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1 Introduction

1.1 Filings based on Multi-Year Tariff (MYT) Principles

The Andhra Pradesh Electricity Regulatory Commission framed the “Terms and Conditions for determination of Tariff for Wheeling and retail supply of electricity” Regulation 4 of 2005 and First Amendment Regulation 2014 (“Regulation”), lays down the principles for determination of Aggregate Revenue Requirement (ARR) for (a) Distribution Business and (b) Retail Supply Business of the licensees. The ARR so determined for each of the businesses will form the basis for fixation of charges for wheeling and for retail sale of electricity.

In the Regulation, the Commission has also laid down the procedures for filing under multi-year tariff principles. The multi-year period is defined as the Control Period and the first Control Period is defined as the three year period starting from financial year 2006-07 and continuing till the end of financial year 2008-09. The third control period was defined as the five year period starting from FY 2014-15 to FY 2018-19. The current filing pertains to the fourth Control Period (FY 2019-20 to FY 2023-24). The Commission has specified in Para 6.2 of the Regulation the following procedure for ARR filing for the distribution and retail supply business:

“The ARR filing for the Distribution business shall be for the entire Control Period. For the Retail Supply business the ARR filing will be on annual basis”

The current filing follows the principles laid down under this Regulation for determination of the ARR for the retail supply business for the year FY 2019-20, which is the first year of the Fourth Control Period.

1.2 Filing Contents

The filing is structured in the following way:

a) Section 2 provides analysis of expected performance for current year for Retail supply Business comprising

- Operating Performance
- Financial Performance

A brief analysis of the financial and operational performance of the licensee during the previous year (2017-18) and the current year (2018-19) is given.

b) Section 3 provides the ARR for Retail Supply Business for first year of the Fourth Control Period and the basis of projections of the expense and revenue items comprising:

- Expenditure Projections
 - Power Purchase and Procurement Cost
 - Transmission Charges
 - PGCIL & ULDC Charges
 - SLDC Charges
 - Distribution Cost
 - Interest on Consumer Security Deposits
 - Supply Margin
 - Other Costs
 - Aggregate Revenue Requirement for Retail Supply Business

- **Revenue Projections**

- Sales Forecast
- Revenue from Current Tariffs
- Non-tariff Income at Current Charges
- Revenue from Cross Subsidy Surcharge
- Revenue from RE Certificates.
- Revenue at Current Tariffs and Charges

- **Revenue Gap**

- Revenue Deficit / Surplus at Current Tariff and Charges
- Proposals to handle the Deficit/Surplus
- Government Subsidy Requirement

- **Other Filings**

- Cross Subsidy Surcharge

The sales forecast is used to determine the revenue from tariff from retail sale of electricity for the first year of the fourth control period and the energy input required for meeting the demand. The power procurement plan is based on the availability of the generation sources during the ensuing year, the cost (fixed, variable and others) and the merit order dispatch of various sources to meet the demand expected during various months.

2 Analysis of expected performance for Current Year 2018-19 for Retail Supply Business

2.1 Introduction

This chapter analyses the performance of the licensee during the Current Year as compared to the previous year & also with the Tariff Order 2018-19. Only the key operating and financial parameters have been considered for this analysis.

2.2 Operating Performance

2.2.1 Energy Balance

| Particulars | 2017-18 | | 2017-18 | | 2018-19 | | Revised Estimate for 2018-19 | |
|---|-------------|--------|----------|--------|-------------|--------|---------------------------------|--------|
| | APERC Order | | Actuals | | APERC Order | | | |
| | MU | % | MU | % | MU | % | MU | % |
| I) Total Metered Sales | 15365.94 | 81.91% | 16162.48 | 81.24% | 17379.81 | 83.47% | 17507.63 | 83.64% |
| a) EHT sales | 3838.14 | 20.46% | 4615.04 | 23.20% | 4899.94 | 23.53% | 5010.845 | 23.94% |
| b) HT sales | 3896.13 | 20.77% | 3971.69 | 19.96% | 4193.43 | 20.14% | 4279.154 | 20.44% |
| c) LT Metered sales | 7631.67 | 40.68% | 7575.74 | 38.08% | 8286.44 | 39.80% | 8217.629 | 39.26% |
| II) LT Agricultural Sales | 2090.27 | 11.14% | 2188.29 | 11.00% | 2090.27 | 10.04% | 2078.499 | 9.93% |
| III) Total Sales | 17456.21 | 93.05% | 18350.77 | 92.24% | 19470.08 | 93.51% | 19586.13 | 93.57% |
| IV) ADD:Distribution Losses | | | | | | | | |
| Distribution Losses (Incl EHT sales) | 1,303.90 | 6.95% | 1543.96 | 7.76% | 1351.11 | 6.49% | 1344.918 | 6.43% |
| V) DISCOM Power purchase | | | | | | | | |
| a) Discom Input(Excl EHT sales) | 14921.97 | | 15279.69 | | 15921.25 | | 15920.20 | |
| b) Discom input(Incl EHT sales) and excluding Transmission losses | 18760.11 | 100% | 19894.73 | 100% | 20821.19 | 100% | 20931.05 | 100% |

2.2.2 Distribution Loss

| Year | Loss Target as per APERC | | Actual | | No. of 11KV T&MHQ feeders for which energy audit done | No. of Additional 33/11KV sub-stations charged |
|---------|--------------------------|----------|----------------------------|----------------------------|---|--|
| | Excl. EHT | Incl.EHT | Excl.EHT | Incl.EHT | | |
| 2009-10 | 11.14% | 8.82% | 10.43% | 8.45% | 640 | 59 |
| 2010-11 | 10.80% | 8.81% | 8.75% | 6.96% | 650 | 27 |
| 2011-12 | 10.54% | 8.55% | 10.37% | 8.40% | 655 | 15 |
| 2012-13 | 10.41% | 8.42% | 12.17% | 9.38% | 697 | 52 |
| 2013-14 | 10.21% | 8.26% | 11.72% | 9.18% | 718 | 19 |
| 2014-15 | 10.21% | 8.26% | 10.74% | 8.46% | 742 | 9 |
| 2015-16 | 9.90% | 7.48% | 8.56% | 6.95% | 801 | 62 |
| 2016-17 | 9.44% | 7.49% | 6.47% | 5.09% | 828 | 10 |
| 2017-18 | 8.74% | 6.95% | 10.10% | 7.76% | 900 | 84 |
| 2018-19 | 8.49% | 6.49% | 8.45% (Revised estimation) | 6.43% (Revised estimation) | 920 | 25(as on 31.10.2018) |

It is expected to reduce the losses further with the implementation of the following measures.

- Reduction of both technical and commercial losses by vigorously conducting 11 KV feeder wise energy audits.
- During the year 2017-18, only 3076 Nos. 11 KV Town, MHQ & industrial feeders including rural feeders were considered for energy audit whereas during the year 2018-19, 3147 Nos. feeders are available for which energy audit is done on regular basis at corporate office level.
- For the year 2017-18, 84 Nos. 33/11 KV sub-stations were charged and for the year 2018-19, 35 Nos. 33/11 KV sub-stations are proposed out of this 25 Nos. were already charged to reduce over loaded 33 KV & 11 KV lines and to maintain good voltage profiles up to the consumers end.

2.2.3 Metered Sales

As can be seen from the table above, in 2017-18, the percentage of metered sales is decreased than the Tariff Order level by 0.67 %. In 2018-19, the metered sales are expected to increase by 2.4% over 2017-18 levels.

Agricultural Sales

In the previous year 2017-18 the actual Agriculture Consumption is 2188.29 MU as against the approved 2090.27 MU. In the current year 2018-19 during the first half of the year the agriculture consumption is 834.00 MU and the sales projection for second half of FY 2018-19 for this category are 1244.50MU.

2.3 Financial Performance

2.3.1 Financial Performance of previous Year FY 2017-18

2.3.1.1 Revenues from sale of electricity

Total Revenue from tariffs and charges against the Tariff Order Targets for Previous Year FY 2017-18 is as shown in the following Table:

| Category | 2017-18 (Rs Crs) | |
|---|------------------|------------------|
| | APERC Target | 2017-18 (Actual) |
| LT Category | 3834.79 | 3748.48 |
| Domestic | 2016.88 | 1850.18 |
| Non-domestic/Commercial | 1060.64 | 1016.73 |
| Industrial | 545.89 | 678.87 |
| Cottage Industries, Dhobighats & Others | 0.97 | 1.04 |
| Irrig & Agriculture | 26.86 | 15.59 |
| Local Bodies, St. Lighting & PWS | 129.75 | 142.86 |
| General Purpose | 52.83 | 42.48 |
| Temporary Supply | 0.97 | 0.72 |
| HT Category | 5435.11 | 5726.43 |
| HT I : General | 4121.36 | 4445.38 |
| HT II: Others | 734.20 | 614.26 |
| HT III: Airports, Bus Stations and Railway Stations | 47.34 | 39.05 |
| HT IV Government LIS & Agl. | 152.27 | 246.36 |
| HT V: Railway Traction | 310.88 | 325.64 |
| HT VI: Townships & Residential Colonies | 24.14 | 21.22 |
| HT VII: Green Power | 0.00 | 0.00 |
| HT VIII: Temporary | 6.49 | 11.17 |
| Category: RESCOs | 38.43 | 23.36 |
| Total (LT+HT) | 9270 | 9474.91 |

Total actual revenue is Rs. 9144.95 Crs. and Non-Tariff Income (NTI) is Rs. 329.96 Crs. Hence total actual Revenue including Non-Tariff Income is Rs.9474.91 Crs.

2.3.1.2 Revenue Surplus / Deficit of FY 2017-18

The financial performance on the actual for the FY: 2017-18 are as under.

| Particulars (Rs. Crs) | APERC (2017-18) | Actuals audited (2017-18) | Variation |
|--|-----------------|---------------------------|----------------|
| Network and SLDC Cost | 2124.44 | 1938.90 | -185.54 |
| Transmission Cost | 441.12 | 292.01 | -149.11 |
| SLDC Cost | 12.98 | 13.50 | 0.52 |
| Distribution Cost | 1522.94 | 1440.81 | -82.13 |
| PGCIL Expenses | 144.31 | 191.51 | 47.20 |
| ULDC Charges | 3.09 | 1.07 | -2.02 |
| Supply Cost | 7433.18 | 8503.40 | 1070.22 |
| Power Purchase / Procurement Cost | 7266.98 | 8,295.55 | 1028.57 |
| Interest on Consumer Security Deposits | 102.9 | 83.48 | -19.42 |
| Supply Margin in Retail Supply Business | 5.72 | 0.00 | -5.72 |
| Energy Efficiency Project cost | | | |
| Other Costs | 57.58 | 124.37 | 66.79 |
| Expenses for Elect. accidents Compensation | 9.5 | 3.49 | -6.01 |
| Aggregate Revenue Requirement | 9567.12 | 10445.79 | 878.67 |
| Total Revenue | 9567.12 | 10,450.87 | 883.75 |
| Revenue from Current Tariffs | 9043.76 | 9,144.95 | 101.19 |
| (Net of incentives & incl. CMC) | | | |
| Other income | | 463.54 | 463.54 |
| Revenue subsidies and grants | 297.1 | 512.42 | 215.32 |
| Non-tariff income | 226.26 | 329.96 | 103.70 |
| Revenue Deficit (-) / Surplus(+) at | 0 | 5.08 | 5.08 |
| Revenue - Cost Coverage (%) | 100% | 100% | |

Note: Other income includes DD-sales Rs.50.33 Crs, Cross Subsidy Rs.38.74 Crs, Distribution Non Tariff Income Rs.22.44 Crs. TE,MP, Wheeling, UI, IED and Others Rs.46.06 Crs. Revenue difference KVAH and KWH Rs.311.07 Crs. & Grants 20.00 Crs.

2.3.2 Financial performance of current year FY 2018-19:

2.3.2.1 Revenues from sale of electricity:

The actual revenue for FY 2017-18 excluding NTI is Rs.9144.95 Crs. and for FY: 2018-19 it is estimated to be Rs.9908.27 Crs.

For the key categories, the licensee has estimated the revenue as below:

| Category Wise Revenue:(Figures shown in Rs. Crores) | | |
|--|-----------------------------|---|
| Category | 2017-18 (Actual) | 2018-19 (Revised Estimate) |
| LT Category | 3617.94 | 3921.89 |
| Domestic | 1785.75 | 1895.71 |
| Non-domestic/Commercial | 981.32 | 1047.76 |
| Industrial | 655.23 | 774.69 |
| Cottage Industries, Dhobighats & Others | 1.01 | 1.10 |
| Irrig & Agriculture | 15.05 | 11.81 |
| Local Bodies, St. Lighting & PWS | 137.89 | 140.70 |
| General Purpose | 41.00 | 49.27 |
| Temporary Supply | 0.70 | 0.84 |
| HT Category | 5527.01 | 5986.38 |
| HT I : General | 4290.57 | 4616.48 |
| HT II: Others | 592.870 | 673.281 |
| HT III: Airports, Bus Stations and Railway Stations | 37.69 | 35.91 |
| HT IV Government LIS & Agl. | 237.78 | 276.70 |
| HT V: Railway Traction | 314.30 | 321.61 |
| HT VI: Townships & Residential Colonies | 20.48 | 17.84 |
| HT VII: Green Power | 0.00 | 0.00 |
| HT VIII: Temporary | 10.78 | 14.57 |
| Category: RESCOs | 22.55 | 29.98 |
| Total (LT+HT) | 9144.95 | 9908.27 |

2.3.2.2 Revenue Surplus / Deficit of current year FY 2018-19

For the period 2018-19, the Licensee projects that it might incur a loss of Rs. 672.00 Crs, due to higher power purchase costs.

| Revenue from current tariff and charges for FY:2018-19(Rs. Crs) | |
|--|--|
| Particulars | 2018-19 Revised Estimate (Rs. Crs.) |
| Supply Margin | 6.16 |
| ROCE / Interest | 153.92 |
| Total Financing Cost | 160.08 |
| Power purchase | 9,073.86 |
| Transmission charges | 421.65 |
| PGCIL / ULDC Charges | 430.04 |
| SLDC Charges | 13.85 |
| O&M (Gross) | 1408.14 |
| Depreciation | 427.51 |
| Interest on consumer deposits | 107.85 |
| True up adj of 1st control period | 0 |
| Other Expenses (Special appropriation & taxes on income) | 262.40 |
| <i>Less: Expenses capitalised</i> | 47.18 |
| ARR | 12,258.19 |
| Total Revenue | 10493.02 |
| Non-tariff Income (Distribution Business) | 189.71 |
| Revenue at Current Tariffs (incl NTI) | 10263.59 |
| Revenue from Cross subsidy surcharge | 39.72 |
| Revenue from Trading | |
| Regulatory Gap/ (Surplus) | 1,765.17 |
| Subsidy | 1093.17 |
| Net Regulatory Gap/ (Surplus) | -672.00 |

3 Power Purchase Quantum and Cost for the Second Half of the Current Financial Year (FY 2018-19) and ensuing full Financial Year (FY2019-20)

3.1 Introduction

Subsequent to the bifurcation of the erstwhile State of Andhra Pradesh as per the Andhra Pradesh Reorganization Act, 2014 (Central Act No. 6 of 2014, dated 01.03.2014), the Southern Power Distribution Company of AP Ltd. (APSPDCL) and the Eastern Power Distribution Company of AP Ltd. (APSPDCL) emerged as the Distribution Licensees of the present State of Andhra Pradesh. As per section 92 read with the Twelfth Schedule of the above Act, the districts of Anantapur and Kurnool which were within the jurisdiction of the erstwhile APCPDCL (Central Power Distribution Company AP Ltd., now TSSPDCL (Southern Power Distribution Company of Telangana Limited)) were transferred to the APSPDCL (Southern Power Distribution Company of AP Ltd.). Further, as per the G.O.Ms. No.20 (dated 08.05.2014), 17.45% share of power held by the erstwhile APCPDCL was transferred to APSPDCL based on the last 5 years' average consumption of Anantapur and Kurnool districts at the time of bifurcation. After factoring the above transfer, the present DISCOMS (Distribution Companies) of Andhra Pradesh have 46.11% share of power out of the share held by the erstwhile four Distribution Companies in the Power Stations of Central Sector, erstwhile APGENCO and certain IPPs. The shares of APEPDCL and APSPDCL (Distribution Companies of AP) out of the above 46.11% are 15.8% and 30.31% respectively. The details of capacities being availed by APDISCOMs from various power stations have been described in the subsequent paragraphs.

3.2 CAPACITIES BEING AVAILED BY APDISCOMS FROM VARIOUS GENERATING STATIONS

3.2.1 APGENCO STATIONS

APDISCOMS have been purchasing power from APGENCO Stations based on the long term PPAs/approval of Hon'ble APERC. From FY 2014-15, APDISCOMs have been availing 100% power from APGENCO Hydel stations and similarly TSDISCOMs have been availing 100% power from TSGENCO Hydel Stations. Further, as per the directions of Government of Andhra Pradesh, APGENCO implemented Power Regulation to TSDISCOMS (Distribution Companies of Telangana) from their thermal stations w.e.f 11.06.2017 due to the non-payment of dues by TSDISCOMs. Similarly, TSGENCO (Telangana State Generating Company) also regulated Power from their thermal stations to APDISCOMS w.e.f the same date. In view of the Power Regulation to TSDISCOMs, APGENCO requested APDISCOMS to avail 100% power from their thermal Stations. Accordingly, APDISCOMs have been purchasing 100% Power from APGENCO thermal Stations since 11.06.2017. Further, as of now, APDISCOMs are not availing any power from TSGENCO.

The PPAs in respect of Dr.NTTTPS-I, II &III, RTTP-I and all Hydel Stations (except Nagarjunasagar Tail Pond PH) of APGENCO are going to be expired by 31.03.2019. It is proposed to continue the purchases from these Stations during FY 2019-20 also subject to the approval of Hon'ble APERC. New Power Plants, Dr.NTTTPS-V and DSSTPS-II are expected to be commissioned by Dec'19 and Jan'20 respectively. APDISCOMS propose to purchase the power from these plants subject to the approval of Hon'ble APERC.

Status of present and proposed capacities being availed/to be availed by APDISCOMs in APGENCO Stations and Interstate Hydel Projects are indicated in the following table.

| Station | Capacity(MW) |
|--|---------------|
| Thermal | |
| Dr. NTTPS-I, II, III(6 x 210MW) | 1260 |
| Dr. NTTPS-IV(1 x 500MW) | 500 |
| RTPP-I(2 x 210MW) | 420 |
| RTPP-II(2 x 210MW) | 420 |
| RTPP- III (1 x 210MW) | 210 |
| RTPP- IV(1x 600MW) | 600 |
| DSSTPS-I (2 x800MW) | 1600 |
| DSSTPS-II(1x800 MW) (To be Commissioned) | 800 |
| Dr.NTTPS-V(1x800 MW)(To be Commissioned) | 800 |
| Total Thermal | 6610 |
| Hydel | |
| Donkarayi Canal PH (1 x 25MW) | 25 |
| Upper Sileru HES (4 x 60MW) | 240 |
| Lower Sileru HES (4 x 115MW) | 460 |
| Srisaillam Right Bank PH (7 x 110MW) | 770 |
| Nagarjuna Sagar right canal PH (3x30MW) | 90 |
| PABR (2 x 10MW) | 20 |
| Mini Hydel Station (2 x 0.5MW) | 1 |
| Nagarjuna Sagar Tail Pond PH (2 x 25MW) | 50 |
| Interstate Hydel Projects | |
| Machkund, Orissa (AP share 70%) | 84 |
| T.B. Station, Karnataka (AP share 80%) | 57.6 |
| Total Hydel including Interstate Projects | 1797.6 |
| Total APGENCO | 8407.6 |

3.2.2 CENTRAL GENERATING STATIONS

APDISCOMS have been purchasing power from Central Generating Stations controlled/owned by GoI based on the long term PPAs. The list of the Stations along with the APDISCOMs' share of power from these Stations (as per the Regional Energy Account issued by SRPC for the month of Sep'18) are indicated in the following table. Further, APDISCOMs have been purchasing bundled power from thermal Stations of NTPC which was allocated by MOP/GOI against the solar power procurement by APDISCOMs under JNNSM Phase I &II. NNTP (New Neyveli Thermal Plant) of NLC is expected to be commissioned by Dec'18. The Capacities being availed by APDISCOMs in CGS are tabulated below.

| Station | CapacityShare(MW) |
|-----------------------------|-------------------|
| NTPC-(SR) Ramagundam I & II | 274.47 |
| NTPC-(SR) Ramagundam- III | 68.84 |
| NTPC-Talcher-II | 172.46 |
| NTPC Simhadri Stage-I | 461.1 |
| NTPC Simhadri Stage-II | 185.69 |
| NLC TS II Stage-I | 48.56 |
| NLC TS II Stage-II | 87.36 |

| | |
|--------------------------------|----------------|
| NPC-MAPS | 18.4 |
| NPC-Kaiga 1 & 2 | 56.28 |
| NPC-Kaiga 3 & 4 | 59.97 |
| Vallur (JV) NTPC with TANGEDCO | 94.13 |
| NLC-TNPL Tuticorin | 128.45 |
| NTPC-Kudigi | 247.58 |
| NTPC JNNSM Phase I | 39.19 |
| NTPC JNNSM Phase II | 500 |
| NNTPS | 52.46 |
| Total CGS | 2494.94 |

3.2.3 Old Gas Based IPPs (Independent Power Projects)

GGPP (Godavari Gas Power Plant-216.824 MW, formerly GVK PHASE-I)

The PPA with GVK-I expired on 20.06.2015. Subsequently, APDISCOMs bought the power plant on 22.04.2016 and renamed it as GGPP. The plant is being operated by the employees deputed from APGENCO. GoAP vide letter dated 04.05.2018 approved the proposal of APDISCOMs to hand over the plant to APGENCO. The process of handing over the plant is under progress. APDISCOMs are at present dispatching the energy from this plant based on the approval given by Hon'ble APERC in the Retail Tariff Order for FY 2018-19. APDISCOMs propose to avail the power from this plant during FY 2019-20 also subject to the approval of Hon'ble APERC.

SPGL (SPECTRUM POWER GENERATION LIMITED-205.187MW)

Upon the expiry of PPA with the plant on 18.04.2016, APDISCOMs proposed to renew the PPA for a further period of 15 years and accordingly sent the proposal to GoAP for consent. If the consent is received from GoAP, APDISCOMs will file the draft PPA before Hon'ble APERC for approval. APDISCOMs are at present purchasing the power from this plant at the rates approved in the Retail Tariff Order for FY 2018-19. Pending permission from GoAP, APDISCOMs propose to purchase the power from this plant during FY 2019-20 also subject to the approval of Hon'ble APERC.

LKPL PHASE-I (LANCO KONDAPALLI POWER LIMITED PHASE-I -361.92MW)

PPA of this plant expired on 01.01.2016. APDISCOMs decided to continue the PPA for further period and accordingly sought the consent of GoAP. After receiving the approval from GoAP, APDISCOMs filed the draft PPA before Hon'ble APERC. Pending approval of the PPA by the Hon'ble APERC, APDISCOMs are purchasing the power from this plant at the rates approved in the Retail Tariff Order for FY 2018-19. APDISCOMs propose to continue the purchases from this plant during FY 2019-20 also subject to the approval of Hon'ble APERC.

The capacities being availed by APDISCOMs in the above plants are as tabulated below.

| Station | Capacity (MW) |
|----------------|----------------------|
| GGPP | 216.824 |
| SPGL | 205.187 |
| LKPL Phase-I | 361.92 |
| Total | 783.931 |

3.2.4 NEW GAS BASED IPPs

APDISCOMs of erstwhile united AP State entered into long term PPAs with GVK Extension (220 MW), GVPGL(GMR Vemagiri Power Generation Limited-370 MW), Gouthami CCPP(464 MW) and Konaseema Gas Power Limited (444.08 MW). These new IPPs were commissioned during the years 2006 (GVPGL), 2009 (GVK Extension, Gouthami CCPP) and 2010 (Konaseema Gas Power Limited). After bifurcation of AP State, APDISCOMs of the present AP State were allocated 46.11% of share of capacity in these plants. The Natural gas supplies from RIL KG D-6 fields to the aforesaid IPPs became zero w.e.f. 01.03.2013. As a result, there is no generation from these plants as of now. Further, there is no official communication from MoP & NG on the availability of natural gas to these plants. The e-bid RLNG Scheme ended by 31.03.2017 and MoP/GOI has not extended the scheme. Therefore, APDISCOMs are not proposing to procure any power from these plants. Further, APDISCOMs are not presently paying any fixed charges to these plants.

3.2.5 APGPCL (AP GAS POWER CORPORATION LIMITED)

APGPCL is a joint sector gas-based power project. APDISCOMs are availing power from this project to the extent of APTRANSCO's equity share in the project. The share of APDISCOMS power in this project is as follows.

| Station | Capacity Share (MW) |
|-----------------|---------------------|
| APGPCL Stage-I | 9.33 |
| APGPCL Stage-II | 24.96 |
| Total | 34.29 |

3.2.6 RENEWABLE ENERGY BASED POWER PLANTS

APDISCOMs share of Capacities (including anticipated additions) in the Renewable Energy based Projects for FY 2018-19 H2 and FY 2019-20 are given below. Renewable Energy based projects have been allocated to the APDISCOMs based on their geographical location (These projects have signed PPAs with the DISCOM in which they are located. Hence, the entire power is allocated to that DISCOM only) till 31st July, 2017 and subsequently in the ratio of 34.27% and 65.73% to APEPDCL and APSPDCL respectively.

| Type of Project | Capacity Share (MW) FY 2018-19H2 | Capacity Share (MW) FY 2019-20 |
|---|-------------------------------------|-----------------------------------|
| Biomass Power Projects including Co-gen | 144.5 | 144.5 |
| Bagasse Cogeneration Projects. | 105.2 | 105.2 |
| Wind Power Projects | 3963.4 | 4146.90 |
| Mini Hydrel Power Projects | 46.1 | 46.1 |
| Industrial Waste Based Power Projects | 21.66 | 21.66 |
| Municipal Waste Based Power Projects | 0 | 68.15 |
| NCL Energy Ltd. | 8.25 | 8.25 |
| Solar Power Projects | 687.03 | 692.03 |
| Solar Parks | 2050 | 3050 |
| NVVNL Bundled Power -SOLAR | 39.19 | 39.19 |
| Total | 7065.33 | 8321.98 |

3.2.7 MINI POWER PLANT (GAS BASED)

APEPDCL had PPA with Srivathsa Power Projects Limited (17.202 MW) which expired on 31.03.2018. APEPDCL is at present purchasing power from this plant as per the approval given by Hon'ble APERC vide order dated 01.09.2018. The approval is valid for power procurement up to 31.03.19. APEPDCL proposes to procure power from this project for FY 2019-20 also subject to the approval of Hon'ble APERC.

