National Electric Power Regulatory Authority
Islamic Republic of Pakistan

Registrar

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No. NEPRA/TRF-336/IESCO-2015/2689-2691
February 29, 2016

Subject: **Determination of the Authority in the matter of Petition filed by Islamabad Electric Supply Company Ltd. (IESCO) for the Determination of its Consumer end Tariff Pertaining to Financial Years 2015-2016 to 2019-20 [Case # NEPRA/TRF-336/IESCO-2015]**

Dear Sir,

Please find enclosed herewith the subject Determination of the Authority along with Annexure-I, II, III, IV, V, VI, VII, VIII & IX (140 pages) in Case No. NEPRA/TRF-336/IESCO-2015.

2. The Determination is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National Electric Power Regulatory Authority (Tariff Standards and Procedure) Rules, 1998.

3. The Order part along with Annexure-I, II, III, IV, V, VI, VII, VIII & IX of the Determination needs to be notified in the official Gazette.

Enclosure: As above

29.02.16
(Syed Safeer Hussain)

Secretary
Ministry of Water & Power
'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-336/IESCO-2015

TARIFF DETERMINATION
FOR
ISLAMABAD ELECTRIC SUPPLY COMPANY
(IESCO)
DETERMINED UNDER
NEPRA TARIFF (STANDARDS AND PROCEDURE) RULES - 1998

Islamabad

29th **February, 2016**

Abbreviations

ADB	Asian Development Bank
AJK	Azad Jammu and Kashmir
AMI	Advance Metering Infrastructure
AMR	Automatic Meter Reading
BoD	Board of Director
BTS	Base Transceiver Station
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CCI	Council of Common Interest
CDP	Common Delivery Point
COSS	Cost of Service Study
CPI	Consumer Price Index
CPPA (G)	Central Power Purchasing Agency Guarantee Limited
CpGenCap	The summation of the capacity cost in respect of all CpGencos for a billing period minus the amount of liquidated damages received during the months
CTC	Capacity Transfer Charges
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
FC	Finance Cost
FCA	Fuel Charges Adjustment
FESCO	Faisalabad Electric Supply Company Limited
FY	Financial Year
GFA	Gross Fixed Assets
GoAJK	Government of Azad Jammu and Kashmir
GOP	Government of Pakistan
GWh	Giga Watt Hours
HHU	Hand Held Unit

HT/LT	High Tension/Low Tension
HSD	High Speed Diesel
IFRS/IAS	International Financial Reporting Standards/International Accounting Standards
IGTDP	Integrated Generation Transmission and Distribution Plan
IESCO	Islamabad Electric Supply Company Limited
IPP	Independent Power Producer
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
MEPCO	Multan Electric Power Company Limited
MMBTU	One million British Thermal Units
MW	Mega Watt
MoWP	Ministry of Water and Power
MVA	Mega Volt Amp
MYT	Multi Year Tariff
NEPRA	National Electric Power Regulatory Authority
NPCC	National Power Construction Corporation
NPV	Net Present Value
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
PPA	Power Purchase Agreement
PPAA	Power Procurement Agency Agreement
PPP	Power Purchase Price
PPRA	Public Procurement Regulatory Authority
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
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SBP	State Bank of Pakistan
SOT	Schedule of Tariff
STG	Secondary Transmission Grid
T&D	Transmission and Distribution
T&T	Transmission and Transformation
TDS	Tariff Differential Subsidy
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
X-Factor	Efficiency Factor
XWDISCO	Ex-WAPDA Distribution Company

DETERMINATION OF THE AUTHORITY IN THE MATTER OF PETITION FILED BY ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO) FOR THE DETERMINATION OF ITS CONSUMER END TARIFF

CASE NO. NEPRA/TRF-336/IESCO-2015

PETITIONER

Islamabad Electric Supply Company Limited (IESCO), Street No 40, G-7/4, Islamabad.

INTERVENER

1. Anwar Kamal Law Associates (AKLA)
2. Syed Sharafat Hussain Shah Power Consultant Cost Management Cell.
3. Bahria Town (Pvt) Ltd. (BTPL)

COMMENTATOR

NIL

REPRESENTATION

1. Mr. Malik Muhammad Yousaf Awan, Chief Executive Officer
2. Raees Haider, Finance Director
3. Mushtaq Ahmad, Director General (HR)
4. Abid Iqbal, G.M /Technical Director
5. Wasif Hussain, G.M / Operational Director
6. Khalid Nazir, G.M / Customer Services Director
7. Khalid Masood, Additional DG (IS)
8. Qazi Arif Latif, Additional ED Legal

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The Authority, in exercise of the powers conferred on it under Section 7(3) (a) read with Section 31 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, Tariff Standards and Procedure Rules, 1998 and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by the parties, issues raised, evidence/record produced during hearings, and all other relevant material, hereby issues this determination.

Khawaja Muhammad Naeem
Member

Himayat Ullah Khan
Member

Syed Masood-ul-Hassan Naqvi 29/2
Member

Maj (R) Haroon Rashid
Vice Chairman

Brig (R) Tariq Saddozai
Chairman
29/2/16

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29.02.16

1. BACKGROUND

1.1 Islamabad Electric Supply Company Limited (IESCO), hereinafter called "the Petitioner", being a Distribution Licensee of NEPRA filed a petition dated October 22, 2015 for the determination of its consumer-end tariff pertaining to the FY 2015-16 to 2019-20 in terms of Rule 3(1) of Tariff Standards & Procedure Rules-1998 (hereinafter referred as "Rules"). The Petitioner has sought the following relief:

- ✓ To allow the O&M cost breakup in controllable and uncontrollable.
- ✓ To allow proposed indexations in line with CPI change for controllable costs.
- ✓ Repair & maintenance costs be allowed as "K" Factor at the rate of 2.75% of its opening fixed assets (excluding revaluation surplus).
- ✓ To allow "Z" factor to cover damages against natural disasters and extraordinary events.
- ✓ To allow the proposed efficiency factor "X" as an adjustment to CPI indexation.
- ✓ To allow the proposed DIIP.
- ✓ To allow Return on Rate Base at 18.85%.
- ✓ To allow Floor for Return on Equity (ROE) at 19%.
- ✓ One-time private sector participation reopeners be allowed.
- ✓ To allow Fixed Service Charge for certain categories of consumers
- ✓ To Reconsider tariff rates for AJK
- ✓ To consider the proposal with regard to Rs.34 billion as per credit notes issued by CPPA.
- ✓ To allow the proposed mechanism for maintaining fully funded retirement benefit fund.
- ✓ To allow exclusion of LPS in determining the annual revenue requirement.
- ✓ To allow the mechanism proposed for covering cost of funds due to delay in TDS.
- ✓ To consider the criteria for rationalization of Life Line consumers.
- ✓ To resolve the issue pertaining to TOU Metering for Telecom and Cellular companies and all offices.
- ✓ To consider revision in the definition of the domestic tariff with regard to Government Offices, all Educational institutions and mosques.
- ✓ To allow Prior year adjustments pertaining to 2014-15.
- ✓ To allow true-up and adjustment mechanism as per provided in MYT petition.

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- ✓ Approval envisaged for the tariff proposed for the control period based on submissions made in the present tariff application.
- ✓ Any inadvertent omissions / errors/ rounding off difference / shortcomings submitted in this Tariff Petition be condoned.
- ✓ Any other relief, order or direction which the Authority deems fit.

2. PROCEEDINGS:

2.1 In terms of rule 4 of the Rules, the Petition was admitted by the Authority on 5th November, 2015. The Authority while considering the request of the Petitioner for immediate application of the proposed tariff, under rule 4 (7) of the Rules, is of the view that since proposed/requested consumer-end tariff was based on some requests which totally ignored some of the previous decisions of the Authority, therefore the request for immediate application of the proposed consumer-end tariff does not merit consideration.

2.2 In compliance of the provisions of sub-rules (5) & (6) of the Rule 4 and Rule 5, notices of admission and hearing were sent to the parties which were considered to be affected or interested. An advertisement in this regard was also published in the leading national newspapers with the title and brief description of the petition on 28th November, 2015 inviting filing of reply, intervention requests and comments by any interested or affected party.

3. FILING OF OBJECTIONS/ COMMENTS:

3.1 Despite issuing separate notices to the key stakeholders and publication of notices in the national newspapers, neither any reply was filed nor any intervention request was received within the prescribed time, however intervention requests were filed by M/s Anwar Kamal Law Associates (AKLA), Syed Sharafat Hussain Shah, Power Consultant, Cost Management Cell, PTCL and M/s Bahria Town (Pvt) Ltd. after the stipulated time. The Authority, following the principle of fairness and in order to provide an opportunity to the stakeholders, condoned the delay in filing the intervention request and the requests were allowed accordingly.

4. INTERVENERS

4.1 Anwar Kamal law Associates (AKLA)- Intervener

4.1.1 Anwar Kamal Law Associates (AKLA) in its Intervention request submitted vide letter No. R/NEPRA/741/15 dated December 07, 2015 raised certain concerns. A brief of the concerns, as per AKLA, are reproduced as hereunder;

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- Consumer-end tariff for the FY2015-16, should have been determined prior the commencement of the Financial Year. Admitting the Tariff Petition so late, is not only against the applicable law, but also has adverse financial impact on the consumers.

- Approval of IGTDP is a precondition for the submission of the petition as per the Tariff Guidelines but same is not done in the instant case.

- The Authority increased the T&D losses of Petitioner in last year's determination, whereas with the Investment amount paid by the consumers during the last 4 to 5 years, the losses should have decreased / been reduced.

- The Accounts for retaining the over-recovered amount on account of FCA and profit thereon during the reference Base Year are not stated in the Petition.

- The month wise details of payable amount on account of electricity purchases from CPPA (G) and the amount paid to CPPA (G) is not stated in the Petition.

- Month wise details of Late Payment Surcharge (LPS) recovered from the consumers and its' ultimate utilization is not mentioned.

- Outcome of the Over-billing issue initiated in 2008-09, is still not known to the consumers.

- Month wise amount collected from the consumers on account of various Surcharges and the ultimate use on account of each Surcharge is not stated in the Petition.

- The Petitioner's recovery is almost 100%, then why its consumers are subjected to load management.

- The Capacity charges for Plants which are not supplying electricity to CPPA(G), and as a result of which consumers of the Petitioner are suffering from Load-Shedding, should not be paid by IESCO?

- Audit of CPPA (G), should be conducted by MEPCO considering the fact that CPPA (G) is purchasing high-cost electricity from Wind, Solar and other high-cost Power Plants for MEPCO, while low cost electricity Plants are / were not utilized to their full capacity and due to Transmission Line constraints?

- Supply of 650 MW electricity to K-Electric results in high-cost electricity and Load-Shedding for IESCO consumers.

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- Has the Government of Pakistan conveyed the details of the Surcharges which will be added on to the Tariff to be determined by NEPRA?
- A Period of seven days (5 working days only) is not enough for meaningful participation by the consumers.
- Non-compliance with time-lines renders the whole exercise of Tariff-setting unlawful and subject to correction by the superior Courts.

4.2 <u>Mr. Sharafat Hussain Shah, Power Consultant, PTCL</u>

4.2.1 The Intervener has submitted its IR with respect to the TOU metering of Telecom & Cellular sector. The concerns of the Petitioner are reproduced as hereunder;

i. NEPRA determined the TOU meter rates so that consumers through Demand Side Management can reduce their electricity bills.

ii. The Intervener has been seriously impacted by all the tariff enhancements in previous few years, which is one of the major factors impacting its profitability negatively.

iii. The statement of the Petitioner that Telecom companies maintain a constant load throughout the day, month and years is totally false, at least in its case, as its consumption is impacted by changing seasons, day of the weeks, and times of the day.

The Petitioner has failed to provide solid proof regarding unfair advantage by the Telecom and cellular companies.

iv. The Intervener has requested that a new Tariff may be formulated for PTCL with variable charges @ Rs 8.80 per KWH such as Railway, POF WAH, AJK Co-Generation and Rawat Lab, because Commercial tariff is arbitrary & un-justified for 85 % motive load and minor commercial used consumption OR Telecom sector should be declared as industry and charged under tariff B-1, 8-2, B-3 as it was charged in the past.

4.2.2 The concerns raised by the Intervener have been discussed in detail under the relevant issue.

4.3 <u>M/s Bahria Town Services, Bahria Town (Pvt.) Limited, Rawalpindi/ Islamabad</u>

4.3.1 The Intervener has submitted the following points;

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i. While considering revision of the C-3 category Tariff for IESCO, the Authority is requested that Bahria Town's power purchase rate be lower than its sale rate and tariff of C-3 be adjusted in such a manner that Bahria Town, being a Power Distributor, can earn the gross profits at the same ratio as projected by IESCO in its petition.

ii. The proposal for introduction of charging MDI charges (Fixed charges i.e. Rs. 360/KW/M) during peak hours has very critical financial impact on bulk purchases, which would result in the indirect increase of tariff and significant financial impact on our financials.

iii. The Authority may advise IESCO for formulation of a suitable mechanism to pass on Government subsidy to the consumers of Bahria Town (Pvt.) Ltd, as well.

5. REJOINDER BY THE PETITIONER

5.1 The concerns so raised by the intervener were communicated to the Petitioner and the Petitioner has filed rejoinder to the following effect.

5.2 On the issue of submission of IGTDP with Tariff Petition, the Petitioner stated that the submission is in accordance with the Authority's instructions issued vide No. NEPRA /R/SAT-I/10037-49, dated July 06, 2015.

5.3 Regarding issue of T&D Losses, the Petitioner has submitted that in last 5 years its losses have been reduced from 9.75% to 9.41%. The Petitioner has further submitted that Targeted T&D losses have been proposed in Multi-Year Tariff Petition have the decreasing trajectory.

5.4 Regarding Prior year adjustment, the Petitioner has mentioned that the same has been worked out and submitted in Multi-Year Tariff Petition.

5.5 On the point of Fuel price Adjustment, the Petitioner has submitted that it has been passed on to consumers as per GOP notifications.

5.6 The Petitioner has provided the month wise detail of Payable amount and amount paid to CPPA (G) is attached in Annex (B-1).

5.7 Regarding the issue of Late Payment Surcharge, the Petitioner has stated that the same has been incorporated as other income and detail has already been provided in Multi-Year Tariff Petition.

5.8 On the issue of outcome of overbilling issue, the Petitioner has mentioned that no such overbilling issue had been referred by NEPRA.

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5.9 Regarding Surcharges charged to various categories of consumers, the Petitioner has submitted that these are being recovered in the light of SRO 569(1)/2015 dated 10.06.2015 and were determined by NEPRA and notified by GOP.

5.10 On the point of Load shedding in IESCO area when its recovery is almost 100%, the Petitioner has mentioned that load shedding is not related with recovery and depends upon quota allocated to IESCO which is further depended on generation.

5.11 Regarding payment of capacity charges for Plants which are not supplying electricity to CPPA (G), the Petitioner has stated that currently whole electricity procurement is being done through CPPA (G).The point may be referred to CPPA (G).

5.12 On the issues i.e. Audit of CPPA (G), supply of 650 MW to K-Electric and detail of surcharges to be added by the GoP, the Petitioner has mentioned that these Policy issues need to be taken up with Ministry of Water and Power.

5.13 Regarding time period for filing of Intervention Request, the Petitioner has stated that this needs consideration of Authority.

5.14 On the issue of ToU rates for cellular companies, the Petitioner has submitted that the issues related to TOU metering have already contested by the Petitioner in different tariff petitions. The Authority has also discussed the issue in length. The matter is under consideration by NEPRA.

6. <u>Whether the concerns raised by the Interveners / Commentators are justified?</u>

6.1 It may be observed at the very outset that for filing an intervention request, the time period prescribed in terms of rule 6 of the Rules is 7 days from the date of publication of notice of admission. It is also the requirement of said rule that the intervention request should contain the objections, the manner in which such person is likely to be affected by the determination, the contentions of the person, the relief sought and the evidence, if any, in support of the case. On the basis of the pleadings, the issues are to be framed to be considered during the course of hearing. Now once the prescribed time is lapsed and on the basis of available record, issues are framed, then any delayed filing of intervention request may not be maintainable and it is also not possible to share the issues, as per stance taken by the intervener in the present case.

6.2 Further that instead of providing grounds and justifications in the intervention request, raising the questions of providing any information is nowhere provided in the Rules. In case the petitioner requires any information, it may either approach the petitioner directly or may file a motion of discovery in terms of rule 10 of the Rules. Anyhow, in order to meet with the ends of natural justice and to provide opportunity of raising the

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respective concerns by the interveners, the delay in filing the requests was condoned and all the interveners were allowed to participate in the proceedings.

6.3 As per the concerns so raised by the interveners and the rejoinder filed by the petitioner, the findings of the Authority are as under:-

7. <u>NEPRA Response - AKLA</u>

7.1 The Authority, on the issue of late submission of the Tariff Petitions, considers that the Tariff Standard & Procedures Rules 1998 (The Rules) do not provide any time frame for submission of the Tariff Petitions. However, in order to ensure timely determination of consumer end tariff, the Authority has issued the NEPRA guidelines for determination of consumer-end tariff (Methodology & Process) notified vide SRO. 34(I) 2015 dated 16.01.2015, wherein, timelines for the submission of Tariff Petitions have been prescribed. The Intervener has rightly pointed out that the Petitions have been submitted late, however, non-admission of the Petitions by the Authority on the grounds of late submission, would not be in the consumers' interest, keeping in view the declining trend of oil prices in the international market.

7.2 As far the concern of the Intervener regarding adverse financial impact on consumers due to late admission of the petitions, resulting in late determination of the consumer end tariff is concerned, it is pertinent to mention that any such financial impact is adjusted through monthly FCA and Prior Year Adjustments. Accordingly the consumers as well as DISCOs interest is protected against downward or upward variations in Fuel prices or any other adjustments.

7.3 The Intervener is correct, in submitting that IGTDP requires prior approval of the Authority, since as per the Methodology, the submission of IGTDP by XWDISCOs and its approval by the Authority, is required before filing of the tariff petition. The timelines for the submission of IGTDP, as per the Methodology, is September 01 each year. Since the Methodology was notified in January 2015 and separate submission of IGTDP and its subsequent approval by the Authority would have resulted in considerable delay bearing financial implications for the Petitioner. In view thereof, the Authority, on the request of the XWDISCOs, allowed to file the IGTDP along with their Consumer-end Tariff Petitions. Here it is pertinent to mention that submission of the IGTDP by XWDISCOs with their tariff petitions, does not mean that the same has been accepted by the Authority as such. The Authority grants approval of the IGTDP after carrying out

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its required due diligence, keeping in view the prospective benefits in terms of reduction in level of losses and improvement in the overall distribution system.

7.4 On the concern of increasing T&D loss target in last year's tariff determination, it appears that the Intervener is not fully aware of the decision of the Authority in this regard, as the T&D loss target was maintained at 9.44% for FY 2014-15, in the matter of Petitioner. The same T&D losses target was assessed for the FY 2013-14. Thus, the impression that the level of T&D losses was increased, is not correct. The Intervener's concern of allowing considerable investment to the Petitioner (around Rs.23 billion was allowed to the Petitioner during last three year's period), whereas the Petitioner has shown minor reduction in its T&D losses, is valid. The Authority is cognizant of the fact and in order to ensure the prudence and effectiveness of the Investments Program, the Authority has already issued the Methodology which prescribes filing of IGTDP which would ensure qualitative results in terms of reduction in level of T&D losses and improvement in the overall distribution system. The Authority provides annual review of the IGTDP, which will address the intervener's concerns with respect to effective monitoring of the investment and corresponding improvement.

7.5 On the issue of over recovered amounts on account of FCA, the Authority is of the view that the Governing document for XWDISCOs for maintaining their Financial Accounts is the IFRS /IAS and XWDISCOs maintain their accounts as per the aforementioned standards. However, the Authority ensures that the benefit of extra recovery, if any made by XWDISCOs is passed on to the relevant consumers through adjustment in the tariff.

7.6 The rationale/relevance for the requirement of information pertaining to the month wise payable amount on account of electricity purchases from CPPA (G) and the amount paid to CPPA (G), is not provided by the Intervener. Here it is pertinent to mention that the Petitioner has filed its petition in accordance to the Rules and the "Methodology".

7.7 Regarding the issue of LPC, the Authority in the tariff determination for the FY 2014-15, decided that the late payment charge recovered from the consumers on utility bills shall be offset against the late payment invoices raised by CPPA (G) against respective DISCO only .i.e. CPPA (G) cannot book late charge over and above what is calculated as per the relevant clause of the agreement to a respective XWDISCO only. The Petitioner has attached a detail of LPC recovered from the consumers with its petition whereby an

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amount of Rs.704.55 million, has been recovered from the consumers during FY 2014-15. The matter is also discussed in detail under the relevant issue.

7.8 The Authority is cognizant of the overbilling issue and therefore had already issued directions to all the XWDISCOs to print snap shots on bills and also under take the project of Hand Handled Units (HHU).

7.9 Regarding the issue of surcharges, the Authority is of the view that surcharges are levied by the Federal Government from time to time under Section 31 (5) of the NEPRA Act 1997 and therefore the matter does not pertain to NEPRA.

7.10 The Authority on the points raised by the Intervener, regarding payment of capacity charges to the plants not supplying electricity and purchase of high cost electricity from Wind, Solar and other high cost power plants, noted that point of the intervener although is valid but the intervener needs to understand the technological constraints. In the case of wind and solar, no fuel is used whereas the Merit order is prepared on the basis of fuel cost and variable O&M. Technically speaking, wind and solar are to be operated first being high in the merit order. As regard the payment of capacity charges to these plants, which do not supply electricity it is to be kept in view that since plants are operated in accordance with the Merit Order and their operation is dependent upon the varying demand situation in the country, therefore, it may not be possible to operate all the plants round the clock. The Power Purchaser, however, has to make payment of capacity charges in accordance with the terms of the PPAA, in case the plants are available otherwise it recovers Liquidated Damages from the producers. On the point of carrying out of Audit of cheaper power plants not being utilized to their full capacity, the Authority has decided to strengthen its performance monitoring cell to make it more effective. In this regard the Authority has directed NPCC to submit merit order fortnightly. The Authority has further issued directions to NPCC to strictly follow the merit order, and in case of any deviation it needs to submit rational / justification. This will address the Intervener's concern regarding operation of cheaper plants at their maximum.

7.11 On the issue related to K-Electric, the Petitioner is advised to participate in the tariff setting process of K-Electric and submit its contentions in relevant the proceedings.

7.12 Regarding the details of surcharges, the Authority considers that the matter pertains to GoP and does not fall under the ambit of the Authority.

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7.13 The time of seven days for filing of Intervention Request is as per the sub-rule 3 of the Rule 6 of NEPRA (Tariff Standards and Procedures) Rules 1998.

8. NEPRA Response – M/s PTCL & M/s Bahria Town

8.1 On the concern regarding revision of C-3 category tariff, the Authority has observed that tariff is determined by NEPRA keeping in view the cost of service.

8.2 On the issue of charging fixed charges during Peak hours, the Authority clarifies that its determined fixed charges are irrespective of Peak and Off Peak timings. Further, they are already part of the tariff design. In view thereof, the concern of the intervener of having any additional financial implication is not valid.

8.3 The issue of subsidy primarily pertains to GOP.

9. FRAMING OF ISSUES

9.1 Following issues were framed to be considered during the hearing and for presenting written as well as oral evidence and arguments:-

- ✓ Whether the Petitioner has complied with the directions of the Authority given in the tariff determination for the FY 2014-15.
- ✓ Whether the Petitioner's projected energy purchases & energy sales for the FY 2015-16 to FY 2019-20, is reasonable?
- ✓ Whether the Petitioner's proposed DIIP focuses on reduction of T&D losses from current 9.41% (FY 2014-15) to 9.31% (FY 2019-20) are justified?
- ✓ Whether the Petitioner's projected power purchase cost for the FY 2015-16 to FY 2019-20, is justified?
- ✓ Whether the Petitioner's reference O&M cost of for the FY 2015-16 is justified for future adjustments till FY 2019-20?
- ✓ Whether the Petitioner's reference depreciation charge for the FY 2015-16 is justified for future adjustments till FY 2019-20?
- ✓ Whether the Petitioner's reference Return on Regulatory Asset base based on projected rate of return of 18.85% for FY 2015-16 is justified for future adjustments till FY 2019-20?
- ✓ Whether the Petitioner's requested 19% floor on equity, is justified?

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- ✓ Whether the Petitioner's requested 05 year PIB MYT at October 08 2015 is justified?
- ✓ Whether the Petitioner's requested beta of 1.44 based on averaging of foreign listed companies is justified?
- ✓ Whether the Petitioner requested cost of debt as per actual is merit consideration?
- ✓ Whether the Petitioner request for 'one time' adjustment as a result of private participation to adjust fixed asset based is merit consideration?
- ✓ Whether the Petitioner request for one-time adjustments for the following in the event of any potential private sector participation merits consideration?
    - Revision of T&D loss target
    - Amendments/Revision to the DIPP
    - Reassessment of cost of debt
    - Fixed asset base used for calculation of RORB and Deprecation
- ✓ Whether the Petitioner's projected other income for the FY 2015-16 to 2019-20, is reasonable?
- ✓ Whether the Petitioner's proposed Investment plan for the FY 2015-16 to FY 2019-20, is justified, keeping in view the prospective benefits?
- ✓ Whether the prior year adjustment calculated by IESCO of Rs. (1,037) Million for the FY 2015-16 is accurate?
- ✓ Whether the proposed revenue requirements and average sale rate for FY 2015-16 to FY 2019-20, is justified?
- ✓ Whether setting efficiency factor X not be more than 10% of the CPI after 3rd year of tariff control period is justified?
- ✓ Whether creation of two more circles, 11 divisions and 39 sub-division, is justified?
- ✓ Whether the additional hiring of 10,304 under different cadres by the end of FY 2019-20, is justified?
- ✓ Whether the repair & maintenance cost to be determined via "k" factor, capped at 2.25% of net opening fixed assets, is justified?

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- ✓ Whether the "Z" factor requested by the Petitioner to cover damages caused by natural disasters, is merit consideration?

- ✓ Whether the Petitioner request to reduce AJK tariff from Rs. 12.77 per kWh to Rs. 9.80 / kWh, is justified?

- ✓ Whether the Petitioner request to allow KIBOR + 400-300 basis point on delayed TDS to cover cost of financing / opportunity cost is merit consideration?

- ✓ What will be the mechanism of charging Wheeling/Use of System Charges (UOSC) in case of network of XW-DISCOs are used for Wheeling?

- ✓ Whether there is any major deviation in the petition from the NEPRA guidelines for determination of consumer-end tariff (Methodology & Process) notified vide SRO. 34(I) 2015 dated 16 01.2015?

- ✓ What is the financial impact / loss of revenue due to TOU metering for cellular company connections and other similar connections?

- ✓ What is the criteria considered by the petitioner for segregation between controllable and un-controllable costs?

- ✓ Whether there should be any penalty as a cut on Distribution Margin (D.M) if desired level of performance standards is not achieved by the Petitioner?

- ✓ Whether there should be any mechanism for sharing of profits/benefits by the Petitioner with the consumers if the petitioner performance exceeds the desired level?

- ✓ Whether the concerns raised by the intervener / commentator are justified?

- ✓ What are the concerns of the Petitioner on the application of domestic tariff for Government office, educational institutions and mosques?

10. <u>HEARING</u>

10.1 In order to arrive at a just and informed decision, it was decided to conduct a hearing in the matter on December 17, 2015. Notices of hearing were sent to the concerned parties and published in the leading newspapers on 28th November, 2015. Accordingly, hearing was held on the due date at NEPRA Tower, Islamabad. In addition, the stakeholders were also informed through individual letters well before the time of hearing.

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10.2 During the hearing, the Petitioner was represented by its Chief Executive Officer, along with his financial and technical team. The Interveners M/s Bahria Town Islamabad and Mr. Sharafat of PTCL, were also present during the hearing. Representative from the Privatization Commission and general public also participated in the hearing.

10.3 On the basis of pleadings, evidence/record produced and arguments raised during the hearing, issue-wise findings are given as under:

11. **Issue # 1: Whether the Petitioner has compiled with the directions of the Authority given in the tariff determination for the FY 2014-15?**

11.1 The Authority issued several directions in the tariff determination for the FY 2014-15. The compliance of which are discussed under relevant heads. However, few of the directions are discussed below;

11.2 **To share the update on the recovery for AJK with the Authority not later 30th April, 2015.**

11.2.1 While deciding the tariff determination for the FY 2012-13 and FY 2013-14, the Authority discussed in detail the amount receivable from Government of Azad Jammu & Kashmir (AJK) as appearing in the financial statements of the Petitioner. The Petitioner was directed in the previous years' tariff determination to take up the matter of recovery from AJK seriously with the GoP and submit relevant communications in this regard to the Authority.

11.2.2 The Petitioner during the tariff determination process for the FY 2014-15, stated that it has lodged the claim with the Ministry of Water & Power vide multiple letters dated 28th October, 2013, 20th February, 2014, 27th May, 2014 and 9th June, 2014.

11.2.3 In the Petitioner's last year's tariff determination, the Authority observed that the receivables from AJK increased from Rs. 15,131 million to Rs. 24,849 million as on 30th June, 2014. The Petitioner explained in its notes to the financial statements that claim of this amount has been lodged with the MoWP and Ministry of Finance for the period starting from April, 2008 to June, 2014 and management is confident that the amount will be recovered in near future. The Authority while expressing its concern on the long outstanding dispute again directed the Petitioner to take up the matter of recoveries in the sub-committee constituted in this regard not later than 30th April, 2015.

11.2.4 The Petitioner on the issue has stated in its petition for the FY 2015-16 that presently, Rs.37.80 billion are outstanding against AJK (ending August, 2015). The receivable emanates from the difference in the basis of tariff rate applied by AJK and the Petitioner. AJK is making payments at the rate of Rs.2.59/unit whereas it is billing AJK as per tariff determined by the Authority. This receivable is increasing at the rate of about Rs.800

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million per month. Accordingly, for arriving at an amicable solution for settlement of this dispute, the Petitioner proposed reconsideration of tariff rates for AJK, keeping in view the consumer mix of AJK and requested that the average rate for AJK may be reduced from Rs.12.77 per Kwh (Average) to Rs.9.80 per Kwh. (Average).

11.2.5 The Authority from the financial statements of the Petitioner, pertaining to FY 2014-15 has observed that the receivables from AJK have further increased from Rs.24,849 million of last year to Rs.34,975 million as at 30th June, 2015.

11.2.6 The Authority also noted that the Petitioner during its tariff determination process for the FY 2014-15, took the same stance whereby it claimed that the amount receivable from GoAJK will be recovered in near future. However, the balance of amount outstanding from GoAJK is continuously increasing.

