



TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

**5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul,
Hyderabad 500004.**

TARIFF ORDER

Retail Supply Tariffs for FY 2016-17

In the Supply Areas of

Southern Power Distribution Company of Telangana Limited (TSSPDCL)

And

Northern Power Distribution Company of Telangana Limited (TSNPDCL)

Dated 23rd June, 2016

(Tariffs applicable from 1st July, 2016 to 31st March, 2017)

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TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

HYDERABAD

Present

Sri Ismail Ali Khan, Chairman
Sri H. Srinivasulu, Member
Sri L. Manohar Reddy, Member

Dated 23rd June, 2016

O.P.No. 06 of 2016

Southern Power Distribution Company of Telangana Limited (TSSPDCL)

O.P. No. 07 of 2016

Northern Power Distribution Company of Telangana Limited (TSNPDCL)

... Applicants

The Southern Power Distribution Company of Telangana Limited (TSSPDCL) and Northern Power Distribution Company of Telangana Limited (TSNPDCL) filed the Petitions under Sections 64 of the Electricity Act, 2003, before the Telangana State Electricity Regulatory Commission (TSERC or the Commission) on 8th March, 2016 for approval of Aggregate Revenue Requirement (ARR) and Tariff proposal for Retail Supply Business for FY 2016-17. The Petitions were admitted by the Commission and assigned O.P. Numbers 06 of 2016 & 07 of 2016 respectively. The Commission held the public hearings on the Petitions at Hyderabad (TSSPDCL) on 06-04-2016 & 07-04-2016 and Karimnagar (TSNPDCL) on 09-04-2016. The Commission in exercise of the power vested in it by the Electricity Act, 2003 and Andhra Pradesh Electricity Regulatory Commission (Terms & Conditions for determination of tariff for Wheeling and Retail Sale of electricity) Regulation No. 4 of 2005, adopted by TSERC vide its Regulation No. 1 of 2014, and after taking into consideration all the submissions made by Petitioners, all the suggestions and objections of the public, responses of Licensees, issues raised during the Public Hearing, and all other relevant material, issued the following common Order.

Chapter-1: Introduction

- 1.1 This Commission having been established under Section 82 (1) of the Electricity Act, 2003 (Herein after referred to as ‘The Act’) is required to exercise the powers and functions vested in it in terms of Section 86 and Section 62(1) of the Act to determine the tariff for (1) Supply of electricity by a generating company to a Distribution Licensee (2) Transmission of electricity (3) Wheeling of electricity and (4) Retail Sale of Electricity as the case may be within the state of Telangana.
- 1.2 Consequent upon formation of the state of Telangana and its coming into being, the Government of Telangana established the commission vide G. O. M/s. No. 3 dated 26.07.2014 and constituted the Commission vide G. O. M/s. No. 13 dated 22.10.2014 by appointing the Chairman and the Members. The Commission after it became functional on 03.11.2014 had issued its first regulation, Regulation No. 1 of 2014, on 10.12.2014 being Telangana State Electricity Regulatory Commission (Adoption) Regulation, 2014. Clause 2 of the Regulation states as follows:
- “All regulations, decisions, directions or orders, all the licensees and practice directions issued by the erstwhile Andhra Pradesh Electricity Regulatory Commission (Regulatory Commission for States of Andhra Pradesh and Telangana) as in existence as on the date of the constitution of the Telangana State Electricity Regulatory Commission and in force, shall mutatis-mutandis apply in relation to the stakeholders in electricity in the State of Telangana including the Commission and shall continue to have effect until duly altered, repealed or amended, any of Regulation by the Commission with effect from the date of notification as per Notification issued by the Government of Telangana in G.O.Ms.No.3 Energy(Budget) Department, dt.26-07-2014 constituting the Commission.”*
- 1.3 In accordance with the above Regulation, all the regulations framed by the erstwhile APERC will continue to apply for the state of Telangana. The two (2) Distribution Companies (hereinafter referred to as the “Distribution Licensees” or “Licensees” or “DISCOMS”) namely, the Northern Power Distribution Company of Telangana State Limited (TSNPDCL or NPDCL) and the Southern Power Distribution Company of Telangana State Limited (TSSPDCL or SPDCL) filed their Aggregate Revenue Requirement (ARR) and tariff petitions for Retail Supply Business for FY 2016-17 on 8th March, 2016.
- 1.4 In exercise of the powers conferred by clauses (a) (c) and (d) of sub-section (1) of section 62 and clause (a) of sub-section (1) of section 86 of the Act, 2003 read with clause 8 of Regulation No. 4 of 2005 being the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for the Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulations, 2005 and all other powers hereunto enabling in that behalf and after considering the views of the State Advisory Committee meeting held on 17th March 2016 and the suggestions and objections received from the public during the public hearings held on 06th, 7th and 9th of April 2016, the Commission, hereby, passes this order determining the ARR and Retail Supply tariff in the State of Telangana.

- 1.5 In accordance with the above Act and regulations, the Commission had issued the first retail supply tariff order for the state of Telangana on 27th March 2015. Subsequently, Commission had also issued a multi-year Tariff Order for the Distribution business for third control period.

Tariff filing

- 1.6 As per provisions of Section 64 of the Act, it is incumbent upon the Licensee to make an application to the Commission for determination of tariff in such manner and upon such terms as may be specified by the Regulations framed by the Commission.
- 1.7 The Licensees have to file ARR & proposals for Retail Supply Tariff for the entire Control Period. But they sought permission from the Commission to file ARR for Retail Supply Business for FY 2015-16 on annual basis in view of the projection of energy availability, estimation of power purchase cost for the entire control period and Tariff uncertainty. The Commission, vide its letter. No. TSERC/DD (T-Engg)/T-01 of 2015/D.No.751 /15 dated 28th November 2015, had granted permission to the Licensees for filing of ARR for Retail Supply Business only for FY 2016-17.
- 1.8 Regulation 4 of 2005 lays down that the licensee is required to file tariff application on or before 30th November of each year before the Commission so as to enable the Commission to pass order within 120 days determining the tariff for the ensuing financial year beginning from 1st of April of the succeeding calendar year. Accordingly the Licensees were expected to file the necessary petitions for the approval of ARR and tariff for FY 2016-17 by 30th November 2016. However, the licensees have not filed the petitions by 30th November.
- 1.9 The Licensees have requested the Commission for extension of time for filing of ARR and Tariff proposal petitions from time to time. The main reasons stated by the licensees for seeking such extensions were the analysis of upcoming lift irrigation schemes to be energized in the ensuing year and the pending policy decisions of the State Government on (a) supply of 9 hours power to agricultural consumers in the day time, (b) takeover of loans under the Ujwal Discom Assurance Yojana (UDAY) scheme by the Government of Telangana. According to the licensees these decisions were to have a significant impact on the financials and revenue requirement of the Licensees.
- 1.10 The extensions of time for filing of ARRs were filed jointly by the licensee in S. R. Nos. 60, and 61 of 2015 and S. R. Nos. 4, 7, 9, 10 and 12 of 2016 from time to time. The Commission has granted extension of time up to 05th February, 2016. The Licensees have filed the petition for ARR retail supply tariff approval on 08th March, 2016. After careful consideration of the reasons given by the Licensees, the Commission is of the view that the delay is neither willful nor wanton, therefore, the delay in filing upto 7th February, 2015 is condoned by the Commission.

Admission of the petition

1.11 The petitions for approval of ARR and Tariff for Retail Supply Business for FY 2016-17 submitted by the Licensees were scrutinized and found to be generally in order as per the adopted regulations of TSERC vide its Regulation 1 of 2014 (Conduct of Business). The Commission admitted the filings and the same were taken on record by assigning the following Original Petition (O.P.) numbers:

- O.P.No. 6 of 2016 of TSSPDCL
- O.P.No. 7 of 2016 of TSNPDCL

1.12 The Commission directed the Licensees to issue a Public Notice for inviting the objections/suggestions on the petitions.

Data Gaps and Licensee's responses

1.13 Based on the scrutiny of the ARR and tariff proposals submitted by the Licensees, the Commission identified certain data gaps/additional information requirement in the Petition. Accordingly, following additional information/clarification from the Petitioner were sought by the Commission

- Submission of all complete forms related to ARR and Tariff in workable excel formats with formulas and linkages.
- Submission of all complete forms related to Category wise Cost of Supply in workable excel formats with formulas and linkages.
- Audited accounts for FY 2014-15 along with supplementary audit report of CAG.
- Justification for the discrepancy in numbers with reconciliation of numbers.
- Actual month wise consumer category wise sales for November 2015 to February 2016.
- Actual power purchase (MU) from each generating source for FY 2015-16 along with the corresponding power purchase cost giving the details of fixed cost, variable cost, incentive etc.
- Current Status of New Projects from which the power procurement has been proposed in FY 2016-17.
- Status of PPAs with various IPPs.
- List of all new capacity additions getting commissioned in FY 17 along with commercial operation date assumptions.
- The annual maintenance schedule for FY 2016-17 for own generation stations

- Actual power purchase bills and FCA claim bills for own generation stations for FY 2015-16.

1.14 The Licensees submitted most of the information sought by the Commission which has been considered by the Commission while analyzing the ARR for FY 2016-17.

Meeting of State Advisory Committee (SAC)

1.15 As a part of the tariff exercise, a meeting of the State Advisory Committee (SAC) was held on 17th March, 2016 to elicit views on the ARR and tariff proposals of the Licensees. The suggestions made by the members of SAC were also considered by the Commission while finalizing the Tariff Order.

Overview of stakeholder consultation process

1.16 The Licensees, as directed by the Commission, published a public notice in two English newspapers (in English), two Telugu newspapers (in Telugu) and two Urdu newspapers (in Urdu) on 10th March, 2016. The notice was to inform the general public that the licensees have filed their ARR and Tariff proposals in respect of their retail supply business for FY 2016-17 before the Commission.

1.17 The filings made by the licensees along with supporting material were made available to the public at large through the offices of the Chief General Manger and the Superintending Engineer, operation circles. The filings and supporting material were also made available on the websites of the Commission and the Licensees.

1.18 It was also notified in the public notice (Annexure O) that, objections / suggestions on the ARR filings and tariff proposals may be filed with the licensee by 30th March, 2016 with a copy marked to the Commission.

1.19 In response to the public notice, a large number of objections / suggestions were received (Annexure C) by the Commission both in writing as well as oral during the public hearing.

1.20 The Licensees were also directed to reply to all the written objections received by 5th April, 2016 by sending the same to the respective objector with a copy to the Commission before the scheduled date of public hearing by the concerned Licensee. The replies were also required to be posted on the respective websites.

1.21 The Commission has conducted the public hearings at one place in each licensee's area. The public hearings were held at Hyderabad on 06th and 7th of April, 2016 on the filings of TSSPDCL and at Karimnagar on 9th April, 2016 on the filings of TSNPDCL. During the hearings, the Licensees made a brief presentation on their respective filings and then the Commission heard the objectors desiring to be heard in person. At the hearings, apart from the registered objectors, the persons / organizations who had turned up at the venue directly were also heard and their petitions / suggestions were also considered. At the end, as directed by the Commission, the respective Licensees responded on the issues raised by the objectors

during the hearing. The licensee were directed to furnish written replies / submissions where there are issues which cannot be replied immediately.

- 1.22 The Secretary to Government, Energy Department on behalf of the Government of Telangana State has made a statement communicating the Government's commitment to provide necessary financial assistance to power sector and subsidy to the utilities in accordance of the provisions of section 65 of the Electricity Act 2003 on 07th April, 2016. It was also stated on behalf of the Government of Telangana that it intends to join the UDAY scheme in which State Government can take 75% of the total loans outstanding on the books of DISCOMs as on 30th September, 2015.
- 1.23 The Commission places on record its deep appreciation for the awareness and public spirit exhibited in the form of objections / suggestions made both in writing as well oral submission on the proposals made by the licensees. While all the views and opinions expressed by the consumers / objectors may not have been specifically reflected in this order; the Commission has made every effort to address the spirit and essence of the objections / suggestions. It also made earnest attempts to respond to them wherever necessary the issues being germane to the determination of the ARR and the tariff.

Communication with Government of Telangana State (GoTS)

- 1.24 The Commission sent a communication to the government informing that the Commission after examining each component of the filings made by the licensees had determined the Revenue Requirement for the two Discoms together at INR 26,825.41 Crores FY 2016-17. The consolidate revenue gap arrived at for both Discoms is INR 4,598.45 Crores.
- 1.25 In the letters to the GoTS, the Commission has placed the Full Cost Recovery Tariff Schedule (FCRTS) for FY 2016-17, which the licensee will have to charge in the absence of any external subsidization u/s 65 of the Electricity Act, 2003 in order to recover the Commission determined ARR. The Commission also prepared a Retail Supply Tariff Schedule (RSTS) for FY2016-17 duly considering the following.
- (A) If the RSTS is to be implemented, the Licensees shall have to be compensated by the Govt. of Telangana u/s 65 of the Electricity Act, 2003, to the extent of Rs. 4598.45 Crores for FY2016-17.
- (B) In case Govt. of Telangana wishes to further reduce tariffs for any class of consumers in the RSTS, then the consequential additional subsidy shall have to be borne by the GoTS. In the filings of licensees, the Tariff for Poultry farms under Industrial category was treated as subsidized category.
- 1.26 Further to the above, Commission after noticing the GO stating the budget provisions, issued by Govt. of Telangana, where in a budget allocation is indicated at INR 4470.10 Crores, sent another communication to the Government stating if the Govt. of Telangana wishes to restrict the subsidy amount to that of the budget allocated amount, the remaining gap will be passed on to the consumers by the Commission by increasing the customer charges on

proportionate basis except for agricultural consumers and LT Domestic Category-I(A)(i) (upto 50 units), i.e without changing the Retail Supply Tariffs.

1.27 The Commission has sent a reminder letter to the GoTS vide letter dated 17-06-2016, to communicate the consent of the GoTS by 20-06-2016 on the quantum of subsidy to be provided.

1.28 In response to the Commission's letters dated 23rd April, 3rd May, 7th May and 17th June 2016, the State Government vide Letter No. 432/Budget/2016 dated 23.06.2016 of the Secretary to Government, Energy Department, issued directions u/s 108 of the Electricity Act, 2003 to maintain uniform retail supply tariff for all categories of consumer across both the DISCOMs of the State for FY 2016-17 and communicated the Subsidy to be provided by the State Government under Section 65 of EA, 2003.

Layout of the order

1.29 This order is organized into ten(10) chapters

- a) Chapter-1 provides a background and the details of quasi-judicial regulatory process undertaken by the Commission;
- b) Chapter-2 provides a brief of the Public Hearing process, including the details of comments of various stakeholders, the licensee's response and views of the Commission thereon;
- c) Chapter-3 provides analysis of the approach followed for determination of energy sales for FY 2016-17;
- d) Chapter-4 provides detailed approach followed by the Commission for estimation of power purchase requirement and availability from various sources;
- e) Chapter-5 provides component wise analysis of the ARR and Cost of Service for FY 2016-17;
- f) Chapter-6 provides the revenue projections for FY 2016-17;
- g) Chapter-7 provides details of changes made to the Retail Tariff Design, the reference tariff schedule, subsidy commitment by the Government and the full cost tariffs applicable;
- h) Chapter-8 gives the tariff schedule applicable for the consumers; and
- i) Chapter-9 provides the terms and conditions of tariff applicable to HT and LT consumers;

Chapter-2: Stakeholder consultation

Objections/suggestions on power purchase cost

2.1 Cost due to backing down of long term sources

In the projections of power purchase cost for the year 2016-17, in the ARR filings, the DISCOMs have shown “cost due to backing down of long term sources” of 6926 MU as INR. 692.61 Crore. The Objector has requested the Hon’ble Commission to direct the DISCOMs to provide details of which long term sources are proposed to be back down during 2016-17 and give the reasons for the same. Also, the Discoms have to clarify whether such backing down has taken place during 2015-16 and if so give details thereof and reasons for the same.

Reply from Licensees

It may be noted that due to the collective efforts of the stakeholders – State Govt, TS Genco, TS Transco, TS Discoms in planning and timely execution of evacuation facilities and generation projects, the State of Telangana is expected to meet the energy requirement largely from long term sources.

It is pertinent to note that in the ensuing year, there are solar capacity additions. From a grid management perspective, it would entail determining an optimal dispatch of supply sources as well as in flattening of the demand.

The Licensee expects to meet the peak demand through additional power procurement. There may not be energy requirement during the troughs in the off-peak time. This would result in backing down of sources of supply and the backing down will be done as per the merit order (i.e., the source which is having highest cost at that time) for the year 2016-17.

Details of the backing downs during FY2015-16 are being submitted to the Commission on monthly basis.

Commission’s view

The Commission agrees with the Licensees view, that there will be a peak demand that arises due to the extension of 9 hours supply to agricultural pump sets. In the power system, it is not possible to maintain flat demand curve since the demand for supply depends upon the seasonal load variations also. Even after trying to achieve a flat demand curve by providing ToD tariff, still there exists a peak demand in certain time periods. During the off peak period some of the stations may be asked to back-down in real scenario.

The Commission could not arrive at the exact quantum of back-down as it varies from time to time. Hence, the Commission, currently has not allowed any amount against back-down of stations. Any actual quantum realized on back-down will be considered in the true up exercise.

2.2 **High cost purchases from market and sale of surplus power**

The Discoms have projected an additional revenue of Rs.724 crore due to sale of power of 1448 MU during 2016-17. At the same time, they have proposed to purchase 521 MU from the market at a cost of Rs.272 crore. When a quantum of 6926 MU is going to be backed down, and when the average cost of sale of surplus power is slightly more than the average cost of purchases from the market, there is no need of purchasing high cost power from different sources.