3.2.8 Sembcorp Energy India Limited (Formerly Thermal Powertech Corporation India Limited)

APDISCOMs and Telangana DISCOMs signed PPA with the company for a contracted capacity of 500 MW under Long term basis through case-I bidding for a period of 25 years w.e.f. 20.04.2015. APDISCOMs share of contracted capacity in the plant is 46.11% i.e., 230.55 MW out of the said total contracted capacity of 500 MW. The plant is connected to CTU network in AP. As per the PPA, APDISCOMs are obligated to reimburse the applicable Long Term Open Access (LTOA) charges to the generator.

3.2.9 KSK MAHANADI POWER CORPORATION LIMITED

APDISCOMs have PPA with KSK Mahanadi Power Corporation Limited for a contracted capacity of 400 MW. The PPA is valid up to 31.03.2021. The plant is located in Western Region and is connected to the CTU network. As per the PPA, APDISCOMs are obligated to reimburse the applicable Long Term Open Access (LTOA) charges to the generator.

3.3 ENERGY AVAILABILITY FOR FY 2018-19 H2 AND FY 2019-20

3.3.1 The energy availabilities have been estimated after considering the generators projections, actual performance of the generating Stations during FY 2017-18 and FY 2018-19 H1, the availabilities approved in the Retail Tariff Order for FY 2018-19, the availability of fuel, breakdown of units, expiry of the existing PPAs during FY 2018-19 H2 and FY 2019-20, expected commissioning of new stations and the need to maintain the spinning reserve. The proposed availabilities in MU are indicated in the following tables. The coal allocated to RTPP-I and RTPP-III stations from MCL mines is being diverted for use in more efficient DSSTPS-I during FY 2018-19 H2 under flexible Utilization of coal in order to reduce the variable costs. This resulted in reduction of availabilities for RTPP-I, RTPP-III and increase in availability for DSSTPS-I during FY 2018-19 H2.

3.3.2 APGENCO STATIONS

AVAILABILITY (MU)

| Station | FY 2018-19 H2 | FY 2019-20 |
|-------------------------------|-----------------|-----------------|
| Thermal | | |
| Dr NTTPS-I,II,III | 3850.75 | 7050.27 |
| Dr NTTPS-IV | 1717.17 | 2836.05 |
| RTPP-I | 340.53 | 1943.24 |
| RTPP-II | 1162.48 | 1943.24 |
| RTPP-III | 11.94 | 990.62 |
| RTPP-IV | 315.13 | 543.47 |
| DSSTPS-I | 5554.35 | 7862.98 |
| DSSTPS-II | - | 380.27 |
| Dr.NTTPS-V | -- | 467.52 |
| Total | 12952.35 | 24017.65 |
| Hydel | | |
| Machkund PH AP Share | 166.32 | 290.47 |
| Tungabadra PH AP Share | 68.31 | 123.57 |
| Upper Sileru HES | 251.92 | 414.71 |
| Lower Sileru HES | 594.00 | 1047.73 |
| Donkarayi Canal PH | 83.16 | 98.01 |
| SSLM (Right Bank) PH | 297.00 | 954.90 |
| Nagarjunasagar Right canal PH | 56.43 | 109.66 |
| PABR | 2.38 | 6.13 |
| Mini Hydel(Chettipeta) | 1.10 | 2.62 |
| Nagarjunasagar Tail Pond PH | 62.37 | 101.97 |
| Total | 1582.98 | 3149.77 |
| Grand Total | 14535.33 | 27167.42 |

3.3.3 CENTRAL GENERATION STATIONS

AVAILABILITY (MU)

| Station | FY 2018-19 H2 | FY 2019-20 |
|--------------------------------|----------------|-----------------|
| NTPC-(SR) Ramagundam I & II | 896.97 | 1795.00 |
| NTPC-(SR) Ramagundam- III | 200.66 | 426.24 |
| NTPC-Talcher-II | 643.79 | 1139.11 |
| NTPC Simhadri Stage-I | 1619.52 | 3061.74 |
| NTPC Simhadri Stage-II | 768.51 | 1233.00 |
| NLC TS II Stage-I | 127.95 | 268.00 |
| NLC TS II Stage-II | 235.98 | 482.12 |
| NPC-MAPS | 53.69 | 112.83 |
| NPC-Kaiga 1 & 2 | 209.16 | 394.38 |
| NPC-Kaiga 3 & 4 | 213.50 | 420.28 |
| Vallur (JV) NTPC with TANGEDCO | 296.45 | 538.56 |
| NLC-TNPL Tuticorin | 451.00 | 863.00 |
| NTPC-Kudigi | 603.72 | 1226.48 |
| NTPC JNN SM Phase I | 159.05 | 274.64 |
| NTPC JNN SM Phase II | 1988.55 | 3504.00 |
| NNTPS | 91.79 | 324.84 |
| Total | 8560.29 | 16064.22 |

3.3.4 APGPCL (MUs)

| Station | FY 2018-19 H2 | FY 2019-20 |
|-----------------|---------------|---------------|
| APGPCL Stage-I | 13.97 | 31.54 |
| APGPCL Stage-II | 47.62 | 87.49 |
| Total | 61.59 | 119.03 |

3.3.5 OLD GAS BASED IPPs (MUs)

| Station | FY 2018-19 H2 | FY 2019-20 |
|--------------|----------------|----------------|
| GGPP | 445.43 | 797.83 |
| SPGL | 521.62 | 1046.11 |
| LKPL Phase-I | 780.24 | 1268.17 |
| Total | 1747.29 | 3112.11 |

3.3.6 NEW GAS BASED IPPs (MUs)

Availabilities from new gas based IPPs have not been considered due to the non-availability of natural gas.

| Station | FY 2018-19 H2 | FY 2019-20 |
|-----------------------------|---------------|------------|
| | | |
| GVPGL | 0 | 0 |
| Gautami CCPP | 0 | 0 |
| GVK Extension | 0 | 0 |
| Konaseema Gas Power Limited | 0 | 0 |

3.3.7 RENEWABLE ENERGY SOURCES (MUs)

| Source | FY 2018-19 H2 | FY 2019-20 |
|--|----------------|-----------------|
| Bio Mass Power Projects including Co-gen | 103.37 | 216.66 |
| Bagasse Cogeneration Projects. | 72.75 | 77.66 |
| Wind Power Projects | 1664.23 | 8866.32 |
| Mini Hydel Power Projects | 83.06 | 110.50 |
| Industrial Waste Based Power Projects | 6.74 | 16.11 |
| Municipal Waste Based Power Projects | 0 | 268.18 |
| NCL Energy Ltd. | 8.21 | 12.30 |
| Solar Power Projects | 681.70 | 1230.49 |
| Solar Parks | 1992.10 | 5933.33 |
| NVVNL Bundled Power -SOLAR | 21.54 | 37.82 |
| Total | 4633.69 | 16769.36 |

3.3.8 MINI POWER PLANT (MUs)

| Station | FY 2018-19 H2 | FY 2019-20 |
|----------------------------------|---------------|------------|
| Srivathsa Power Projects Limited | 33.81 | 68.00 |

3.3.9 SEMBCORP ENERGY AND KSK MAHANADI (MUs)

| Station | FY 2018-19 H2 | FY 2019-20 |
|--|---------------|------------|
| Sembcorp Energy India Limited | 984.74 | 1716.42 |
| KSK Mahanadi Power Corporation Limited | 1485.12 | 2977.37 |

3.3.10 Swap power (MUs)

In order to avoid the short-term procurements and thereby save the costs, APDISCOMs have been swapping (banking) power with other Govt utilities to the extent possible. The details of power being swapped are indicated in the following table

| Description | FY 2018-19 H2 | FY 2019-20 |
|--|---------------|------------|
| Energy availed from other utilities | 3344.71 | 666.79 |
| Energy to be returned to other utilities | -252.16 | -4121.85 |

3.3.11 OTHER SHORT-TERM SOURCES (MUs)

Even after considering the above availabilities, there will still be a gap between demand (energy requirement) and availability for the FY 2019-20. APDISCOMs propose to bridge this gap by short term procurement from SGPL (Sembcorp Gayatri Power Limited) and through Power Exchanges keeping in view that PPA signing with SGPL under DBFOO is under process and the tariff of the same is lower than the average cost of power in the Exchanges. Further, there is uncertainty on the availability of sufficient power in the Exchanges. If there is an alternate source

of power cheaper than this, the same would be preferred. However, this proposed procurement would only be an option but not a compulsion. The details of short term procurement and sales are indicated below.

| Station/Source | FY 2018-19 H2 | FY 2019-20 |
|---|----------------------|-------------------|
| Sembcorp Gayatri Power Limited | 0 | 3600.00 |
| Bilateral purchases including Power Exchanges | 1123.15 | 445 |
| Bilateral sales including Power Exchanges | -573.07 | 0 |
| Total | 550.08 | 4045 |

3.3.12 SUMMARY OF ENERGY AVAILABILITY (MU)

| Source | FY 2018-19 H2 | FY 2019-20 |
|---|----------------------|-------------------|
| APGENCO-Thermal | 12952.35 | 24017.65 |
| APGENCO-Hydel | 1582.98 | 3149.77 |
| CGS | 8560.29 | 16064.22 |
| APGPCL | 61.59 | 119.03 |
| IPPs | 1747.29 | 3112.11 |
| Renewable Energy Sources | 4633.69 | 16769.36 |
| Mini Power Plant | 33.81 | 68.00 |
| KSK Mahanadi and Sembcorp India | 2469.86 | 4693.79 |
| Sembcorp Gayatri Limited | 0 | 3600.00 |
| Bilateral Purchases including Power Exchanges | 1123.15 | 445 |
| Swap power (From other utilities) | 3344.71 | 666.79 |
| Swap Power (To other utilities) | -252.16 | -4121.85 |
| Sales to other utilities | -573.07 | 0 |
| Total | 35684.49 | 68583.87 |

3.4 POWER PURCHASE COST

3.4.1 APGENCO STATIONS

FIXED COSTS IN RS.CRS

The fixed costs for FY 2018-19 H2 were projected based on the tariff approved by the Hon'ble APERC in the Retail Tariff Order for FY 2018-19 and MYT order (for APGENCO stations) dated 26.03.2016 in O.P. No.3 of 2016. For FY 2019-20, in respect of old stations, the fixed costs furnished by APGENCO were considered as the same as less than the fixed costs approved by the Hon'ble APERC for FY 2018-19 in O.P.No.3 of 2016. For RTPP-IV, the fixed rate approved in the Retail Tariff Order for FY 2018-19 was considered. For DSSTPS-I, the fixed rate furnished by APPDCL was considered as this is less than the fixed rate approved by APERC in the Retail Tariff Order for FY 2018-19. For DSSTPS-II and Dr.NTTPS-V which are yet to be commissioned, same fixed rate as that of DSSTPS-I was considered as all these units are of same capacity. The fixed charges computed based on the above are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|-------------------------------|----------------|-----------------|
| Thermal | | |
| Dr NTTPS-I, II, III | 331.94 | 804.38 |
| Dr NTTPS-IV | 221.43 | 345.02 |
| RTPP-I | 137.86 | 303.07 |
| RTPP-II | 202.13 | 292.43 |
| RTPP-III | 134.63 | 271.38 |
| RTPP-IV | | 43.98 |
| DSSTPS-I | 566.54 | 770.57 |
| DSSTPS-II | 0 | 37.27 |
| Dr.NTTPS-V | 0 | 45.82 |
| Interest on Pension Bonds | 404.14 | 861.95 |
| Total | 1998.66 | 3,775.87 |
| Hydel | | |
| MACHKUND PH AP Share | 15.95 | 34.01 |
| TUNGBHADRA PH AP Share | 10.93 | 23.32 |
| Upper Sileru HES | 28.72 | 70.39 |
| Lower Sileru HES | 55.05 | 134.91 |
| Donkarayi Canal PH | 2.99 | 7.33 |
| SSLM (Right Bank) PH | 85.26 | 199.68 |
| Nagarjunasagar Right canal PH | 8.93 | 20.54 |
| PABR | 5.28 | 11.75 |
| Mini Hydel (Chettipeta) | 0.39 | 0.88 |
| Nagarjunasagar Tail Pond PH | 24.13 | 49.67 |
| Total | 237.63 | 552.48 |
| Grand Total | 2236.29 | 4325.50 |

VARIABLE RATE IN RS/KWH.

The variable rates for FY 2018-19 H2 were projected as per the rates approved in the Retail tariff Order for FY 2018-19. For 2019-20, the variable rates were projected by enhancing the rates approved in the Retail Tariff order for FY 2018-19 by 3%. For DSSTPS-I, the variable rate furnished by APPDCL was considered. For DSSTPS-II and Dr. NTPPS-V which are yet to be commissioned, the variable rates considered are same as that of DSSTPS-I as all these plants are of same capacity. The variable rates are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|---------------------|----------------------|-------------------|
| Dr NTPPS-I, II, III | 2.67 | 2.75 |
| Dr NTPPS-IV | 2.41 | 2.48 |
| RTPP-I | 3.14 | 3.23 |
| RTPP-II | 3.14 | 3.23 |
| RTPP-III | 3.14 | 3.23 |
| RTPP-IV | 3.14 | 3.23 |
| DSSTPS-I | 2.61 | 2.65 |
| DSSTPS-II | -- | 2.65 |
| Dr.NTPPS-V | -- | 2.65 |

3.4.2 CENTRAL GENERATING STATIONS

FIXED COSTS IN RS. CRS

The fixed costs for FY 2018-19 H2 and FY 2019-20 were projected as per the latest CERC, DAE orders. The fixed costs are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|--------------------------------|----------------------|-------------------|
| NTPC-(SR) Ramagundam I & II | 69.81 | 139.62 |
| NTPC-(SR) Ramagundam- III | 18.75 | 37.51 |
| NTPC-Talcher-II | 43.66 | 87.32 |
| NTPC Simhadri Stage-I | 154.73 | 309.46 |
| NTPC Simhadri Stage-II | 100.43 | 200.86 |
| NLC TS II Stage-I | 11.55 | 23.11 |
| NLC TS II Stage-II | 21.54 | 43.09 |
| NPC-MAPS | - | - |
| NPC-Kaiga 1 & 2 | - | - |
| NPC-Kaiga 3 & 4 | - | - |
| Vallur (JV) NTPC with TANGEDCO | 58.32 | 116.65 |
| NLC-TNPL Tuticorin | 70.02 | 140.03 |
| NTPC-Kudigi | 134.81 | 317.21 |
| NTPC JNNSM Phase I | - | - |
| NTPC JNNSM Phase II | - | - |
| NNTPS | 18.16 | 73.02 |
| Total | 701.79 | 1487.87 |

VARIABLE RATES IN RS/KWH

The variable rates for FY 2018-19 H2 were projected as per the rates approved in the Retail Tariff Order for FY 2018-19. For 2019-20, the variable rates were projected by enhancing the rates approved in the Retail Tariff order for FY 2018-19 by 3%.The variable rates are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|--------------------------------|---------------|------------|
| NTPC-(SR) Ramagundam I & II | 2.18 | 2.25 |
| NTPC-(SR) Ramagundam- III | 2.15 | 2.21 |
| NTPC-Talcher-II | 1.39 | 1.43 |
| NTPC Simhadri Stage-I | 2.68 | 2.76 |
| NTPC Simhadri Stage-II | 2.68 | 2.76 |
| NLC TS II Stage-I | 2.88 | 2.97 |
| NLC TS II Stage-II | 2.88 | 2.97 |
| NPC-MAPS | 2.23 | 2.30 |
| NPC-Kaiga 1 & 2 | 3.22 | 3.32 |
| NPC-Kaiga 3 & 4 | 3.22 | 3.32 |
| Vallur (JV) NTPC with TANGEDCO | 2.20 | 2.27 |
| NLC-TNPL Tuticorin | 2.39 | 2.46 |
| NTPC-Kudigi | 3.58 | 3.69 |
| NTPC JNN SM Phase I | 3.58 | 3.69 |
| NTPC JNN SM Phase II | 3.50 | 3.61 |
| NNTPS | 2.49 | 2.56 |

3.4.3 APGPCL

FIXED COSTS IN RS. CRS.

The fixed costs projected for FY 2018-19 H2 and FY 2019-20 are based on the actual fixed rates claimed by APGPCL for the month of Oct'18.The fixed costs computed, based on the above rates, are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|-----------------|---------------|-------------|
| APGPCL Stage-I | 0.92 | 2.08 |
| APGPCL Stage-II | 2.39 | 4.39 |
| Total | 3.31 | 6.47 |

VARIABLE RATES IN RS/KWH

The variable rates projected for FY 2018-19 H2 and FY 2019-20 are based on the actual rates claimed by APGPCL for the month of Oct'18. The variable rates take into account the increase in gas price affected from 1st Oct,18. The variable rates are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|-----------------|----------------------|-------------------|
| APGPCL Stage-I | 3.533 | 3.533 |
| APGPCL Stage-II | 3.024 | 3.024 |

3.4.4 OLD GAS BASED IPPs

FIXED CHARGES IN RS. CRS.

The fixed rates adopted for computing the fixed charges are same as that approved in the Retail tariff order for FY 2018-19. The fixed costs computed, based on the above rates, are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|----------------|----------------------|-------------------|
| GGPP | 39.64 | 79.78 |
| SPGL | 47.99 | 96.24 |
| LKPL Phase-I | 87.39 | 121.74 |
| Total | 175.02 | 297.76 |

VARIABLE RATES IN RS/KWH

The variable rates have been computed by considering the GCVs, SHR, Auxiliary Consumption and latest actual gas price which is effective from 1stOctober,2018(\$3.36/MMBTU) and are tabulated below. It is requested for pass through of gas price in the variable cost may be permitted.

| Station | FY 2018-19 H2 | FY 2019-20 |
|----------------|----------------------|-------------------|
| GGPP | 2.89 | 2.89 |
| SPGL | 2.76 | 2.76 |
| LKPL Phase-I | 2.58 | 2.58 |

3.4.5 NEWGAS BASED IPPs

Fixed and variable costs have not been projected for these plants as there is no generation from these plants.

3.4.6 RENEWABLE ENERGY SOURCES

The rates for the energy supplied from different categories of Renewable Energy based projects have been arrived at based on the rates approved by the Hon'ble APERC in different orders. Where there are different rates for different projects in the same category, weighted average rate was adopted. The rates for energy supplied from different categories of Renewable Energy Sources are indicated below.

| Source | FY 2018-19 H2 | FY 2019-20 |
|--|---------------|------------|
| Bio Mass Power Projects including Co-gen | 6.26 | 6.46 |
| Bagasse Cogeneration Projects. | 4.42 | 4.40 |
| Wind Power Projects | 4.73 | 4.63 |
| Mini Hydel Power Projects | 2.34 | 2.44 |
| Industrial Waste Based Power Projects | 6.24 | 6.23 |
| Municipal Waste Based Power Projects | -- | 6.90 |
| NCL Energy Ltd. | 1.83 | 1.79 |
| Solar Power Projects | 5.81 | 5.90 |
| Solar Parks | 4.62 | 4.10 |
| NVVNL Bundled Power -SOLAR | 10.67 | 10.67 |

3.4.7 MINI POWER PLANT

FIXED COSTS IN RS. CRS.

The fixed rates adopted for computing the fixed charges for FY 2018-19 H2 and FY 2019-20 are same as that approved by Hon'ble APERC vide order dated 01.09.2018. The fixed costs computed based on the above rates are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|----------------------------------|---------------|------------|
| Srivathsa Power Projects Limited | 0 | 2.20 |

VARIABLE RATE RS/KWH

The variable rate has been computed by considering the GCV, SHR, Auxiliary Consumption and latest actual gas price which is effective from 1st October,2018(\$3.36/MMBTU). The rate so computed has been adopted for FY 2018-19 H2 and FY 2019-20 and tabulated below. It is requested for pass through of gas price in the variable cost may be permitted.

| Station | FY 2018-19 H2 | FY 2019-20 |
|----------------------------------|---------------|------------|
| Srivathsa Power Projects Limited | 3.50 | 3.50 |

3.4.8 SEMBCORP ENERGY AND KSK MAHANADI

FIXED COSTS IN RS. CRS.

These are the bid based projects and the tariffs discovered in the bids were adopted by APERC. Therefore, the fixed costs and variable costs for these Stations have been computed based on the rates discovered in the bid. The fixed costs are indicated in the following table.

| Station | FY 2018-19 H2 | FY 2019-20 |
|--|---------------|------------|
| Sembcorp Energy India Limited | 148.98 | 292.02 |
| KSK Mahanadi Power Corporation Limited | 222.77 | 447.98 |

VARIABLE RATES RS/KWH

| Station | FY 2018-19 H2 | FY 2019-20 |
|--|---------------|------------|
| Sembcorp Energy India Limited | 2.02 | 2.22 |
| KSK Mahanadi Power Corporation Limited | 2.60 | 2.78 |

3.4.9 OTHER SHORT-TERM SOURCES RS/KWH

| Station/Source | FY 2018-19 H2 | FY 2019-20 |
|---|---------------|------------|
| Sembcorp Gayatri Power Limited | -- | 4.57 |
| Bilateral purchases including Power Exchanges | 5.61 | 4.57 |
| Bilateral Sales including Power exchanges | 3.76 | -- |

3.4.10 PGCIL CHARGES

The POC rate approved by CERC for the latest quarter i.e. third quarter of FY 2018-19 is Rs.4.414 lakhs/MW which includes POC slab rate, Reliability support charges rate and HVDC charges rate. Apart from the main POC bill, PGCIL raises supplementary bills also from time to time. Further, transmission assets pertaining to CTU(Central Transmission Network) get added to the network regularly which would increase the POC charges in future. To account for the above, the POC rate of Rs.4.414 lakhs/MW has been enhanced by 5% to arrive at a value of Rs. 4.63 lakhs/MW. Based on this value, the POC charges for FY 2018-19 H2 and FY 2019-20 have been computed in the following manner.

POC charges for FY 2018-19 H2

$$\begin{aligned} &= (4.63) \times (\text{number of months in the second half of FY 2018-19}) \times (\text{interstate capacity in MW APDISCOMs are expected to avail})/100 \\ &= (4.63) \times (6) \times (2664)/100 = \text{Rs.740 Crs.} \end{aligned}$$

Similarly, the POC charges for FY 2019-20 as per the above formula have been arrived at as Rs. 1480 Crs.

The above charges include the POC charges reimbursable to KSK Mahanadi and Sembcorp Energy plants.

ENERGY REQUIREMENT

The DISCOM wise Energy Requirement are tabulated below.

| DISCOM | FY 2018-19 H2 | FY 2019-20 |
|--------------|---------------|--------------|
| APEPDCL | 10755 | 24606 |
| APSPDCL | 20572 | 43108 |
| Total | 31327 | 67713 |

The energy requirement of APDISCOMs has been arrived at by grossing up the sales with appropriate transmission and distribution losses. The external losses (PGCIL losses) on the power purchased from CGS (excluding NTPC Simhadri-I), KSK Mahanadi and Sembcorp Energy India Limited have also been factored for arriving at the above energy requirement.