11.2.7 Regarding the proposal of the Petitioner to reduce the average rate for AJK from Rs.12.77 per Kwh (average) to Rs.9.80 per Kwh (average), the Authority considers that it determines consumer end tariff of any category in accordance with the Tariff Standard & Procedures Rules 1998 and the same has been followed while determining the GoAJK tariff in the instant Petition. The Petitioner is again directed to take up the matter of recoveries in the sub-committee, constituted in this regard, not later than 30th June, 2016 and the Authority be apprised about the progress as soon as possible.

11.3 To complete the study of T&D losses and submit its completion timelines at the earliest

11.3.1 While deciding the tariff petition of the Petitioner pertaining to the FY 2012-13, the Authority directed the Petitioner to carry out study of its existing distribution network from an Independent Consultant, which would enable the Petitioner to carryout investments with technical advisories and at the same time it would enable the Petitioner to identify potential areas for the improvements and to submit its ToRs along with its completion timelines by 31st March 2013. It was further directed that the TORs of the study should include study of losses on 132 kV, 11kV and below. The Authority also observed in the said tariff determination that study of losses on LT lines is a huge task and therefore, allowed the Petitioner to select a reasonable sample of LT lines in order to carry out study. The Authority during the tariff determination process for the FY 2013-14 also observed that its direction was not complied with respect to submission of detailed TORs along-with a firm date for completing the study of its T&D losses. Accordingly the Petitioner was again directed to share the TORs of the study not later than March 31, 2014.

11.3.2 The Authority considers that noncompliance of its direction is a very serious violation, which may lead to initiation of penal proceedings under the relevant applicable law. In view thereof the Authority hereby directs to comply with its earlier direction for

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submission of TORs of the study along-with the timelines for completing the same not later than 31st March, 2014.

11.3.3 The Petitioner responded vide letter no. 10954/IESCO/CEO/CS dated 31st March, 2014 whereby it requested the Authority to extend the date of compliance up to June 30, 2014. Subsequently, during the tariff determination process for the FY 2014-15, the Petitioner stated that it has floated a tender to conduct the study of T&D losses. The evaluation of bids is in process and the outcome shall be shared with the Authority in due course of time. The Petitioner vide letter # 22582-83/CEO/IESCO/CE(P&E)/HT-1471 date 30th December, 2014, informed the Authority that it has hired a Consultant for its study. The Authority in view thereof, again in the tariff determination for FY 2014-15, directed the Petitioner to submit its completion timelines at the earliest.

11.3.4 The Petitioner in its instant tariff petition i.e. for the FY 2015-16, stated that M/s Power Planners has submitted a sample study on July 03, 2015, which is based on sample study of 180 HT Feeders and 80 LT Networks and the results indicate that:

1) Sample annual energy loss HT network including lines and distribution transformers is 4.171%.
2) Sample annual energy loss in the LT network including cables is 2.379%.

11.3.5 The Petitioner has further informed that the Consultant has also conducted a separate study and evaluation of Transmission and Transformation (T&T) losses using power system simulator (PSS/E) Software. The results indicate that the energy loss as percentage of energy import in 2013-14 is 2.514%.

11.3.6 Based on the results of the sample study and analysis conducted by the Petitioner's team, the Petitioner has reported Transmission and Distribution Losses for 2015-16 to 2019-20 as given below:

Description		2016	2017	2018	2019	2020
Transmission Losses	%	2.505%	2.500%	2.495%	2.490%	2.485%
Distribution Losses (11KV & Below)	%	6.535%	6.520%	6.505%	6.490%	6.475%
Total Technical Losses	%	8.912%	8.893%	8.873%	8.854%	8.834%
Administrative Losses	%	0.478%	0.477%	0.477%	0.476%	0.476%
Total T&D losses	%	9.390%	9.370%	9.350%	9.330%	9.310%

11.3.7 The Petitioner during the hearing presented that complete study / evaluation was to be submitted by the Consultant by December 2015, however, the Consultant has requested to extend the deadline by end of February 2016.

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11.3.8 The issue has been discussed under the relevant head.

11.4 <u>**To submit details of actual investments undertaken under the head of DOP, ELR and STG in the FY 2013-14 against the corresponding benefits** not later than 30th June, 2015.</u>

11.4.1 The Petitioner in its tariff petition for the FY 2014-15 was directed to submit details of actual investments undertaken under the head of DOP, ELR and STG in the FY 2013-14 against the corresponding benefits not later than 30th June, 2015.

11.4.2 The Petitioner in compliance with the Authority's direction has submitted the detail of STG activities being funded by ABD as under;

Sr.No.	Name of Project	Description	Present Status
New Grid Stations (03 Nos)			
1	132 KV Grid Station New Chrkri Road (2x26 MVA)	i. ICB-01 (Turn key projects) Lot-I (3 Grid Stations)	LOA isued to M/S Sino Steel and and contract award is under process. Performance Gurantee valid upto 01.10.2016
2	132 KV Grid Station New Bhara Kahu(2x26 MVA)		
3	132 KV Grid Station New Sangjani 2 (2x26 MVA)		
Extension with 20/26 MVA P/T/F (04 Nos)			
4	132 KV Grid Station Rajjar (1x26 MVA)	Lot-III (All panels)	Delivery completed
5	132 KV Grid Station Fateh Jang (1x26 MVA)	Lot-IV (Conductor, cables)	Delivery completed
6	132 KV Grid Station F 11 (1x26 MVA)	Lot-V (Steel poles)	Delivery completed
7	132 KV Grid Station Sowan (1x26 MVA)	iii. ICB-02 (R) Lot-I (CPs CTs PTs Isolators)	Work awarded on 31 03 2015 to M/S Sieyuan China. 10% advance payment made on 17 06 2015.
		Lot-II (Hardware)	Work awarded on 30.04.2015 to M/S SARA Turkey and 10% advance has been paid on 18 06 2015.
		Lot-III (Towers)	Work awarded on 01.04.2015 to M/S Thawh Long Joint Stock Vietnam. 10% advance payment made on 14.07.2015.
Augmentation with 40 MVA P/T/F (09 Nos.)			
8	132 KV Grid Station Kamalabad (T2 & T3) (At T2:26 to 40 MVA)	ii. ICB-02 (for Goods) Lot-I (Power Transformers)	As per advice of ADB, revise BER prepared and an agenda point has been put up to procurement committee (BOD) IESCO, Islamabad on 01.07.2015. Bid validity upto 30.09.2015.
9	132 KV Grid Station KTM (T3) (26 to 40 MVA)		
10	132 KV Grid Station KTM (T2) (26 to 40 MVA)		
11	132 KV Grid Station Jhelum (T1) (26 to 40 MVA)		
12	132 KV Grid Station Cantt Repco (T1) (26 to 40 MVA)		
13	132 KV Grid Station Zero Point (T2) (26 to 40 MVA)		
14	132 KV Grid Station I 10 (T2) (26 to 40 MVA)		
15	132 KV Grid Station I 8 (T2) (26 to 40 MVA)		
16	132 KV Grid Station Chaklala (26 to 40 MVA)		
Transmission Lines (08 Nos)			
17	Replacement of Sangjani - Zeropoint T/Line with new Double Circuit	Lot-II (5 No T/Lines)	Contract awarded to M/s ICC. 10% advance payment released during March, 2015 and work is under process.
18	132 KV T/Line F/F Barakhu G/S		
19	132 KV T/Line F/F Chakri Road G/S from Adyala		
20	132 KV T/Line F/F Sangjani-2 G/S		
21	132 KV T/Line KTM Charki Road		
22	132 KV T/Line Replacement of Burhan N/Wah Cent 1 & 2		
23	Replacement of Existing New Rawat - Sowan with new line		

11.4.3 Further on the direction to submit actual investments undertaken under DOP, ELR and STG in the FY 2013-14 against their corresponding benefits, the Petitioner has only provided project wise completion cost and their dates of completion for the investments undertaken in the STG program for the FY 2013-14.

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Sr.No.	Name of project	Completion cost (PKR in Million)	Date of completion
1	132 KV MES Grid Station	229.370	06.08.2013
2	132 KV Adyala Grid Station	217.146	28.05.2014
3	132 KV Nur Pur Sethi Grid Station	185.251	09.06.2014
4	Extension of P/Transformer at 132 KV E-8 Grid Station	55.000	20.02.2014
5	132 KV T/Line Gondal - Attock	54.079	09.06.2014
6	132 KV T/Line F/Jhang - Ahmedal - Pindigheb	71.393	07.09.2013
7	132 KV T/Line F/F Adyala	34.700	28.05.2014
8	132 KV T/Line F/F Gangal	9.905	28.02.2014
9	132 KV T/Line C.S.Shah - Nur Pur Sethi (Tranche -II)	289.420	09.06.2014
	Total Investment	**1146.264**	

11.4.4 The Petitioner needs to provide the requisite information keeping in view the spirit of the Authority's direction whereby it was intended to assess whether the Petitioner carried out investments effectively which resulted in reduction of losses and system improvements. The Petitioner rather than complying with the directions of the Authority provided a break-up of the cost incurred. The Petitioner, is therefore again directed to provide details of actual investments undertaken under the head of DOP, ELR and STG in the FY 2013-14 and FY 2014-15 against the corresponding benefits thereof not later than 30th June, 2016.

11.5 <u>To submit details of investments pertaining to HHUs along with its completion timelines not later than 30th June, 2015.</u>

11.5.1 In order to protect the interest of consumers in the matter of excessive billing, the Authority while considering the proposals floated by different XWDISCOs, during the proceedings of the tariff determination for the FY 2014-15 tariff determination process; agreed with the proposal submitted by PESCO regarding printing of snapshot of meter reading on the electricity bills of the consumers not only to enhance the level of confidence of the consumers but also to create an effective quality check on the Meter Readers.

11.5.2 In view of the aforementioned proposal regarding printing of snap shot of meter reading on the electricity bills, the Authority also considered the proposal of the Petitioner & MEPCO for allowing the cost of hand held meter reading units and principally decided to allow the cost of the hand held units to the Petitioner and directed it to submit its investment requirements for the implementation of the said plan along with the completion timelines not later than 30th June 2015.

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11.5.3 The Petitioner vide its letter No.8085-91/CEI/CSD dated August 21, 2015 has stated that meter reading has been started with the help of smart phones, whereby the project has been implemented in 83 sub-divisions out of 108 and the rest of sub-divisions will be covered in couple of weeks. Here it is pertinent to mention that the Petitioner in its DIIP has included an amount of Rs.155 million on account of cost of HHUs and has proposed that for FY 2015-16 implementation of meter reading will be carried out using both Mobile Phones and HHUs and from FY 2016-17 onward the entire process will be converted on HHUs. The Petitioner however has not provided any details with regard to the total number of HHUs required. The Petitioner, although, has started printing snap shots through mobile phones, yet, the importance of HHU cannot be denied which is the sustainable solution and will eventually replace the mobile phones. It is further noted that there were several complaints from the consumers that the snap shots appearing on the bills are not clear and readable. In view thereof, the Petitioner is directed to adopt necessary measures to address problems being faced by the consumers and further the Petitioner is directed to keep the record of snap shots for one year.

11.6 <u>To install AMR and AMI at all of their CDPs by December 31, 2015.</u>

11.7 <u>To install AMR and AMI on the receiving end of at least 30% of their 11 kV feeders (as existing on 30 June 2014) by 31st December 2015 and remaining 70% till June, 2016.</u>

11.8 <u>To initiate and install AMR/AMI at the consumer level in at least 10 of their high loss making subdivisions by 31st December, 2015 and remaining 70% by 30th June 2016.</u>

11.8.1 The Authority considers that one of the key reasons for high transmission and distribution losses in XWDISCOs is the lack of any tracking mechanism for electricity flow from the points of their electricity purchases (CDP) down to the final consumers. A reliable metering and recording system at every voltage level starting with the 132 kV grid, at the 11 kV and to 440 and 220 volts is therefore critical for the elimination of theft, unaccounted electricity and diagnosing technical problems. In view thereof, the Authority directed all XWDISCOs to install AMR and AMI Systems. The Authority considered that such systems would also enable it in analyzing XWDISCOs' genuine investment requirements. Consequently, reduction in losses would help in saving billions of rupees annually and support GOP's efforts in eliminating circular debt. Thus, the Authority directed all XWDISCOs;

- To install AMR and AMI at all of their CDPs by December 31, 2015.
- To install AMR and AMI on the receiving end of at least 30% of their 11 kV feeders (as existing on 30 June 2014) by 31st December 2015 and remaining 70% till June, 2016.

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- To initiate and install AMR/AMI at the consumer level in at least 10 of their high loss making subdivisions by 31st December, 2015 and remaining 70% by 30th June 2016.

11.8.2 In response, the Petitioner during the hearing submitted that AMR at CDPs have been installed and installation of AMI at 11KV is under consideration.

11.8.3 Regarding installation of AMI at the consumer level, the Petitioner has mentioned that PC-1 for installation of AMI for Rawalpindi circle (0.9 Million Customers) along with CIS for entire IESCO has been principally approved by ECNEC, as soon as the approval is received tender documents will be floated. The current project will cost USD 188 million that will be funded under debt equity ratio of 80:20. The debt component to be funded by ADB.

11.8.4 The Authority appreciates the efforts of the Petitioner regarding installation of AMR at CDPs, however, installation of AMR/ AMI at 11 KV feeders and at the consumer level, the Petitioner is again directed to complete the installation of its remaining AMI/ AMRs as per the deadlines set by the Authority.

11.9 <u>To submit the required certificate for replacement hiring before the finalization of the tariff determination pertaining to the FY 2015-16.</u>

11.9.1 The Petitioner was directed to submit a certificate from the external auditor in respect of the financial impact of replacement hiring during the FY 2009-10 and onwards. The financial impact of which, as per the Petitioner is Rs. 665 million. Based on the request of Petitioner, the Authority extended the deadline and directed the Petitioner to submit the certificate not later than 31st March, 2014. The Petitioner vide its letter no. 10954/IESCO/CEO/CS dated 31st March, 2014 informed the Authority that it hired M/s Ernst and Young Ford Rhodes Sidat Hyder & Co. for the issuance of the certificate. The Petitioner also requested to extend the deadline up to May 31, 2014.

11.9.2 Subsequently, the Petitioner in the hearing of its tariff petition for the FY 2014-15 informed that the process shall be completed by 15th October, 2014. However, no update was provided by the Petitioner afterwards. The Authority, keeping in view the quality of compliance had already issued an audit frame work in this regard, which has already been communicated to the Petitioner vide its letter # NEPRA/R/TRF-100-DISCO/7332-41 dated 30th June, 2014. The framework was issued after the NEPRA Professional's several meetings with the representatives of different XWDISCOs and Auditor (M/s Deloitte & co). The revised format of report as per the applicable International Standard on Auditing (ISA) was agreed and consequently directions were given to all the XWDISCOs to submit the required certificate as per the agreed ISA and format of certificate, which was also shared with all the XWDISCOs on 30th June, 2014.

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11.9.3 The Authority had been deducting this cost in the previous tariff determinations, however, in the tariff determination for FY 2014-15, considering the fact that as per the approved tariff methodology, the Petitioner's reference/base expense would be established for future years under the MYT regime, the Authority considered it unjust on the part of the Petitioner if the said cost is disallowed again. In view thereof, the Authority decided to allow this cost in the FY 2014-15 on provisional basis subject to the condition that if the required certificate is not provided before the finalization of the tariff determination pertaining to the FY 2015-16, the referred cost would be disallowed permanently and no further directions would be given to the Petitioner in this regard.

11.9.4 The Petitioner during the hearing of its instant petition i.e. FY 2015-16 has mentioned that the verification is under process and complete report, when received from Auditors will be submitted.

11.9.5 Till today the Authority has not received any certificate from the Petitioner. In view thereof, as per the decision of the Authority in its tariff determination for FY 2014-15, the replacement hiring cost amounting to Rs.890 million has been disallowed while assessing salaries and wages cost of the Petitioner for FY 2015-16.

11.10 <u>To explain the reasons for higher repair and maintenance expense under this head and submit a break-up of actual expense in FY 2013-14, not later than 30th April, 2015.</u>

11.10.1 The Authority during the tariff determination of the Petitioner for the FY 2014-15 observed that the Petitioner was allowed an expense of Rs. 545 million in the FY 2013-14 for repair & maintenance against which it incurred an expense of Rs. 737 million. Owing to the sudden increase in the expense, the Petitioner was directed to explain the reasons for higher expense under this head and submit a break-up of actual expense undertaken in FY 2013-14, not later than 30th April, 2015.

11.10.2 The Petitioner vide its letter No.8085-91/CEI/CSD dated August 21, 2015 has provided the following break-up of the actual expenditure incurred in FY 2013-14 under the head repair & maintenance;

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REPAIR AND MAINTENANCE BUDGET VS EXPENDITURE STATEMENT
FOR THE FY 2012-13 & 2013-14 **Rs in Million**

A/C Head	Upto June 2013	Budget Approved by NEPRA 2013-14	Exp. Upto June, 2014	Variance
A&MR Civil Works(5302/800)	63.179	50.000	49.542	0.458
R&M Distribution Plant (530600)	628.271	483.281	677.798	(194.517)
R&M General Plant (530700)	8.495	11.719	9.463	2.256
TOTAL	**699.945**	**545.000**	**736.803**	**(191.803)**

11.10.3 Analysis of the financial statement of the Petitioner for FY 2014-15 shows that the actual expense under repair & maintenance has further increased to Rs.872 million against the allowed Rs.697 million. However, no justification/ explanation and detail / break-up of the cost has been provided.

11.10.4 The issue is discussed under the head of Repair & maintenance.

11.11 <u>To submit comments on the creation of new circles, divisions and sub divisions at the earliest.</u>

11.11.1 Faisalabad Electric Supply Company (FESCO) and Lahore Electric Supply Company (LESCO) requested for creation of new circles, divisions and sub-divisions in the tariff petitions for the FY 2013-14. The Authority directed both the XWDISCOs to take appointments for a separate presentation on this issue and deferred the decision till that time. In addition, the Authority made this an issue for discussion for all XWDISCOs in the tariff petition for the FY 2014-15. All the XWDISCOs including the Petitioner were directed to file comments on the matter vide letter no. NEPRA/R/SAT-I/TRF-100-DISCOs/13653-61 dated 31st October, 2014.

11.11.2 The Petitioner has submitted during the hearing of its current petition that its MYT petition covers anticipated expansions and projects proposed in DIIP, including creation of new circles, divisions & subdivisions wherein creation of two more circles, 11 divisions and 39 sub-divisions have been proposed.

11.11.3 The Issue has been discussed under the relevant head.

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11.12 <u>To share some sample electricity bills with the Authority with the call center number printed on the face of bills.</u>

11.12.1 The Authority in the tariff determination for FY 2013-14, while allowing the Investment for establishment of the Call Centre directed the Petitioner to print Call Center number on the consumer bills along-with its advertisement on different media channels. The Authority also directed to submit daily complaint reports to its Consumer Affair Division and the Member Consumers Affair be given access to the Petitioner's system so that he may be able to monitor the complaint re-dressal any time.

11.12.2 The Petitioner afterwards vide letter no. 10954/IESCO/CEO/CS dated 31st March, 2014 and during the hearing of its tariff petition for FY 2014-15 informed that the Call Center number is being printed on the bills and that the Authority has been provided access to the Call Center data base. The Authority in view thereof, in the tariff determination for FY 2014-15, directed the Petitioner to share some sample electricity bills with the Authority with the call center number printed on the face of bills.

11.12.3 The Petitioner vide its letter No.8085-91/CEI/CSD dated August 21, 2015 has submitted that the Call Center is closed since October 2014. The Authority has seriously noted that although the Call Center is closed its number i.e. 118 is appearing on the Electricity Bills. Further, the Authority has noted with great concern that despite the fact that Petitioner has been allowed Investment for the Call Center the same is not operational since October 2014. The Authority considers that the Petitioner needs to explain in detail the reason for non-operation of the call center for which the consumers have already been burdened for the Return and Depreciation of the Investment made on the Call Center, not later than June 30, 2016.

11.13 <u>To submit Auditor's certificate in respect of Negative Revenue Adjustment.</u>

11.13.1 The Authority in its tariff determination for FY 2013-14 directed the Petitioner to submit Auditor's certificate regarding the negative revenue adjustment of Rs.1,212 million in the consumer mix variance computation by the Petitioner for the FY 2012-13, not later than 31st March, 2014. The Petitioner vide its letter no. 10954/IESCO/CEO/CS dated 31st March, 2014 informed the Authority that it has requested the auditor for the said certificate who has started the process of verification.

11.13.2 Subsequently in compliance thereof, the Petitioner has provided the desired certificate from its Auditors M/s E&Y whereby it been mentioned that accruals of revenue are in agreement with the books of accounts of the Company for the Years ended from 30 June 2011 to 30 June 2013.

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11.14 **To share the details of late payment charges recovered from consumers and paid to CPPA in the FY 2014-15 with the tariff petition for the FY 2015-16 to claim the offset of LPS.**

11.14.1 As per the clause 9.3(d) of the Electricity supply agreement dated 29th June, 1998 between XWDISCOs & NTDC, the XWDISCOs are obliged to pay CPPA late payment charge on delay payments of invoice. The clause 9.3 (d) of the agreement deals with Late Payment charge as below:

"Late Payments by WAPDA or the Company, as the case may be, shall bear mark-up at a rate per annum equal to the Base Rate plus four percent (4%) per annum compounded semi-annually, and shall be computed for the actual number of Days on the basis of three hundred sixty-five (365) Day Year."

11.14.2 In view thereof, the Authority in the tariff determination for FY 2014-15, decided that the late payment charge recovered from the consumers on utility bills shall be offset against the late payment invoices raised by CPPA against respective XWDISCO only .i.e. CPPA cannot book late charge over and above what is calculated as per the relevant clause of the agreement to a respective XWDISCO only. The Petitioner was, therefore, directed to share the details of late payment charges recovered from consumers and any invoice raised by CPPA under the head of mark up on delayed payments for the FY 2014-15. The Petitioner was directed to submit the requisite information along-with its tariff petition for FY 2015-16. Any remaining LPC, (i.e. after the offset) shall be adjusted from the revenue requirement of FY 2015-16 and in the event of non-submission of evidence of payment to CPPA, the entire amount of LPC recovered from consumers shall be made part of other income *(and deducted from revenue requirement)* in the FY 2015-16.

11.14.3 Here it is clarified that LPC, if any, in FY 2014-15 were invoiced by and due to CPPA under the ESA, however, from July 2015 interest for late payment would be invoiced by CPPA (G) as per the PPAA and the Commercial code.

11.14.4 The Petitioner vide its letter No.8085-91/CEI/CSD dated August 21, 2015 has mentioned that an amount of RS.704.55 Million has been collected on account of Late Payment Charges (LPC) during FY 2014-15.

11.14.5 The issue has been discussed under the relevant head.

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11.15 **To give comments on the proposal before the next year's tariff petition for the settlement of changing terms and conditions of lifeline consumers and also to share the Financial impact of revision of criteria of lifeline consumers on its revenue.**

11.16 **What are the concerns of the Petitioner on the application of domestic tariff for Government office, educational institutions and mosques?**

11.16.1 The matter of changing terms and conditions of lifeline and residential consumers was raised by the Petitioner in the tariff petition for the FY 2012-13 and the Authority took comments of all XWDISCOs on the matter during the tariff determination process for the FY 2013-14. Accordingly, the following modifications to the terms and conditions of lifeline and residential consumers were proposed,

- The criteria for Lifeline consumers is modified and only those residential consumers having single phase electric connection with a limited sanctioned load upto 1 kW and consumption of less than 50 units will qualify to be the life line consumers.
- A floating average of six months consumption of lifeline consumers should not exceed 50 units.
- In case of detection billing under the category of lifeline consumers, 1 year average floating billing must be less than 50 units
- All government offices, educational institutes and mosques should be removed from the category of residential consumers.

11.16.2 Although the Authority completed its consultative process but it still felt that before modifying the Terms & Conditions further analysis as to how much consumers will be reduced on monthly basis along with it financial implication from the Petitioner needs to be obtained.

11.16.3 Accordingly, the Petitioner, in its tariff determination pertaining to the FY 2014-15 was directed to give comments on the proposal before the next year's tariff petition for the settlement of this issue and also to share the financial impact of revision of criteria of lifeline consumers on its revenue.

11.16.4 The Petitioner, in its current tariff petition has submitted that benefit available to the life-line consumers should be passed on to the deserving consumers, only for which it has submitted evidence and proposals for consideration of the Authority in its tariff petition for FY 2013-14.

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11.16.5 The Petitioner, however, has not provided any financial impact in terms of revision of criteria of lifeline consumers on its revenue in its instant petition.

11.16.6 The Authority after careful consideration has decided to modify the Terms & Conditions to the extent of the following;

- The criteria for Lifeline consumers is modified to only those residential consumers having single phase electric connection with a sanctioned load up to 1 kW.
- At any point of time, if the floating average of last six months consumption exceed 50 units, then the said consumer would not be classified as life line for billing month even if its consumption is less than 50 units. For the purpose of calculating floating average, the consumption charged as detection billing would also be included.

11.16.7 The Petitioner on the issue of application of Domestic Tariff for Government Offices, Educational Institutions and Mosques has submitted that the issue pertains to existing definition of domestic tariff defined in 'Terms and Conditions of Tariff' as part of Tariff Determinations issued by NEPRA whereby 'domestic tariff' includes Govt. offices, educational institutions (Private & Public Sector) and mosques. The Petitioner also submitted that as a result of this anomaly in the definition, these institutions are billed under the head of domestic tariff and enjoy facilities available for domestic consumers like lower rate for lifeline consumers & slab-benefits. The matter was raised with the Authority in previous petitions and the Authority decided to address the matter separately by involving all the stakeholders in an independent hearing and decided to seek comments on this matter from all XWDISCOs. The Petitioner in view thereof has requested to resolve the matter at the earliest.

11.16.8 The Authority on the issue has decided to create a New General Services Category by changing terms & conditions of the residential consumers and has decided to restrict residential category as Residences and Places of worship, excluding thereby all government and other offices, educational institution. Thus, the consumer category A3 General services shall include;

- Approved charitable/religious institutions
- Government and semi – Government Offices and institutions
- Government Hospitals and dispensaries
- Educational Institutions

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- Water supply schemes including water pumps and tube wells operating on three phase 400 volts other than those meant for the irrigation or reclamation of Agricultural land.

12. **Issue # 2: Whether the Petitioner's projected energy purchases & energy sales for the FY 2015-16 to FY 2019-20, is reasonable?**

12.1 The Petitioner has requested purchases of 9,263 GWh for the FY 2015-16, as baseline, by applying an increase of around 3% from the actual units received during the FY 2014-15. The Petitioner has submitted that it does not produce a single unit neither it purchases electricity from additional sources except CPPA (G) and only utilizes the allocated resources by CPPA (G). The Petitioner has forecasted energy purchases based on review of historical data and expected increase in availability of electricity. The Petitioner further stated that it has projected purchases assuming growth in consumers and network rehabilitation plans with a Compound Annual Growth Rate (CAGR) of 3.00%, to reach at 10,425 GWh by FY 2019-20.

12.2 Regarding projected sales, the Petitioner has mentioned that these are based on the detailed working and assumption of the DIIP attached with the petition. The Petitioner has used sales of 8,393 GWh as baseline for FY 2015-16 which reaches to 9,455 GWh by FY 2019-20 based on annual compound rate increase of 3.01%, after adjusting the proposed T&D losses of each year from the projected purchases.

12.3 As per the Petitioner the forecasted trends for electricity purchase and sale are reasonable, as they are neither optimistic and nor pessimistic.

12.4 The Petitioner projected following purchases and sales from FY 2015-16 to 2019-20.

	2015-16	2016-17	2017-18	2018-19	2019-20
Power Purchase (GWh)	9,263	9,541	9,827	10,122	10,425
Projected Sale (GWh)	8,393	8,647	8,908	9,177	9,455

12.5 The Methodology prescribes the submission of generation plan by NTDC and procurement plan by CPPA (G) and its approval by the Authority prior to the filing of the tariff petition by the XWDISCOs, as also pointed out by one of the Intervener in its Intervention Request. Since both NTDC and CPPA (G) did not submit the generation and the procurement plans, the Authority in order to avoid any delays in the determination of XWDISCOs tariff petitions for FY 2015-16 and onward, decided to

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consider the power purchases and their corresponding cost as estimated by the XWDISCOs, along with the instant tariff petitions.

12.6 Although, there is an inbuilt mechanism for adjusting actual variation in sales against the estimated sales, yet in order to avoid unnecessary fluctuations in the consumer-end tariff it is appropriate to make realistic assessment of the purchases and sales. Moreover, it is also important to have a realistic assessment of the monthly references of fuel cost for making monthly fuel cost adjustment pursuant to Section 31(4) of Regulation of Generation, Transmission and Distribution Act (XL 1997). In view thereof, the Authority has carried out a detailed exercise for estimating station wise generation pertaining to the FY 2015-16. An increase of around 2.05% has been assumed over the actual generation pertaining to the FY 2014-15, as generation growth. Here it is pertinent to mention that the actual generation for the FY 2014-15 was 1.94% more than the actual generation for the FY 2013-14. After incorporating all the expected upcoming additional generation, it is estimated that in the FY 2015-16 the overall system generation will be about 98,989 GWh. After adjusting for the NTDC's permissible transmission losses of 3.0%, about 96,019 GWh are expected to be delivered to the distribution companies; the estimated share for the Petitioner from the pool for the FY 2015-16, is accordingly assessed as 9,086 GWh for the FY 2015-16, as against 9,263 GWh projected by it. After incorporating the T&D losses target for the FY 2015-16 (discussed below) the sales target in the instant case for the same period works out as 8,233 GWh. As regard the assessment for the FY 2016-17 and onwards is concerned, as per the Methodology, the NTDC would file data for its generation plan before or on 1st September, each year. The Authority after due diligence may consider revising the current projection of purchases and sales (after incorporating assessed T&D losses level).

13. <u>Issue # 3: Whether the Petitioner's projected power purchase cost for the FY 2015-16 to FY 2019-20, is justified?</u>

13.1 The Petitioner has requested for a Power Purchase Price (PPP) of Rs. 86,465 million (Rs.9.3344/kWh) (unadjusted) for the FY 2015-16.

13.2 The Petitioner has assessed PPP after giving an annual increase of 5% and 3% on Use of System Charges (UoSC) and Capacity Transfer Charges (CTC) respectively from 2015-16 to 2019-20, whereas, for the Energy Purchase Price, 5% growth on preceding year has been assumed. The Petitioner further stated that abovementioned assumptions are based on the inflationary trend observed in the past. The component wise details as submitted by the Petitioner is given below.