Reply from Licensees

Demand-supply balance is expected to vary across the hours in a day. For optimizing the power purchase cost, the licensee proposes to sell surplus power during certain hours and also procure additional power during periods where there is higher demand.

To provide uninterrupted power supply, the licensee has proposed procurement of short term power and during the off-peak months, it has been proposed to sell a part of surplus power, to reduce the effective cost of procurement.

Commission's view

The Commission agrees with the views of the Licensees on the variation of demand-supply across various hours of a day. In order to meet the peak demand, the Licensee has to procure additional power and also to sell the excess power available during the off-peak/ off-season period. The Commission analyzed the power availability in the state of Telangana and also approved the monthly sales based on the filings of the Licensees. The Commission found that there will be a surplus power during certain months (4337 MU). The Commission also examined the prevailing market purchase rates in the Southern region (S1 and S2) only as there is no sufficient corridor available to sell the power in the NEW Grid.

The Commission has computed the rate to sell the surplus power by the Licensees at INR. 4.09/kWh.

Government of Telangana to bear the financial burden of short term purchases: Sri M Venugopala Rao has requested the Commission to direct the Government of Telangana to bear the additional financial burden that has arisen as a result of purchasing short-term and costly power at its behest without seeking prior approval of the Commission for the quantity and upper ceiling of price.

Reply from Licensees

No response from the Licensees.

Commission's view

The Licensees are obligated to furnish their views on this issues raised by Objectors.

The Licensees are directed to respond to the issues raised by the Objectors here after. The regulation 1 of 2014 on truing up of power purchase cost of the previous year does not allow to consider additional power procured beyond the approved quantum for agricultural category. Regarding power purchase made whether through short or medium term, to meet the approved sales, in case there is a shortage from approved sources of generation, the Commission is examining the process of procurement i.e. transparent process of bidding U/s 63 of EA 2003 prior to approval.

- 2.3 **Escalation in variable cost for TS & AP Genco and central generating stations:** For the year FY 2016-17, variable costs for TS & AP Genco and central generating stations, the Discoms have considered 2% escalation over the actual variable costs during the second half year of 2015-16. The objector has requested the Commission to reject the proposal of the Discoms for 2% escalation in variable costs for FY 2016-17 and factor in the increase in coal cess by one hundred per cent from Rs.200/- to Rs.400/- per tonne as proposed in the budget for FY 2016-17.

The average power purchase cost from APGENCO stations has been projected in the range of Rs.4.06 per unit to Rs.10.77 per unit. Similarly, the average power purchase cost from TSGENCO stations has been projected in the range of Rs.3.14 per unit to Rs.5.19 per unit. It is pointed out that the highest fixed cost has been claimed in respect of RTPP Stage-III at around Rs.6.89 per unit and the highest variable cost has been claimed at Rs.3.88 per unit in respect of RTPP I, RTPP Stage-II and RTPP Stage-III.

Reply from Licensees

An increase of 2% on the variable cost has been considered keeping in view the increase in costs which has been observed in 1st half of 2015-16.

Merit order principle has been followed for computing the energy to be dispatched from the stations. As the variable cost of RTPP is high when compared to other stations, it is farther in the merit order and the energy dispatched is less. This results in higher fixed cost on a per unit basis.

Commission's view

The Commission has not accepted the Licensees submission of 2% escalation in variable cost. The Commission has determined the variable cost of each station by considering the station wise average variable cost for third quarter (Q3) of FY 2015-16 along with the 3rd quarter Fuel Cost Adjustment (FCA) charges, impact of decreasing trend in domestic coal prices and the impact of increase in coal environment cess from 200 INR/Tonne to 400 INR/Tonne.

Variable cost projections not in line with recent fuel price trends

The Petitioner has projected the average power purchase prices from APGENCO & TSGENCO thermal stations, Central Generating Stations and IPPs in FY 2016-17 which,

prima facie, do not correspond to the recent trends in fuel prices. The objector has requested for a thorough prudence check of all the power procurement costs proposed, after the visible lows of fuel prices.

Reply from Licensees

The variable costs of TS GENCO, APGENCO & CGS for FY 2016-17 are projected considering the actual variable costs incurred during first half of 2015-16. The licensee would furnish the necessary information as may be required by the Hon'ble Commission for allowing fuel cost.

Commission's view

The Commission has analyzed the recent trends in domestic coal prices and the power purchase bills of FY 2015-16 as furnished by the Licensee and has considered the impact of the same while approving the variable cost of power purchase for FY 2016-17.

2.4 **Tariff norms followed by State Commission is significantly lenient compared to CERC benchmarks**

The objector has pointed out that the tariff norms prescribed by the Generation Tariff Regulations, 2008 and applicable to TSGENCO and APGENCO stations are significantly lenient, compared to CERC benchmarks which thereby promote inefficiency and are burdensome on the consumers.

All the norms of operation such as plant availability factor, plant load factor, station heat rate, auxiliary consumption, secondary oil consumption and transit losses have been tightened by the Hon'ble CERC for the 2014-19 tariff block, but a corresponding revision has not been undertaken by the Hon'ble State Commission.

In view thereof, it is of utmost importance, that the Hon'ble Commission undertakes a review of the Generation Tariff Regulations, 2008 and approve tariff norms which are comparable and at par with CERC benchmarks.

Reply from Licensees

This falls under the purview of Hon'ble Commission.

Commission's view

The Commission while determining the tariff for TSGENCO stations for third control period will examine the technical norms fixed by CERC in its third control period order and will take appropriate action for similar capacity units.

2.5 **No escalation in fixed and variable cost should be allowed for own generation stations**

The Petitioner has submitted that the power procurement costs from TSGENCO and APGENCO stations for FY 2016-17 have been considered as per the projections by respective GENCOs. It is pointed out that the petition for determination of Generation tariffs for FY 2014-19, based on the Generation Tariff Regulations has been filed on 31.12.2015 by APGENCO. Further, there is no information available publicly to gauge the status of filings of TSGENCO stations. It is urged that till the time the generation tariffs are not finalized for GENCOs, no escalation in fixed and variable costs should be allowed in the power purchase cost from these stations.

Linear increase in the power purchase cost without considering the distinct nature of fixed (capacity) charges and variable (energy) charges: The fixed costs for a power station in typical cost plus tariff regime typically fall year on year in the initial years. This is because the return on capital employed (interest on long term loan) would fall year on year as long term loan gets repaid. After the loan is fully repaid, there is a marked drop in the fixed charges as the interest liability becomes nil and depreciation expense also falls. The depreciation rate is higher in the initial years to match the cash outflow required for loan repayments. After the loan is fully repaid, the depreciation rate falls such that balance depreciation is amortized over the balance useful life of the asset. Subsequently, the tariff remains flat and there is a slight increase only on account of the increase in the O&M expenses due to escalation index.

Thus, the fixed charges ought to have decreased on a year to year basis. In view of the same, the Petitioner's submission for increase in capacity charges ought to be rejected.

Reply from Licensees

The Generation tariff order for Control period FY 2014-19 is yet to be finalized by the Hon'ble Commission. As the tariff order for Genco stations is yet to be notified, the licensee has projected the fixed and variable costs of generation plants based on the estimate received from the Genco plants.

Escalation rate for variable cost is taken as 2% keeping in view the increase in cost of coal, increase in rail freight and diesel charges. Further any fuel cost variances of the previous years will be passed on to the consumers under Retail true-up in the tariff orders

Commission's view

The Commission has considered the fixed cost for APGENCO stations as approved vide order dated 26.03.2016 in O.P.No.3 of 2016. For TSGENCO stations, so far the tariff for third control period has not been determined. Hence the Commission has determined the provisional tariff for FY 2016-17 for the existing stations based on the principles elaborated in detail in the power purchase section of this order.

For determination of variable cost, the Commission has not accepted the Licensee's submission of 2% escalation and has approved the cost as per the approach explained in detail in power purchase section.

- 2.6 **Consumers entitled for a refund of Rs. 2,081.81 crore towards the excess power purchase cost claimed by the Discoms over the 2nd Control Period (FY2009-14):** The Hon'ble APERC had approved the tariff of APGENCO stations for the period 01.04.2009 to 31.03.2014 (undivided Andhra Pradesh State) vide its Order dated 31.05.2014. The tariff approved for the APGENCO stations in the said Order was less than the provisional tariff allowed in the Retail Tariff Orders by Rs.2081.81 crore.

In view of the above, the Hon'ble Commission had directed the APGENCO to adjust the difference between the tariff already collected from the Discoms and the tariff approved in the said Order dated 31.05.2014 within a period of six months i.e., before 31.12.2014.

Thus, the consumers are entitled for a refund of Rs. 2,081.81 crore towards the excess power purchase cost claimed by the Discoms over the 2nd Control Period (FY 2009-14).

It is humbly stated that both the Distribution Licensees of the State, have not provided for such refund for FY 2009-14. The Hon'ble Commission is urged to allow the refund of the excess power purchase cost amounting to Rs.2081.81 crore as it pertains to the 2nd Control Period and pass the necessary adjustment in the ARR for FY2016-17.

Reply from Licensees

AP Genco claimed fixed cost as per actual availability for old stations and based on actual COD for new stations. The amounts were adjusted on year to year basis and final adjustment was made during 2012-13 as part of FRP scheme. Hence all the recoveries were made as per APERC Order No. 15/2009.

Commission's view

The erstwhile APERC has determined the station wise capital cost and in-turn year wise fixed cost for first and second control periods separately. In its orders, the erstwhile APERC has arrived at the amount to be paid or recovered from the DISCOMs by the erstwhile APGENCO. The amount was arrived after setting off the provisional amount allowed in the respective Retail Supply Tariff Orders. However, some of the stations which were anticipated and hence provided with an amount in the Retail Supply Tariff Orders have not declared commercial operation. Such amount has to be readjusted. In the said orders the erstwhile APERC has mentioned to verify the actual payments made with reference to Retail Supply Tariff Orders and adjustment to be carried out based on actuals. The TSGENCO and TSDICOMs are directed to ascertain the exact amount to be paid or recovered by themselves for their respective shares and incorporate the same in subsequent year filing, if any.

- 2.7 **Very high average power procurement cost considered for new hydel power stations:** The Petitioner has submitted the total cost in respect of new hydel power stations Lower

Jurala and Pulichintal to the tune of Rs.236.73 crore and Rs.62.07 crore which translates to an average power procurement rate of Rs.14.10 per unit and Rs.5.86 per unit respectively. Needless to mention, that these are exorbitantly high rates of power purchase and must be out rightly rejected by the Hon'ble Commission.

The average power procurement cost from hydel stations has been projected at around Rs.3.32 per unit which is a steep increase from the hydel generation cost of Rs.1.85 per unit approved by this Hon'ble Commission in the tariff order for FY 2015-16.

Reply from Licensees

The total cost in respect of new hydel power stations Lower Jurala and Pulichintal of Rs.236.73 crore and Rs.62.07 crore respectively are towards fixed costs of the station. As the fixed costs has to be met for plant maintenance irrespective of the generation and generation of hydel plants are highly depend on the water availability, the per unit costs will vary and cannot be comparable.

Commission's view

The Commission has examined the fixed cost furnished by TSDISCOMS pertaining to lower Jurala and Pulichintala. The Commission has examined the capital costs of similar stations of same technology and commissioned during that relevant year. Considering this aspect assessed the capital cost provisionally and computed the fixed cost as per the norms specified in Regulation 1 of 2008. The fixed cost provisionally computed are INR 269 Crs for Lower Jurala HEP and INR 62.07 Crs for Pulichintala HEP. The Commission has ascertained the availability of generation from Lower Jurala HEP and Pulichintala HEP for FY 2016-17 as 534.43 MU and 245.58 MU respectively. The per unit cost of generation is 5.03 INR/kWh and 2.83 INR/kWh.

- 2.8 **High power procurement price considered by TS Discoms compared to AP Discoms:** The AP Discoms (APSPDCL and APEPDCL) in their retail tariff filings for FY2016-17 have considered an average power procurement rate of Rs.3.74 per unit from TSGENCO stations. In contrast to this, the Petitioner has arbitrarily considered the power procurement rate of Rs.4.69 per unit from TSGENCO which is higher by Rs.0.95 per unit (20%). Such higher projection has put an additional burden of Rs.785 crore [8291.32 MU x (Rs.4.69/unit-Rs.3.74/unit)/10] on the ARR being claimed by both the Telangana Discoms.

The Objector submits that the unreasonably high power procurement price from the TSGENCO stations is devoid of any justification and ought to be rejected by the Hon'ble Commission.

Reply from Licensees

Merit order plays a key role in determining the quantum of energy dispatched from a generating station. This in turn impacts the average cost of procurement as the fixed cost

tends to be the same. A scenario of lower energy dispatch, leads to an increase in the cost of procurement.

The energy mix and the dispatch profile of TS is different from AP.

Commission's view

The Commission has prudently checked the power purchase cost (fixed and variable costs) of TSGENCO stations filed by the Licensees. The variable cost has been computed based on actual payment made for third quarter (Q3) of FY 2015-16 along with the 3rd quarter Fuel Cost Adjustment (FCA) charges and impact of increase in coal environment cess from 200 INR/Tonne to 400 INR/Tonne. The fixed cost has been arrived based on the approved capital cost and as per Regulation 1 of 2008. The weighted average per unit cost of TSGENCO stations based on availability is INR 4.32 /kWh. Probably when the filing made by APDISCOMS, the increase in coal cess was not there and the basis of the cost arrived at was not tallied with the actual cost.

- 2.9 **Use of imported coal by TS Genco stations:** The Petitioner has attributed the projected increase in the energy charges on account of the increase in usage of imported coal to bridge fuel shortfall. In this regard, the Petitioner has made 2 (two) submissions on page nos. (iii) and 52 of the instant Petition

It is pointed out that the Petitioner has contradicted its own claim of increase in the usage of imported coal, wherein, it has, at page no. 13 in response to “compliance of directives of the Commission”, stated that:

“As per TS Genco's letter dated 30.06.2015, TS Genco is not procuring any imported coal for utilization of its thermal power stations. The short fall is being met through additional quantity of coal supplied by M/s. SCCL over and above the linkage quantity.”

The Objector wishes to point out that there has been a significant reduction in the coal imports during last 8-10 months and the trend is expected to continue in the wake of increased production of the domestic coal companies.

Thus, the approach of the Petitioner to consider higher proportion of imported coal in the ensuing year and thereby higher variable/energy charges is erroneous and not reflective of the current fuel supply scenario in the country.

Reply from Licensees

In the page no. (iii) of the petition, the petitioner was trying to express its inability to file Multi-year Tariff filings i.e. for 5 years for retail supply business due to uncertainties in determination of power purchase costs which highly depends on the international prices, domestic inflation and usage of imported coal to meet the demand which have taken place in the past years.

As a part of compliance with the directives issued by Hon'ble Commission, it is stated that no imported coal has been used from 01.04.2015 to 30.06.2015 by TS Genco stations.

Hence, it is to reiterate that no imported coal has been considered in the TSGenco stations in the ARR filings.

Commission's view

The Commission has not considered any use of imported coal by TSGENCO stations. Regarding discrepancy in the filing the reply furnished by Licensee is in order.

- 2.10 **Claim towards Income Tax in power purchase cost:** It is pointed out that the Petitioner has claimed Rs.38 crore towards 'Income Tax' and Rs.225.74 crore towards item titled 'Others' in respect of power procurement from TSGENCO stations. The taxes on incomes are payable based on actuals as automatic pass-through and hence such costs cannot be claimed on presumptive basis. Further, in respect of item claimed under the nomenclature 'Others', it is pointed out, that the Petitioner has not furnished any justifications towards such expenses, etc. In view thereof, the claims towards 'Income Tax' and 'Others' ought to be disallowed by the Hon'ble Commission.

Reply from Licensees

Estimated income taxes has been used for ARR projection and as per Regulation 1 of 2014 ,if there is any variation in actual income tax paid at later stage, it would be adjusted in next year True-up/true down.

Commission's view

Income Tax is a pass through at actuals as per Regulation No. 1 of 2008. Thus the Commission has not allowed any amount towards income tax payment since it is not actuals

- 2.11 **Projected power purchase price is higher than the national level APPC:** The projected power purchase price from APGENCO stations in 2016-17 is the highest from all sources. The projected power purchase price is higher even than the weighted average power purchase price from NCE sources and the long term power from APGENCO is almost equal to the procurement price from short term sources (market sources).

It is pointed out that the Average Power Purchase Cost ("APPC") for FY 2014-15 at the national level was Rs.3.40/kWh. This has been computed and notified by the Hon'ble CERC by its order dated 03.12.2015 in Petition No. 15/SM/2015. The total cost of power purchase considered for computation of APPC excludes cost of generation or procurement from renewable energy sources and transmission charges. In contrast to the national level APPC of Rs.3.40/kWh, the cost of power purchase from APGENCO has been considered at Rs.5.11/kWh and from TSGENCO at Rs.4.69/kWh in FY 2016-17.

Reply from Licensees

The projected weighted average PP cost is Rs.4.27/unit. While the NCE cost is projected at Rs 5.88/unit. The cost of few AP Genco units is on the higher side due to the MOD principles which has been highlighted earlier. There has been new generation stations considered in the ensuing year. This does increase the cost of power due to high depreciation and loan repayment in the initial years.

