Section 31(3) of the amended NEPRA Act, the following general guidelines shall be applicable to the Authority in the determination, modification or revision of rates, charges and terms and conditions for provision of electric power services; (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;
- 15.51. The Authority uses the Capital Asset Pricing Model (CAPM) for calculation of Return of Equity (RoE) component of the WACC, being the most widely accepted model, which is applied by regulatory agencies all over the world to estimate the cost of capital for regulated utilities. Further, as per the Tariff 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.
- 15.52. Keeping in view the above, the Authority for the assessment of RoE component for the FY 2020-21, has considered weighted average yield on 05 Years Pakistan Investment Bond (PIB) as of July 22, 2020 as risk free rate, which is 8.2139%.
- 15.53. The expected return on any investment is the sum of the risk-free rate and an extra return ower 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 taken

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- as a measure of market rate of return. To have an appropriate measure of the market rate of return, analyzed KSE-100 Index return, over a period of 10 years i.e. FY 2011 to FY 2020, which remained at around 13.9%. The Authority also analyzed returns offered by stock exchanges of the neighboring countries, and noted that return of KSE-100 index remained higher than those of neighboring countries.
- 15.54.Based on the above analysis, the Authority has considered the rate of return on KSE-100 index as expected market return in WACC formula for calculation of Return of equity. The rate of return on KSE-100 index of around 13.9%, translates into risk premium of around 5.68% (with risk free rate of 8.2139%, Weighted Average Yield of 5-Year PIB as of July 22, 2020). Therefore, keeping in view the aforementioned, Market Risk Premium of 5.68% is considered as reasonable for calculation of cost of equity component.
- 15.55. Regarding assessment of beta, the Authority has considered the earlier studies in the matter, range of betas used by international Regulators, and accordingly decided to use the beta of 1.10, while assessing the RoE component.
- 15.56. 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 taken cost of debt as 3 month's KIBOR + 2.00% spread. Consequently, the cost of debt has been worked out as 9.03% i.e. 3 Months KIBOR of 7.03% as of 3rd July 2020 plus a spread of 2.00% (200 basis points).
- 15.57.In view thereof, the WACC for the FY 2020-21 has been worked out as under;

Cost of Equity;

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\label{eq:Ke} \begin{split} \text{Ke} &= R_F + \left(R_{\text{M}}\text{-}R_F\right) \times \beta \\ &= 8.2139\% + \left(13.9\%\text{-}8.2139\% = 5.686\% \times 1.1\right) = 14.47\% \\ \text{The cost of debt is;} \\ \text{Kd} &= 9.03\% \end{split}
```

WACC= $((\text{Ke } \times (\text{E} / \text{V}) + (\text{Kd } \times (\text{D} / \text{V})))$

Where E/V and D/V are equity and debt ratios respectively taken as 30% and 70%; WACC = $((14.47\% \times 30\%) + (9.03\% \times 70\%)) = 10.66\%$

Treatment of Capital Work in Progress (CWIP) while calculating the RoRB

15.58. The Authority noted that as per the existing practice of XWDISCOs, CWIP in made part of RAB, while calculating RoRB. Considering the fact that CWIP also includes Interest during Construction (IDC), which once capitalized becomes part of total fixed assets, the Authority, regarding treatment of CWIP as part of RAB, has considered the best practices adopted by different Regulators across the world and observed the following;

Energy Regulators Regional Association (ERRA) Practices for RAB

15.59. As per the Energy Regulators Regional Association (ERRA) tariff data base, regarding CWIP, most of the regulators think that new CAPEX should be introduced in the RAB on the basis of actual costs incurred up to the point at which the assets become operational. Some regulators include construction work in progress in the RAB when construction is to be completed within a relatively short period of time, e.g. in one year. Accordingly RAB is calculated as per the following formula;

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RAB calculation: net approach

The regulatory asset base for the year t is calculated according to the following formula:

CB = OB + Inv - D - AD - DC + DWC

where:

OB - opening value of regulatory assets for year t of the regulatory period:

Inv - investment (capital expenditures) for year t of the regulatory period;

D - depreciation for year t of regulatory period;

AD - assets disposal for year t of regulatory period:

DC - annual change over year t in the value of assets funded by

capital contributions

DWC - annual change over year t in working capital;

CB - closing value of regulatory assets for year t of the regulatory period

- 15.60. Similarly, in India, the Maharashtra Electricity Regulatory Commission, while calculating return only considers assets that have been capitalized and any amount beyond 30% of equity portion is treated as part of debt.
- 15.61.In view of the above international practices and the fact that CWIP includes IDC, which once capitalized becomes part of total fixed assets, the Authority has decided to allow Return on Equity only up-to 30% of the CWIP separately and make the same as part of total RoRB.
- 15.62.Based on above and using WACC of 10.66% on RAB by including allowed investment for the FY 2020-21 and excluding therefrom the amount of CWIP, and allowing RoE at 30% of the closing value of CWIP, the RoRB of the Petitioner for the FY 2020-21 has been worked out as under;

Description	FY 2019-20	FY 2020-21
Fixed Assets O/B	83,299	87,551
Addition	4,252	5,266
Fixed Assets C/B	87,551	92,817
Depreciation	32,191	35,397
Net Fixed Assets	55,360	57,420
Capital WIP C/B	-	-
Fixed Assets Inc. WIP	55,360	57,420
Less: Deferred Credits	41,134	41,420
Total RAB	14,226	16,000
Average RAB	15,113	
WACC - %		10.66%
RORB		1,611
Capital WIP C/B		24,472
Equity Portion of CWIP 309	7,342	
ROE on CWIP	1,062	
Total RORB	2,673	



- 15.63. The total amount of RoRB as worked out above has been allocated in terms of Distribution and Supply Functions, as per the criteria adopted by the Petitioner itself. Accordingly, the RORB for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.535 million.
- 15.64. 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.

- 15.65. Similarly for the FY 2018-19, the Authority again observed that the Petitioner as per its provisional accounts had insufficient cash balance, 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.
- 15.66. Accordingly, the Authority 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 and also directed the Petitioner to restrain from unlawful utilization of receipts against deposit works & security deposits, 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.
- 15.67. The Petitioner during the hearing submitted that Security deposits and receipt against deposit works is being utilized for the purpose, for which these funds are received. It also added that PESCO inherited security deposit shortfall from WAPDA on its inception in 1998 together with the amount being recovered by FBR from these heads from time to time. However, it is making all out efforts to recoup the shortfall to the extent possible. The Petitioner further submitted that to check the shortfall, the balance under the head of Deposit Work in Progress, Bank Balance and the stock in operation needs to be considered also.
- 15.68.Regarding disclosure in the financial statements, the Petitioner mentioned that specific disclosures have been given in the audited accounts of FY 2019-20 w.r.t bank balance as well as work in progress under Deposit head.
- 15.69. The Authority for the FY 2019-20, has again observed that the Petitioner has insufficient cash balance as on 30th June 2020, against their 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. Thus, it would be unfair and unjust with the consumers to suffer due to the unlawful act of the Petitioner. Accordingly, the amount of receipts against deposit works has been considered as a part of Deferred Credits for the assessment of RAB for FY 2020-21, after excluding therefrom the cash/ bank balances and the amount of stores & Spares available with DISCOs.

OTHER INCOME

15.70. The Petitioner has submitted that main sources of other income include Interest Income OWER Sale of Scrape, Amortization of Deferred Credit, Rental & Service Income etc., whereas the Wheeling Charges and Late Payment Surcharge have been excluded as per decision of NEDS

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NEPRA. Accordingly the Petitioner has projected the following amounts as Other Income during the MYT control period for both its distribution and supply functions;

D:	istribution	& Supply o	of Power B	usiness	
		Tarif	f Control P	eriod	
Description	Test Year	Y2	Y3	Y4	Y5
	2020-21	2021-22	2022-23	2023-24	2024-25
	Act/Pro.	Proj.	Proj.	Proj.	Proj.
Other Income	3,800	4,180	4,598	5,058	5,564
% Inc./ (Dec.)	10%	10%	10%	10%	10%

15.71. The Petitioner has provided the following detail of other income pertaining to the Supply of Power Function;

Supply of Power Business						
		Tarif	f Control F	eriod		
Description	Test Year	Y2	Y3	Y4	Y5	
-	2020-21	2021-22	2022-23	2023-24	2024-25	
	Act/Pro.	Proj.	Proj.	Proj.	Proj.	
Other Income	1,189	1,308	1,439	1,583	1,741	
% Inc./ (Dec.)	10%	10%	10%	10%	10%	

- 15.72.Other income is considered to be a negative cost which may include, but not be limited to, amortization of deferred credit, meter and rental income, late-payment charges, profit on bank deposits, sale of scrap, income from non-utility operations, commission on PTV fees and miscellaneous income.
- 15.73. Since the other income would be trued up every year as per the mechanism provided in the instant determination, therefore, for the FY 2020-21, the Authority has decided to allow an amount of Rs.3,467 million based on audited accounts of the Petitioner for FY 2019-20, including the amount of amortization of deferred credit but exclusive of the amount of late payment charges and wheeling charges from TESCO for both of its Distribution and Supply functions
- 15.74. 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 2020-21. Here it is pertinent to mention that the LPS recovered from the consumers on utility bills shall be offset against the late payment invoices raised by CPPA (G) against respective XWDISCO only and in the event of non-submission of evidence of payment to CPPA (G), the entire amount of Late Payment charge recovered from consumers shall be made part of other income and deducted from revenue requirement in the subsequent year.
- 15.75. The Petitioner is further directed to provide year wise detail of wheeling charges charged to TESCO and the amount actually received from TESCO in this regard.
- 15.76. The total amount of Other Income as worked out above has been allocated in terms of Distribution and Supply Functions, as per the criteria adopted by the Petitioner itself. Accordingly, Other Income for the FY 2020-21 pertaining to the Supply of Power function works out as Rs.1,075 million, which is hereby allowed.

15.77. The reference Other Income determined for the FY 2020-21 would be adjusted annually as per the adjustment mechanism prescribed in the instant determination.





Adjustment Mechanism

15.78. The Petitioner has submitted that O&M component of the Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor).

Controllable & Uncontrollable Costs

15.79. The Petitioner has submitted that O&M cost needs to be bifurcated into controllable and uncontrollable cost components and the 'Uncontrollable costs' be trued-up at the end of every year and the 'Controllable costs' be indexed every year with CPI change less agreed efficiency factor, adjustable in last two years, to pass on the benefit of system efficiency to the consumers. The Petitioner has provided the following break-up in terms of Controllable and Uncontrollable costs;

Controllable Costs	Uncontrollable Costs
Travelling Expenses	Pay and Allowances - Existing
Office Supplies & Store handling	Rent, Rate & Taxes
Vehicle Expenses	Injuries & Damages
Power, Light & Water	Collection Expenses
Communication & Postage	Legal Charges
Advertising & Publicity	Management Fee
Subscription & Periodicals	Audit Charges
Misc. Expenses	
Bank Charges	
Insurance Premium	

15.80. The Petitioner proposed the following adjustment mechanism for the above costs;

- ✓ The base year FY 2019-20 does not reflect the true cost rather showing with employees of 13,221 Nos. with sanctioned posts of 28,268 Nos. and accordingly factor "N" is included to account for the new recruitments.
- ✓ Adjustment in Salary & Pension (including pension part of post-retirement benefit) may be linked with the Increase announced by GoP in Annual Budget on actual basis.
- ✓ 5% increase on account of Annual Increment may be allowed.
- ✓ The remaining allowances / benefits may be adjusted on the basis of CPI for controllable costs and on the basis of actual in case of uncontrollable costs.
- ✓ An additional variable "N" may be included to account for the New Recruitments against vacant positions and the same may be indexed as proposed above.
- ✓ Another variable "Z" may also be included to account for the cost relating to extra ordinary events with financial implication of Rs.25 Million or more and the same may be indexed as well.