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Power Purchase Price (PPP) Break-up (Mln Rs.)					
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Energy Transfer Charge	63,146	68,298	73,863	79,884	86,389
Capacity Transfer Charge	21,407	23,151	25,038	27,079	29,286
NTDC Use of System Charge	1,912	2,029	2,152	2,284	2,423
Power Purchase Price	**86,465**	**93,478**	**101,053**	**109,247**	**118,098**
PPP (Rs. /Kwh)	9.33	9.80	10.28	10.79	11.33

13.3 In order to make fair assessment of the PPP, an in-house evaluation was done. As per the existing mechanism, 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 PPA. The overall power purchase cost constitutes a pool price which is transferred to the XWDISCOs according to a mechanism prescribed by the Authority and notified by the Federal Government in the Official Gazette. The Power Purchase Price has been projected, which in turn formulates the reference values for the monthly fuel adjustments & biannual PPP adjustment with respect to T&D losses, Capacity and Transmission Charges. Here it is pertinent to mention that while making biannual adjustments of the PPP, the Authority may rationalize the SoT accordingly.

13.4 From all the available sources of generation of electricity, i.e. Hydel, Thermal-Gas, RFO, Nuclear, Coal, Solar, Wind, Bagasse and Imports, a total of 98,989 GWh power is expected to be generated during the FY 2015-16. The estimated/projected source-wise generation and the estimated cost of electricity is given in the following table:

Fuel Type	Gen.	Share	Cost	Share	Rate
	MkWh	%	Mln. Rs.	%	Rs./kWh
Hydel	32,563	32.90%	3,124	0.56%	0 10
Coal	102	0%	382	0%	3 74
HSD	1,702	2%	22,168	4%	13 02
F.O.	30,881	31 2%	332,651	59%	10 77
Gas	26,218	26%	177,129	32%	6.76
Nuclear	4,995	5%	6,609	1%	1.32
Mixed	1,015	1%	10,332	2%	10.18
Import from Iran	443	0%	4,669	1%	10.55
Wind Power	724	1%	975	0%	1.35
Bagasse	319	0%	1,977	0%	6.20
Solar	26	0%	64	0%	2.47
Total	**98,989**	**100%**	**560,080**	**100%**	**5.66**
Energy Charges [Net of NTDC Losses]	**96,019**		**560,080**		**5.83**
Cap. Charge [Rs. /kWh]			239,695		2.50
UOSC [Rs. /kWh]			30,520		0.32
Total Cost [Rs. /kWh]	**96,019**		**830,295**		**8.65**

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13.5 Here it is pertinent to mention that the aforementioned energy charge includes variable O&M charges. But as per the tariff methodology, variable O&M charges would not be made part of monthly fuel adjustment and would be adjusted as part of biannual adjustments. From the above table it is clear that 31% of total generation is expected on Residual Fuel oil (RFO) but its share in overall energy cost is expected to be around 59%, which means that variation in generation mix and oil prices will have great impact on the cost of generation and will ultimately affect the consumer-end tariff. The RFO prices over the last year have shown a decreasing trend, whereby the actual average RFO prices during the FY 2014-15 remained at around Rs. 56,121 [excluding Sales Tax and including freight] per metric ton and came to a lower level of Rs. 40,411 per metric ton as against the last year's average projected price of Rs. 65,769 [excluding Sales Tax and including freight] per metric ton. The RFO prices in Pakistan are not only affected by the international market but also by the exchange rate parity. Based on the international market condition, it can be presumed that this lower trend shall continue in the future as well, consequently, for the FY 2015-16, RFO prices have been assumed on an average of Rs. 47,981 per metric ton [excluding Sales Tax and including freight] after incorporating the possible determinants of RFO prices. The HSD prices for the FY 2015-16, are being assumed on an average of Rs. 61.29 per liter [excluding Sales Tax], keeping in view the declining trend of HSD price in FY 2014-15,which remained on average Rs. 76.89 per litre during the FY 2014-15, against the projection of Rs. 93.45/ litre. Keeping in view the recent developments regarding the import of RLNG and the notification by OGRA regarding provisional price of RLNG, it is quite obvious that gas based power plants will also be run on RLNG especially in the months where there is gas shortage as has been the case in the past. Accordingly, impact of RLNG has also been considered while projecting the gas prices for the FY 2015-16, which has been assumed at Rs. 900/ MMBTU.

13.6 The generation cost is transferred to the XWDISCOs according to the Transfer Price Mechanism (TPM) as prescribed by the Authority.

13.7 Energy transfer charge shall be calculated on the basis of units delivered after adjusting target transmission losses as per the latest notified tariff determination in the matter of NTDC. NTDC shall, for the purpose of clarity intimate to all XWDISCOs the generation part of the Transfer Charge during a billing period by deducting from the Transfer Charge the Transmission Charge or Use of System Charges.

13.8 According to the above mechanism Rs.21,271 million and Rs.2,706 million is the share of the Petitioner on account of CpGenCap and USCF respectively for the FY 2015-16. The overall fixed charges comprising of CpGenCap and USCF in the instant case works out as Rs.23,977 million, which translate into Rs.1,222 /kW/month or Rs.2.64/kWh.

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13.9 The annual PPP for the FY 2015-16 in the instant case works out as Rs. 76,859 million. With the projected purchase of 9,086 GWh for the same period the average PPP turns out to be as Rs. 8.46/ kWh (Annex – IV). On the basis of 9.39% T&D losses, the PPP per kWh is assessed as Rs. 9.34/kWh.

13.10 Regarding the assessment for the FY 2016-17 and onwards is concerned, as per the Methodology, the NTDC would file data for its generation plan before or on 1st September, each year. The Authority after due diligence may consider revising the current projection of PPP. Accordingly, the impact of revised prices on the SOT, would be done by the Authority. Here it is pertinent to mention that the references of power purchases would continue to exist irrespective of the financial year unless the revised references are notified by the GoP.

14. <u>Issue # 4: Whether the Petitioner's proposed DIIP focuses on reduction of T&D losses from current 9.41% (FY 2014-15) to 9.31% (FY 2019-20) are justified?</u>

14.1 <u>Whether the T&D losses reduction in the given time period is justified?</u>

14.2 The Petitioner requested a T&D losses target of 9.39% for the FY 2015-16 which gradually reduces to 9.31% by the end of the control period i.e. FY 2019-20. The Petitioner has submitted an Integrated Generation Transmission & Distribution Plan (IGTDP), which includes formation of new grids, up-gradation of existing grids, revamping of secondary transmission (66, 132 KV) lines, augmentation of HT & LT lines, provision of T&P items, induction of low loss transformers, theft detection by enforcement agencies and replacement of meters to Advanced Metering Infrastructure (AMI).

14.3 The Petitioner has mentioned that rehabilitation/ replacement is required on equipment /material, at various grid stations and transmission lines, which have completed their useful life and have become deteriorated due to excess wear and tear with the passage of time or have become outdated and their spares are not available in local market. Due to these reasons, they cause frequent faults and loss of energy in the shape of leakages etc. Resultantly, many breakdowns occur due to which not only public suffers but the Petitioner also sustains financial loss. The objective of the Distribution Rehabilitation Project is to reduce system technical losses, resulting from power losses in the distribution conductors and equipment including losses due to additional current flowing in the system on account of poor power factor of customer loads.

14.4 The Petitioner further explained that based on the load flow studies certain additional equipment requirements have been identified that included 132 kV transmission lines, 132/11 kV substations, reconductoring, additional 2nd circuit, power transformer, capacitor banks and related control equipment and these requirements have been

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categorized as expansion works and planned to be implemented over the tariff control period.

14.5 The Petitioner further stated that it has been able to maintain T&D losses to a considerably lower level compare to other XWDISCOs, and has reduced its T&D losses from 10.28% in FY 2008-09 to 9.41% in FY 2014-15 as under;

Fiscal Year	T&D losses (%)
2008-09	10.28%
2009-10	10.78%
2010-11	9.82%
2011-12	9.74%
2012-13	9.52%
2013-14	9.46%
2014-15	9.41%

14.6 The Petitioner justified that its DIIP focuses on reduction of T&D losses from current 9.41% (FY 2014-15) to 9.31% (FY 2019-20), while maintaining an aggressive customer acquisition plan of 559,449 customers over next five years.

14.7 The Petitioner submitted that as per the directions of the Authority, it has carried out study of its T&D losses through M/s Power Planners International. The results of the study, based on the results of the sample study of 180 HT Feeders and 80 LT Networks, indicate that:

i. Annual energy loss in HT network including lines & distribution transformer is 4.171%.
ii. Annual energy loss in LT network including cables is 2.379%.

14.8 The Petitioner also mentioned that a separate study and evaluation of Transmission and Transformation (T&T) losses has also been carried out by the Consultant, using power system simulator (PSS/E) Software, whereby energy loss as percentage of energy import in 2013-14 is 2.514%.

14.9 The Petitioner, based on the results of the sample study and analysis conducted by it, has submitted the following break-up of its T&D Losses for 2015-16 to 2019-20;

Description		2016	2017	2018	2019	2020
Transmission Losses	%	2.505	2.500	2.495	2.490	2.485
Distribution Losses (11KV & Below)	%	6.535	6.520	6.505	6.490	6.475
Total Technical Losses	%	8.912	8.893	8.873	8.854	8.834

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Administrative Losses	%	0.478	0.477	0.477	0.476	0.476
Total T&D losses	%	9.390	9.370	9.350	9.330	9.310

14.10 The Petitioner is of the view that its administrative losses are at its lowest level and further reduction is minute. The following table shows the projection of reduction in T&D losses as proposed by the Petitioner.

Year	% age Losses (Proposed)	Transmission Loss Decrease (%)	Distribution Loss Decrease (%)	Total Decrease (%)
2014-15	9.41			
2015-16	9.39	0.005	0.008	0.013
2016-17	9.37	0.005	0.017	0.022
2017-18	9.35	0.006	0.012	0.018
2018-19	9.33	0.008	0.018	0.026
2019-20	9.31	0.008	0.013	0.021
Total Decrease (%)	0.10	0.032	0.068	0.10

14.11 The Petitioner has also requested that its loss targets be adjusted in the event of any potential private sector participation. In addition, the Petitioner has proposed for provision of one-time adjustments regarding revision of T&D loss targets and amendments/revisions to the DIIP in the event of any potential private sector participation.

14.12 The Authority observed that while deciding the tariff petition of the Petitioner pertaining to the FY 2012-13, the Authority directed it to conduct a study of its existing distribution network from an Independent Consultant. The direction was aimed at assisting the Petitioner in identifying potential areas for improvements and to carry out investments with technical advisories. It was further directed that the TORs of the study should include study of losses on 132 kV, 11kV and below and to submit completion timelines. The Authority while recognizing the fact in the said tariff determination that study of losses on LT lines is a huge task, therefore, allowed the Petitioner to select a reasonable sample of LT lines in order to carry out study. The Petitioner was also required to submit the ToRs of its study.

14.13 The Petitioner vide its letter no. 10954/IESCO/CEO/CS dated 31st March, 2014 requested to extend the date of compliance up to June 30, 2014. Thereafter, the Petitioner in its petition for FY 2014-15 stated that it has floated a tender to conduct the study of its T&D losses, the evaluation of bids is in process and the outcome shall be shared with the Authority in due course of time. The Petitioner vide letter # 22582-

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83/CEO/IESCO/CE(P&E)/HT-1471 date 30th December, 2014, informed the Authority that it has hired a Consultant for its study.

14.14 Since the Petitioner did not comply with the directions of the Authority, in terms of carrying out an independent study of its T&D losses, therefore, the Authority, for FY 2014-15, assessed T&D losses of the Petitioner at a level of 9.41%

14.15 The Petitioner in the instant petition i.e. FY 2015-16 informed that a partial study, based on sample size of 180 HT Feeders (around 21%) and 80 LT Networks, has been carried out by the consultant i.e. M/s Power Planners International indicating the following results.

i. HT network including lines and distribution transformers is 4.171%.
ii. LT network including cables is 2.379%.

14.16 The Petitioner also based on its study of Transmission and Transformation (T&T) losses, has reported T&T losses are 2.514%.

The Petitioner, in its submitted IGTDP, highlighted the following constraints in its existing system;

Description	Unit	Quantity
Overloaded 132 kV Grid Stations	No.	21
132 kV Grid Stations facing Low Voltage Problems	No.	02
Overloaded Transmission Lines (66 kV & 132 kV)	No.	22
High Loss 11 kV Feeders	No.	38
Overloaded 11 kV Feeders need Rehabilitation	No.	100
Overloaded Distribution Transformers	No.	2433

14.17 The Petitioner in view of proposed investments expects the following improvements / additions in its existing system to overcome the constraints. The same would also cater for the expected increase in its customer base;

Total MVA Added at 132 kV Grids:	2405 MVA
New Transmission Lines:	488 km
Capacitors Installation (132 kV Fixed):	36 MVAR
Capacitors Installation (11 kV Fixed):	178 MVAR
New HT (11 kV) Lines:	820 km
New LT (415/230 V) Lines:	220 km
The existing HT and LT ratio is:	0.92

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The HT and LT ratio after 5 Years:	1.017
Average Length of 11 kV Feeders at Present:	38.0 km
Average Length of 11 kV Feeders after 5 Years:	32.9 km
Total KVA added at Distribution Level:	296,575 KVA

14.18 The Authority has carefully evaluated Petitioner's arguments for setting the T&D losses target for the FY 2015-16 and onwards. The Authority observed with great concern that even with the instant petition, the Petitioner has failed to comply with the directions of the Authority in terms of completion of study of its T&D losses from a third party and has not given any firm date with regard to the completion of the study. In view thereof, the Authority directs the Petitioner to get study of its system completed as soon as possible. Here it is pertinent to mention that although the provided study is based on a very limited sample size, but in terms of its findings, the Petitioner's T&D losses works out as 9.28% (including administrative losses level of 0.478% as reported by the Petitioner).

14.19 The Authority is of the view that the Petitioner's proposed reduction in T&D losses is not logical keeping in view the level of requested investments as mentioned above. The Authority has also observed that the Petitioner put forward the same argument in its earlier tariff petitions and in view thereof the Authority directed the Petitioner to carry out study of T&D losses of its distribution Network highlighting the potential areas of improvements. Since the Petitioner has not provided that study hence the Authority cannot agree with the rationale of the Petitioner. In view of the aforementioned, the Authority has decided to allow a T&D losses target of 9.39% to the Petitioner for the FY 2015-16, which will gradually reduce to 7.80% in FY 2019-20, as mentioned hereunder;

Year	%age losses (Proposed)	%age Losses (Allowed)	%age Decrease (Allowed)		
			Transmission Loss Decrease	Distribution Loss Decrease	Total Decrease
2014-15	9.41	9.44			
2015-16	9.39	9.39	0.019	0.031	0.05
2016-17	9.37	9.22	0.07	0.10	0.17
2017-18	9.35	8.93	0.10	0.19	0.29
2018-19	9.33	8.49	0.19	0.25	0.44
2019-20	9.31	7.80	0.27	0.42	0.69
Total Decrease (%)	0.10	1.64	0.649	0.991	1.64

14.20 On the request of onetime opener, in the event of any private sector participation, the Authority considers that it may only happen if the Petitioner completes study of its T&D losses and the Authority is convinced with the quality of the study and the said study is accepted by the Authority.

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15. **Issue # 5: Whether the Petitioner's proposed Investment plan for the FY 2015-16 to FY 2019-20, is justified, keeping in view the prospective benefits?**

Issue # 6: Whether the Petitioner request for one-time adjustments for the following in the event of any potential private sector participation is merit consideration?

a. Revision of T&D loss target
b. Amendments/Revision to the DIIP

15.1 As per the NEPRA guidelines for the determination of consumer end tariff (Methodology and Process), 2015 (The Methodology) notified vide S.R.O. 34 (I)/2015 dated January 16, 2015, the submission of IGTDP and assessment of T & D losses by XWDISCOs and their approval by the Authority is required before filing of the tariff petition. The timelines for submission of the IGTDP and assessment of T&D losses, as per the Methodology, is September 01 each year. The date specifies the initiation of approval process and on 1st September, each year, the Authority would start the process of review of previous year's actual performance and its subsequent impact on next year's plan. The Petitioner would also present its intended plan for the sixth year, in the same process. (Concept of re-rolling investment plan as specified in the Tariff Methodology).

15.2 Here it is pertinent to mention that the Methodology was notified in January 2015, and the process for the determination of the IGTDP and assessment of T&D losses, should have been started by September 01, 2015. The Petitioner did filed some details with respect to the IGDTP yet due to the quality of information the same were returned. The Authority considering the fact that the process was new to all the XWDISCOs conducted workshops in order to improve the filing capacities of the XWDISCOs. In view of aforementioned, had a separate process in this regard been initiated, it would have resulted in considerable delays in filing of the tariff petitions thus, the Authority considering the time constraints and being the first year of the new tariff regime, (on the request of the XWDISCOs), allowed to file the IGTDP & assessment of T&D loses along-with their Consumer-end Tariff Petitions.

15.3 The Petitioner filed its IGTDP for the next five years under both the scenarios i.e. Optimally Achievable Scenario and the Best case Scenario.

15.4 The Petitioner, under the Optimally Achievable scenario, has requested an amount of Rs.56,229 million and under the Best Case scenario an amount of Rs.80,555 million to execute its development/ investment plan for MYT period from FY 2015-16 to 2019-20. Both the aforementioned proposed amounts are exclusive of the consumer contribution / deposit work which has been projected by the Petitioner as Rs.13,944 million under both the scenarios.

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15.5 **Summary of capital cost for proposed projects under Optimally Achievable Scenario is as under:**

Million Rs.

	Description	2015-16	2016-17	2017-18	2018-19	2019-20	Total
A	**STG (Expansion & Rehabilitation)**	**8316**	**3252**	**1566**	**1196**	**5144**	**19474**
B	Distribution (Expansion)	554	554	555	555	558	2777
	Distribution (Rehabilitation)	1114	1114	1114	1114	1117	5572
	Cost of Vehicles	36	45	37	45	51	213
	Cost of T & P	10	11	11	11	11	54
	Cost of Civil Works	108	132	120	132	144	636
	Cost of GIS Mapping Plan	22	56	75	5	33	243
	Cost of Staffing Plan	0	0	0	0	0	0
	Sub Total (B)	**1844**	**1912**	**1912**	**1862**	**1914**	**9495**
C	Miscellaneous Charge @ 1%	102	52	35	31	71	290
	Authority Supervisory Charges @ 0.5 %	51	26	17	16	35	145
	Contingencies @ 5%	508	258	174	156	353	1448
	Dismantling Charges @ 5% Equipment Cost Against Rehabilitation	(8.94)	(8.94)	(8.94)	(8 94)	(8.94)	(44.72)
	I.D.C: @ 11.21% per annum on local and 12% per annum on F.E.C	Included in Financial Evaluation					
	Escalation @ 5.0%	508	529	548	670	1950	4206
	Sub-Total (C):	**1160**	**856**	**765**	**864**	**2400**	**6044**
Total Cost of Distribution Plan without O&M Charges (A+B+C)		**11320**	**6020**	4243	**3922**	**9458**	**35013**
D	**AMI**	**0**	**0**	**0**	**0**	**18420**	**18420**
E	Other Functional Plans	520	602	537	272	405	2336
	Contingencies @ 5% (On other functional plans)	26	30	27	14	20	117
	Escalation @ 5.0% (On other functional Plans)	26	62	85	59	112	343
	Sub-Total (E)	**572**	**694**	649	**345**	**537**	**2796**
Total Cost of Distribution Plan including Functional Plan without O&M Charges (A+B+C+D+E)		**11892**	**6714**	4892	**4267**	**28415**	**56229**

** An amount of Rs. 13944 Million to be recovered from consumers under STG and DOP Expansion as submitted by IESCO in its MYT Petition is not included above.*

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Summary of capital cost for proposed projects under Best Case is as under:

Million Rs.

	Description	2015-16	2016-17	2017-18	2018-19	2019-20	Total
A	STG (Expansion & Rehabilitation)	**8316**	**10337**	**6469**	**2647**	**5144**	**32913**
B	Distribution (Expansion)	1094	1155	1215	1276	1337	6077
	Distribution (Rehabilitation)	1785	1786	1786	1784	1784	8925
	Cost of Vehicles	36	45	37	45	51	214
	Cost of T & P	10	11	11	11	11	54
	Cost of Civil Works	108	132	120	132	144	636
	Cost of GIS Mapping Plan	22	56	75	57	33	243
	Cost of Staffing Plan*	0	0	0	0	0	0
	Sub-Total **(B)**	**3055**	**3185**	**3244**	**3305**	**3360**	**16149**
C	Miscellaneous Charge @ 1%	114	135	97	60	85	**491**
	Authority Supervisory Charges @ 0.5%	57	68	48	30	43	**246**
	Contingencies @ 5%	569	676	484	299	425	**2453**
	Dismantling Charges @ 5% Equipment Cost Against Rehabilitation	(6.67)	(6.67)	(6.67)	(6.63)	(6.63)	**(33.26)**
	IDC: @ 11.21% per annum on local and 12% per annum on FEC	Included in Financial Evacuation					
	Escalation @ 5 0%	569	1386	1527	1288	2349	**7119**
	Sub-Total (C):	**1302**	**2258**	**2149**	**1670**	**2895**	**10276**
	Total Cost of Distribution Plan without O&M Charges (A+B+C)	**12673**	**15780**	**11862**	**7622**	**11399**	**59338**
D	**AMI****	**0**	**0**	**0**	**0**	**18420**	**18420**
E	Other Functional Plans	520	602	537	272	405	**2336**
	Contingencies @ 5% (On other functional plans)	26	30	27	14	20	**117**
	Escalation @ 5.0% (On other functional Plans)	26	62	85	59	112	**344**
	Subtotal (E):	**572**	**694**	**649**	**345**	**537**	**2797**
Total Cost of Distribution Plan including Functional Plan without O&M Charges (A+B+C+D+E)		**13245.3**	**16474.3**	**12511.3**	**7967.4**	**30356.4**	**80554.7**

**An amount of Rs.13,944 Million to be recovered from consumers under STG and DOP expansion as submitted by IESCO in its MYT Petition is not included above.*

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15.6 **Funding Plans**

15.6.1 The Petitioner has mentioned that it has the following funding plan under the optimally achievable scenario;

Billion Rs.

Proposed Funding Plan						
Description	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**Total**
ADB Tranche-III	2.9	-	-	-	-	2.9
ADB Tranche-IV	-	2.5	-	-	-	2.5
ADB Funding for AMI Metering	-	-	-	-	18.4	18.4
Internal cash flows from operations	9.0	4.2	4.9	4.3	10.0	32.3
Total	**11.9**	**6.7**	**4.9**	**4.3**	**28.4**	**56.2**
Consumer Contribution	**1.7**	**4.1**	**1.8**	**4.3**	**2.0**	**13.9**
Grand Total	**13.6**	**10.8**	**6.7**	**8.6**	**30.4**	**70.1**

15.7 **Existing System of the Petitioner**

15.7.1 The Petitioner also provided details of its existing distribution system as mentioned hereunder;

Description	**Unit**	**Quantity**
Grid Stations		
132 kV Grid Stations	No.	77
66 kV Grid Stations	No.	5
33 kV Grid Station	No.	3
132 kV Consumer Owned Grid Stations	No.	23
Power Transformers	No.	239
Capacity of Power Transformers	MVA	5224
Transmission Lines (132 kV & 66 kV)		
Total Length of Transmission Lines	KM	3452
Distribution System		
11 kV Feeders	No.	951
Total Length of 11 kV Lines	KM	24272
Total Length of LT Lines	KM	26145
Distribution Transformers	No.	44811
Capacity of Distribution Transformers	KVA	3707000
Service Connections		
Domestic	No.	2085256
Commercial	No.	350989
Industrial	No.	15048

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Tube Well	No.	8192
Bulk	No.	861
Others	No.	1821
Total IESCO Consumers	No.	2462167

15.8 Constraints in the Existing System

15.8.1 The Petitioner has highlighted the following constraints in its Existing System;

Description	Unit	Quantity
Overloaded 132 kV Grid Stations	No.	21
132 kV Grid Stations facing Low Voltage Problems	No.	02
Overloaded Transmission Lines (66 kV & 132 kV)	No.	22
High Loss 11 kV Feeders	No.	38
Overloaded 11 kV Feeders need Rehabilitation	No.	100
Overloaded Distribution Transformers	No.	2433

15.9 Proposed Additions/ Improvements in the Existing System Post Investment

15.9.1 The Petitioner in view of its aforementioned proposed IGTDP expects the following improvements / additions in its existing system to overcome the constraints and to cater for the expected increase in its customer base;

Total MVA Added at 132 kV Grids:	2405 MVA
New Transmission Lines:	488 km
Capacitors Installation (132 kV Fixed):	36 MVAR
Capacitors Installation (11 kV Fixed):	178 MVAR
New HT (11 kV) Lines:	820 km
New LT (415/230 V) Lines:	220 km
The existing HT and LT ratio is:	0.92
The HT and LT ratio after 5 Years:	1.017
Average Length of 11 kV Feeders at Present:	38.0 km
Average Length of 11 kV Feeders after 5 Years:	32.9 km
Total KVA Added at Distribution Level:	296575 KVA

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The Petitioner has proposed the following improvements in its Performance Standards as a result of the proposed investment:

Description	2015 (Baseline)	2016	2017	2018	2019	2020
SAIFI (numbers)	0.04	0.03	0.02	0.02	0.02	0.02
SAIDI (hours)	1.0	0.98	0.97	0.96	0.96	0.95
Supply Restoration (hours)	2.0-4.0	2.0-3.5	1.5-3.5	1.0-3.0	1.0-3.0	1.0-2.0
Fatal Accidents	6	0	0	0	0	0
Non-Fatal Accidents	28	0	0	0	0	0
No of meters read manually	Mobile Reading	MOBILE & HHU	Only HHU	Only HHU	Only HHU	Only HHU
Reduction in billing related complaints (No.)	77386	69647	62683	56414	50773	45696
T&D Losses (%)	9.41	9.390	9.370	9.370	9.350	9.310
Technical Loss (%)	8.931	8.912	8.893	8.873	8.854	8.834
Non-Technical Losses (%)	0.475	0.478	0.477	0.477	0.476	0.476
Service to Supply related complaints (hours)	3	3	3	3	3	3
Meters Replacement	61356	119109	119109	119109	119109	119109

16. Based on the foregoing submissions of the Petitioner and the proposed IGTDP, the Authority framed the following issues for discussion during the hearing.

- *Whether the load demand forecast provided by IESCO is justified? IESCO may submit the basis of load demand forecast.*

- *Whether the base line conditions identified by IESCO in its 5 years' investment plans truly reflective of its prevailing performance and conditions?*

- *Whether the indicated capital cost of Rs. 56228 million for proposed projects for next 5 years under optimally achievable case is justified? IESCO is required to submit year wise rationale in respect of cost-benefits through investing the above mentioned amount and improvement in its existing networks such as improvement in HT/LT ratios and average length per 11 kV feeder.*

- *Whether the indicated capital cost of Rs. 80,552 million for proposed projects for next 5 years under best case scenario is justified?*

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- *Whether IESCO has arranged the funds required to undertake these projects? If yes, IESCO is required to provide the details of source of funding in respect of each project.*

- *The linkage between investment plans and performance standards is the core component of investment plans therefore IESCO may provide a comprehensive year wise analysis about improvement in SAIFI, SAIDI and other performance standards achieved through its investments.*

On the basis of pleadings, evidence/record produced and arguments raised during the hearing, issue-wise findings are given as under;

17. <u>Whether the load demand forecast provided by IESCO is justified? IESCO may submit the basis of load demand forecast?</u>

17.1 The Petitioner has submitted that the load demand forecast is a justified methodological report prepared by it under the supervision of GM Planning (Power) NTDC, Lahore. Huge data is collected throughout the year, as per SOP issued by GM Planning (Power) NTDC, and the preparation/compilation of the report is a careful & painstaking process. For presenting a clear picture, the data is collected which forms the basis of load forecast report is summarized below:

17.2 <u>For Preparation of the Forecast:</u>

- Preparation of Base Case in light of above information.
- Detail of pending connections (in operation sub-divisions, Divisions, Circles & IESCO Head Quarter).
- Expected planned load (New Independent Grids, Expected New Village Electrification, Expected load of New Housing Societies).
- Expected category wise growth rates of sales.
- Expected feeder wise and category wise load factors.
- Expected diversity factors and coincidence factors.

17.3 <u>For Preparation of Base Case:</u>

- Existing Feeder wise and Category wise sales of IESCO.
- Monthly Units Received, Sold, Lost & T&D losses of IESCO.
- Month-wise peak demand of IESCO (both recorded and computed).
- Month-wise MDI of each connection in the medium large industries category.
- Maximum recorded load (in MW) of each feeder.

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17.4 The Petitioner further submitted that this data is fed to PMS Software which produces the forecast report on desired formats. In light of the detailed work above, the load demand forecast report is the only justified methodological report prepared by the Petitioner under the supervision of GM Planning (Power) NTDC, Lahore.

Year	Growth Rates (%)	Expected Energy Purchase (GWh)	Demand (MW)
2015-16	3.00%	9263	1511
2016-17	3.00%	9541	1556
2017-18	3.00%	9827	1603
2018-19	3.00%	10122	1651
2019-20	3.00%	10425	1700

17.5 The issue has already been discussed under the head of projected sales growth.

18. <u>Whether the base line conditions identified by IESCO in its 5 years' investment plans truly reflective of its prevailing performance and conditions?</u>

18.1 The Petitioner has submitted its existing base line conditions as follows:

Description	Unit	Quantity
Grid Stations		
132 kV Grid Stations	No.	77
66 kV Grid Stations	No.	5
33 kV Grid Station	No.	3
132 kV Consumer Owned Grid Stations	No.	23
Power Transformers	No.	239
Capacity of Power Transformers	MVA	5224
Transmission Lines (132 kV & 66 kV)		
Total Length of Transmission Lines	KM	3452
Distribution System		
11 kV Feeders	No.	951
Total Length of 11 kV Lines	KM	24272
Total Length of LT Lines	KM	26145
Distribution Transformers	No.	44811
Capacity of Distribution Transformers	KVA	3707000
Service Connections		
Domestic	No.	2085256
Commercial	No.	350989
Industrial	No.	15048

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Tube Well	No.	8192
Bulk	No.	861
Others	No.	1821
Total IESCO Consumers	No.	2462167

18.2 The Petitioner has reported the following constraints in its existing system and the performance indices;

Description	Unit	Quantity
Overloaded 132 kV Grid Stations	No.	21
132 kV Grid Stations facing Low Voltage Problems	No.	02
Overloaded Transmission Lines (66 kV & 132 kV)	No.	22
High Loss 11 kV Feeders	No.	38
Overloaded 11 kV Feeders need Rehabilitation	No.	100
Overloaded Distribution Transformers	No.	2433

Description	2015 (Baseline)
SAIFI (numbers)	0.04
SAIDI (hours)	1.0
Supply Restoration (hours)	2.0-4.0
Fatal Accidents	6
Non-Fatal Accidents	28
No. of meters read manually	Mobile Reading
Reduction in billing related complaints (No.)	77386
T&D Losses (%)	9.41
Technical Loss (%)	8.931
Non-Technical Losses (%)	0.475
Service to Supply related complaints (hours)	3
Meters Replacement	61356

18.3 The Authority is of the firm view that its Regulatory Assessment in terms of T&D losses, Recoveries and Performance Standards (PSDR-2005 along with all amendments) are achievable by the Petitioner with its existing infrastructure if the same are properly maintained. The Authority has observed that the Petitioner is consistently failing in achieving its assessed regulatory benchmarks, the Authority feels that in order to avoid further deterioration of the system it cannot ignore the importance of investments to ensures reliable, safe and smooth supply of electricity. Here it is pertinent to mention that the instant IGTDP not only caters for the rehabilitation/augmentation of existing infrastructure but also caters for future expansion needs along with technology developments.