Commission's view

The Commission has thoroughly scrutinized the cost of power procurement from APGENCO stations. The Commission has also examined fixed cost for APGENCO stations determined by the APERC in the GENCO Tariff Order. The Commission has considered provisionally the fixed costs determined in APERC order. Regarding determination of station wise variable cost, the actual payment made for third quarter (Q3) of FY 2015-16 along with the 3rd quarter Fuel Cost Adjustment (FCA) charges and impact of increase in coal environment cess from 200 INR/Tonne to 400 INR/Tonne has been considered. The cost of procurement based on availability is INR 4.67/kWh. As per the PPAs, the fixed cost has to be paid for these stations. The energy will be drawn as per the Merit Order Dispatch.

2.12 **Unreasonably high price considered for bilateral and market purchases:** The proposed price for bilateral and market purchases seems to be unreasonably high considering the recent trends in the price of power traded in open market and exchanges.

The Objector submits that the rates in the power exchanges were considerably lower in FY2015-16 than previous years.

The power prices have ranged between Rs.2.41 per unit to Rs.4.88 per unit, with the 11 month average (Apr to Feb 2016) at around Rs.3.80 per unit.

The objector has prayed that although there doesn't appear to be any requirement of market purchase, the Commission may fix the maximum ceiling at or around Rs.3.80 per unit as against Rs.5.22 per unit projected by the TSSPDCL.

Reply from Licensees

It is to be noted that per unit cost considered for bilateral and market purchases has been computed using weighted average tariff discovered from latest Short term tenders floated by Telangana State from Jun'16 to May'16 and existing short term purchase orders for April & May 2015.

Further, the quantum of power is not necessarily available on the exchange when the Discoms need it. This would also be resulting in higher price of power. Hence the Discoms have procured power under competitive bidding on a short-term basis.

Licensees have considered bilateral purchases at average rate of INR. 5.22/unit based on the quoted rate of the generators through transparent bidding process for short-term procurement of power on RTC basis.

Price variation on IEX is very dynamic and it cannot be taken as an indicator for fixing the ceiling price of short term purchases.

Contracting of additional power by the licensee would also ensure in supplying reliable power to consumers without interruptions.

Commission's view

The short term price considered by the Commission is INR 4.29/kWh. This price considered is as approved by Hon'ble APERC in Retail Supply Tariff Order FY 2016-17 for sale of surplus power by APDISCOMS. Under AP Reorganization Act 2014, for surplus power of APGENCO stations the first right of refusal is with TSDISCOMS.

- 2.13 **Power purchase under RLNG scheme to be done at a lower price:** TS Discoms will be purchasing power from new gas based power plants under a special scheme of the central government. In the meantime RLNG, fuel used under this special scheme, price nearly halved to about \$ 6 per MBTU. The objector has requested that new power purchase from these plants should be done at the lower RLNG price.

Reply from Licensee

The licensee would be procuring power from Gas based plants based on the tariff determined by the Hon'ble Commission

Commission's view

The unit rate of Rs.4.70 considered from power purchase from new IPPs is taken as per the PPAs entered under phase-II of the e-bid RLNG scheme for the period from 01.10.2015 to 31.03.2016. During the operation of e-bid RLNG scheme, the targeted tariff fixed for TS DISCOMs by MoP is a single part tariff of Rs.4.70/kWh. Same tariff has been assumed for projecting costs for New IPPs for FY2016-17.

Objections/suggestions on power purchase requirement and availability

- 2.14 **Significant deviations in actual energy requirement and availability vis-à-vis approved by the Commission in last year Tariff Order for FY 2016**

Both the Licensees have projected a revised energy requirement of 49,913 MU against 48,550.97 MU approved by the Commission for the year 2015-16. The Commission has observed that "based on the month wise energy requirement and energy availability, there is no requirement of energy from bilateral/ short term purchases. Based on the above, the total energy availability works out to 54,576.66 MU as against the energy requirement of 48,550.97 MU at the state periphery" (Page No. 156 of tariff order for 2015-16). Moreover,

the Commission has mentioned that “the Licensees have indicated surplus power in their filings. The Commission examined the availability of power and found that there is no shortage of power” (Page No. 87 of tariff order for 2015-16). Against the power purchase cost of INR. 18,850.99 crore for purchasing 48,550.97 MU for 2015-16, both the Licensees have shown a revised cost of INR. 22,649 crore for purchasing/ projected to purchase 49,913 MU. The revised purchases include 10,519 MU from market at a total cost of INR. 6,062 crore. In other words, the projections of the Licensees on availability, requirement of energy and cost of purchases for the year 2015-16 have gone awry. The Licensees have purchased additional power of 1,362 MU and spent an additional amount of INR. 3,798 crore than what have been approved by the Commission.

Reply from Licensees

As per the Tariff Order for FY 2015-16, energy availability from Hydel stations was approved at 4,038 MU. However there was hydel failure and hydel energy is estimated to be a mere 130 MU and energy from AP Genco stations was also on the lower side.

In order to make good the short-fall from the above sources, the Licensees have contracted power from short-term sources in order to ensure reliable and un-interrupted power supply to all categories of consumers.

Commission’s view

The Licensees have to procure power from short term sources when there is a shortfall in approved generation quantum from hydel stations. The Licensees are supposed to file true up on power purchase cost as per Regulation, for FY 2014-15 as per audited accounts and on provisional basis for FY 2015-16. The Licensee have not filed and stated this will be covered under UDAY Scheme for the period upto 30.09.2015.

- 2.15 **9 hours supply to agricultural consumers:** The Discoms have claimed that supply of power to agricultural consumers for 9 hours a day “is expected to have a significant increase in the peak demand and the licensee is contracting for additional power purchase to meet the peak demand.” The Discoms have not explained how they propose to schedule 9 hours supply to agriculture and how much “additional” power is required to meet the claimed “peak demand.” If at all additional power is to be purchased to meet “peak demand,” the Discoms should confine to purchasing it for the required peak period.

Reply from Licensees

The Discoms are currently in the process of devising the roster schedule for supply of power to agricultural consumers which would minimize the incidence of the peak demand on the grid. The Discoms endeavor to manage peak deficit if any through additional power procurement. Procuring power only during a particular time will result in a higher cost. The Licensee has been able to discover competitive prices.

A nominal growth of 4% has been considered while projecting the agricultural consumption for 2016-17. The agricultural consumers are rostered and supply to them is given as per the roster schedules. In view of the increased hours of supply, the agricultural supply schedule would be designed optimally to reduce the impact of the increased peak load incident on the grid.

Commission's view

The CMD of TSSPDCL in his reply furnished during the public hearing process has stated that the agriculture supply will be given in two groups in two spells i.e., six hours in day time and three hours in night time for each group. Considering the above, the Commission determined the requirement of power month-wise for FY 2016-17 and assessed the availability of power from all approved sources. The Commission noticed that during certain months there is a shortage of power from the approved sources. Hence the Commission has allowed procurement of power from short term sources (surplus power of APGENCO stations at the cost indicated in APERC Retail Supply Tariff Order) to the extent of shortfall.

2.16 **Availability from hydro generating stations:** The Petitioner has projected the hydel generation based on the average of the preceding 5 years' actual generation. The Objector believes that the generation from hydel stations has to be projected based on the average of the preceding 10 years' actual generation.

Additionally, the Petitioner has stated that new hydel power units/stations are expected to be commissioned in April 2016 namely Lower Jurala U#3, 4, 5 and 6 and Pulichintal HEP (4 units) and the Petitioner has projected net share of around 237.90 MU from Lower Jurala and 150.16 MU from Pulichintal HEP in the power procurement plan for 2016-17 (both Discoms put together). Thus, the prudent estimate of hydel generation as per Objector's Assessment for Telangana Discoms is to the tune of 3994.43 MU [3606.37 MU + 237.90 MU + 150.16 MU] as against 3420.59 MU claimed by the Petitioner.

It is prayed that the projection from Lower Jurala and Pulichintala ought to be based on the design energy of such stations and the Petitioner may be directed to furnish such data to the Hon'ble Commission as part of the current proceedings.

Reply from Licensees

It has been observed over the past few years that the actual availability from Hydel stations has been consistently lower than the value approved in the Tariff Orders issued by TSERC. In this regard, the projection for the ensuing year (FY2016-17) has been considered to be similar to the availability of average of last five years.

With regard to upcoming hydel stations, the 3rd, 4th, 5th and 6th units of Lower Jurala and 4 units of Pulichintala HES are ready for CoD and will be expected in Apr'2016 depending on water availability.

However, 100% share has been considered for the new hydel stations.

Commission's view

The Commission has examined station wise design energy and as per design energy, the quantum of energy from all TSGENCO hydel stations is arrived at 3841 MU. The Commission has determined availability of the hydel energy for FY 2016-17 as 3841 MU.

With regard to upcoming hydel stations, the Discoms reply that the 3rd, 4th, 5th and 6th units of Lower Jurala and 4 units of Pulichintala HES are ready for CoD and will be expected in Apr'2016 depending on water availability is found satisfactory.

- 2.17 **Sharing of power between Telangana and AP State from hydel generating stations:** The objector has stated that though the power utilities in both the states – Telangana and AP – are sharing power generated in thermal power plants on the lines specified in the re-organization Act they are not sharing the power generated in the hydel power stations. Power generated from the hydel stations is being used within the states where these plants are located. However the ARR shows that TSDISCOMs will be sharing the power generated at the hydel power stations also. Thus the objector has requested for clarification on the principle followed for sharing hydel generation.

Reply from Licensees

The licensees have followed the AP Re-organization Act, 2014.

Commission's view

AP Reorganization Act 2014 stipulates allocation of energy from APGENCO hydel stations to TS Discoms, but the Commission after examining the actual dispatch situation has found that no energy had been dispatched to TS Discom in FY 2015-16. Hence the Commission has considered the total generation of TSGENCO hydel stations to the TS Discoms only.

- 2.18 **Purchase of surplus power**

It is observed that the Licensees in their petition have filed for a surplus power of 2,338 MU. As power purchase cost constitutes to 80% of the total ARR, the Licensees are requested to forecast accurate power requirement for the state and avoid unnecessary surplus purchase to help minimize costs.

Reply from Licensees

GoTS plans to provide 9 hours of agricultural supply in FY 2016-17 which would result increasing peak demand during day time. Solar capacity additions have been planned during the year to cater the same. However, it is expected that CoDs of most of the capacities would occurs towards end of FY 2016-17 with spill over to FY 2017-18. To cater to this peaking demand (varying between 700MW-2200MW), DISCOMs need to procure short term power to meet the peak deficit.

Commission's view

The Commission has estimated the month-wise shortfall based on the energy availability and requirement. A part of the shortfall would be met from Discom to Discom transfers and remaining would be purchased from market sources. The shortfall estimated for both the Licensees put together is 291 MUs for FY 2016-17, after making adjustment of Discom to Discom energy transfer, which shall be purchased from short term sources.

2.19 **Rightful share from IPPs to Telangana State**

In the resource plan of FY 2015-16 to FY 2018-19, the Licensees have gradually decreased the share to zero by FY 2018-19 to the state from gas IPPs. Due to the front loading of tariff in the PPAs with these gas IPPs, consumers of Telangana have paid for the fixed cost of the projects. But will not be able to reap the benefits of the cheaper power as on date. Hence, it is requested that the Hon'ble Commission to direct the Licensees to take necessary steps to get their due share of power from these projects under buy-out or renewal of their PPAs. Despite of the of the directive of the Hon'ble commission to produce the details of Buy-out price for GVK-1 and Lanco (in tariff order FY 2015-16), the Licensees have failed to comply.

Reply from Licensees

Based on the present availability of Gas and after examining financial implications/cost analysis duly taking into consideration of fixed charges/capacity charges, TSDISCOMS/TSPCC will take necessary steps in R&M/Buyout of IPPs with the necessary approval from the Government of Telangana State.

Commission's view

The reply furnished by the Licensee is in order. The Licensee shall take immediate action and report the Commission on this issue by end of September 2016.

Objections/suggestions on review of expired PPAs and new PPAs

2.20 **To examine the PPAs with TSGENCO and SCCL plants through public process**

Reply from Licensees

Under the purview of the Commission

Commission's view

The PPAs of TSDICOMS with SCCL and NTPC are kept on the website of the Commission for inviting comment/ suggestions from the stakeholders. Regarding PPAs of new stations of TSGNECO no PPA has been received by the Commission till date.

2.21 **Renewal of PPA/buyout of GVK Plant:** The objector has sought for TS Discoms stand to get the due share from GVK-1 project under buy-out. M/s GVK Stage-1 project PPA tenure

was completed on 19th June, 2015. TSPCC/TS Discoms decided not to exercise the option for renewal of PPA/buyout of GVK Plant in view of high cost. The objector has also sought for reasons to conclude that the buyout of GVK Plant is of high cost.

Reply from Licensees

As per the PPA (Article-7.2.1), the Board (TSDISCOMs & APDISCOMs being successors) has the right but not obligation to extend the term of the Agreement for additional 15 years, if the Company's Renovation & Modernization (R&M) proposal is accepted by the Board and approved by the authority (TSERC). If the R&M proposal is not accepted and approved, then the PPA provided for option to purchase the Project at the price (Buy-out price) set forth in Schedule-A of the PPA. For determination of Buy-out price, TSDISCOMs/APDISCOMs have to appoint an Appraiser in consultation with M/s. GVK Industries Limited.

After bifurcation, APPCC is reported to have engaged M/s. Grant Thornton as an Appraiser for M/s. GVK Stage-I. APPCC have not consulted TSPCC/TSDISCOMs while engaging M/s. Grant Thornton.

M/s. Grant Thornton has estimated the Terminal Value of M/s. GVK Project @ Rs.293.374 Crores excluding spare parts, consumables, and fuel stock (Inventory) worth of Rs.77.89 Crores.

Total estimated cost with R&M cost after Buy-out process works out to Rs.984.50 Crores.

At the present availability of gas which is around 30% the fixed charge per unit works out to Rs.4.96/unit plus(+) the Variable charges for gas will be around Rs.2.90/unit and the total unit cost will be around Rs.7.86/unit, which is more than the average unit price of power procured under short term.

After careful examining the above issues, TSDISCOMS/TSTRANSCO has taken the appropriate decision with the approval from GoTS.

Commission's view

The Licensee has not clearly stated what decision it has taken with the approval from GoTS, i.e. whether to buy or not. The same shall be furnished by end of July 2016 so that appropriate action can be taken by the Commission.

- 2.22 **(A) Expiry of PPA with project (SPGL):** The PPA with Spectrum project (SPGL) is going to expire on 18.4.2016. The objector has sought for the action plan that TS Discoms would initiate to continue to get their due share from this project after expiry of the PPA.

Reply from Licensees

A letter was addressed to the Government of Telangana with financial implications/cost analysis for necessary orders on the issue of Renewal of Agreement (Buy-out).

(B) Expiry of PPA with Lanco Kondapally: The existing PPA with Lanco Kondapally project expired on 1.1.2016. The objector has sought for the action plan that the TS Discoms would undertake to get the Lanco PPA renewed, with necessary rectification of defects in the earlier PPA, and get their due share from the same. In the case of GVK-1, Lanco and Spectrum projects, more than 90% of their capital cost (that, too, inflated) has been paid by the four Discoms in the undivided AP in the form of depreciation charges, including interest on their loans, during the periods of their PPAs. Due to defective terms and conditions in the PPAs, consumers of the four Discoms suffered the burdens of frontloading the tariffs. If the TS Discoms fail to get their due share from these projects under buy-out or renewal of the PPAs of these projects, the consumers in Telangana will be deprived of the benefits of frontloading the tariff and relatively cheaper power from these projects that would be available from them due to substantial reduction in fixed costs in terms of reduced capital costs.

Reply from Licensees

A letter was addressed to the Energy Department, GoTS, giving the unit cost details for Renewal of PPA with M/s. LANCO.

Commission's view

The Licensee shall pursue with GoTS for obtaining necessary orders and furnish the same to the Commission so that appropriate action can be taken.

2.23 **Power procured from Hinduja National Power Corporation Limited:** In the estimates of net availability of power and fixed costs, the Discoms have not shown project of HNPCL in Visakhapatnam and Damodram Sanjeevaiah thermal power project in Nellore district, though both these projects have achieved CoD. The objector has asked if TS Discoms are giving up claims for their due share of power from these projects at the behest of the Government of Telangana.

Reply from Licensees

The consent for the PPA was not given by either CERC or APERC, thus the PPA is not legally valid in terms of Section 21 (5) of A.P. Electricity Reform Act 1998 read with Section 86(1)(b) of the Electricity Act 2003. There was no consent by APERC for the Hinduja PPA (HNPCL). Therefore the said PPA is legally not valid.

Commission's view

The reply of the Licensee is in order. However the Licensee may seek opinion of legal expert on validity of PPA signed between the parties and as per the provisions of the AP Reorganization Act, 2014.

2.24 **PPA of erstwhile AP Discom's with M/s Singareni Collieries Company Limited (SCCL):** During the united AP State regime the then 4 APDISCOMs had entered into a PPA with M/s Singareni Collieries Company Limited (SCCL) in respect of their 2x600 MW

Thermal Power Project (stage-1) at Pagadapalli (V), Jaipur (M), Adilabad District on 29.09.2010. The aforesaid PPA was submitted to the then APERC for its consent. The then APERC however, returned the said PPA without giving its consent for the reason that the said PPA did not specify precisely the tariff payable in terms of its Regulation No.1 of 2008 and directed that the then APDISCOMs & TSDISCOMs may file suitable petitions under section 86(1)(b) of the Electricity Act 2003.

Reply from Licensees

The PPA entered by united APDISCOMs during the year 2010 was returned by erstwhile APERC without giving consent. Subsequently, the A.P. State got bifurcated and Telangana State was formed w.e.f. 2.6.2014. As the original PPA was legally not valid, therefore TSDISCOMs entered into a fresh PPA with M/s SCCL for a Gross Capacity of 1200 MW (2x600 MW).