3.5 SUMMARY OF POWER PURCHASE COST FOR THE CURRENT YEAR FY 2018-19 H2 AND ENSUING YEAR FY 2018-19

Based on the availability, requirement and costs for each source, the summary of power purchase cost for Andhra Pradesh for H2 FY 2018-19 is projected as follows:

| FY 2018-19 H2 | | | | |
|---------------------------------|---------------------|---------------------|---------------------|------------------------|
| Source | Energy Availability | Energy Dispatch(MU) | Total Cost (Rs Crs) | Per Unit Cost (Rs/kWh) |
| APGENCO Thermal and DSTPP-I &II | 12,952.35 | 11,240.99 | 4,930.03 | 4.39 |
| APGENCO Hydel | 1,582.98 | 1,582.98 | 237.63 | 1.50 |
| CGS | 8,560.29 | 6,731.80 | 2,546.92 | 3.78 |
| APGPCL | 61.59 | 9.55 | 6.20 | 6.49 |
| IPPs – Gas | 1,747.29 | 1,015.94 | 442.37 | 4.35 |
| Renewable Energy Sources | 4,633.69 | 4,633.69 | 2,246.84 | 4.85 |
| Srivathsa | 33.81 | - | 0.53 | - |
| KSK Mahanadhi | 1,485.12 | 1,485.12 | 608.90 | 4.10 |
| Sembcorp Energy | 984.74 | 984.74 | 347.70 | 3.53 |
| Swap Power (Availment) | 3,344.71 | 3,344.71 | 1,351.26 | 4.04 |
| Short-term Purchases | 1,123.15 | 1,123.15 | 630.62 | 5.61 |
| Gross Purchases | 36,509.72 | 32,152.66 | 13,247.14 | 4.15 |
| Swap Power(Return) | 252.16 | 252.16 | 101.87 | 4.04 |
| Short-term Sales | 573.07 | 573.07 | 215.70 | 3.76 |
| Net Purchases | 35,684.49 | 31,327.43 | 13,031.45 | 4.15 |

Based on the availability, requirement and costs for each source, the summary of power purchase cost for Andhra Pradesh for FY 2019-20 is projected as follows:

| FY 2019-20 | | | | |
|---------------------------------|----------------------------|----------------------------|----------------------|-------------------------------|
| Source | Energy Availability | Energy Dispatch(MU) | Cost (Rs Crs) | Per Unit Cost (Rs/kWh) |
| APGENCO Thermal and DSTPP-I &II | 24,017.65 | 23,742.45 | 10,391.22 | 4.38 |
| APGENCO Hydel | 3,149.77 | 3,149.77 | 552.48 | 1.75 |
| CGS | 16,064.22 | 15,504.67 | 5,963.87 | 3.85 |
| APGPCL | 119.03 | 109.59 | 40.74 | 3.72 |
| IPPs – Gas | 3,112.11 | 3,112.11 | 1,144.26 | 3.68 |
| Renewable Energy Sources | 16,769.36 | 16,769.36 | 7,706.43 | 4.60 |
| Srivathsa | 68.00 | 45.52 | 19.03 | 4.18 |
| KSK Mahanadhi | 2,977.37 | 2,977.37 | 1,275.57 | 4.28 |
| Sembcorp Energy | 1,716.42 | 1,716.42 | 672.85 | 3.92 |
| Swap Power (Availment) | 666.79 | 666.79 | 269.38 | 4.04 |
| Sembcorp Gayatri(Short-term) | 3,600.00 | 3,600.00 | 1,645.20 | 4.57 |
| Short-term purchase | 445.00 | 441.30 | 201.67 | 4.57 |
| Gross Purchases | 72,705.72 | 71,835.34 | 29,882.71 | 4.16 |
| Swap Power (Return) | 4,121.85 | 4,121.85 | 1,665.23 | 4.04 |
| Net Purchases | 68,583.87 | 67,713.49 | 28,217.48 | 4.17 |

4 Losses

4.1 DISCOM losses

The DISCOM losses for H2 FY 2018-19 is taken as per APERC approved values. For FY 2019-20 the losses have been projected as in the Resource Plan for the 4th control period is considered. The below table provides the voltage level losses for projecting the energy requirement for H2 FY 2018-19 and FY 2019-20.

| APEPDCL - DISCOM lossess | | |
|---------------------------------|----------------------|-------------------|
| Voltage Level | H2 FY 2018-19 | FY 2019-20 |
| 33 KV | 2.82% | 2.81% |
| 11 KV | 3.33% | 3.28% |
| LT | 4.16% | 4.13% |

4.2 TRANSCO losses

The Transco losses for H2 FY 2018-19 have been taken as per approval. The same losses have been considered For FY 2019-20 also.

| TRANSMISSION LOSSES 2018-19 H2 | TRANSMISSION LOSSES 2019-20 |
|---------------------------------------|------------------------------------|
| 3.27 | 3.27 |

4.3 *Losses external to APTRANSCO system*

The losses external to the APTRANSCO system are considered to be 3.27 % for H2 FY 18-19 and also for FY 2019-20. This is applicable for procurement of power from Central Generating Stations and other medium and short term purchases. However, external losses have not been considered for bilateral / inter-state purchases due to considering average landed power purchase cost at APTransco periphery expenditure Projections for APEPDCL

5 Expenditure Projections for APEPDCL

5.1 Power Purchase and Procurement Cost

The Energy dispatch from various generating stations to APEPDCL is estimated to be 22397.43 MU for FY 2018-19 and 24605.88 MU for 2019-20 and the cost of this energy would be Rs.9073.86 Cr. and Rs. 10236.30 Crs. respectively.

| Particulars | Units | 2018-19 | 2019-20 |
|-------------------------------------|-----------------|----------|----------|
| Power Purchase from Generators | (in MUs) | 22397.43 | 24605.88 |
| Power Purchase cost from Generators | (in Rs. Crores) | 9073.86 | 10236.30 |

5.2 AP Transco Transmission Charges

The actual transmission charges for FY 2017-18 is Rs.292.01 Crs. The licensee has considered the Transmission cost for FY 2018-19 as approved in the Tariff Order FY 2018-19.

FY 2018-19

| Name of Transmission service provider | Load not eligible for Open Access | | | Load Eligible for Open Access | | | Total Cost(Rs. Crs) |
|---------------------------------------|-----------------------------------|-----------------------|-----------------|-------------------------------|-----------------------|-----------------|---------------------|
| | MW | Tariff (Rs./kW/month) | Cost (Rs. Crs.) | MW | Tariff (Rs./kW/month) | Cost (Rs. Crs.) | |
| APTRANSCO | 3614.37 | 94.44 | 409.61 | 669.17 | 94.44 | 75.84 | 485.45 |
| True down of Transmission charges | | | -63.8 | | | | -63.80 |
| Total | 3614.37 | 94.44 | 345.81 | 669.17 | 94.44 | 75.84 | 421.65 |

FY 2019-20

For the fourth control period (FY 2019-20 to FY 2023-24), the transmission licensee has proposed to consider State Peak Demand (MW) as filed in the Resource Plan, instead of Installed Generation/Contracted Capacity, for computation of Transmission Tariff. Further the State Peak Demand is further apportioned to both the Discoms APEPDCL(34.27%) and APSPDCL(65.73%) as per the prevailing energy allocation ratio and the same would be considered as part of Long Term Transmission Agreement (LTTA) to be executed with AP Transco, as proposed by APTRANSCO. The Transmission cost for FY 2019-20 as projected in the Transmission MYT for 4th MYT control period (FY 2019-20 to 2023-24) and the apportioned demand are considered for computing the transmission cost of the Licensee.

| Name of Transmission service provider | Load not eligible for Open Access | | | Load Eligible for Open Access | | | Total Cost(Rs. Crs) |
|---------------------------------------|-----------------------------------|-----------------------|-----------------|-------------------------------|-----------------------|-----------------|---------------------|
| | MW | Tariff (Rs./kW/month) | Cost (Rs. Crs.) | MW | Tariff (Rs./kW/month) | Cost (Rs. Crs.) | |
| APTRANSCO | 3335.33 | 121.81 | 487.53 | 588.59 | 121.81 | 86.04 | 573.57 |
| | | | | | | | |
| Total | 3335.33 | 121.81 | 487.53 | 588.59 | 121.81 | 86.04 | 573.57 |

5.3 SLDC Charges

The actual SLDC charges for 2017-18 are Rs.13.50 Crs. and for FYs: 2018-19 , it is estimated at Rs.13.85 Crs. based on the approved SLDC in the Tariff Order for FY 2018-19.

| 2018-19 | Annual Fee | | | Charges | | | Total Cost (Rs. Crs.) |
|--|----------------|----------------------|-----------------|----------------|-----------------------|-----------------|-----------------------|
| | MW | Tariff (Rs./MW/year) | Cost (Rs. Crs.) | MW | Tariff (Rs./MW/month) | Cost (Rs. Crs.) | |
| Load not eligible for Open Access | 3614.37 | | 1.52 | 3614.37 | | 10.16 | 11.68 |
| Load Eligible for Open Access | 669.17 | 4214.27 | 0.28 | 669.17 | 2342.73 | 1.88 | 2.16 |
| Total | 4283.54 | | 1.81 | 4283.54 | | 12.04 | 13.85 |

FY 2019-20

As per Regulation 1 of 2006, for computation of Annual Fee and Operating Charges, Total Generation Capacity is to be considered. Accordingly, the total generation capacity is apportioned to both the Discoms APEPDCL and APSPDCL, as per the prevailing energy allocation ratio, for the purpose of computation of SLDC charges of the Licensee.

| 2019-20 | Annual Fee | | | Charges | | | Total Cost (Rs. Crs.) |
|-----------------------------------|------------|----------------------|-----------------|---------|-----------------|-----------------|-----------------------|
| | MW | Tariff (Rs./MW/year) | Cost (Rs. Crs.) | MW | Tariff (Rs./MW) | Cost (Rs. Crs.) | |
| Load not eligible for Open Access | 5687.92 | 22448.00 | 12.77 | 5687.92 | 1628.76 | 11.12 | 23.89 |
| Load Eligible for Open Access | 1003.75 | | 2.25 | 1003.75 | | 1.96 | 4.22 |
| Total | 6691.67 | | 15.02 | 6691.67 | | 13.08 | 28.10 |

5.4 PGCIL :

The POC rate approved by CERC for the latest quarter i.e. third quarter of FY 2018-19 is Rs.4.414 lakhs/MW which includes POC slab rate, Reliability support charges rate and HVDC charges rate. Apart from the main POC bill, PGCIL raises supplementary bills also from time to time. Further, transmission assets pertaining to CTU (Central Transmission Network) get added to the network regularly which would increase the POC charges in future. To account for the above, the POC rate of Rs.4.414 lakhs/MW has been enhanced by 5% to arrive at a value of Rs. 4.63 lakhs/MW. Based on this value, the POC charges for FY 2018-19 H2 and FY 2019-20 have been computed in the following manner.

POC charges for FY 2018-19 H2

$$= (4.63) \times (\text{number of months in the second half of FY 2018-19}) \times (\text{interstate capacity in MW APDISCOMs are expected to avail})/100$$

$$= (4.63) \times (6) \times (2664)/100 = \text{Rs.740 Crs.}$$

Similarly, the POC charges for FY 2019-20 as per the above formula have been arrived at as Rs. 1480 Crs.

The above charges include the POC charges reimbursable to KSK Mahanadi and Sembcorp Energy plants.

Based on the above computations, the PGCIL Charges of APEPDCL considered for FY 2018-19 and the projections for FY 2019-20 are considered as below :

| Particulars | FY 2018-19 | FY 2019-20 |
|--------------------------------|---------------|---------------|
| | Rs.Crs | Rs.Crs |
| PGCIL Expenses | 426.64 | 507.20 |
| Short Term Open Access Charges | | 53.36 |
| Total PGCIL Charges | 426.64 | 560.56 |

5.5 ULDC Charges

For FY 2018-19, ULDC charges approved in the Tariff Order have been adopted and the licensee has projected the ULDC charges for FY 2019-20 are as shown in the table below:

| Particulars(Rs. Crs) | FY 2018-19 | FY 2019-20 |
|----------------------|------------|------------|
| ULDC Charges | 3.40 | 1.53 |

5.6 Distribution Costs

The licensee has adopted the Distribution cost for FY 2018-19 as approved in the Wheeling Tariff Order (Distribution Business Tariff Order) for 3rd MYT control period (FY 2014-15 to 2018-19).

| Name of the Distribution Service Provider | Cost for Load not eligible for Open Access (Rs. Crs) | Cost for Load Eligible for Open Access | Total Cost (Rs. Crs.) |
|---|--|--|-----------------------|
| APEPDCL | 1708.73 | 63.52 | 1772.25 |

The licensee has estimated the distribution cost for FY 2019-20 on the basis of MYT to be filed for the fourth control period since FY 2019-20 is the first year of 4th Control period (FY 2019-20 to FY 2023-24). However, detailed projections for all five years of the 4th control period shall be submitted in MYT petition for Distribution ARR that shall be filed by the Licensee at a later date. The projections in the MYT petition shall be based on APERC's regulation 4 of 2005. The applicable regulations are reproduced below for reference:

APERC Regulation 4 of 2005 states that *“Every Distribution Licensee shall file for each of its licensed business an application for approval of its Aggregate Revenue Requirement (ARR) for each year of the Control Period, not less than 120 days before the commencement of the first year of the Control Period. This filing shall be in such form and in such manner as specified and in accordance with the Guidelines issued by the Commission. The Distribution Licensees may file such applications for ARR of the first Control Period within a period not less than 90 days before the commencement of the Control Period. The ARR filing for the Distribution business shall be for the entire Control Period”*

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..
..

“The ARR filings shall contain the following

1. The Operation and Maintenance (O&M) costs which include employee-related costs, repair & maintenance costs and administrative & general costs, estimated for the Base Year and the year prior to the Base Year in complete detail, together with the forecast for each year of the Control Period based on the norms proposed by the Distribution Licensee including indexation and other appropriate mechanisms in terms of the principles enunciated in this Regulation for O&M cost allowance.

2. *Regulated Rate Base (RRB) for the Base Year and each year of the Control Period which requires submission of the working capital requirement and a detailed scheme/project-wise Capital Investment Plan with a capitalization schedule covering each year of the Control Period consistent with the Resource Plan filed by licensee.*

3. *A proposal for appropriate capital structure and its cost of financing (interest cost and return on equity) for the purpose of computing Weighted Average Cost of Capital.*

4. *Targets proposed for reduction of distribution losses during the Control Period duly adhering to the Licensees' Standards of Performance Regulation.*

5. *Details of depreciation, including Advance against depreciation if any required and capitalization schedules for each year of the Control Period.*

6. *Description of external parameters proposed to be used for indexation;*

7. *Details of taxes on income;*

8. *Any other relevant expenditure;*

9. *Proposals for sharing of gains and losses;*

10. *Proposals for efficiency parameter targets;*

11. *Proposals for rewarding efficiency in performance*

12. *Any other matters considered appropriate"*

Keeping view of the above, the projected revenue requirement for the distribution licensee for FY 2019-20 is shown below:

Table 1: Projected Distribution Cost in Rs. Cr.

| Particulars | FY20 |
|--|--------------|
| O&M Charges (Net) | 1,576 |
| Depreciation | 397 |
| Advance Against Depreciation | - |
| Taxes on Income | 18 |
| Other Expenditure | 15 |
| Special Appropriations | - |
| Total Expenditure | 2,005 |
| Less: IDC and expenses capitalized* | 71 |
| Less: O&M expenses capitalized | - |
| Net Expenditure | 1,934 |
| Add: Return on Capital Employed | 233 |
| Distribution ARR | 2,167 |
| Less: Wheeling Revenue from Third Party/Open Access/NTI (if any) | 186 |
| Total Distribution ARR | 1,981 |

5.7 Interest on Consumer Security Deposits

The details showing the interest on Consumer Security Deposit is as below.

| Revenue Requirement Item (Rs. Crs.) | | For Control Period | |
|-------------------------------------|----------------------------|--------------------|------------|
| | | Base Year | FY 2019-20 |
| A | Opening Balance | 1472.58 | 1722.91 |
| B | Additions during the Year | 298.33 | 220.20 |
| C | Deductions during the Year | 48.00 | 59.60 |
| D | Closing Balance | 1722.91 | 1883.51 |
| E | Average Balance ((A+D)/2) | 1597.75 | 1803.21 |
| F | Interest @ % p.a. # | 6.75 | 7.00 |
| G | Interest Cost (E * F) | 107.85 | 126.22 |

Interest on consumer security deposits are 8.38% in FY: 2013-14, 8.31% in FY 2014-15, 7.60% in FY 2015-16 , 6.58% in FY 2016-17 , and 5.98% in FY 2017-18. Based on the past trend, the licensee has considered the 6.75% & 7.00 % rate of interest for estimation of interest on consumer security deposits for FY 2018-19 and 2019-20.

As per APERC Regulation 6 of 2004 stipulates "*Security Deposit amount shall be two months charges in case of monthly billing and 3 months charges for bi-monthly billing*".

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"The interest accruing to the credit of the consumer shall be adjusted annually against the amounts outstanding from the consumer to the Licensee as on 1st May of every year and the amounts becoming due from the consumer to the Licensee immediately thereafter."

5.8 Supply Margin

Supply margin has been projected as per norms approved by Hon'ble Commission based on RRB approved by Hon'ble APERC in Distribution business Tariff Order for 3rd Control Period:

| Particulars(in Rs. Crs) | FY 2018-19 | FY 2019-20 |
|-------------------------|------------|------------|
| Supply Margin Amount | 6.16 | 10.03 |

5.9 Other Costs

The licensee has projected the following expenditure under other costs:

- 1) Amount payable towards DELP to M/s EESL, New Delhi
- 2) Amount payable towards solar pumpsets
- 3) Amount payable towards Energy Efficient Pump sets
- 4) Amount payable towards BLDC Pumpsets on grid
- 5) Amount payable to Electric Vehicle charging stations
- 6) Expenses for electrical accidents compensation

5.9.1 Energy Conservation / Efficiency measures:

DELP:

The licensee with the approval of Honourable Commission has distributed 2 Nos. LED bulbs in all the districts of its jurisdiction. In accordance with the approval of the Honourable Commission, the licensee has projected the amounts payable to M/s EESL, New Delhi. Total Number of LEDs distributed up to end FY 2018-19 is around 7549057 Nos and amount paid Rs.94.26 Crs.

Energy Efficient Pumpsets:

8284 Nos. Energy efficient pump sets were energized upto FY 2017-18 , 3379 Nos. pump sets were energized in FY 2018-19 (H1) and proposed for releasing in H2 (FY 2018-19) are 3148 Nos. and 3,000 Nos. are proposed in FY 2019-20.

Solar Agricultural pump sets:

9463 Nos. Solar Agricultural pump sets were energized upto FY 2017-18 , 2943 Nos. pump sets were energized in FY 2018-19 (H1) and expected pumpsets to be energized in H2(FY 2018-19) is 5717 Nos., in FY 2019-20 is 5000 No.s.

BLDC Pumpsets:

225 Nos. BLDC pump sets on grid were energized in FY 2018-19 (H1) and proposed for releasing in H2 (FY 2018-19) are 1000 Nos. and 1500 Nos. are proposed in FY 2019-20.

Electrical Vehicle Charging Stations:

20 Nos Electric Vehicle charging stations proposed for set up in H2 (FY 2018-19) and 50 Nos. are proposed in FY 2019-20.

The following table summarizes the Agricultural demand met through solar off-grid power out of total Agricultural demand of the licensee.

| Particulars | FY 2018-19 | FY 2019-20 |
|--|------------|------------|
| Agricultural Demand met through Grid Power | 2078.50 | 2280.67 |
| Agricultural Demand met through Solar Pumpsets* | 94.8 | 133.59 |
| Total Agricultural Demand | 2173.3 | 2414.26 |

* Each 5HP Pumpset is expected to produce 6000 Units of energy per year

The consumer contribution is 55,000 of the project cost, the MNRE, Govt. of India provides 85,000 of the project cost as subsidy and balance 1,84,000 is to be borne by the licensee.

The details of Other Costs projected by Licensee for FY 2018-19 & FY 2019-20 are as follows:

| OTHER COSTS (Rs Crs) : | | |
|--|-------------------|-------------------|
| Particulars | FY 2018-19 | FY 2019-20 |
| Payments to M/s.EESL towards DELP | 32.44 | 27.97 |
| Payment AGL Solar pumpsets | 162.08 | 114.27 |
| Energy Pump Sets | 38.31 | 19.85 |
| BLDC-Solar pumpsets -on grid | 0.00 | 48.81 |
| Electric Vehicles Charging stations | 0.00 | 2.11 |
| Expenses for electrical accidents compensation | 10.00 | 10.00 |
| TOTAL : | 242.83 | 223.01 |

5.10 Aggregate Revenue Requirement (ARR) for Retail Supply Business

The Aggregate revenue requirement for FY 2017-18 (Actuals), FY 2018-19 (Revised Estimates) and Projections for FY 2019-20 are as shown below:

| Sl. No. | EXPENDITURE ITEM | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|----------------|---|-------------------|-------------------|-------------------|
| 1 | Power Purchase / Procurement Cost | 8295.55 | 9073.86 | 10236.30 |
| 2 | Transmission Cost | 292.01 | 421.65 | 573.57 |
| 3 | PGCIL & ULDC Expenses | 192.58 | 430.04 | 562.09 |
| 4 | SLDC Cost | 13.50 | 13.85 | 28.10 |
| 5 | Distribution Cost | 1522.94 | 1772.25 | 1981.00 |
| 6 | Interest on Consumer Security Deposits | 83.48 | 107.85 | 126.22 |
| 7 | Supply Margin in Retail Supply Business | 0.00 | 6.16 | 10.03 |
| 8 | Other Costs, if any | 127.86 | 242.83 | 223.01 |
| | Aggregate Revenue Requirement | 10527.92 | 12068.48 | 13740.32 |

6 Revenue Projections

6.1 Sales Forecast

The factors affecting the actual consumption are numerous and often beyond the control of the licensee due to factors such as Government Policy, economic climate, weather conditions and force majeure events like natural disasters. Therefore, an accurate point-estimate of the consumption (sales by licensee) is not possible. Under such a situation, the attempt is to look into various factors and estimate the interrelationships to arrive at a reasonably accurate forecast within a range and use a single point-estimate within the range for the limited purpose of estimating future costs / revenues.

6.1.1 Trend Method

This method is a non-causal model of demand forecasting which assumes that the underlying factors, which drive the demand for electricity, are expected to follow the same trend as in the past and hence the forecast for electricity is also based on the assumption that the past trend in consumption of electricity will continue in the future. The strength of this method, when used with balanced judgment, lies in its ability to reflect recent changes and therefore is probably best suited for a short-term projection as used for the ARR/ Tariff filing. However, the trend-based approach has to be adjusted for judgment on the characteristics of the specific consumer groups/ categories. For example, while this method may provide a better estimate of consumption by the domestic and commercial categories of consumers, it may not be very suitable for the industrial category because of the high dependence of demand on the end-use and also on the macroeconomic variables.

In any case, the forecasts arrived at by using the trend method need to be modified for impact of any other considerations like increasing commercialization/ development in certain districts/ regions to incorporate the impact of econometric variables and the load reliefs issued in the past.

6.1.2 Sales Estimation for the FY 2018-19:

- The licensee has adopted a modified trend approach by considering the trend of actual of H1 FY 2017-18, FY 2017-18 and H1 FY 2018-19 and the same growth rate was adopted for H2 of FY 2018-19 duly removing exceptions/outliers due to sudden increase/decrease.

- The growth rates thus adopted category wise are shown in following table:

| Category | FY 2018-19 Actual (H1) /FY 2017-18 Actual (H1) | Revised Estimate FY 2018-19 /FY 2017-18 | FY 2019-20/ FY 2018-19 |
|-----------------------------------|--|---|------------------------|
| | % | % | % |
| LT Supply | 5.95% | 5.45% | 8.80% |
| LT I: Domestic | 5.45% | 5.68% | 6.66% |
| LT II: Non-Domestic/Commercial | 6.27% | 6.30% | 8.06% |
| LT III: Industry | 23.70% | 21.73% | 16.30% |
| Industries other than Aquaculture | 4.22% | 6.32% | 6.28% |
| Aquaculture | 36.59% | 28.61% | 20.00% |
| LT IV: Cottage Industries | 9.36% | 10.37% | 6.14% |
| LT V: Agriculture | -4.37% | -5.02% | 9.73% |
| LT VI: Street Lightng & PWS | 1.73% | 1.92% | 2.61% |
| LT VII: General | 20.32% | 20.36% | 7.87% |
| LT VII: Temporary supply | 26.81% | 21.33% | 3.58% |
| HT Supply | 9.58% | 8.19% | 18.04% |
| HT I (A): General | 5.62% | 4.75% | 5.33% |
| HT I (B): Energy Intensive | 18.95% | 14.50% | 16.57% |
| HT II: Others | 10.14% | 10.93% | 4.11% |
| HT III: Airports, Bus Stations | -13.91% | -9.19% | 2.67% |
| HT IV Agriculture, | 14.75% | 16.29% | 190.78% |
| HT V: Railway Traction | 2.45% | 2.55% | 2.88% |
| HT VI: Townships & | -14.57% | -13.82% | 1.18% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 149.04% | 31.42% | 0.45% |
| Category: RESCOs | 3.32% | 3.26% | 6.42% |
| Total | 7.64% | 6.73% | 13.18% |

| SALES ESTIMATES FOR FY 2018-19 | | | | | | |
|---|-----------------------------------|----------------|-----------------|-----------------------------------|---------------------|-----------------|
| Category | Actual sales FY 17-18 (MU) | | | Estimated sales 18-19 (MU) | | |
| | H117-18 | H217-18 | Total | H1 Actuals | H2 Estimated | Total |
| LT Supply | 4943.16 | 4820.88 | 9764.04 | 5237.34 | 5058.79 | 10296.13 |
| LT I: Domestic | 2826.78 | 2203.96 | 5030.73 | 2980.82 | 2335.64 | 5316.46 |
| LT II: Non-Domestic/Commercial | 521.93 | 456.69 | 978.62 | 554.63 | 485.61 | 1040.24 |
| LT III: Industry (all subcategories) | 582.29 | 700.88 | 1283.17 | 720.28 | 841.71 | 1561.99 |
| Industry (other than Aquaculture) | 189.48 | 206.62 | 396.10 | 203.42 | 217.71 | 421.13 |
| Aquaculture | 392.81 | 494.26 | 887.07 | 516.86 | 624.00 | 1140.86 |
| LT IV: Cottage Industries | 1.21 | 1.13 | 2.35 | 1.33 | 1.26 | 2.59 |
| LT V: Agriculture | 872.12 | 1316.17 | 2188.29 | 834.00 | 1244.50 | 2078.50 |
| LT VI: Street Lightng & PWS | 111.70 | 114.54 | 226.25 | 113.63 | 116.96 | 230.59 |
| LT VII: General | 26.81 | 27.17 | 53.98 | 32.25 | 32.71 | 64.97 |
| LT VII: Temporary Supply | 0.31 | 0.33 | 0.64 | 0.39 | 0.39 | 0.78 |
| HT Supply | 4289.43 | 4297.30 | 8586.73 | 4700.37 | 4589.63 | 9290.00 |
| HT I (A): General | 2029.61 | 2002.82 | 4032.43 | 2143.63 | 2080.27 | 4223.91 |
| HT I (B): Energy Intensive Industries | 1154.59 | 1312.22 | 2466.81 | 1373.40 | 1451.16 | 2824.56 |
| HT II: Others | 314.19 | 276.47 | 590.66 | 346.03 | 309.21 | 655.24 |
| HT III: Airports, Bus Stations and Railway Stations | 24.53 | 17.70 | 42.23 | 21.12 | 17.23 | 38.35 |
| HT IV Agriculture, Government LIS, CPWS | 238.99 | 172.28 | 411.27 | 274.24 | 204.04 | 478.27 |
| HT V: Railway Traction | 338.70 | 335.07 | 673.77 | 346.99 | 343.98 | 690.97 |
| HT VI: Townships & Residential Colonies | 18.45 | 12.14 | 30.59 | 15.76 | 10.60 | 26.37 |
| Green Power | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT VIII: Temporary | 2.17 | 6.03 | 8.20 | 5.40 | 5.37 | 10.77 |
| RESCOs | 168.20 | 162.57 | 330.77 | 173.80 | 167.77 | 341.56 |
| Total | 9232.59 | 9118.18 | 18350.77 | 9937.71 | 9648.42 | 19586.13 |

6.1.3 Sales Projections for the year FY 2019-20

- The licensee has worked out circle wise CAGR for each category and adopted moderate/suitable CAGR removing exceptions/outliers due to sudden increase/decrease in sales starting from 2013-14 to 2018-19 duly observing CAGR of 5 Years, 4 Years, 3 Years, 2 Years and 1 Year .
- In respect of HT IV LI Schemes, upcoming projects consisting of 2 schemes 1) Chintalapudi LIS with a load of 440.56 MW works out to consumption of 845.87 MU considering 16 hours of supply for 120 days of operation and Uttarandra Sujala Sravanthi LIS with a load of 46.00 MW works out to consumption of 44.16 MU considering 16 hours of supply for 60 days of operation. The total Load of the schemes is 486.562 MW works out to a consumption of 890.03 MU. The details are indicated in the table below:

Projected Sales for upcoming LI Schemes for the FY 2019-20

| Sl. No. | Name of the Scheme | District | Status | No. of Days to be operated in a year | No. of Hrs to be operated in a Day | C.M.D. MW | Voltage | Apr-19 | May-19 | Jun-19 | Jul-19 | Aug-19 | Sep-19 | Oct-19 | Nov-19 | Dec-19 | Jan-20 | Feb-20 | Mar-20 | Total M.U |
|---------------------------------|------------------------------|---------------|---|--------------------------------------|------------------------------------|-----------|--------------|--------|--------|--------|--------|----------|----------|----------|----------|--------|--------|--------|--------|-----------|
| Chintalapudi LIS | | West Godavari | Expected to be commissioned in Dec18 | 120 | 16 | 107.89 | 220/11 KV | | | | | 51.7872 | 51.7872 | 51.7872 | 51.7872 | | | | | 207.1488 |
| 1 | a) Tadipudi 220/11kV | | Expected to be commissioned in March 19 | 120 | 16 | 294.67 | 400/220/11KV | | | | | 141.4416 | 141.4416 | 141.4416 | 141.4416 | | | | | 565.7664 |
| 2 | b) Guddigudem 400/220/11kV | | Expected to be commissioned in Jan 19 | 120 | 16 | 16.22 | 132/11 KV | | | | | 7.7856 | 7.7856 | 7.7856 | 7.7856 | | | | | 31.1424 |
| 3 | c) Reddyganapavaram 132/11kV | | | 120 | 16 | 21.78 | 132/11 KV | | | | | 10.4544 | 10.4544 | 10.4544 | 10.4544 | | | | | 41.8176 |
| 4 | d) Routhugudem 132/11kV | | | 120 | 16 | 21.78 | 132/11 KV | | | | | 10.4544 | 10.4544 | 10.4544 | 10.4544 | | | | | 41.8176 |
| | | Total | | | | 440.56 | | | | | | | | | | | | | | 845.88 |
| Uttarandra Sujala Sravanthi LIS | | | | | | | | | | | | | | | | | | | | |
| 5 | Jamathulapalem | Visakhapatnam | Expected to be commissioned in Sep 19 | 120 | 16 | 23.00 | 132/11 KV | | | | | | | 11.04 | 11.04 | | | | | 22.08 |
| 6 | Tida | | 120 | 16 | 23.00 | 132/11 KV | | | | | | | 11.04 | 11.04 | | | | | | 22.08 |
| | | Total | | | | 46.00 | | | | | | | | | | | | | | 44.16 |
| Total of both schemes | | | | | | 486.56 | | | | | | | | | | | | | | 890.04 |

- In respect of LT-III Aquaculture a moderate growth rate of 20% was considered, since a substantial steep increase in growth rate is observed over a period and a gradual decreased trend is observed thereafter.