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18.4 In view thereof, the Authority has recorded/noted Petitioner's submitted aforementioned details as a starting point for proposed future investments to be subsequently reviewed in detail to rationalize the same.

19. **Whether the indicated capital cost of Rs. 56,228 million for proposed projects for next 5 years under optimally achievable case is justified? IESCO is required to submit year wise rationale in respect of cost-benefits through investing the above mentioned amount and improvement in its existing networks such as improvement in HT/LT ratios and average length per 11 kV feeder.**

19.1 The Petitioner has submitted the following Financial Internal Rate of return and Benefit to cost ratio over 30 year's period:

Detail	DOP, ELR & Others	AMI	DIIP
Financial Internal Rate of Return (FIRR):	18.0%	8.9%	26.9%
Benefit Cost Ratio over the life of the Project (30Yrs): (Discounted)	1.28 at 8% Discount Rate	-	-
Payback Period:	-		

19.2 The Petitioner has also indicated following benefits as a result of proposed investment:

HT/LT Ratio of Existing System	0.92
HT/LT Ratio after DIIP	1.017
Average Length of Existing 11 KV Network/Feeder	38 km
Average Length of 11 kV Feeder after DIIP	32.9 Km

19.3 The Petitioner has also mentioned that through investments under optimally achievable case, following improvements in the existing network are foreseen after 5 (five) years:

Total MVA Capacity of Power Transformers:	7629 MVA
Total Length of Transmission Lines:	3940 km
Total length of HT (11 kV) Line after Implementation:	25092 km
Total Length of LT (415/230 V) after Implementation:	26365 km
The HT and LT ratio after Implementation:	1.017
Average Length of 11 kV Feeders after Implementation:	32.90 km
Total KVA Capacity of Dist. Transformers after DIIP	4003575 KVA
Power Factor Improvement:	100%

19.4 The Authority observed that year wise benefit to cost ratios has been provided, however, in view of the delayed benefits on some of the projects the yearly ratio may not reflect

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the true picture. The Authority also noted that the Petitioner has proposed a comprehensive plan for expansion and improvement which is supported by demand forecast prepared by NTDC Planning Department and load flow studies. The Authority further noted that at the 11 kV level Petitioner has plans to reduce its average Length of existing 11 KV Network/Feeder from 38 Km to 32.9 Km over a period of 5 years. Here it is pertinent to mention that the Petitioner currently has a lower HT/LT ratio of 0.92 (a ratio of 1.2 is considered reasonable as per utility practices) and has plans to bring it at a level of 1.017 by proposing 220 km of LT lines and 820 km of HT lines, however, the HT/LT ratio after accounting for the additions of lines as proposed by the Petitioner works out to be 0.95, which is still lower than the required standard of 1.2.

19.5 The issue is deliberated under the decision part.

20. Whether the indicated capital cost of Rs. 80,552 million for proposed projects for next 5 years under best case scenario is justified?

20.1 The Petitioner has submitted that the investment under the best case scenario has been prepared with the help of existing capabilities and is therefore justified and is aimed;

- To strengthen the reliability of system
- To establish ring between grid stations
- To establish ring between 11kv feeders
- To reduce the length of 11kv lines
- Contingency for important grid stations
- Improvement in voltage profile

20.2 The issue is deliberated under decision part.

21. Whether IESCO has arranged the funds required to undertake these projects? If yes, IESCO is required to provide the details of source of funding in respect of each project.

21.1 The Petitioner has submitted that to meet its CAPEX requirements funding through Loans, internal cash-flows and Capital Contributions are sufficient to meet most of the CAPEX. The Petitioner provided the following funding plan for the proposed investment under the Optimally Achievable Scenario;

Rs. in Billions

Proposed Funding Plan						
Description	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**Total**
ADB Tranche-III	2.9	-	-	-	-	2.9
ADB Tranche-IV	-	2.5	-	-	-	2.5
ADB Funding for AMI Metering	-	-	-	-	18.4	18.4

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Internal cash flows from operations	9.0	4.2	4.9	4.3	10.0	32.3
Total	**11.9**	**6.7**	**4.9**	**4.3**	**28.4**	**56.2**
Consumer Contribution	**1.7**	**4.1**	**1.8**	**4.3**	**2.0**	**13.9**
Grand Total	**13.6**	**10.8**	**6.7**	**8.6**	**30.4**	**70.1**

21.2 The Authority understands that funding arrangement for the proposed investment and expansion plans will be one of the major challenges for the Petitioner. Thus, in order to analyze the funding capacity of the Petitioner, the Authority carried out an analysis of its future RoRB and Depreciation expense based on the allowed investment. It was observed that that the Petitioner can be able to fund the allowed investments from its own resources.

22. **The linkage between investment plans and performance standards is the core component of investment plans therefore IESCO may provide a comprehensive year wise analysis about improvement in SAIFI, SAIDI and other performance standards achieved through its investments.**

22.1 The Petitioner submitted its response as under;

Description	2015 (Baseline)	2016	2017	2018	2019	2020
SAIFI (numbers)	0.04	0.03	0.02	0.02	0.02	0.02
SAIDI (hours)	1.0	0.98	0.97	0.96	0.96	0.95
Supply Restoration (hours)	2.0-4.0	2.0-3.5	1.5-3.5	1.0-3.0	1.0-3.0	1.0-2.0
Fatal Accidents	6	0	0	0	0	0
Non-Fatal Accidents	28	0	0	0	0	0
No of meters read manually	Mobile Reading	MOBILE & HHU	Only HHU	Only HHU	Only HHU	Only HHU
Reduction in billing related complaints (No.)	77386	69647	62683	56414	50773	45696
T&D Losses (%)	9.41	9.39	9.37	9.37	9.35	9.31
Technical Loss (%)	8.931	8.912	8.893	8.873	8.854	8.834
Non-Technical Losses (%)	0.475	0.478	0.477	0.477	0.476	0.476
Service to Supply related complaints (hours)	3	3	3	3	3	3
Meters Replacement	61356	119109	119109	119109	119109	119109

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22.2 The base line performance of IESCO is quite satisfactory for all the parameters except for safety areas where the data is not in accordance with the already submitted data by the Petitioner in its Annual Performance Report.

The Authority noted that the process of introducing an amendment in the Performance Standards is under way and would be finalized shortly. However, in the meanwhile, not to overstep the legal parameters, the Authority directs that the Petitioner must follow the already laid Performance Standards (PSDR-2005). In case the Performance Standards are amended and are subsequently approved, the Petitioner will comply with the amended Performance Standards.

22.3 The Authority has therefore set the following targets in terms of Performance Standards for the Petitioner:

Description	Baseline	2016	2017	2018	2019	2020
SAIFI (Nos.)	0.036	0.030	0.020	0.020	0.020	0.020
SAIDI (Minutes)	0.995	0.995	0.995	0.995	0.995	0.995
Fatal accident	6 + 8*	0	0	0	0	0
Non-fatal accident	28 + 04*	0	0	0	0	0
Reduction in billing related complaints	77386	69647	62683	56414	50773	45696
T&D loss (%)	9.41	9.39	9.22	8.93	8.49	7.80
Meters replacement	61356	119109	119109	119109	119109	119109

* Represents No. of fatal and Non-fatal accidents of general public which the Petitioner did not mentioned.

22.4 Time frame for new connection in terms of Overall Standard 3 of PSDR 2005 is as follows:

S. #	Description	Time limit for issuance of demand notice after receipt of application	Time limit for provision of connection after payment of demand notice
1	For supply at voltage level up to 400 V and load up to 15 kW	10 days	20 days
2	For supply at voltage level up to 400 V and load above 15 kW but not exceeding 70 kW	15 days	38 days
3	For supply at voltage level up to 400 V and load above 70 kW but not exceeding 500 kW	15 days	58 days

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4	For supply at voltage level up to 11 or 33 kV and load above 500 kW but not exceeding 5000 kW	30 days	76 days
5	For supply at voltage level 66 kV and above for all loads	45 days	451 days

Supply Restoration (in minutes) must be complied as per Guaranteed Standard 1 of PSDR 2005.

23. <u>DECISION OF THE AUTHORITY:</u>

23.1 The Authority has observed that the Petitioner, as per requirements of IGTDP, submitted its investment plans for the next five years under both the scenarios i.e. **Optimally Achievable Scenario**, wherein it has proposed a total investment of Rs.56,229 Million (excluding the consumer contribution of Rs.13,944 million) and **Best Case Scenario** wherein it has proposed a total investment of Rs.80,555 million (excluding the consumer contribution of Rs.13,944 million).

23.2 The Authority, in order to properly evaluate the proposed investment by the Petitioner, also considered the actual spending of the Petitioner against the allowed investment over the last three years period, as per the details provided by the Petitioner, which are reproduced as hereunder;

(Rs. in Million)

Year	Investment Allowed	Actual Spending	Spending %
2012-13	7,223	4,792	66%
2013-14	7,700	4,483	58%
2014-15	7,823	4,827	62%

23.3 The above analysis clearly depicts that the Petitioner has not been able to spend the amount in full, allowed by the Authority during the last three years. During the FY 2014-15, the Petitioner has spent only Rs.4,827 Million i.e. 62% of the allowed investment of Rs.7,823 Million, which is maximum spending, made by the Petitioner, during the last three years. The Petitioner although has been able to make investment only in the range of Rupees 4 to 5 billion during the last three years, however, under the present IGTDP, it has requested for around *Rupees Fifty Six billion*, over a period of five years which translates to an average of around *Rupees Eleven billion* per year. The Authority understands that with the conditions remaining the same it would be unlikely that the Petitioner would be able to spend such amounts, however, the Authority in view of the privatization scenario, is of a firm view that the incoming-g private partner

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would make all out efforts to make the existing system robust and is expected to carry out extra ordinary investments. Thus, keeping in view the prospective privatization scenario, the Authority has decided to allow the following investments to the Petitioner, over the five year's control period, inclusive of the consumer contribution/ deposit work of Rs.13,944 million.

Million Rs.

Description	Requested Optimal Case	Requested Best Case	Allowed Investment
STG	19474	32913	17184
DOP (Expansion and Rehabilitation)	8349	15002	8349
Vehicles and Tools & Plans	267	267	268
Civil Works	636	636	636
GIS Mapping Plan	243	243	191
AMR/Commercial Improvement	18420	18420	18420
Other Functional Plans	2336	2336	2336
Miscellaneous Charges	6504	10737	6351
TOTAL	**56229**	**80554**	**53735**
Consumer Contribution	**13944**	**13944**	**13944**
Grand Total	**70173**	**94498**	**67679**

Year wise breakup of the allowed investment is as under;

Million Rs.

Description	2015-16	2016-17	2017-18	2018-19	2019-20	Total
STG	6748	2545	1566	1196	5129	17184
Distribution (Expansion & Rehabilitation)	1668	1668	1669	1669	1675	8349
Vehicles and Tools & Plants	46	56	48	56	62	268
Civil Works	108	132	120	132	144	636
GIS Mapping Plan	22	56	75	5	33	191
AMR/Commercial Improvement	0	0	0	0	18420	18420
Other Functional Plans	520	602	537	272	405	2336
Miscellaneous Charges	1109	902	877	932	2531	6351
TOTAL	**10221**	**5961**	**4892**	**4262**	**28399**	**53735**
Consumer Contribution	**1697**	**4129**	**1827**	**4331**	**1960**	**13944**
Grand Total	**11918**	**10090**	**6719**	**8593**	**30359**	**67679**

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23.4 The Authority while going through the requested cost submitted by the Petitioner, observed that the Petitioner's requested investment is on the higher side when compared with the similar cases. The Authority noted that the Petitioner has mentioned to use the GIS Technology for the new Grids which as per the Petitioner has a higher cost. The Petitioner has also submitted to use the Rail conductors along-with the Lynx conductors, for its Transmission Lines works, and to largely use the Osprey conductors for its 11 KV lines which as per the Petitioner require higher investments.

23.5 The Authority however is of the view that the cost for Extension 132 (T/Bay) and New TL 132 kV SDT under the STG program of the Petitioner is exaggerated and therefore has decided to rationalize the requested cost on the basis of cost requested in other similar cases. Similarly the impact of contingencies / escalation etc. included in the total cost by the Petitioner is also on the higher side, therefore, in order to rationalize the same, the Authority has decided to include escalations/ contingencies etc. @ 5% of the allowed costs. Further, there was a totaling error in the cost of GIS Mapping Plan requested by the Petitioner, which instead of Rs.243 million as claimed by the Petitioner is Rs.191 million and accordingly Rs.191 million have been considered while working out the total investments of the Petitioner.

23.6 The Authority considers that removal of system constraints for transferring power from NTDC system must be the first priority, followed by improvement in metering systems through ELR and overloaded grids.

23.7 The Authority in order to ensure prudent and effective spending of the allowed investment has approved the Target Investment Plan for the Petitioner, as given in **ANNEX-VII**, for the period of five years, so that progress on the implementation of these projects can be monitored effectively and in case of any failure regarding proper implementation of the target plans, proceedings will be initiated against the Petitioner under NEPRA Act, Rules and Regulations. Thus, after completing the approved investment plan, the Petitioner would accomplish the following;

Total MVA Capacity of Power Transformers after adding 2405 MVA at 132 KV Grids	7629 MVA
Total KVA at Distribution Level after adding 296,575 KVA	4003575 KVA
Total Length of Transmission Lines after adding 488 km	3940 km
Total length of HT (11 kV) Line after adding 820 km lines	25092 km
Total Length of LT (415/230 V) after adding 220 km lines	26365 km
The HT and LT ratio after Implementation:	0.95
Average Length of 11 kV Feeders at Present:	38.0 km
Average Length of 11 kV Feeders after 5 Years:	32.9 km
Capacitors Installation (132 kV Fixed):	36 MVAR
Capacitors Installation (11 kV Fixed):	178 MVAR
Improvement in Power Factor	100 %

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23.8 The addition of 2405 MVA at 132 KV Grids and addition of 296,575 KVA at Distribution level would bring overloading at zero level. Thus, all the system constraints highlighted by the Petitioner would be removed after the implementation of five year plan. The Authority considers that the impact of all the investment may get diluted, if the Petitioner carry out village electrification imprudently. The Authority is cognizant of the fact that imprudent village electrification may result in overloading and increasing T&D losses. In the past, the village electrification was restricted to poles, lines and distribution transformers only. Its impact on the existing grid or strengthening of the grid due to the additional load in the form of village electrification was totally ignored. In view thereof, the Authority directs the Petitioner to spend at least 20% of the village electrification funds for improvement / up-gradation of the grid. The Petitioner is further directed not to undertake any village electrification which would result in overloading of its system. The village electrification would only be undertaken without augmentation of the grid, if it already has spare MVAs.

24. <u>One Time Opener for the IGTDP</u>

24.1 The Petitioner also requested for provision of one-time adjustments regarding amendments/revisions to the DIIP in the event of any potential private sector participation. However no further justification / arguments have been provided by the petitioner in support of its proposal.

24.2 The Authority after careful consideration of the Petitioner's request, is of the view that the mechanism of annual review of the investment takes care of the concerns of the Petitioner without provision of one time opener. If the private investor wants to add or modify something in the IGTDP, it is free to do that subject to the approval of the Authority as per the prescribed mechanism.

24.3 Here it is pertinent to mention that considering the fact that RAB for the FY 2015-16 & onwards has been calculated based on the allowed level of investments and in case the Petitioner ends up making an investment higher than already allowed, so in order to allow the impact of the incremental investment the Authority has decided to annually true up the RAB, as per actual investments. Thus, any investments carried out by the Petitioner beyond the allowed level, during the MYT period, would be catered for under prior year investment mechanism.

25. <u>Sharing of benefits of Efficient Procurement</u>

25.1 The Petitioner has also requested that to bring cost efficiency from private sector participation and as a result of ongoing-privatization process, it is proposed that where an investment has been incurred efficiently i.e. the completion of required investments is closed at a lower cost compared to what is included in the allocated regulatory budget,

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half of the difference in cost between budgeted and incurred cost be included in the Rate Base to fairly share capital efficiency benefits with customers and owners.

25.2 The issue has been addressed under the RoRB part of the determination.

26. **Issue # 7: Whether Petitioner's reference Return on Regulatory Asset base based on projected rate of return of 18.85% for FY 2015-16 is justified for future adjustments till FY 2019-20?**

27. **Issue # 8: Whether the Petitioner's requested 19% floor on equity, is justified?**

28. **Issue # 9: Whether the Petitioner's requested 05 year PIB MYT at October 08 2015 is justified?**

29. **Issue # 10: Whether the Petitioner's requested beta of 1.44 based on averaging of foreign listed companies is justified?**

30. **Issue # 11: Whether the Petitioner requested cost of debt as per actual is merit consideration?**

31. **Issue # 12: Whether the Petitioner request for 'one time' adjustment as a result of private participation to adjust fixed asset based is merit consideration?**

31.1 The Petitioner has requested the following returns for FY 2015-16 to 2019-20 based on projected rate of return (WACC) of 18.85%, calculated on 70:30 Debt to Equity Ratio.

	2014-15 Allowed	2015-16	2016-17	2017-18	2018-19	2019-20
Proj. RoRB (Rs. In Million)	4,473	6,807	8,902	9,694	10,209	12,835
Proj. RoRB (Rs./ kWh)	0.55	0.81	1.03	1.09	1.11	1.36

31.2 The Petitioner has proposed the yield to Maturity of Five Year PIB issued by SBP, as the risk free rate, i.e. 9.25% prevailing on October 08, 2015, as per Clause 19(3)(a)(ii) of the Tariff Methodology.

31.3 The Petitioner has worked out the Equity market risk premium based on 10 year annual percentage change in Karachi Stock Exchange 100 index. Based on this analysis, the Petitioner has estimated Market Premium to be 20.30%, however, if five years average is assumed the same stands at 29.6% as submitted by the Petitioner. Accordingly, for the purpose of calculating the market premium, the Petitioner has used 10 year annual percentage change in KSE 100 index.

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31.4 Regarding Calculation of Beta, the Petitioner has submitted that the equity Beta allowed by NEPRA as per tariff determination for 2011-12 was 1.33. The Petitioner has mentioned that it has recalculated the equity Beta, based on foreign comparable DISCOs, as the local comparable companies are not available. The Beta has been computed by the Petitioner using Individual 2-year and 5-year Company based unlevered beta for the Foreign Listed companies as at June 30, 2015, adjusted for the capital structure based on 70:30 Debt/Equity Ratio which worked out as 1.44. The Petitioner provided the following calculations of Beta during hearing;

Comparable Company	Country	Leverage		Tax rate	Company Beta		Unlevered beta	
		2years	5 years		2 years	5 years	2-years	5-years
Dhaka Electric Supply Company ltd	Bangladesh	0.35	0.32	27.50%	0.74	0	0.59	0.59
Interregional Distribution Grid Company of centre joint stock company	Russia	3.5	2.06	20%	0.31	0.75	0.08	0.28
Interregional Distribution Grid Company of South joint stock company	Russia	14.87	10.56	20%	0.64	1.22	0.05	0.13
Joint stock company vo. energy	Russia	0.57	0	20%	1.47	-	1.01	1.01
JSC Rossety	Russia	6.92	5.21	20%	0.04	1.44	0.01	0.28
krasnoyarskenergosoyt OAO	Russia	0.59	0.25	20%	0.60	0.64	0.41	0.53
vladimir power sale company open joint stock company	Russia	5.05	2.54	20%	0.58	0.61	0.12	0.20
Average							*0.32*	*0.43*

Asset Beta 2 Year	0.32
Asset Beta 5 Year	0.43

Risk Free Rate (5yr PIB)	9.25%
Return of the Market	20%

Debt	70%
Equity	30%

Equity Beta	
Beta 5 Year	1.44

31.5 The Petitioner has accordingly calculated the equity component of the WACC in accordance with Capital Asset Pricing Model (CAPM) and has requested that a floor of 19% for return on equity may be allowed for protection of equity investors.

31.6 The Petitioner has calculated the return on equity using the following formula

$$K_e = R_f + (beta \times risk\ premium)$$

31.7 Based on the above, the Return on Equity worked out by the Petitioner is 25.17%.

31.8 The cost of debt has been assumed by the Petitioner as 16.15% based on the loan amounts outstanding as at June 30th 2015 and rates charged, as provided hereunder:

IESCO Loan Profile				
Long Term Loans	**Rs in Billion**	**Weights**	**Rate Charged**	**Weight Average Rate**
Asian Development Bank Tranche –I	2,057	26.42%	17.00%	4.49%
Asian Development Bank Tranche –II	1,606	20.62%	15.00%	3.09%
International Bank for Reconstruction and Development	3,688	47.37%	17.00%	8.05%
Asian Development Bank Tranche –III	252	3.24%	15.00%	0.49%

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Earthquake Reconstruction and Rehabilitation Authority	182	2.34%	1.00%	0.02%
Total	7,785	100%		16.15%

31.9 The Petitioner has further submitted that cost of debt has not been adjusted for any tax implications due to the reasons that for the preparation of the MYT Petition, no tax provision has been assumed based on the fact that its books show accumulated tax losses and if any taxes are payable/paid the same will be claimed as per actual. The Petitioner has also proposed that keeping in view the possible private sector participation, the said rate may kindly be reset though one time reopener on the cost of debt. It was further proposed that subsequent to the resetting, an incentive mechanism may be introduced to encourage the new investor to reduce the existing cost of debt and that a sharing mechanism may be introduced in line with the power generation policies. The Petitioner has also requested a one-time opener after privatization, for the revision of Fixed Asset Base, (as the current RAB is without revaluation surplus) and the private party may be allowed appropriate return to private players, depending upon the transaction structure. Thus, through one-time opener the calculation of RoRB and Depreciation may be revised. The Petitioner has also requested for annual adjustment in the risk free rate.

31.10 The Petitioner has further requested for adjustment at the end of every year in RAB for variance between actual and budgeted CAPEX. Further, to bring cost efficiency from private sector participation, the Petitioner has proposed that where an investment has been incurred efficiently for example, the completion of required investments is closed at a lower cost compared to what is included in the allocated regulatory budget, half of the difference in cost between budgeted and incurred cost be included in the Rate Base to fairly share capital efficiency benefits with customers and owners.

31.11 The Authority, after careful evaluation of the Petitioner's submissions is of the view that 5 years PIB Bond's rate as risk free rate is in line with the approved Tariff Methodology as the Methodology prescribes the linking of risk free instrument with the control period of tariff determination. Since the instant petition has been submitted under a MYT regime for a period of five years, therefore, ideally the tenure of the debt instrument used for the purpose of risk free rate should be of five years as used by the Petitioner in its workings. The Authority has therefore decided to use the weighted average yield on 05 Years Pakistan Investment Bond (PIB) as of July 16, 2015, being start of the tariff control period, as the risk free rate, which is 8.9652%. The Authority also understands that since PIB Bonds cut off yield rate is determined through bidding process and is traded in Pak Rupees, hence it takes into account the country risk and inflation.

31.12 The Petitioner proposed a market risk premium of 11.05% based on 10-year movement of Karachi Stock Exchange index, however, no detailed calculations in this regard has been provided by the Petitioner. The Authority understands that the expected return on

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any investment is the sum of the risk-free rate and an extra return to compensate for the risk. This extra return or 'risk premium' is the difference between market rate of return and risk free rate. Generally, the return on stock market index is taken as a measure of market rate of return. The Authority in order to have an appropriate measure of the market rate of return, analyzed KSE-100 Index return over a period of 8 years and also considered Analysts' consensus/ research houses estimates in this regard. The rate of return on KSE-100 index during the period from 2008-2015 was around 16.5%, which translates into risk premium of around 7.53% (with risk free rate of 8.9652%).

31.13 Thus, keeping in view the information of Analyst/research house, the Authority considers Market Risk Premium of 7% as reasonable for calculation of cost of equity component.

31.14 While reviewing the Petitioner's working with respect to Beta of 1.44, it was observed that data of only seven (7) entities were analyzed.

31.15 The Authority, in order to have an appropriate measure of the Beta, carried out its own study and detailed analysis, whereby not only the local but International Markets were also explored. The Authority also considered a recent study undertaken by Castalia for the ERC in the Philippines using 111 firms selected from the Damodaran (a professor in Stern Business School at New York University) data set. The average Beta from this sample was 0.997 for the transmission and distribution companies and 1.073 for the whole sample. The average gearing of the sample is 67%. If the same is worked out on 70/30 gearing, the beta of 0.997 works out as 1.10. A few examples of Beta used by different Regulators in the world are given as hereunder;

Regulator	Beta	Gearing
Ofgem	0.9-0.95	65/35
AER	0.7	60/40
NZ Com	0.61	60/40
Northern Ireland	0.74	60/40

31.16 A beta of 0.75 at a gearing of 60/40 – which is around the mid-point of the above estimates – equates to a beta of 1.0 at a gearing of 70/30. A beta of 0.8 at 60/40 equates to a beta of 1.07 at 70/30. A beta of 0.95 at a gearing of 65/35 works out as 1.11 at 70/30 gearing.

31.17 Thus, keeping in view the finding of the study undertaken by Castalia for the ERC in the Philippines using 111 firms, range of betas used by international Regulators and

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findings of the Authority's in house study, it has decided to assess the beta in the instant case as 1.10.

31.18 As regard the cost of debt, the Authority understands that 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. The Authority during its determination in the matter of XWDISCOs pertaining to the FY 2014-15, decided to use the actual rate of debt appearing in the balance sheets of the XWDISCOs (excluding the loans which were disallowed by the Authority) considering the fact that the payment of these loans were due in the FY 2014-15 and onwards. All of these loans were relent loans whose interest ranged between 15%-18%. When this decision was made, the Privatization scenario was not active and the decision was primarily based keeping in view the single year tariff regime and public sector ownership of the XWDISCOs. The cost of relent loans becomes irrelevant in the privatized scenarios being not reflective of the current cost of debt. Considering the future privatization policy of GoP, and the fact that the Authority is awarding MYT for the future 5 year's period, a forward looking approach has been used for estimating cost of debt of these loans for WACC calculation. Here it is pertinent to mention that historically when State Owned Enterprises were privatized e.g. K- Electric, the relent loans on the balance sheet of K-Electric were converted into equity by the GoP. Further, the Authority was also anticipating some additional equity from the GOP in some form, that's the reason why the Authority raised the optimum capital structure from 80:20 to 70:30. In view of aforementioned, the Petitioner's request of initially setting cost of debt at 16.67% and then giving it an opener does not merit consideration, hence rejected by the Authority.

31.19 The Authority, in order to do a fair evaluation of the cost of debt, considered recent TFCs / Sukkuk launched by K-Electric Limited with a 5 year's term maturity, whereby Rs.1,500 million were raised by K-Electric on a rate of 3 month KIBOR + 2.75% during FY 2013-14. Here it pertinent to mention that the K-Electric also raised Rs. 22 billion on 7 years TFC on a rate of 3 Months KIBOR plus 1% during 2014-15.

31.20 In view of the aforementioned, the Authority has decided to take cost of debt as 3 month's KIBOR + 2.75% spread. Consequently, the cost of debt has been worked out as 9.76% i.e. 3 Months KIBOR of 7.01% as of 2nd July 2015 plus 2.75% spread.

31.21 As per the Methodology, the adjustments in RORB for future periods are based on changes in RAB only, meaning thereby that the cost of debt and equity is locked for a

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period of 5 years and the Petitioner can maximize its profits in absolute terms through increasing its Asset base. Here it is pertinent to mention that Authority's approved methodology is silent on the variation of KIBOR fluctuations.

31.22 When the Petitioner is requesting to assess the risk free rate annually, it is primarily asking to reassess the cost of equity annually. The Authority understands that adjusting Cost of Equity during the multi-year tariff period is not a global regulatory norm. It appears that by annual review of risk free rate the Petitioner is trying to cover the fiscal risk on future investments. If this is the case, then it may be noted that risk free rate can neither rise in isolation nor is it the only determinant of Cost of Equity. In an environment of rising interest rates, stocks are negatively impacted in general. So any increase in risk free rates would generally entail a decrease in stock market return, thus lowering the market risk premium. Therefore, the contention that any increase in risk free rate would automatically increase Cost of Equity for future investments is not correct. In addition, in a multi-year tariff environment, capital investments are planned for the whole tariff period. The estimated Cost of Equity is already based on assumption of a certain percentage of equity investment in these periodic future investments. This is why a 5year risk free rate and long term market premium is used in Cost of Equity calculations. This methodology ensures that the allowed Cost of Equity is not impacted by short term rate changes. In case an annual adjustment in Cost of Equity is required, then the working would be on the basis of one year risk free rate and market premium. Lastly, short term rates and annual adjustment in Cost of Equity render the whole purpose of multi-year tariff useless as the primary rationale for allowing multi-year tariff to XWDISCOs in Pakistan is that this will reduce the uncertainty to investors regarding their equity returns. Frequent adjustments make investor's return less stable by making them more prone to short term market volatility. In view thereof, the Authority has decided to lock the cost of equity for the whole control period. In view of afore going, the request of reviewing cost of equity including risk free rate is rejected.

31.23 The Petitioner has requested putting a floor 19%. In this regard the Petitioner during the hearing submitted that for investment in IPPs, NEPRA has allowed a US$ based minimum ROE of 17% or above for private investors to incentivize investment in power sector of Pakistan, which are in dollar terms and accordingly actual returns in rupee terms will be higher after taking into account the rupee devaluation. The Petitioner also mentioned that since GoP is opening the distribution sector for private participation and a reference in this case is the 1994 Policy which was successful in attracting investment to Pakistan's power sector because it offered an allowed return and safeguard from currency depreciation to the private investors. The Petitioner presented the following comparison of allowed ROE in this regard;

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Sector	ROE
Wind	17%
Solar PV	17%
Local Coal (Other than Thar coal)	20%
Imported Coal	17%
Small Hydro	20%

31.24 The Authority considers that Petitioner's comparison of Authority's return on IPPs with the distribution business is not valid. The Authority's allowed exchange rate fluctuation to IPPs for the green filed projects, is in line with the GOPs policy, whereas the Petitioner is a going concern business. Further, it does not cover the rupee devaluation upfront rather it hedges the exchange rate fluctuation i.e. it works both ways. If the margin of rupee devaluation is allowed upfront, it would result in undue benefit to the Petitioner in case the Rupee appreciates (as happened in the last two years). Thus, in view of the aforementioned, the return of equity, as per the Tariff Methodology is locked for a period of 5 years, whereby it would be earning the assessed return for the whole five years. In view thereof, the request for premium on account of rupee devaluation is not accepted.