Commission's view

The reply of the Licensee is in order.

2.25 PPA with M/s.TPCIL under DBFOO

The four Discoms in the undivided Andhra Pradesh had entered into a PPA with TPCIL, which was selected after following due process of competitive bidding, for purchasing 500 MW on long-term basis and got the consent of APERC to the same. The tariff determined for purchasing power from TPCIL is Rs.3.58 per kwh, which includes a fixed cost of Rs.1.82 per kwh (page 109 of tariff order of APERC for the year 2015-16).The claims of the TS Discoms and the Commission that the price of Rs.4.15 per kwh agreed to after "negotiations," which includes a fixed cost of Rs.2.64 per kwh, is "lower and competitive" and "fair and reasonable" goes contrary to facts and are untenable. The TS Discoms will be purchasing 570 MW from a plant of the same project of TPCIL paying a fixed cost which is higher by Rs.0.82 per kWh compared to the fixed cost they and AP Discoms are paying for purchasing power from a plant of the same project under the existing PPA. In other words, for purchasing 4244 mu per annum generated with a PLF of 85% of 570 MW, the TS Discoms will be paying Rs.348 crores additionally per annum and Rs.2784 crore additionally during the period of eight years of the PPA. This is tantamount to imposing avoidable and additional burden of Rs.2784 crore on consumers during the period of eight years of the PPA.

The objector also stated that though the Discoms got approval of the Commission for procurement of 1000 MW, their deviations in the bidding process resulted in confining to 570 MW only, thereby ignoring the procurement of another 430 MW on long-term basis.

Reply from Licensees

The earlier PPA was signed for 500 MW (Net) by all four DISCOMs under Case-I bidding route for supply of power from Unit-I (660 MW) of the TPCIL. This procurement was

initiated in the year 2010 and the financial bid was submitted in 2011. The rates submitted in 2011 cannot be compared with the prices in 2016.

The earlier PPA was signed for 25 years whereas the present PPA for 570 MW was signed in 2016, that too for a period of 8 years only. Hence the rates in the both bids are not comparable. Tariffs quoted in shorter period will be slightly higher than tariffs committed for 25 years period. As TSGENCO has taken up big Capacity addition, TSDISCOMs limited the present PSA for 8 years only.

Fixed Charges in earlier PPA under Case-I bidding would be increasing year-on-year (Escalation component present) whereas the Fixed charge in the present PPA under DBFOO (Design, Built Finally Own & Operate) would be decreasing by 2% year-on-year, which would be advantageous to TSDISCOMs. Therefore, Tariffs in the both PPAs are not comparable.

Model bidding documents notified by Ministry of Power have provided for customization of the bidding documents as per Procurer's requirement i.e. immediate requirement of power considering the corridor constraint etc.

The DISCOMS have specified the eligibility criteria in the bid process so as to ensure plants which are ready to supply power by the required date may participate. Due to severe transmission constraints, plants in NEW grid could not have been able to supply power. Hence only plants in SR region were eligible to participate.

Even within SR region, surplus capacity is limited as states such as Andhra Pradesh and Karnataka have called for short-term/long-term tenders to secure power from the SR developers.

After the closure of the tender process, the DISCOMS have approached the Commission for additional procurement of 1500 MW since only 570 MW could be contracted under the current tender. However, keeping in view the limited capacity in the SR region, and the efforts of TSGENCO to expedite SGS capacity additions, the procurement process was halted. Success of the solar tender which received highly competitive prices and will be very effective in catering to the agriculture demand and reducing the overall burden on the grid.

Further, the Hon'ble Commission has given approvals right from the Bidding Process initiation like according In-Principle approval, approving the Model Bid documents (RFQ, RFP) etc. which has been done as per the guidelines notified by Ministry of Power, Govt. of India.

Commission's view

The Commission has passed a detailed order on procurement of power from TPCIL Unit II under the DBFOO and all issues were considered in the order.

- 2.26 **Public hearing on PPA of KTPP Stage-II and SCCL:** The PPAs for new plants of TS Genco are not yet approved by the Commission. It is not clear on what basis power purchase cost for these plants is decided. In the past CAG raised doubts on the cost incurred in erecting these plants. In its Report for the year 2010 CAG examined Kakatiya – I plant and found excess spending was Rs.555.48 crore (26.74%). CAG Report for the year ending Mar'14 found that selection of costlier pipes for raw water pipeline of KTPP Stage-II resulted in avoidable excess cost of INR 43.30 crore. The objector has requested the Commission to hold public hearings on PPAs with the new power plants of TSGENCO.

Reply from Licensees

All the necessary data for tariff fixation would be made available to TSERC.

Commission's view

Regarding PPA of KTPP Stage-II, PPA and tariff petition have not yet been filed before the Commission. As and when it is filed the Commission will examine the issues raised by the objector.

Objections/suggestions on ARR items

- 2.27 **Claim of exorbitantly higher inter-state transmission charges under PGCIL and ULDC charges**

The Hon'ble Commission in the tariff order for FY 2015-16 had approved PGCIL and ULDC charges amounting to INR. 274.06 Crore for TSSPDCL and INR. 111.53 Crore for TSNPDCL. As against this, the claim for FY 2016-17 is to the tune of INR. 892.78 Crore and INR. 372.67 Crore which are higher by around 225% and 234% respectively for TSSPDCL and TSNPDCL over FY 2015-16 approved charges.

No justifications have been furnished by the Petitioner for claiming such higher PGCIL and ULDC charges. In any case, such increase in PGCIL and ULDC charges should be disallowed by this Hon'ble Commission.

Reply from Licensees

In order to meet the deficit scenario, energy has been procured from short term resources which have resulted in considerable increase in PGCIL charges. Another reason for increase in PGCIL charges also include charges to be paid for procuring energy from TPCIL Unit - 2.

Commission's view

CERC determines the PGCIL charges for every quarter in accordance with the Regulation (17) of the Central Electricity Regulatory Commission Regulations, 2010 and amendments

there to. The charges determined by CERC against PGCIL charges have increased three times (3x) over the last one year.

Further, as mentioned by the Licensees, the increased procurement of power from medium term sources to meet the deficit scenario has also increased the amount against PGCIL charges.

ULDC charges remain to be a very small component amounting to INR. 8.70 Crore for both Licensees together and is approved on actual expense incurred by the Licensees.

2.28 Increase in consumer deposits not in proportion to the consumer load and sales growth

The increase in consumer deposits is directly proportional to the load growth and consumer sales. It is pointed out that the projected increase in consumer deposits in FY 2016-17 over FY 2014-15 levels is to the tune of 210% (INR. 413.46 Crore), whereas the increase in consumer sales has only been to the tune of 20% (5,586.64 MU). The objector submits that the addition in consumer security deposits projected by the Petitioner, belies the load growth and consumer sales growth projected by the Petitioner. In view thereof, the Hon'ble Commission is requested to conduct a strict prudence check towards the projections in respect of additions to consumer security deposits.

Reply from Licensees

The security deposits which are collected from the consumers at the time of load enhancement or new service release are directly proportional to the expected incremental revenue. The increase in percentage of revenue is not directly correlated with increase in percentage of sales due to different tariff rates applicable for different class of consumers.

Commission's view

The response furnished by Licensees is satisfactory

Objections/suggestions regarding government subsidy

2.29 Subsidy claim from Government of Telangana

The objector has submitted that the State Government is free to provide subsidized or free power to any class of consumers. However, it should provide full and commensurate subsidy in such cases and there is no occasion to subsidize the cost of supplying free power / subsidized power by imposing the burden on the industrial consumers through cross subsidy. The objector has also said that if the provisions of the tariff policy is not complied by the distribution licensees and the State Government, then 100% subsidy is ought to be provided by the State Government.

Further, the subsidy requirement for FY 2016-17 has been worked out considering the projected sales for FY 2016-17, projected revenue realization and cost to serve computed by

the Telangana Discoms, which works out to INR. 7,393.97 Crore [INR. 3,268.26 Crore + INR. 4,125.72 Crore].

However, against the total subsidy requirement of INR. 7,393.97 Crore, the subsidy commitment in the State Budget for FY 2016-17 has only been to the tune of INR. 4,470.10 Crore.

The objector humbly prays that:

- The Hon'ble Commission may approve full and commensurate subsidy for FY 2016-17 towards LT-I Domestic, LT-III Industries- Poultry farms, LT-V Agriculture and HT-I (A) Industry- Poultry farms and any other applicable category. In view thereof, the Hon'ble Commission may consider the objector's assessment of the subsidy requirement of INR. 3,268.26 Crore for TSSPDCL and INR. 4,125.72 Crore for TSNPDCL in FY 2016-17.

Reply from Licensees

The Hon'ble Commission while issue of tariff order will estimate Licensee's revenue requirement for the ensuing year and address the revenue deficit through tariff hike and subsidy from the state government in consultation with the Government of Telangana.

Commission's view

The Commission determines the tariff for the subsidizing categories after examining the following:

- i. Existing tariff
- ii. Incremental increase in the average Cost of Supply over the previous year

The Commission has determined the tariff for said categories based on above points, so as not to increase the cross subsidy which is in line with National Tariff Policy.

For subsidized categories, the Commission examined the Cost of Service of category, existing tariff and amount of cross subsidy available from subsidizing categories before determining the tariff so as to recover the approved ARR amount. Thus, the Full Cost Recover Tariff Schedule was prepared and sent to the GoTS u/s 65 of Electricity Act 2003.

2.30 Non-payment of subsidy by the government

The objector opined that, the government is not paying the subsidy as promised while purchasing high cost power on temporary basis and being passed on to consumers as interest burden.

Reply from Licensees

The Government is making timely payment of subsidy as stipulated in the Tariff Order. Further, any additional commitment from the state government towards expensive power purchase is also been taken over under Financial Restructuring Plan (FRP) till FY 2012-13. Recently, GoTS has given its concurrence in joining in Ujwal Discom Assurance Yojana (UDAY) scheme wherein the state government shall takeover 75% of Discom's debts as on 30.09.2015.

Commission's view

The reply furnished by the Licensees is in order. However, the Licensees shall furnish the details of subsidy amount received (with date and month).

Objections/suggestions on cost of service and tariff related issues

2.31 Tariff should be within $\pm 20\%$ of the average cost of supply

The Revised Tariff Policy envisages that the tariff should progressively reflect the efficient and prudent cost of supply of electricity and the tariffs for all categories of consumers except the consumers below poverty line should be within $\pm 20\%$ of the average cost of supply. More importantly even for BPL categories for consumption up to a prescribed level the prescribed tariff ought to be at least 50% of the average cost of supply.

The objector has suggested that though the Petitioner has calculated the category-wise CoS for all classes of consumers, it has not used the same to determine tariffs. This renders the exercise of calculating the category-wise CoS futile and misleading. The non-domestic (commercial) and HT tariffs are significantly over 120% of the average cost of supply. As per the provisions of the Electricity Act and Tariff Policy, the subsidizing consumers such as industrial consumers cannot be penalized, for making good the cost, to be recovered from the subsidized category beyond the permissible $\pm 20\%$ of the average cost of supply. Any benefit which the Licensee wants to confer to the subsidized category beyond the maximum of $\pm 20\%$ can and should be recovered through Government subsidy and cannot in any way be loaded to the subsidizing consumers. In view of the above, the Objector states that the tariff hike for industrial consumers is invalid in law and fails the mandate of the Electricity Act and Tariff Policy.

Reply from Licensees

The licensees have proposed an increase of 7.5% for HT-I category while the cost of service increase in 14.2%. The cross subsidy for the overall HT-I category is 117%. The licensees submit that the cross subsidy certainly contributes to additional cost to the industry, but it has to be borne in mind that the truly needy (particularly domestic consumers with consumption < 100 Units / month) are able to realize the benefits of electricity at a reduced tariff.

The Licensees would like to state that they have examined the views of a large spectrum of stakeholders while arriving at the tariff proposals for FY 2016-17 and it has been their best effort to balance revenue gap and providing reasonable tariffs to various consumers in the State.

As per the National Tariff Policy, the tariffs to the consumers are to be fixed at $\pm 20\%$ of COS. Hence it is deemed that the consumers whose tariffs are fixed over and above COS will cross subsidise the consumers whose tariffs are below COS to ensure revenue neutrality.

However, as per the Tariff Policy, Licensee has put all efforts while proposing tariffs to be within $\pm 20\%$ of the average cost of supply wherever it is possible.

Commission's view

The Commission while determining the tariff for each category has considered

- a) existing tariff,
- b) Increase in the average cost of supply over the previous year for the subsidizing categories so that the cross subsidies from these categories are not increased,
- c) Avoiding of tariff shock to the subsidized categories during this year.

Ultimately, tried to achieve the principles of National Tariff Policy

2.32

Railway Traction

a. Cost of Service and tariff for Railway Traction

The proposed Cost of service for Railway Traction is as follows:

Discom	Overall Cost of Service (INR./ kWh)
TSSPDCL	6.35
TSNPDCL	6.66
Average	6.50

The CoS is being calculated in terms of kWh and energy is being charged for Railway traction in terms of kVAh.

The comparison of cost of service and tariff for Railway traction HT-V category is given below.

Year	Average CoS of Discoms (INR./ kWh)	Traction tariff (INR./ kWh)	% variation
2015-16	5.64	6.80	20.56%
2016-17 (proposed)	6.50	7.48	15.08%
% increase over last year	15.25%	10%	

From above, it may be seen that the traction tariff is higher by 15.08% for 2016-17 according to National Tariff policy.

It appears that DISCOMs are increasing CoS with a view to keep tariff within $\pm 20\%$ as per National Tariff Policy.

Cost of service arrived by DISCOMs are on higher side and some element of cross subsidies definitely would have been included at the time of calculating the cost of service.

Reply from Licensees

- a. The average Cost of Supply (CoS) increased from INR. 5.64 per unit as approved by the Hon'ble Commission for FY2015-16 to INR. 6.44 per unit as estimated and filed by the TS Licensees at state level.

The increase in the CoS at state level is mainly due to:

Increase in Power Purchase Cost: The estimated Power Purchase cost in FY 2016-17 is higher due to increase in energy requirement resulting from domestic growth and addition of new loads such as water grid and HMR.

Increase in Network Cost: The Distribution cost approved in FY 2015-16 was INR. 3,034 Crore and this has increased to INR. 3,658 Crore due to increased Capital Investment of the licensees, increase in wages of employees. In order to cater to current deficit scenario, new long term PPAs were entered, which are connected to Central Transmission Utility and short term purchases, results in considerable increase in PGCIL costs from INR. 362 Crore to INR. 1,257 Crore.

This increase in CoS has led to a revenue gap of INR. 4,168.69 Crore for FY 2016-17 for TSSPDCL. To reduce the revenue gap, the Licensee is undertaken various energy conservation and loss reduction activities besides increase in tariff for certain category of consumer for FY2016-17.

- b. Due to increase in power purchase, Network costs, Discoms are forced to propose increase in tariffs for all the categories.

Commission's view

The Commission has fixed the tariff for railway traction (i.e. HT Category-V (A)) considering the following:

- i. Existing tariff (for FY 2015-16)
- ii. Increase of average cost of supply (30 paisa) over that of previous year

- iii. Determined the tariff by adding 30 paisa over the existing tariff which is equivalent to the increased cost of supply.

While computing cost of service and Cross Subsidy receivable for this category, the Commission has thoroughly scrutinized the proposed CoS of Licensees and has computed the Cost of Service for this category based on normative parameters.

2.33 **Deration of contracted demand**

SRI. A.V.S. Suresh from Kamineni Steel & Power India Pvt. Ltd. has requested to allow deration of contracted demand without any reference to clearance of pending bills or dues. Further, it was also requested not to levy deemed consumption charges (minimum demand) during the disconnection period.

Reply from Licensees

Deration on CMD will be done without any reference to clearance of pending bills/dues. However in case of restoration of disconnected supply, the supply will be restored only after clearing the dues.

The deemed consumption charges, as per the terms and conditions of Supply agreement, have to be paid even if the electricity is not consumed. This is because supply has been disconnected by the Licensee due to non-payment of electricity charges, theft of electricity or un-authorized use or for any other valid reason.

Commission's view

As the Licensees have stated that they are not insisting on arrears payment at the time of deration of contracted demand, the Commission agrees with the view of the Licensees. However, for the restoration of supply of a disconnected service after considering deration of CMD, the Licensee can do so after paying the pending bills.

Regarding levying of minimum energy consumption charges for all categories except HT-I (B), the Licensees can charge the same as per the provisions of this Tariff Order.

2.34 **Extension of Subsidy to certain categories – Request for Deletion of cross subsidy:**

Section 61(g) of Electricity Act 2003 stipulate that *“the tariff progressively reflects the cost of supply of electricity, and also reduces and eliminates cross- subsidies within the period to be specified by the appropriate commission.”*

From the cost of service and tariff models of the various Licensees, it is noted that certain categories have been heavily subsidized and the cross subsidy is charged to other consumers like Railways. This needs to be eliminated as per the stipulation under Section 61 (g) of the Electricity Act, 2003.

Railway pleads Hon'ble Commission to fix tariff reasonably for HT-V category. Cross-subsidy element is required to be reduced to zero gradually.

Reply from Licensees

As stated in sub-clause 2 of Clause 8.3 of National Tariff Policy "For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within $\pm 20\%$ of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy" the Licensee has put all efforts while proposing tariffs to be within $\pm 20\%$ of the average cost of supply wherever it is possible. In case of HT-V Railway Traction has proposed tariff within +/- of the average Cos of the Licensees.