- ✓ The O&M part of Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor) as per the following mechanism;
 O&M Rev. = [O&M Ref. (Controllable Cost) x {1+(ΔCPI-X)}]+Uncontrollable Cost

(Actual)+N+ Z

Where;

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

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







 Δ CPI = Change in Consumer Price Index published by Pakistan Bureau of Statistics latest available on 1st July against the CPI as on 1st July of the Reference Year in terms of percentage.

X = Efficiency factor

- N = New Hiring including indexation of controllable & uncontrollable costs.
- **Z** = Cost relating to extraordinary events including indexation with financial impact of Rs.25 Million or more.
- 15.81. The Authority noted that as per the approved tariff methodology the Power Purchase Price is the only uncontrollable cost which is allowed a pass through item. The other remaining costs are to be treated as controllable costs.
- 15.82. The Authority, while assessing the O&M costs of the Petitioner i.e. rent, rates & taxes, Injuries & damages, collection expenses, legal charges, management fee, and Audit Charges etc., has incorporated these costs in the reference cost, keeping in view the audited accounts of the Petitioner for the FY 2019-20, to be adjusted in the remaining MYT control period as per the adjustment mechanism given below. The risk / benefits of any future cost fluctuations thereof lies with the Petitioner along with an opportunity for optimizing overall costs under these head. The treatment is in line with the very sprit of multi- year tariff regime and in accordance with Authority's approved tariff methodology.
- 15.83.Regarding adjustment of O&M costs with the efficiency factor X, the Authority noted that the Petitioner although has proposed to index its O&M costs with CPI subject to adjustment of X-factor, however, nothing has been proposed in terms of value of X-factor. Therefore, in the absence of any recommendation form the Petitioner, the Authority in line with its earlier MYT decisions in the matter of XWDISCOs, has decided to keep the efficiency factor "X", as 30% of increase in CPI for the relevant year of the MYT control period. The Authority has further decided to implement the efficiency factor from the 3rd year of the control period, in order to provide the Petitioner with an opportunity to improve its operational performance, before sharing such gains with the consumers.
- 15.84.Regarding request of the Petitioner to allow "Z" factor, the Authority observed that it has allowed insurance cost to the Petitioner in the reference O&M cost for the FY 2020-21 subject to future increases, and the same covers for any such extra ordinary events. Therefore, the request of the Petitioner, to allow any such factor as a separate cost is not justified.
- 15.85.The mechanism for adjustment of costs allowed as part of Distribution Margin, during the MYT control period is as under;

Salaries & Wages and Post-retirement Benefits:

15.86. The reference costs shall be adjusted every year with the increase announced by the GoP, being beyond the Petitioner's control, for the respective year till the time the Petitioner remains in the public sector. In addition a 5% increase as requested by the Petitioner would be allowed on the amount of Basic pay to account for the impact of annual increment. In case, the Petitioner is privatized during the MYT period, the allowed cost of Salaries & Wages would be adjusted with CPI-X factor.

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Post-retirement benefits

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

O&M Costs

15.88.Regarding other O&M cost, the reference cost would be adjusted every Year with CPI-X factor. However, the X factor would be applicable from the 3rd year of the MYT control period. The Adjustment mechanism would be as under;

·	
Adjustmer	nt Mechanism -Operation & Maintenance Exp.
Operation & Maintenance Exp.	= Ref. O&M cost x [1+(CPI -X factor)]

RORB

15.89. The reference RoRB would be adjusted every Year based on the amount of RAB worked out for the respective year after taking into account the amount of investment allowed for that year as per the following mechanism;

, ,		
	Adjustment Mechanism - RoRB	
RORB(Rev)	=RORB(Ref) x RAB(Rev) / RAB(Ref)	

- 15.90.In addition the allowed RAB for previous year will be trued up downward only, keeping in view the amount of investment allowed for the respective year. In case, the Petitioner ends up making higher investments than the allowed, the same would be the Petitioner's own commercial decision and would not be considered while truing up the RAB, unless due to any regulatory decisions/interventions/approved plans for which the Petitioner obtains prior approval of the Authority. In such case the Authority may also revise the efficiency targets in terms of T&D losses etc.
- 15.91. The Authority also understands that interest payment is an obligatory cash flow liability unlike discretionary dividend payment and considering the fact that any default may hamper the financial position of the Petitioner, hence the Authority has decided to cover the risk of floating KIBOR. Accordingly, fluctuation in the reference KIBOR would be adjusted biannually. In addition, the Authority has also decided to allow sharing of benefit by introducing a claw back mechanism for any savings resulting from cheaper financing by the Petitioner to the extent of 2.00% spread. If the Petitioner manages to negotiate a loan below 2.00% spread, the savings would be shared equally between the consumers and the Petitioner through PYA mechanism annually. In case of more than one loan, the saving with respect to the spread would be worked out by a weighted average cost of debt. The sharing would be only to the extent of savings only i.e. if the spread is greater than 2.00%, the additional cost would be borne by the Petitioner.

Depreciation Expenses

15.92. The reference Depreciation charges would be adjusted every Year as per the following formula;

DEP (Rev) = DEP (Ref) \times GFAIO (Rev) GFAIO (Ref)

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Where: DEP (Rev) = Revised Depreciation Expense for the Current Year

DEP (Ref) = Reference Depreciation Expense for the Reference Year

GFAIO (Rev) = Revised Gross Fixed Assets in Operation for the Current Year

GFAIO (Ref) = Reference Gross Fixed Assets in Operation for the Reference Year

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

Other Income

15.94.Other Income shall be adjusted annually as per the following mechanism during the MYT control period to calculate future Other Income.

OI (Rev) = OI (1) + (OI(1) + OI (0))

OI (Rev) = Revised Other Income for the Current Year

OI (1) = Actual Other Income as per latest Financial Statement.

OI (0) = Actual/Assessed Other Income used in the previous year.

16. Whether the requested provision for bad debt is justified?

16.1. The Petitioner on the issue of Provision for Bad Debts has submitted that it is pursuing the recovery of arrears from its consumers but due to the worst law and order situation in Khyber Pakhtunkhwa and non-payment culture particularly the attitude of consumers residing in areas adjacent to TESCO, the recovery campaign is affected. Administrative & Political obligations do not allow us to take severe action against the defaulters. Moreover, disconnection creates law and order situation in terms of road blockade, blast of transmission towers and attacks on PESCO staff, Grid Stations and offices. Accordingly, provision for doubtful debts is made on the basis of ageing formula agreed with the Auditors and approved by the BoD PESCO.

Recovery Plan

- 16.2. The Petitioner has provided the following recovery plan in this regard;
 - ✓ Prompt billing
 - ✓ Recording Correct Meter Reading
 - ✓ Delivery of bills in time.
 - ✓ Reconciliation of billing disputes with Govt: agencies.
 - ✓ Timely debit of Audit Notes.
 - ✓ Prompt disconnection of running defaulter consumer
 - ✓ Installation of ABC cables on high loss feeders in order to control theft of energy & to make effective disconnection so that defaulter consumers may be compelled to the payment of arrears.
 - ✓ Out of court settlement of disputed cases.

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- ✓ Recovery through PESCO Police from defaulters.
- ✓ Kuli Kachehri on weekly basis are being held on circle level to redress the genuine grievances of the consumers on the spot and to recover the outstanding dues from the defaulters.
- ✓ Combing of feeders is being carried out through PESCO field formations in their respective areas aiming at removal of direct hooks, replacement of sluggish and defective meters, proper meterization and accurate billing through MMR system so as to eliminate theft of energy, bring the defaulter as well as un-registered consumers in billing network and to recover the legitimate arrears of PESCO.
- ✓ Posting of Recovery Magistrate for recovery of outstanding arrears.
- ✓ Recovery under Land Revenue Act, by Tehsildar Recovery Officer.
- ✓ Fixing of responsibility of recovery of arrears as follows;

Offi	Defa	ulters
Officers	Running	Permanent Disconnected
SDO	Upto Rs. 500,000	Upto Rs.1,00,000
XEN	Above Rs. 500,000 to 10 Lac	Above Rs.1,00,000 to 10 Lac
SEs	Above 10 Lacs	Above 10 Lacs

16.3. The Petitioner accordingly requested the following amounts on account of Provision of Bad Debts;

	Supply of	Power E	Business			
	f Control P	Control Period				
Description	2020-21	2021-22	2022-23	2023-24	2024-25	
	Act/Pro.	Proj	Proj	Proj.	Proj.	
	Test Year	Y2	Y3	Y4	Y5_	
Recovery %age	91%	92.50%	92.90%	93.40%	94.10%	
As Sales %age	4.70%	3.90%	4.20%	4.20%	4.00%	
Provision for Bad debts	7,363	6,962	8,189	8,663	8,962	
% Increase/ (Decrease)	56%	-5%	18%	6%	3%	

- 16.4. The Authority has noted with concern that almost same submissions were made with the Petitioner in its Supply Petition for the FY 2019-20, wherein it was projected to improve the Recovery Ratio to 92% in the FY 2019-20. However, in the instant Petition the recovery for FY 2020-21 has been projected as 91%.
- 16.5. Nonetheless, it is important to mention that the Authority in its Re-determination decision dated 18.09.2017, allowed an amount of Rs.15,748 million to the Petitioner as Write-Offs on provisional basis subject to fulfilment of the given criteria. The Authority also decided that in case the Petitioner fails to actually write off the allowed amounts, as per the given criteria, and required evidence is not provided, the provisionally amount shall be adjusted back subsequently. The Petitioner was not able to complete the required process/ criteria and no amount was written off; accordingly, the allowed amount of write-offs was adjusted back. The Petitioner has again requested for provision of Bad Debts during the MYT control period, without any actual write-offs as per the criteria, which the Authority considers is not justified, hence disallowed.

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- 17. Whether the requests of the Petitioner in its review motion against the tariff determination for the FY 2018-19 & FY 2019-20 are justified?
- 17.1. The Authority issued determinations of PESCO for Distribution of Power on December 11, 2020, and Supply of Power tariff on December 14, 2020, for the FY 2018-19 & FY 2019-20 and intimated the same to the Federal Government for notification. PESCO being aggrieved with the decisions of the Authority filed Motion for leave for Review vide letter dated December 24, 2020, against both the decisions of the Authority for its Distribution of Power and Supply of Power.
- 17.2. The Authority in the matter of MLR vide decision dated 19.04.2021 decided as under;
 - "The Authority, however, considering the fact that the determination against which the MLR has been filed by the Petitioner has already been notified by the Federal Government vide SRO dated February 12, 2021, which was made applicable with immediate effect, has decided to return back the subject Motion to the Petitioner, with the directions to submit the concerns raised in the MLR in its next tariff petition for consideration of the Authority. The Petitioner is directed to file its Multi Year Tariff Petition, as already directed, without further delay."
- 17.3. In view thereof, all the concerns raised by the Petitioner have been addressed in the Multi Year Distribution Function Tariff determination of the Petitioner for the FY 2020-21. Thus, need not to be discussed here again in the instant determination of Supply of Power tariff.
- 18. Whether the requested investment Plan is justified?
- 18.1. The investment requested by the Petitioner has been discussed and addressed in detail in the Multi Year Distribution Function Tariff determination of the Petitioner for the FY 2020-21. Thus, need not to be discussed here again in the instant determination of Supply of Power Tariff.
- 19. Whether the requested Prior Years Adjustment is justified?