6.1.4 Forecasting Sales: LT V (Agriculture)

- In respect of Agriculture about 10,424 connections are targeted for release in FY 2019-20 which constitutes to about 5% increase on present works. In the previous years a negative trend 8.80% is observed during FY 16-17 to 17-18, and 5.02% during FY17-18 to FY18-19 which is due to favorable climatic conditions prevailed during that period. However, considering normal conditions in 2019-20, and target to be met in 2019-20, about 10 % overall growth is considered in 2019-20.

6.1.5 Process of Estimation:

In compliance to the directive of the Hon'ble APERC with regard to estimation of Agriculture consumption in the service area of APEPDCL, the Agriculture consumption in all the 5 circles are being worked out. Meters were fixed on LV side of sampled DTRs feeding exclusively agricultural services in each Mandal. In EPDCL, there are about 2,23,196 number of Agricultural services existing at the end of September 2018. There are 3856 Meters existing at the LV side of the DTRs to gauge the agricultural consumption as shown in the following table.

| Name of the Circle | No. of Mandals having agricultural services | The mandals having sampled DTRs as per TF-2.10 | DTRs metered |
|--------------------|---|--|--------------|
| Srikakulam | 38 | 30 | 180 |
| Vizianagaram | 34 | 30 | 307 |
| Visakhapatnam | 43 | 25 | 299 |
| Rajahmundry | 59 | 36 | 1290 |
| Eluru | 46 | 29 | 1780 |
| Total | 220 | 150 | 3856 |

The monthly meter readings of all the agricultural DTRs are collected from the five circles and the consumptions are arrived. The consumptions recorded at LV side of the DTRs will be netted off by a pre specified percentage to take care of LT network losses. The instruction of the Commission in qualifying a particular type of LT feeder based on Line Length, Loading pattern to a certain percentage pre specified losses is followed. The specific Agriculture consumption per HP is estimated for all the DTRs existing in that Mandal and the same is extrapolated to all other Agriculture Pump sets spread across the Mandal to arrive at Mandal wise estimated consumption.

The Distribution Licensee humbly request the Hon'ble Commission to accept the actual agriculture sales filed by the Licensee based on the old methodology. The Licensee is in the process of adopting the ISI methodology to measure actual agriculture sales in the future.

According to GoAP policy of releasing new agriculture connections in the year 2019-20, the target for EPDCL during the year is to release 10,424 new connections. The consumption from these new connections (addition in agriculture pumpsets) has also been taken into consideration while projecting the sales.

For the year FY 2019-20, the licensee has projected sales considering number of Agriculture services as per the target during FY19-20 and considering the normal climatic conditions. The licensee has projected the unrestricted sales for FY 2019-20, as it would like to plan no load restriction measures for FY 2019-20. The unrestricted sales projected for FY 2019-20 for this category is 2280.67 MU. The growth rate of sales for FY 2018-19 over FY 2017-18 is -5.02 % and for FY 2019-20 over FY 2018-19 is 9.73%.

The agricultural demand met through Off-Grid Solar pumpsets (Around 133.59 MUs) is adjusted to the Agricultural demand for the Licensee.

The energy savings due to replacement of conventional pumpsets with energy efficient pumpset has also been considered and adjusted to the Agricultural Demand for the Licensee.

| Particulars | FY 2018-19 | FY 2019-20 |
|---|------------|------------|
| Agricultural Demand met through Grid Power | 2078.50 | 2280.67 |
| Agricultural Demand met through Solar Pumpsets | 94.8 | 133.59 |
| Total Agricultural Demand | 2173.3 | 2414.26 |

The licensee has assumed 7 hours of supply to agricultural consumers, in its projections, considering the present power supply situation in the State.

The final abstract is as follows:

| LT V-Agriculture | | | | |
|---------------------------|------------|------------|--------------|----------------------|
| Year | H1 (in MU) | H2 (in MU) | TOTAL(in MU) | APERC Target (in MU) |
| 2012-13 | 747.07 | 781.34 | 1528.41 | 1714.02 |
| 2013-14 | 855.61 | 896.83 | 1752.45 | 1714.02 |
| 2014-15 | 989.41 | 1,177.51 | 2,166.92 | 1714.02 |
| 2015-16 | 1062.27 | 1087.22 | 2149.49 | 1936.33 |
| 2016-17 | 1024.6 | 1374.81 | 2399.41 | 2281.16 |
| 2017-18 | 872.12 | 1316.17 | 2188.29 | 2090.27 |
| 2018-19 (Estimations)* | 834.00 | 1244.50 | 2078.50 | 2090.27 |
| 2019-20 (Projections) | 911.79 | 1368.88 | 2280.67 | |

*For Year 2018-19, actual sales is provided for FY 18-19 H1 and revised sales is provided for FY 18-19 H2.

- Based on the above, the circle wise growth rates considered for each consumer category is shown in following table:

CIRCLE WISE GROWTH RATES CONSIDERED FOR EACH CONSUMER CATEGORY

| Category | SKLM | VZM | VSKP | RJY | ELR | Total |
|-------------------------------------|--------|--------|--------|--------|--------|--------|
| Low Tension | | | | | | |
| LT I: Domestic | 8.07% | 8.52% | 6.68% | 6.49% | 7.19% | 6.66% |
| LT II: Non-Domestic/Commercial | 7.87% | 7.47% | 8.56% | 7.25% | 7.27% | 8.06% |
| LT III: Industry(all subcategories) | 6.80% | 6.48% | 11.01% | 15.72% | 17.82% | 16.30% |
| Industry(other than Aquaculture) | 5.57% | 5.27% | 9.04% | 5.00% | 5.00% | 6.28% |
| Aquaculture | 20.00% | 20.00% | 20.00% | 20.00% | 20.00% | 20.00% |
| LT IV: Cottage Industries | 5.00% | 2.94% | 3.14% | 5.96% | 10.00% | 6.14% |
| LT V: Agriculture | 10.00% | 10.00% | 10.00% | 10.00% | 10.00% | 9.73% |
| LT VI: Street Lightng & PWS | 1.00% | 1.26% | 1.62% | 1.72% | 4.22% | 2.61% |

| Category | SKLM | VZM | VSKP | RJY | ELR | Total |
|---|--------|-------|--------|--------|--------|-------|
| LT VII: General | 8.68% | 8.40% | 5.61% | 10.00% | 5.00% | 7.87% |
| LT VII: Temporary Supply | 0.00% | 0.00% | 0.00% | 5.00% | 5.00% | 3.58% |
| HT Category at 11 kv | | | | | | |
| HT I (A): General | 9.20% | 3.00% | 6.90% | 6.42% | 2.00% | 5.47% |
| Industrial Colonies | 2.00% | 0.00% | 2.00% | 0.00% | 5.00% | 2.80% |
| Seasonal Industries | 0.00% | 2.00% | 2.00% | 0.00% | 0.00% | 0.61% |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 9.20% | 3.00% | 6.90% | 6.42% | 2.00% | 5.53% |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 9.20% | 3.00% | 6.90% | 6.42% | 2.00% | 5.55% |
| HT I (B): Ferro Alloy Units | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT I (C): Aquaculture and Animal Husbandry | 5.00% | 2.00% | 10.00% | 5.00% | 10.00% | 6.08% |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00% | 5.00% | 5.00% | 5.00% | 5.00% | 5.00% |
| HT II: Others | 2.00% | 2.00% | 5.00% | 1.97% | 0.00% | 3.50% |
| Time of Day Tariffs (6 PM to 10 PM) | 2.00% | 2.00% | 5.00% | 1.97% | 0.00% | 3.54% |
| HT II (B): Religious Places | 0.00% | 2.00% | 5.00% | 2.00% | 0.00% | 2.21% |
| HT II (C): Function Halls/Auditoriums | 5.00% | 2.00% | 0.00% | 5.00% | 10.00% | 4.31% |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (10 PM to 6 AM) off peak | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.00% | 0.00% | 0.00% | 2.00% | 0.00% | 2.00% |
| HT III: Airports, Bus Stations and Railway Stations | 3.00% | 0.00% | 2.00% | 5.00% | 0.00% | 3.39% |
| Time of Day Tariffs (6 PM to 10 PM) | 3.00% | 0.00% | 2.00% | 5.00% | 0.00% | 2.66% |
| HT IV Government LIS | 5.00% | 5.00% | 2.00% | 5.00% | 0.00% | 3.27% |
| HT IV Agriculture | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV CPWS | 10.00% | 5.00% | 2.00% | 2.00% | 2.00% | 4.76% |
| HT VI: Townships & Residential Colonies | 0.00% | 5.00% | 0.00% | 0.00% | 0.00% | 0.60% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 0.00% | 0.00% | 0.00% | 2.00% | 0.00% | 0.60% |
| Category: RESCOs | 0.00% | 8.68% | 5.60% | 0.00% | 0.00% | 6.42% |
| HT Category at 33 kv | | | | | | |
| HT I (A): General | 8.42% | 8.90% | 10.00% | 5.00% | 2.00% | 7.26% |
| Industrial Colonies | 0.00% | 0.00% | 5.00% | 0.00% | 5.00% | 4.02% |
| Seasonal Industries | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 8.42% | 8.90% | 10.00% | 5.00% | 2.00% | 7.42% |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 8.42% | 8.90% | 10.00% | 5.00% | 2.00% | 7.36% |

| Category | SKLM | VZM | VSKP | RJY | ELR | Total |
|--|--------|--------|--------|--------|-------|--------|
| HT I (B): Ferro Alloy Units | 0.00% | 5.00% | 15.00% | 0.00% | 0.00% | 11.48% |
| HT I (C): Aquaculture and Animal Husbandry | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00% | 0.00% | 0.00% | 0.00% | 2.00% | 2.00% |
| HT II: Others | 2.00% | 5.00% | 6.81% | 10.00% | 5.00% | 7.05% |
| Time of Day Tariffs (6 PM to 10 PM) | 2.00% | 5.00% | 6.81% | 10.00% | 5.00% | 7.09% |
| HT II (B): Religious Places | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (C): Function Halls/Auditoriums | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (E): Electrical Vehicles (Evs) / Charging Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (10 PM to 6 AM) off peak | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II(F) : Startup Power for Capitive Generating plants , Co-generating plants and Renewable Generation Plants | 0.00% | 0.00% | 2.00% | 2.00% | 0.00% | 2.00% |
| HT III: Airports, Bus Stations and Railway Stations | 0.00% | 0.00% | 2.00% | 0.00% | 0.00% | 2.00% |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV Government LIS | 0.00% | 5.00% | 0.00% | 0.00% | 5.00% | 3.07% |
| HT IV Agriculture | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV CPWS | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VI: Townships & Residential Colonies | 0.00% | 0.00% | 2.00% | 0.00% | 0.00% | 2.00% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT Category at 132 kv | | | | | | |
| HT I (A): General | 10.00% | 0.00% | 2.00% | 2.00% | 5.00% | 2.44% |
| Industrial Colonies | 0.00% | 0.00% | 2.00% | 0.00% | 1.00% | 1.99% |
| Seasonal Industries | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 10.00% | 0.00% | 2.00% | 2.00% | 5.00% | 3.27% |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 10.00% | 0.00% | 2.00% | 2.00% | 5.00% | 3.27% |
| HT I (B): Ferro Alloy Units | 0.00% | 12.35% | 15.00% | 0.00% | 0.00% | 17.09% |
| HT I (C): Aquaculture and Animal Husbandry | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II: Others | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.02% |
| Time of Day Tariffs (6 PM to 10 PM) | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.04% |
| HT II (B): Religious Places | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (C): Function Halls/Auditoriums | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

| Category | SKLM | VZM | VSKP | RJY | ELR | Total |
|--|-------|-------|-------|-------|-------|---------|
| HT II (E): Electrical Vehicles (Evs) / Charging Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (10 PM to 6 AM) off peak | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.00% | 2.00% | 0.00% | 2.00% | 0.00% | 0.62% |
| HT III: Airports, Bus Stations and Railway Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV Government LIS | 0.00% | 0.00% | 0.00% | 5.00% | 5.00% | 239.13% |
| HT IV Agriculture | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV CPWS | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT V: Railway Traction | 4.37% | 6.57% | 2.00% | 2.00% | 1.53% | 2.88% |
| HT VI: Townships & Residential Colonies | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

Note: New LI Schemes consisting of sales 845.87MU (Chintalapudi LIS) is considered for FY 2019-20 in Eluru circle and 44.16MU (Uttarandra Sujala Sravanthi LIS) is considered for FY 2019-20 in Visakhapatnam circle. The total Load of the schemes is 486.562 MW works out to a consumption of 890.03 MU.

APEPDCL CAGR TREND AND Projected Growth rate for FY 2019-20:

| Category | 5YEARS | 4YEARS | 3YEARS | 2YEARS | 1YEAR | Projected Growth rate for FY 19-20 |
|--|--------------|--------------|--------------|--------------|--------------|------------------------------------|
| Low Tension | | | | | | |
| LT I: Domestic | 9.13% | 9.42% | 6.35% | 7.42% | 5.68% | 6.66% |
| LT II: Non-Domestic/Commercial | 9.95% | 11.02% | 7.78% | 7.62% | 6.30% | 8.06% |
| LT III: Industry (all subcategories) | 25.86% | 25.86% | 26.59% | 32.42% | 21.73% | 16.30% |
| Industries(other than Aquaculture) | 0.03% | 0.12% | -1.05% | 1.88% | 12.32% | 6.28% |
| Aquaculture | 62.64% | 52.02% | 43.21% | 45.60% | 28.61% | 20.00% |
| LT IV: Cottage Industries | 7.29% | 7.73% | 5.53% | 12.19% | 10.37% | 6.14% |
| LT V: Agriculture | 3.47% | -1.04% | -1.11% | -6.93% | -5.02% | 9.73% |
| LT VI: Street Lighting & PWS | -0.47% | 0.71% | -0.24% | 3.76% | 1.92% | 2.61% |
| LT VII: General | 11.79% | 13.65% | 11.16% | 14.65% | 20.36% | 7.87% |
| Total LT | 9.29% | 8.43% | 6.79% | 6.59% | 5.45% | 8.80% |
| HT Category at 11 kV | | | | | | |
| HT I (A): General | -10.79% | -15.99% | -22.71% | -35.33% | -61.89% | 5.47% |
| Lights and Fans | -100.00% | -100.00% | -100.00% | 0.00% | 0.00% | 0.00% |
| Industrial Colonies | 3.59% | 14.62% | 17.76% | 7.18% | -9.86% | 2.80% |
| Seasonal Industries | 34.00% | 32.40% | 11.72% | 96.74% | 29.84% | 0.61% |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 373.83% | 5.53% |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 24.66% | 37.90% | 29.38% | 125.70% | 0.00% | 5.55% |

| Category | 5YEARS | 4YEARS | 3YEARS | 2YEARS | 1YEAR | Projected Growth rate for FY 19-20 |
|---|----------|----------|----------|----------|---------|------------------------------------|
| HT I (B): Ferro Alloy Units | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT I (C): Aquaculture and Animal Husbandry | 0.00% | 0.00% | 0.00% | 25.85% | 67.72% | 6.08% |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00% | 0.00% | 0.00% | 104.92% | 235.73% | 5.00% |
| HT II: Others | 5.07% | 6.64% | 2.06% | -2.84% | -12.09% | 3.50% |
| Time of Day Tariffs (6 PM to 10 PM) | 7.93% | 11.91% | 4.67% | 114.83% | 347.12% | 3.54% |
| HT II (B): Religious Places | 0.00% | 0.00% | 0.00% | 9.79% | 20.52% | 2.21% |
| HT II (C): Function Halls/Auditoriums | 0.00% | 0.00% | 0.00% | 16.19% | 19.22% | 4.31% |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (10 PM to 6 AM) off peak | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.00% |
| HT III: Airports, Bus Stations and Railway Stations | 23.66% | 25.78% | 37.94% | -21.31% | -38.88% | 3.39% |
| Time of Day Tariffs (6 PM to 10 PM) | 42.19% | 55.63% | 83.52% | 126.56% | 382.18% | 2.66% |
| HT IV Government LIS | 7.97% | 2.82% | -1.09% | 5.22% | 1.91% | 3.27% |
| HT IV Agriculture | 0.00% | 0.00% | 0.00% | -100.00% | 0.00% | 0.00% |
| HT IV CPWS | 18.26% | 18.53% | 15.84% | 9.48% | 5.02% | 4.76% |
| HT VI: Townships & Residential Colonies | -5.98% | -6.36% | -11.81% | -15.55% | -18.83% | 0.60% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 0.00% | 0.00% | 0.00% | 194.81% | 80.90% | 0.60% |
| Category: RESCOs | 7.74% | 10.49% | 5.17% | 8.47% | 3.26% | 6.42% |
| HT Category at 33 kV | | | | | | |
| HT I (A): General | -11.53% | -18.86% | -29.27% | -43.80% | -71.77% | 7.26% |
| Lights and Fans | -100.00% | -100.00% | -100.00% | 0.00% | 0.00% | 0.00% |
| Industrial Colonies | 3.97% | 4.32% | -1.65% | -0.12% | -5.68% | 4.02% |
| Seasonal Industries | 26.03% | 19.71% | 7.48% | 0.00% | -18.35% | 0.00% |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 497.97% | 7.42% |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 31.52% | 48.81% | 33.71% | 157.66% | 0.00% | 7.36% |
| HT I (B): Ferro Alloy Units | 20.97% | 17.93% | 30.92% | 20.24% | -11.59% | 11.48% |
| HT I (C): Aquaculture and Animal Husbandry | 0.00% | 0.00% | 0.00% | -100.00% | 0.00% | 0.00% |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.00% |
| HT II: Others | 8.81% | 5.59% | 7.28% | 11.63% | 16.25% | 7.05% |
| Time of Day Tariffs (6 PM to 10 PM) | 9.29% | 8.82% | 7.53% | 177.56% | 608.26% | 7.09% |
| HT II (B): Religious Places | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (C): Function Halls/Auditoriums | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (10 PM to 6 AM) off peak | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.00% |
| HT III: Airports, Bus Stations and Railway Stations | 9.88% | 20.54% | 26.23% | -12.48% | -25.00% | 2.00% |

| Category | 5YEARS | 4YEARS | 3YEARS | 2YEARS | 1YEAR | Projected Growth rate for FY 19-20 |
|---|----------|----------|----------|---------|---------|------------------------------------|
| Time of Day Tariffs (6 PM to 10 PM) | 16.95% | 29.63% | 35.86% | 0.00% | 0.00% | 0.00% |
| HT IV Government LIS | 8.84% | -3.26% | -8.55% | -2.19% | -14.90% | 3.07% |
| HT IV Agriculture | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV CPWS | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VI: Townships & Residential Colonies | 9.38% | 8.68% | 3.91% | 1.86% | -5.65% | 2.00% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 0.00% | 0.00% | 0.00% | 0.23% | -40.11% | 0.00% |
| HT Category at 132 kV | | | | | | |
| HT I (A): General | -17.53% | -29.95% | -40.43% | -57.12% | -80.88% | 2.44% |
| Lights and Fans | -100.00% | -100.00% | -100.00% | 0.00% | 0.00% | 0.00% |
| Industrial Colonies | -1.43% | 1.37% | -3.48% | 9.66% | -0.16% | 1.99% |
| Seasonal Industries | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 521.83% | 3.27% |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 21.86% | 33.71% | 18.05% | 82.99% | 0.00% | 3.27% |
| HT I (B): Ferro Alloy Units | 15.06% | 21.61% | 51.37% | 44.00% | 18.08% | 17.09% |
| HT I (C): Aquaculture and Animal Husbandry | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II: Others | -3.97% | -6.43% | -22.21% | -19.16% | -33.91% | 0.02% |
| Time of Day Tariffs (6 PM to 10 PM) | -0.98% | -1.77% | -18.41% | 29.86% | 0.00% | 0.04% |
| HT II (B): Religious Places | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (C): Function Halls/Auditoriums | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ToD (10 PM to 6 AM) off peak | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.62% |
| HT III: Airports, Bus Stations and Railway Stations | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV Government LIS | 0.00% | 149.69% | 0.00% | 51.38% | 24.70% | 239.13% |
| HT IV Agriculture | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT IV CPWS | -100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT V: Railway Traction | 12.81% | 2.41% | 1.93% | 4.37% | 2.55% | 2.88% |
| HT VI: Townships & Residential Colonies | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VII: Green Power | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| HT VIII: Temporary | 0.00% | 0.00% | 0.00% | -52.56% | 0.00% | 0.00% |
| Total HT | 11.00% | 11.23% | 12.55% | 14.29% | 8.19% | 18.04% |
| Total (LT + HT) | 10.08% | 9.71% | 9.37% | 10.04% | 6.73% | 13.18% |

The table below is a summary of the sales forecast for FY 2018-19 and FY 2019-20. The trend of sales of FY 14-15, 15-16, 16-17 & 17-18 has also been shown:

Sales (MU)

| Category | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|--|----------------|----------------|----------------|----------------|-----------------|-----------------|
| LT Category | 7448.16 | 8453.61 | 9061.63 | 9764.04 | 10296.13 | 11202.31 |
| Domestic | 3708.53 | 4419.66 | 4607.05 | 5030.73 | 5316.46 | 5670.71 |
| Non-domestic/Commercial | 684.83 | 830.90 | 898.23 | 978.62 | 1040.24 | 1124.09 |
| Industrial | 622.44 | 770.03 | 890.82 | 1283.17 | 1561.99 | 1816.59 |
| Cottage Industries, Dhobighats & Others | 1.93 | 2.21 | 2.06 | 2.35 | 2.59 | 2.75 |
| Irrigation & Agriculture | 2166.92 | 2149.49 | 2399.41 | 2188.29 | 2078.50 | 2280.67 |
| Local Bodies, St. Lighting & PWS | 224.08 | 232.30 | 214.18 | 226.25 | 230.59 | 236.61 |
| General Purpose | 38.94 | 47.30 | 49.42 | 53.98 | 64.97 | 70.08 |
| Temporary Supply | 0.50 | 1.73 | 0.45 | 0.64 | 0.78 | 0.81 |
| HT Category at 11 kV | 1689.38 | 1973.03 | 1976.61 | 2178.25 | 2293.14 | 2411.16 |
| HT I (A): General | 942.09 | 1016.34 | 1122.24 | 1231.55 | 469.29 | 494.94 |
| Lights and Fans | 26.93 | 3.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| Industrial Colonies | 1.44 | 1.53 | 2.17 | 2.76 | 2.49 | 2.56 |
| Seasonal Industries | 3.26 | 7.18 | 2.59 | 7.72 | 10.02 | 10.08 |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 121.46 | 202.77 | 86.21 | 99.41 | 471.03 | 497.08 |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | | | 0.00 | 0.00 | 439.17 | 463.52 |
| HT I (B): Ferro Alloy Units | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT I (C): Aquaculture and Animal Husbandry | 0.00 | 0.00 | 9.94 | 9.38 | 15.74 | 16.69 |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00 | 0.00 | 7.06 | 8.83 | 29.63 | 31.11 |
| HT II: Others | 248.39 | 302.19 | 340.24 | 365.38 | 321.22 | 332.45 |
| Time of Day Tariffs (6 PM to 10 PM) | 58.31 | 79.76 | 19.82 | 20.45 | 91.45 | 94.69 |
| HT II (B): Religious Places | 0.00 | 0.00 | 2.96 | 2.96 | 3.57 | 3.65 |
| HT II (C): Function Halls/Auditoriums | 0.00 | 0.00 | 3.66 | 4.15 | 4.95 | 5.16 |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | | | 0.00 | 0.00 | 0.00 | 0.00 |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | | | 0.00 | 0.00 | 0.00 | 0.00 |
| ToD (10 PM to 6 AM) off peak | | | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | | | 0.00 | 0.00 | 0.02 | 0.02 |
| HT III: Airports, Bus Stations and Railway Stations | 6.91 | 6.59 | 27.95 | 28.31 | 17.31 | 17.89 |
| Time of Day Tariffs (6 PM to 10 PM) | 1.65 | 1.56 | 1.88 | 2.01 | 9.67 | 9.93 |
| HT IV Government LIS | 18.84 | 21.76 | 19.02 | 20.66 | 21.05 | 21.74 |
| HT IV Agriculture | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 |
| HT IV CPWS | 10.91 | 13.85 | 17.96 | 20.50 | 21.53 | 22.56 |
| HT VI: Townships & Residential Colonies | 20.00 | 22.43 | 21.57 | 18.95 | 15.38 | 15.47 |
| HT VII: Green Power | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT VIII: Temporary | 0.00 | 0.00 | 0.93 | 4.45 | 8.05 | 8.10 |

| | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| Category: RESCOs | 229.20 | 293.65 | 290.29 | 330.77 | 341.56 | 363.49 |
| HT Category at 33 kv | 1235.71 | 1518.58 | 1514.06 | 1793.44 | 1986.02 | 2136.74 |
| HT I (A): General | 764.57 | 936.77 | 1049.25 | 1174.23 | 331.45 | 355.51 |
| Lights and Fans | 7.42 | 1.83 | 0.00 | 0.00 | 0.00 | 0.00 |
| Industrial Colonies | 0.78 | 0.97 | 0.92 | 0.98 | 0.92 | 0.96 |
| Seasonal Industries | 3.81 | 6.31 | 0.00 | 9.59 | 7.83 | 7.83 |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 111.68 | 229.06 | 82.48 | 93.27 | 557.72 | 599.13 |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | | | 0.00 | 0.00 | 547.57 | 587.87 |
| HT I (B): Ferro Alloy Units | 135.91 | 117.14 | 181.84 | 297.33 | 262.87 | 293.06 |
| HT I (C): Aquaculture and Animal Husbandry | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00 | 0.00 | 0.00 | 0.00 | 25.32 | 25.82 |
| HT II: Others | 113.32 | 114.07 | 113.03 | 121.17 | 140.85 | 150.79 |
| Time of Day Tariffs (6 PM to 10 PM) | 21.82 | 24.62 | 3.97 | 4.32 | 30.60 | 32.77 |
| HT II (B): Religious Places | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II (C): Function Halls/Auditoriums | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | | | 0.00 | 0.00 | 0.00 | 0.00 |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | | | 0.00 | 0.00 | 0.00 | 0.00 |
| ToD (10 PM to 6 AM) off peak | | | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II (F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | | | 0.00 | 0.00 | 0.74 | 0.75 |
| HT III: Airports, Bus Stations and Railway Stations | 4.23 | 4.44 | 11.66 | 11.91 | 8.93 | 9.11 |
| Time of Day Tariffs (6 PM to 10 PM) | 0.86 | 0.97 | 0.00 | 0.00 | 2.44 | 2.44 |
| HT IV Government LIS | 63.42 | 72.62 | 58.06 | 65.26 | 55.54 | 57.24 |
| HT IV Agriculture | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT IV CPWS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT VI: Townships & Residential Colonies | 7.87 | 9.79 | 10.59 | 11.64 | 10.99 | 11.21 |
| HT VII: Green Power | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT VIII: Temporary | 0.00 | 0.00 | 2.23 | 3.75 | 2.24 | 2.24 |
| HT Category at 132 kV | 3144.66 | 3024.22 | 3621.39 | 4615.04 | 5010.84 | 6417.98 |
| HT I (A): General | 993.33 | 1131.57 | 1300.84 | 1250.73 | 239.17 | 244.99 |
| Lights and Fans | 49.72 | 1.73 | 0.00 | 0.00 | 0.00 | 0.00 |
| Industrial Colonies | 58.79 | 69.04 | 51.62 | 62.18 | 62.08 | 63.32 |
| Seasonal Industries | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 158.24 | 307.47 | 151.05 | 81.81 | 508.71 | 525.33 |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | | | 0.00 | 0.00 | 505.76 | 522.32 |
| HT I (B): Energy Intensive Industries | 1171.54 | 738.59 | 1235.41 | 2169.48 | 2561.69 | 2999.59 |
| HT I (C): Aquaculture and Animal Husbandry | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II: Others | 62.26 | 101.40 | 73.04 | 72.23 | 47.73 | 47.74 |
| Time of Day Tariffs (6 PM to 10 PM) | 12.82 | 21.99 | 7.08 | 0.00 | 11.94 | 11.95 |

| | | | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| HT II (B): Religious Places | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II (C): Function Halls/Auditoriums | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | | | 0.00 | 0.00 | 0.00 | 0.00 |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | | | 0.00 | 0.00 | 0.00 | 0.00 |
| ToD (10 PM to 6 AM) off peak | | | 0.00 | 0.00 | 0.00 | 0.00 |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | | | 0.00 | 0.00 | 2.16 | 2.18 |
| HT III: Airports, Bus Stations and Railway Stations | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Time of Day Tariffs (6 PM to 10 PM) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT IV Government LIS | 9.78 | 0.00 | 165.88 | 304.85 | 380.14 | 1289.19 |
| HT IV Agriculture | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT IV CPWS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT V: Railway Traction | 628.18 | 652.44 | 634.34 | 673.77 | 690.97 | 710.89 |
| HT VI: Townships & Residential Colonies | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT VII: Green Power | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| HT VIII: Temporary | 0.00 | 0.00 | 2.12 | 0.00 | 0.48 | 0.48 |
| Total HT | 6069.75 | 6515.83 | 7112.06 | 8586.73 | 9290.00 | 10965.87 |
| Total (LT + HT) | 13517.90 | 14969.44 | 16173.68 | 18350.77 | 19586.13 | 22168.18 |

6.2 Gross Revenue

6.2.1 Revenue from Current Tariffs (Excl. Non-Tariff Income)

The computation of revenue at current tariff for FY 2018-19 and FY 2019-20 for each customer category is carried out as follows:

Revenue from Tariffs =

Energy Estimate * Approved Energy Charges ... (a)

+ Demand Estimate * Approved Demand Charges (b)

+ Incremental Revenue on account of Monthly Minimum Charges ('MMC') ... (c)

+ Customer Charges(d)

+ Other Charges (e)

Energy charges:

For customer categories having telescopic energy tariffs, the energy estimates have been apportioned into the slabs and then have been multiplied with the corresponding slab tariff. The apportionment has been based on the historical break up of telescopic consumption into the various slabs as captured in the billing information database. The energy charges are calculated as per the billing parameters i.e., KWH and KVAH for the category and the existing tariff rates of that category

Demand/Fixed Charges: The estimate of demand has been made in "HP/KW" or in "MVA" as the case maybe. Billing demand has been assumed to grow in proportion to the growth of sales in FY 2019-20. Additional demand due to additional load has been added to arrive at final demand for the year FY 2019-20.

Monthly Minimum charges (MMC): In respect of LT categories, it is the difference between the cost of units recorded and monthly minimum charges notified in the tariff order.

Customer Charges: Customer charges are as approved in tariff Order for each of the category of consumers. As per the revised regulatory formats income from customer charges is considered as part of revenue from tariffs.

Other Charges: These are the charges other than the above charges.

The gross revenue from current tariffs (excl. NTI) estimated for FY 2018-19& FY 2019-20 are tabulated below:

| Gross Revenue from Current Tariffs(Excluding NTI) | | |
|--|---------------------------------|---------------------------------|
| Category | FY 2018-19 estimated | FY 2019-20 projected |
| LT I: Domestic | 1,895.71 | 2,019.70 |
| LT II: Non-Domestic/Commercial | 1,047.76 | 1,135.16 |
| LT III: Industry | 774.69 | 888.95 |
| LT IV: Cottage Industries | 1.10 | 1.16 |
| LT V: Agriculture | 11.81 | 12.56 |
| LT VI: Street Lightng & PWS | 140.70 | 144.34 |
| LT VII: General | 49.27 | 53.13 |
| LT VII: Temporary Supply | 0.84 | 0.87 |
| Total LT | 3,921.89 | 4,255.87 |
| HT I (A): General | 3,207.21 | 3,412.29 |
| HT I (B): Energy Intensive Industries | 1,409.27 | 1,642.24 |
| HT II: Others | 673.28 | 717.99 |
| HT III: Public Infrastructure and Tourism | 35.91 | 36.66 |
| HT IV: Government LIS | 276.70 | 807.70 |
| HT V: Railway Traction | 321.61 | 333.17 |
| HT VI: Townships & Residential Colonies | 17.84 | 18.07 |
| HT VII: Green Power | - | - |
| HT VIII: Temporary | 14.57 | 17.52 |
| Category: RESCOs | 29.98 | 31.90 |
| Total HT | 5,986.38 | 7,017.56 |
| Total LT+HT | 9,908.27 | 11,273.43 |

6.2.2 Non-tariff Income at Current Charges Rs. Crs.

| Items of Non - Tariff Income | Base Year | FY 2019-20 |
|---|---------------|---------------|
| Recoveries from theft of power or malpractices | 0.00 | 0.00 |
| Interest Income from Bank Deposits / Investments etc. | 5.42 | 5.69 |
| Interest income from staff advances and loans | 3.04 | 3.19 |
| Power Purchase Rebates earned | 32.59 | 34.22 |
| Securitisation benefits | 0.00 | 0.00 |
| Miscellaneous / Other Receipts | 34.31 | 36.03 |
| R.C.fees | 31.20 | 32.76 |
| L.T.Application fees | 3.57 | 3.75 |
| Other income | 15.13 | 15.89 |
| Delayed Payment Surcharge | 230.06 | 241.56 |
| Total Non tariff income | 355.32 | 373.09 |

6.2.3 Revenue from Theft of Power or Malpractices:

The licensee would like to state that it is not appropriate to include this item in the ARR. This is because the forecasts are made assuming that there will be no theft or malpractice. The Discom has been provided a distribution loss target under the MYT and this is the basis of ARR computation. Any instances of theft or malpractice will have a bearing on the loss target achievement and since that is not subject to true-up, revenue from theft and malpractice should not be considered.

6.2.4 Interest income from Bank Deposits / investments

Interest income from bank deposits has been estimated at Rs. 5.42 Crs., Rs. 5.69 Crs. for the Financial Years 2018-19 and 2019-20 respectively. The estimate is made considering the existing deposits and their maturity periods and also considering the financial position of the company to make fixed deposits in the coming two years.

6.2.5 Power Purchase Rebates earned:

It is estimated that Power Purchase Rebates will be earned to the extent of Rs.32.59 Crs. for FY: 2018-19 and Rs.34.22 Crs. for FY: 2019-20.

6.2.6 Miscellaneous /Other Receipts:

Miscellaneous receipts for retail supply business comprise mainly of the following receipts-

- Capacitor Surcharge
- Penalties from suppliers
- Others

Miscellaneous receipts for FY 2018-19 is estimated as Rs.34.31Crs based on first half of FY 2018-19 and for FY 2019-20 based on past trend it was estimated as Rs.36.03 Crores .

6.2.7 R.C. fees and Application fees:

Taking into consideration of the past trend, R.C. fees and Application fees are projected at Rs. 31.20 Crs and Rs. 32.76 Crs for FY 2018-19 and FY 2019-20.

6.2.8 Delayed Payment Surcharge (DPS)

Taking into consideration of the past trend, delayed payment surcharge (DPS) are estimated at Rs. 230.06 Crs for FY2018-19 and Rs. 241.56 Crs for FY 2019-20.

6.2.9 Cross Subsidy Surcharge :

Revenue expected from Cross Subsidy Surcharge for FY 2019-20 is as following.

Revenue from Cross Subsidy Surcharge: Rs.43.80 Crs.

6.2.10 Revenue at Current Tariffs and Charges

The revenue from current tariffs estimated for FY 2019-20 is tabulated as under:

| Consumer Categories | Net Revenue including NTI (Rs. Crores) |
|---|--|
| Low Tension | 4,444.40 |
| LT I: Domestic | 2,115.13 |
| Group A: All consumers with annual consumption < = 900 Units | 488.41 |
| 0-50 | 266.93 |
| 51-100 | 144.52 |
| 101-200 | 50.62 |
| Above 200 | 26.34 |
| Group B: All consumers with consumption (< =2700 and > 900 units) | 1,100.53 |
| 0-50 | 341.99 |
| 51-100 | 292.93 |
| 101-200 | 334.26 |
| 201-300 | 99.76 |
| Above 300 | 31.60 |
| Group C: All consumers with annual consumption >2700 units | 526.20 |
| 0-50 | 44.29 |
| 51-100 | 50.89 |
| 101-200 | 141.42 |
| 201-300 | 121.84 |
| 301-400 | 70.33 |
| 401-500 | 37.23 |
| Above 500 units | 60.20 |
| Smart Meters (Optional for above 500 units / month | - |
| Time of Day tariff (ToD) 10 AM to 12 Noon | - |
| LT II: Non-Domestic/Commercial | 1,154.08 |
| LT II (A): Upto 50 Units/Month | 76.56 |
| 0-50 | 76.56 |

| Consumer Categories | Net Revenue including NTI (Rs. Crores) |
|--|---|
| LT II (B): Above 50 Units/Month | 1,062.75 |
| 0-50 | 100.78 |
| 51-100 | 104.41 |
| 101-300 | 207.19 |
| 301-500 | 108.09 |
| Above 500 | 542.28 |
| LT II (C): Advertisement Hoardings | 1.39 |
| LT II (D) : Function Halls / Auditoriums | 11.04 |
| LT II (E) : Electric Vehicles (EVs) / Charging Stations | 2.35 |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | - |
| ToD (10 PM to 6 AM) off peak | - |
| LT II (F) : Startup Power for Captive Generating Plants, Co-generation plants and Renewable Generation Plants | - |
| LT III: Industry | 919.52 |
| Industries (General) | 325.49 |
| Seasonal Industries (off season) | 0.99 |
| Aquaculture and Animal Husbandry | 576.33 |
| Sugarcane crushing | 0.04 |
| Mushroom and Rabbit farms | - |
| Floriculture in Green House | 0.00 |
| Poultry Hatcheries & Poultry Feed mixing plants | 16.66 |
| LT IV: Cottage Industries | 1.21 |
| Cottage Industries upto 10HP | 1.04 |
| Agro Based Activities | 0.17 |
| LT V: Agriculture | 50.94 |
| LT V (A): Agriculture with DSM Measures | 48.15 |
| Corporate Farmers & IT Assesses | 1.21 |
| Wet Land Farmers (Holdings >2.5 acre) | 1.14 |
| Dry Land Farmers (Connections > 3 nos.) | 0.43 |
| Wet Land Farmers (Holdings <= 2.5 acre) | 4.23 |
| Dry Land Farmers (Connections <= 3 nos.) | 41.13 |
| LT V (B): Agriculture without DSM Measures | 2.65 |
| Corporate Farmers & IT Assesses | 0.42 |
| Wet Land Farmers (Holdings >2.5 acre) | 1.44 |
| Dry Land Farmers (Connections > 3 nos.) | 0.32 |
| Wet Land Farmers (Holdings <= 2.5 acre) | 0.18 |
| Dry Land Farmers (Connections <= 3 nos.) | 0.29 |
| LT V (C): Others | 0.13 |
| Salt farming units with CL upto 15HP | 0.08 |
| Rural Horticulture Nurseries | 0.05 |
| Connected Load upto 5 HP | 0.05 |
| connected load above 5 HP and upto 25HP | - |
| LIFT IRRIGATION | 0.00 |
| LT VI: Street Lighting & PWS | 148.33 |

| Consumer Categories | Net Revenue including NTI (Rs. Crores) |
|--|---|
| LT VI (A): Street Lighting | 65.77 |
| Panchayats | 37.97 |
| Municipalities | 6.43 |
| Municipal Corporations | 21.37 |
| LT VI (B): PWS Schemes | 82.07 |
| Panchayats | 72.11 |
| Municipalities | 5.15 |
| Municipal Corporations | 4.81 |
| LT-VI (C): NTR Sujala Padhakam | 0.49 |
| LT VII: General | 54.31 |
| LT VII (A): General Purpose | 45.85 |
| LT VII (B): Religious Places | 8.46 |
| (i) Religious Places (CL > 2kW) | 1.76 |
| (ii) Religious Places (CL <= 2kW) | 6.70 |
| LT VII: Temporary Supply | 0.88 |
| Total LT | 4,444.40 |
| High Tension | 7,202.11 |
| HT Category at 11 kv | 1,865.35 |
| HT I (A): General | 592.48 |
| Lights and Fans | - |
| Industrial Colonies | 1.66 |
| Seasonal Industries | 7.89 |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 375.21 |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 254.86 |
| HT I (B): Energy Intensive Industries | - |
| HT I (C): Aquaculture and Animal Husbandry | 6.97 |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 25.35 |
| HT II: Others | 395.27 |
| Time of Day Tariffs (6 PM to 10 PM) | 84.07 |
| HT II (B): Religious Places | 1.99 |
| HT II (C): Function Halls/Auditoriums | 6.31 |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | - |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | - |
| ToD (10 PM to 6 AM) off peak | - |
| HT II (F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.03 |
| HT III: Public Infrastructure and Tourism | 19.26 |
| Time of Day Tariffs (6 PM to 10 PM) | 8.46 |
| HT IV Government LIS | 13.25 |
| HT IV Private Irrigation and Agriculture | - |
| HT IV CPWS | 11.49 |
| HT VI: Townships & Residential Colonies | 10.91 |
| HT VII: Green Power | - |
| HT VIII: Temporary | 11.87 |

| Consumer Categories | Net Revenue including NTI (Rs. Crores) |
|--|---|
| Category: RESCOs | 38.02 |
| HT Category at 33 kV | 1,556.56 |
| HT I (A): General | 414.42 |
| Lights and Fans | - |
| Industrial Colonies | 0.62 |
| Seasonal Industries | 5.60 |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 424.68 |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 296.19 |
| HT I (B): Energy Intensive Industries | 162.33 |
| HT I (C) : Aquaculture and Animal Husbandry | - |
| HT I (D) : Poultry Hatcheries and Poultry Feed Mixing Plants | 16.43 |
| HT II: Others | 151.91 |
| Time of Day Tariffs (6 PM to 10 PM) | 26.87 |
| HT II (B): Religious Places | - |
| HT II (C) : Function Halls / Auditoriums | - |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | - |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | - |
| ToD (10 PM to 6 AM) off peak | - |
| HT II (F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 0.93 |
| HT III: Public Infrastructure and Tourism | 7.68 |
| Time of Day Tariffs (6 PM to 10 PM) | 1.93 |
| HT IV Government LIS | 34.34 |
| HT IV Agriculture | - |
| HT IV CPWS | - |
| HT VI: Townships & Residential Colonies | 7.61 |
| HT VII: Green Power | - |
| HT VIII: Temporary | 5.02 |
| HT Category at 132 kV | 3,780.20 |
| HT I (A): General | 433.24 |
| Lights and Fans | - |
| Industrial Colonies | 41.08 |
| Seasonal Industries | - |
| Time of Day Tariffs (ToD) peak (6 AM to 10 AM & 6 PM to 10 PM) | 349.78 |
| Time of Day Tariffs (ToD) off peak (10 PM to 6 AM) | 240.70 |
| HT I (B): Energy Intensive Industries | 1,535.33 |
| HT I (C) : Aquaculture and Animal Husbandry | - |
| HT I (D): Poultry and Hatcheries and Poultry Feed Mixing Plants | - |
| HT II: Others | 50.00 |
| Time of Day Tariffs (6 PM to 10 PM) | 9.48 |
| HT II (B): Religious Places | - |
| HT II (C) : Function Halls / Auditoriums | - |
| HT II (E): Electrical Vehicles (EVs) / Charging Stations | - |
| ToD (6 AM to 10 AM & 6 PM to 10 PM) | - |

| Consumer Categories | Net Revenue including NTI (Rs. Crores) |
|---|---|
| ToD (10 PM to 6 AM) off peak | - |
| HT II(F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 2.62 |
| HT III: Public Infrastructure and Tourism | - |
| Time of Day Tariffs (6 PM to 10 PM) | - |
| HT IV Government LIS | 772.02 |
| HT IV Agriculture | - |
| HT IV CPWS | - |
| HT V: Railway Traction | 345.14 |
| HT VI: Townships & Residential Colonies | - |
| HT VII: Green Power | - |
| HT VIII: Temporary | 0.81 |
| TOTAL(LT + HT) | 11,646.51 |
| Revenue from cross subsidy surcharges | 43.8 |
| Revenue from RE Certificates | 10.90 |
| Total revenue including Non Tariff Income, Cross subsidy and revenue from RE Certificates | 11,701.21 |

7 Average Revenue Realized vs Average CoS break up for APEPDCL in FY 2019-20

- Average Revenue Realized (ARR) for FY 2019-20 is Rs.5.30/kWh
- Average Cost of Supply (CoS) for APEPDCL - Rs. 6.20/kWh
- Average CoS break-up (per unit of Sales) for APEPDCL is as follows

| ARR Parameters | FY 18-19 Approved (Rs./Unit) | FY 18-19 Estimated (Rs./Unit) | FY 19-20 Projected (Rs./Unit) |
|---------------------|------------------------------------|----------------------------------|----------------------------------|
| Power Purchase cost | 4.01 | 4.05 | 4.16 |
| T&D Loss Cost | 0.42 | 0.58 | 0.46 |
| Network | 1.31 | 1.35 | 1.42 |
| Other Cost | 0.11 | 0.18 | 0.16 |
| Cost of Service | 5.85 | 6.16 | 6.20 |

- The estimated revenue gap for the licensee for FY 2019-20 is as follows:

| SNO. | Particulars | FY 2019-20 |
|--------------|--|------------|
| A | Total Revenue at Current Tariffs (Rs. Crs.) | 11,701.21 |
| B | Aggregate Revenue Requirement (Rs. Crs.) | 13,740.32 |
| C=A-B | Revenue(Deficit)/Surplus at Current Tariffs (Rs. Crs.) | (2,039.10) |
| D | Revenue charged through proposed tariff (Rs. Crs.) | 52.33 |
| C+D | Total Revenue Deficit (Rs. Crs.) | (1,986.77) |

8 Energy Conservation measures taken up by APEPDCL

8.1 Energy Efficiency Initiatives

- APEPDCL comprises of 5 districts namely Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari with approximately 58 lakhs consumers having an average demand of 1500MW per day.
- As part of Energy Conservation week APEPDCL organized the following activities to create awareness on Energy Conservation, Energy Efficiency and Renewable Energy Sources i.e. Solar etc.,
 - Rallies are conducted for creating awareness among general public.
 - Painting Competitions were conducted for School going children in Sub Junior, Junior & Senior Categories on the Topic Energy Conservation & Solar Energy.
 - Technical quiz conducted for school going children to create awareness on Energy Resources and Energy Conservation.
 - Solar Expo conducted from 22nd to 24th August 2015 with Solar panel vendors and other energy efficient devices suppliers to promote Roof top solar Energy.
 - Workshops are conducted for creating awareness on Energy Conservation for farmers and to encourage farmers to utilise Energy Efficient pumpsets in place of their old pumpsets under AgDSM Programme.

8.2 Energy Conservation Initiatives taken by APEPDCL

- As part of Loss Reduction and Energy Conservation Measures the following initiatives are taken
 - a. Erected BEE 5 Star rated DTRs**
 - APEPDCL is the first power utility in procurement of DTRs with BEE 5 star rating among all power utilities in India. So far 87,402 Nos BEE Star rated DTRs have been provided.
 - b. Erected Capacitor Banks**
 - 119 No's of 1MVAR and 03 No's 2MVAR Capacitor Banks totalling to 125 MVAR were erected.
 - 184Nos. 600 KVAR capacitor banks totalling 110.4 MVAR erected on 11 kV Agriculture feeders for improving power factor and consequent reduction of load current on the feeders.
 - c. Distribution of LED Bulbs to each domestic consumer**
 - APEPDCL implemented DSM Based Efficient Lighting Programme (DELP) through M/s. EESL for distribution of LED bulbs in APEPDCL area.
 - 2 Nos. LED Bulbs of 7W/9W were distributed to each domestic service at free of cost and about 75.41 lakh bulbs were distributed . Estimated Energy Savings per month is 46.47 MU.
 - Supply of 2 more LEDs to BPL SC ST Consumers in addition to the two LED bulbs being supplied by the DISCOMs under SCSP and TSP funds. So far 10.94 lakh bulbs were distributed to the consumers.
 - Cumulative Energy savings per year for 86 Lakh LED bulbs distributed is 639.05 MU.

d. Gram Swaraj Abhiyan (GSA) :

- Govt of India has launched Gram Swaraj Abhiyan Programme – Special initiative during 14th April to 5th May 2018 covering various activities in Unnat Jyoti by Affordable LED for All- Ujala.
- 9W LED bulbs were sold by EESL in 58 villages of Srikakulam, East Godavari and West Godavari Districts at Rs 50/- each during the programme. Under Extended GSA, EESL sold LED bulbs in entire Visakhapatnam & Vijayanagaram Districts and distributed 94663 LED bulbs.
- The GoAP has also initiated distribution of more LED bulbs across the counter to the desired consumers at bulk procurement price of Rs. 70/- per each bulb.

e. Implemented Domestic Efficient Fan Programme (DEFP) :

- APEPDCL implemented the Domestic Efficient Fan Programme (DEFP) in Narasapuram revenue division in West Godavari District through M/s. EESL for distribution of 1,00,000 Nos. BEE 5 star rated fans on upfront basis @ Rs1100/- per fan and in Instalment basis @Rs.1250/- per fan within 24 instalments.
- APEPDCL filed a petition for extending the program in all areas of APEPDCL in similar method for distribution of 12 Lakh fans. The Hon'ble APERC accorded approval for implementation of the programme in APEPDCL area.
- So far 63,315 Nos fans were distributed in both upfront and EMI option.
- The estimated energy savings per annum is 4.98 MU.

f. Tube lights :

- APEPDCL proposed to implement the Energy Efficient LED Tube Light (EETL) program with the Financial support of M/s. Energy Efficiency Services Limited (EESL), New Delhi .
- Under this program LED Tube Lights will be issued to the willing consumers in UPFRONT counter mode. So far 76680 Nos Tube Lights have been distributed in 5 Districts. The estimated energy savings is 3.4 MU

g. Installed Ag DSM Project :

- APEPDCL has initiated implementation of Ag DSM based project at Rajanagaram Mandal in East Godavari District on ESCO model with M/s EESL.
- Under this project 2496 Nos inefficient agricultural Pump sets are proposed to be replaced with Energy Efficient Pump Sets (EEPS) .However 973 Nos old pump sets were replaced with Energy Efficient Pump Sets and the total Estimated Energy Savings per annum is about 15.76 MU.
- Further APEPDCL has initiated implementation of Ag DSM programme of replacement of **35,000 Nos old conventional Pump Sets with most Energy Efficient Pump Sets** in 5 districts of APEPDCL. Expected Energy savings to DISCOM per annum is 113.12 MU.
- **11161** Number of Energy Efficient Pump sets have been replaced in APEPDCL area as on 30.09.18 and the estimated energy savings are 21.22 MU.