Commission's view

The section 61 (g) as quoted by the Objector has since been amended as follows:

"The tariff progressively reflects the Cost of Supply of electricity and also reduces cross subsidies in a manner specified by the appropriate Commission"

Though the Commission has not specified a road map for reduction of Cross subsidy, yet in real time has reduced the cross subsidy over the years.

2.35 Comparison of Railway traction with HT-I (B) Ferro alloys:

Under HT-I (B) category energy intensive industries proposed with INR. 4.80 per unit without any increase from 2015-16. The Railway traction tariff is proposed at INR. 7.48 per unit is higher than 55.8% over tariff proposed for HT-I (B) category.

It is to mention that Railway traction is also power intensive and loads are for passenger & goods train services which are run round the clock. There is no distinction of peak to non-peak hours. Most of the goods trains are run during night time which is off peak period. This is improving base loads of Licensees and supporting the grid stability. Apart from this, Railways is maintaining higher power factor. Contribution of Railways to economic and social developments of country far outweighs the advantages of HT-I (B).

Railway pleads before Hon'ble Commission to critically examine the preferential treatment / subsidy given to HT-I (B) which is unjustifiable and against basic principles of Electricity Act 2003 (section 61).

Reply from Licensees

Ferro Alloys is a power intensive industry and cost of power contributes substantially to the cost of production. Ferro alloy industries located in Telangana are also facing acute challenges in sustaining operations due to a mix of domestic and global factors. Considering

the above factors and in order to make Ferro Alloys in Telangana competitive and sustainable, the licensee has proposed no increase in tariff for the category. Moreover, HT-I(B) and Railway traction is not directly comparable with respect to their end use characteristics.

Due to the high load factor of Railway Traction, Railways is already being exempted from paying any demand charges unlike other HT consumers.

Commission’s view

The Commission determined the categories of consumers based on the factors indicated in the Electricity Act 2003. The Ferro Alloys is a power intensive category and they have a tariff condition for minimum offtake whereas the railway traction category does not have such condition.

2.36 Hyderabad Metro Rail

a. Comparison between HT-V(A) - Railway traction and HT-V(B) HMR:

In the proposed tariff of 2016-17, HT-V category is separated in to two parts as HT-V (A) for Railway traction and HT-V (B) for HMR traction.

The proposed railway traction tariff of INR. 7.48 per unit is higher than the HT-V (B) HMR traction by 18 paise despite the fact that both are availing of supply at same voltage level and for the same purpose of public transportation.

b. High CoS determined for HMR

As per the directive from the government, on the basis of Article 6.4 of the concession agreement and clause 8.9 of the Detailed Project report of Hyderabad Metro Rail, the Licensee has filed an addendum to the submitted ARR filing. In the addendum, it is recommended to have a separate category for HMR Loads as HT-IX with CoS at INR. 7.07 per unit (Addendum). The details of the CoS furnished made available in the addendum are furnished hereunder:

Voltage level	Category	MVA	MU
132 kV	HMR V(B) Traction	17.5	37.4
132 kV	Ht-III: Airports, Bus Stations and Railway stations	7.5	16.0
Total		25.0	53.4

The objector having been aggrieved by this determination of CoS at INR. 7.07/unit has requested the Hon’ble Commission for correction of the same.

c. Treating Metro Rail Service as distinct class of consumer

The Metro Rail Service has been classified as a distinct class of consumer across other regions of the nation on a cost of supply tariff. There is a set precedence of Delhi Metro Rail Corporation, which has allocated separate category on cost of supply tariff.

d. Cost of T&D infrastructure and facilities for HMR

It is submitted that unlike other consumers all infrastructure and facilities after the point of interconnection with transmission/distribution system are established, maintained and operated by the HMR at its own cost and the TRANSCO/DISCOM do not incur any dedicated expense for supply to Hyderabad Metro Rail. HMR has established four receiving sub-stations at various locations in proximity to Metro Rail System at its own cost. These will receive power at 132 kV. The onward distribution within the Traction system and the Depots/stations is done by HMR, thus absorbing all the losses (if any) incurred in the course of distribution.

e. Approach followed to arrive at CoS for HMR

The provisions of the Electricity Act 2003, and the National Tariff Policy do not permit the Distribution Company to determine the CoS on marginal cost. In particular the National Tariff Policy requires determination of CoS on average cost basis.

It is further brought to notice of the Hon’ble Commission that TSSPDCL and its predecessor has been using the embedded cost approach for determining the cost of service. However in the case of HMR, TSSPDCL has followed the marginal cost approach which is discriminatory. It is also relevant to highlight that no state within the country determines CoS on marginal cost approach.

In the addendum filed by the Licensee, HT-IX category has been projected to have a load of 25 MVA with a consumption of 53.4 MU. The break-up of HMR load across the various categories and the Cost of Service for each category is provided hereunder:

Category	Consumption	Cost of Service (INR./ kWh)	
Stations	16.0 MU	5.32	CoS for HT-III category in ARR
Traction	37.4 MU	5.49	CoS for HT-V category in ARR

On a simplistic weighted average basis, the CoS for HT-IX would therefore amount to INR. 5.43 per unit.

Reply from Licensees

- a. The HMR is designed to be a mass rapid transit system which would substantially contribute in reducing vehicular traffic, congestion during peak hours and thereby improving convenience to the end user.

In order to account for the above, the licensee has proposed a slight reduction in the tariff of HMR compared to Railway Traction. Similar such charging principle is prevalent in other metros such as Delhi Metro.

- b. As the Licensee with addition of HMR loads is tend to procure power from marginal stations which is otherwise can be avoided. Hence, it is sensible to fix the CoS based on the marginal cost as this is the actual costs incurred by the licensee to supply power to HMR@ INR. 7.07 per unit.
- c. The licensee in the addendum filing has created a separate sub-category for Hyderabad Metro Rail (HT-IX- HMR) and proposed tariff to meet the Cost of Supply (Cos) considering marginal power purchase cost, network costs and retail supply costs and doesn't include any cross subsidy component.
- d. The Licensee has considered transmission losses and external losses incurred for the energy purchased from outside state periphery viz. CGS, Market purchases and losses up to the voltage of supply of electricity to the HMR.
- e. Hence, it is sensible to fix the CoS based on the marginal cost as this is the actual costs incurred by the licensee to supply power to HMR.

Commission's view

TSSPDCL in its filings had proposed the sub category of HT-V (B) Hyderabad Metro Rail (HMR). Through an addendum petition dated 21/03/2016, TSSPDCL had requested the Commission to consider Hyderabad Metro Rail as a distinct specific tariff category called HT-IX: HMR. During the public hearing, objection was raised against the proposal of creating a separate category since the nature of business of HMR is similar to that of Indian Railways.

The Commission has examined the proposal for creating a separate category or sub-category to an existing category and presents its reasoning as below:

- HMR will be engaged in the activities of providing mass rapid transit system for Hyderabad and is a public utility and a social sector project having many social benefits which would be bestowed upon a section of traveling public.
- Section 61 and 62 of The Electricity Act allow for differentiation on the basis of geographical positioning and the purpose for which supply is required. The nature of service provided, geographical area and purpose of HMR are different from that of the Indian Railways and hence qualify for separation.

- With regard to load factor of the service, as the HMR becomes fully operational, the movement of trains will be more frequent in the given limited area of operations and thus the load factor will be higher than that of the Railways.
- Further the HMR provides only passenger services unlike the Railways which carry goods and earn additional revenue from such services.

Hence, the Commission opines that HMR is eligible to be classified under a separate category as has been done in Delhi. The commercial operation of the HMR is anticipated to be commenced during the year FY2016-17 covering only a limited area of operations and at present its load constitutes construction and commercial loads. The Commission observes that the category cost of service cannot be ascertained at this stage and hence a sub-category can be created with lower tariff than that of the Indian Railways to accommodate the unique requirement of this category prior to major commercial operations. **Meanwhile the Commission directs TSSPDCL to study the consumption pattern for the portion of the commercial operation to commence during the year FY 2016-17 and propose the Category CoS for the subsequent year.**

Hence the sub-category HT-V (B) Hyderabad Metro Rail (HMR) under HT-V Railway traction is created as requested by the Discom in its original petition and after considering the facts explained. Categorization of Metro Rail as a separate category/ sub-category has also been allowed by DERC and KERC respectively.

2.37 **Railway has right to negotiate the tariff irrespective tariff policy**

Railway has been considered as a deemed licensee for its own consumption and thus Railway is on par with licensee (i.e. Discom) and thus railway to be given power as per the negotiated rates not annual tariff mode. Railway pleads Hon'ble commission to grant relief to Railway at cost of Rs.4.97/unit on par with the power purchase cost + 16% profit (Rs.4.27 power purchase cost for 2016-17) selling power to the other licensee.

Reply from Licensees

Fundamentally, the power cost at the generator bus needs to be grossed up with losses and network charges upto the relevant voltage level needs to be added to arrive at the cost of serving a particular consumer. It is not feasible to supply power at the rate suggested by the objector, as network losses and network charges are ignored. The PP cost grossed up with losses and network cost amounts to Rs.6.44/unit (Cost of Service).

Commission's view

If the Railways would like to avail of the status of a deemed Licensee, it can approach the Commission through a separate petition as per the regulations in force.

2.38 **Change of Category for Offset Printers**

Telangana Offset Printers Association has suggested to reclassify printing industry from present LT II-B to LT III-A1 under industrial tariff, as the printing presses are registered under SSI act.

Reply from Licensees

As per the existing tariff order definition the Printing Presses comes under category LT-II Non-Domestic/Commercial. Hence the same has billed as per LT-II tariffs.

Commission's view

The Commission after considering the facts carefully is of the view that offset printing does not qualify under the industry category.

2.39 **Tariff Hike for LT-II (B) category**

Telangana State Tariff for LT-II (B) is higher than all surrounding states of Andhra Pradesh, Karnataka and Tamilnadu. In view of the above, the objector requested the Hon'ble Commission not to increase the LT-II (B) Non-Domestic/Commercial Tariff for FY 2016-17.

Reply from Licensees

Due to the increase in average cost of service of state from INR. 5.64 per unit as approved in Tariff Order 2015-16 to INR. 6.44 per unit as filed in ARR for FY 2016-17, the Licensee is obligated to increase Tariff nominally for FY 2016-17. To reduce the revenue gap increase of energy charges has been proposed in addition to the envisaged tariff subsidy support from Govt. of Telangana. The approval of the tariff will be at the discretion of the Hon'ble Commission

Commission's view

The Commission has fixed the tariff for LT-II (B) category considering the following:

- i. Existing tariff (for FY 2015-16)
- ii. Increase of average cost of supply (30 paisa) over that of previous year
- iii. Determined the tariff by adding 30 paisa over the existing tariff which is equivalent to the increased cost of supply.

2.40 **Separate category for educational institutions**

The objector requested the Commission to provide a separate category for educational institutes

Reply from Licensees

As per the Tariff Order Government educational institutions and student hostels run by government agencies and charitable institutions are categorized under LT-VII (A) General Purpose category.

Commission's view

The reply furnished by the Licensees is satisfactory.

2.41 **Tariff variation across different metered categories**

The objector opined that there is no justification for assigning different tariff to various metered category consumers

Reply from Licensees

As per Section 61 (g) and Section 62(3) of the Electricity Act, 2003, Tariffs of different categories will be different from category to category based on purpose of usage, nature of supply, voltage of utilization, its load factor, power factor, etc.

Commission's view

The Commission has determined the tariff categories based on: (a) voltage level at which the power is supplied, (b) total consumption of electricity, (c) purpose of availing supply, (d) power factor and (e) load factor as per section 62 (3) of the Electricity Act 2003.

2.42 **Relief from minimum demand and energy charges**

A.V.S. Suresh has requested relief from minimum demand and energy charges. For instance at the contracted MD of 45 MVA, The plants are required to pay a minimum bill of approximately Rs.2.4 crores per month, regardless of the operating status of the Steel Plant.

The minimum demand and energy charges, based on the CMD, may be waived when the plant is not in production.

Reply from Licensees

The minimum demand charges are levied as a part of recovery of fixed charges. Based on the nature of the system, the recovery of fixed charges will be either completely through levy of fixed charges or partially from fixed charges and partially from minimum charges. As it is evident that, when a consumer is connected to a system, the utility has to ensure readiness of network to meet the maximum contracted demand at any point of time especially for industrial units. Fixed costs of generation, Machine capacity, transmission system, certain work force and supervisory staff is kept on the job of monitoring the system; defraying administrative expenses not directly related to the consumption of energy are to be met by the utility. This element of the fixed charges, as an accepted practice, is recovered through the mechanism of minimum monthly charges which is highly justified.

Commission's view

The reply furnished by the Licensees is satisfactory.

- 2.43 Lowering of tariff for bulk consumers, especially the manufacturing plants where one of the basic process inputs is electric power.

Reply from Licensees

The tariff for Industrial category is lower as compared to other HT-II, HT-III, HT-V categories.

Commission's view

With increase in quantum of power to be purchased by the Licensees, the cost of procurement also increases. This can be observed from the merit order dispatch. Hence, the bulk consumer will have to bear such higher cost. However, the Commission while fixing the tariff has considered average cost of supply.

- 2.44 In the new tariff proposal, night time rebate would be INR. 0.55 per unit (from 10.00 pm to 6.00 am). But the TOD charges are INR. 1.0 per unit, for both the peak hours. The objector requested the Commission to consider the night time rebate also to be at INR. 1.0 per unit, to promote off peak usage, as was given in other states.

Reply from Licensees

The load curve, consumer mix and demand pattern varies from state to state. In the State of Telangana, in view of extension of additional hours of supply to agricultural consumers during day time, it is expected that the state will witness a morning peak from 6:00 am to 10:00 am as well.

Further, it must be noted under the new TOD time slots which have been proposed, that an incentive of INR. 0.55 per unit is for a period of 8 hours whereas the penalty of INR. 1.00 per unit is for a period of 4 hours. Hence the licensee is of the view that this is reasonable and would encourage consumers in shifting their load.

The time of day periods has been considered based on the overall load curve of the state anticipating the loads across categories including agricultural supply during day time. It was observed that the periods 06:00 to 10:00 hours and 18:00 to 22:00 hours, is a peak demand period and the time period 10:00 to 06:00 hours is an off peak time period. Hence the licensee has proposed ToD incentive and penalty periods accordingly.

The ToD rebate is introduced mainly to shift the load from peak period to off peak in order to flatten the load curve.

Commission's view

In view of the inputs from various stakeholders, the Commission has considered it just and reasonable to fix the incentive for the consumption between 10:00 pm and 6:00 am at INR. 1.00 per unit. The Commission is of the view that, this increase in incentive will encourage the consumers to shift their loads to the night and help achieve a flat load curve.

- 2.45 Special Rebate for supply at EHV, for 132 kV and above, 1% rebate on Energy charges is given in other states.

Reply from Licensees

The energy charges for HT categories are determined considering the cost of service and losses at each voltage level. Hence no special rebate is required for EHT consumers.

Commission's view

The voltage wise tariff fixed by the Commission for each category considers the losses and existing assets at individual voltage level. Thus the power supply availed of at higher voltage (as per eligible voltage) will have a lesser tariff.

- 2.46 **Cost of Service for Time of Day (TOD)**

The cost of service for the ToD periods of 0600 to 1000 hrs and 1800 to 2200 hrs is not shown to be any different from the cost of service during the rest of the period. In the circumstances there is no valid reason or justification for continuing with the TOD tariff at a higher level. It is therefore submitted that the TOD tariff be deleted and all the energy round the clock be at the same tariff.

Reply from Licensees

The Discoms are resorting to short term high cost power procurement to meet the peak demand and to recover such high costs, the Discoms are charging additional tariff in the form of ToD during peak time.

Commission's view

The reply furnished by the Licensees is satisfactory.

- 2.47 Special Rebate for power factor (when P.F is greater than 0.95) for every 1% rise above this, there would be a INR. 0.5 i.e. 1.0% reduction in energy charges.

Response from Licensees

The power factor rebate was superseded by the kVAh billing system from the year 2011-12. The consumer can enjoy the benefits for maintaining higher power factors under kVAh billing system.

Commission's view

The Commission has introduced kVAh tariff in order to improve the power factor by the consumer. If the consumer attains the unity power factor, the kWh and kVAh are equal and there is no loss to the consumer.

2.48 **Waiver of Cross Subsidy Surcharge for power intensive industries**

Relief from Cross Subsidy charges so that power intensive industries may avail of power available at cheaper rates on open access.

Reply from Licensees

Cross subsidy surcharge is levied as per Section 42(2) of the Electricity Act, 2003 and determined as per National Tariff policy guidelines to meet the Discom's current level of cross subsidy.

Commission's view

There is no such provision in the Electricity Act 2003 to waive the Cross Subsidy Surcharge to a particular group of industries.

2.49 **Separate category for Electric Arc Furnace**

A separate category may be created for Electric Arc Furnace based Steel Producers on the lines of Ferro Alloy Units.

Response from Licensees

The categorization of consumers is mainly done based on the underlying nature of the activity. As the steel production comes under the definition of Industry, no separate tariff category is required.

Commission's view

The Commission finds no logic in adopting a separate category or to align with Ferro Alloys for all Electric Arc Furnace Industries. The Ferro Alloys industries are power intensive category and having a tariff condition for minimum offtake whereas other industries using arc furnace in the process are not having such conditions, also they do not fit into the meaning of power intensive.

2.50 **Cost of service**

The write up on the cost of service filed does not sufficiently explain the methodology. The data filed does not show how each line item of the ARR is allocated to different categories of consumers and the basis thereof and how the cost of service of each category has been computed. The Discoms may provide the information.