31.25 As regard the assessment of cost of debt annually, the Authority considers that since interest payment is an obligatory cash flow liability unlike discretionary dividend payment and considering the fact that any default may result in chocking of the Petitioner, hence the Authority has decided to cover the risk of floating KIBOR, thus, any 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 whereby any savings resulting from cheaper financing by the Petitioner to the extent of 2.75% spread. If the Petitioner manages to negotiate a loan below 2.75% 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 2.75%, the additional cost would be borne by the Petitioner.

31.26 All the other factors remaining the same, the WACC has been re-worked as below;

$$ke = RF + (RM - RF) \times \beta$$
$$= 8.9652\% + (7\% \times 1.1)$$
$$= 16.67\%$$

The cost of debt is taken as; Kd = 9.76%

$$WACC = [Ke \times (E / V)] + [Kd \times (D / V)]$$

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Where E/V and D/V are equity and debt ratios respectively taken as 30% and 70%;

WACC = {16.67% x 30%} + {9.76% x 70%} = 11.83%

31.27 Thus, considering the tax as a pass through item, the Authority using the aforementioned rate of return of 11.83%, has assessed Rs.2,937 million as return on rate base as per the following calculations:

Description	Rupees in Million	
	FY 2014-15 Audited	FY 2015-16 Projected
Opening fixed assets in operation	57,547	61,710
Assets Additions during the year	4,163	7,266
Closing Fixed Assets in Operation	**61,710**	**68,975**
Less: Accumulated Depreciation	18,481	20,943
Net Fixed Assets in operation	**43,228**	**48,032**
+ Capital Work in Progress (Closing)	6,226	10,878
Total Fixed Assets	49,454	58,910
Less: Deferred Credit	29,252	29,730
Total	**20,202**	**29,181**
Average Regulatory Assets Base		24,691
Return on Rate Base @ 11.83%		2,921

31.28 The Authority while going through the Financial Statements of the Petitioner for the FY 2014-15 noted that the Petitioner has insufficient cash balance as on 30th June 2015 against its pending liability of receipt against deposit works and consumer security deposits. The insufficient cash balance indicates 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 considers 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. Similarly, 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. The Petitioner has to provide rational / justification for improper utilization of the money because the consumers have to suffer unnecessary delay on this account.

31.29 In view of the aforementioned reasons the Authority considers that it will be unfair and unjust for the consumers to suffer due to the unlawful act of the Petitioner. Accordingly, the Authority has decided, to include the entire amount of receipts against deposit works as a part of Deferred Credits for the assessment of RAB for FY 2015-16. The Authority

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directs the Petitioner to ensure that in future consumer's deposits are not utilized for any other purpose. The Petitioner is also being directed to restrain from unlawful utilization of receipts against deposit works and security deposits, failing which, the proceedings under the relevant law shall be initiated against the Petitioner. The Petitioner is also directed to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance.

31.30 The RoRB of Rs.2,921 Million and the RAB of Rs.24,691 calculated for FY 2015-16 will be the reference RoRB and RAB respectively for future adjustment of RoRB during the tariff control period. The RoRB adjustment will be made in accordance with the following formula, as prescribed in the Methodology;

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

Where:

$RORB_{(Rev)}$	=	Revised Return on Rate Base for the Current Year
$RORB_{(Ref)}$	=	Reference Return on Rate Base for the Reference Year
$RAB_{(Rev)}$	=	Revised Rate Base for the Current Year
$RAB_{(Ref)}$	=	Reference Rate Base for the Reference Year

31.31 Considering the fact that RAB for the FY 2015-16 & onwards has been allowed based on estimated level of investments and in case the actual investments carried out turn out to be different from the estimated level, i.e. the Petitioner ends up in making higher investments than the allowed, the benefit of the incremental benefit must be passed on to the Petitioner and vice versa. In view thereof, the Authority has decided to true up the benefit of incremental investments and vice versa each year through the Prior Year Adjustment mechanism, which addresses the concerns of the Petitioner for adjustment at the end of every year in RAB for variance between actual and budgeted CAPEX and the one time opener regarding re-assessment of Asset Base after privatization.

31.32 Further with regard to the issue raised by the Petitioner regarding inclusion of savings arising due to efficient procurement, in its rate base, the Authority considers that any procurement whether in the public or in the private sector has to be efficient based on competitive rates. The governing rules in the matter of any public procurement are PPRA Rules which ensure efficient / competitive procurement. The Authority believes that the private investor will also ensure its procurement on most competitive basis which obviously will be a reflection of the prevailing market conditions. The Authority therefore fails to understand the rationale behind the Petitioner's claim. Even if any procurement results in savings, the final true up would be based on the actual

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procurements and any savings would be reinvested by the Petitioner, thus not only ensuring allowed returns but would also end up in terms of efficiency gains e.g. by way of reduction in T&D Losses etc., all of which will be retained by the Petitioner. Therefore, the request of the Petitioner to include half of the difference between the budgeted and incurred cost, in the Rate Base does not merit consideration.

31.33 Regarding the issue of onetime adjustment of RAB, in case of private participation, the Authority considers that the consumers of the Petitioner have been paying a nominal return on the allowed RAB, thus incorporates the impact of inflationary increases over the years. In addition, the Petitioner has been allowed depreciation on the historical cost of its assets, over the past years and the same amount is being paid by the consumers of the Petitioner on a specific asset base. The Authority considers that any change of ownership does not form any grounds for the Petitioner for enhancing its return resulting in additional burdening of its consumer. The Authority feels that the objective of privatization is to provide services most efficiently at reduced rates rather than enhancing the tariff to increase the profits of the investor. In view thereof, the request of the Petitioner with respect to onetime adjustment, in the opening historical cost of assets does not merit consideration.

32. <u>Issue # 13: Whether the Petitioner's reference O&M cost of for the FY 2015-16 is justified for future adjustments till FY 2019-20?</u>

33. <u>Issue # 14: Whether the additional hiring of 10,304 under different cadres by the end of FY 2019-20, is justified?</u>

34. <u>Issue # 15: Whether setting efficiency factor X not be more than 10% of the CPI after 3rd year of tariff control period is justified?</u>

35. <u>Issue # 16: Whether the repair & maintenance cost to be determined via "K" factor, capped at 2.75% of net opening fixed assets, is justified?</u>

36. <u>Issue # 17: What is the criteria considered by the petitioner for segregation between controllable and un-controllable costs?</u>

37. <u>Issue # 18: Whether the "Z" factor requested by the Petitioner to cover damages caused by natural disasters, is merit consideration?</u>

37.1 The Petitioner stated that O&M cost includes the estimated cost of service, repair, necessary materials for operations, salary, administration, management and other operating costs relating to Petitioners distribution and supply business. During the hearing of MYT for FY 2015-16 the Petitioner has presented the historical trend of its actual O&M expenses which is given below;

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Description	2012-13	2013-14	2014-15
	Actual		
Salaries Wages & Other Benefits (Cash)	4,923	5,601	6,329
Travelling Expenses	217	237	252
Repair & Maintenance	700	737	872
Vehicle Running	313	294	282
Misc. Expenses	398	455	498
Total	6,551	7,324	8,233
Salaries Wages & Other Benefits (Non-Cash)	919	811	3,170
Net Provision (mainly doubtful debts)	-	(382)	138
G. Total	7,470	7,753	11,541

37.2 The Petitioner mentioned that the O&M expenses 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. As per the Petitioner, employees' cost includes costs related to salaries and benefits of all staff (administrative, operational and security). The Petitioner stated 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.

37.3 The Petitioner has requested that the O&M cost be bifurcated into controllable and uncontrollable cost components and the 'Uncontrollable costs' are requested to 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.

37.4 The Petitioner has proposed following formula for O&M cost which is reproduced hereunder:

$$O\&M_t = [Controllable\ cost\ per\ unit\ of\ last\ year\ \times \{1 + (CPI - X)\} \times units\ sold] + Uncontrollable\ cost + Z + K$$

Where,

CPI = Change in Consumer Price Index over last year

X = Efficiency factor

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Z = Cost relating to extraordinary events
K = Repairs and Maintenance costs

37.5 The Petitioner delineated that the aim of the formula is to provide the Petitioner with targets to improve operating efficiency within the five-year tariff period.

37.6 <u>CPI Inflation Rate</u>

37.6.1 The Petitioner requested that the CPI inflation rate may be allowed based on change in Consumer Price Index as reported by Pakistan Bureau of Statistics.

37.7 <u>Controllable Cost</u>

37.7.1 The Petitioner has not provided any basis of projections of controllable O&M expenses for the FY 2015-16 i.e. the base year. However, the Petitioner has projected the controllable O&M costs by assuming an inflation rate of 5% for each year of the tariff control period excluding the base year. The Petitioner further stated that controllable cost during control period will also increase annually due to new projects (as envisaged in DIIP) 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. The Petitioner provided following detail of its controllable cost;

Description	Test Year	Base Year	Control Period			
Rs in Million	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20
<u>Existing cost streams</u>						
Travelling Expenses	252	250	263	276	289	304
Office supplies & Other Exp	75	89	94	98	103	108
Vehicle Expenses	282	308	324	340	357	375
Power Light & Water	28	38	40	42	44	47
Communication & Postage	27	46	48	51	53	56
Advertising & Publicity	5	50	53	55	58	61
Subscription & Periodicals	1	2	2	2	2	2
Entertainment	3	3	3	3	3	4
Out Side Service Employed	14	5	5	6	6	6
Misc. Expenses	47	50	53	55	58	61
Bank Charges	7	11	11	12	12	13
Insurance Premium	26	30	32	33	35	36
Sub Total	768	882	926	973	1,021	1,072

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Impact of New Projects						
FY 2016		155	163	171	179	188
FY 2017		-	126	133	139	146
FY 2018		-	-	76	80	84
FY 2019		-	-	-	106	111
FY 2020		-	-	-	-	140
Sub Total		155	289	380	505	670
Grand Total	768	1,037	1,215	1,352	1,526	1,742

37.8 Uncontrollable Cost

37.8.1 With regards to uncontrollable cost (as per the Petitioner), it has projected different growth rates for different cost streams based on management experience. The Petitioner has mentioned that uncontrollable cost factors would be affected by growth in employee benefits, consumer growth rates and growth in regulatory fee etc. The Petitioner also stated that uncontrollable cost will also increase annually due to new projects (as envisaged in DIIP) and accordingly projected cost includes impact of new projects. The Petitioner provided following detail of its controllable cost;

Description	Test Year	Base Year	Control Period			
Rs in Million	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20
Pay and Allowances - Existing	7,585	8,431	9,696	11,150	12,823	14,746
Pay and Allowances - New Projects	-	1,106	2,808	3,210	3,488	3,980
Rent, Rate & Taxes	37	42	46	50	55	61
Injuries & Damages	14	30	33	36	40	44
Collection Expenses	160	196	205	216	227	238
Professional Fees	36	52	56	61	66	71
Management Fee	-	86	90	94	99	104
NEPRA Fees	22	22	24	27	29	32
Misc. Costs due to New Projects	-	75	141	187	250	334
Grand Total	7,854	10,039	13,099	15,031	17,077	19,610

37.9 Salaries Wages & Other Benefits

37.9.1 The Petitioner has estimated an expense of Rs.9,537 (Including post-retirement benefits) under the salaries, wages & other benefits expense for the FY 2015-16 based on actual expense of the FY 2014-15 by;

- ✓ Merging therein ad-hoc relief for 2011 and 2012, which have an impact of 29% along with annual increments having an impact of 5%.
- ✓ 7.5% ad-hoc relief allowance and increase in medical allowance of 25%.
- ✓ Increase in Pay and Allowances also increased because of the provisioning for post-retirement benefits (based on actuarial valuation).

37.9.2 The Petitioner has included an amount of Rs. 1,106 million in its salaries, wages & other benefits on account of Pay & Allowances of new projects for the FY 2015-16.

37.9.3 The Petitioner has also proposed to recruit a total number of 10,304 additional staff from FY 2015-16 to FY 2019-20 as per the following plan;

Manpower Hiring Plan

BPS	2015-16	2016-17	2017-18	2018-19	2019-20
20	3	0	0	0	0
19	10	1	0	1	0
18	10	4	2	4	4
17	102	25	10	6	14
16	20	89	30	33	65
15	180	0	0	0	0
14	344	158	80	67	99
12	17	0	0	0	0
11	15	0	0	0	0
9	38	452	83	38	95
8	0	8	0	0	0
7	573	1657	211	104	235
6	291	104	20	19	40
5	1265	2263	233	90	275
4	19	0	0	0	0
3	81	38	16	6	16
2	332	143	53	42	71

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BPS	2015-16	2016-17	2017-18	2018-19	2019-20
Total	3300	4942	738	410	914

37.9.4 The Petitioner also mentioned that besides above 2015-16 the total promotions are 1,100 of existing staff into different cadres. The Petitioner in the hearing of MYT for FY 2015-16 provided the detail breakup of shortage of manpower as given below;

Description	Total Numbers
Existing Shortage based on 2004-5 sanctioned strength	3,300
Based on # NEPRA/R/TRF-100/12654-63 dated August 26, 2015 read with SOP's of XWDISCOs as per WAPDA's Office Order dated 08.08.2002:- Existing Hidden Shortage due to old Sanctioned Strength and Requires Revision of Sanctioned Strength/ Creation of New Posts due to increase in number of consumers/expansion in network	3,017
Creation of New Posts due to Establishment of New Formations in five years (Circle, Divisions, Sub Divisions, Grid Stations, Revenue Offices etc)	3,987
Total	10,304

Man power statistics (As of June 2015)			
Manpower	Sanctioned	Working	Vacant
Officer	478	352	126
Official	16218	13043	3175
TOTAL	16696	13395	3301

Category	BPS	Existing Sanctioned	As per Yardstick	Difference/ Required
M.R	7	1205	1965	760
B.D	5	617	963	346
LM-I	9	1123	1414	291
LM-II	7	1044	1460	416
ALM	5	3416	4620	1204
TOTAL		7405	10422	3017

Name Of Office to be Created	FY 15 – 20	Avg. Strength	Required Staff
Operation Sub Divisions	41	76	3131
Operation Divisions	9	21	189
Operation Circles	2	27	54
Revenue Offices	9	40	360
Sub Stations	17	11	182
Other offices	4	18	71
Total	82		3987

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37.9.5 According to the Petitioner its current head count is 13,395 against sanctioned strength of 16,695 thus at present 3,300 posts in different cadres are vacant, which affects the overall performance. The Petitioner accordingly requested that following its existing yard stick and sanctioned strength of WAPDA, hiring of 3,300 personnel for FY 2015-16 may be allowed along with proposed hiring plan for FY 2016-17 to FY 2019-20 in different cadres of BPS-2 to BPS-20. All new divisions, sub-divisions and other proposed organizational restructuring including each hiring will be made with BOD approval. The Petitioner explained that two more circles, 11 more divisions and 39 sub-divisions will be created based on future expansions and related organization requirements. The Petitioner emphasized that the listed above manpower requirements have been established in line with the Authority's directions vide letter No. NEPRA/R/TRF-100/12654-63 dated August 26, 2015 read with SOP's of XWDISCOs as per WAPDA's Office Order dated August 08, 2002 with regard to staffing as a result of bifurcation/creation of sub-divisions.

37.9.6 The Petitioner stated that it has started recruitments after lifting of ban on recruitments by GoP and the Recruitment Policy issued by the GoP. Subsequently on clearance by Ministry of W&P and in the light of resolution of BOD dated January 17, 2015, it outsourced the hiring process and signed an MOU with M/s Resource Access for conducting the written exams to ensure transparency and merit based recruitment. Appointments in BPS 17-18 have been completed (after interview and adhering to required formalities), while interviews for other categories are in process.

37.9.7 The Petitioner provided the following manpower statistics as of June 2015 highlighting the shortage of staff in the company:

Man power statistics (As of June 2015)

Manpower	Sanction	Working	Vacant	%age
Officer	478	352	126	74%
Official	16218	13043	3175	80%
TOTAL	16696	13395	3301	80%

Officers (BPS-17 to 20)					
Category	Regular	Contract	Daily Wages	Work Charge	Total
Technical	252	3	0	0	255
Non-Technical	95	2	0	0	97
TOTAL	347	5	0	0	352
Officials (BPS-1 to 16)					
Technical	8183	112	205	4	8504
Non-Technical	3964	111	262	202	4539
TOTAL	12147	223	467	206	13043
Grand Total					13395

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37.9.8 The Authority has carefully evaluated the Petitioner's request of additional hiring considering arguments put forward i.e. i) the existing shortage of staff based on the WAPDA's approved yard stick of sanctioned strength; ii) since the referred yards stick was approved long way back hence has some hidden shortages and requires revision of sanctioned strength due to increase in number of consumer / expansion in network. In order to build its case, the Petitioner also referred Authority's letter # NEPRA/R/TRF-100/12654-63 dated 26th August, 2015. The Authority has discussed additional hiring cost requested by the Petitioner with reasonable clarity in the tariff determinations for the FY 2013-14 and FY 2014-15. The Authority disallowed the cost of additional hiring as it was not based on proper justification and quantified benefits thereof, which would also include a comparison of existing state of affairs. The Authority feels that the Petitioner's request does not provide analysis, scientific study and different options keeping in view technological advancements. The Authority cannot accept the Petitioner's proposed hiring cost on the basis of old benchmarks. The Authority expects that the Petitioner needs to consider the investments in AMR, Smart metering and other advance techniques reducing reliance on manual and outdated methodology being practiced. The Authority adjudicated that the rationale for the additional hiring should not be merely based on sanctioned strength and vacant posts. If, according to the Petitioner's criteria for additional recruitment should be based on some yardstick, then that yardstick must be approved by the Authority, which the Authority has not approved in the instant case. In view thereof, the Petitioner's request of additional hiring based on the existing yard stick and sanctioned strength of WAPDA was declined. In the instant petition, again the Petitioner has relied on the vacant seats as per the WAPDA's yard stick. Although the Petitioner has provided next five years objectives in its DIIP however, after going through the Petitioner's investment plan thereof, the Petitioner has not specifically linked the efficiency targets with the requested cost of recruitments. The Petitioner was expected to establish the gap in its existing performance arising out of lesser staff and if that gap is filled it would bring about certain quantified improvement. As per the summary provided in DIIP, the Petitioner, intends to recruit 10,304 employees under different grades, to be recruited over a period of five years. The major recruitment is under Grade- 2 (39.1%) and Grade -5 (30.5%), which constitute around 70% of the proposed recruitment plan. The general designations in Grade – 2 are Security guards, Sweepers, Qasids and Naib Qasids etc. The general designations in Grade – 5 are Bill Distributors, Helpers, Assistant Sub Station Attendants, (ALM are initially appointed in Grade -3 and then are promoted to Grade – 5 after one year) etc. The Authority see no linkage between the requested cost and the efficiency targets set by the Petitioner in its DIIP e.g. in terms of operational efficiency, the Petitioner claims that it would improve its collections from 90.9% (as on FY 2015-16),

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to 100% (by 2019-20). Whereas, the Petitioner claims that its collection from private consumers is already 99.4%. The Authority is aware of the fact that its recovery ratio is deteriorated due to non-recovery from GoAJK , how would it additional recruitment in Grade -2 , 5 and 9 would help in improving the collection target of the Petitioner . Further, the Petitioner plans to improve its SAIDI standard from 1.00 to 0.95, over a period of five years. The question is whether requested additional recruitment justifies the 0.05 improvement in the performance standard. When it comes to improvement in customer care, the Petitioner talks about implementing Centralized complaint handling system and setting up of Customer Service Information system, which would in turn result in lesser number of staff for the operational activities. Thus, keeping in view the recruitment plan, no correlation between the efficiency targets and additional recruitments is established.

37.9.9 In addition to aforementioned, the Petitioner while arguing its case has itself admitted that the yardstick on which its recruitment plan is based needs revision. The Authority considers that the same was approved more than a decade back and lots of technological advancements has taken place during that course of time, thus changing the best utility practices altogether. The Authority considers that Petitioner's proposed Commercial Improvement Plan and the technological advancements with regard to installation of AMI/ AMR, Electronic Metering, ERP, CIS System, IT infrastructure to support new initiatives etc., would result in efficiency of the operations and accordingly its manpower requirement would reduce.

37.9.10 On the referred letter of the Authority, referred by the Petitioner was specifically on the subject of creation of new subdivisions, divisions and circles, however even the referred letter's para 6 specifically qualifies that the prudence of the costs would be justified by the Petitioner.

37.9.11 On the issue of creation of new subdivisions, divisions and circles, the Authority in the tariff determination for the FY 2014-15, had directed the Petitioner to submit comments on the same at the earliest. The Petitioner, however, did not submit its comments on the issue. In the instant petition, the Petitioner in its DIIP, has provided some information as where it intends to depute its proposed new recruitment, grade wise.

37.9.12 The Authority has evaluated Petitioner's request in the context of transitioning from Single year to Multiyear tariff regime and the anticipated change in management through the ongoing privatization program. The Authority considers that allowing creation of new circles / divisions /sub divisions is decision specific under single year tariff regime, whereby each year its financial and qualitative impact may be

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evaluated/analyzed. Under multiyear tariff regime the instant decision becomes irrelevant as the existing state of affairs of the Petitioner is considered as benchmark for future efficiencies. Further, keeping in view the existing management change whose prime objective is to bring efficiency and which may achieve the objective without creating new circle. The Authority further feels that in the era of technological advancements, every effort needs to be adopted to get the benefit of technology to bring efficiency through reducing reliance on more man power. Thus, keeping in view the arguments with respect to management change, multiyear tariff regime and the fact that the Petitioner has failed to comply with the Authority's direction, the Authority has decided, not to allow the additional recruitment of 10,304 employees without any proper study.

37.9.13 The Authority has also observed a bonus amounting to Rs. 148 million, while evaluating the actual accounts of the Petitioner, and has decided not to include it in the reference cost for future increases.

37.9.14 The Authority also directed the Petitioner in the tariff determination of FY 2012-13 to submit a certificate from the external auditor in respect of the financial impact of new recruitments during FY 2009-10. The issue has been discussed in detail under the directions part.

37.9.15 The Authority while assessing the Pay & Allowances and other benefits of the Petitioner for FY 2015-16 (reference cost for future increases), has taken into account the impact of GOP's recent announcement of 7.5% increase as ad-hoc allowance, 5% annual increment, merging ad-hoc relief of 2011 & 2012 in running basic pay and increase in Medical Allowance by 25% as per GOP notification.

37.9.16 Accordingly, based on the discussion made in the preceding paragraphs and after incorporating the impact of the aforementioned increases, the Authority has assessed Pay & Allowances and other benefits as Rs.4,384 million (excluding post-retirement benefits) for the FY 2015-16. The same shall be considered as the reference/base cost for working out future salaries, wages and other benefits for the remaining control period as per Annex-VI

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37.10.1 **Post-Retirement Benefits**

37.10.1 The Authority considering the overall liquidity position in the power sector and in order to ensure that the Petitioner fulfils its legal liability with respect to the post-retirement benefits, directed the Petitioner and all other XWDISCOs to create a separate fund in this regard before 30th June 2012. Subsequently, this deadline was extended by the Authority. The rationale was that the creation of funds would ensure that the Petitioner records it liability more prudently since the funds would be transferred to a separate legal entity. In addition to that these independent funds would generate their own profits, if kept separate from the company's routine operations and in the longer run reducing the Distribution Margin and eventually consumer-end tariff.

37.10.2 The Petitioner, in its tariff petition for the FY 2014-15, submitted that it has complied with the directions of the Authority and has created the Pension Fund, however, no details regarding transfer of amount, if any, into the fund were shared with the Authority.

37.10.3 The Petitioner in the current petition keeping in view the financial constraints and on-going privatization process, has proposed the following options in response to Authority direction requiring for a fully funded pension fund:

37.11 Option-I

A one-time provision for retirement benefits may be allowed in advance and an amount equivalent to opening retirement obligation is transferred to a separate fund.

37.12 Option-II

A staggered funding strategy may be allowed whereby Petitioner place the funds against the liability in a piecemeal manner every year over a period of 5 to 10 years to fund its opening liability. The same is needed to be incorporated in the Petitioner's tariff to enable it to recoup the funds transferred

37.13 On the issue of pre-unbundling pensioners, the Petitioner submitted that as per directions of the Authority, the pension expenses of EX-WAPDA pensioners retired before 1.07.98 will be borne by the Petitioner and financial impact on this account with regard to financial year 2014-15 amounts to positive Rs. 247 Million.

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37.14 Here it is pertinent to mention that the Authority had been allowing the provision for post-retirement benefits to the Petitioner as a part of its O&M cost till FY 2011-12 and the Petitioner has a practice of withholding distribution margin (DM) and transferring the remaining amount to CPPA. It was only for the last three years that the Authority decided to allow the actual amount on account of pension benefits, due to non-compliance of the Authority's directions. Thus, any post retirement liability pre FY 2011-12, is with the Petitioner.

37.15 Considering the expected management change, the dynamics of multiyear tariff regime and the fact that the Petitioner has complied with the direction of the Authority to the extent of creation of the separate Pension Fund, the Authority, has decided to allow the provision for the post-retirement benefits based on last three years average provision as per its financial statements. The provision for FY 2015-16 based on last three years' average is being allowed including the impact of the employees retired before unbundling of WAPDA. Here it is pertinent to mention that since the post-retirement benefits include other liabilities in addition to Pension, hence it directed to create separate accounts or fund (as the case may be) for each head of post retirement liability. It would be mandatory for the Petitioner to deposit the whole amount into separate funds and accounts. If the Petitioner fails to transfer the whole amount of post-retirement benefits, the Authority would adjust the deficit payments in the next year's provision and from thereon, only actual amounts paid and amount transferred into the fund would be allowed. In case of complete failure to transfer any amount into the fund, the Authority would only allow actual payments, rather than provision. In addition, separate proceedings would also be initiated for the noncompliance of the Authority's directions, under the relevant law. In view thereof, for FY 2015-16, an amount of Rs.2,894 million is hereby allowed to the Petitioner for the postretirement benefits. In case the Petitioner intends to transfer previous year's liability as well, it can do so, however the Authority would only allow provisions (or actual amount transferred as the case may be) pertaining to future periods only i.e. FY 2015-16 and onwards.

37.16 Repair and Maintenance Expenses

37.16.1 The Petitioner stated that the repair and maintenance cost allowed by the Authority was lower than its requirement for FY 2014-15.

37.16.2 The Petitioner explained that repair and maintenance expenses are an important aspect in maintaining the end-user tariff, necessary to meet distribution loss targets and to

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circumvent avoidable huge investments. The Petitioner also provided following analysis of R&M cost as allowed by the Authority and as actually incurred:

Comparative historical analysis of R&M cost as a %age of NFA

Year	Opening Net Fixed Assets (Operating)	R&M Determined	%age of Net Assets	R&M Actual	%age of Net Assets
2011-12	32,428	450	1.39%	525	1.62%
2012-13	34,616	505	1.46%	700	2.02%
2013-14	37,393	545	1.46%	737	1.97%
2014-15	41,066	697	1.70%	872	2.12%

37.16.3 The Petitioner stated that it has constraints to maintain its system for providing better service for meeting required R&M. Accordingly, it is proposed that a level of autonomy be provided to the DISCO for meeting its regular repair & maintenance requirements. In this regard, it is proposed that a K factor may be allowed to determine repair & maintenance costs. The K factor shall be set as a percentage of opening net fixed assets (excluding revaluation surplus). This would allow a pre-allocated budget for the DISCO to meet its R&M cost. The Petitioner requested to allow to undertake repairs it deems necessary, remaining within the allowed level of costs.

37.16.4 The Petitioner requested that K-factor to be set at 2.75% to meet overdue R&M requirements for the company's infrastructure. The Petitioner also highlighted that it is possible that private sector participation will make significant expenditure to existing infrastructure.

37.16.5 The Petitioner in light of the above requested the Authority to allow the Petitioner the following forecasted repairs and maintenance expense for the period FY2015-16 to FY2019-20.

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Projected R&M Cost – K Factor

Mln. Rs.

Year	FY-16	FY-17	FY-18	FY-19	FY-20
Opening Balance(NFA, excluding revaluation)	43,228	60,417	68,578	72,021	77,668
%age (K Factor)	2.75%	2.75%	2.75%	2.75%	2.75%
R&M Cost	1,189	1,661	1,886	1,981	2,136

37.16.6 A review of financial statements of the Petitioner as given below reveals that the expense under this head has increased significantly over a period of five years. The expenses for the FY 2014-15 are Rs. 872 million which are 44% higher as compared to average (Rs. 608 million) from FY 2010-11 to FY 2013-14.

Particular	Mln. Rs.	Inc. (%)
FY 2014-15	872	18%
FY 2013-14	737	5%
FY 2012-13	700	33%
FY 2011-12	525	12%
FY 2010-11	469	

37.16.7 Since the Petitioner has not provided any rational and justification for this increase, therefore, the Authority itself conducted a detailed analysis of the last 5 years' repair & maintenance expense of the Petitioner. The Authority observed that over a period of five years, on average around 45% of repair and maintenance expenses pertained to the cost of distribution transformers and around 6% related to the meter's cost. The remaining 49% was with respect to the repair and maintenance of other distribution network as mentioned below;

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Description	FY 11		FY 12		FY 13		FY 14		FY 15		5-Year Avg	
	Mln. Rs.	% of Total	Mln. Rs.	% of Total	Mln. Rs.	% of Total	Mln. Rs.	% of Total	Mln. Rs.	% of Total	Mln. Rs.	% of Total
R&M Office Building	19	4%	22	4%	31	4%	19	3%	16	2%	22	3%
R&M General Plant	6	1%	12	2%	8	1%	9	1%	12	1%	10	1%
R&M Other Physical Property	32	7%	27	5%	32	5%	30	4%	44	5%	33	5%
132 KV Grid Station	40	9%	68	13%	114	16%	197	27%	257	30%	136	21%
11 KV Distribution Lines	38	8%	72	14%	59	8%	69	9%	72	8%	62	9%
Distribution Transformers	250	53%	254	48%	365	52%	307	42%	313	36%	298	45%
Meters	27	6%	18	4%	34	5%	53	7%	68	8%	40	6%
Others Miscel	56	12%	51	10%	56	8%	51	7%	90	10%	61	9%
Total	**469**	**100%**	**525**	**100%**	**700**	**100%**	**737**	**100%**	**872**	**100%**	**660**	**100%**

37.16.8 The available information was further scrutinized and as per the information the number of total transformer damaged during the FY 2014-15 were 1,332 which translates into 140 MVAs. When the claimed cost per damaged transformer was calculated, it worked out around Rs. 234,970 per transformer and around Rs.2,235,569 per MVA . The same is approximately 60% of the average of newly installed transformer. The Authority also observed that total number of meters' defective and replaced during FY 2014-15 were 3,985 and 11,696 respectively. The claimed cost of repair of meters per defective meters and newly replaced meter was calculated around PKR 17,165 and PKR. 5,848 respectively, whereas, the requested average cost of new 2-phase and 3 phase meter as per DIIP of the Petitioner is PKR 4,312. The repair and maintenance cost per defective meter and newly replaced meter is almost 398% and 136% of newly purchased meter. It may be construed that the Petitioner's repair expenses are exaggerated / over stated and needs to be looked into and rationalized. In view of aforementioned, it appears that the Petitioner may be expensing out some costs which should be capitalized. The specific head of repair and maintenance is exclusively for the routine expenses pertaining to repair and maintenance. Here it is pertinent to mention that during the hearing process of other XWDISCOs, it was revealed that the fixed assets especially transformers and meters are not tagged, hence there is a strong possibility of expensing out some of the capitalized assets. The Authority is of the view that proper tagging of the assets is of utmost importance in order to enable the Petitioner to properly classify its cost in terms of capital or expense. The Authority therefore directs the Petitioner to maintain a proper record of its assets by way of tagging each asset for its proper tracking.