- 19.1. The Petitioner has requested to allow negative PYA of Rs.3,151 million as detailed hereunder for both its Distribution and Supply of Power Functions;

Sr.	Prior Year Adjustments	Rs. In Million
1	DM (FY 2019-20)	
	DM Allowed	23,376
	DM Recovered	20,032
	Under Recovered	3,344
2	Other Income (FY 2019-20)	
	Allowed	-2,940
	Actual	-3,467
	Under/(Over) Recovery	-527
3	Sales Mix Variances FY 2019-20	(5,228)
4	PYA over recovered (FY 2018-19)	(4,455)
5	Turn over tax	3,008
	Total Prior Period Adjustment	-3,858
6	Uniform Seasonal Pricing Structure Subsidy (USPS)	707
	Net Prior Year Adjustment	(3,151)



19.2. The issue of PYA has been deliberated in detail in the Distribution Tariff Determination of the Petitioner under the MYT regime, therefore, needs not to be discussed here again. However, the amount of PYA, worked out in the Distribution



tariff determination of the Petitioner is reproduced hereunder for inclusion of the same as part of Revenue Requirement of the Petitioner for its supply of Power Function;

	Rs. Mln
Description	PESCO
Description	. 2000
1st & 2nd Qtr. FY 2018-19	
Allowed Amount	25,120
Qtr. Rs./kWh	2.1699
Recovered	29,055
Under/(Over) Recovery	(3,935)
3rd & 4th Qtr. FY 2018-19	
Allowed Amount	5,443
Qtr. Rs./kWh	0.5877
Recovered	5,963
Under/(Over) Recovery	(520)
Interim D.M FY 2018-19	7 0 017
Allowed Amount	3,817
Qtr. Rs./kWh	0.4121
Recovered	4,181
Under/(Over) Recovery	(364)
1st Qtr. FY 2019-20	<u>,</u> _
Allowed Amount	2,865
Qtr. Rs./kWh	0.3093
Recovered	3,157
Under/(Over) Recovery	(292)
Distribution Margin FY 2019-20	
Allowed	23,376
Recovered	19,839
Under/(Over) Recovery	3,537
Other Income FY 2019-20	
Allowed	(2,940)
Actual	(3,467)
Under/(Over) Recovery	(527)
Sales Mix Variances	
FY 2019-20	(5,345)
FY 2020-21	1
	(5,345)
MID EV 2018 10 6. PV 2010 20	
MLR FY 2018-19 & FY 2019-20	<u></u>
RORB	656
Other Exp without PEPCO Fee	50
Tax Payments	3,008
PYA of FY 2018-19	1,737
Distribution Margin FY 2020-21	5,451
Allowed	23,376
Recovered	22,188
Under/(Over) Recovery	1,188
	1
Total Prior Period Adjustment	(6,259)







- 19.3. The Authority in line with its earlier decision in the matter of negative FCA, has calculated the impact of negative FCA pertaining to the FY 2019-20 in the matter of lifeline consumers, domestic consumers (consuming up-to 300 units) and Agriculture Consumers which has been retained by the Petitioner. The Authority has also worked out the impact of positive FCAs not recovered by the Petitioner from life line consumers. The Authority also considered the relevant clauses of the S.R.O. 189 (1)/2015 dated March 05, 2015 issued by GoP and the amount of subsidy claims filed by the Petitioner for the FY 2019-20.
- 19.4. After considering all the aforementioned factors, the Authority observed that the Petitioner has retained a net amount of Rs.796 million on account of negative FCA for the FY 2019-20, pertaining to the lifeline consumers, domestic consumers (consuming up-to 300 units) and Agriculture Consumers, which is still lying with the Petitioner. The Authority also considered the amount of subsidy claims filed by the Petitioner for the FY 2019-20, which shows a net subsidy claim filed by the Petitioner.
- 19.5. The Authority in view of the above and in line with its earlier decisions, has decided not to adjust the impact of negative FCA across different consumer categories. Thus, the net negative FCA amount pertaining to the lifeline consumers, domestic consumers (consuming up-to 300 units) and Agriculture Consumers for the FY 2019-20 i.e. Rs.796 million, which is still lying with the Petitioner, must be adjusted by the Federal Government, against the overall Tariff Differential Subsidy claim in the matter of the Petitioner eventually reducing GOP's overall Tariff Differential Subsidy burden. The above working has been carried out based on the data/information provided by PITC, as DISCOs have not submitted the required information. In case DISCOs own calculations are different from the aforementioned numbers, keeping in view the last slab benefits etc., the same may be shared with the Authority in its subsequent adjustment request. This decision of the Authority is only applicable under a subsidy regime, whereby aforementioned classes of consumers are receiving subsidy directly in their base tariff.
- 19.6. The Authority also observed that supplemental charges billed by CPPA-G to PESCO from FY 2014-15 to FY 2020-21, are in excess of LPS recovered by PESCO, therefore, no adjustment is being made in this regard in line with the earlier decision of the Authority.
- 19.7. Here it is pertinent to mention that the Petitioner vide letter dated 14.05.2022, has provided its workings regarding impact of life line consumers on quarterly adjustments, by claiming an amount of Rs.1,023 million for the period from 4th quarter of FY 2017-18 till the FY 2020-21. The Authority considers that the claim of the Petitioner requires further deliberation, however, considering the fact that the instant tariff determinations are at final stage, the Authority has decided to consider this claim in the next tariff adjustment/indexation of the Petitioner.

20. Whether the requested Financial Charges on TFCS are justified?

20.1. The Petitioner submitted that the Economic Coordination Committee (ECC) of the Cabinet considered the summary dated 31st May 2017, submitted by the Ministry of Water & Power (now Ministry of Energy (Power Division)) regarding issuance of Sovereign Guarantee by the Ministry of Finance in respect of syndicated loan finance facility amounting to Rs.41 Billion for the power sector and decided as under:-

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Power Holding (Private) Limited would be responsible for arranging loan amounting to Rs.41 billion. The amount would be utilized for the purpose of funding the repayment liabilities of the Distribution Companies through arrangement between Power Holding Private Limited and DISCOs. Appointment of the financing facility shall be made to the DISCOs according to their respective liability towards power purchasers. The Ministry of Finance would provide Sovereign guarantee for repayment of loan as well as interest for the facility amounting to Rs.41 billion, arranged through a consortium of local banks. The servicing of markup principal repayments and all other amounts becoming due and payable in respect of the subject facility shall be the responsibility of the respective DISCOs.

- 20.2. The Petitioner further submitted that CPPA-G has issued various Debit notes cumulatively amounting to Rs.2.5 billion in compliance with the decision of ECC (ECC-60/14/2017 dated 07-06-2017) to PESCO for booking of the same as liability in PESCO books on account of long term loans.
- 20.3. Detail of Mark-up/ Debit notes issued by CPPA are hereunder:

Reference	Date	Rupees
PPA-65/PESCO-04	Jun-18	631,754,766
PPA-169/PESCO-04	Dec-18	343,732,825
PPA-169/PESCO-04	Jun-19	209,209,311
PPA-07/PESCO-04	Jul-19	279,468,289
PPA-153/PESCO-04	Dec-19	590,837,015
PPA-374/PESCO-04	Jun-20	484,753,753
TOTAL		2,539,755,959

- 20.4. The Petitioner accordingly requested the Authority to consider the matter in the light of ECC decision and allow the same to PESCO.
- 20.5. The Authority has already adjudicated on the issue in detail and with reasonable clarity in the tariff determination of the Petitioner for the FY 2015-16, and in the subsequent tariff determinations. The Petitioner has failed to provide any new evidence or reason to substantiate its aforementioned claim, which could formulate the basis for the Authority to reconsider its earlier decision in this regard; therefore, the request of the Petitioner is declined.
- 21. Whether the requested turnover tax and CPPA overhead are justified
- 21.1. The issue has been deliberated in detail in the Distribution Tariff Determination of the Petitioner under the MYT regime, therefore, needs not to be discussed here again.

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

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- 22.1. The Petitioner during the hearing submitted that it has already requested NEPRA to revise the criteria of fixed charges on the basis of 50% of sanctioned load in case of no energy is consumed during the month. The Authority noted that other DISCOs also during proceedings of their tariff petitions supported applicability of fixed charges based on sanctioned loads.
- 22.2. The Authority also noted that as per the decision dated 01.11.2021 in the matter of Wheeling Costs to be included in the Tariff Determination of DISCOs, it was decided as under;

"Hybrid BPC

- 12.1. In future tariff determinations of DISCOs, for Hybrid BPCs, fixed charges shall be levied based on their sanctioned load or actual MDI, whichever is higher and will be applicable on such BPCs who retain DISCOs as deemed supplier. In the meanwhile, based on the above formula, NEPRA will determine it on case to case basis."
- 22.3. The Authority observed that as per the current tariff structure, certain consumer categories like Commercial, Industrial, Bulk and Agriculture are levied fixed charges, which are based on their actual MDI for the month. The Authority considers that the capacity charges of generation companies which are fixed in nature, as it has to be paid based on plant availability, are charged to DISCOs based on the actual MDIs of DISCOs. However, the present consumer end tariff design is of volumetric nature whereby major portion of the cost is charged / recovered from the consumers on units consumed basis i.e. per kWh and only a small amount is recovered on MDIs basis from the consumers.
- 22.4. In view of the above discussion, decision of the Authority dated 01.11.2021 in the matter of wheeling and to ensure that Hybrid BPCs, who keep DISCOs connection as backup, also share portion of the fixed costs, the Authority has decided to change the mechanism for levying of monthly fixed charges to various categories of consumers. The Fixed charges shall now be charged, based on 50% of the sanctioned load or actual MDI for the month, whichever is higher. However, in such cases, no minimum monthly charges would be billed even if no energy is consumed. The Authority has also decided to increase the rate of fixed charges currently applicable to certain categories i.e. from Rs.400/kW/M, 420/kW/M and 440/kW/M to Rs.440/kW/M, 460/kW/M, and 500/kW/M respectively. At the same time, the Authority not to overburden such consumers who are levied fixed charges, has adjusted their variable rate, to minimize the impact of increase in fixed charges.
- 22.5. According to the above mechanism, Rs.165,291 million and Rs.15,116 million is the share of the Petitioner on account of CpGenCap and UoSC (NTDC/HVDC) & Market Operator Fee respectively for the FY 2022-23. The overall fixed charges comprising of CpGenCap and UoSC (NTDC/HVDC) & Market Operator Fee in the instant case works out as Rs.180,407 million, which translate into Rs.4,356/kW/month based on projected average monthly MDI of the Petitioner. However, Fixed charges being billed to consumers is Rs.440/kW/M, 460/kW/M, and 500/kW/M for different categories based on 50% of the NER Resource of total projected fixed charges to be charged to the Petitioner by CPPA-G.

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- 22.6. Here it is also pertinent to mention that once the CTBCM becomes operational, the Hybrid BPCs shall be treated in accordance with the prevailing Regulations at that time.
- 23. Whether there should be any amendment in Terms and Conditions of Tariff (For Supply of Electric Power to Consumers by Supply Licensees) keeping in view the changes in Consumer Service Manual?
- 23.1. The Authority observed that certain amendments have been approved in the NEPRA CSM, regarding extension of load for B-3 & C-2 from 5MW to 7.5MW, after following due process of law. The same amendments are also required to be incorporated in the Tariff determination of DISCOs. Accordingly, the following changes are being made in the Terms & Conditions of Tariff;

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

24. Electric Vehicle Charging Stations

- 24.1. In order to provide an enabling regulatory regime for the Electric Vehicle Charging Stations ("EVCS") that would supplement the introduction and promotion of Electric Vehicles ("EV") in Pakistan, and provide a strong base for the growth of the EV charging infrastructure to support the development of this industry. The charging services for EV is going to involve setting up a dedicated facility that would require a dedicated infrastructure including AC/DC conversion, conductive charging system, charging connectors, plugs, inlets and socket outlets, cables, protection system and dedicated electricity supply system with dedicated connection and transformer.
- 24.2. Here it is pertinent mention that the National Electric Vehicle Policy 2019 requires the following;

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

- 24.3. The Authority in view thereof, in exercise of powers under section 7 read with section 31 of NEPRA Act read with 3(1) of NEPRA Tariffs (Standards & Procedure) Rules, 1998 carried out proceedings to amend the terms and condition of XWDISCOs and KE's tariff for this purpose. During the proceedings the issues regarding tariff to be charged from electric vehicles by EVCS along-with proposed amendments in the tariff Terms & conditions for the purpose was discussed in detail.