Reply from Licensees

The cost of service model of the licensee consists of two parts

1. **Technical Model:** The technical model evaluates the load factors of major category of consumers with their estimated sales and gives the coincident demand and non-coincident demand for these categories of consumers. It studies the actual load pattern by taking feeder wise loads recorded during the immediate past 12 months period considering predominance loads on such feeders to arrive at category wise load curves under sampling method. The sales estimated for category of consumers grossed up with respective voltage level losses are used to arrive at coincident and non-coincident factors for each category of consumers which are shown in page no. 68 of the ARR filing petition.
2. **Financial Model:** The financial model uses the outputs from the technical model for allocation of costs among consumer categories. Initially each cost line item is classified in to Demand, Energy and customer related expenses and then allocated /apportioned to the consumer categories based on coincident, non-coincident demand, energy and connected loads as explained in page no. 69 and 70 of the ARR filings petition.

Commission's view

The reply furnished by the Licensees on explaining the methodology of computation of CoS for each category is in order.

2.51 Reduced tariff for domestic consumers

The objector requested the Commission to consider not revising the tariff for consumption up to 200 units for individual connections and allow an increase of INR. 0.50 per unit in the slab of 201 to 400 units. It was also requested that, for residential apartments common connections the existing slab rates up to 400 units remain unrevised and allow an increase of INR. 0.65 per unit above 401 units. The current tariff for the existing slabs were already on the higher side and any further increase will lead to overburdening of monthly maintenance charges.

Reply from Licensees

The average Cost of Supply is increased from INR. 5.64 per unit as approved by the Hon'ble Commission for FY 2015-16 to INR. 6.44 per unit as estimated and filed by the TSDicsoms. This increase in the CoS is mainly due to increase in Power Purchase Cost and increase in network cost. The increase in CoS has led to a revenue gap of INR. 4,168.69 Crore for FY 2016-17. To reduce the revenue gap, the Licensee has undertaken various energy conservation and loss reduction activities besides increase in tariff for certain category of consumer for FY 2016-17 including domestic category.

For common services in residential apartments, there is no separate tariff category/ rates in the Tariff order. The common services will be billed as per the respective LT-I to LT-II tariff rates as mentioned in the terms and conditions of the LT Tariffs.

Commission's view

The Commission before determining the tariff for domestic category has considered the existing tariff slabs, increase in average cost of supply over the previous year and Cost of Service of this category. The Commission, however, determined a tariff that is higher than the actual increase in cost of supply over the previous year for the subsidized category (domestic category in this case). Even after such increase the category remains subsidized.

2.52 **Request to increase the connected load applicability to religious places**

The objector has requested the Commission to enhance the connected load applicability for LT-VII (B) Religious places from 2 kW to a minimum of 5 kW.

Reply from Licensees

The categorization and sub-categorization of consumers is under the purview of the Hon'ble Commission.

Commission's view

The subcategory named wholly religious places under the main category LT-VII: General has been modified to accommodate contracted load above 2 kW. Separate tariff has been determined for a contracted load of above 2 kW subject to certain conditions.

2.53 **Request for change in category**

M/s Kamineni hospitals and others requested for a separate preferential tariff by introducing a sub-category for hospitals along with change in the category from HT-II to HT-VI. The objector also requested for a relief from ToD tariff as hospital is service that is operated 24x7.

Reply from Licensees

The categorization of consumers is mainly done based on the underlying nature of the activity. As Hospital activity fall under definition of HT-II: Others it is billed under HT-II Others. A preferential tariff for a particular class of consumers will lead to further widening of revenue deficit of the Discom which will either burden the other consumers in terms of higher cross subsidy or increase in government liabilities. Hence the proposal of separate category with preferential tariffs for Hospitals is not viable to the Discoms.

ToD tariff is mainly imposed to reduce the overall peak demand in the system and also to ensure Grid Discipline. The Discoms are resorted to short term high cost power procurement

to meet the peak demand and to recover such high costs, the Discoms are charging additional tariff in the form of ToD during peak time.

Licensee in its ARR filings for FY2016-17, has also proposed to introduce incentive @ Rs.0.55/unit for use of power during night time i.e., from 10 pm to 6 am

Commission's view

The Change in category from HT-II to HT-VI, for the Objector hospital, does not fall under the definition of HT-VI category which is meant for Towns and Residential Colonies. Hence, the Commission has not considered the request.

2.54 **Change in category and reduction in tariff for LT-III subcategories**

In the petitions submitted, the Licensees have proposed a tariff of INR. 3.82 per unit for LT-III (iv) i.e. Poultry farms. The Objector has requested to implement the same tariff across other sub categories of LT-III viz. pisciculture/ prawn culture, sugarcane crushing, mushroom & rabbit culture and Floriculture in green house. Further, the same tariff is requested to be implemented for dairy farms, animal husbandry and nurseries. It was also requested to categorize all the above mentioned subcategories to one subcategory.

Reply from Licensees

In the tariff order of FY 2015-16, agriculture related sectors were categorized under LT-IV (B) and LT-V (C). The energy charge for the aforementioned categories in the tariff order FY 2015-16 was INR. 3.75 and INR. 3.70 per unit respectively. The Licensees in their petition for FY 2016-17 have not proposed any tariff hike on these categories.

Further, tariff for the mentioned categories is lower than LT-III (i) (Industry) category. If the tariff is reduced any further it will be an additional burden to the Licensees.

Commission's view

The tariff categories/ sub categories will be fixed based on the purposes of supply, total consumption of electricity, Load factor, etc. as per provisions. Accordingly the sub categories were created.

2.55 **Categorizing dry and wet land farmers to single category**

The objector opined that the classification of dry and wet land farmers in LT-V (A) and (B) category should be removed. Instead, all the farmers with bore/ well connections should be treated equally and subsidy be extended to all such farmers. Under this category the income to the Licensees is below INR. 3.0 crores. Hence if this proposal is considered, it will be a great advantage to the farmers.

Reply from Licensees

The sub categories mentioned under LT-V (A) and (B) are as proposed by the government for the disbursement of subsidy. Changing the categories for these sub categories is not in the purview of the Licensees.

Commission's view

The Commission has examined the issue. During the public hearing many of the agricultural consumers have represented to the Commission requesting to withdraw the IT assessee sub-category as PAN card is necessary to open a bank account or taking loan, etc., considering the request of the objector, the IT assessee sub-category has been withdrawn in LT-V (A) and V (B) for FY 2016-17.

2.56 Implementation of tariff for agricultural supply beyond specified time

For the agricultural supply of 16 hours through lift irrigation scheme under LT-V, the erstwhile united Andhra Pradesh considered free supply for first 7 hours and for the remaining 9 hours a tariff of INR. 3.50 per unit was charged. The same system is still implemented in the divided Andhra Pradesh. The objector requested the Commission to consider a similar system for Telangana.

Reply from Licensees

The proposed free agricultural supply for first 7 hours and a tariff of INR. 3.50 per unit for any additional supply from lift irrigation scheme under LT-V category is in implementation as per the tariff order issued by the Hon'ble Commission for FY 2015-16.

Commission's view

The Commission has considered the request and agreed to extend the supply beyond 7 hours for LI schemes under LT-V at the tariff of INR. 3.80 (sum of existing tariff (INR. 3.50) and increase in average cost of supply over the previous year (30 paise) totaling to INR. 3.80.

2.57 Suggestion on category HT-III

It is observed that the tariff for railway stations and bus stations are at a par with that of airports. The objector opined that it is unfair to charge railway and bus stations at the same level with airports. Hence, requested to charge airports INR. 8.00 per unit and railway & bus stations at INR. 6.00 per unit.

It was also requested that, industries/ sectors which are functioning in the premises of the airport should be charged under their respective categories but not under LT-III.

Reply from Licensees

The decision in this regard is in the purview of the Hon'ble Commission.

Commission's view

The suggestion is not considered by the Commission for this year as the category is meant for public service sectors limited to bus stations, railway stations and airports.

Regarding segregation of loads within the premises of the airport (RGIA), the Commission had issued a directive to TSSPDCL in the Tariff Order of FY 2015-16. The Licensees, in response to the directive stated that, a notice to the Novotel Hotel which is outside the premises of the airport has been issued asking them to take a new HT service under HT-II category.

The Licensee is directed to examine the possibility of segregation of remaining loads so that separate metering can be provided in order to bill under appropriate category and submit the report to the Commission by the end of August, 2016.

2.58 **Request to include charitable hostels under LT-VII (A)**

As per the proposal of the Licensees, the tariff under LT-VII general purpose is applicable to charitable institutions i.e. public charitable trusts and societies registered under the societies registration Act (running educational medical institutions on a no-profit basis). The objector requested the Hon'ble Commission to include all students' hostels run by charitable trusts/societies and NGO's on no-profit basis under this category.

Reply from Licensees

To get the benefit of lower tariff to genuine students hostels run by several charitable trusts / societies the Licensees have proposed the following clause in the definition of LT- VII General purpose in the ARR & Tariff proposals filings 2016-17

“This tariff would be applicable for consumers who are having tax exemption from IT Department under 80G”.

Commission's view

The Tariff Order is very clear on this issue.

2.59 **Increase in tariff for LT-I (B) Domestic category**

In the tariff proposal for the year 2016-17, Petitioners have submitted a steep increase in the tariffs under LT-I (B) Domestic slab 201-400 units from INR. 4.80 to 8.15 per unit. The objector requested a clarification in this regard.

Reply from Licensees

In the Tariff Order for FY2015-16, the average cost of service (CoS) at state level was INR. 5.64/ unit. Since then there has been significant increase in the average CoS and the Licensees estimated the average CoS for FY2016-17 at state level to be INR. 6.44/ unit. The

average realization at state level with the current tariffs is INR. 4.56/ unit. There is revenue gap of INR. 1.98/ unit. Hence, the Licensees proposed tariff revision for various categories to recover a part of revenue gap from the consumers. Licensees have put all efforts while proposing tariffs to be within +/-20% of the average cost of supply wherever it is possible.

Commission's view

The Commission before determining the tariff for domestic category has considered the existing tariff slabs, increase in average cost of supply over the previous year and Cost of Service of this category. The Commission, however, determined a tariff that is higher than the actual increase in cost of supply over the previous year for the subsidized category (domestic category in this case). Even after such increase the category remains subsidized.

2.60 Telescopic system for domestic tariff

a. Single table telescopic system for domestic consumers

The proposed four tables for the domestic consumers is not acceptable. Instead it should be a single telescopic table. The objector, hence requested the Licensees to adopt the below suggested table which would help realizing the proposed revenue and is telescopic in nature.

1-100 units	INR. 2.00/ kWh
101-200 units	INR. 4.00/ kWh
201-300 units	INR. 6.00/ kWh
301-400 units	INR. 8.00/kWh
Above 400 units	INR. 10.00/ kWh

Start the tariff with INR. 1.00 for the first unit (this benchmark tariff can be set as suitable to the Hon'ble Commission) and increase the tariff by 2 paisa for every additional unit.

b. Re-introduction of telescopic system

The proposed revision in tariff for the LT domestic slabs is on the higher side and is not telescopic in nature. A consumer with monthly consumption of 100 units will have to pay an additional amount of INR. 126.75, if the consumption goes up by one unit above 100 units. Similarly, a consumer of 200 units consumption will end up paying INR. 216.80 for one additional unit above 200 units. This is the irrationality of the non-telescopic system. . Hence, requesting the Commission to reject proposals for introduction of non-telescopic system and re-introduce telescopic system of tariffs.

c. Mitigate financial burden on middle class through reduction in tariff

The objector requested the Hon'ble Commission to consider the following tariff structure in order to reduce the financial burden on the middle income group.

Above 200 units and up to 400 units

First 100 units INR. 3.25 per unit
 101 - 200 units INR. 4.25 per unit
 201 - 400 units INR. 4.80 per unit

Above 400 units

0 - 200 units INR. 4.80 per unit
 201 - 400 units INR. 8.15 per unit
 Above 400 units INR. 9.50 per unit

Reply from Licensees

- a. The suggestion made by the objector are noted. The final decision on the tariff is in the purview of the Hon’ble Commission.
- b. The tariff structure proposed by the Licensees is still telescopic in nature, however an attempt has been made to rationalize the number of slabs in each sub-category.

The number of sub-categories still remains same as in the previous year. Only number of slabs in category LT-I (B) (ii) has changed.

Commission’s view

The Commission has examined the proposal of the Licensees on the slabs suggested for Domestic category. The Commission while examining the slabs found that the there is no difference in the tariff of LT-I (A) (i) and LT-I (A) (ii) for consumption up to 50 units. Hence, the Commission has merged both the sub-categories and renamed it as LT-I (A).

Further, the Licensees have stated that GoTS shall provide subsidy for the consumers with consumption up to 50 units and between 51 and 100 units. Hence, the Commission has provided a separate sub-category and renamed it as LT-I (A). Therefore, the suggestion of the objector to have a single table could not be considered. For the remaining sub-categories, the Commission has retained them as proposed by the Licensees (except for merging of slabs).

However on the slab structures, the Commission examined the existing slab structure of the sub-category LT-I (B) (ii) (consumptive above 200 units) of LT-I domestic category and after a thorough examination, the Commission determined to revise the slab structures in order to rationalize and simplify the same. Accordingly, the Commission revised the slab structure from 8 to 5 slabs. The existing and revised slab structures are as follows

Existing Tariff Slab	Revised Tariff Slab
I (B) (ii) Above 200 Units/Month	I (B)(ii) Above 200 Units/Month
0-50	0-200

Existing Tariff Slab	Revised Tariff Slab
51-100	
101-150	
151-200	
201-250	
251-300	201-300
301-400	301-400
Above 400 units	401-800
	Above 800 units

2.61 Commercial tariff in two categories

The tariff for commercial utilization can be in two categories

Reply from Licensees

The suggestion of the objector is already under implementation.

Commission’s view

The reply furnished by the Licensees is not in order, as they have proposed four sub categories for LT-II: Non-Domestic/ Commercial category. However, the Commission agrees to the sub-categories proposed by the Licensees.

2.62 Tariff to be rounded off to nearest absolute value

The objector requested the Licensees to propose the unit charges should be rounded off to the nearest absolute value without decimals (Paisa).

Reply from Licensees

The tariff has been limited to two decimals.

Commission’s view

The Commission has rounded of the tariff as far as possible to nearest 5 paisa or 10 paisa considering the revenue impact on this account.

2.63 Tariff design

The objector requested the Licensees to explain the objective behind “Tariff Design”.

Reply from Licensees

The licensee feels that the increased Cost of Supply should reflect appropriately in the tariff structure. Hence, to meet the revenue deficit in ensuing year, the licensee has proposed tariff increase in few categories and designed the tariff structure accordingly.

Commission’s view

The reply furnished by the Licensees on the purpose of Tariff Design is satisfactory

2.64

Capacitor surcharge

In the previous orders issued by the Hon’ble Commission LT consumers with kWh billing (except LT Domestic, LT-IV, LT-VI (A), LT-VII (B)) having connected loads mentioned in the table below shall pay capacitor surcharge (as per rules in vogue) at the rate of 25% of the billed amount, if capacitors are found defunct.

Category	Contracted load
LT-II & LT-VII (A)	<10 kW
Lt-III & LT-VI (B)	<20 HP

Request to clarify the rationale behind assessing capacitor surcharge as 25% of the bill amount for direct ceiling.

If there is no inductive load at the consumer end and having good PF then installing additional capacitor leads to lead PF and it impacts the electronic equipment.

So, the Hon’ble Commission is requested to levy the penalty in slab wise. For example ≥ 0.95 No penalty, 0.90 to 0.95 - 5% on Energy Charges, 0.85 to 0.90 - 10% on Energy Charges, 0.8 to 0.85 - 15% on Energy Charges, < 0.8 - 20% on Energy Charges.

Reply from Licensees

As per Tariff Order 2015-16, (Page No.208 – 209) the consumer shall provide capacitor of suitable rating (as per GTCS). If during inspection, no capacity is found or the capacitors already installed are found defective, such consumer shall be liable to pay capacitor surcharge @ 25% of the monthly bill amount.

If the capacitor is installed and receiving bills with capacitor surcharge, such cases may be informed to the concerned section officer/call center for rectification of the corresponding bills.

Commission’s view

The kVAh billing system incorporated in the Tariff Order will take care of the penalty on poor power factor. The kVAh billing is incorporated for those services whose contracted demand/ contracted load is more than the specified limits in the Tariff Order.

2.65 **Abnormal high charges for LT consumer with consumption above 100 units**

The proposed domestic categories A&B have not been changed in the tariff rates. But the balance categories with consumption above 100 units per month are being charged abnormal. These proposed rates are applicable to 75% of the domestic consumers. Request the Hon'ble Commission to reduce the financial burden of these consumers by reducing the tariff.

Reply from Licensees

The proposed tariff increase does not affect 75% of the Domestic Consumers. For the consumers having consumption more than 100 units and less than 200 units, though the tariff has been increased, the average realization at state level at proposed tariff is INR. 3.83 per unit which is very less than the cost of service of INR. 6.44 per unit borne by the Licensee. Even at the proposed tariff, INR. 2.66 per unit has to be borne by state government and cross subsidy.

Commission's view

The Commission before determining the tariff for domestic category has considered the existing tariff slabs, increase in average cost of supply over the previous year and Cost of Service of this category.

2.66 **Categorize LT Commercial based on load**

The commercial categories are paying huge amounts in respect of electricity charges. Request to categorize the commercial shops on the basis of the Load. Consumption below 200 units and above 200 units to be charged under different categories.