Due to the above and various other activities the Energy loss of APEPDCL has got reduced to 5.48%. If it is further reduced by 1%, approx. 170MU of power can be saved annually cost of which is Rs 70/- crores and hence loss reduction activities are being continuously monitored.

8.3 Solar Roof Top Project

- APEPDCL is encouraging the development of Non-Renewable energy and accepting the Gross/Net Metering options from the eligible developers as per the Policy, 2015
- For promotion of Solar Roof Top Projects, APEPDCL has conducted many awareness programme with channel partners, public, Bankers, NREDCAP officials, Residential welfare associations. APEPDCL has conducted training programmes to its staff for promotion of Solar Roof Top and nominated district wise, division wise nodal officers.
- 10KW Roof top Solar Project were installed at ATC building Visakhapatnam during the year 2012 and 10KW Roof top Solar Project were installed at Govt Circuit House Visakhapatnam during the year 2015
- Recently it is approved by APEPDCL management to sanction loans to the employees of APEPDCL who wish to install Solar Rooftops up to a capacity of 3 KWp. The orders are yet to be issued.
- The Solar Rooftops are being installed on all office buildings of APEPDCL and collector offices covering all five districts of APEPDCL by adding a capacity of 1.28MW.
- During a recent meeting with MD/NREDCAP, Channel Partners of Solar Rooftop and Andhra Bank Officials, it was approved to install 1 KWp Solar Rooftop systems to the interested consumers of low income group by providing upfront subsidy and loan for the balance amount, in Visakhapatnam city in the first phase, and allowing the EMIs of the loan in the monthly CC bills of the consumer by entering MOU with Andhra Bank. Due to this innovative idea, nearly 600 Nos applications have been registered and 150 Nos applicants have already processed their applications for bank loans. Synchronization completed for 200Nos. Solar Rooftops
- So far 1204 Nos., Solar Rooftop Systems with 23732 KWp capacity have been synchronized with the grid.

8.4 Solar Agriculture Pump sets

As a measure to reduce power purchase cost especially in Agriculture which is the highest loss potential pocket ,12406 Nos. solar Agriculture Pump sets were installed and about 154 No's works are under progress.

8.5 IT Initiatives

APEPDCL is exploring various modes to utilize technological developments for improving operational efficiency and customer care. Some of the highlights of the areas in which the basic work is completed and is expected to Go-Live by the end of this financial year are as follows:

Ease of Doing Business (EODB):

As per the Department of Industrial Policy and Promotion (DIPP), Government of India proposed Ease of Doing Reforms 2017. In turn, the Industries department, Government of A.P has communicated EoDB reforms frame work for implementation by the DISCOMs.

As per the EoDB frame work, the simplified templates are prepared duly reducing the number of documents required for obtaining the electricity connection to only two, namely proof of ownership / occupancy and authorization document (in case of firm / company) and the same is being implemented duly integrating the said templates at Meeseva portal, Industries Single desk portal and online application of APEPDCL website. By implementing EoDB frame work, the applicants are provided fixed cost estimate based on the load (KVA/ KW) required for obtaining electricity connection in all areas. This system allows submission of online application, System generated demand note, online payment and tracking of status without the need for a physical touch point for document submission for new electricity connection.

IAMR based HT Billing:

Billing of all HT services in the DISCOM through Integrated Automatic Meter Reading (IAMR) is taken up and up to 90% of the services are presently being billed with IAMR.

Mobile Applications:

Apart from existing mobile apps viz ‘Eastern Power’ & ‘AP Vidyut Pravah’ for consumers and D List operation & PMI for field employees, few more Mobile apps for field staff are developed for improving the internal efficiency of the DISCOM

- App for release of new service connections
- App for online updation of the complaints received from Command Control Centre (CCC)
- App for surveying all aqua culture services

Integrated Power Development Scheme (Phase-2):

A scheme was sanctioned by Govt. Of India for an amount of Rs. 3.82 Crores for the additional 8 Nos. towns under IPDS Phase-2. As part of this, Upgradation of Command Control Centre (CCC) with latest IVRS technology and Implementation of GIS & MDAS for the 8 towns are taken up.

Integrated Power Development Scheme (IT Enablement):

A scheme was sanctioned for an amount of Rs. 10.71 Crores for Upgradation of SAP ERP from ECC 6.0 to Suite On HANA under IPDS (IT Enablement). The scheme is under implementation stage.

EP Digital:

With digital being the new norm, Indian electric utilities are evolving rapidly to cater to changing consumer needs and behaviour. Hence, with a vision to become a digital organization, APEPDCL has started its digital transformation journey under the flagship project “EP Digital”. The objective of “EP Digital” is to improve customer experience across consumer categories for the organization.

As part of this project, APEPDCL has undertaken seven key digital initiatives:

- 1) A digitalized 'Smart Bill' – The consumer electricity bill at present has been completely digitalized to highlight important information on energy consumption and to provide personalized insights to consumers in a visually appealing format.
- 2) Proactive notification dispatch to consumers – Under this initiative, the DISCOM seeks to provide important notifications to its consumers via SMS, email and the Eastern Power mobile app. Notifications include – bill reminders, delayed payments, outages, status of new connection application, etc.
- 3) 2 Way communication through SMS service - This self-care solution empowers consumers to communicate with the DISCOM via SMS to obtain important information across key areas such as outages, billing, complaints etc.
- 4) Advanced Interactive Voice Response System (IVRS) – In order to provide anytime anywhere customer service over the phone, APEPDCL is currently upgrading its IVRS application. The aim is to have the upgraded application act as a single interactive point for a variety of consumer services including supply and billing related complaint registration, reporting an emergency, obtaining outage related information, Meeseva & ATP location information etc.
- 5) APEPDCL Website redesign, and the creation of customer and business portals – With the goal of providing personalized information through an easy-to-use and interactive interface, the website has gone through a complete redesign to give it a modern look and feel. Additionally, portals for domestic as well as business users have been created to ensure easier access to information and services such as viewing of Smart Bills, making payments, analyzing consumption patterns, viewing outage alerts, etc. to all consumers.
- 6) Multi-Channel Consumer Survey – By conducting consumer surveys across multiple channels, APEPDCL is seeking to capture insights and pain points across areas such as bill generation, bill payments, new connection process, complaint resolution, etc. The feedback received will help the DISCOM improve customer experience.
- 7) Digital Marketing and social media campaigns – With a focus on leveraging social media for improving customer engagement, APEPDCL is actively engaging with its consumers on social media channels, such as Facebook and Twitter. The goal is to promote new products and services and to address consumers' grievances and suggestions

9 Performance Reports

| Details of Compensation awarded to consumers and penalties imposed and disciplinary action proposed on department staff | | | | | | |
|---|-------------------|--------------------|-----------------------------------|----------------------|---|---|
| ABSTRACT (2017-18) | | | | | | (Rs. Lakhs) |
| Sl. No | Circle | Total No. of Cases | No. of Cases Compensation awarded | Compensation Awarded | No. of cases disciplinary action proposed | No. of cases both Penalty/ DC action proposed |
| 1 | Srikakulam | 2 | 2 | 0.05 | 0 | 0 |
| 2 | Vizianagaram | 2 | 2 | 0.05 | 0 | 0 |
| 3 | Visakhapatnam | 2 | 2 | 0.165 | 0 | 0 |
| 4 | Rajamahendravaram | 2 | 2 | 0.075 | 0 | 0 |
| 5 | Eluru | 5 | 5 | 0.12 | 0 | 0 |
| Total | | 13 | 13 | 0.46 | 0 | 0 |

| DETAILS OF COMPENSATION AWARDED TO CONSUMERS AND PENALTIES IMPOSED AND DISCIPLINARY ACTION PROPOSED ON DEPARTMENT STAFF | | | | | | |
|---|-------------------|--------------------|-----------------------------------|--|---|---|
| ABSTRACT (April-18 to Sept-18) | | | | | | (Rs. Lakhs) |
| Sl. No | Circle | Total No. of Cases | No. of Cases Compensation awarded | Penalties imposed/ Compensation Awarded Amount (Rs.) | No. of cases disciplinary action proposed | No. of cases both Penalty/ DC action proposed |
| 1 | Srikakulam | 4 | 4 | 0.175 | 0 | 0 |
| 2 | Vizianagaram | 0 | 0 | 0 | 0 | 0 |
| 3 | Visakhapatnam | 0 | 0 | 0 | 0 | 0 |
| 4 | Rajamahendravaram | 4 | 4 | 0.09 | 0 | 0 |
| 5 | Eluru | 1 | 1 | 0.01 | 0 | 0 |
| Total | | 9 | 9 | 0.275 | 0 | 0 |

| Non Departmental Fatal Electrical Accidents (Human) occurred during 2017-18 and amount of Ex-gartia paid | | | | | | |
|--|---------------|---|---|------------|---------------------------------------|--------------------|
| Sl. No. | District | No. of accidents occurred | | | No. of cases for which ex-gratia paid | |
| | | Due to Dept. Faults (Snapping of conductor, defective appliances etc.,) | Not due to Dept. Faults (unauthorized work etc.,) | Total | No. of cases | Amount in Rs Lakhs |
| 1 | Srikakulam | 10 | 42 | 52 | 16 | 50.00 |
| 2 | Vizianagaram | 8 | 18 | 26 | 17 | 62.00 |
| 3 | Visakhapatnam | 12 | 56 | 68 | 5 | 28.00 |
| 4 | East Godavari | 13 | 79 | 92 | 21 | 51.00 |
| 5 | West Godavari | 15 | 25 | 40 | 19 | 51.00 |
| EPDCL | | 58 | 220 | 278 | 78 | 242.00 |

Note: Ex - gartia sanctioned including previous years accident cases also.

| Non Departmental Fatal Electrical Accidents (Human) occurred during the period from 01-4-2018 to 30-09-2018 and amount of Ex-gartia paid | | | | | | |
|--|---------------|---|---|------------|---------------------------------------|--------------------|
| Sl. No. | District | No. of accidents occurred | | | No. of cases for which ex-gratia paid | |
| | | Due to Dept. Faults (Snapping of conductor, defective appliances etc.,) | Not due to Dept. Faults (unauthorized work etc.,) | Total | No. of cases | Amount in Rs Lakhs |
| 1 | Srikakulam | 5 | 19 | 24 | 5 | 22.00 |
| 2 | Vizianagaram | 3 | 6 | 9 | 2 | 10.00 |
| 3 | Visakhapatnam | 7 | 27 | 34 | 7 | 20.00 |
| 4 | East Godavari | 10 | 52 | 62 | 4 | 11.00 |
| 5 | West Godavari | 13 | 21 | 34 | 6 | 30.00 |
| EPDCL | | 38 | 125 | 163 | 24 | 93.00 |
| Note : Payment of ex-gratia for the balance cases could not be made due to non-receipt of necessary documents required for payment. | | | | | | |

| Departmental Fatal Electrical Accidents occurred during 2017-18 | | | | |
|---|-------------------|-------|---|---------------------|
| Sl. No. | District | Total | No. of cases for which compensation paid during 2017-18 | |
| | | | No. of cases | Amount in Rs. Lakhs |
| 1 | Srikakulam | 0 | 0 | 0 |
| 2 | Vizianagaram | 1 | 1 | 8.23 |
| 3 | Visakhapatnam | 2 | 2 | 13.44 |
| 4 | Rajamahendravaram | 1 | 1 | 7.25 |
| 5 | Eluru | 0 | 0 | 0.00 |
| EPDCL TOTAL | | 4 | 4 | 28.94 |

| Departmental Fatal Electrical Accidents occurred during 01-04-2018 TO 30.09.2018 | | | | |
|--|-------------------|-------|--|--------------|
| Sl. No. | District | Total | No. of cases for which compensation paid 2018-19 (Upto Sep.) | |
| | | | No. of cases | Amount in Rs |
| 1 | Srikakulam | 0 | 0 | 0.00 |
| 2 | Vizianagaram | 0 | 0 | 0.00 |
| 3 | Visakhapatnam | 1 | 1 | 7.58 |
| 4 | Rajamahendravaram | 0 | 0 | 0.00 |
| 5 | Eluru | 0 | 0 | 0.00 |
| EPDCL TOTAL | | 1 | 1 | 7.58 |

| No. of DTRs failed & erected during 2017-18 and 2018-19 (upto 30.09.18) | | | | | | | | |
|---|--------------------|---------------------------------------|------------------------------------|-----------------------------------|---------------------------------------|--|---|-------------------------------------|
| Sl. No. | Name of the Circle | No. of DTRs existing as on 31-03-2017 | No. of DTRs erected during 2017-18 | No. of DTRs failed during 2017-18 | No. of DTRs existing as on 31-03-2018 | No. of DTRs erected during 2018-19 (upto 30.09.18) | No. of DTRs failed during 2018-19 (upto 30.09.18) | No. of DTRs existing as on 30-09-18 |
| 1 | SKLM | 15203 | 1122 | 1105 | 16325 | 377 | 1047 | 16702 |
| 2 | VZM | 14481 | 1204 | 968 | 15685 | 471 | 834 | 16156 |
| 3 | VSP | 26570 | 5467 | 889 | 32037 | 929 | 735 | 32966 |
| 4 | RJY | 45568 | 1228 | 2380 | 46796 | 1343 | 1381 | 48139 |
| 5 | ELR | 71504 | 5940 | 4751 | 77444 | 3361 | 2424 | 80805 |
| EPDCL | | 173326 | 14961 | 10093 | 188287 | 6481 | 6421 | 194768 |

| DTR COMPLAINTS RECEIVED DURING FY: 2017-18, ATTENDED AND BALANCE AT CALL CENTERS AS ON 31-03-18 | | | | | | | | | |
|--|----------------------|--|------------|--|--|-------------|---|--|------------|
| S.No. | Circle | No. Of DTR Complaints to be attended as on 01-04-17 | | No. of DTR Complaints Received during FY: 2017-18 | No. of DTR Complaints attended during FY: 2017-18 | | No. of Complaints Rejected | Balance No. of DTR complaints to be attended as on 31-03-18 | |
| | | WRT | BRT | | WRT | BRT | | WRT | BRT |
| 1 | SRIKAKULAM | 5 | 1 | 1179 | 1014 | 170 | 0 | 0 | 1 |
| 2 | VIZIANAGARAM | 7 | 0 | 960 | 795 | 169 | 0 | 0 | 3 |
| 3 | VISAKHAPATNAM | 2 | 0 | 827 | 730 | 99 | 0 | 0 | 0 |
| 4 | RAJAHMUNDRY | 3 | 0 | 1788 | 1596 | 186 | 0 | 9 | 0 |
| 5 | ELURU | 30 | 0 | 3588 | 2870 | 697 | 0 | 23 | 28 |
| Total | | 47 | 1 | 8342 | 7005 | 1321 | 0 | 32 | 32 |

**DTR COMPLAINTS RECEIVED DURING FY: 2018-19, ATTENDED AND BALANCE
AT CALL CENTERS AS ON 30-09-18**

| S.No. | Circle | No. Of DTR Complaints to be attended as on 1-04-18 | | No. of DTR Complaints Received during FY; 2018-19 (upto Sep.) | No. of DTR Complaints attended during FY: 2018-19 (up to Sep.) | | No. of Complaints Rejected during FY: 2018-19 (upto Sep.) | Balance No.of DTR complaints to be attended as on 30-09-18 | |
|--------------|----------------------|--|-----------|---|--|------------|---|--|----------|
| | | WRT | BRT | | WRT | BRT | | WRT | BRT |
| 1 | SRIKAKULAM | 0 | 1 | 1059 | 998 | 61 | 0 | 0 | 1 |
| 2 | VIZIANAGARAM | 0 | 3 | 842 | 750 | 95 | 0 | 0 | 0 |
| 3 | VISAKHAPATNAM | 0 | 0 | 641 | 619 | 22 | 0 | 0 | 0 |
| 4 | RAJAHMUNDRY | 9 | 0 | 1403 | 1324 | 86 | 0 | 2 | 0 |
| 5 | ELURU | 23 | 28 | 2458 | 2188 | 320 | 0 | 1 | 0 |
| Total | | 32 | 32 | 6403 | 5879 | 584 | 0 | 3 | 1 |

**FUSE OF CALLS RECEIVED DURING FY: 2017-18, ATTENDED AND BALANCE
AT CALL CENTERS AS ON 31.03.2018**

| S. No. | Circle | No. of FOC complaints to be attended as on 01-04-2017 | | No. of FOC complaints received during FY 2017-18 | No. of FOC complaints attended during FY 2017-18 | | No. of Complaints Rejected | Balance No. of FOC complaints to be attended as on 31.03.2018 | |
|--------------|----------------------|---|-----------|--|--|------------|----------------------------|---|------------|
| | | WRT | BRT | | WRT | BRT | | WRT | BRT |
| 1 | SRIKAKULAM | 14 | 2 | 16566 | 16437 | 116 | 0 | 18 | 11 |
| 2 | VIZIANAGARAM | 9 | 1 | 7699 | 7585 | 99 | 0 | 10 | 15 |
| 3 | VISAKHAPATNAM | 55 | 4 | 88632 | 88392 | 150 | 0 | 125 | 24 |
| 4 | RAJAHMUNDRY | 31 | 10 | 61347 | 61166 | 117 | 0 | 65 | 40 |
| 5 | ELURU | 51 | 4 | 35869 | 35630 | 198 | 0 | 53 | 43 |
| Total | | 160 | 21 | 210113 | 209210 | 680 | 0 | 271 | 133 |

**FUSE OF CALLS RECEIVED DURING FY: 2018-19, ATTENDED AND BALANCE
AT CALL CENTERS AS ON 30.09.2018**

| S. No. | Circle | No. of FOC complaints to be attended as on 01-04-2018 | | No. of FOC complaints received during FY 2018-19 (upto Sep.) | No. of FOC complaints attended during FY 2018-19 (upto Sep.) | | No. of Complaints Rejected during FY 2018-19 (upto Sep.) | Balance No. of FOC complaints to be attended as on 30.09.2018 | |
|--------------|----------------------|---|------------|---|--|------------|--|---|-----------|
| | | WRT | BRT | | WRT | BRT | | WRT | BRT |
| 1 | SRIKAKULAM | 18 | 11 | 15152 | 15059 | 76 | 0 | 32 | 14 |
| 2 | VIZIANAGARAM | 10 | 15 | 7517 | 7435 | 44 | 0 | 56 | 7 |
| 3 | VISAKHAPATNAM | 125 | 24 | 73618 | 73560 | 60 | 0 | 129 | 18 |
| 4 | RAJAHMUNDY | 65 | 40 | 49004 | 48911 | 83 | 0 | 90 | 25 |
| 5 | ELURU | 53 | 43 | 26143 | 26092 | 94 | 0 | 39 | 14 |
| Total | | 271 | 133 | 171434 | 171057 | 357 | 0 | 346 | 78 |

**DETAILS OF CIRCLE WISE AND CATEGORY WISE BURNT METERS IN APEPDCL AS ON
30.09.2018**

| S. No. | Circle | I | II | III | IV | V | VI | VII | Others | Total |
|--------------------------|-------------------|-------------|------------|-----------|----------|-----------|------------|-----------|----------|-------------|
| 1 | Srikakulam | 331 | 43 | 12 | 0 | 2 | 20 | 10 | 0 | 418 |
| 2 | Vizianagaram | 265 | 26 | 8 | 0 | 2 | 24 | 5 | 0 | 330 |
| 3 | Visakhapatnam | 168 | 37 | 3 | 0 | 5 | 40 | 3 | 0 | 256 |
| 4 | Rajamahendravaram | 352 | 91 | 15 | 4 | 8 | 92 | 11 | 0 | 573 |
| 5 | Eluru | 226 | 63 | 48 | 0 | 5 | 120 | 6 | 0 | 468 |
| Total for APEPDCL | | 1342 | 260 | 86 | 4 | 22 | 296 | 35 | 0 | 2045 |

DETAILS OF CIRCLE WISE AND CATEGORY WISE STUCK-UP METERS IN APEPDCL AS ON 30.09.2018

| S. No. | Circle | I | II | III | IV | V | VI | VII | VIII | Others | Total |
|--------------------------|-------------------|--------------|-------------|------------|-----------|-----------|------------|------------|----------|----------|--------------|
| 1 | Srikakulam | 3023 | 238 | 17 | 1 | 1 | 32 | 39 | 0 | 0 | 3351 |
| 2 | Vizianagaram | 1622 | 147 | 21 | 0 | 1 | 40 | 30 | 0 | 0 | 1861 |
| 3 | Visakhapatnam | 3159 | 325 | 7 | 1 | 13 | 72 | 26 | 0 | 0 | 3603 |
| 4 | Rajamahendravaram | 5875 | 691 | 93 | 7 | 19 | 118 | 84 | 0 | 0 | 6887 |
| 5 | Eluru | 4410 | 520 | 117 | 1 | 14 | 112 | 78 | 0 | 0 | 5252 |
| Total for APEPDCL | | 18089 | 1921 | 255 | 10 | 48 | 374 | 257 | 0 | 0 | 20954 |