- 24.4. Based on the outcome of the proceedings, the Authority has decided as under;

Amendment in Tariff Terms & Conditions

✓ In A-2 Commercial "1", following is added at the end; "ix) Electric Vehicle Charging Stations"

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

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

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

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

Addition in Schedule of Tariff

- ✓ In Schedule of Tariffs (SoTs), under A-2 General Supply Tariff Commercial, a new tariff i.e. A-2(d) Electric Vehicle Charging Station is added.
- 25. Whether the existing Tariff Terms and Conditions needs to be modified, especially with reference to the request of Telecom companies to charge "B Industrial Supply" Category tariff instead of "A-2 Commercial" category tariff?
- 25.1. The Authority during the tariff determinations of GEPCO for the FY 2019-20, on the request of Telenor regarding charging of Industrial tariff from Telecom Operators decided as under;

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

- 25.2. In view thereof, in the instant tariff adjustment requests of the Petitioner, the subject matter is being discussed as a separate issue.
- 25.3. The Petitioner during the hearing submitted that Telecom sector is only providing the services to consumers not value addition, therefore A-2 commercial is accurate

25.4. Telecom companies in their comments/ Intervention Requests have submitted that Telecom Sector including Cellular Operators (CMOs) has been declared as an Industry vide Ministry of Industries notification dated 20.04.2004, therefore, for the purpose of

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- charging of electricity, industrial tariff may be applied to CMOs instead of currently applicable Commercial tariffs.
- 25.5. M/s NAYAtel and M/S PTCL both submitted that in line with the Telecom Policy of 2004, the Federal Government was pleased to declare Telecom sector including Cellular Operators as an "Industry" with immediate effect vide Gazette Notification dated 20.04.2004, issued by the Ministry of Industries and Production, Government of Pakistan.
- 25.6. The Ministry of Information Technology vide UO dated 16.06.2014 also endorsed the request of the Telecom Sector including CMOs to be classified as Industrial Undertaking under clause (b) of Section 2(29C) of the Income Tax Ordinance 2001.
- 25.7. In view of the above, it has been submitted that telecom companies along with other CMO's as an "Industrial Undertaking", so that "Industrial Tariff is applied across the board to the Telecom Sector companies in Pakistan instead of "Commercial Tariff. Accordingly, it has been requested that issue of applicability of "Industrial Tariff on Telecom Sector may be addressed and determined by the Authority, while determining the Uniform Tariff for DISCOs throughout Pakistan, including the current MYT indexation request of IESCO.
- 25.8. Ministry of IT &T vide its letter dated 18.06.2014 addressed to FBR, submitted the following;
 - o ".... MoIT endorses the request of Telecom Industry, including Mobile Cellular Operators (CMOs) to be classified as "Industrial Undertaking" under clause (b) of section 2 (29C) of the Income Tax Ordinance 2001.
 - We will appreciate if the issue is examined and finalized in light of the aforementioned Cabinet decision and the subsequent notification issued in this regard by the Ministry of Industries & Production."
- 25.9. The Ministry of Information Technology and Telecommunication, vide letter dated 29.04.2020, while referring to the meeting of the Committee on issues of CMOs constituted by the Prime Minister, held on 13.04.2020 stated that like any high tech industry, Telecom Operators use electricity for their infrastructure i.e. Data Centers, exchanges, points of presence (POPs), BTSs, Mobile Switching centers, Base Station Controllers (BSCs) etc. MoIT&T accordingly requested NEPRA to implement the Government orders.
- 25.10. DISCOs during the hearing submitted that as per tariff terms and conditions industrial connections required motive load and Telecom companies does not fall under this category of tariff.
- 25.11. The Ministry of Energy (MoE) vide comments dated 02.08.2021, submitted that the government has extended various reforms, packages & incentives, inter alia; Circular Debt Management Plan (CDMP), facilitative Ease of Doing Business architecture, strategizing increase in sales to high value consumer classes, Industrial Support package (ISP), flat peak & off-peak tariff scheme for industrial units and Zero-Rated Industrial (ZRI) package. Industrial tariff is applicable to the industries production facilities and the warehouses, which are used to transmit the products to the retailer/ distribution network, are considered as commercial value addition. Telecom companies being engaged in provision of telecom services through retail/ distribution network infrastructure, may be travel as commercial value-added activity for which consumer has to pay and, therefore, the same commercial value-added activity for which consumer has to pay and, therefore, the same commercial value-added activity for which consumer has to pay and, therefore, the same commercial value-added activity for which consumer has to pay and, therefore, the same commercial value added activity for which consumer has to pay and, therefore, the same commercial value added activity for which consumer has to pay and, therefore, the same commercial value added activity for which consumer has to pay and, therefore, the same commercial value added activity for which consumer has to pay and, therefore, the same consumer has to pay and the consumer has to pay an

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may be continued to be served electricity under commercial tariff category. In view of above, it has been submitted that any consideration of the Authority for the relocation of telecom companies from commercial category to industrial category may not be aligned with the economic objectives underlying the various industrial packages/concessions in field. Moreover, this relocation will result in the revenue gap and put extra burden on other consumers or fiscal space.

- 25.12. The Ministry of Finance (MoF) vide comments dated 30.07.2021, submitted that Telecom Companies/Cellular Mobile Companies Operators are basically involved in commercial activities and electricity cost is a pass through item. Further, Telecom Companies/Cellular Mobile Companies Operators fix their consumer end tariff without consulting the Regulator. Therefore, Finance Division is further of view that electricity supply to these companies for their infrastructure units under the category "A-2 Commercial" may be continued and they may not be considered for supply of electricity under the tariff category "B-2 Industrial Supply".
- 25.13. Here it is pertinent to mention that subsequent to the aforementioned Intervention Requests and Comments from the Telecom companies, separate tariff petitions have also been filed by M/s PTCL, M/s Telenor and M/s Pak Telecom Mobile Company (Ufone) Limited for change in tariff category of Telecom Operators from Commercial to Industrial.
- 25.14. Since the said Petitions are under consideration of the Authority, therefore, the Authority has decided to issue a separate additional decision on the issue once the proceedings on the aforementioned petitions are completed.
- 26. Whether there should any Fixed Charges on Residential & General Services Consumers, having net metering facility?
- 26.1. The Petitioner during the hearing submitted that at present no Fixed Charges are charged from all category of consumers (Residential, General Services, Commercial, Tube well & Industrial) having net metering facility. Accordingly, the Petitioner proposed that a certain amount of fixed charges per month on installed DG Facility for Net metering connections for use of system may be charged from all categories of consumers.
- 26.2. The Authority observed that the net metering regime is presently at a nascent stage as current installations are a negligible portion of total generation capacity of the power system, therefore, decided not to levy any fixed charges on Residential and General services net metering consumers.
- 26.3. However, considering the steep rise in the Power Purchase cost of electricity coupled with stability in the prices of installing DG facilities, the Authority has decided to initiate proceedings for amendment in NEPRA (Alternative and Renewable Energy) Distributed Generation and Net Metering Regulations, 2015, for change in tariff payable by DISCOs to net metering consumers for excess energy delivered in the system.
- 27. Upfront Indexation/adjustment for the FY 2021-22 and FY 2022-23
- 27.1. The Authority also understands that by the time the instant decision is notified, the FY 2021-22 would have elapsed and the FY 2022-23 would have started. Meaning thereby that tariff indexation/adjustment for the FY 2021-22, which ideally should have become allowed in in July 2021 would have become overdue, and the indexation/adjustment for the FY 2022-23 would also have become due. In view thereof, and in order to the FY 2022-23 would also have become due.

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timely recovery of the allowed cost to the Petitioner, the Authority has decided to allow the indexation/adjustment for the FY 2021-22 and the FY 2022-23, upfront in the instant decision as per the adjustment/indexation mechanism provided in this determination. However, the impact of under/over recovery due to indexation/adjustment for the FY 2021-22 would be allowed/adjusted subsequently as part of future PYA.

27.2. Here it is pertinent to mention that indexation/adjustment for the FY 2021-22 and FY 2022-23 has been worked out based on the NCPI for the month of December 2020 and December 2021 respectively, for which the reference NCPI for the month of December 2019 has been used. Thus, for the purpose of filing future indexation/adjustment requests, the Petitioner shall use the NCPI for the month of December for the respective year.

28. Order

28.1. In view of the discussion made in preceding paragraphs and accounting for the adjustments discussed above, the allowed revenue requirement of the Petitioner, for the FY 2020-21 along-with upfront indexation/adjustment for the FY 2021-22 and FY 2022-23, to the extent of its Supply function is summarized as under;

Supply of Power (SOP)		FY 2020-21	FY 2021-22	FY 2022-23
Description	Unit	SOP	SOP	SOP
Units Received	[MkWh]	14,909	14,909	16,532
Units Sold	[MkWh]	11,729	11,819	13,199
Units Lost	[MkWh]	3,180	3,091	3,333
Units Lost	[%]	21.33%	20.73%	20.16%
Energy Charge	1	86,594	86,594	148,740
Capacity Charge		102,527	102,527	165,291
Transmission Charge & Market			[]	
Operation Fee		5,526	5,526	15,116
Power Purchase Price	[M.ln. Rs.]	194,647	194,647	329,147
Wire Business cost		14,924	17,325	19,854
Power Purchase Price with wire	[M ln, Rs.]	209,570	211,971	349,001
business cost	[207,570	211,571	517,001
Pay & Allowances	l	3,790	4,593	5,050
Post Retirement Benefits	l	1,891	2,080	2,258
Repair & Maintainance		35	39	42
Traveling allowance		74	84	91
Vehicle maintenance		44	50	54
Other expenses		697	785	853
O&M Cost	[Min. Rs.]	6,531	7,630	8,348
Depriciation		321	345	379
RORB		535	681	899
O.Income		(1,075)	(1,296)	(1,296)
Margin	[Mln, Rs.]	6,312	7,361	8,330
Prior Year Adjustment Including	[M ln, Rs.]			
Turn Over Tax	•	(6,259)	(6,259)	(6,259)
Revenue Requirement	(M in. Rs.)	209,623	213,074	351,073
Average Tariff	[Rs/kWh]			
Power Purchase Price-Unadj.				
Power Purchase Price-Adjusted		17.87	17.94	26.44
Margin		0.54	0.62	0.63
PYA/l'urn Over Tax		(0.53)	(0.53)	(0.47)
Average Tariff	[Rs./kWh]	17.87	18.03	26.60

28.2. The Petitioner is directed to follow the following time lines for submission of the lines for submission of

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Description	ADJUSTMENTS/ INDEXATION	TIME LINES				
Power Purchase Price	The Authority, keeping in view of an Price references along with any Quar	ny abnormal changes may review Power Purchase terly adjustment				
Fuel Cost	Monthly, as per the approved mechanism. Impact of FCA on T&D losses would be adjusted on Quarterly basis.	Data to be provided by CPPA (G) by close of the month				
Variable O&M	Quarterly, as per the approved Quarterly adjustment mechanism.	a period of 07 Days on Quarterly basis.				
Capacity Charges	Quarterly, as per the approved Quarterly adjustment mechanism.	Request to be furnished by the Petitioner not later than a period of 07 Days on Quarterly basis.				
Transmission /UOSC & MOF Charges	Quarterly, as per the approved Quarterly adjustment mechanism.	Request to be furnished by the Petitioner not later than a period of 07 Days on Quarterly basis.				
Margin						
Salaries, Wages & Benefits						
Post-retirement Benefit	Annually as per the mechanism given in					
Other operating expenses	the decision					
Depreciation		Request to be submitted by Petitioner in February of				
Return on Regulatory Asset Base	1	every year, so that adjustment / indexation for the next				
Other Income	L	year is determined in timely manner.				
Prior Year Adjustment	Annually as per the mechanism given in the decision	year is determined in thinkly manner.				