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Particular	Unit	FY 14	FY 15
Transformers R&M	[PKR]	307,353,780	312,979,636
Transformers Damaged	[Nos.]	1,452	1,332
MVAs Damaged	[MVAs]	134	140
R&M / Transformer	[PKR]	211,676	234,970
R&M Cost / MVA	[PKR]	2,289,499	2,235,569
Avg. Cost of New Transformer Per MVA	[PKR]	3,754,160	3,754,160
R&M to New Transformer Ratio	[%]	61%	60%
Meters Defective	[Nos.]		3,985
Meter Replaced	[Nos.]		11,696
R&M Cost	[PKR]		68,401,108
R&M / Def. Meter (398% of New Meter Cost)	[PKR]		17,165
R&M / Rep. Meter (136% of New Meter Cost)	[PKR]		5,848
Avg. Cost of New Meter	[PKR]		4,312

37.16.9 The Petitioner requested that K-factor to be set at 2.75% of NFAs to meet overdue R&M requirements for the company's infrastructure. Since the Petitioner has not provided any rational or basis for setting 2.75 % therefore, the Authority itself conducted a detailed analysis of actual repair & maintenance expense and asset base of the Petitioner, as given below.

Category	GFAs Excluding Land		Avg. R&M of Last 5 Years		R&M % of GFA
	Mln. Rs	%	Mln. Rs.	%	
Distribution Transformers	9,161	16%	298	45%	3.25%
Others Fixed Assets (G.S, D.L, Others.)	49,595	84%	363	55%	0.73%
Total	58,756	100%	660	100%	1.12%

37.16.10 From the analysis it is revealed that the Petitioner spent around 45% of its average repair and maintenance expenditure of last five years on repair and maintenance of its distribution transformers which are 16% of its total assets base and rest of 55% expenditure is carried out on the remaining 84% of assets. When the repair and maintenance cost with respect to the transformers is measured, in terms of percentage of GFA, its works out 3.25%. Whereas the rest of the repair & maintenance cost in terms of percentage of GFA works out as 0.73%. Even if the total average cost (of the last five years) is calculated in term of percentage of GFA, it works out not more than 1.12%. As discussed above, one of the possible reason for high repair and maintenance cost, under

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the head of distribution transformers, is that the Petitioner might be expensing out some costs which have to be capitalized.

37.16.11No doubt the Private partner is expected to carryout substantial infrastructure expenditure, yet it is also expected to do it with new, expensive and efficient equipment, leading to overall reduction in R&M cost and increasing total GFA base. Thus, the Petitioner idea if adopted would result in undue burden to the consumers in the long run. In addition to the aforementioned discussion, the Petitioner's request of annual adjustment in this regard is against the very sprit of multiyear tariff regime.

37.16.12 In view of foregoing, the Authority has decided not to accept the Petitioner's request of allowing K factor. Nevertheless, the Authority understands that the adherence to service standards and improvement of customer services is only possible through continuous repair and maintenance of distribution network, In view thereof, the Authority has assessed Rs. 836 million repair and maintenance cost for FY 2015-16 (base/reference cost) which shall be considered as the reference cost for working out future repair and maintenance expenses, in the remaining control period as per Annex-VI. The Petitioner is also directed to provide an explanation on the concerns of the Authority in terms of tagging and non-capitalization of assets, if any, not later than 30th June, 2016.

37.17 **Other operating expenses**

37.17.1 Other Operating expenses include Travelling Expenses, Office supplies & Other Exp, Vehicle Expenses, Power Light & Water, Communication & Postage, Advertising & Publicity, Subscription & Periodicals, Entertainment, Out Side Service Employed, , Bank Charges, Insurance Premium, Rent, Rate & Taxes , Injuries & Damages, Collection Expenses, Professional Fees, Management Fee, NEPRA Fees, Misc. Expenses and new project related cost. The Petitioner requested 5% annual inflationary increase in Travelling Expenses, Office supplies & Other Exp, Vehicle Expenses, Power Light & Water, Communication & Postage, Advertising & Publicity, Subscription & Periodicals, Entertainment, Out Side Service Employed, Bank Charges, Insurance Premium, Misc. Expenses, whereas Rent, Rate & Taxes , Injuries & Damages, Collection Expenses, Professional Fees, Management Fee and NEPRA Fees are projected at different growth rates based on management experience.

37.17.2 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. As regard the assessment pertaining to the FY 2015-16 (reference/ base cost), the Authority has decided to accept the actual figures of the FY 2014-15 as such and allowed an inflationary increase on the same. Thus, the assessment in this regard works out to the tune of Rs.1,010 million. The aforementioned other expenses also include cost of

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Rs.27.33 million as insurance cost.

37.17.3 The assessment for the FY 2015-16, shall be considered as the reference for working out future Other Operating Expenses for the remaining tariff control period as per Annex-VI.

37.18 Segregation between "Controllable" and "Uncontrollable" costs

37.18.1 The Petitioner has stated that O&M cost has been bifurcated between controllable and uncontrollable costs. The Petitioner proposed to index controllable cost with the change in CPI whereas the uncontrollable costs requested to treat as passed through items. The Petitioner delineated that its management is of the view that controllable and uncontrollable cost during control period will also increase annually due to new projects (as envisaged in DIIP). This impact due to new projects is significant and accordingly these O&M costs may be allowed in the related year in which project is planned to be completed, and afterwards, either trued up in case of uncontrolled cost or indexed with change in CPI, after report of successful completion of the project, in case of Controlled cost.

37.18.2 The Petitioner desired that the following costs to be treated as uncontrollable and controllable;

Controllable	Un-controllable
Travelling Expenses	Power Purchase Price
Office supplies & Other Exp	Pay and Allowances - Existing
Vehicle Expenses	Pay and Allowances - New Projects
Power Light & Water	Rent, Rate & Taxes
Communication & Postage	Injuries & Damages
Advertising & Publicity	Collection Expenses
Subscription & Periodicals	Professional Fees
Entertainment	Management Fee
Out Side Service Employed	NEPRA Fees
Misc. Expenses	Misc. Costs due to New Projects
Bank Charges	
Insurance Premium	
Impact of New Projects	

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37.18.3 As per the approved tariff methodology the Power Purchase Price and Corporate Tax are the only uncontrollable costs which are allowed as pass through items. The other remaining costs are to be treated as controllable costs.

37.18.4As regard the Pay and Allowances, Rent, Rate & Taxes, Injuries & Damages, Collection Expenses, Professional Fees, Management Fee and NEPRA Fees the Authority has incorporated all these costs as per the latest actual figures in the references/ base cost for the future increase during the control period. The Authority is of the view that any O&M cost related to Investment projects are to be capitalized during the life of the projects, whereby the prudent assessment of recurring O&M cost, has already been incorporated in the base expense. Thus, risk of any future cost fluctuations lies with the Petitioner along with an opportunity for optimizing overall costs under this head. The treatment is in line with the very sprit of multi- year tariff regime and in accordance with Authority's approved tariff methodology.

37.18.5 The Authority received a letter from Ministry of Finance, Revenue, Economic Affairs, Statistics & Privatization (Privatization Commission) dated 25th November, 2015, communicating a decision of Cabinet Committee on Privatization (CCOP) regarding approved structure for the privatization of FESCO. Since the Authority's decision on the referred subject would principally affect the Petitioner's consumer end tariff as well; hence the Petitioner is referred to para no. 20.3 to 20.9 of the Authority's determination in the matter of Petition filed by FESCO's for determination of its Multi Year consumer end tariff pertaining to FY 2015-16 to FY 2019-20, dated December 31, 2015 on the issue.

37.19 **Adjustment mechanism for O&M costs – Efficiency factor "X"**

37.19.1 The Petitioner has also proposed efficiency factor "X" during the control period, which will be applied to the benchmark O&M cost adjusted by CPI. The Petitioner stated that its management expects that any operational efficiency for adjustment in CPI as "X" factor will not be more than 10% of the CPI adjustment factor. The Petitioner delineated that efficiency can be achieved after implementation of at least 60% of all the functional plans implemented therefore it is accordingly submitted that after 3rd year, 10% of applicable CPI adjustment factor is set as "X Factor".

37.19.2 The Authority after careful evaluation of the Petitioner's proposal is of the view that it has not provided any rationale or basis for the requested efficiency factor. The Authority strongly believes that there has to be some basis or rationale on which Authority can set a reasonable efficiency factor. In view thereof, in order to have a fair assessment of the efficiency factor, the Authority itself carried out a benchmarking exercise aimed at rationality of the efficiency factor.

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37.19.3 The salient features of the methodology are reproduced as hereunder;

✓ Actual O&M cost for FY 2013-14 has been bifurcated into 5 cost categories – Salaries & wages, Repair & maintenance, Travel allowance, Vehicle fuel & maintenance and Other expenses (e.g. rent and other office expenses). The weights were assigned keeping in view the controllability factors attached to each cost category which were further divided into sub-categories.

✓ Cost drivers were selected for all the cost categories/ sub-categories for the O&M cost as under;

Cost Categories	**Cost Drivers**
Salaries & Wages (Rs.)	No. of Employee No. of Active Consumers.
Other Expenses	No. of Office No. of Active Consumers. No. of Consumers.
Traveling Allowance	No. of Employee
Vehicle Allowance	Area Sq. K.M
R & M	No. of Office Length of H.T & L.T Lines No. of Grid Stations No. of Distribution Transformers No. of Active Consumers.

✓ The cost per cost driver was worked out to select the most efficient company within a sample of efficient companies. Considering, the variability of the results across the XWDISCOs, under a similar cost category, a scoring mechanism was devised, which translated the results of cost drivers in to scores.

✓ A maximum score of 100 was assigned to the best performing XWDISCO on each cost driver. Subsequently, these scores were converted into weighted scores with respect to each cost category / sub-category. The weighted score of each cost category / sub-category was then added to obtain the overall score of the XWDISCO. This exercise was carried out for all the XWDISCOs.

✓ The efficiency factor was set from the highest benchmark of 100 score.

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37.19.4 On the basis of aforementioned benchmarking, the Authority has assessed an efficiency factor of 5.8% per annum calculated over the whole control period of 5 years. However, keeping in view the Petitioner's request of keeping it at zero% for the first two years, the Authority has decided to implement the same from the 3rd year of the control period. Here it is pertinent to mention that the Authority also kept the efficiency level of KESC (Now K-Electric) to zero %, for the first two years of the control period, when it was privatized, keeping in view the fact that the new incoming partner must be given some time to adjust itself in a new environment. In addition, the Authority in order to save the Petitioner from any negative adjustment on account of O&M cost, has decided that the efficiency factor X, in any year of the control period, should not be greater than 30% of increase in CPI for the relevant control year. Thus, 5.8% efficiency factor would only apply if 30% of CPI increase in any year is more than 5.8%. If 30% of CPI increase in any year, is less than 5.8%, then the efficiency factor would be 30% of the increase in CPI, in any year, during the control period.

37.20 Z factor for force majeure events

37.20.1 The Petitioner proposed a "Z" factor as a provision for extraordinary events keeping in view vulnerability to damages caused by natural disasters, and requested to include it in the O&M cost indexation formula. The Petitioner requested to classify all such costs as force majeure and requested to recover the same during the following year, subject to prior approval of Authority. The Petitioner also stated that any costs recovered under insurance coverage shall not be included in the tariff for the subsequent year.

37.20.2 The Authority has allowed insurance cost in the reference cost of other expenses for FY 2015-16 for future increases. The insurance cost covers grids and vehicles. If the Petitioner intends to cover its other assets along-with more insurance coverage then it has to mitigate its commercial risk through its profits.

38. Issue # 19: Whether the Petitioner's reference depreciation charge for the FY 2015-16 is justified for future adjustments till FY 2019-20?

38.1 The Petitioner has submitted that depreciation charges are based on the accounting policies followed by the Petitioner and has been calculated on the basis of;

(i) the value of existing assets Less revaluation surplus; plus

(ii) Addition in assets during the projected year.

38.2 The assets will be depreciated on a straight-line method as per utility practice i.e. buildings on free hold land @ 2%, buildings on leasehold land @ 2%, distribution equipment @ 3.5%, vehicles @ 10%, Computer & ancillary equipment @ 33%, furniture & fixtures @ 10%, other plant and equipment@ 10%.

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38.3 Based upon these assumptions, the Petitioner has projected the following depreciation cost under the Tariff Control Period;

Rs in Million	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Depreciation	2,510	2,885	3,123	3,438	4,483

38.4 The Petitioner requested for a one time opener in case of private participation, with respect to the assessment of Depreciation, based on the fact that the current OFAs are without revaluation and the private party must be ensured reasonable depreciation cost depending on transaction structure.

38.5 As per the Methodology, depreciation expense for the test year, which in the instant case is FY 2015-16, 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. The reference expense would be adjusted annually in accordance with the following formula/ mechanism as prescribed in the Methodology;

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

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

38.6 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 2015-16 have been worked out as Rs.68,975 million. Accordingly, the depreciation charge for the FY 2015-16 has been assessed as Rs.2,462 million calculated on actual depreciation rates for each category of Assets as per the Company policy.

38.7 After carefully examining the relevant details and information pertaining to the deferred credit and amortization as per the accounts for the FY 2014-15, the Authority has projected amortization of deferred credit to the tune of Rs.1,219 million for the FY 2015-16. Accordingly, the consumers would bear net depreciation of Rs.1,243 million. The reference/base depreciation expense determined for FY 2015-16 shall be adjusted annually in accordance with the aforementioned adjustment formula/ mechanism as prescribed in the Methodology.

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38.8 Considering the fact that Depreciation expense for the FY 2015-16 & onwards has been allowed based on estimated level of investments and in case the actual investments carried out turns out to be different from the estimated level, i.e. in case the Petitioner ends up in making higher investments than the allowed, the benefit of the incremental benefit must be passed on to the Petitioner and vice versa. In view thereof, the Authority has decided to true up the benefit of incremental investments and vice versa each year through the Prior Year Adjustment mechanism, which addresses the concerns of the Petitioner for calculation of depreciation each year based on actual CAPEX.

38.9 Regarding the issue of onetime adjustment of RAB, in case of private participation, the Authority considers that the consumers of the Petitioner have been paying a nominal return on the allowed RAB, thus incorporates the impact of inflationary increases over the years. In addition to the Petitioner has been allowed depreciation on the historical cost of its assets, over the past years and the same amount is being paid by the consumers of the Petitioner on a specific asset base. The Authority considers that any change of ownership does not formulates any grounds for the Petitioner for enhancing its return resulting in additional burdening of its consumer. In view thereof, the request of the Petitioner with respect to onetime adjustment, in the opening historical cost of assets does not merit consideration.

39. <u>Issue # 20: Whether the Petitioner request to allow KIBOR + 400-350 basis point on delayed TDS to cover cost of financing / opportunity cost is merit consideration?</u>

39.1 The Petitioner keeping in view the privatization process has requested to charge a markup on delayed tariff differential subsidy by GoP (may be through CPPA (G) credit note) at KIBOR + 350 – 400 bps to cover cost of financing/ opportunity cost, as delay in TDS results in liquidity issues and utilization of funds/financing lines for meeting priority payments. The Petitioner further justifying the request has stated that, the result of delay in payment to CPPA attracts penalties and accordingly these should be allowed to be recovered through surcharge on delayed period in receipt of TDS.

39.2 The Authority observes that the claim of the Petitioner for markup of delayed TDS is contradictory as on one hand the Petitioner is requesting for a markup whereas at the same time advance payments of Rs.1,764 million have been made to CPPA (G). However, the Authority considers that the matter of payment of mark-up on delayed tariff differential subsidy, is something which is initially to be agreed by between the Petitioner and the GoP and subsequently, any agreement reached, must be brought to the Authority for its consideration in terms of its legal cover (under legal documents such as PPAA, Commercial code) and its financial implications, if any. In view thereof, the Authority currently declines the Petitioner's request. However, the Petitioner may discuss the proposals with GOP and CPPA (G).

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40. **Issue # 21: Whether the Petitioner request to reduce AJK tariff from Rs.12.77 per kWh to Rs.9.80 per kWh, is justified?**

40.1 The matter has been discussed under the Direction part of the determination.

41. **Issue # 22: What is the financial impact / loss of revenue due to TOU metering for cellular company connections and other similar connections?**

41.1 The Petitioner on the issue has submitted that TOU Metering on Cellular Companies and offices is resulting in an unfair advantage to these organization and details in this regard were submitted in its Tariff Petition 2013-14. The Petitioner justifying its request stated that the issue originates from the fact that TOU metering in Telecom and Cellular Companies and offices, no distinction could be made between off peak and peak hours due to the nature of the services provided by this sector. The Petitioner further stated that these consumers are availing the benefits resulting from the system, which has caused a negative impact on the average sale rates of the Petitioner.

41.2 The Petitioner during the hearing also presented that Cellular companies do not contribute in reducing load during peak hours as they do not have any control or mechanism or technology to control the load during peak hours. The Petitioner further presented that all the major private offices are closed before the peak hours and all their consumption is charged on off peak rates. The Petitioner in view thereof requested to resolve the matter at the earliest keeping in view the stance taken in the Tariff Petition 2013-14 and the arguments presented during the separate hearing held on the issue.

41.3 The Petitioner presented the following financial loss on account of TOU tariff to cellular companies during one year is as under:-

Name of department(s)	Number of connections	Units (GWH)	Billing on TOU	Billing on normal tariff	Loss during 2014-15
Cellular companies	2439	92.9	1418	1835	413 (Million)

41.4 The Authority observed that the Petitioner, in its tariff petition for the FY 2012-13, contended that by installing TOU meters on the connections that operate on a 24 hour basis, an undue benefit of lesser off peak rate is enjoyed by these sort of consumers as their demand remains constant throughout the day, irrespective of the differential tariff being offered in different time spectrum. The Petitioner presented a negative billing impact of Rs.9 million per month approx. due to the installation of TOU meters on cellular company connections (who according to the Petitioner, maintains constant load

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throughout the day). The same concern was noted and addressed in para 6.5 of the tariff determination for the FY 2012-13 dated 27th March, 2013.

41.5 Consequently, the Authority decided to deal with the matter separately and directed all XWDISCOs for comments on the issue. Subsequently, comments were filed by XWDISCOs and they supported the stance of the Petitioner in their tariff petitions for the FY 2013-14. The following arguments were presented by XWDISCOs;

42. **Risks**

- Conversion to a TOU meter is only viable for consumers who are aware of the rules and are able to alter their consumption patterns to maximize plan benefits.
- The main objective of TOU tariff was reduced demand on the power system during peak hours by introducing TOU metering.
- Cellular companies run their business round the clock during peak hours as well thus do not contribute toward the reduction in power demand during the peak hours.
- A separate tariff may be introduced for cellular companies as they do not deserve TOU tariff due to constant load behavior.
- The consumer of cellular companies are enjoying the cross subsidy because they are availing the benefits resulting from application of TOU tariff consequently causing a negative impact on revenue as well as average sale rates.
- GEPCO also submitted a negative billing impact of TOU metering of cellular connections of Rs. 13.88 million affecting the revenues of the company;

Comparison of TOU/ Normal Billing to the Cellular Companies for the Month of June, 2013				
Name of Company	No. Of Connections	TOU Billing	Billing under Normal Tariff	Difference
Cellular Companies	1,955	Rs.38.42 million	Rs. 52.30 million	Rs. 13.88 million

- XWDISCOs suggested discontinuation of TOU metering on all such connections and more specifically on cellular company connections. FESCO also requested for a separate tariff category for these connections.

42.1 Keeping in view the aforementioned arguments / comments submitted by the XW-DISCOs, the Authority decided to hold a separate hearing on the issue by taking

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stakeholder on board. In this regard a hearing was held on 8th July, 2014. The hearing was attended by representatives of IESCO and legal representatives of Cellular Companies. The representatives of IESCO reiterated their stance and requested the Authority to discontinue the installation of TOU meters on these connections. Whereas, the legal representatives of Cellular companies objected to the proceedings and demanded that evidence of losses being faced by XWDISCOs should be produced to review by cellular companies in order to provide further justification / evidence. The legal representatives further objected to the suo-moto proceedings and named it as a brain storming session which needs to be followed by examination of evidence by cellular companies and a further hearing opportunity. The legal representatives of the Petitioner objected to the concerns of cellular companies' representatives and offered to present all the facts to the Authority. The Authority, during the hearing, required both XWDISCOs and cellular companies to provide their evidences in this regard to the Authority for consideration.

42.2 As directed by the Authority during the hearing, the Petitioner submitted data vide letter No. 7617-20/CE/IESCO/CD(S) dated 21st July, 2014. In the meantime some initial information was provided by Warid Telecom Company.

42.3 A number of cellular companies instead of providing data, went to the higher court against the suo motto proceedings initiated by the Authority. The Honorable Islamabad High Court, dismissed their petition and the same was challenged by cellular companies before the Supreme Court of Pakistan. The decision of the Honorable Supreme Court is reproduced here as under;

"This petition is, therefore, converted into appeal and is allowed. Consequently the impugned judgment dated 22.07.2014 is set aside. This however shall not prevent NEPRA from furnishing the information relevant to the notice issued in the press and to proceed with the hearing after adhering to the National Electric Power Regulatory Authority (Tariff Standards and Procedure) Rule, 1998."

42.4 The representatives of Cellular companies Telecom, Mobilink and Ufone, M/s Aqlal Advocates later on submitted Motion for leave for review vide letter dated 25th July, 2014 and made the following submissions;

- The respondent is unable to file proper evidence without the pleadings and summary of evidence of the Petitioner being shared with them;
- Contrary to Authority's understanding, there is no technical capability in the Network Operations Centre (NOC) of the respondents to measure and record the peak vs off-peak consumption of the BTS sites;

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- The consumption data as submitted with the motion shows lower consumption in peak hours and is available with the Petitioner. Consequently, Authority is requested to seek such data from the Petitioner and share the same with the Respondents for them to be able to file counter-comments thereon before the Authority proceeds to accept and act upon such data.

- Rule 9(9) and 9(15) of the Tariff Standards and Procedure Rules, 1998 provides for establishing a detailed schedule for the orderly disposition of the proceeding, entailing, inter alia, for filing of interrogatories, discovery motions, objections and responses to objections and other procedural matters. Thus the instant proceedings have been conducted without summaries of evidence, any discovery, interrogatories or pleadings of the parties which preclude the Respondents from meaningful participation in the proceedings by presenting their case properly and effectively.

42.5 On the afore stated submissions, the Cellular companies made following pleas;

- A detailed schedule for the orderly disposition of the proceeding, inter alia, for filing of interrogatories, discovery motions, objections and responses to objections and other procedural matters be established before further proceedings;

- After collection of all requisite evidence and giving adequate opportunities to the parties to consider and, if required, object to such evidence, declare close of evidence before the next hearing.

42.6 As per decision of Supreme Court of Pakistan the Authority again started proceedings, the Authority vide letter No. 1085-91 dated 23-01-2015 shared the information provided by the Petitioner with cellular companies for their comments. In response only M/s Mobilink provided their comments vide letter dated 9th March, 2015.

42.7 Consequently a letter was issued to the concerned stakeholders dated July 06, 2015 for their comments on the data provided by the Petitioner. However, no comments were received.

42.8 In view of aforementioned and as per the statutory requirements, the Authority framed the same issue in the instant petitions and the relevant data was sought from the XWDISCOs for the onwards comments from the cellular companies.

42.9 The Authority keeping in view the sensitivity of the issue decided to constitute an in house-committee having Technical and financial representation for the review/evaluation of the comments and arguments of the parties. The Authority in light

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of the findings of the committee may change terms and conditions, if any along with the biannual PPP adjustments.

43. <u>Issue # 23: Whether the Petitioner's projected other income for the FY 2015-16 to 2019-20, is reasonable?</u>

43.1 The Petitioner has projected the following other income for the period of MYT;

Description	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20
Amortization of deferred credit	1,071	1,119	1,263	1,322	1,488	1,559
Other Income*	456	481	505	529	555	581
Total	1,530	1,600	1,768	1,851	2,043	2,140

* excludes late payment surcharge of Rs.705 Million for FY 2015

43.2 The Petitioner has stated that other Income includes amortization of deferred credit, income from financial and non-financial assets and income from other sources. The Petitioner however has not provided any basis for its projection.

43.3 The Petitioner has stated that Late Payment Charges have been excluded from the projected Other Income of FY 2015-16 as per NEPRA decision in the tariff determination of FY 2014-15. The Petitioner justifying the request has stated that given the historical challenges associated with managing cash flows and timely recoveries by the Company, the Late Payment Surcharge (LPS) has been excluded from other income to accurately reflect the Company's cash flow risk emanating from its operations.

43.4 Petitioner for the mechanism of adjustment of LPC in the subsequent years of the Tariff Control period has proposed that the actual other income to be trued up at year end against projected other income.

43.5 The Petitioner during the hearing has stated that as per NEPRA directions it's projected other income will be trued up and any difference will be adjusted in following year's tariff.

43.6 As per the Tariff Methodology Other Income may be determined in a manner that is consistent with the base year. Other income may be considered to be a negative other 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. Other income will be monitored to identify trends.

43.7 The Authority has assessed other Income for the petitioner as Rs.1,600 Million for FY 2015-16 which will be adjusted annually as per the following mechanism to calculate future Other Income.

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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.

43.8 The Authority does not see any new rationale or ground which was not considered before at the time the initial decision was made hence see no merit on the grounds submitted by the Petitioner to completely exclude the amount of LPC while calculating other Income. However, the Authority in consistency with its earlier decision, on the issue, has not included the amount of LPC while assessing the other income for FY 2015-16. Here it is pertinent to mention that the LPC 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 LPC recovered from consumers shall be made part of other income and deducted from revenue requirement in the FY 2016-17.

44. Issue # 24: Whether the prior year adjustment calculated by IESCO of Rs. (1,037) Million for the FY 2015-16 is accurate?

44.1 The Petitioner, in its petition requested an amount of Rs. 1,037 million negative under the head of Prior Period Adjustment including Impact of Late Determination / notification of tariff, sales mix variance and Quarterly adjustments for Capacity Charges and Use of System Charges. The petitioner in support of its claim has provided the following detail;

a. Impact of Late Determination/Notification of Tariff

Tariff for the FY 2014-15 was determined by the Authority in March 2015 (effective from July 2014), which was notified by GoP on June 10, 2015. Due to this late notification a negative adjustment in tariff is required amounting to Rs. 19,336 Million

b. Sales Mix Variance

A negative adjustment of Rs.615 Million has been worked out based on sales mix variance. The adjustment has been calculated based on the data available as at the time of preparation of this tariff petition.

c. Quarterly Adjustment

Quarterly adjustment has been worked out as positive Rs.11,817 Million.

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d. **Supplementary Charges:**
This includes supplementary charges advised under the debit note by CPPA for previous years. The total supplementary amounts to positive Rs.6,850 Million.

e. **Impact of pre-unbundling pensioners:**
As per directions of NEPRA the pension expenses of EX-WAPDA pensioners retired before 1.07.98 will be borne by the Petitioner. The financial impact on this account with regard to financial year 2014-15 amounts to positive Rs.247 Million.

44.2 The Petitioner has also requested the Authority to continue its support with regard to Prior Year Adjustment in future and proposed to include the following as prior year adjustments:

- The difference in the Power Purchase cost to be borne by the Petitioner due to delay in NEPRA's determination and actual implementation of consumer end tariff.
- The difference in recovery of the revenues due to consumer mix variance (actual vs forecasted).
- The variance between actual and forecasted DM, other income and Prior Period Adjustments.
- An annual adjustment is also proposed to the Distribution Margin to correct for actual distribution volumes being lower or greater than the amount assumed in determining the distribution margin. This adjustment is proposed to apply to the subsequent year's distribution margin; and
- Any other additional adjustment, other than mentioned above.

44.3 The Authority while evaluating the Petitioner's requests has observed that it has not provided any calculations in support of its requested PYA. Hence, the Authority has decided to carry out its own calculations, which are as follows;

		Rs. Million
	Notified reference PPP during the FY 2014-15	88,221
	Assessed Distribution Margin for the FY 2014-15	12,448
	Assessed PYA for the FY 2014-15	(13,793)
Add ;	1st Qrt's PPP adjustment pertaining to the FY 2014-15	2,904
Add;	2nd Qrt's PPP adjustment pertaining to the FY 2014-15	1,919
Add;	3rd Qrt 's PPP adjustment pertaining to the FY 2014-15	1,224
Add;	4th Qrt's PPP adjustment pertaining to the FY 2014-15	2,242

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Less ;	Regulated PPP recovery on notified rates during the FY 2014-15	96,461
Less;	Regulated DM recovery on notified rates during FY 2014-15	8,922
Less;	Regulated PYA recovery on notified rates during FY 2014-15	(19)
Less;	Net impact of assessed & actual Other Income for the FY 2014-15	491
Add;	Impact of Consumer – Mix Variance for the FY 2014-15	(337)
Add;	Ex-WAPDA Pensioner	247
Total Unrecovered/ (Over recovered) Costs for the FY 2014-15		**(10,781)**

44.4 The issue of Pre unbundling WAPDA employees, the Authority in line with its decision has allowed the said cost. On the issue of supplementary charges, the Petitioner has not provided any details as to which particular period it relates to. Hence, the same is disallowed. Here it is pertinent to mention that the Authority allowed LPC, to be adjusted against the markup payments to the CPPA to the extent of FY 2014-15 only.

45. **Issue # 25: What will be the mechanism of charging Wheeling/Use of System Charges (UOSC) in case of network of XW-DISCOs are used for Wheeling?**

45.1 The Petitioner during the hearing submitted that Wheeling charges should be calculated and adjusted at CPPA level. The Petitioner has also requested that if its current consumer opts for wheeling, then NEPRA is requested to re-adjust the impact on T&D Loss target.