Frequency and Voltage at various levels of interface over the period April-2017 to October-2018

| CIRCLE | 132/33KV SS | 33/11KV SS | Parameter | Apr-17 | May-17 | Jun-17 | Jul-17 | Aug-17 | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | |
|--------|--------------|----------------|-------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| SKLM | PALASA | PALASA | AVG VOLTAGE | 11.30 | 11.50 | 11.30 | 11.20 | 11.40 | 11.40 | 11.23 | 11.56 | 11.25 | 11.62 | 11.41 | 11.35 | 11.54 | 11.30 | 11.30 | 11.30 | 11.30 | 11.1 | 11.2 | |
| | | | FREQ. | 49.50 | 49.60 | 49.20 | 49.30 | 49.50 | 49.10 | 49.10 | 49.10 | 49.60 | 49.20 | 48.90 | 49.42 | 49.61 | 49.20 | 49.31 | 49.22 | 49.28 | 49.21 | 49.4 | |
| | CHILAKAPALEM | SRIKAKULAM | AVG VOLTAGE | 11.20 | 11.52 | 11.45 | 11.23 | 11.56 | 11.81 | 11.50 | 11.00 | 11.16 | 11.12 | 11.46 | 11.62 | 11.70 | 11.23 | 11.25 | 11.20 | 11.81 | 10.89 | 10.96 | |
| | | | FREQ. | 49.10 | 49.10 | 49.60 | 49.20 | 48.90 | 49.60 | 49.20 | 49.30 | 49.50 | 49.61 | 49.20 | 49.31 | 49.22 | 48.90 | 49.60 | 49.20 | 49.62 | 48.95 | 49.1 | |
| | TEKALI | SANTHABOMMALI | AVG VOLTAGE | 11.20 | 11.20 | 11.10 | 11.60 | 11.30 | 11.10 | 11.00 | 11.70 | 11.30 | 11.80 | 11.80 | 11.80 | 11.80 | 11.60 | 11.50 | 11.80 | 11.80 | 11.7 | 11.6 | |
| | | | FREQ. | 49.30 | 49.50 | 49.61 | 49.20 | 49.31 | 49.22 | 48.90 | 49.60 | 49.20 | 49.62 | 49.60 | 49.20 | 48.90 | 49.55 | 48.90 | 49.60 | 49.20 | 49.5 | 49.7 | |
| VZM | BOBBLI | PARVATHIPURAM | AVG VOLTAGE | 11.10 | 11.00 | 11.20 | 11.20 | 11.10 | 11.00 | 11.10 | 11.00 | 11.21 | 11.11 | 11.30 | 11.25 | 11.40 | 11.30 | 11.25 | 11.30 | 11.25 | 11.28 | 11.3 | |
| | | | FREQ. | 49.50 | 49.60 | 49.30 | 49.40 | 49.60 | 49.50 | 49.10 | 49.20 | 49.30 | 49.10 | 49.40 | 49.30 | 49.40 | 49.25 | 49.31 | 49.41 | 49.24 | 49.29 | 49.32 | |
| | | SALURU | AVG VOLTAGE | 11.30 | 11.20 | 11.20 | 11.10 | 11.15 | 11.20 | 11.25 | 11.10 | 11.10 | 11.20 | 11.30 | 11.25 | 11.30 | 11.40 | 11.32 | 11.25 | 11.24 | 11.26 | 11.3 | |
| | | | FREQ. | 49.80 | 49.80 | 49.80 | 49.90 | 49.80 | 49.90 | 49.80 | 49.40 | 49.90 | 49.50 | 49.90 | 49.70 | 49.80 | 49.90 | 49.80 | 50.00 | 49.80 | 49.9 | 49.88 | |
| | | PARAVATHIPURAM | NAGURU | AVG VOLTAGE | 11.20 | 11.10 | 11.10 | 11.50 | 11.30 | 11.10 | 11.00 | 11.60 | 11.30 | 11.20 | 11.80 | 11.80 | 11.80 | 11.50 | 11.50 | 11.30 | 11.40 | 11.2 | 11.4 |
| | | | | FREQ. | 49.30 | 49.10 | 49.25 | 49.20 | 49.31 | 49.22 | 49.10 | 49.60 | 49.20 | 49.24 | 49.60 | 49.30 | 49.40 | 49.55 | 49.10 | 49.50 | 49.30 | 49.4 | 49.25 |
| | KOMARADA | | AVG VOLTAGE | 11.30 | 11.34 | 11.30 | 11.20 | 11.40 | 11.40 | 11.23 | 11.26 | 11.25 | 11.35 | 11.40 | 11.35 | 11.44 | 11.30 | 11.20 | 11.27 | 11.25 | 11.28 | 11.3 | |
| | | | FREQ. | 49.10 | 49.10 | 49.40 | 49.20 | 49.20 | 49.10 | 49.20 | 49.25 | 49.40 | 49.34 | 49.20 | 49.31 | 49.30 | 49.20 | 49.45 | 49.20 | 49.35 | 49.4 | 49.2 | |
| | VONTITHADI | RAJAPULOVA | AVG VOLTAGE | 11.20 | 11.20 | 11.10 | 11.40 | 11.30 | 11.21 | 11.00 | 11.25 | 11.30 | 11.65 | 11.45 | 11.20 | 11.35 | 11.50 | 11.40 | 11.48 | 11.38 | 11.25 | 11.4 | |
| | | | FREQ. | 49.20 | 49.40 | 49.61 | 49.10 | 49.31 | 49.22 | 49.20 | 49.40 | 49.20 | 49.52 | 49.25 | 49.20 | 49.10 | 49.44 | 49.20 | 49.40 | 49.20 | 49.25 | 49.3 | |
| | | T.B.VARA | AVG VOLTAGE | 11.10 | 11.40 | 11.35 | 11.25 | 11.45 | 11.62 | 11.25 | 11.05 | 11.10 | 11.20 | 11.32 | 11.34 | 11.40 | 11.32 | 11.20 | 11.35 | 11.40 | 11.45 | 11.28 | |
| | | | FREQ. | 49.20 | 49.30 | 49.40 | 49.22 | 49.10 | 49.40 | 49.20 | 49.25 | 49.25 | 49.35 | 49.32 | 49.20 | 49.25 | 49.40 | 49.40 | 49.10 | 49.35 | 49.25 | 49.32 | |
| RIJ | R.C.PURAM | TALAREVU | AVG VOLTAGE | 11.00 | 11.10 | 11.20 | 11.05 | 11.10 | 11.20 | 11.35 | 11.30 | 11.50 | 11.10 | 11.20 | 11.30 | 11.00 | 11.00 | 11.45 | 11.30 | 11.10 | 11.05 | 11.1 | |
| | | | FREQ. | 50.00 | 49.99 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 49.99 | 49.99 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50 | 50 | |
| | PEDDAPURAM | DIVILI | AVG VOLTAGE | 11.20 | 11.40 | 11.20 | 11.20 | 11.30 | 11.20 | 11.30 | 11.20 | 11.20 | 11.20 | 11.40 | 11.20 | 11.20 | 11.30 | 11.20 | 11.40 | 11.20 | 11.15 | 11.1 | |
| FREQ. | 50.04 | | 50.03 | 50.04 | 50.04 | 50.04 | 50.04 | 50.03 | 50.02 | 50.03 | 50.04 | 50.04 | 50.03 | 50.04 | 50.04 | 50.04 | 50.01 | 50.04 | 50 | 50 | | | |
| ELURU | NIDADAVOLE | NIDADAVOLE | AVG VOLTAGE | 10.90 | 10.93 | 10.97 | 11.07 | 11.10 | 11.00 | 11.03 | 10.97 | 10.87 | 10.97 | 10.97 | 10.83 | 10.87 | 10.93 | 11.07 | 11.03 | 10.97 | 11 | 11 | |
| | | | FREQ. | 49.80 | 49.80 | 49.80 | 49.90 | 49.80 | 49.90 | 49.80 | 49.90 | 49.90 | 50.00 | 49.90 | 49.70 | 49.80 | 49.90 | 49.80 | 50.00 | 49.80 | 49.99 | 49.98 | |
| | J.R.GUDEM | J.R.GUDEM | AVG VOLTAGE | 10.90 | 10.93 | 10.97 | 11.03 | 11.03 | 11.07 | 10.97 | 10.93 | 10.87 | 10.93 | 10.97 | 10.83 | 10.93 | 10.97 | 11.07 | 11.03 | 11.03 | 10.9 | 10.89 | |
| | | | FREQ. | 49.90 | 49.80 | 49.90 | 49.80 | 49.80 | 49.80 | 49.80 | 49.80 | 49.90 | 50.00 | 49.90 | 49.80 | 49.80 | 49.80 | 49.80 | 50.00 | 49.80 | 49.9 | 49.92 | |
| | P.T.PALLI | P.T.PALLI | AVG VOLTAGE | 10.93 | 10.90 | 10.97 | 11.03 | 10.97 | 11.03 | 10.93 | 10.97 | 10.90 | 10.97 | 11.03 | 11.30 | 10.90 | 10.90 | 11.07 | 11.10 | 11.00 | 10.9 | 10.99 | |
| | | | FREQ. | 49.80 | 49.80 | 49.80 | 49.90 | 49.80 | 49.90 | 49.80 | 49.80 | 49.90 | 50.00 | 49.90 | 49.90 | 49.80 | 49.90 | 49.80 | 50.00 | 49.80 | 49.9 | 49.98 | |
| VSP | ANANDAPURAM | ANANDAPURAM | AVG VOLTAGE | 9.60 | 9.70 | 8.40 | 9.50 | 9.60 | 9.40 | 9.60 | 9.20 | 7.70 | 7.30 | 9.50 | 7.80 | 14.20 | 9.00 | 8.50 | 9.00 | 11.60 | 11.6 | 11.6 | |
| | | | FREQ. | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50 | 50 | |
| | | BHEEMILI | AVG VOLTAGE | 11.10 | 11.05 | 10.90 | 10.75 | 10.95 | 10.85 | 11.35 | 11.30 | 10.95 | 11.10 | 10.70 | 10.80 | 10.80 | 10.90 | 10.85 | 11.00 | 10.90 | 11.3 | 10.4 | |
| | | | FREQ. | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 50 | 50 | |

| Break Downs & Interruptions in Power supply to Rural Consumers for FY: 2017-18 | | | | | |
|--|---------------|-------------|---------------------------|---------------|---------------------------|
| S. No. | Circle | Breakdowns | | Interruptions | |
| | | Nos | Duration (Hrs:min:sec) | Nos | Duration (Hrs:min:sec) |
| 1 | Srikakulam | 794 | 1638:20 | 560 | 1079:54 |
| 2 | Vizianagaram | 512 | 953:12:00 | 457 | 504:05:00 |
| 3 | Visakhapatnam | 1225 | 2370:22:00 | 2503 | 645:58:00 |
| 4 | Rajahmundry | 864 | 1639:07:00 | 2244 | 1370:35:00 |
| 5 | Eluru | 956 | 1984:03:00 | 3867 | 7934:08:00 |
| DISCOM | | 4351 | 6946:44:00 | 9631 | 10454:46:00 |

| Break Downs & Interruptions in Power supply to Rural Consumers for FY: 2018-19 (upto 31-10-18) | | | | | |
|---|---------------|-------------|---------------------------|---------------|---------------------------|
| S. No. | Circle | Breakdowns | | Interruptions | |
| | | Nos | Duration (Hrs:min:sec) | Nos | Duration (Hrs:min:sec) |
| 1 | Srikakulam | 497 | 5070:55:00 | 202 | 246:45:00 |
| 2 | Vizianagaram | 514 | 866:00:00 | 186 | 300:02:00 |
| 3 | Visakhapatnam | 441 | 705:43:00 | 2443 | 564:44:00 |
| 4 | Rajahmundry | 665 | 1112:05:00 | 1615 | 1639:20:00 |
| 5 | Eluru | 658 | 936:18:00 | 1593 | 3832:24 |
| DISCOM | | 2775 | 7754:43:00 | 6039 | 2750:51:00 |

| Break Downs & Interruptions in Power supply to Urban Consumers for FY:2017-18 | | | | | |
|--|---------------|-------------------|-----------------------------------|----------------------|-----------------------------------|
| S. No. | Circle | Breakdowns | | Interruptions | |
| | | Nos | Duration (Hrs:min:sec) | Nos | Duration (Hrs:min:sec) |
| 1 | Srikakulam | 117 | 254:49 | 73 | 163:12 |
| 2 | Vizianagaram | 90 | 175:58:00 | 155 | 190:23:00 |
| 3 | Visakhapatnam | 1065 | 993:45:00 | 1465 | 377:08:00 |
| 4 | Rajahmundry | 287 | 416:12 | 2142 | 2125:58 |
| 5 | Eluru | 276 | 224:54:00 | 2899 | 1732:56:00 |
| DISCOM | | 1835 | 1394:37:00 | 6734 | 2300:27:00 |

| Break Downs & Interruptions in Power supply to Urban Consumers for FY: 2018-19 (upto 31-10-18) | | | | | |
|---|---------------|-------------------|-----------------------------------|----------------------|-----------------------------------|
| S. No. | Circle | Breakdowns | | Interruptions | |
| | | No.s | Duration (Hrs:min:sec) | No.s | Duration (Hrs:min:sec) |
| 1 | Srikakulam | 78 | 1430:37:00 | 239 | 387:04:00 |
| 2 | Vizianagaram | 115 | 160:08:00 | 46 | 53:01:00 |
| 3 | Visakhapatnam | 272 | 305:51:00 | 535 | 136:28:00 |
| 4 | Rajahmundry | 192 | 201:55:00 | 880 | 616:12:00 |
| 5 | Eluru | 250 | 192:52:30 | 774 | 969:52:00 |
| DISCOM | | 907 | 2098:31:00 | 2474 | 1192:45:00 |

| Services released from 1-APR-2017 TO 31-MAR-2018 in APEPDCL | | | | | | | | | |
|---|--------------------|--------------|----------------|---------------|--------------|--------------|---------------|--------------|---------------|
| CATEGOR Y | OPENING BALANCE | | REGISTE RED | RELEASED | | REJE CTED | BALAN CE | CB_WR T | CB_BR T |
| | WRT | BRT | | WRT | BRT | | | | |
| PWS Schemes | 2050 | 1244 | 1208 | 390 | 292 | 93 | 3727 | 1234 | 2493 |
| Cottage Industries | 106 | 53 | 91 | 30 | 9 | 5 | 206 | 55 | 151 |
| Industrial Normal | 3863 | 2445 | 8690 | 2624 | 2228 | 709 | 9437 | 2941 | 6496 |
| Agriculture | 19510 | 15266 | 13889 | 662 | 3108 | 1514 | 43381 | 17740 | 25641 |
| Domestic | 63198 | 19817 | 164495 | 142978 | 12091 | 4684 | 87757 | 20369 | 67388 |
| General Purpose | 760 | 340 | 2257 | 1821 | 152 | 102 | 1282 | 341 | 941 |
| Commercial | 10157 | 6503 | 50484 | 41213 | 4154 | 1824 | 19953 | 6797 | 13156 |
| Street Lights | 1458 | 800 | 1053 | 136 | 239 | 217 | 2719 | 786 | 1933 |
| Temporary | 351 | 472 | 283 | 111 | 2 | 111 | 882 | 473 | 409 |
| TOTAL | 101453 | 46940 | 242450 | 189965 | 22275 | 9259 | 169344 | 50736 | 118608 |

| Services released from 1-APR-2018 TO 30-SEP-2018 in APEPDCL | | | | | | | | | |
|---|--------------------|---------------|----------------|---------------|--------------|-------------|---------------|--------------|---------------|
| Category | Opening balance | | Regis tered | Released | | Rejete d | Balanc e | CB_WR T | CB_BR T |
| | WRT | BRT | | WRT | BRT | | | | |
| PWS Schemes | 1234 | 2493 | 1204 | 193 | 169 | 15 | 4554 | 1492 | 3062 |
| Cottage Industries | 55 | 151 | 75 | 21 | 13 | 2 | 245 | 56 | 189 |
| Industrial Normal | 2941 | 6496 | 2975 | 834 | 1440 | 74 | 10064 | 2807 | 7257 |
| Agriculture | 17740 | 25641 | 9937 | 1002 | 3238 | 874 | 48204 | 21204 | 27000 |
| Domestic | 20369 | 67388 | 97166 | 74195 | 7927 | 2479 | 100322 | 26515 | 73807 |
| General Purpose | 341 | 941 | 4171 | 1388 | 153 | 172 | 3740 | 1584 | 2156 |
| Commercial | 6797 | 13156 | 32190 | 23698 | 3926 | 1211 | 23308 | 7898 | 15410 |
| Street Lights | 786 | 1933 | 351 | 17 | 41 | 14 | 2998 | 772 | 2226 |
| Temporary | 473 | 409 | 195 | 33 | 5 | 34 | 1005 | 478 | 527 |
| TOTAL | 50736 | 118608 | 148264 | 101381 | 16912 | 4875 | 194440 | 62806 | 131634 |

| No. of cases filed in respect of pilferage of power by DPE wing | | | | | | | |
|---|---------------|-------------------------------|-------------------------------|------------------------------|---------------------------|-------------------------------|------------------------------|
| S.No | Circle | Amounts Assessed in Rs. Lakhs | | | | | |
| | | 2017-18 | | | 2018-19 (upto 9/18) | | |
| | | No. of services inspected | No. of pilferage cases booked | Amount realized in Rs. Lakhs | No. of services inspected | No. of pilferage cases booked | Amount realized in Rs. Lakhs |
| 1 | Srikakulam | 12945 | 82 | 2.01 | 4916 | 2 | 0.04 |
| 2 | Vizianagaram | 18670 | 109 | 4.33 | 7766 | 40 | 3.65 |
| 3 | Visakhapatnam | 16689 | 107 | 47.00 | 7878 | 45 | 2.12 |
| 4 | Rajahmundry | 12537 | 129 | 187.56 | 6581 | 57 | 21.76 |
| 5 | Eluru | 12217 | 72 | 77.74 | 4659 | 28 | 31.60 |
| 6 | HT-DPE | 1845 | 0 | 0.00 | 954 | 0 | 0.00 |
| TOTAL | | 74903 | 499 | 318.64 | 32754 | 172 | 59.18 |

| Amounts realized through intensive inspections by field staff | | | | | | | |
|---|---------------|-------------------------------|---------------------|------------------------------|---------------------------|---------------------|------------------------------|
| S.No | Circle | Amounts Assessed in Rs. Lakhs | | | | | |
| | | 2017-18 | | | 2018-19 (upto 9/18) | | |
| | | No. of services inspected | No. of cases booked | Amount realised in Rs. Lakhs | No. of services inspected | No. of cases booked | Amount realised in Rs. Lakhs |
| 1 | Srikakulam | 75840 | 46 | 0.75 | 11816 | 13 | 0.17 |
| 2 | Vizianagaram | 17162 | 376 | 2.5464 | 3887 | 151 | 0.42218 |
| 3 | Visakhapatnam | 52424 | 341 | 11.15421 | 22864 | 63 | 2.3998 |
| 4 | Rajahmundry | 84529 | 621 | 33.8 | 21878 | 258 | 11.83 |
| 5 | Eluru | 34958 | 142 | 12.38 | 14692 | 30 | 4.33 |
| TOTAL | | 264913 | 1526 | 60.63061 | 75137 | 515 | 19.15198 |

| No. of cases filed in respect of Theft of energy by DPE wing | | | | | | | |
|--|---------------|-------------------------------|-------------------------------|------------------------------|---------------------------|-------------------------------|------------------------------|
| S.No | Circle | Amounts Assessed in Rs. Lakhs | | | | | |
| | | 2017-18 | | | 2018-19 (upto 9/18) | | |
| | | No. of services inspected | No. of pilferage cases booked | Amount realized in Rs. Lakhs | No. of services inspected | No. of pilferage cases booked | Amount realized in Rs. Lakhs |
| 1 | Srikakulam | 12945 | 564 | 5.18 | 4916 | 163 | 0.88 |
| 2 | Vizianagaram | 18670 | 586 | 11.51 | 7766 | 298 | 6.02 |
| 3 | Visakhapatnam | 16689 | 658 | 58.48 | 7878 | 331 | 4.64 |
| 4 | Rajahmundry | 12537 | 873 | 201.05 | 6581 | 508 | 28.97 |
| 5 | Eluru | 12217 | 1092 | 118.43 | 4659 | 446 | 36.95 |
| 6 | HT-DPE | 1845 | 0 | 0.00 | 954 | 0 | 0.00 |
| TOTAL | | 74903 | 3773 | 394.66 | 32754 | 1746 | 77.46 |

| No. of cases filed in respect of Theft of energy by field staff | | | | | | | |
|---|---------------|-------------------------------|-------------------------------|------------------------------|---------------------------|-------------------------------|------------------------------|
| S.No | Circle | Amounts Assessed in Rs. Lakhs | | | | | |
| | | 2017-18 | | | 2018-19 (upto 9/18) | | |
| | | No. of services inspected | No. of pilferage cases booked | Amount realized in Rs. Lakhs | No. of services inspected | No. of pilferage cases booked | Amount realized in Rs. Lakhs |
| 1 | Srikakulam | 75,840 | 533 | 3.06 | 11816 | 292 | 1.11 |
| 2 | Vizianagaram | 17,162 | 68 | 1.76 | 3887 | 20 | 0.20 |
| 3 | Visakhapatnam | 52,424 | 249 | 9.08 | 22864 | 25 | 1.01 |
| 4 | Rajahmundry | 84,529 | 212 | 26.20 | 21878 | 114 | 8.44 |
| 5 | Eluru | 34,958 | 673 | 11.75 | 14692 | 186 | 2.56 |
| TOTAL | | 264,913 | 1,735 | 52 | 75,137 | 637 | 13 |

| LT Court cases involving the Licensee as on 30-09-2018 | | | |
|---|--------------------|--------------|----------------------------------|
| S. No. | Name of the Circle | No. of Cases | Amount involved in Rs. Lakhs. |
| 1 | Srikakulam | 10 | 106.76 |
| 2 | Vizianagaram | 6 | 12.59 |
| 3 | Visakhapatnam | 7 | 14.73 |
| 4 | Rajamahendravaram | 19 | 50.67 |
| 5 | Eluru | 22 | 106.93 |
| APEPDCL | | 64 | 291.68 |

| HT Court cases involving the Licensee as on 30-09-2018 | | | |
|---|--------------------|--------------|----------------------------------|
| S. No. | Name of the Circle | No. of Cases | Amount involved in Rs. Lakhs. |
| 1 | Srikakulam | 28 | 1811.45 |
| 2 | Vizianagaram | 19 | 4761.39 |
| 3 | Visakhapatnam | 50 | 21216.76 |
| 4 | Rajamahendravaram | 88 | 4996.75 |
| 5 | Eluru | 76 | 16470.75 |
| APEPDCL | | 261 | 49257.10 |

| SCHEME-WISE DETAILS OF CAPITAL EXPENDITURE FOR FYs 2017-18 & 2018-19 | | | |
|---|--|----------------------------|---|
| Item No. | Name of the scheme | Expenditure 2017-18 | Expenditure 2018-19 (Up to 30.09.18) |
| 1 | Release of Services | 264.520 | 150.410 |
| 2 | Part - A : IT Works | 3.270 | 0.000 |
| 3 | SI-Conductors & Lines | 8.170 | 0.000 |
| 4 | SI - VCBs | 1.750 | 4.050 |
| 5 | SI - Meters | 69.660 | 0.000 |
| 6 | SI - Power Transformers | 18.330 | 1.000 |
| 7 | SI - Distribution Transformers | 15.740 | 17.610 |
| 8 | Solar Pumpsets,AGDSM | 68.790 | 7.910 |
| 9 | HVDS (Phase-3) for Rajahmundry | 0.570 | 10.030 |
| 10 | HVDS (Phase-3) for SKL, VZM, VSP circles | 0.000 | 0.000 |
| 11 | HVDS (Phase-4) for Rajahmundry | 0.060 | 63.770 |
| 12 | HVDS (Phase-5) for Eluru | 59.800 | 0.000 |
| 13 | DDG | 14.500 | 0.000 |
| 14 | IPDS,DDUGJY | 314.490 | 0.000 |
| 15 | World Bank (Power For All) | 10.400 | 0.000 |
| 16 | P:IE SC/ST colonies | 5.010 | 15.560 |
| 17 | New 33/11 KV SS | 5.440 | 120.200 |
| 18 | T&D Civil Works | 26.830 | 0.710 |
| 19 | T&D Other Works, MRT | 64.740 | 0.150 |
| 20 | T&D IT Works | 0.350 | 8.110 |
| 21 | Pumpset Energisation,AGDSM | 28.190 | 41.230 |
| 22 | SCADA for Visakhapatnam Dist. | 5.010 | 0.700 |
| 23 | 33 KV Interlinking Lines | 2.100 | 32.150 |
| Grand Total | | 987.720 | 473.590 |

Details of LT Arrears of consumers over Rs. 50000 pending for over 6 months AS ON 30.09.18

| Sl. No | Particulars | SKLM | | VZM | | VSP | | RJY | | ELR | | TOTAL | |
|--------|----------------------------|-------------|----------------------|-------------|----------------------|-------------|----------------------|-------------|----------------------|-------------|----------------------|--------------|----------------------|
| | | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) |
| 1 | Court Cases/Disputed /BIFR | 10 | 106.76 | 6 | 12.59 | 7 | 14.73 | 19 | 50.67 | 22 | 106.93 | 64 | 291.68 |
| 2 | Govt./ Local bodies | 4310 | 6282.30 | 1436 | 1666.50 | 4900 | 10775.38 | 5771 | 18702.76 | 6180 | 26087.15 | 22597 | 63514.10 |
| 3 | UDC Services | 5 | 5.53 | 7 | 7.27 | 5 | 9.65 | 36 | 29.58 | 19 | 23.89 | 72 | 75.92 |
| 4 | Dismantaled / Bill Stopped | 27 | 34.30 | 28 | 33.20 | 30 | 42.41 | 78 | 78.52 | 37 | 86.97 | 200 | 275.40 |
| 5 | Instalments/Others | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| | TOTAL | 4352 | 6428.89 | 1477 | 1719.56 | 4942 | 10842.17 | 5904 | 18861.53 | 6258 | 26304.95 | 22933 | 64157.10 |

Details of HT Arrears of consumers over Rs. 50000 pending for over 6 months AS ON 30.09.18

| Sl. No | Particulars | SKLM | | VZM | | VSP | | RJY | | ELR | | TOTAL | |
|--------|----------------------------|-----------|----------------------|-----------|----------------------|-----------|----------------------|------------|----------------------|------------|----------------------|------------|----------------------|
| | | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) | SCs | Amount (Rs.in lakhs) |
| 1 | Court Cases/Disputed /BIFR | 28 | 1811.45 | 19 | 4761.39 | 50 | 21216.76 | 88 | 4996.75 | 76 | 16470.75 | 261 | 49257.10 |
| 2 | Govt./ Local bodies | 30 | 224.57 | 11 | 360.28 | 9 | 185.39 | 53 | 1600.96 | 32 | 39357.20 | 135 | 41728.39 |
| 3 | UDC Services | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 4 | Dismantaled / Bill Stopped | 14 | 87.42 | 10 | 1974.42 | 23 | 583.30 | 37 | 733.45 | 9 | 70.80 | 93 | 3449.40 |
| 5 | Instalments/Others | 2 | 5.93 | 8 | 6888.22 | 8 | 8072.14 | 0 | 0.00 | 0 | 0.00 | 18 | 14966.29 |
| | TOTAL | 74 | 2129.38 | 48 | 13984.31 | 90 | 30057.59 | 178 | 7331.16 | 117 | 55898.75 | 507 | 109401.18 |

CIRCLE WISE SAIDI FOR THE FY 2017-18:

| APEPDCL-CIRCLE WISE SAIDI ACTUALS in Hrs. FY 2017-18 | | | | | | | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|------------------------|
| CIRCLE | APR'17 | MAY'17 | JUN'17 | JUL'17 | AUG'17 | SEP'17 | OCT'17 | NOV'17 | DEC'17 | JAN'18 | FEB'18 | March'18 | Average 2017-18 |
| SRIKAKULAM | 6.54 | 12.47 | 14.74 | 9.85 | 11.64 | 9.31 | 6.44 | 5.52 | 5.75 | 3.12 | 3.93 | 7.16 | 8.04 |
| VIZIANAGARAM | 4.86 | 19.64 | 18.19 | 10.73 | 15.33 | 11.86 | 10.23 | 7.97 | 6.29 | 4.37 | 4.98 | 8.43 | 10.24 |
| VISAKHAPATNAM | 3.39 | 6.13 | 6.43 | 4.02 | 5.75 | 4.93 | 2.61 | 1.95 | 2.48 | 1.96 | 2.05 | 2.73 | 3.70 |
| RAJAHMUNDRY | 8.74 | 12.45 | 17.97 | 11.38 | 7.4 | 9.89 | 5.65 | 4.02 | 3.92 | 3.74 | 5.54 | 6.23 | 8.08 |
| ELURU | 8.59 | 16.19 | 19.98 | 15.79 | 8.69 | 9.43 | 6.65 | 4.31 | 7.08 | 4.11 | 6.05 | 6.87 | 9.48 |
| APEPDCL | 6.42 | 11.40 | 15.35 | 10.42 | 8.73 | 8.78 | 5.81 | 4.23 | 4.83 | 3.4 | 4.57 | 5.94 | 7.49 |

CIRCLE WISE SAIDI FOR 2018-19:

| APEPDCL-CIRCLE WISE SAIDI ACTUALS in Hrs. FY 2018-19 | | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|------------------------|
| CIRCLE | APR'18 | MAY'18 | JUN'18 | JUL'18 | AUG'18 | SEP'18 | Average 2018-19 |
| SRIKAKULAM | 24.20 | 17.18 | 14.88 | 10.88 | 6.35 | 12.41 | 14.32 |
| VIZIANAGARAM | 25.61 | 16.22 | 15.12 | 8.24 | 5.83 | 11.49 | 13.75 |
| VISAKHAPATNAM | 6.82 | 6.34 | 4.46 | 3.2 | 1.76 | 4.64 | 4.54 |
| RAJAHMUNDRY | 12.23 | 17.53 | 15.11 | 11.21 | 6.96 | 9.55 | 12.10 |
| ELURU | 14.82 | 19.72 | 16.08 | 13.91 | 10.4 | 11.34 | 14.38 |
| APEPDCL | 14.71 | 15.24 | 12.83 | 9.6 | 6.34 | 9.43 | 11.36 |

CIRCLE WISE SAIFI FOR FY 2017-18:

| APEPDCL-CIRCLE WISE SAIFI ACTUALS in Nos.FY 2017-18 | | | | | | | | | | | | | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|-----------------|
| CIRCLE | APR'17 | MAY'17 | JUN'17 | JUL'17 | AUG'17 | SEP'17 | OCT'17 | NOV'17 | DEC'17 | JAN'18 | FEB'18 | March'18 | Average 2017-18 |
| SRIKAKULAM | 13 | 20 | 23 | 19 | 22 | 17 | 13 | 11 | 10 | 7 | 7 | 11 | 14 |
| VIZIANAGARAM | 10 | 25 | 26 | 19 | 23 | 17 | 15 | 7 | 10 | 7 | 7 | 12 | 15 |
| VISAKHAPATNAM | 3 | 7 | 9 | 5 | 7 | 7 | 4 | 6 | 3 | 6 | 2 | 4 | 5 |
| RAJAHMUNDRY | 12 | 19 | 24 | 17 | 13 | 15 | 11 | 6 | 7 | 6 | 9 | 10 | 12 |
| ELURU | 13 | 23 | 28 | 22 | 16 | 15 | 12 | 8 | 9 | 7 | 9 | 11 | 14 |
| APEPDCL | 10 | 18 | 22 | 16 | 14 | 14 | 10 | 8 | 7 | 7 | 7 | 9 | 12 |

CIRCLE WISE SAIFI FOR FY 2018-19:

| APEPDCL-CIRCLE WISE SAIFI ACTUALS in Nos. FY 2018-19 | | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------------|
| CIRCLE | APR'18 | MAY'18 | JUN'18 | JUL'18 | AUG'18 | SEP'18 | Average 2018-19 |
| SRIKAKULAM | 27 | 22 | 23 | 20 | 12 | 21 | 21 |
| VIZIANAGARAM | 29 | 21 | 20 | 15 | 10 | 19 | 19 |
| VISAKHAPATNAM | 8 | 7 | 5 | 5 | 3 | 6 | 6 |
| RAJAHMUNDRY | 16 | 19 | 20 | 19 | 12 | 14 | 17 |
| ELURU | 19 | 23 | 23 | 23 | 16 | 16 | 20 |
| APEPDCL | 18 | 18 | 18 | 16 | 11 | 14 | 16 |

10 Cost of Service Methodology for 2019-20

The Hon'ble APERC vide the Retail Supply Tariff Order for FY 2018-19, paragraph 259, has directed the Licensees to study the Cost of Service (COS) models, so that the COS shall be based on more precise methods using verifiable, measurable and quantifiable data and submit a report on such study for consideration of the same in future, duly taking the views of the stakeholders.