KIBOR	Bi-Annually, as per the decision					
Return on Equity (ROE)	No adjustment allowed over Reference ROE					
Spread	As per the mechanism in the decision	1				

- 28.3. Responsible to provide supply service within its service territory on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority,
- 28.4. To make its system available for operation by any other licensee, consistent with applicable instructions established by the system operator.
- 28.5. 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.
- 28.6. 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.
- 28.7. 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.

29. Summary of Direction

- 29.1. A summary of all directions passed in this determination and in the Distribution of Power Tariff Determination, by the Authority are reproduced hereunder. The Authority hereby directs the Petitioner to;
 - i. To ensure tagging of each of its assets to ensure proper classification of costs and for their proper tracking.
 - ii. To provide the required details of late payment charges recovered from the consumers and any invoice raised by CPPA (G) under the head of mark-up on delayed payments for the period from FY 2019-20 to FY 2020-21
 - iii. To provide details of actual tax assessments, tax allowed and the amount of tax paid for the last five years

iv. 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 the Petitioner monitoring respect.

v. To take remedial measures for achievement of performance standards as law

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- NEPRA Performance Standards (Distribution) Rules, 2005, for which a detailed plan showing steps to be taken be prepared and submitted to the Authority.
- vi. To prepare a plan regarding installation of Aerial Bundle Cable (ABC) in its all circles to bring LT line losses down, and submit the same to the Authority for monitoring the progress of the Petitioner
- vii. To prioritize its investment claimed under STG, DOP and ELR etc. i.e. removal of system constraints for transferring power from NTDC system must be the first priority, followed by reduction in T&D losses and improvement in metering systems through ELR and overloaded grids and 11kV feeders.
- viii. STG and HT connectivity proposals should be reflective of the new grid stations as planned and approved under TSEP be given in the tariff determination
- ix. To take all the possible preventive measures to ensure no fatal accidents occur in future and improve its HSEQ performance
- x. To take all possible measures to facilitate consumers in terms of complaint handling, connection provision as per CSM and establish one window solutions.
- xi. To ensure that amount allowed under each head of investment shall not be used under any other head. The re-appropriation of Authority's allowed investment under different heads by DISCO shall not be acknowledged by the Authority and shall be adjusted accordingly. In case of any deviation under each head of the investment for more than 5% in the instant approved investment plans of DISCOs due to any regulatory decisions/interventions/approved plans, DISCOs shall be required to submit additional investment requirements for prior approval of the Authority.
- xii. The HT and LT rehabilitation proposals shall be evaluated on the basis of GIS mapping through ArcGIS and load flow analysis through SynerGee Electric. The HT & LT Plans will be based on of PMS demand forecast and consistent with the STG Plan. The STG plans should be in line with the Transmission System Expansion Plan (TSEP) approved by the Authority from time to time.
- xiii. GIS mapping has to be updated periodically after execution of respective HT and LT rehabilitation proposals and network shall be regularly updated for the optimized future investments and avoid equipment failures through prudent and proactive planning practices.
- xiv. DISCOs shall ensure Open Access to all the relevant entities/licensees without discrimination and shall objectively evaluate and make available on the website of DISCO the network available capacity, current allocation of the capacity and the future investment required to be made part of distribution system planning.
- xv. The DISCO through Market Implementation & Regulatory Affairs Department (MIRAD) shall prepare and develop the medium-term demand forecast, transmission plans and business plan for submission of the same to the Authority.
- xvi. MIRAD shall ensure effective reporting and monitoring of the allowed investment on monthly, quarterly and annual basis. The main components would include STG, DERNER RELR and Commercial Improvement.
- xvii. MIRAD shall develop the dashboard for effective monitoring and reporting of

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- plans. The CEO along with the functional in-charge of each department will be responsible for presenting the above mentioned progress to the Authority and also submit the monthly, quarterly and annual progress reports in the matter.
- xviii. To clear all pending connections and submit a detailed report to NEPRA on monthly basis.
 - xix. To submit the project-wise detailed report for the investment carried out along with their cost-benefit analysis and technical/financial savings achieved for the FY 2018-19, FY 2019-20 and FY 2020-21, by September 30, 2022.
 - xx. To provide the details of the corrective measures to tackle the future demand and removal of constraints.
 - xxi. To provide detailed reasoning for less drawl of power against its allocated quota.
- xxii. To submit the measures that can be taken to convert hard areas into soft
- xxiii. To provide the remedial measures taken for the achievement of performance standards
- xxiv. To provide loading position of its distribution network and submit a report regarding the plans/investments executed to improve the system constraints
- xxv. To take all the possible preventive measures to ensure no fatal accidents occur in future.
- xxvi. To provide the details that whether TOU meters installed to all the eligible connections
- xxvii. To provide the progress regarding the installation of AMI meters at the consumer end.
- xxviii. To provide progress of installation of ABC cable to control theft of electricity.
- xxix. To submit its annual adjustment / indexation requests by February every year, so that adjustment / indexation for the next year is determined in timely manner
- 30. The determination of the Authority along-with Annex-I , Annex-IA, Annex-II, Annex-III, Annex-IV and Annex-V, is hereby intimated to the Federal Government for notification in the official gazette in terms of section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

Rafique Ahmed Shaikh
Member

Tauseef H. Farooqi

Chairman

Chairma

Additional Note:

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

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

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

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

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

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



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

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Annex-I

FUEL PRICE ADJUSTMENT MECHANISM

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

Fuel Price variation = Actual Fuel Cost Component - Reference Fuel Cost Component

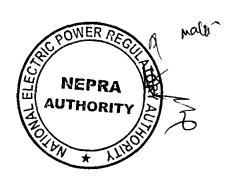
Where:

Fuel Price variation is the difference between actual and reference fuel cost component

Actual fuel cost component is the fuel cost component in the pool price on which the DISCOs will be charged by CPPA (G) in a particular month; and

Reference fuel cost component is the fuel cost component for the corresponding month projected for the purpose of tariff determination as per Annex-IV of the determination;

The fuel price adjustment determined by the Authority shall be shown separately in the bill of the consumer and the billing impact shall be worked out on the basis of consumption by the consumer in the respective month.



QUARTERLY ADJUSTMENT MECHANISM

Quarterly adjustment shall be the Actual variation in Power Purchase Price (PPP), excluding Fuel Cost Component, against the reference Power Purchase Price component and the impact of T&D losses on FCA, for the corresponding months and shall be determined according to the following formula;

Quarterly PPP (Adj) = PPP(Actual) (excluding Fuel cost)-PPP(Recovered) (excluding Fuel cost)

Where;

PPP(Actual) is the actual cost, excluding Fuel cost, invoiced by CPPA-G to XWDISCOs, adjusted for any cost disallowed by the Authority.

 $PPP_{(Recovered)} \ is \ the \ amount \ recovered \ based \ on \ reference \ rate \ in \ Rs./kWh, \ excluding fuel \ cost, \ as \ per \ the \ Annex-IV \ of \ the \ XWDISCOs \ determination \ that \ remained \ notified \ during \ the \ period.$

Impact of T&D losses on FCA

Monthly FCA allowed (Rs./kWh) x Actual units Purchase x % T&D losses

Where;

Monthly FCA allowed (Rs./kWb) is the FCA allowed by the Authority for the respective months of the concerned period.

T&D Loss % is percentage of T&D losses that remained notified during the period.

The sum of amounts so worked for each month of the Quarter shall be divided by the Projected units to be sold as determined by the Authority to work out Rs./kWh Quarterly adjustment.



Peshawar Electric Supply Company (PESCO) Estimated Sales Revenue on the Basis of New Tariff

	Sale	35	i	Revenue		Base	Tariff	PYA 2021		Total	Tariff
Description	OH#	0/ 681	Fixed Charge	Variable	Total	Fixed Charge	Variable	Amount	Variable	Fixed	Variable
•	GWh	% Mix		Charge	lotai		Charge		Charge Rs./ kWh	Charge Rs./kW/ M	Charge Rs./ kWh
				Min. Rs.		Rs./kW/ M	Rs./ kWh	Min. Rs.	K23 KWII	LET SEAN M	Kaa Kiiii
Residential	т			·				····			
For peak load requirement less than 5 kW	91	0.69%		455	455		5.00				5.00
Up to 50 Units - Life Line 51-100 units - Life Line	37	0.28%] [681	681		18.23	(18)	(0.47)		17.76
01-100 Units	1293	9.80%		27,453	27,453]	21.23	(608)	(0.47)		20.76
101-200 Units	286	2.16%		6,634	6,634		23.23	(133)	(0.47)		22.77
01-100 Units	495	3,75%	l	11,815	11,815		23.85	(238)	(0.48)		23.37
101-200 Units	1049	7.95%		28,376	28,376		27.04	(504)	(0.48)		26.50
201-300 Units	1495	11.32%	- '	41,182	41,182		27.55	(718)	(0.48)		27.0
301-400 Units	807	6.11%	- 1	23,222	23,222		28.79	(387)	(0.48)		28.3
401-500 Units	497	3.77%		14,527	14,527		29.23	(239)	(0.48)		28.7
501-600 Units	304	2.30%		9,186	9,186	1	30.23	(146)	(0.48)		29.7
601-700Units	194	1.47%	1	6,061	6,061	1	31.23	(93)	(0.48) (0.48)		30.7 31.7
Above 700 Units	581	4.40%		18,736	18,736		32.23	(279)	(0.40)	—	J
For peak load requirement exceeding 5 kW)	0				1 404		31.23	(22)	(0.48)		30.7
Time of Use (TOU) - Peak	45	0.34%	=	1,401 4,922	1,401 4,922		23.85	(99)	(0.48)	[23.3
Time of Use (TOU) - Off-Peak	206	1.56% 0.00%	-	4,922	4,322	ļ !	32.23	(0)	(0.48)	(31.7
Temporary Supply Total Residential	7,381	55.92%		194,661	194,661		02,50	(3,482)			
Commercial - A2	1,301	JJ. J.E. /8	-	. 54,501	, 4-1,4-2 1			1-1			
For peak load requirement less than 5 kW	441	3.34%		12,453	12,453		28.21	(212)	(0.48)		27.7
For peak load requirement exceeding 5 kW	""] 3,54 %		,2,400	1	I '	ļ			1	1
Regular		0.00%	ا ما	4	4	500	26.23	(0)	(0.46)	500	25.7
Time of Use (TOU) - Peak	118	0.90%	ا	3,699	3,699		31.23	(53)	(0.45)		30.7
Time of Use (TOU) - Off-Peak	537	4.07%	1,406	13,502	14,909	500	25.13	(258)	(0.48)		24.6
Temporary Supply	3	0.02%		75	75		28.21	(1)	(0.46)		27.7
Electric Vehicle Charging Station (EVCS)	1	0.01%	-	33	33		25.00	(1)	(0.46)		24.5
Total Commercial	1,101	8.34%	1,407	29,766	31,172			(525)			
									(2.42)		27.7
General Services-A3	583	4.42%	<u> </u>	16,477	16,477	<u> </u>	28.25	(268)	(0.46)		21.1
Industrial	·	,	·					(0)	(0.48)		26.7
B1	7	0.05%	-	192	192		27.26 31.15	(3) (6)	(0.48)		30.6
B1 Peak	12			362	362 2,147		25.05	(41)	(0.48)		24.5
B1 Off Peak	86	0.65% 0.01%		2,147 25	2,147	500	27.15	(0)	(0.48)		26.6
B2 B2 TOU (People)	145	1,10%	1	4,510	4,510]	31.15	(70)	(0.48)		30.6
B2 - TOU (Peak) B2 - TOU (Off-peak)	914	6,93%	1	22,441	25,401	500	24.55	(439)	(0.48)		24.0
B3 - TOU (Peak)	145	1.10%		4,517	4,517		31.15	(70)	(0.48)		30.6
B3 - TOU (Off-peak)	965	7 31%	1	25,044	26,380	460	25.95	(463)	(0.48)	460	25.4
B4 - TOU (Peak)	118	0.89%		3,665	3,665		31,15	(56)	(0.48)		30.6
B4 - TOU (Off-peak)	/32	5.54%	985	18,846	19,831	440	25.75	(351)	(0.48)	440	25.2
Temporary Supply	0	0.00%	-	11	11		30.15	(0)	(0.48)		29.6
Total Industrial	3,124	23.67%	5,282	81,761	87,043			(1,500)			
Single Point Supply			,						(0.40)		07.