Category	Energy Purchased (M.kWh)	Energy Sales (M.kWh)	T&D Losses (%age)
	2014-15	2014-15	2014-15
A1 Domestic	4,186,948	3,705,171	11.5
A2 Commercial	952,086	842,533	11.5
Industry	1,787,382	1,670,782	9.4
Bulk Supply	1,871,095	1,755,472	6.9
Tube-wells	105,611	93,459	11.5
Others	89,826	79,665	8.6
Total	**8,992,949**	**8,147,083**	**9.41**

45.2 Considering the submission of the Petitioner and the comments of CPPA (G) on the issue of Wheeling (through email dated 21st September, 2015) whereby CPPA (G) has informed that while invoicing to XWDISCOs, it excludes the transmission cost(s) as well as generation capacity cost depending on MDI, the Authority, in view of importance of the matter, has decided to conduct a meeting on the subject matter with all the stakeholders not later than 30th June, 2016 to resolve the issue.

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46. **Issue # 26: Whether there is any major deviation in the petition from the NEPRA guidelines for determination of consumer-end tariff (Methodology & Process) notified vide SRO. 34(I) 2015 dated 16.01.2015?**

46.1 The Petitioner during the hearing of its instant petition submitted that there are no such deviations from NEPRA guidelines.

46.2 Although some deviations from the methodology were observed in the Petition yet, the Authority, in its instant decision has not deviated from its notified Guidelines. However, certain issues on which the Methodology was silent has been explained /clarified further under the respective heads e.g. truing up of RAB & Depreciation and adjustment on account of variation in KIBOR.

47. **Issue # 27: Whether there should be any penalty as a cut on Distribution Margin (D.M) if desired level of performance standards is not achieved by the Petitioner?**

47.1 The Petitioner on the issue submitted during the hearing that if the respective DISCO will not perform up to the required standards then the company will not be able to sustain on the pre-determined revenue requirement, which means if the desired performance standards are not achieved as envisaged in the DIIP, the energy sale will reduce which will trigger the automatic penalty mechanism in-built in the structure.

47.2 The Authority understands that the incorporation of the efficiency factor "X" caters for in case the Petitioner does not bring in the desired level of efficiency as the Petitioner would end up bearing the extra costs over the set tariff. However, in case the Authority observes any major deviation from the performance standards as committed by the Petitioner in its IGTDP, over the tariff control period, the Authority may consider introducing an extra cut on DM in the next tariff control period.

48. **Issue # 28: Whether there should be any mechanism for sharing of profits/benefits by the Petitioner with the consumers if the petitioner performance exceeds the desired level?**

48.1 The Petitioner has presented that Efficiency Sharing mechanism is proposed in the petition to bring cost efficiency from private sector participation and as a result of ongoing-privatization process as mentioned below;

i. In case an investment has been incurred efficiently, such as the completion of required investments is closed at a lower cost compared to what is included in the allocated regulatory budget, it is proposed that half of the difference in cost between budgeted and incurred cost be included in the Rate Base to fairly share capital efficiency benefits with customers and owners.

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ii. On debt component, petitioner proposed that if as result of reassessment of cost of debt from private participation, the cost debt gets reduced, the reduced cost of debt is to be shared with consumer.

iii. Also the adjustment factor- 'X' is proposed in the petition for sharing of the operational benefits with the consumer.

48.2 The Petitioner submitted that the above mechanism will incentivize it to bring efficiency and reduction in cost, in all areas of operations.

48.3 The Authority has already prescribed the mechanism for sharing of profits / benefits with the consumers on account of savings in cost of debt's spread. The mechanism has been explained in detail under the respective head/ issue. However, after taking into account all the adjustments and assessments, as discussed in the instant determination, if the Petitioner still earns extra profits the same will be shared with the consumers and the Petitioner equally.

49. <u>Issue # 29 : Any other relief sought by the Petitioner.</u>

49.1 <u>Credit Notes of Rs 34 Billion and tariff increase by Rs.0.43/kwh as Financial Cost Surcharge (FC Surcharge).</u>

49.1.1 The Petitioner has submitted that CPPA has issued various credit notes cumulatively amounting to Rs 34,240,653,319 to the Petitioner for booking of these credit notes as liability in IESCO books on account of long term loans.

49.1.2 Detail of credit notes issued by CPPA and requested for reversal as provided by the Petitioner is hereunder:

Reference	Date	Rupees
PPA-96/IESCO-11	May-12	4,271,805,912
PPA-115/IESCO-12	Jun-12	1,071,582,554
PPA-178/IESCO-18	Jun-13	2,567,074,409
PPA-187/IESCO-19	Jun-13	469,586,782
PPA-154/IESCO-18	Jun-14	1,658,441,203
PPA-190/IESCO-26	May-13	338,786,627
PPA-201/IESCO-22	Feb-15	6,562,097,701
PPA-209IESCO-23	Feb-15	17,301,278,131
Total		34,240,653,319

49.1.3 The Petitioner also submitted that on an initiative of the GOP, revised determinations were issued by NEPRA on 09-06-2015 duly notified by the GOP on 10-06-2015, SRO #

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569 dated 10-06-2015, based on which it has been allowed to charge Rs.0.43/kwh as Financial Cost Surcharge (FC Surcharge) to its consumers with immediate effect. The Petitioner further stated that as per NEPRA directions it is charging the FC Surcharge and collections in this regard are currently deposited to CPPA. The issue of booking of loans has been taken up with BOD and IESCO is of the view that the liability of Rs.34 Billion may be retained by CPPA (Credit notes may be reversed) or transferred to NTDC, while IESCO as per directions of NEPRA can collect FC Charge and deposit same to CPPA/NTDC for servicing of its debt obligations. The Petitioner has mentioned that this proposal is submitted in line with GoP policy for possible private sector participation in IESCO.

49.1.4 It appears that the credit notes being referred by the Petitioner are related to the PHPL loans, against which the Authority, while deciding the tariff petition for the FY 2012-13, has already adjudicated on the issue with clarity. Since the Petitioner has not provided any new rational or evidence in this regard, hence the matter does not require any further deliberation and the Authority maintain its earlier decision.

49.1.5 Regarding point of the Petitioner that it is charging the FC Surcharge as per NEPRA directions, it is clarified that NEPRA has not levied any of such surcharge; rather it is the Federal Government which has the statutory power to do the same. Under section 31(5) of NEPRA Act, 1997, Federal Government has the power to levy any surcharge and any such surcharge is to be considered as a cost to be included in the tariff determined by NEPRA. The GoP, through its re-consideration request in the matter of determinations for the EX-WAPDA Distribution Companies for the Financial Year 2014-15, intimated that it has levied certain surcharges including the FC surcharge. NEPRA through the re-consideration request of the GoP was requested to simply indicate the amounts of such surcharge imposed by the Federal Government in exercise of its powers; against the already determined schedule of tariff in case of XWDISCOs. Detailed decision of the Authority in the matter of Reconsideration Request of GoP was issued vide No. NEPRA/TRF-100/8883-8885 dated June 09, 2015.

49.2 Proposal for Introduction of Fixed Charges

49.2.1 The Petitioner has proposed that in order to maintain the consumer discipline & to ensure recovery of revenue requirement mainly through Fixed Charges, a component of fixed charges may be added in the tariff of domestic consumer instead of fixed minimum charges so that the fixed charges covers more of the overall revenue requirement of company and variable charges can be reduced. Accordingly, the Petitioner has proposed that in order to rationalize tariff for domestic A-1 (normal and TOU), Commercial (A-2(a)) and Industrial (B-1), it is proposed that a Fixed charge @100/kw against sanctioned load of the consumers having load less than 5 kw may please be allowed and the

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increasing effect of levying fixed charges may be adjusted through providing relief in the variable charges.

49.2.2 A detailed working in this regard is provided hereunder:

Table: Proposed Fix Charges = Rs. 100/Kw

DESCRIPTION	Total Consumers (Avg)	Sales (Mwh)	Fixed Charges Rs. Mill	Var. Chrg. Rs. Mill	Total Rs. Mill	Unit Rate Rs./Kwh	load 06/2015 Kw	Fix Charges Rs. Mill	New var. Chrg. Rs. Mill	New Var. Rate Rs. /Kwh	Diff. in Var. Rate Rs./Kwh
Normal Domestic Total	1,951,639	3,114,088	0.00	22,530	22,530	7.23	2,830,843	3,397	19,133	6.14	1.09
Domestic (TOU)	99,693	589,166	0.00	7,215	7,215	12.25	888,308	1,066	6,149	10.44	1.81
Commercial A2											
UPTO 5KW	319,851	274,055	0.00	4,698	4,698	17.14	438,519	526	4,172	15.22	1.92
Industrial											
B1	10,895	58,371	0.00	694	694	11.89	111,453	134	561	9.60	2.29

49.2.3 The Petitioner has mainly proposed levy of fixed charges to maintain the consumer discipline & to ensure recovery of its revenue requirement. The Authority considers that it already determines Petitioner's tariff which ensures 100% recovery of its revenue requirement. In case consumption pattern of any consumer category change, the same is adjusted through consumer mix variance under the Prior Year Adjustment mechanism. Thus the argument of ensuring recovery of revenue requirement through fixed charges is already taken care of in the existing mechanism. Further, the Petitioner has not provided any basis for proposing fixed charges as Rs.100/kW, therefore, the Authority cannot adjudicate on the adequacy of the Petitioner's request.

50. ORDER

50.1 From what has been discussed above, the Authority hereby determines the tariff of the petitioner Company for the Financial Year 2015-16 to 2019-20 under the Multi-Year Tariff Regime as under:-

I. Islamabad Electric Supply Company (IESCO) is allowed to charge its consumers such tariff as set out in the schedule of tariff for IESCO annexed to the determination.

II. The actual variation in fuel cost component of power purchase price against the reference fuel cost component shall be adjusted on monthly basis without taking into account the T&D losses. The monthly fuel price adjustment shall be based on the actual information submitted by CPPA (G), adjustment of remaining

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components of PPP will be adjusted biannually. Here it is pertinent to mention that while making biannual adjustments of the PPP, the Authority may rationalize the SoT accordingly.

III. IESCO is allowed to charge the users of its system a "Use of system charge" (UOSC) equal to:

i) Where only 132 kV system is involved

$$UOSC = DM(Gross) \times \frac{(1-L)}{(1-0.029)} \times \text{AFI(T)} \quad Paisa/kWh$$

ii) Where only 11 kV distribution systems is involved.

$$UOSC = DM(Gross) \times \frac{(1-L)}{(1-0.05)} \times \text{AFI(D)} \quad Paisa/kWh$$

iii) Where both 132 kV and 11 kV distribution systems are involved.

$$UOSC = DM(Gross) \times \frac{(1-L)}{(1-0.079)} \times \text{AFI(TD)} \quad Paisa/kWh$$

Where:

Gross Distribution Margin for FY 2015-16 is set at Rs. 1.76/kWh (without excluding impact of other income)

'L' is the overall percentage loss assessment for the respective year.

AFI (T) = Adjustment factor for investment at 132 kV level i.e. 38%

AFI (D) = Adjustment factor for investment at 11 kV level i.e. 41%.

AFI (TD) =Adjustment factor for investment at both 132 kV & 11 kV level i.e. 79%.

Net Distribution Margin for FY 2015-16 is set at Rs. 1.57/kWh.

IV. The residential consumers will be given the benefit of only one previous slab.

V. IESCO is hereby allowed the following T&D losses target over the five years tariff control period.

Year	2015-16	2016-17	2017-18	2018-19	2019-20
T&D losses target	9.39%	9.22%	8.93%	8.49%	7.80%

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VII. IESCO is hereby allowed a total investment of Rs.67,679 million including Rs.13,944 million as given hereunder. Detail attached as Annexure-VII;

Million Rs.

Description	2015-16	2016-17	2017-18	2018-19	2019-20	Total
STG	6,748	2,545	1,566	1,196	5,129	17,184
Distribution (Expansion & Rehabilitation)	1,668	1,668	1,669	1,669	1,675	8,349
Vehicles and Tools & Plants	46	56	48	56	62	268
Civil Works	108	132	120	132	144	636
GIS Mapping Plan	22	56	75	5	33	191
AMR/Commercial Improvement	0	0	0	0	18,420	18,420
Other Functional Plans	520	602	537	272	405	2,336
Miscellaneous Charges	1,109	902	877	932	2,531	6,351
TOTAL	**10,221**	**5,961**	**4,892**	**4,262**	**28,399**	**53,735**
Consumer Contribution	**1,697**	**4,129**	**1,827**	**4,331**	**1,960**	**13,944**
Grand Total	**11,918**	**10,090**	**6,719**	**8,593**	**30,359**	**67,679**

50.2 The Authority hereby determines and approves the following component wise cost and their adjustments/indexation mechanism in the matter of IESCO's MYT tariff petition for the FY 2015-16 to 2019-20.

TARIFF COMPONENT	Assessed Cost FY 2015-16	Reference Cost For tariff control period	ADJUSTMENTS/ INDEXATION	TIME LINES
POWER PURCHASE PRICE				
Energy Purchase Price				
Fuel Cost	50,104	50,104	Monthly, as per the approved mechanism.	Data to be provided by CPPA (G)by 3rd of close of the month
Variable O&M	2,777	2,777	Biannually, as per the approved mechanism.	Request to be furnished by the Petitioner not later than 10th July and 10th January, as the case may be.
Capacity Charges	21,271	21,271	Biannually, as per the approved mechanism.	Request to be furnished by the Petitioner not later than 10th July and 10th January, as the case may be.

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Use of System Charges	2,706	2,706	Biannually, as per the approved mechanism.	Request to be furnished by the Petitioner not later than 10th July and 10th January, as the case may be.
T&D Losses	9.39%	9.39%	Biannually, as per the approved mechanism.	Request to be furnished by the Petitioner not later than 10th July and 10th January, as the case may be.
NET DISTRIBUTION MARGIN	12,907	-		
O&M Cost				
Salaries, wages & other benefits	4,384	4,384	Annually, as per Annex-VI	Request to be submitted by Petitioner by 7th July every year.
Post-Retirement benefits	2,894	-	As per the decision	
Repair and Maintenance	836	836	Annually, as per Annex-VI	Request to be submitted by Petitioner by 7th July every year.
Other operating expanses	1,010	1,010	Annually, as per Annex-VI	Request to be submitted by Petitioner by 7th July every year.
Depreciation	2,462	2,487	Annually, as per the Annex-VI	Request to be submitted by Petitioner by 7th July every year.
Return on Rate Base	2,921	2,937	Annually, as per the Annex-VI	
Other Income	(1,600)	(1,600)	Annually, as per the Annex-VI	
Prior Year Adjustment	(10,781)	-	Annually, as per the existing Mechanism	
KIBOR Spread	2.75%	-	Annually, as per the decision	
KIBOR	7.01%		Bi-Annually, as per the decision.	

The Order part, Annex-I, II, III, IV, V, VI, VII, VIII, IX annexed with determination is intimated to the Federal Government for notification in the official gazette under Section 31(4) of the NEPRA Act.

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51. Summary of Direction

51.1 The summary of all the directions passed in this determination are reproduced hereunder;

- ✓ To take up the matter of outstanding amounts of receivable from AJK with the sub-committee constituted in this regard not later than 30th June, 2016 and the Authority be apprised on quarterly basis about the progress in this regard.
- ✓ To provide details of actual investments undertaken under the head of DOP, ELR and STG in the FY 2013-14 and FY 2014-15 against the corresponding benefits thereof not later than 30th June, 2016.
- ✓ To finalize the procurement process of HHUs at the earliest and convert the billing process on HHU basis in order to eliminate the inefficiencies and to adopt necessary measures to address problems being faced by the consumers regarding visibility of snap shots appearing on the bills and to keep the record of snap shots till one year.
- ✓ To complete the installation of its remaining AMI/ AMRs as per the deadlines set by the Authority.
- ✓ To explain in detail the reason for non-operational of the call center for which the consumers have already been burdened for the Return and Depreciation of the Investment made on the Call Center, not later than June 30, 2016.
- ✓ To spend at least 20% of the village electrification funds for improvement / up-gradation of the grid. The Petitioner is further directed to not to undertake any village electrification which would result in overloading of its system. The village electrification would only be undertaken without augmentation of the grid, if it already has spare MVAs.
- ✓ To complete study of its Transmission and Distribution losses on 132 KV, 11KV and below.
- ✓ To ensure that in future consumer's deposits are not utilized for any other purpose and to restrain from unlawful utilization of receipts against deposit works and security deposits, failing which, the proceedings under the relevant law shall be initiated against the Petitioner. The Petitioner is also directed to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance.
- ✓ The Petitioner has to provide rational / justification for improper utilization of the consumer security deposit and receipt against deposit work. The Petitioner is also being directed to restrain from unlawful utilization of receipts against

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deposit works and security deposits, failing which, the proceedings under the relevant law shall be initiated against the Petitioner.

- ✓ The Petitioner is also directed to give clear disclosures in its Financial Statements with respect to the consumer financed spares and stores, work in progress and cash & bank balance.
- ✓ To create separate accounts or fund (as the case may be) for each head of post retirement liability and transfer the amount in the post retirement liability in the fund or accounts (as the case may be).
- ✓ To maintain a proper record of its assets by way of tagging each asset for its proper tracking and to provide an explanation on the concerns raised by the Authority in terms of its R&M cost not later than 30th June, 2016.
- ✓ To share the detail of late payment charges recovered from the consumers and any invoice raised by CPPA / CPPA (G) under the head of mark-up on delayed payments for the FY 2014-15 and FY 2015-16.

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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.

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Islamabad Electric Supply Company Limited(IESCO)
Estimated Sales Revenue on the Basis of New Tariff

Description	Sales		Tariff		Revnue		
	GWh	% Mix	Fixed Charge	Variable Charge	Fixed Charge	Variable Charge	Total
			Rs./kW/M	Rs./kWh		Mln. Rs.	
Residential							
Up to 50 Units	310	3.77%		4.00	-	1,241	1,241
For peak load requirement less than 5 kW							
01-100 Units	1056	12.82%		7.10	-	7,495	7,495
101-200 Units	523	6.35%		11.00	-	5,749	5,749
201-300 Units	619	7.52%		11.00	-	6,812	6,612
301-700Units	309	3.76%		13.00	-	4,020	4,020
Above 700 Units	84	1.03%		14.30	-	1,208	1,208
For peak load requirement exceeding 5 kW)							
Time of Use (TOU) Peak	110	1.33%		14.30	-	1,566	1,566
Time of Use (TOU) - Off-Peak	486	5.90%		7.10	-	3,451	3,451
Temporary Supply	1	0.01%		14.65	-	9	9
Total Residential	**3,498**	**42.48%**			-	**31,551**	**31,551**
Commercial - A2							
For peak load requirement less than 5 kW	251	3.05%		14.25	-	3,562	3,562
For peak load requirement exceeding 5 kW							
Regular	11	0.13%	400.00	11.25	19	122	141
Time of Use (TOU) - Peak	160	1.21%		14.30	-	1,425	1 425
Time of Use (TOU) - Off-Peak	451	5.48%	400.00	7.10	1,174	3,204	4 379
Temporary Supply	13	0.15%		14.25	-	180	180
Total Commercial	**826**	**16.03%**			**1,193**	**8,514**	**9,707**
General Services-A3	**247**	**3.00%**	-	**10.56**	-	**2,606**	**2,606**
Industrial							
B1	3	0.04%		11.25	-	38	38
B1 Peak	8	0.10%		14.30	-	120	120
B1 Off Peak	47	0.57%		7.10	-	335	335
B2	10	0.12%	400.00	10.75	11	109	120
B2 - TOU (Peak)	43	0.52%		14.30	-	610	610
B2 - TOU (Off-peak)	343	4.16%	400.00	6.90	908	2,364	3,272
B3 - TOU (Peak)	23	0.28%		14.30		331	331
B3 - TOU (Off-peak)	411	4.99%	360.00	6.70	491	2,754	3,245
B4 - TOU (Peak)	86	1.04%		14.30		1,229	1,229
B4 - TOU (Off-peak)	714	8.67%	360.00	6.60	691	4,713	5,404
Temporary Supply	0	0.00%		11.25	-	0	0
Total Industrial	**1,689**	**20.51%**			**2,101**	**12,603**	**14,706**
Single Point Supply for further distribution							
C1(a) Supply at 400 Volts-less than 5 kW	0	0.00%		11.75	-	9	0
C1(b) Supply at 400 Volts-exceeding 5 kW	7	0.08%	400.00	11.25	7	73	80
Time of Use (TOU) - Peak	13	0.16%		14.30	-	183	183
Time of Use (TOU) - Off-Peak	61	0.74%	400.00	7.10	100	435	535
C2 Supply at 11 kV	93	1.13%	360.00	11.05	108	1,032	1,140
Time of Use (TOU) - Peak	62	0.76%		14.30	-	893	893
Time of Use (TOU) - Off-Peak	317	3.85%	360.00	6.90	483	2 186	2,669
C3 Supply above 11 kV	0	0.00%	360.00	10.95	-		-
Time of Use (TOU) - Peak	41	0.50%		14.30	-	566	566
Time of Use (TOU) - Off-Peak	196	2.38%	360.00	6 70	242	1 312	1 554
Total Single Point Supply	**790**	**9.60%**			**939**	**6,701**	**7,640**
Agricultural Tube-wells - Tariff D							
Scarp	3	0.04%		11.30	-	33	33
Time of Use (TOU) - Peak	5	0.06%		14.30	-	71	71
Time of Use (TOU) - Off-Peak	11	0.14%	200.00	6.70	135	77	212
Agricultual Tube-wells	63	0.77%	200 00	9.45	59	600	659
Time of Use (TOU) Peak	2	0.02%		14.30	-	28	28
Time of Use (TOU) - Off-Peak	10	0.12%	200.00	6.70	34	65	99
Total Agricultural	**94**	**1.15%**			**228**	**873**	**1,102**
Public Lighting - Tariff G	82	1.00%		13.25	-	1,092	1,092
Residential Colonies	22	0.26%		13.25	-	287	287
Tariff K - AJK	552	6.71%	360.00	10.50	538	5,797	6,335
Time of Use (TOU) - Peak	79	0.95%		14.30	-	1,124	1,124
Time of Use (TOU) - Off-Peak	354	4.30%	360.00	6.60	426	2,407	2,833
Tariff K -Rawat Lab	0	0.00%		13.25		4	4
Sub-Total	**1,089**	**13.23%**			**964**	**10,712**	**11,676**
Special Contract - Tariff-J							
J-1 For Supply at 66 kV & above	-	0.00%	360.60	10.95	-	-	-
Time of Use (TOU) - Peak	-	0.00%		14.30	-	-	-
Time of Use (TOU) - Off-Peak	-	0.00%	360.00	6.70	-	-	-
J-2 (a) For Supply at 11, 33 kV	-	0.00%	360.00	11.05	-	-	-
Time of Use (TOU) - Peak	-	0.00%		14.30	-	-	-
Time of Use (TOU) - Off-Peak	-	0.00%	360.00	6.90	-	-	-
J-2 (b) For Supply at 66 kV & above	-	0.00%	360.60	10.95	-	-	-
Time of Use (TOU) - Peak	-	0.00%		14 30	-	-	-
Time of Use (TOU) - Off-Peak	-	0.00%	360.00	6.70	-	-	-
J-3 (a) For Supply at 11, 33 kV	-	0.00%	360.00	11.05	-	-	-
Time of Use (TOU) - Peak	-	0.00%		14.30	-	-	-
Time of Use (TOU) - Off-Peak	-	0.00%	360.00	6.90	-	-	-
J-3 (b) For Supply at 66 kV & above	-	0 00%	360 00	10.95	-	-	-
Time of Use (TOU) - Peak	-	0 00%		14.30	-	-	-
Time of Use (TOU) - Off-Peak	-	0.00%	360 00	6.70	-		-
Total Revenue	**8,233**	**100.00%**			**5,426**	**73,559**	**78,985**

SCHEDULE OF ELECTRICITY TARIFFS
FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)

A-1 GENERAL SUPPLY TARIFF - RESIDENTIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
a)	For Sanctioned load less than 5 kW			
i	Up to 50 Units	-		4.00
	For Consumption exceeding 50 Units			
ii	001 - 100 Units	-		7.10
iii	101 - 200 Units	-		11.00
iv	201 - 300 Units	-		11.00
v	301 - 700 Units	-		13.00
vi	Above 700 Units	-		14.30
b)	For Sanctioned load 5 kW & above	-		
			Peak	Off-Peak
	Time Of Use	-	14.30	7.10

As per the Authority's decision residential consumers will be given the benefits of only one previous slab.

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: Rs. 75/- per consumer per month
b) Three Phase Connections: Rs. 150/- per consumer per month

A-2 GENERAL SUPPLY TARIFF - COMMERCIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
a)	For Sanctioned load less than 5 kW			14.25
b)	For Sanctioned load 5 kW & above	400.00		11.25
			Peak	Off-Peak
c)	Time Of Use	400.00	14.30	7.10

Under tariff A-2, there shall be minimum monthly charges at the following rates even if no energy is consumed.

a) Single Phase Connections; Rs. 175/- per consumer per month
b) Three Phase Connections: Rs. 350/- per consumer per month

A-3 GENERAL SERVICES

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh
a)	General Services	-	10.55

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

a) Single Phase Connections; Rs. 175/- per consumer per month
b) Three Phase Connections: Rs. 350/- per consumer per month

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SCHEDULE OF ELECTRICITY TARIFFS
FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)

B INDUSTRIAL SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
B1	Upto 25 kW (at 400/230 Volts)	-		11.25
B2(a)	exceeding 25-500 kW (at 400 Volts)	400.00		10.75
	Time Of Use		Peak	Off-Peak
B1 (b)	Up to 25 KW		14.30	7.10
B2(b)	exceeding 25-500 kW (at 400 Volts)	400.00	14.30	6.90
B3	For All Loads up to 5000 kW (at 11,33 kV)	380.00	14.30	6.70
B4	For All Loads (at 66,132 kV & above)	360.00	14.30	6.60

For B1 consumers there shall be a fixed minimum charge of Rs. 350 per month.
For B2 consumers there shall be a fixed minimum charge of Rs. 2,000 per month.
For B3 consumers there shall be a fixed minimum charge of Rs. 50,000 per month.
For B4 consumers there shall be a fixed minimum charge of Rs. 500,000 per month.

C SINGLE-POINT SUPPLY FOR PURCHASE IN BULK BY A DISTRIBUTION LICENSEE AND MIXED LOAD CONSUMERS NOT FALLING IN ANY OTHER CONSUMER CLASS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
C -1	For supply at 400/230 Volts			
a)	Sanctioned load less than 5 kW	-		11.75
b)	Sanctioned load 5 kW & up to 500 kW	400.00		11.25
C -2(a)	For supply at 11,33 kV up to and including 5000 kW	380.00		11.05
C -3(a)	For supply at 66 kV & above and sanctioned load above 5000 kW	360.00		10.95
	Time Of Use		Peak	Off-Peak
C -1(c)	For supply at 400/230 Volts 5 kW & up to 500 kW	400.00	14.30	7.10
C -2(b)	For supply at 11,33 kV up to and including 5000 kW	380.00	14.30	6.90
C -3(b)	For supply at 66 kV & above and sanctioned load above 5000 kW	360.00	14.30	6.70

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SCHEDULE OF ELECTRICITY TARIFFS FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)

D - AGRICULTURE TARIFF

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
D-1(a)	SCARP less than 5 kW	-		11.30
D-2 (a)	Agricultural Tube Wells	200.00		9.45
			Peak	Off-Peak
D-1(b)	SCARP 5 kW & above	200.00	14.30	6.70
D-2 (b)	Agricultural 5 kW & above	200.00	14.30	6.70

Under Agriculture 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 5 kW can opt for TOU metering.

E - TEMPORARY SUPPLY TARIFFS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh
E-1(i)	Residential Supply	-	14.65
E-1(ii)	Commercial Supply	-	14.25
E-2	Industrial Supply	-	11.25

For the categories of E-1(i&ii) 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

Note:

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.

G- PUBLIC LIGHTING

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh
	Street Lighting	-	13.25

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

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SCHEDULE OF ELECTRICITY TARIFFS
FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)

H - RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh
	Residential Colonies attached to industrial premises	-	13.25

K - SPECIAL CONTRACTS

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
1	Azad Jammu & Kashmir (AJK)	360.00	10.50	
			Peak	Off-Peak
	Time Of Use	360.00	14.30	6.80
2	Rawat Lab		13.25	

J - SPECIAL CONTRACTS UNDER NEPRA (SUPPLY OF POWER) REGULATIONS 2015

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES Rs/kW/M	VARIABLE CHARGES Rs/kWh	
J -1	For supply at 66 kV & above and having sanctioned load of 20MW & above	360.00	10.95	
J-2				
(a)	For supply at 11,33 kV	380.00	11.05	
(b)	For supply at 66 kV & above	360.00	10.95	
J-3				
(a)	For supply at 11,33 kV	380.00	11.05	
(b)	For supply at 66 kV & above	360.00	10.95	
	Time Of Use		Peak	Off-Peak
J -1(b)	For supply at 66 kV & above and having sanctioned load of 20MW & above	360.00	14.30	6.70
J-2 (c)	For supply at 11,33 kV	380.00	14.30	6.90
J-2 (d)	For supply at 66 kV & above	360.00	14.30	6.70
J-3 (c)	For supply at 11,33 kV	380.00	14.30	6.90
J-3 (d)	For supply at 66 kV & above	360.00	14.30	6.70

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Annex-IV

IESCO Power Purchase Price

Name	July	August	September	October	November	December	January	February	March	April	May	June	Total
Units Purchased by DISCOs (GWh)	949	933	847	782	684	656	596	617	624	607	826	964	9,086

kWh

Fuel Cost Component	4.9811	4.7552	5.1217	5.2366	5.0497	5.8619	7.1241	5 7493	6 6429	6.7227	5.2908	4.9927	5.514
Variable O & M	0.2727	0.2678	0 2825	0.2891	0 2916	0 3337	0 3711	0 3234	0.3467	0.3577	0.3050	0 2891	0.306
CpGenCap	2.2626	1 9473	1 8949	2.3006	2 4507	2 6715	3 1866	2 3727	2.9303	2.6991	2.3033	1 8041	2.3411
USCF	0 2858	0 2631	0 2601	0.3067	0 3412	0 3307	0 3658	0.3069	0.3352	0.3485	0.2631	0.2419	0.2978
Total PPP in Rs. /kWh	**7.8012**	**7.2333**	**7.5591**	**8.1330**	**8.1332**	**9.1978**	**11.0476**	**8.7523**	**10.2550**	**10.1280**	**8.1622**	**7.3278**	**8.4590**

Rs in Million

Fuel Cost Component	4,728	4,437	4,340	4,095	3,455	3 846	4,243	3,548	4,147	4,083	4,370	4,811	50,104
Variable O & M	259	250	239	226	200	219	221	200	216	217	252	279	2,777
CpGenCap	2,148	1,817	1,606	1,799	1,677	1,753	1,898	1,464	1,829	1,639	1,902	1,738	21,271
USCF	271	246	220	240	233	217	218	189	209	212	217	233	2,706
PPP	**7,405**	**6,750**	**6,406**	**6,361**	**5,565**	**6,035**	**6,580**	**5,402**	**6,401**	6,152	**6,742**	**7,061**	76,859

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

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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 Islamabad Electric Supply Company Limited (IESCO) engaged in the business of distribution 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 highest of maximum demand recorded in a month 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 exceeding 4 kW supply shall be given at three-phase.