Reply from Licensees

Such slabs as proposed by the objector are already available in LT-II: Non-domestic category. The existing slabs will meet the requirements of different consumers and their consumption.

Commission's view

The response furnished by the Licensees is in order.

2.67 **Categorization of R.O. water plants**

It is submitted that the Palamoor R.O. Water Plants Association Regd. No. 354/2012 and the service connection to the water plants were released under LT-III. A back billing assessment under the LT-II was issued to the Association from August 2012 by the ADE, operations of Mahbubnagar town. The water purifying plant is an industry of processing the water and the same shall not be included in commercial category. Hence, the objector requested the

Hon'ble Commission to consider the water purifying under LT-III and declare the back billing assessment as illegal.

Reply from Licensees

As per the existing tariff order definition the R.O. Plants comes under category LT-II Non-Domestic/Commercial. Hence the same has billed as per LT-II tariffs.

Duly considering the representations received from the R.O. Water Plants Association, the Licensee has proposed to include Reverse Osmosis (RO) Water Processing Plants in the category of LT-III (Industry) in the present ARR & Tariff filings.

Commission's view

The Commission accepts the proposal of Licensees. The Objector is advised to approach Consumer Grievance Redressal Forum which is created by the Commission under the provisions of the Electricity Act 2003 for any pending issues concerned.

2.68 **Request for separate Category for Spinning Mills**

The objector has requested the Hon'ble Commission on the following:

- To create a single tariff for spinning & textile units as it is an energy intensive industry with power being 40% of the manufacturing cost
- To abolish the demand charges and create a separate single tariff by bringing the spinning industry under separate Category with no additional charges in form of TOD (Time of Day) Tariff.
- To consider a separate Categorization for Spinning Mills while finalizing the Tariff for 2016-17. The same request when made to the government has been considered positively and included in the draft Textile and Apparel policy 2015-2020 (T-TAP policy).

Reply from Licensees

Spinning & Textile units comes under Industrial activity and hence it is being categorized under HT-I (Industry).

In two part tariff, the demand charges which are fixed in nature collected to recover the costs towards fixed costs payable to generators, maintenance of network/infrastructure and readiness of network to meet the maximum contracted demand at any point of time especially for industrial units.

Further, ToD tariff is mainly imposed to reduce the overall peak demand in the system and also to ensure Grid Discipline.

Hence, Licensee does not agree with proposal of separate categorization of Spinning Mills and removal of demand charges & ToD.

Commission's view

The general principle of tariff structure is to have two part tariff, i.e. capacity/ fixed/ demand charges and energy charges. Accordingly, the Commission has fixed the two part tariff for HT categories except certain categories on technical grounds. Hence, it is not possible to determine single part tariff for industries like textiles, etc.

On charges for ToD, the reply furnished by the Licensees is in order.

Regarding creation of a separate category for textile industry, the Commission found that, it does not deem fit to do so under the section 62 (3) of the Electricity Act 2003.

The Commission has to determine the tariff within the provisions of the Electricity Act 2003 and if GoTS issues any policy, the GoTS has to provide required subsidy amount u/s 65 of the Electricity Act 2003.

2.69 **The filings made by Licensees to be rejected**

The objector opined that it was not appropriate to honor the filing or fix the tariff as the Licensees have admitted the uncertainty in the projections of power purchase quantum and other regulatory objectives

Reply from Licensees

As per Regulation 4 of 2005, the Licensee is required to file the Aggregate Revenue Requirement (ARR) for Retail Supply Business and Tariff Proposals for the entire control period i.e. for five years (2014-15 to 2018-19). However, the Licensee had requested the Hon'ble Commission to allow it to submit the ARR for Retail Supply Business for FY 2016-17 only instead of entire control period (for five years) due to significant uncertainty involved in projection of quantum of power to be purchased from various sources as well in costs, not meeting the regulatory objectives of the multi-year tariff regime, demand side uncertainty etc. for entire control period. The Hon'ble Commission has granted permission to submit the ARR & Proposed Tariff Filings in respect of Retail Supply Business on annual basis for FY 2016-17 vide proceedings No.TSERC/Tariff/DD(T-Engg)/T-01/2015/D.No. 751/15, dated 28.09.2015.

Commission's view

The reply furnished by the Licensees is satisfactory.

2.70 Penalties levied during R&C measures

The penalty charges levied during the implementation of R&C measure were waived off to the tune of 50%. The objector has requested the Licensees to waive off the remaining penalty amount as well.

Reply from Licensees

The issue is not under the purview of the Licensees

Commission's view

The erstwhile APERC has given reasons in its order for waiving only 50% penalty charges. If the remaining 50% penal charges is waived it will have an impact on revenue of the Licensees.

2.71 Tariff for hair cutting salon

The objector opined that the tariff for hair cutting salon should be at par with domestic category tariff

Reply from Licensees

The licensees have proposed INR.2.00 per unit subsidy to the existing non-domestic category (hair cutting saloons) in proposed tariff filing.

Commission's view

The reply furnished by the Licenses is in order.

2.72 Rice mills and granite industries

The objector requested the Hon'ble Commission to consider rice mills and granite industries as seasonal industries

Reply from Licensee

As per the Tariff Order issued by the Hon'ble Commission, the Rice mills and Granite industries are not considered as seasonal industries.

Commission's view

The reply furnished by the Licenses is satisfactory.

2.73 Separate Category for Rice Mills

It is submitted that consumption of Rice Mill Units will be more than that of Ferro Alloys. Hence, the Hon'ble Commission is requested for creation of separate LT Category for rice mills whose connected load is up to 180 HP.

Reply from Licensees

As per the existing Tariff Order, LT-III Industrial category is permitted up to 100 HP. It is not required other separate category.

Commission's view

The Commission has examined the entire issue in a thread bear and decided to create an optional sub-category under HT-I (A) up to a contracted maximum demand of 150 kVA with lesser demand charge and high energy charges so as to meet the requirement of rice mills. It is not possible to bring back the services from HT category to LT category as it involves transformer cost and other technical problems. It is also technically not possible to increase the contracted demand in the LT Category as requested.

2.74 Categorization of mango plantation

The objector requested the Hon'ble Commission to consider mango plantation under subsidized agricultural category

Reply from Licensees

The service will be inspected and billed in the eligible category.

Commission's view

The reply furnished by the Licensees is in order.

2.75 Reconnection of sick industries

It is submitted by the objector that a development charge is being collected for reconnection of a sick industry. Further, deration of demand load is not being allowed. The objector requested the Licensees to install prepaid meters for HT Consumers

Reply from Licensees

Deration of demand was not honored due to pending bills and prepaid HT meters are not yet available in the market.

Commission's view

Regarding installation of prepaid meters for HT category service, the Licensees are directed to verify the availability of meters and metering structure duly consulting Central Electricity Authority (CEA).

- 2.76 The objector opined that the tariff for poultry farms is less than that applicable for dairy farms.

Reply from Licensees

As per the proposed tariffs for the FY 2016-17, the tariff for dairy farms up to 10 HP (INR. 3.75 per Unit) under LT-IV (B) is less than poultry farming units (INR. 3.82 per unit).

Commission's view

During FY 2015-16, GoTS has provided subsidy of INR.2.00 per unit on the tariff determined by the Commission for Poultry farms. This is the reason for lower tariff for Poultry farms. However, the Commission has determined the tariff following principles applicable to other categories.

- 2.77 **Imposing deemed energy consumption charges on disconnected service of Ferro-Alloys (Category HT-I (B))**

The objectors of Ferro-Alloys have raised an issue stating that the Licensees are charging deemed energy consumption charges during the disconnected period. The Ferro-Alloys Industry under disconnection will not be able to achieve any consumption, leave alone 85%. It is against the principles of natural justice to enforce what is impossible. Since the Ferro-Alloys industries under HT-I (B) are exempted from minimum charges, any levy of deemed consumption charges during the period of disconnection tantamount to levy of minimum charges which are exempted to this category.

Reply from Licensees

No response

Commission's view

The Commission has examined the issue. For Ferro-Alloys, a minimum offtake (deemed consumption charges) per annum is fixed by the Commission at the rate of 6,701 kVAh per kVA per annum will be billed based on average contracted maximum demand or average actual demand whichever is higher. When the service is disconnected i.e. the service is not in live condition, the consumer cannot consume any energy. Hence raising bills at a consumption computed at a load factor of 85% (i.e. deemed consumption of energy) is not reasonable. Therefore, the Commission has decided not to levy deemed consumption charges during the disconnection period for HT-I (B): Ferro-Alloys category for FY 2016-17.

Objections/suggestions on General issues

2.78 Promptness in decision making

The Licensees have submitted their subject proposals on 8th March, 2016 to the Hon'ble Commission instead of submitting the same by 30th November, 2015. Despite a delay of three months issues such as a) analyzing the impact of UDAY; b) decision regarding scheduling 9 hours of agricultural power supply during day time; and c) gathering and analyzing the data of upcoming lift irrigation schemes that are going to be energized during 2016-17 in Telangana were not finalized. Further, the Licensees have submitted their ARR and tariff proposals after completion of elections lends added credence to the widely shared perception that the delay in submission is to serve political expediency of the party-in-power.

Reply from Licensees

The licensee has made every effort to file the ARR and Tariff petition by 30th November, 2015, the delay in filings has been mainly due to reasons beyond the control of the licensee viz., the analyzing the impact of UDAY scheme which was announced by MoP, GoI in November, 2015, aimed at turning around the performance of loss making state utilities. UDAY scheme envisages co-operation between GoI, State Government and the licensee for achieving the turnaround of the distribution utility. UDAY scheme intends to achieve the above objective through a tri-partite agreement between GoI, State Government and the Licensee.

A clear understanding of roles, responsibilities and benefits by joining such a scheme is a key pre-requisite before joining it. This involved seeking clarifications from GoI as well as exchange of information between the parties concerned. It may be noted that the above activities involved considerable time before the decision to join UDAY scheme was announced in February, 2016.

As per the UDAY notification, flexibility is given to State Government on the quantum of debt to be taken-over and this would impact the extent of reduction of losses of 2015-16. As debt take-over pattern is yet to be finalized the licensees have included a prayer for consideration by the Hon'ble Commission.

Commission's view

The Licensees are expected to file the ARR and Tariff proposals for Retail supply business for the ensuing year by the end of November of current year as per the act and regulations. The Licensees have requested extension of time for filing petitions in view of the following

- Analyzing measures to be adopted on the newly introduced UDAY scheme for financial turn around and revival of DISCOMs, a scheme introduced by MoP on 23rd November, 2015, which has a material impact on ARR filings of DISCOMs.

- Analyzing the impact on ARR due to increase in the agricultural supply to 9 hours and increase in peak load during day time.
- Also, for gathering and analyzing the data on upcoming lift irrigation schemes which have been taken on priority basis by the GoTS.

Considering the requests made by the Licensees, the Commission has granted extension of time to submit the filing from time to time.

2.79 **Short timelines for objections**

A period of just one week is given, by implication, to the Licensees to send its replies to the suggestions and objections from the interested public and to the later to study the same and prepare for further submissions during the public hearing.

Reply from Licensees

The last date of submission of the suggestions and objections of ARR filings to the Licensees is 30th March, 2016.

The Licensees have simultaneously arranged for responses/replies to the objectors as and when the objections/suggestions were received without waiting till the due date i.e., 04th April, 2016.

Commission's view

The time given for Objectors is 21 days for studying and filing objections, which is similar to that of most of the previous years. Regarding furnishing replies to the objectors, the Licensees have not objected for the given timeline.

2.80 **Impact of transmission true up**

The impact of true up claims of Transmission utility for the second control period also will be felt on the ARR of Distribution Licensees, the Commission should have directed the Transmission utility to submit the same in time. Contrary to its earlier directive to the Distribution Licensees to submit their ARR and tariff revision proposals for 2016-17 in time, the Hon'ble Commission has repeatedly conceded their requests for extension of time for the same by more than three months. The Commission should not only act independently and objectively in exercising its due authority and in its functioning but also appear to be so.

Reply from Licensees

The submissions for approval of true up by the Transmission utility is not in the purview of the Distribution Licensees.

Commission's view

The TS Transco has mentioned that the assets and liabilities of erstwhile AP Transco have not yet been bifurcated between AP and TS Transco. TS Transco has hence stated that it will file the ARR and tariff for the balance of the third control period during the year 2016-17 along with True up for the second control period vide its letter No. CE/Plg.,Cooml.&Co-ordn./DE/RAC/F.ARR(FY16-17)/D.No.68/15 dated 24th November, 2015.

The TS Transco is directed to file the ARR and tariff proposals for the balance period of third control period before the end of November 2016 as promised.

2.81 **Request for true up information**

The Hon'ble Commission to direct the Licensees to submit their explanations for variations relating to true up claims.

Reply from Licensees

The Licensees are not claiming the true ups of 1st and 2nd control periods and FY 2014-15 in view of participation in UDAY scheme. However, the licensees have shown the computations of the deviations of actual performance with respect to the values approved by Hon'ble Commission for the 1st and 2nd control periods and the revenue gap for FY 2014-15 and FY 2015-16.

Commission's view

It is understood that the liability from the true up of first and second control period of the Wheeling and Retail supply business including the revenue gap for FY 2014-15 and FY 2015-16 will be dealt through UDAY scheme. However, the Licensees are obligated to file the true up claims before the Commission for examination and necessary directives to improve performance in future years. In this regard, the Commission agrees to the views of the objector.

2.82 **Billing cycle and effects**

The objector opined that the current billing cycle is between 20 to 40 days (starts on about 04th and ends on 17th of every month). Due to the wide ranging billing cycle, the category of certain classes of consumers shifts to the next category (for example, LT-I(B) (i) to LT-I(B) (ii)). This is resulting in payment of higher energy charges by the consumer for none of their fault.

The objector has requested the Hon'ble Commission to kindly roll back LT-I (B) (ii) in total and extend the telescopic billing system of LT-I (B) (i). It was also requested to maintain billing cycle as 30 days x 24 hours and not based on calendar month system.

Reply from Licensees

LT Cat-I consumer CC bills have been issued through spot billing machines on the same day of every month to the extent possible. If any consumer has been issued with a delay of 1 or 2 days, thereby, if their monthly consumption exceeds 200 units, such CC bills have been revised on receipt of consumer representation and excess bill amount will be withdrawn. However, the CC bills will be issued for 30 or 31 days consumption by tracking previous reading date to avoid excess billing amount due to delay in issuing of CC Bills in future (i.e. for more than 30 or 31 days consumption in a month).

Commission's view

The Licensees response to rectify bills if requested does not seem appropriate. When there is a delay from the Licensee in taking reading, the bills have to be adjusted to monthly consumption irrespective of the request from consumer.

The Licensees are directed to develop a software system in the spot billing machines such that the consumption is limited to the billing month (for example, if previous month reading was taken on 5th day of the month, the next reading taken on 7th day instead of taking on 5th day of current month, the consumption shall be apportioned to 30/31 days depending on the number of days in that particular calendar month so that it avoids the shifting of consumption to higher slabs).

2.83 **Higher tariff – Reason for subscription of additional services in same premise**

The consumer availing power supply of 400 units per month has to pay the energy charges of INR. 2590 as per new tariff. But if he takes one more additional service in the same premises, bi-furcating the existed load, he has to pay two bills of INR. 750 each i.e., INR. 1500 only towards energy charges. Similar is the case for any further higher consumption.

If consumers adhere to this mechanism the average revenue/specific revenue to the licensees will decrease. Further, new consumers are resorting to multiple services in the same premises on the pretext of number of dwellings, to get safeguard from this defective tariff.

Reply from Licensees

The additional service is being given only when there is clear indication that the portion is a separate dwelling. Every new connection is accorded after careful inspection of the dwelling.

The Licensee is also undertaking periodic inspection of services to detect cases of multiple connections in order to prevent the loss of revenue to the Licensee. The consumers at the higher slabs are charged high so that, energy efficient appliances are put to use by the consumers and energy conservation is taken up.

Commission's view

The response furnished by the Licensees seems adequate. However, the Licensee should ensure that no multiple connections are given in violation of GTCS and Tariff Order.

2.84 **Transmission and distribution losses**

T&D loss levels for both the Licensees continue to be high. They are higher than the level approved by the Commission. Higher T&D losses lead to higher quantum of power procurement and also higher tariff burden on the consumers and higher subsidy support burden on the state government. As substantial amounts are being spent on T&D infrastructure and also O&M including salaries these should reflect in lower T&D losses.

Reply from Licensees

The licensees have strived to achieve the loss reduction targets set by the Hon'ble Commission. The reduction in losses over the last year is as below

TSSPDCL:	2014-15 – 12.92%	2015-16 (estimate) – 10.81%
TSNPDCL:	2014-15 – 13.25%	2015-16 (estimate) – 11.33%

Commission's view

The Licensees and the State Transmission Utility (STU) are obligated to adhere to the loss trajectory as prescribed by the Commission in its MYT orders. The projections of power purchase quantum is done by grossing up the sales with loss trajectory for FY 2016-17 as approved by the Commission in the MYT Order. Thus, there is no burden to the consumer on account of any excess loss incurred by the Licensee above the approved losses. The true-up for previous years, wherever necessary, will also be carried out on the same principle.

2.85 **Uninterrupted power supply**

M/s Kamineni hospitals and others have requested uninterrupted power supply to hospitals in order to cater the needs of a large number of sick patients on ventilators and monitors.

Reply from Licensees

The Licensees are striving to provide uninterrupted and quality power supply to the consumers. It is may be noted that during the FY 2015-16 there were no load reliefs in the Licensee's area of supply and Licensee presumes to continue the same in the future i.e., for FY 2016-17.