C1(a) Supply at 400 Volts-less than 5 kW	0	1	i e	7	7	l '	27.84	(0)	(0.48)		27.3
C1(b) Supply at 400 Volts-exceeding 5 kW	21	0.16%		593	617	500	27.64	(10)	(0.48)		27.1
Time of Use (TOU) - Peak	12	1	F	377	377		31.23	(6)	(0.48)		30.3
Time of Use (TOU) - Off-Peak	60	0.46%	112	1,482	1,594	500	24.63	(29)	(0.48) (0.48)		24.1 27.0
C2 Supply at 11 kV	16		1	450	469	460	27.54 31.23	(8) (19)	(0.48)		30.7
Time of Use (TOU) - Peak	40	l .		1,262	1,262 5,215	460	26,03	(91)	(0.48)		25.5
Time of Use (TOU) - Off-Peak	190	1.44%	1	4,935 2	5,215	460	27.43	(91)	(0.48)		26.9
C3 Supply above 11 kV Time of Use {TOU} - Peak	3	l		105	105]	31.23	(2)	(0.48)		30.
Time of Use (TOU) - Peak Time of Use (TOU) - Off-Peak	17	0.13%	32	444	476	440	25.83	(8)	(0.48)	440	25.3
Total Single Point Supply	361	2.73%		9,657	10,124			(173)			
Agricultural Tube-wells - Tariff D		2	***	-1	-1						
Scarp	1 0	0.00%		9	9		27.84	(0)	(0.48)		27.
Time of Use (TOU) - Peak	0	ı	-	15	15	1 '	31.23	(0)	(0.48)		30.
Time of Use (TOU) - Off-Peak	2	0.02%		58	62	200	24.63	(1)	(0.48)		24.
Agricultual Tube-wells	22	0.17%		607	673	200	27.84	(10)	(0.48)	9 1	27.
Time of Use (TOU) - Peak	14	0.10%	-	431	431		31.23	(7)	(0.48)		30
Time of Use (TOU) - Off-Peak	70		156	1,718	1,873	200	24.63	(33)	(0.48)	200	24
Total Agricultural	109	0.82%		2,838	3,064			(52)			
Public Lighting - Tanff G	18		1	564	564		31,53	(9)	(0.48)		31
Residential Colonies *	2	0.01%	-	54	54		31.83	(1)	(0.48)		31
Tanff K - AJK	0	0.00%	0	0	0	440	27.84	(0)	(0.48)	440	27
Time of Use (TOU) - Peak	103	0.78%	-	3,219	3,219	i '	31.23	(49)	(0.48)	i '	30
· · · · · · · · · · · · · · · · · · ·		į .		10,277	10.953	440	24.63	(200)	(0.48)	440	24
Time of Use (TOU) - Off-Peak	417		017	10.277	10.803						
Time of Use (TOU) - Off-Peak	417	3.10%	0//	10,211	10.993	1					

Note: The PYA 2021 column shall cease to exist after One (01) year of notification of the instant decision.



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AUTHORITY

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SCHEDULE OF ELECTRICITY TARIFFS FOR PESHAWAR ELECTRIC SUPPLY COMPANY (PESCO)

A-1. GENERAL SUPPLY TARIFF - RESIDENTIAL

Sr. No.	tariff category / particulars	FIXED CHARGES	VARIABLE	CHARGES	PYA	2021	Total Vari	able Charges
		Rs/kW/M	Rs/	kWh	Rs/	kWh	Re	/kWh
		Λ		В	•	c		D
a)	For Sanctioned load less than 5 kW							
ı	Up to 50 Units - Life Line			5.00		•		5.00
11	51 - 100 Units - Life Line	-		18.23		(0.47)		17.76
1111	001 - 100 Units	-		21.23		(0.47)		20.7
iv	101 - 200 Units	-		23.23		(0.47)		22.7
v	601 - 100 Units	-		23.85		(0.48)		23.3
vi	101 - 200 Units	-		27.04		(0.48)		26.50
iv	201 - 300 Units	-		27.55		(0.48)		27.01
viii	301 - 400 Units	-		28.79		(0.48)		28.3
ix	401 - 500 Units	- 1		29.23		(0.48)		28.75
, x	501 - 600 Units	- [30.23		(0.48)	ï	29.75
xi.	601 - 700 Units	-		31.23		(0.48)		30.75
vi	Above 700 Units	-		32.23		(0.48)		31.75
ъ)	For Sanctioned load 5 kW & above							
1			Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
1	Time Of Use		31.23	23.85	(0.48)	(0.48)	30.75	23.37

As per Authority's decision only protected residential consumers will be given the benefit of one previous siab.

As per Authority's decision, residential life line consumer will not be given any slab benefit.

Under tariff A-1, there shall be minimum monthly customer charge at the following rates even if no energy is consumed.

a) Single Phase Connections: b) Three Phase Connections:

Rs. 75/- per consumer per month Rs. 150/- per consumer per month

	A-2 GENERA	L SUPPLY TAR	IFF - CO	MMERCIAL				
Sr. No. TARIFF CATEGORY / PARTICULARS		FIXED CHARGES	VARIABLE	CHARGES	PYA :	2021	Total Vari	able Charges
		Rs/kW/M	Rs/	kWh	Rs/1	cWh	Ra Ra	/kWh
		A		В		:		D
a)	For Sanctioned load less than 5 kW			28.21		(0.48)		27.73
b)	For Sanctioned load 5 kW & above	500.00		26.23		(0.46)		25.77
		J	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak
c)	Time Of Use	500.00	31,23	25.13	(0.45)	(0.48)	30.78	24.65
d }	Electric Vehicle Charging Station (EVCS)			25.00		(0.46)		24.54

a) Single Phase Connections;

Rs. 175/- per consumer per month

Fixed Charges shall be billed based on 50% of sanctioned Load or Actual MDI for the month which over is higher. In such case there would be no minimum monthly

charges even if no energy is consumed.

A-3	GENERAL SERVICES	

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED	VARIABLE CHARGES	PYA 2021	Total Variable Charges		
		Rs/kW/M	Rs/kWh	Rs/kWh	Rs/kWh		
		A	В	С	D		
2)	General Services	-	28.25	(0.46)	27.79		

Under turiff A-3, there shall be minimum monthly charges at the following rates even if no energy is consumed.

a) Single Phase Connections; b) Three Phase Connections:

Rs. 175/- per consumer per month Rs. 350/- per consumer per month

B INDUSTRIAL SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE	E CHARGES	PYA 2	2021	Total Variable Charges Rs/kWh		
		Rs/kW/M	Rs/	/kWh	Rs/l	wh			
		A		В	P			D	
B 1	Upto 25 kW (at 400/230 Volts)	-		27.26		(0.48)		26.78	
B2(a)	exceeding 25-500 kW (at 400 Volts)	500.00		27.15		(0.48)		26.67	
	Time Of Use	1	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	
B1 (b)	Up to 25 KW	†	31.15	25.05	(0.48)	(0.48)	30.67	24.57	
B2(b)	exceeding 25-500 kW (at 400 Volts)	500.00	31.15	24.55	(0.48)	(0.48)	30.67	24.07	
В3	For All Loads up to S000 kW (at 11,33 kV)	460.00	31.15	25.95	(0.48)	(0.48)	30.67	25.47	
B4	For All Loads (at 66,132 kV & above)	440.00	31.15	25.75	(0.48)	(0.48)	30.67	25.27	

For B1 & B1[b] consumers there shall be a fixed minimum charge of Rs. 350 per month.

Fixed Charges shall be billed based on 50% of sanctioned Load or Actual MDI for the month which ever is higher. In such case there would be no minimum monthly charges even if no energy is consumed.

C - SINGLE-POINT SUPPLY

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M		CHARGES	PYA :			iable Charges	
	For supply at 400/230 Volts Sanctioned load less than 5 kW			27.84		(0.48)		27.36	
b)	Sanctioned load 5 kW & up to 500 kW For supply at 11,33 kV up to and including 5000 kW	500.00		27.64		(0.48)		27.16 27.06	
	For supply at 11,55 kV up to and including 5000 kW	460.00		27.54 27.43		(0.48) (0.48)		26.98	OWER RE
	Time Of Use		Pouk	Off-Peak	Peak	Off-Peak	Peak	Off-700-1	
C -1(c)	For supply at 400/230 Volts 5 kW & up to 500 kW	500.00	31.23	24.63	(0.48)	(0.48)	30.75	124,15	
	For supply at 11,33 kV up to and including 5000 kW	460.00	31.23	26.03	(0.48)	(0.48)	30.75	(24/55	
C -3(b)	For supply at 66 kV & above and sanctioned load above 5000 kW	440.00	31.23	25.83	(0.48)	(0.48)	30.75	45.35	NEPRA

| 440.00 | 31.23 | 25.83 |
Fixed Charges shall be billed based on 50% of sanctioned Load or Actual MDI for the month which ever is higher.





SCHEDULE OF ELECTRICITY TARIFFS FOR PESHAWAR ELECTRIC SUPPLY COMPANY (PESCO) D - AGRICULTURE TARIFF

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M		charges kwh	PYA :		Total Variable Charges Rs/kWh		
		A		В		3		D	
D-1(a)	SCARP less than 5 kW			27.84		(0.48)		27.36	
D-2 (a)	Agricultural Tube Wells	200.00		27.84		(0.48)	B) 27.3		
٠,			Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Ponk	
D-1(b)	SCARP 5 kW & above	200.00	31.23	24.63	(0.48)	(0.48)	30.75	24.15	
D-2 (b)	Agricultural 5 kW & above	200.00	31.23	24.63	(0.48)	(0.48)	30.75	24.15	

Under this tariff, there shall be minimum monthly charges Rs.2000/- per consumer per month, even if no energy is consumed.

Note: The consumers having sanctioned load less than S kW can opt for TOU metering.

B - TEMPORARY SUPPLY TARIFFS

E - TEMPORARY SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	PYA 2021	Total Variable Charges
		Ra/kW/M	Rs/kWh	Re/kWh	Rs/kWh
		^	В	C	D
E-1(i)	Residential Supply		32.23	(0.48)	31.75
E-1(ii)	Commercial Supply		28.21	(0.46)	27.75
E-2	Industrial Supply	l	30.15	(0.48)	29.67

For the categories of E-lithii) above, the minimum bill of the consumers shall be Rs. 50/- per day subject to a minimum of Rs. 500/- for the entire period of supply, even if no energy is consumed.

F - SEASONAL INDUSTRIAL SUPPLY TARIFF

125% of relevant industrial tariff

Tariff-F consumers will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of a new connection or at the beginning of the season. Once exercised, the option remains in force for at least one year. Note:

	G-	PUBLIC LI	GHTING		
Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	PYA 2021	Total Variable Charges
		Rs/kW/M	Rs/kWh	Rs/kWh	Re/kWh
		A	В	c	D
	Street Lighting		31.53	(0.48)	31.05

Under Tariff G, there shall be a minimum monthly charge of Rs.500/- per month per kW of lamp capacity installed.

H - RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES

Sr. No	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	PYA 2021	Total Variable Charges		
<u></u>		Rs/kW/M	Rs/kWh	Rs/kWh	Rs/kWh		
			В	С	Ď		
	Residential Colonies attached to industrial premises		31.83	(0.48)	31.35		

K - SPECIAL CONTRACTS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE	CHARGES	PYA 2	2021	Total Variable Charges		
ļ		Rs/kW/M	Rs/	kWh	Rs/l	cWh			
L		A		B				D	
1	Azad Jammu & Kashmir (AJK)	440.00		27.84		(0.48)		27.36	
l :	·	i i	Peak	Off-Peak	Peak	Off-Peak	Peak	Off-Peak	
L	Time Of Use	440.00	31.23	24.63	(0.48)	(0.48)	30.75	24.15	

Note: The PYA 2021 column shall cease to exist after One (01) year of notification of the instant decision.



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Description	July	August	September	October	November	December	January	February	March	April	May	June	Total
Units Purchased by DISCOs (GWh)	1,861	1,886	1,471	1,167	994	1,158	1,222	1,014	1,060	1,265	1,619	1,815	16,532

Rs./kWh

Fuel Cost Component	9.7441	9.8934	9.9114	9.1705	6.0762	9.3193	10.5541	7.2120	8.7122	8.3875	7.8281	7.5084	8.7867
Variable O&M	0.2198	0.2179	0.2288	0.2350	0.1599	0.2032	0.2433	0.1906	0.1935	0.2069	0.2031	0.2013	0.2103
Capacity	6.9134	6.7887	8.3218	9.8235	12.8042	12.6946	12.6078	14.2478	11.4038	12.7428	9.6165	8.1860	9.9982
UoSC	0.7465	0.7277	0.8661	0.9546	1.1208	1.1115	1.1285	1.1906	1.0610	1.0064	0.8088	0.7003	0.9143
Total PPP in Rs./kWh	17.6238	17.6278	19.3281	20.1836	20.1610	23.3286	24.5337	22.8410	21.3706	22.3437	18.4564	16.5959	19.9095

Rs. in million

Fuel Cost Component	18,137	18,662	14,579	10,703	6,041	10,796	12,893	7,316	9,231	10,606	12,674	13,625	145,264
Variable O&M	409	411	337	274	159	235	297	193	205	262	329	365	3,476
Capacity	12,868	12,806	12,241	11,465	12,730	14,706	15,402	14,453	12,083	16,114	15,569	14,854	165,291
UoSC	1,389	1,373	1,274	1,114	1,114	1,288	1,379	1,208	1,124	1,273	1,309	1,271	15,116
Total PPP in Rs./kWh	32,804	33,252	28,431	23,557	20,045	27,026	29,970	23,169	22,643	28,254	29,881	30,115	329,147

It is clarified that PPP is pass through for all the DISCOs and its monthly references would continue to exist irrespective of the financial year, unless the new SOT is revised and notified by the GoP





TERMS AND CONDITIONS OF TARIFF (FOR SUPPLY OF ELECTRIC POWER TO CONSUMERS BY DISTRIBUTION LICENSEES)

PART-I

GENERAL DEFINITIONS

The Company, for the purposes of these terms and conditions means Peshawar Electric Supply Company (PESCO) engaged in the business of distribution/supply of electricity within the territory mentioned in the licence granted to it for this purpose.

- 1. "Month or Billing Period", unless otherwise defined for any particular tariff category, means a billing month of 30 days or less reckoned from the date of last meter reading.
- 2. "Minimum Charge", means a charge to recover the costs for providing customer service to consumers even if no energy is consumed during the month.
- 3. "Fixed Charge" means the part of sale rate in a two-part tariff to be recovered on the basis of "Billing Demand" in kilowatt on monthly basis.
- 4. "Billing Demand" means the 50% of the sanction load or Actual maximum demand recorded in a month, whichever is higher, except in the case of agriculture tariff D2 where "Billing Demand" shall mean the sanctioned load.
- 5. "Variable Charge" means the sale rate per kilowatt-hour (kWh) as a single rate or part of a two-part tariff applicable to the actual kWh consumed by the consumer during a billing period.
- 6. "Maximum Demand" where applicable, means the maximum of the demand obtained in any month measured over successive periods each of 30 minutes' duration except in the case of consumption related to Arc Furnaces, where "Maximum Demand" shall mean the maximum of the demand obtained in any month measured over successive periods each of 15 minutes' duration.
- 7. "Sanctioned Load" where applicable means the load in kilowatt as applied for by the consumer and allowed/authorized by the Company for usage by the consumer.
- 8. "Power Factor" means the ratio of kWh to KVAh recorded during the month or the ratio of kWh to the square root of sum of square of kWh and kVARh,.
- 9. Point of supply means metering point where electricity is delivered to the consumer.
- 10. Peak and Off Peak hours for the application of Time Of Use (TOU) Tariff shall be the following time periods in a day:

	* PEAK TIMING	OFF-PEAK TIMING
Dec to Feb (inclusive)	5 PM to 9 PM	Remaining 20 hours of the day
Mar to May (inclusive)	6 PM to 10 PM	-do-
June to Aug (inclusive)	7 PM to 11 PM	-do-
Sept to Nov (inclusive)	6 PM to 10 PM	-do-

^{*} To be duly adjusted in case of day light time saving

11. "Supply", means the supply for single-phase/three-phase appliances inclusive of both general and motive loads subject to the conditions that in case of connected or sanctioned load 5 kW and above supply shall be given at three-phase.

12. "Consumer" as defined in NEPRA Act.

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- 13. "Charitable Institution" means an institution, which works for the general welfare of the public on no profit basis and is registered with the Federal or Provincial Government as such and has been issued tax exemption certificate by Federal Board of Revenue (FBR).
- 14. NTDC means the National Transmission and Despatch Company.
- 15. CPPA(G) means Central Power Purchasing Agency Guarantee Limited (CPPA)(G).
- 16. The "Authority" means "The National Electric Power Regulatory Authority (NEPRA)" constituted under the Regulation of Generation, Transmission and Distribution of Electric Power Act.

GENERAL CONDITIONS

- 1. "The Company shall render bills to the consumers on a monthly basis or less on the specific request of a consumer for payment by the due date.
- 2. The Company shall ensure that bills are delivered to consumers at least seven days before the due date. If any bill is not paid by the consumer in full within the due date, a Late Payment Charge of 10% (ten percent) shall be levied on the amount billed excluding Govt. tax and duties etc. In case bill is not served at least seven days before the due date then late payment surcharge will be levied after 7th day from the date of delivery of bill.
- 3. The supply provided to the consumers shall not be available for resale.
- 4. In the case of two-part tariff average Power Factor of a consumer at the point of supply shall not be less than 90%. In the event of the said Power factor falling below 90%, the consumer shall pay a penalty of two percent increase in the fixed charges determined with reference to maximum demand during the month corresponding to one percent decrease in the power factor below 90%.

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PART-II

(Definitions and Conditions for supply of power specific to each consumer category)

A-1 RESIDENTIAL

Definition

"Life Line Consumer" means those residential consumers having single phase electric connection with a sanctioned load up to 1 kW.

The lifeline consumers to include residential Non-Time of Use (Non-ToU) consumers having maximum of last twelve months and current month's consumption \leq 100 units; two rates for < 50 and <100 units will continue.

"Protected consumers" mean Non-ToU residential consumers consuming \leq 200 kWh per month consistently for the past 6 months.

Residential Non-ToU consumers not falling under the protected category would be categorized under "Un-protected consumer category".

- 1. This Tariff is applicable for supply to;
 - i) Residences,
 - ii) Places of worship,
- 2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. A-1(a) tariff.
- 3. All new consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and shall be billed on the basis of tariff A-l(b) as set out in the Schedule of Tariff.
- 4. All existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and converted to A-1(b) Tariff by the Company.

A-2 COMMERCIAL

- 1. This tariff is applicable for supply to commercial offices and commercial establishments such as:
 - i) Shops/Flower Nurseries/Cold Storage
 - ii) Hotels, Hostels and Restaurants,
 - iii) Petrol Pumps and Service Stations,
 - iv) Compressed Natural Gas filling stations,
 - v) Private Hospitals/Clinics/Dispensaries,
 - vi) Places of Entertainment, Cinemas, Theaters, Clubs;
 - vii) Guest Houses/Rest Houses,
 - viii) Office of Lawyers, Solicitors, Law Associates and Consultants etc.
 - ix) Electric Vehicle Charging Stations (EVCS)
- 2. Electric Vehicle Charging Stations shall be billed under A-2(d) tariff i.e. Rs./kWh for peak and off-peak hours. For the time being, the tariff design is with zero fixed charges, however, in future the Authority after considering the ground situation may design it tariff structure on two part basis i.e. fixed charges and variable charges.

Mode

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- 3. The Electric Vehicle Charging Station shall provide "charging service" to Electric Vehicle with a maximum cap as determined by the Authority from time to time. For the time being the Cap has been determined as Rs.50/kWh. The EVCS shall be billed by DISCOS under A-2(d) tariff. However, monthly FCAs either positive or negative shall not be applicable on EVCS.
- 4. Consumers under tariff Λ-2 having sanctioned load of less than 5 kW shall be billed under a Single-Part kWh rate Λ-2(a)
- 5. All existing consumers under tariff A-2 having sanctioned load 5 kW and above shall be billed on A-2(b) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariff A-2(c).
- 6. The existing and prospective consumers having load of 5 kW and above shall be provided T.O.U metering arrangement and shall be billed under tariff A-2(c).

A-3 GENERAL SERVICES

- 1. This tariff is applicable to;
 - i. Approved religious and charitable institutions
 - ii. Government and Semi-Government offices and Institutions
 - iii. Government Hospitals and dispensaries
 - iv. Educational institutions
 - v. Water Supply schemes including water pumps and tube wells other than those meant for the irrigation or reclamation of Agriculture land.

Consumers under General Services (A-3) shall be billed on single-part kWh rate i.e. A-3(a) tariff.

B INDUSTRIAL SUPPLY

Definitions

- 1. "Industrial Supply" means the supply for bona fide industrial purposes in factories including the supply required for the offices inside the premises and for normal working of the industry.
- 2. For the purposes of application of this tariff an "Industry" means a bona fide undertaking or establishment engaged in manufacturing, value addition and/or processing of goods.
- 3. This Tariff shall also be available for consumers having single-metering arrangement such as;
 - i) Poultry Farms
 - ii) Fish Hatcheries, fish farms, fish nurseries & Breeding Farms and
 - iii) Software houses

Conditions

An industrial consumer shall have the option, to switch over to seasonal Tariff-F, provided his connection is seasonal in nature as defined under Tariff-F, and he undertakes to abide by the terms and conditions of Tariff-F and pays the difference of security deposit rates previously deposited and those applicable to tariff-F at the time of acceptance of option for seasonal tariff. Seasonal tariff will be applicable from the date of commencement of the season, as specified by the customers at the time of submitting the option for Tariff-F. Tariff-F consumers will have the option to convert to corresponding ONER Regular Industrial Tariff category and vice versa. This option can be exercised at the option of obtaining a new connection or at the beginning of the season. Once exercised the option will remain in force for at least one year.

B-1 SUPPLY AT 400 VOLTS THREEPHASE AND/OR 230 VOLTS SINGLE PHASE

- 1. This tariff is applicable for supply to Industries having sanctioned load upto 25 kW.
- 2. Consumers having sanctioned load upto 25 kW shall be billed on single-part kWh rate.
- 3. Consumers under tariff B-1 having sanctioned load of less than 5 kW shall be billed under a Single-Part kWh rate. However, B-1 consumers having sanctioned load of less than 5 kW may opt for ToU meter
- 4. The existing and prospective consumers having load of 5 kW and above shall be provided T.O.U metering arrangement and shall be billed under tariff B1(b).

B-2 SUPPLY AT 400 VOLTS

- 1. This tariff is applicable for supply to Industries having sanctioned load of more than 25 kW up to and including 500 kW.
- 2. All existing consumers under tariff B-2 shall be provided T.O.U metering arrangement by the Company and converted to B-2(b) Tariff.