The Licensee humbly submits that the above study has been taken up and going to submit a report shortly. However for the purpose of this filing, the old methodology previously followed by the Licensee is adopted for the ensuing financial year.

10.1 Category wise Load Curves

- Load Shapes of different categories of consumers are constructed based on the hourly demand data from feeder samples.
 - Data is collected from sample feeders from all the circles for each category
 - From each sample feeder hourly data was collected for upto 10 days per quarter.
 - The samples include normal working days as well as non-working days like Sundays, Festivals and other Holidays.
- Based on the collected feeder samples, load curve for each category has been arrived.

10.2 Estimation of Coincident and Non-Coincident Demand for each Category

- Demand at customer voltage level for FY 2019-20 is estimated using the load curves and FY 2019-20 projected sales of each category.
- Hourly demand for each category is grossed up with respective T&D losses to arrive at the demand contributed by each category to the grid demand.
- Maximum Demand of each category is considered as Non-Coincident Demand.
- Based on the hourly demands of each category at the grid level the peak time is arrived.
- Corresponding demand contributed by each category during the peak hour is considered as Coincident Demand.

Based on the above methodology Coincident Demand (MW) and Non-Coincident Demand (MW) for APEPDCL for FY 2019-20

| S.No. | Category | Coincident Demand | Non-Coincident Demand |
|---------------------|---|-------------------|-----------------------|
| | | (MW) | (MW) |
| Low Tension Supply | | | |
| 1 | Domestic - Category I | 605 | 894 |
| 2 | Non-domestic Supply - Category II | 155 | 191 |
| 3 | Industrial Supply - Category III | 262 | 265 |
| 4 | Cottage Industries - Category IV | 0 | 0 |
| 5 | Irrigation and Agriculture - Category V | 599 | 601 |
| 6 | Public Lighting - Category VI | 33 | 43 |
| 7 | General Purpose - Category VII | 10 | 13 |
| 8 | Temporary - Category VIII | 0 | 0 |
| | Total Low Tension Supply | 1,663 | 2,006 |
| High Tension Supply | | | |
| 9 | Industrial Segregated - Cat- I (11KV) | 193 | 193 |
| 10 | Industrial Segregated - Cat- I (33KV) | 233 | 238 |
| 11 | Indusl. Segregated - Cat-I (220/132KV) | 487 | 514 |
| 12 | Indusl. Non-Segregated - Cat- II (11KV) | 62 | 67 |
| 13 | Indusl. Non-Segregated - Cat- II (33KV) | 21 | 26 |
| 14 | Indusl. Non-Segre - Cat-II (220/132KV) | 7 | 8 |
| 15 | Irrigation and Agriculture - Cat-IV (11KV) | 6 | 6 |
| 16 | Irrigation and Agriculture - Cat-IV (33KV) | 7 | 8 |
| 17 | Irrigation and Agriculture - Cat-IV (132KV) | 150 | 165 |
| 18 | Railway Traction - Cat V (132KV) | 87 | 88 |
| 19 | Colony Consumption (11KV) | 2 | 3 |
| 20 | Colony Consumption (33KV) | 2 | 2 |
| 21 | Temporary | 1 | 2 |
| 22 | RESCOS Cat VI | 50 | 64 |
| | Total High Tension Supply | 1306 | 1385 |
| | Total Demand | 2,969 | 3,391 |

10.3 Allocation of expenditure to consumer categories

- Power Purchase Cost Allocation
 - As fixed costs of power purchase is driven primarily by the system peak demand, hence fixed cost component of Power Purchase is allocated to various categories based on the Coincident Demand.
 - Variable costs are allocated based on the energy requirement of each category
- Transmission Cost Allocation
 - Transmission Costs including PGCIL Costs, SLDC Costs and ULDC Charges is dependent on the Non-Coincident Demand and hence are allocated in proportion to the Non-Coincident Demand of each category.

- **Distribution Cost Allocation**
 - Distribution Cost consists of Employee Expenses, Interest and Depreciation costs of Distribution Assets. These costs are dependent on both the Non-coincident Demand of each category as well as on the number of customers.
 - 80% of the distribution cost of the licensee is allocated based on the Non-Coincident Demand
 - 20% of the distribution costs is allocated in the proportion of number of consumers in each category.
- **Interest on Security Deposit**
 - As Consumer Security Deposit is dependent on the energy consumed by each category, interest on CSD is allocated based on the energy requirement of each category
- **Supply Margin**
 - Supply Margin is linked to the Distribution Assets. Hence the Supply Margin is allocated in the proportion of Non-Coincident Demand.
- **Other Costs**
 - Other costs are incurred on distribution assets and hence is allocated in proportion to the Non-Coincident Demand of each category.

10.4 Allocation of Expenditure of APEPDCL for FY 2019-20

| Cost Description | Demand Related Expenditure | Energy Related Expenditure | Consumer Related Expenditure | Total Expenditure |
|---|----------------------------|----------------------------|------------------------------|-------------------|
| | (Rs Crs) | (Rs Crs) | (Rs Crs) | |
| Power Purchase Cost | 2687.08 | 7549.22 | 0.00 | 10236.30 |
| Transmission + PGCIL + ULDC + SLDC Costs | 1163.75 | 0.00 | 0.00 | 1163.75 |
| Distribution Cost | 1670.00 | 0.00 | 311.00 | 1981.00 |
| Supply Margin | 10.03 | 0.00 | 0.00 | 10.03 |
| Interest on Consumption Deposit | 0.00 | 126.22 | 0.00 | 126.22 |
| Others | 223.01 | 0.00 | 0.00 | 223.01 |
| Total | 5753.87 | 7675.45 | 311.00 | 13740.32 |

10.5 Based on the above cost allocation, the category wise cost of service for APEPDCL is summarized below

| S.No. | Category | Sales | Allocated Expenditure | Cost of Service |
|-------|---|------------------|-----------------------|-----------------|
| | | (MU) | (Rs. Crs.) | (Rs./kwh) |
| 1 | Domestic - Category I | 5,670.71 | 3,748.17 | 6.61 |
| 2 | Non-domestic Supply - Category II | 1,124.09 | 770.31 | 6.85 |
| 3 | Industrial Supply - Category III | 1,816.59 | 1,170.51 | 6.44 |
| 4 | Cottage Industries - Category IV | 2.75 | 1.85 | 6.73 |
| 5 | Irrigation and Agriculture - Category V | 2,280.67 | 1,581.55 | 6.93 |
| 6 | Public Lighting - Category VI | 236.61 | 175.72 | 7.43 |
| 7 | General Purpose - Category VII | 70.08 | 53.81 | 7.68 |
| 8 | Temporary - Category VIII | 0.81 | 0.59 | 7.34 |
| | Total Low Tension Supply | 11,202.31 | 7,502.51 | 6.70 |
| 9 | Industrial Segregated - Cat- I (11KV) | 1,515.99 | 936 | 6.17 |
| 10 | Industrial Segregated - Cat- I (33KV) | 1,870.18 | 1040 | 5.56 |
| 11 | Indusl. Segregated - Cat-I (220/132KV) | 4,355.55 | 2290 | 5.26 |
| 12 | Indusl. Non-Segregated - Cat- II (11KV) | 463.80 | 335 | 7.22 |
| 13 | Indusl. Non-Segregated - Cat- II (33KV) | 195.86 | 121 | 6.19 |
| 14 | Indusl. Non-Segre - Cat-II (220/132KV) | 61.87 | 45 | 7.23 |
| 15 | Irrigation and Agriculture - Cat-IV (11KV) | 44.30 | 41 | 9.24 |
| 16 | Irrigation and Agriculture - Cat-IV (33KV) | 57.24 | 59 | 10.30 |
| 17 | Irrigation and Agriculture - Cat-IV (132KV) | 1,289.19 | 751 | 5.82 |
| 18 | Railway Traction - Cat V (132KV) | 710.89 | 412 | 5.80 |
| 19 | Colony Consumption (11KV) | 15.47 | 11 | 7.32 |
| 20 | Colony Consumption (33KV) | 11.21 | 7 | 6.27 |
| 21 | Temporary | 10.82 | 9 | 8.21 |
| 22 | RESCOS Cat VI | 363.49 | 181 | 4.98 |
| | Total High Tension Supply | 10,965.87 | 6,237.81 | 5.69 |
| | Total Demand | 22,168.18 | 13,740.32 | 6.20 |

11 Tariff Proposals

Licensees proposed to continue with current tariffs as approved by Hon'ble Commission during FY 2018-19 for all categories. This has benefited all consumers (1.76 Cr.) of the state of Andhra Pradesh. Total number of consumers in the APEPDCL are 63Lakhs.

However, following changes have been proposed:

11.1 LT IV (A) Cottage Industries:

For dhobi ghats the applicable demand charge is Rs. 20/kW/month with energy charge of Rs. 3.75/unit as per ARR Tariff Order 2018-19. However, the Licensee is providing free supply to these consumers based on G.O.Rt. No. 75 dated 27th June, 2018, wherein the Government directed the Licensee to extend all benefits on par with agriculture connections (free category) to extend helping hand and as an encouragement to the washerman in the state.

11.2 LT V (C) Others: Rural Horticulture Nurseries:

For nursery farmers the applicable demand charge is Rs. 20/HP/month with energy charge of Rs. 1.50 per unit for consumers with connected load upto 5 HP and Rs. 3.70 per unit for consumers with connected load upto 25 HP as per ARR Tariff Order 2018-19 is. However, the Licensee is providing free supply to these consumers based on G.O.Rt. No. 39 dated 14th March, 2018, directed the Licensee to extend all benefits on par with agriculture connections (free category) to extend helping hand and as an encouragement to the nursery farmers in the state.

11.3 LT II (E) and HT II (E): Electric Vehicles EV's /Charging stations:

As per the directions of the GoAP , the Licensee proposes to decrease the Energy Charges and no Time of Day Tariff as given below:

| Category | Current Tariff (Rs. Per kWh/kVAh) | | | Proposed Tariff (Rs. Per kWh/kVAh) | | |
|--|-----------------------------------|--|---------------------------|------------------------------------|--|---------------------------|
| | Energy Charges | ToD (6 am to 10:00 am & 6:00 pm to 10:00 pm) | ToD (10:00 pm to 6:00 am) | Energy Charges | ToD (6 am to 10:00 am & 6:00 pm to 10:00 pm) | ToD (10:00 pm to 6:00 am) |
| LT-II (E) and HT-II (E): Electric Vehicles (EVs)/Charging Stations | 6.95 | 8.00 | 5.95 | 5.95 | 7.00 | 4.95 |

11.4 HT V: Railway Traction:

Licensee proposes increase in tariff for Railway Traction (HT-V).

The Licensee proposes an increase in Demand charges and Energy Charges as given below:

| Category | Current Tariff | | Proposed Tariff | |
|-------------------------|----------------|----------------|-----------------|----------------|
| | Energy Charges | Demand charges | Energy Charges | Demand charges |
| | Rs./kVAh | Rs./kVA/month | Rs./kVAh | Rs./kVA/month |
| HT-V : Railway Traction | 3.55 | 300 | 3.95 | 390 |

Note: All other conditions are as per the Chapter-XII of Retail Supply Tariff Schedule for FY 2018-19 unless and otherwise mentioned in this document.

12 Cross Subsidy Surcharge for FY 2019-20

The licensee humbly submits the Cross Subsidy Surcharge computation for FY 2019-20 as per the methodology suggested in the National Tariff Policy, 2016 (NTP-2016) and considering the tariff schedule as per the Filing of Tariff Proposals by the licensee.

As per section 8.5 of NTP-2016, Cross Subsidy Surcharge formula is as below:

$$S = T - [C / (1 - L/100) + D + R], \text{ where}$$

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets

Above formula may not work for all distribution licensees, particularly for those having power deficit, the State Regulatory Commissions, while keeping overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

In accordance with the above formula, the licensee computed Sub-category-wise Cross Subsidy Surcharge based on the filed tariffs, as applicable, for the FY 2019-20.

a) Computation of “C”

Computation of “C” for APEPDCL is based on the filed average cost of power purchase by the licensee.

$$C = \text{Average Power Purchase Cost} = \text{Total Cost of Power Purchase} / \text{Total Power Purchase Quantity}$$

| Particulars | Power Purchase (MU) | Total Cost (In Rs. Cr.) | Average Cost of power purchase (Rs. / Unit) |
|-------------|---------------------|-------------------------|---|
| APEPDCL | 24605.88 | 10236.30 | 4.16 |

b) Computation of “D”

Step 1: Applicable wheeling charge at various voltage levels as approved by the Honourable Commission and PGCIL charges as filed

| Network | (132kV and above) (Rs./kVA/month) | 33kV (Rs./kVA/month) | 11kV (33kV included) (Rs./kVA/month) |
|------------------------------------|--------------------------------------|-------------------------|---|
| Transmission / Wheeling Charges | 121.81 | 46.00 | 383.00 |

The PGCIL charges as filed by the licensee is as follows:

| Network | PGCIL Charges (Rs. Cr.) | Total sales FY 2019-20 (MU) |
|---------------|-------------------------|-----------------------------|
| PGCIL Network | 507.20 | 22168.18 |

Step 2: Conversion of wheeling charges and transmission charges to Rs/unit values considering a load factor of 100% using the formula: (Wheeling Charge/ (24*30*100%)) for wheeling charges and (PGCIL Charges*10/Total Sales) for PGCIL charges

| Network | PGCIL Charges (Rs/kWh) | 132kV and above(Rs/kWh) | 33kV (Rs/kWh) | 11kV (33kV included) |
|---------------------------------|------------------------|-------------------------|---------------|----------------------|
| Transmission / Wheeling Charges | 0.23 | 0.21 | 0.08 | 0.66 |

Step 3: Computation of wheeling charges and transmission charges at relevant voltage level based on the above values is

| Network | (132kV and above) (a) | 33kV (b) | 11kV (c) | Wheeling Charge + Transmission Charge = "D" = (a+b+c) |
|-----------------------------|-----------------------|----------|----------|---|
| Up to 11kV Level | 0.44 | 0 | 0.66 | 1.09 |
| Up to 33kV Level | 0.44 | 0.08 | 0 | 0.52 |
| Up to 132kV and above Level | 0.44 | 0 | 0 | 0.44 |

c) Computation of "L"

Step 1: Applicable loss at various voltage levels as filed

| Network | PGCIL Loss | APTransco (132kV and above) | 33kV | 11kV |
|----------|------------|-----------------------------|-------|-------|
| Losses % | 3.27% | 4.00% | 3.28% | 2.81% |

Step 2: Computation of 132kV and above loss

| | Units to be handled (MU) | Loss % | Loss in MU |
|--|--------------------------|--------|------------|
| PGCIL | 5641.97 | 3.27% | 184 |
| AP Transco | 24,421 | 3.27% | 799 |
| Total EHV | | | 983 |
| EHV Loss % = Total EHV Loss / Total PP Requirement | | | 4.00% |

Step 3: Computation of system losses at relevant voltage level based on the above values is

| Network | 132kV and above (a) | 33kV (b) | 11kV (c) | System Loss "L" = {1- (1 - a)*(1-b)*(1-c)} |
|------------------------------------|---------------------|----------|----------|--|
| For 11kV Consumer | 4.00% | 2.81% | 3.28% | 9.75% |
| For 33kV Consumer | 4.00% | 2.81% | 0.00% | 6.69% |
| For EHT (132kV and above) Consumer | 4.00% | 0.00% | 0.00% | 4.00% |

d) Computation of “R”

The cost of carrying regulatory asset is considered to be zero

e) Computation of “T”

As per NTP 2016, “T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation”

Tariff payable for each of the relevant category is a combination of Demand Charge and Energy Charge. Other charges like Customer Charge, Minimum Charge, and NTI have been excluded from the calculation of Average Realization.

The category-wise CSS computation for APEPDCL is as follows.

| Category | T | C | D | L | R | $S = T - (C / (1 - L / 100) + D + R)$ | $A = 0.2 * T$ | $CSS = \min (S, A)$ |
|--|--|---------------------------------|------------------|-----------------|--------------------------|---------------------------------------|-------------------------------------|---------------------|
| | Revenue Realization (Only Demand & Energy Charges) | Per Unit Cost of Power Purchase | Wheeling Charges | Applicable Loss | Cost of Regulatory Asset | CSS (Rs./Unit) | 20 % of Average Revenue Realization | CSS (Rs./Unit) |
| High Tension | | | | | | | | |
| HT Category at 11 kv | | | | | | | | |
| HT I (A): General | 8.20 | 4.16 | 1.09 | 0.10 | - | 2.50 | 1.64 | 1.64 |
| HT I (C): Aquaculture and Animal Husbandry | 3.98 | 4.16 | 1.09 | 0.10 | - | - | 0.80 | - |
| HT I (D): Poultry Hatcheries and Poultry Feed Mixing Plants | 7.93 | 4.16 | 1.09 | 0.10 | - | 2.23 | 1.59 | 1.59 |
| HT II: Others | 11.00 | 4.16 | 1.09 | 0.10 | - | 5.30 | 2.20 | 2.20 |
| HT II (B): Religious Places | 5.23 | 4.16 | 1.09 | 0.10 | - | - | 1.05 | - |
| HT II (C): Function Halls/Auditoriums | 11.77 | 4.16 | 1.09 | 0.10 | - | 6.07 | 2.35 | 2.35 |
| HT II (F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 11.77 | 4.16 | 1.09 | 0.10 | - | 6.07 | 2.35 | 2.35 |
| HT III: Public Infrastructure and Tourism | 9.77 | 4.16 | 1.09 | 0.10 | - | 4.07 | 1.95 | 1.95 |
| HT IV Government LIS | 5.82 | 4.16 | 1.09 | 0.10 | - | 0.12 | 1.16 | 0.12 |
| HT IV CPWS | 4.89 | 4.16 | 1.09 | 0.10 | - | - | 0.98 | - |
| HT VI: Townships & Residential Colonies | 6.84 | 4.16 | 1.09 | 0.10 | - | 1.14 | 1.37 | 1.14 |
| HT VII: Green Power | - | | | | | | | |
| HT VIII: Temporary | 14.43 | 4.16 | 1.09 | 0.10 | - | 8.72 | 2.89 | 2.89 |
| Category: RESCOs | 0.88 | 4.16 | 1.09 | 0.10 | - | - | 0.18 | - |
| | | | | | | | | |
| HT Category at 33 kv | | | | | | | | |
| HT I (A): General | 7.19 | 4.16 | 0.52 | 0.07 | - | 2.21 | 1.44 | 1.44 |
| HT I (B): Energy Intensive Industries | 5.37 | 4.16 | 0.52 | 0.07 | - | 0.40 | 1.07 | 0.40 |
| HT I (D) : Poultry Hatcheries and Poultry Feed Mixing Plants | 6.19 | 4.16 | 0.52 | 0.07 | - | 1.22 | 1.24 | 1.22 |
| HT II: Others | 9.56 | 4.16 | 0.52 | 0.07 | - | 4.58 | 1.91 | 1.91 |
| HT II (F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 11.77 | 4.16 | 0.52 | 0.07 | - | 6.80 | 2.35 | 2.35 |
| HT III: Public Infrastructure and Tourism | 8.14 | 4.16 | 0.52 | 0.07 | - | 3.17 | 1.63 | 1.63 |
| HT IV Government LIS | 5.82 | 4.16 | 0.52 | 0.07 | - | 0.85 | 1.16 | 0.85 |
| HT VI: Townships & Residential Colonies | 6.62 | 4.16 | 0.52 | 0.07 | - | 1.64 | 1.32 | 1.32 |
| HT VIII: Temporary | 22.10 | 4.16 | 0.52 | 0.07 | - | 17.13 | 4.42 | 4.42 |
| | - | | | | | | | |
| HT Category at 132 kv | | | | | | | | |
| HT I (A): General | 7.68 | 4.16 | 0.44 | 0.04 | - | 2.91 | 1.54 | 1.54 |
| HT I (B): Energy Intensive Industries | 4.95 | 4.16 | 0.44 | 0.04 | - | 0.18 | 0.99 | 0.18 |
| HT II: Others | 9.79 | 4.16 | 0.44 | 0.04 | - | 5.02 | 1.96 | 1.96 |
| HT II (F) : Startup Power for Captive Generating plants , Co-generating plants and Renewable Generation Plants | 11.77 | 4.16 | 0.44 | 0.04 | - | 7.00 | 2.35 | 2.35 |
| HT IV Government LIS | 5.82 | 4.16 | 0.44 | 0.04 | - | 1.05 | 1.16 | 1.05 |
| HT V: Railway Traction | 5.43 | 4.16 | 0.44 | 0.04 | - | 0.66 | 1.09 | 0.66 |

13 Additional Surcharge

The Licensee filed for Additional Surcharge of Rs. 0.95 per unit in petition for ARR of FY 2018-19. The Hon'ble Commission disallowed it with following comments:

“the Licensees have not been able to demonstrate the above conclusively, as the parameters for grant of additional surcharge prescribed by section 42(4) read with clause 8.5.4 of the National Tariff Policy, 2016 are not satisfactorily established to exist to sustain such a claim. Therefore, the Commission is not rendering any decision on the eligibility or otherwise of the licensees to collect such additional surcharge from a consumer or any class of consumers for FY2018-19 in the present consideration. However, the licensees are at liberty to move an appropriate application for the purpose in accordance with law sufficiently supported by the relevant data and material which may be considered on merits.”

In view of the above, the Licensee seeks liberty from the Hon'ble Commission from filing of the Additional Surcharge in the ARR petition for FY 2019-20. Further, the Licensee also requests the Hon'ble Commission to determine the methodology for determination of the Additional Surcharge. Based on the methodology, the Licensee shall file the Additional Surcharge in supplementary filings.

14 Prayer

Based on the information available, the Applicant has made sincere efforts to comply with the Regulation of the Honourable Commission and discharge its obligations to the best of its abilities. However, should any further material information become available in the near future, the Applicant shall file such additional information and consequently amend/ revise the application.

In the aforesaid facts and circumstances, the Applicant requests that this Honourable Commission may be pleased to:

- a. Take the above ARR, Tariff Proposal along with Cross Subsidy Surcharge Applications of APEPDCL on record and treat it as complete;
- b. Grant suitable opportunity to APEPDCL within a reasonable time frame to file additional material information that may be subsequently available;
- c. Consider and approve APEPDCL's ARR and Tariff application including all requested regulatory treatments in the filing;
- d. Pass such order as the Honourable Commission may deem fit and proper in the facts and circumstances of the case.