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12. "Consumer" means a person of his successor-in-interest as defined under Section 2(iv) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

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 Dispatch 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 (XL of 1997).

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.

At any point of time, if the floating average of last six months' consumption exceed 50 units, then the said consumer would not be classified as life line for the billing month even if its consumption is less than 50 units. For the purpose of calculating floating average, the consumption charged as detection billing would also be included.

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,
   ii) Hotels 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.

2. Consumers under tariff A-2 having sanctioned load of less than 5 kW shall be billed under a Single-Part kWh rate A-2(a)
3. 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).
4. The existing and prospective consumers having load of 5 kW and above can opt for T.O.U metering arrangement and A-2(c) tariff.
5. All existing consumers under tariff A-2 shall be provided T.O.U metering arrangement by the Company and convert it to-A-2 (c) Tariff.
6. All new connections having load requirement 5 kW and above shall be provided T.O.U meters and shall be billed under tariff A-2(c).

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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 operating on three phase 400 volts other than those meant for the irrigation or reclamation of Agriculture land.

1. 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 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 and 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 Regular Industrial Tariff category 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.

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 a 25 kW.
2. Consumers having sanctioned load less than 25 kW shall be billed on single-part kWh rate.
3. All existing consumers under tariff B-1 shall be provided T.O.U metering arrangement by the Company and convert it to-B1 (b) Tariff.

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.

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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 5000 kW and also for Industries having sanctioned load of 500 kW or below who opt for receiving supply at 11 kV or 33 kV.
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 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 NEPRA eligibility criteria.
4. 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

1. This tariff is applicable for supply to Industries for all loads of more than 5000 kW receiving supply at 66 kV, 132 kV and above and also for Industries having load of 5000 kW 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 NEPRA Eligibility Criteria, 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 NEPRA Eligibility Criteria.
4. All B-4 Industrial Consumers shall be billed on the basis of two-part T.O.U tariff.

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C BULK SUPPLY

"Bulk Supply" for the purpose of this Tariff, means the supply given at one point for self-consumption 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-1 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

1. This tariff is applicable to consumers receiving supply at 11 kV or 33 kV at one-point metering arrangement and having sanctioned load of up to and including 5000 kW.
2. 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 NEPRA eligibility criteria.
3. 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.
4. 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 NEPRA Eligibility Criteria, 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 NEPRA Eligibility Criteria.
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.

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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, viz. fish farms, fish hatcheries and fish nurseries.
   iv) Tube-wells installed in a dairy farm meant for cultivating crops as fodder and for 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 tube-wells 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 having sanctioned load of less than 5 kW.
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 having sanctioned load less than 5 kW 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.

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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, marriages and other civil or military functions. This also includes supply to touring cinemas and persons engaged in construction works for all kinds of single phase loads. For connected load exceeding 4 kW, supply may be given at 400 volts (3 phase) to allow a balanced distribution of load on the 3 phases. Normally, temporary connections shall be allowed for a period of 3 months which can be extended on three months basis subject to clearance of outstanding dues.

Special Conditions of Supply

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.

E -2 TEMPORARY INDUSTRIAL SUPPLY

"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.

F 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

1. "Year" means any period comprising twelve consecutive months.
2. 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

seasonal 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 end of 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 part of his load (e.g., lights, fans, tube-wells, etc.) throughout the year, he shall have to bring out 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 re-connected with the Company's Supply System.

G PUBLIC LIGHTING SUPPLY

"Public Lighting Supply" means the supply for the purpose of illuminating public lamps.

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.

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"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.

I. TRACTION

Supply under this tariff means supply of power in bulk to Railways for Railway traction only.

J. SPECIAL CONTRACTS UNDER NEPRA (SUPPLY OF POWER) REGULATIONS 2015

Supply for the purpose of this tariff means the supply given at one or more common delivery points;

i. To a licensee procuring power from IESCO for the purpose of further supply within its respective service territory and jurisdiction.

ii. To an O&M operator under the O&M Agreement within the meaning of NEPRA (Supply of Power) Regulations 2015 duly approved by the Authority for the purpose of further supply within the service territory and jurisdiction of the IESCO

iii. To an Authorized agent within the meaning of NEPRA (Supply of Power) Regulations 2015, procuring power from the IESCO for further supply within the service territory and jurisdiction of the IESCO

J-1 SUPPLY TO LICENSEE

1. This tariff is applicable to a Licensee having sanctioned load of 20 MW and above receiving supply at 66 kV and above.
2. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to J-1(b).
3. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff J-1(b) as set out in the Schedule of Tariff.

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SUPPLY UNDER O&M AGREEMENT

J-2 (a) SUPPLY AT 11 KV AND 33 KV

1. This tariff is applicable to an O&M operator receiving supply at 11 kV or 33 kV under the O&M Agreement duly approved by the Authority.
2. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to J-2(c).
3. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff J-2(c) as set out in the Schedule of Tariff.

J-2 (b) SUPPLY AT 66 KV AND ABOVE

1. This tariff is applicable to an O&M operator receiving supply at 66 kV & above under the O&M Agreement duly approved by the Authority.
2. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to J-2(d).
3. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff J-2(d) as set out in the Schedule of Tariff.

SUPPLY TO AUTHORIZED AGENT

J-3 (a) SUPPLY AT 11 KV AND 33 KV

1. This tariff is applicable to an authorized agent receiving supply at 11 kV or 33 kV.
2. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to J-3(c).
3. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff J-3(c) as set out in the Schedule of Tariff.

J-3 (b) SUPPLY AT 66 KV AND ABOVE

1. This tariff is applicable to an authorized agent receiving supply at 66 kV & above.
2. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to J-3(d).
3. All new consumers shall be provided TOU metering arrangement and shall be billed on the basis of tariff J-3(d) as set out in the Schedule of Tariff.

K. SPECIAL CONTRACTS

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

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O&M EXPENSE

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

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

Where:

$O\&M_{(Rev)}$	=	Revised O&M Expense for the Current Year
$O\&M_{(Ref)}$	=	Reference O&M Expense for the Reference Year
ΔCPI	=	Change in Consumer Price Index published by Pakistan Bureau of Statistics latest available on 1st July against the CPI as on 1st July of the Reference Year in terms of percentage.
X	=	Efficiency factor

RORB

RORB assessment will be made in accordance with the following formula/mechanism·

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

Where:

$RORB_{(Rev)}$	=	Revised Return on Rate Base for the Current Year
$RORB_{(Ref)}$	=	Reference Return on Rate Base for the Reference Year
$RAB_{(Rev)}$	=	Revised Rate Base for the Current Year
$RAB_{(Ref)}$	=	Reference Rate Base for the Reference Year

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DEPRECIATION EXPENSE

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

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

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

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OTHER INCOME

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

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

Where:

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

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A. **Target Projects in Next 5 Years:**

A-1 Number of sub-projects under STG is as follows:

A-1.1 Grid Station Projects to Overcome Overloading and Low Voltage Problems at 132 kV Level:

S. #	Description	Total Nos.	Total MVA	2015-16	2016-17	2017-18	2018-19	2019-20
1	**New**							
a)	132 kV	10	455	3	0	0	2	5
2	**Conversion**							
a)	66 to 132 kV	4	104	4	0	0	0	0
3	**Augmentation**							
a)	132 kV	43	1455	11	28	2	2	0
b)	66 kV	0	0	0	0	0	0	0
4	**Extension (T/Bay)**							
a)	132 kV	21	391	5	15	0	0	1
5	**Extension (L/Bay)**							
a)	132 kV	3	0	2	0	0	1	0
6	**Sub-Total**	**81**	**2405**	**25**	**43**	**2**	**5**	**6**

A-1.2 New Transmission Line Projects to Overcome Power Evacuation Constraints:

S. #	Description	Length KM	2015-16	2016-17	2017-18	2018-19	2019-20
1	132 kV D/C	218.19	51.19	0	62	0	105
2	132 kV SDT	270	190.00	0	0	25	55
3	**Sub-Total**	**488.19**	**241.19**	**0**	**62**	**25**	**160**

A-1.3 2nd Circuit Stringing of Existing SDT Transmission Lines:

S. #	Description	Length KM	2015-16	2016-17	2017-18	2018-19	2019-20
1	132 kV SDT	25	25	0	0	0	0
2	**Sub-Total**	**25**	**25**	**0**	**0**	**0**	**0**

A-1.4 Reconductoring/Up-Gradation of Existing Transmission Lines:

S. #	Description	Length KM	2015-16	2016-17	2017-18	2018-19	2019-20
1	132 kV D/C	107	75	0	7	0	25
2	**Sub-Total**	**107**	**75**	**0**	**7**	**0**	**25**

A-1.5 Capacitor Installation Projects to Improve Power Factor:

S. #	Description	MVAR	2015-16	2016-17	2017-18	2018-19	2019-20
1	11 kV Fixed	177 60	50.40	40.80	86.40	0	0
2	132 kV Switched	36	0	0	0	36	0
3	**Sub-Total**	**213.60**	**50.40**	**40.80**	**86.40**	**36**	**0**

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A-2 Names of New 132 kV Grid Stations and Transmission Lines under STG in Next 5 Years:

Year	New 132 kV Grid Stations	New 132 kV Transmission Lines
2015-16	Sangjani – II Bhara Kahu Chakri Road	KTM-Chakri Road F/F Sangjani-II F/F Bhara Kahu F/F Chakri Road Basal-Jand Jand-Lakkarmar Lakkarmar-Tamman Talagang-DS Bilawal Tamman-Talagang
2016-17	NIL	NIL
2017-18	NIL	Chakwal-2 to C.S.Shah Chakwal-2 to Talagang Chakwal-2 to Neela I/O Gujjar Khan-Rawat for 132 kV Rawat Burhan-New Wah
2018-19	Rawat Burhan	Fatehjang-Tarnol
2019-20	Jhelum Cantt. Sanghoi Sohawa Khanpur Ghorghushti	Power Dispersal from Islamabad West to D-12 to E-8 (I/O) Power Dispersal from Islamabad West to Tarnol to F-11 (I/O) Power Dispersal from Sangjani to Zero Point to I-16 (I/O) Power Dispersal from New Kamra to Old Kamra to Sanjwal Power Dispersal from New Kamra to Faqirabad to Gondal Power Dispersal from New Kamra to Burhan to Nowshera Power Dispersal from Islamabad West to Bahter More Power Dispersal from Islamabad West to Taxila F/F Sohawa F/F Khanpur F/F Jhelum Cantt. F/F Sanghoi F/F Ghorghushti

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A-3 Number of sub-projects under DOP Expansion and Rehabilitation are as follows:

A-3.1 DOP Expansion Projects to Cater Future Demand:

Sr. #	Description	Unit	Quantities 2015-16	2016-17	2017-18	2018-19	2019-20	Total
Scope of Work for 11 kV and Below Expansion								
1	**New HT Lines**							
	Number of proposals	Nos.	16	16	16	16	18	82
	Length of new HT line	Km	164	164	164	164	165	820
	HT line Reconductoring	Km	164	164	164	164	164	820
2	**Transformers (Replacement)**							
	a. 50 KVA	Nos.	45	45	45	45	46	226
	b. 100 KVA	Nos.	90	90	90	90	90	450
	c. 200 KVA	Nos.	45	45	45	45	46	226
	d. others KVA	Nos.	0	0	0	0	0	0
	Sub Total	Nos.	180	180	180	180	182	902
3	**Transformers (New Substations)**							
	a. 50 KVA	Nos.	23	23	23	23	23	113
	b. 100 KVA	Nos.	45	45	45	45	45	225
	c. 200 KVA	Nos.	23	23	23	23	23	113
	d. others KVA	Nos.	0	0	0	0	0	0
	Sub Total	Nos.	90	90	90	90	90	451
4	**11 KV Capacitors**							
	a. Fixed 450 KVAR	Nos.	16	16	16	16	18	82
	b. Fixed 900 KVAR	Nos.	0	0	0	0	0	0
	c. Others	Nos.	0	0	0	0	0	0
	Sub Total	Nos.	16	16	16	16	18	82
5	11 KV Panel	Nos.	16	16	16	16	18	82
Scope of Work for LT Expansion								
1	**New LT Lines**							
	Number of proposals	Nos.	270	270	270	270	273	1353
	Length of new LT line	Km	44	44	44	44	44	220
	LT line Reconductoring	Km	36	36	36	36	36	182
2	**LT Capacitors**							
	a. Different KVARs	Nos.	60	60	60	60	60	300

A-3.2 DOP Rehabilitation Projects to Reduce Overloading at 11 kV Level:

Sr. #	Description	Unit	Quantities 2015-16	2016-17	2017-18	2018-19	2019-20	Total
Scope of Work for 11 kV and Below Rehabilitation								
1	**Rehabilitation of HT Lines**							
	Number of proposals	Nos.	20	20	20	20	20	100
	Bifurcation (New Line Addition)	Km	200	200	200	200	200	1000
	Reconductoring	Km	200	200	200	200	200	1000
	Re-routing	Km	0	0	0	0	0	0
2	**Replacement of Overloaded Transformers**							
	a. 50 KVA	Nos.	55	55	55	55	55	275
	b. 100 KVA	Nos.	110	110	110	110	110	550
	c. 200 KVA	Nos.	55	55	55	55	55	275
	h. others KVA	Nos.	0	0	0	0	0	0
	Sub Total	Nos.	220	220	220	220	220	1100

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3	**New Sub Stations**							
	a. 50 KVA	Nos.	27	27	27	27	29	137
	b. 100 KVA	Nos.	55	55	55	55	56	276
	c. 200 KVA	Nos.	27	27	27	27	29	137
	d. others KVA	Nos.	0	0	0	0	0	0
	Sub Total	Nos.	109	109	109	109	114	550
4	**11 KV Capacitors**							
	a. Fixed 450 KVAR	Nos.	20	20	20	20	20	100
	b. Fixed 900 KVAR	Nos.	0	0	0	0	0	0
	c. Others	Nos.	0	0	0	0	0	0
	Sub Total	Nos.	20	20	20	20	20	100
5	11 KV Panels	Nos.	20	20	20	20	20	100

Scope of Work for LT Rehabilitation								
1	**LT Lines Rehabilitation**							
	Number of proposals	Nos.	330	330	330	330	330	1650
	Bifurcation, Re-routing, shifting of transformer to load center (New Line Addition)	Km	53.6	53.6	53.6	53.6	53.6	268
	Reconductoring of LT Line	Km	44	44	44	44	44	222
2	**LT Capacitors**							
	a. Different KVARs	Nos.	60	60	60	60	60	300

A-4 Number of sub-projects under ELR Program is as follows:

A-4.1 Energy Loss Reduction Projects to Reduce T&D Losses through GIS Mapping:

Sr. #	Description	Unit	Quantities						
			2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
GIS Mapping									
1	**HT Mapping**								
	Number of 11 kV Feeders	Nos.	150	186	198	199	200	200	1133
	Length of HT Lines mapped	Km	120	5402	5414	5426	5437	5449	27250
2	**LT Mapping**								
	Number of Transformers	Nos.	6750	8330	8358	8388	8416	8450	48693
	Length of LT Lines mapped	Km	101	5546	5560	5572	5586	5600	27964
3	**Tools Required**								
	GIS Mapping Software Licenses	Nos.	2	2	9	10	4	0	25
	Hardware including plotters, computers, GPS devices etc	Nos.	1	12	46	120	104	76	357

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Sr. #	Description	Unit	Quantities						
			2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Study Based Planning using GIS Maps with Modern Planning Tools - Transition Plan									
1	**HT**								
	Number of HT Lines Analyzed	Nos.	150	186	198	199	200	200	1133
2	**LT**								
	Number of LT Lines Analyzed	Nos.	6750	8330	8358	8388	8416	8450	48693
3	**Tools Required**								
	Simulation Software Licenses	Nos.	1	2	9	10	4	0	25
	Hardware including plotters, computers etc.	Nos.	0	4	18	20	8	0	50

A-5 Sub-projects under Commercial Improvement Plan are as follows:

A-5.1 Projects to Reduce Metering Complaints/Errors

		Define Scope					
		2015-16	2016-17	2017-18	2018-19	2019-20	Total
A	**AMI Metering**					Smart Metering of Rawalpindi Circle	
B	**Electronic Metering**						
C	**New CIS system**	Study & System Analysis	Implementation of CIS + CRM	Implementation of CIS + CRM	Operation & Maintenance	Operation & Maintenance	
D	**HHUs for meter reading**	Implementation of Meter Reading through smart device /HHU in entire company	Replacement of Smart Phone with HHU	Day to day Operation	Day to day Operation	Day to day Operation	
E	**Consumer Census**			50% Consumers		50% Consumers	100% Consumers
F	**IT infrastructure to support new initiatives**	Installation of Work Station & Server for HHU & ERP. Data Center & Server tor ERP	Data Center for CIS. Networking for ERP & CIS	Maintenance of Data Center, Servers & Work Stations	Maintenance of Data Center, Servers & Work Stations	Maintenance of Data Center, Servers & Work Stations	

A-5.2 Detail of AMI/AMR Metering Plan

S. #	Description	Nos.
A	Single Phase AMI Meters (Domestic)	697,160
B	Single Phase AMI Meters (Commercial)	77,463
C	Three Phase AMI Meters (Commercial)	85,185
D	Meters (Sub Stations)	238
E	Meters (Dist. Transformers)	14,955
F	Meters (Bulk/industrial consumers)	4,617
Total		879,618

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A-6. **Sub-projects under the head of Vehicle, Mechanical Tolls and Plants are as follows:**

A-6.1 Vehicles Required for STG, DOP and ELR Operations:

Sr. #	Description	Unit	Quantities					
			2015-16	2016-17	2017-18	2018-19	2019-20	Total
1	Heavy Vehicles (Trucks)	No.	2	2	2	2	3	11
2	Light Vehicles (Pickup Single Cabin)	No.	7	8	8	8	11	42
3	Cars	No.	0	0	0	0	0	0
4	Bucket Mounted Trucks	No.	2	2	2	2	3	11
5	Motor cycles	No.	14	16	16	16	16	78
6	Jeeps (4x4)	No.	3	6	2	6	4	21
7	Light Vehicle (Pickup Shehzore)	No	7	8	8	8	8	39
	Sub Total	No.	35	42	38	42	45	202

A-6.2 Mechanical Tools & Plants:

S. #	Description	Qty.	Rate (Rs.)	Cost (Rs.)
A	**Sub Division**			
1	Earthing Set	2	3296	6592
2	Farth Tester	1	49176	49176
3	Megger (1000 volts)	1	27200	27200
4	Measuring Tape	1	610	610
5	Fiber Glass Extension Ladder	2	5800	11600
6	Cuffing Hoist (1500 kg)	1	6400	6400
7	Galvanized Steel Bucket	4	300	1200
8	Fiber Extinguisher	3	5900	17700
9	Clip on Volt Amp Meter	2	1489	2978
10	Clip on kW Meter	1	8600	8600
11	Stop Watch	1	1950	1950
12	Black Smith Anvil (76 kg)	1	2025	2025
13	Chain Pulley Block (5 ton)	1	12225.60	12225.60
	Sub-Total			**148256.60**
B	**Crew T&P**			
1	Fiber Glass Extension Ladder	8	18500	148000
2	Cuffing Hoist (750 kg)	8	4800	38400
3	Chain Pulley Block (3 ton)	8	4765	38120
4	Nylon Rope (19 mm dia)	8	9147.6	73180.8
5	Pick Axes	16	64.8	1036.8
6	Kassies	8	162	1296
7	First Aid Box	8	740	5920
8	DEOJ Spanner (9/6" x 5/8")	8	877.5	7020
9	DEOJ Spanner (5/8" x 3/4")	8	877.5	7020
10	Pulling Grip (6-10 mm)	8	520	4160
11	Pulling Grip (12-15 mm)	8	820	6560
12	Hammers	16	108	1728
	Sub-Total			**332441.6**
C	**Personal Line Man T&P**			
1	Safety Hat Insulated	42	260	10920
2	Line Man Safety Belt	56	900	50400
3	Rubber Gloves (Pair)	70	1800	126000
4	Protective Gloves (Pair)	70	110	7700

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5	Line Man Safety Boots (8,9,10 size)	70	1500	105000
6	Live Wire Tester (400 volts)	28	160	4480
7	Line Man Knife	42	100	4200
8	Insulated Screw Driver	28	140	3920
9	Rain Coat	28	900	25200
10	Torch 3 Cells	70	350	24500
11	D-Operating Rod	56	1500	84000
12	Insulated Plier	70	640	44800
13	Adjustable Screw Wrench	42	350	14700
14	Line Men Tool Bag	56	700	39200
	Sub-Total			**545020**
D	**ALM Personal T&P**			
1	Safety Hat Insulated	48	260	12480
2	Line Man Safety Boots (8,9,10 size)	120	1500	180000
3	Insulated Screw Driver	72	140	10080
4	Line Man Knife	72	100	7200
5	Rain Coat	72	900	64800
6	Insulated Plier	72	640	46080
7	Line Men Tool Bag	72	700	50400
	Sub-Total			**371040**

A-7. Sub-projects under Civil Works are as follows:

Enhancement in the number of sub-divisions, divisions, revenue offices and operation circles is essential to provide prompt/effective services to the prospective new consumers in next 5 years. The restraining instructions are that IESCO will not claim additional amount on recruitment of new employees. The number of employees may vary but the allowance in salaries etc. will remain the same. There is no need for construction circles, construction division and construction sub-division as the job of construction would be out sourced and for the purpose of supervision, the existing strength of supervisory staff is ample. The following projects under the Civil Works are allowed:

A-7.1 List of New Offices and Buildings

S. #	Description	Unit	2015-16	2016-17	2017-18	2018-19	2019-20	Total
1	New Grid Stations	No.	3	0	0	2	5	10
2	New GSO Circle	No.	0	0	0	0	0	0
3	P&I Divisions	No.	0	0	0	0	1	1
4	SS & T Divisions	No.	0	0	0	0	1	1
5	Operation Sub Divisions	No.	7	8	8	8	8	39
6	Operation Divisions	No.	2	2	2	2	3	11
7	Revenue Offices	No.	2	2	2	2	3	11
8	Operation Circles	No.	0	1	0	1	0	2
9	Construction Circle	No.	0	0	0	0	0	0
10	Construction Divisions	No.	0	0	0	0	0	0
11	AE Transmission SS&TL	No.	0	0	0	0	1	1
12	AE Maintenance Grids	No.	0	0	0	0	1	1
13	Other offices	No.	0	0	0	0	0	0
	Total	No.	**14**	**13**	**12**	**15**	**23**	**77**

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A-8. Sub-projects under Financial Improvement Plan are as follows:

Description		Define Scope				
		2015-16	2016-17	2017-18	2018-19	2019-20
A	**ERP system implementation**	Implementation of ERP (Financial)	Implementation of ERP (Financial)	Maintenance	Maintenance	Maintenance

A-9. Sub-projects under Communication Improvement Plan are as follows:

Description		Define Scope				
		2015-16	2016-17	2017-18	2018-19	2019-20
A	**Improving Internal Communications with Employees**	• IESCO Web Updation with reference to HR activities • Cell Phones to Supervisory Staff • Computer Networking, E-office at IESCO HQ	• Link of HRIS HQ with Circle Offices and Electronic communication through E-Mail • Cell Phones to Line Staff • Computer Networking & E-Office at Circle	• Link of HRIS HQ at Division level and updation of HRIS • Tablets to Officers • Computer Networking & E-Office at Division & Sub Division level	NIL	NIL

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A-10. Sub-projects under Human Resource Improvement Plan are as follows:

	Description	Define Scope					
		FY2015-16	FY2016-17	FY2017-18	FY2018-19	FY2019-20	Total
A	**Revamping of Training Centers**	(1) Revamping of RTC (2) Computer Lab at RTC (3) Development of practical Yard at RTC	(1) Technical Lab at RTC. (2) Revamping of 2x CTCs and establishment of Computer Labs. (3) Development of Practical Yard at CTCs	(1) Revamping of remaining 3x CTCs. (2) Establishment of Computer Labs (3) Technical Lab at CTCs			
B	**Provision of Safety T&P and promoting safety culture**	(1) Provision of Safety T&P at RTC & CTCs on need basis. (2) Safety Seminars at Operational Circle & Division Offices on Quarterly basis	(1) Provision of Safety T&P at RTC & CTCs on need basis. (2) Safety Seminars at Operational Circle & Division Offices on Quarterly basis	(1) Provision of Safety T&P at RTC & CTCs on need basis. (2) Safety Seminars at Operational Circle & Division Offices on Quarterly basis	(1) Provision of Safety T&P at RTC & CTCs on need basis. (2) Safety Seminars at Operational Circle & Division Offices on Quarterly basis	(1) Provision of Safety T&P at RTC & CTCs on need basis. (2) Safety Seminars at Operational Circle & Division Offices on Quarterly basis	
C	**Training of employees through external training institutions**	580 No.	350 No.	500 No.	550 No.	600 No.	2580 No.
D	**Human Resource Information System Implementation**	ERP system will be implemented in IESCO HQ	The HRIS at Circle level and linked with IESCO HQ	The HRIS at Divisions/R.Os level and linked with Circle & HQ	The HRIS at Sub Divisions level	The HRIS at Grid Stations & Sub Offices level	
E	**Conducting the yard stick study**						
F	**IT infrastructure to support new initiatives**	Installation of Work Station & Server for HHU & ERP. Data Center & Server tor ERP	Data Center for CIS. Networking for ERP & CIS	Maintenance of Data Center, Servers & Work Stations	Maintenance of Data Center, Servers & Work Stations	Maintenance of Data Center, Servers & Work Stations	

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Annex – VIII

<u>List of interested/ effected parties to send the notice of admission/ hearing regarding petition filed by *Islamabad Electric Supply Company Limited (IESCO) for the determination of its consumer-end tariff pertaining to FY 2015-16 to 2019-20 based on actual/estimated results of FY 2014-15 as base year.*</u>

A. ***Secretaries of various ministries***

1. Secretary
Cabinet Division
Cabinet Secretariat
Islamabad

2. Secretary
Ministry of Industries & Production
`A' Block, Pak Secretariat
Islamabad

3. Secretary
Ministry of Water & Power
`A' Block, Pak Secretariat
Islamabad

4. Secretary
Ministry of Finance
'Q' Block, Pak Secretariat
Islamabad

5. Secretary
Ministry of Commerce
A-Block, Pak Secretariat
Islamabad

6. Secretary
Privatization Commission
EAC Building
Islamabad

7. Secretary
Planning and Development Division
P' Block, Pak Secretariat
Islamabad

8. Secretary
Ministry of Petroleum & Natural Resources
'A' Block, Pak Secretariat
Islamabad

9. Secretary
Irrigation & Power Department
Govt. of Punjab
Near Old Anarkali,
Lahore

10. Director General
National Tariff Commission

Ministry of Commerce
State Life Building No. 5,
Blue Area Islamabad

B. Chambers of Commerce and Industry & General Public

1. President
The Federation of Pakistan
Chamber of Commerce and Industry
Federation House. Main Clifton
Karachi 5675600

2. Chief Capital Office
The Federation of Pakistan
Chamber of Commerce & Industry
Aiwan-e-Sanat-o-Tijarat Road,
Sector G-8/1, Islamabad.

3. President
Islamabad Chamber of Commerce & Industry
Chamber House, Aiwan-e-Sanat-o-Tijarat Road,
0-8/1, Islamabad

4. President
Senior Citizen Foundation of Pakistan
5-P, Markaz G-7, Sitara Market
Islamabad

5. Chairman
All Pakistan Textile Mills Association (APTMA)
APTMA I louse, 44-A, Lalazar P.O. Box 5446
Moulvi Tamizuddin Khan Road
Karachi

6. M/s SHEIRI
206-G, Block — 2, P.E.C.H.S
Karachi — 75400

7. The Network for Consumer Protection
Flat No.5, 40-A, Ramzan Plaza, G-9 Markaz
Islamabad.

8. PTCL, Corporate Head Quarters, Block-E, G-8/4
Islamabad-44000

9. Chief Executive Officer
Mobilink, Mobilink House 1-A, Kohistan Road,
F-8 Markaz, Islamabad

10. Chief Executive Officer
Ufone (Emirates Telecommunication Corporation Group),
13-B, F-7 Markaz, Jinnah Supper, Islamabad

11. Chief Executive Officer
Telenor Pakistan (Pvt) Ltd

13.-K, Moaiz Centre Bhittai Road
F-7 Markaz, Islamabad

12. Chief Executive Officer
Zong, CM Pak Limited, Kohistan Road
F-8, Markaz, Islamabad

13. Chief Executive Officer
Warid Telecom (Pvt) Ltd
P.O. Box 3321, Lahore

14. Chairman
Pakistan Telecommunication Authority (PTA)
PTA Headquarter Building, F-5/1, Islamabad

C. Power Companies

1. Chairman
Pakistan Engineering Council
Attaturk Avenue (East), G-5/2
Islamabad

2. Chief Executive
Pakistan Electric Power Company (PEPCO)
721-WAPDA House
Shaharah-e-Quaid-e-Azam
Lahore

3. Chief Operating Officer
CPPA
Room 107 WAPDA House
Shaharah-e-Qauid-e-Azam
LAHORE

4. Managing Director
Private Power and Infrastructure Board (PPIB)
House No. 50, Sector F-7/4
Nazimuddin Road
Islamabad

5. President
Institute of Electrical & Electronics Engineers of Pakistan (IEEEP)
4 — Lawrence Road
Lahore

6. President
The Institute of Engineers Pakistan
IEP Roundabout Engineering Centre
Gulberg — III
Lahroe — 54660

7. Member Power
WAPDA
738 — WAPDA House
Shahra-e-Quaid-e-Azam

Lahore

D. Petitioner
1. Chief Executive Officer
Islamabad Electric Supply Co. Ltd.
Street # 40, Sector G-7/4,
Islamabad.

" The News " 28-11-15

Annex - IX

National Electric Power Regulatory Authority (NEPRA)

NOTICE OF ADMISSION / HEARING

[illegible]

1. [illegible]

2. [illegible]

3. In terms of rule 5 of NEPRA (Tariff Standards & Procedure) Rules, 1998, [illegible]

4. [illegible]

5. [illegible]

Date: [illegible]

Time: [illegible]

Venue: NEPRA TOWER [illegible] ISLAMABAD

All communications should be addressed to: [illegible]

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