- 3. All new applicants i.e. prospective consumers applying for service to the Company shall be provided T.O.U metering arrangement and charged according to the applicable T.O.U tariff.

B-3 SUPPLY AT 11 kV AND 33 kV

- 1. This tariff is applicable for supply to Industries having sanctioned load of more than 500 kW up to and including 5 MW and also for Industries having sanctioned load of 500 kW or below who opt for receiving supply at 11 kV or 33 kV.
- 2. The consumers may be allowed extension of load beyond 5MW upto 7.5MW from the DISCO's owned grid station subject to availability of load in the grid and capacity in the 11kV existing dedicated feeder. In such a case the consumer will bear 100% grid sharing charges including transmission line charges and 100% cost of land proportionate to load. However, only such consumers be allowed extension of load beyond 5MW upto 7.5MW whose connection is at least three (3) years old. While allowing extension in load, the DISCOs shall ensure that no additional line losses are incurred and additional loss, if any, shall be borne by the respective consumers.
- 3. If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
- 4. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the cost of service connection shall be regulated by the Eligibility Criteria laid down by the Authority read with Consumer Service Manual (CSM).

5. All B-3 Industrial Consumers shall be billed on the basis of T.O.U tariff given in the Schedule of Tariff.

B-4 SUPPLY AT 66 kV, 132 kV AND ABOVE

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- 1. This tariff is applicable for supply to Industries for all loads of more than 5MW receiving supply at 66 kV, 132 kV and above and also for Industries having load of 5MW or below who opt to receive supply at 66 kV or 132 kV and above.
- 2. If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
- 3. If the Grid Station required for provision of supply falls within the purview of the dedicated system under the Eligibility Criteria laid down by the Authority read with CSM, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost of service connection shall be regulated by Eligibility Criteria laid down by the Authority read with CSM.
- 4. All B-4 Industrial Consumers shall be billed on the basis of two-part T.O.U tariff.

C BULK SUPPLY

"Bulk Supply" for the purpose of this Tariff, means the supply given at one point for self-consumption to mix-load consumer not selling to any other consumer such as residential, commercial, tube-well and others.

General Conditions

If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days no notice will be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days the fixed charges shall be assessed on proportionate basis for actual number of days between the date of old reading and the new reading.

C-I SUPPLY AT 400/230 VOLTS

- 1. This Tariff is applicable to a consumer having a metering arrangement at 400 volts, having sanctioned load of up to and including 500 kW.
- 2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. C-I(a) tariff.
- 3. All new consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and shall be billed on the basis of Time-of-Use (T.O.U) tariff C-1(c) given in the Schedule of Tariff.
- 4. All the existing consumers governed by this tariff having sanctioned load 5 kW and above shall be provided T.O.U metering arrangements.

C-2 SUPPLY AT 11 kV AND 33 kV

This tariff is applicable to consumers receiving supply at 11 kV or 33 kV at one-point metering arrangement and having sanctioned load of more than 500 kW up to and including 5 MW.
 The consumers may be allowed extension of load bound 5MW up a 2 SAW 6

2. The consumers may be allowed extension of load beyond 5MW upto 7.5MW from the DISCO's owned grid station subject to availability of load in the grid and capacity the likV existing dedicated feeder. In such a case the consumer will bear 100% grid thating

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charges including transmission line charges and 100% cost of land proportionate to load. However, only such consumers be allowed extension of load beyond 5MW upto 7.5MW whose connection is at least three (3) years old. While allowing extension in load, the DISCOs shall ensure that no additional line losses are incurred and additional loss, if any, shall be borne by the respective consumers.

- 3. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the cost of service connection shall be regulated by the Eligibility Criteria laid down by the Authority read with CSM.
- 4. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff C-2(b) as set out in the Schedule of Tariff.
- 5. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to C-2(b).

C-3 SUPPLY AT 66 kV AND ABOVE

- 1. This tariff is applicable to consumers having sanctioned load of more than 5000 kW receiving supply at 66 kV and above.
- 2. If the Grid Station required for provision of supply falls within the purview of the dedicated system under the Eligibility Criteria laid down by the Authority read with CSM, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost of service connection shall be regulated by Eligibility Criteria laid down by the Authority read with CSM.
- 3. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to C-3(b).
- 4. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff C-3(b) as set out in the Schedule of Tariff.

D AGRICULTURAL SUPPLY

"Agricultural Supply" means the supply for Lift Irrigation Pumps and/or pumps installed on Tube-wells intended solely for irrigation or reclamation of agricultural land or forests, and include supply for lighting of the tube-well chamber.

Special Conditions of Supply

1. This tariff shall apply to:

i) Reclamation and Drainage Operation under Salinity Control and Reclamation Projects (SCARP):

ii) Bona fide forests, agricultural tube-wells and lift irrigation pumps for the irrigation of agricultural land.

iii) Tube-wells meant for aqua-culture.

iv) Tube-wells installed in a dairy farm meant for cultivating crops as fodder and upkeep of cattle.

- 2. If, for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
- 3. The lamps and fans consumption in the residential quarters, if any, attached to the tubewells shall be charged entirely under Tariff A-1 for which separate metering arrangements should be installed.
- 4. The supply under this Tariff shall not be available to consumer using pumps for the irrigation of parks, meadows, gardens, orchards, attached to and forming part of the residential, commercial or industrial premises in which case the corresponding Tariff A-1, A-2 or Industrial Tariff B-1, B-2 shall be respectively applicable.

D-1

- 1. This tariff is applicable to all Reclamation and Drainage Operation pumping under SCARP related installation.
- 2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. D-1(a) tariff given in the Schedule of Tariff.
- 3. All new consumers having sanctioned load 5 kW and above shall be provided TOU metering arrangement and shall be charged on the basis of Time-of- Use (T.O.U) tariff D-1(b) given in the Schedule of Tariff.
- 4. All the existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangements and shall be governed by D-1(a) till that time.

D-2

- 1. This tariff is applicable to consumers falling under Agriculture Supply excluding SCARP related installations.
- 2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. D-2(a) tariff given in the Schedule of Tariff.
- 3. All new consumers having sanctioned load 5 kW and above shall be provided TOU metering arrangement and shall be charged on the basis of Time-of- Use (T.O.U) tariff D-2(b) given in the Schedule of Tariff.
- 4. All the existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangements and shall be governed by D-2(a) till that time.

E-1 TEMPORARY RESIDENTIAL/COMMERCIAL SUPPLY

Temporary Residential/Commercial Supply means a supply given to persons temporarily on special occasions such as ceremonial, religious gatherings, festivals, fairs, exhibitions, political gathering, marriages and other civil or military functions. This also includes supply to touring cinemas and persons engaged in construction of house/buildings/plazas of single phase loads. A temporary electric power supply connection for the construction shall be provided by Distribution company initially for a period of six months which is further extendable on three month basis up to completion of the specific job/project for which the temporary connection was obtained. However, there is no minimum time period for provision of temporary connection. The temporary connection for illumination, lighting, weddings, festivals, functions, exhibitions, political gatherings or national and religious ceremonies, civil or military functions etc., testing of industrial equipment or any other emergent requirement of temporary nature, can be provided for specific time period not exceeding two weeks. The sanctioning officer shall ensure that the temporary

Special Conditions of Supply

connection will be utilized for temporary purpose only.

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- 1. This tariff shall apply to Residential and Commercial consumers for temporary supply.
- 2. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.

TEMPORARY INDUSTRIAL SUPPLY E -2

"Temporary Industrial Supply" means the supply given to an Industry for the bonafide purposes mentioned under the respective definitions of "Industrial Supply", during the construction phase prior to the commercial operation of the Industrial concern.

SPECIAL CONDITIONS OF SUPPLY

- 1. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.
- 2. Normally, temporary connections shall be allowed for a period of 3 months, which may be extended on three months basis subject to clearance of outstanding dues.

SEASONAL INDUSTRIAL SUPPLY

"Seasonal Industry" for the purpose of application of this Tariff, means an industry which works only for part of the year to meet demand for goods or services arising during a particular season of the year. However, any seasonal industry running in combination with one or more seasonal industries, against one connection, in a manner that the former works in one season while the latter works in the other season (thus running throughout the year) will not be classified as a seasonal industry for the purpose of the application of this Tariff.

Definitions

"Year" means any period comprising twelve consecutive months.

1. All "Definitions" and "Special Conditions of Supply" as laid down under the corresponding Industrial Tariffs shall also form part of this Tariff so far as they may be relevant.

Special Conditions of Supply

- 1. This tariff is applicable to seasonal industry.
- 2. Fixed Charges per kilowatt per month under this tariff shall be levied at the rate of 125% of the corresponding regular Industrial Supply Tariff Rates and shall be recovered only for the period that the seasonal industry actually runs subject to minimum period of six consecutive months during any twelve consecutive months. The condition for recovery of Fixed Charges for a minimum period of six months shall not, however, apply to the scasonal industries, which are connected to the Company's Supply System for the first time during the course of a season.
- 3. The consumers falling within the purview of this Tariff shall have the option to change over to the corresponding industrial Supply Tariff, provided they undertake to abide by all the conditions and restrictions, which may, from time to time, be prescribed as an integral part of those Tariffs. The consumers under this Tariff will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.

4. All seasonal loads shall be disconnected from the Company's Supply System at the epa the season, specified by the consumer at the time of getting connection, for which the supply is given. In case, however, a consumer requires running the non-seasonal pack of 쏇 outNEPR his load (e.g., lights, fans, tube-wells, etc.) throughout the year, be shall have to be

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separate circuits for such load so as to enable installation of separate meters for each type of load and charging the same at the relevant Tariff.

5. Where a "Seasonal Supply" consumer does not come forward to have his seasonal industry re-connected with the Company's Supply System in any ensuing season, the service line and equipment belonging to the Company and installed at his premises shall be removed after expiry of 60 days of the date of commencement of season previously specified by the consumer at the time of his obtaining new connection/re-connection. However, at least ten clear days notice in writing under registered post shall be necessary to be given to the consumer before removal of service line and equipment from his premises as aforesaid, to enable him to decide about the retention of connection or otherwise. No Supply Charges shall be recovered from a disconnected seasonal consumer for any season during which he does not come forward to have his seasonal industry reconnected with the Company's Supply System.

G PUBLIC LIGHTING SUPPLY

"Public Lighting Supply" means the supply for the purpose of illuminating public lamps. The supply under this tariff shall also be applicable for lamps used in public playgrounds and public parks.

Definitions

"Month" means a calendar month or a part thereof in excess of 15 days.

Special Conditions of Supply

The supply under this Tariff shall be used exclusively for public lighting installed on roads or premises used by General Public.

H RESIDENTIAL COLONIES ATTACHED TO INDUSTRIES

This tariff is applicable for one-point supply to residential colonies attached to the industrial supply consumers having their own distribution facilities.

Definitions

"One Point Supply" for the purpose of this Tariff, means the supply given by one point to Industrial Supply Consumers for general and domestic consumption in the residential colonies attached to their factory premises for a load of 5 Kilowatts and above. The purpose is further distribution to various persons residing in the attached residential colonies and also for perimeter lighting in the attached residential colonies.

"General and Domestic Consumption", for the purpose of this Tariff, means consumption for lamps, fans, domestic applications, including heated, cookers, radiators, air-conditioners, refrigerators and domestic tube-wells.

"Residential Colony" attached to the Industrial Supply Consumer, means a group of houses annexed with the factory premises constructed solely for residential purpose of the bonafide employees of the factory, the establishment or the factory owners or partners, etc.

Special Conditions of Supply

The supply under this Tariff shall not be available to persons who meet a part of their requirements from a separate source of supply at their premises.

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K. SPECIAL CONTRACTS

Supply under this tariff means supply of power to Special Contracts, i.e. Government of Azad Jammu & Kashmir (AJK) at one point.