Commission's view:

The response provided by the Licensees for the objection seems adequate.

2.86 **Role of Licensee and consumer in release of agricultural connection**

The objector has requested the Licensees to

- a) Widely spread the information on the role of consumer and Licensee while taking an agricultural connection. To make available a copy of the estimate to the consumer. Details of material drawn to be communicated to the consumer through a text message and also through documented copy. After the installation, the file to be closed only after taking feedback on the adherence with standard procedure and consent of satisfaction from the consumer on the service.
- b) Similarly, the details of toll free number should be made available to the farmers. Further, feedback on the service and a check on issue resolution as per SOP should be done. In case of any deviation from SOP, compensation has to be paid to the consumer.

Reply from Licensee

An agricultural consumer should register for the connection in the office of ADE operations along with the copy of office along with a copy of farmer's agricultural passbook. The applicant will have to pay an amount of INR. 4,950.00 (for a 5 HP connection) by way of Demand Draft (DD) in favor of the corresponding Licensee. All such registered applications will be sanctioned on FIFO basis. An appointed contractor will then be issued material for the installation and energizing.

In case of any failure in the connection on a later date, the consumer is expected to inform the concerned authority. It is then the duty of Licensee (through its officials) to resume the operation of the DTR or replace the DTR.

This information on the procedure of application and duties of the Licensees are being communicated to the consumers in all the meetings of CGRF and TSERC.

A copy of the estimate is being provided to the consumer. However, it will be in English as the copy will be generated by the SAP system. The details of material drawn are being communicated to the consumer through a text message. Also, a feedback on adherence with standard procedure and consent of satisfaction are being taken from the consumer.

The complaints received in the toll free service (1800 42 53600) will be registered and a unique complaint number will be given to the consumer. The issue will be resolved as per SOP and the consumer will be informed after such issue is resolved. In case of any deviation from SOP, a compensation will be paid to the consumer.

Commission's view

- a) The explanation furnished by the Licensees on adoption of First in First out (FIFO) approach being followed for release of agricultural connection is found satisfactory. **While following the FIFO approach, the Licensees are directed to ensure that**

prospective consumer should be sent status update through a text message (on number furnished in the application). The status update should include priority number, sanction details, details of payment to be made to the Licensees by the consumer, quantum of major materials (poles, conductor and transformers) allocated with date, material drawn and completion of work.

- b) The Licensees are directed to widely publicize the toll free number and ensure its operation 24x7. The Licensees should also ensure sufficient lines for the toll free service are available to avoid congestion in communication. The service should be developed to register complaint through IVRS system equipped to issue a docket number with date and time to facilitate follow up of the complaint. It should further, be enabled to claim compensation under stipulated SoP in case of delay in compliance.**

2.87 ARR to be published in Telugu

The objector requested the Licensees to publish the ARR copy in Telugu.

Reply from Licensees

The details of ARR and tariff filings will be made available in Telugu

Commission's view

The response furnished by the Licensees to the objector seems adequate.

2.88 Employee participation in regulatory proceedings

It is requested by the objector to withdraw the Hon'ble Commission's directive on refraining employee participation in regulatory proceedings

Reply from Licensees

The decision on such matters is under, the purview of the Hon'ble Commission.

Commission's view

The Commission has issued only an advisory quoting the conduct rules applicable to the employees. On this issue, a Writ Petition with number 10223 of 2016 has been filed before Hon'ble High Court of Telangana and the matter is now subjudice.

2.89 Compensation to land owners

Compensation and annual lease for all kinds of tower lines including HT lines that pass through farm lands. No line should be drawn without prior notice, even if a compensation is paid.

Reply from Licensees

No Response

Commission's view

The Licensees must follow the relevant GO issued by the appropriate Government.

2.90 **Neutral wire to agricultural connections**

Provide neutral wire to all agricultural connections.

Reply from Licensees

It is expensive to provide neutral wire to all agricultural connections. However, efforts will be made depending on the available financial resources to provide neutral wire to agricultural connections. In the new agricultural connections, provision for exclusive neutral wire (1x25 sqmm) is available.

As per the government policy to provide 9 hours agricultural power supply, the Licensees will have to provide 3 phase supply. Since the 3 phase motor loads are balanced there will be no requirement for neutral wire.

Commission's view

The erstwhile APERC has issued directives in providing neutral wire to agricultural connections which will avoid accidents, burning of motors and equipment. The Commission adopted all the rules, regulations and directives issued by the erstwhile APERC. Hence, the Licensees shall adhere to the earlier directives.

2.91 **Additional charges at e-seva**

The objector requested the Licensees not to collect additional charges when the bills are paid at e-seva center.

Reply from Licensees

e-seva centers collect the transaction charges from consumers as per the G.O.No. 31

Commission's view

The response furnished by the Licensees is in order. However, the Licensees have provided other options of payment to consumers to avoid such extra charges.

2.92 **Wavier of arrears**

The Telangana Government recently announced before Civic Body Election that the arrears are exempted for the consumers who are using 100 units/ month and Water Bill arrears also. The objector opined that the defaulters are being benefited by the Government instead of a punishment.

Reply from Licensees

In order to improve the functioning of Licensees, to introduce systematic improvements to bring in greater efficiency in revenue realization and to bring in energy usage discipline, the GoTS has formulated G.O.Ms.No.1, dated 03.01.2016 wherein CC charges including Delayed Payment surcharge (DPS) was waived to all domestic consumers with consumption up to 100 units.

Commission's view

The Commission is examining the issue under the provisions of the Electricity Act, 2003.

2.93

Resource plan

As a part of ARR for FY 2016-17, Licensees also included Resource Plan for the third control period. But the information provided in it is not complete and comprehensive. The objector requested the Hon'ble Commission to review the resource plan of the Licensees.

Further a list of power plants which will come into operation during this control period. The Licensee did not provide date of commencement of supply/ CoD for such plants. Without this information it will not be possible to compare the power requirement with power capacity addition plan.

Reply from Licensees

Capacity additions and commencement of supply from new proposed plants has been considered in-line with Power for All document for State of Telangana with slight modification based on the current status. On the review of resource plan, the decision is under the purview of the Hon'ble Commission

Commission's view

- a) In view of the 9 hour supply to agricultural consumers and 24x7 supply to all consumer categories, the Commission has examined the revised resource plan submitted by Licensees. The Commission has issued necessary approvals in order to strengthen the required infrastructure. The additional investment approved (over and above investment approved in the MYT Order of third control period) to the Transmission and Distribution business will be taken up during true-up exercise.
- b) To ensure the aforementioned supply to consumers, the Commission perceives that additional generation is required. For evacuation of power from such new generating stations to load centers, additional transmission lines and transformers have to be installed. This system improvement will require additional investment to be made. The Commission has recognized the same and approved the additional investment which will be a pass through under true up exercise.

In the ARR for the present Retail Supply Tariff, the additional cost on account of additional investment is not considered.

2.94 According to earlier statements of TS government 24,075 MW new capacity addition will be achieved by 2018. But according to the Resource Plan the capacity addition will be only 14,708 MW.

Generation unit	Capacity (MW)
GENCO	4,080
CGS	4,673
Long term contracts	3,039
NCE	2,916
Total	14,708

The difference between the two plans is 9,367 MW. It is requested to clarify the plants that are being laid off the consideration and also the merit of plants that are included in the current list.

Reply from Licensees

As per PFA 22,408 MW capacity additions has been projected which includes capacity additions post 3rd control period. As per resource plan, 14,708 MW are total capacity additions planned during 3rd control period. It also includes following which have not been considered for resource plan projections –

- Damarcherla : 2400 MW (2019-2020) ,
- Singareni Stage 2 : 600 MW (2019-20)
- Hinduja : 560 MW
- NCE 3,500 MW (Solar Parks)
- DBFOO : 230z MW (Variation)

Commission's view

The capacity of 7,290 MW furnished by the Licensee as response to the objection and the capacity of 14,708 MW mentioned in the resource plan sums to a total of 21,998 MW. This total is not in coherence with the total capacity (22,408 MW) projected under the PFA scheme. The Licensee is advised to verify the figures and furnish a correct reply within a month.

2.95 According to the Resource Plan, GENCO plants will be contributing 17,730 MU during 2015-16. But according to net energy availability during 2015-16 as mentioned in ARR (SPDCL, Pg. No. 38) 21,449.61 MU will be available during 2015-16. This shows that the Resource Plan is underestimating power availability from GENCO units by 3,716.61 MU.

Reply from Licensees

The licensee has considered 17,730 MU for FY2015-16 for Genco thermals plants whereas 21,449.61 MU has been projected for FY 2016-17 which is same in both resource plan and ARR.

Commission's view

The response furnished by the Licensee to the objection is in order.

- 2.96 Power availability in Telangana will be increasing from 45,045 MU in 2014-15 to 80,459 MU in 2018-19 registering an increase of 78.62% in power availability. During the same period power generation capacity available will be increasing (going by the Resource Plan) from 8,290 MW to 22,998 MW registering an increase of 177.42% in generation capacity. This shows that increase in power generation capacity is several times higher than actual power available to the Telangana state. This calls in to question the above power generation capacity addition as mentioned in the Resource Plan.

Reply from Licensees

It is to be noted that MW cannot be directly correlated to energy availability since, it largely depends on PLF of the sources. Of the total capacity additions, more than 4000 MW is coming from NCE and Hydel. The average PLF of NCE and Hydel is lower than the average PLF of thermal generation.

- NCE : 3,789 MW
- Hydel: 360 MW

Commission's view

The Commission agrees with the view of the Licensees that PLF for NCE sources are very low. The availability of energy from these sources are dependent on nature.

To add on, the availability of fuel (such as natural gas) is also currently not reliable. Though the capacity in MW is available, the generation in MU cannot be assured to the full capacity. Hence, the reply of the Licensee is justified.

- 2.97 According to the Resource Plan by the end of the third control period 11,792 MW thermal power generation capacity will be added. This will help to generate 40,603 MU of power in 2018-19. This implies one MW plant will generate 3.44 MU of power. In 2015-16 GENCO's 3,344 MW capacity plants generated 21,449 MU implying generation of 6.41 MU per one MW. This shows that new plants being set up will be operating at 50% of the capacity utilization achieved by GENCO plants. This also implies that just half of the proposed capacity addition will be enough to generate the required power. This additional power generation capacity operating at lower capacity utilization factor will imply heavy fixed cost burden on the consumers.

Reply from Licensees

Energy availability for FY 2018-19 has been considered based on expected COD of the plants. Following are the dates COD dates assumed for thermal plants to be commissioned in FY 2018-19:

- Damercherla : 1600 MW (March 2019)
- Kudigi: 168 MW (March 2019)
- Chattisgarh : 800 MW (June 2018)
- KTPS Stage VII : 800 MW (June 2018)
- NTPC UMPP : 4000 MW (March 2019)

Commission's view

As some of the thermal stations are proposed to be commissioned during FY 2018-19, full quantum of generation from these station will not be available. Hence, the reply furnished by the Licensees to the objection is in order.

2.98 Ex-gratia to electrical accidents

The objector opined that meager amount is being paid to the victims of electrical accidents. It was requested to increase the ex-gratia amount to INR. 5.00 Lakh.

Reply from Licensees

As per the order issued by the Hon'ble Commission dated 28th December 2015, the details of ex-gratia paid is tabulated below:

Fatal Accident	Previous Ex-gratia	Enhanced Ex-gratia
Human Being	INR. 2,00,000	INR. 4,00,000
Animal		
Buffalos	INR. 20,000	INR. 40,000
Sheep & Goat	INR. 4,000	INR. 7,000

Commission's view

The Commission has enhanced the ex-gratia amount from INR. 2.00 lakh to INR. 4.00 Lakh for human beings met with fatal electrical accidents recently. Hence, it is not possible increase further.

2.99 It is requested to the Licensees to confirm if any new scheme for replacing old agricultural pump sets with new ISI pump sets through M/s EESL Company was launched.

Reply from Licensees

There is no such programme launched by the Licensees.

Commission's view

The matter will be examined as and when approached to the Commission by the said agency.

2.100 **Launch of CGRF-II**

The objector submitted that the establishment of CGRF-II is due till date.

Reply from Licensees

Notification was issued for inviting applications for the post of CGRF-II Chairman. The process of establishment of CRRF-II will soon be completed.

Commission's view

The reply furnished by the Licensees is satisfactory.

Objections/suggestions on UDAY scheme

2.101 **Effect of UDAY scheme on FY 2015-16 true up**

The Licensees, in the ARR filing, have mentioned that they would file for the true up of FY 2015-16 based on the actual audited accounts finalized after considering the takeover of loans by GoTS under the UDAY scheme in FY 2017-18. The Commission was requested to consider final true up of FY 2015-16 accordingly. In other words, depending on the decision to be taken by the GoTS on taking over of dues on loans of the Licensees, whether the burden of true up for FY 2015-16 will be imposed on the consumers or not in FY 2017-18 continues to be in the realm of uncertainty till then.

Reply from Licensees

Though the in-principle approval has been given by GoTS to join the UDAY scheme, the modalities of the debt takeover is yet to be finalized and this would be impacting the level of losses in FY 2015-16. Licensees haven't claimed any true-up in the current filing for FY 2016-17. The licensees have prayed to the Hon'ble Commission for consideration in FY 2017-18.

Commission's view

Considering the facts on the modalities of the UDAY scheme and the approval from GoTS on schedule of taking over the debt amounts of the Licensees, the reply furnished by the Licensees is found to be in order.

Any balance amount eligible for true-up for FY 2015-16 has to be considered as and when the Licensees make the true-up filings. However, the Licensees are supposed to file the same along with ARR filings of FY 2017-18.

2.102 **Suggestions on maximizing benefits from UDAY scheme, Renewable power purchase obligation and procurement of imported coal**

As the GoTS has given in principle approval to UDAY scheme, the Government and the Licensees should try to get maximum benefit out of it. In an office memorandum dated 20.11.2015, Joint Secretary, Ministry of Power, GoI, on UDAY scheme, has informed, inter alia, that both GoI and States will take steps to reduce cost of power. The objector referred to relevant contents of the MoU.

Suggestions on maximizing benefits from UDAY scheme,

- a) The objector opined that it is the failure of the GoI which led to the increase in power purchase cost. Failure in ensuring supply of indigenous fuel based on linkages, forcing Licensees to purchase imported coal, irrational natural gas pricing and the push to non-conventional energy are the factors; the objector feels have contributed to the increasing cost. In view of the responsibility of the GoI for avoidable additional burdens on the States and consumers of power, it was suggested that GoTS should have insisted on the GoI to take over at least 50 per cent of liabilities of the Licensees, in addition to the grants promised to the States under IPDS & DDUGJY schemes of the GoI.
- b) The GoTS also should have insisted on the GoI to ensure supply of fuels like indigenous coal and natural gas as per allocations made to the power plants, before talking about increased supply of domestic coal. And rationalize pricing of natural gas based on prudent capital and operational costs for exploration and supply plus reasonable profit.

Reply from Licensees

- a) Recognizing the fact that there is scope for improving the coal linkage allocation and thereby reducing the power purchase cost, Coal India had embarked on Coal linkage rationalization exercise. This is expected to benefit the end –consumer due to reduction in coal cost based on the implementation of the linkage optimization opportunities.

The importance of using power from environmentally benign sources have been recognized by utilities across the globe. Renewable Power Obligation is a step in this direction. Cost of power is a key criteria however the responsibility towards environment cannot be totally ignored.

As per the current notification on UDAY scheme, Jharkhand and J & K are given additional dispensation to borrow funds to clear the dues to CPSUs. For other states, the takeover of outstanding debt of the licensee is by the state government.

- b) GoTS has taken up the issue of shortfall in coal linkages at all appropriate levels and forums.

Commission's view

The subject matter is not in the purview of the Commission. However, the Licensees may make efforts in pursuing the same with GoI through GoTS, with an intention to reduce the burden on the consumers.

Renewable Power Purchase Obligation (RPPO) to the Licensees

- c) The retrospective implementation to comply with RPO outstanding since 1st April, 2012 will lead to increase in power purchase cost. Further, GoI is encroaching upon the regulatory authority of the ERCs, which issue RPPO orders, without leaving the issue to the Commissions to decide. The GoTS should have insisted on the GoI to avoid such questionable conditions under UDAY scheme.
- d) In the name of encouraging generation and consumption of renewable energy, including solar energy, coercive reforms are being fobbed off on the Licensees by the protagonists of reforms in the Establishment in New Delhi. Taking undue advantage of power being in the concurrent list of the Constitution of India, the GoI is encroaching upon the freedom and choice of the State Governments, their power utilities and consumers, even while professing and following neo-liberal policies. As a result, even perverse and self-contradictory arrangements are being imposed on the Licensees and their consumers. The so-called renewable energy certificates is one such arrangement.
- e) Without considering ground realities, reasonable possibilities and opportunities for availability of renewable energy at reasonable tariffs, fixing a target of percentage under RPPO turned out to be subjective and unrealistic, in the light of the repeated failures of the Licensees to achieve the same for the reasons beyond their control. The Licensees are under RPPO obligation to purchase renewable power, whereas the developers of RE units have no obligation to sell their power to the Licensees at the rates fixed by the Commission. Probably, such factors might have influenced the Hon'ble Commission not to impose any penalty on the Licensees for their repeated failure in achieving the targets of RPPO so far.
- f) The objector has requested the Hon'ble Commission to dispense the arrangement of RECs totally, as it has adopted the orders and regulations issued by the erstwhile APERC. In this connection, he has referred to the wordings in the tariff order issued by the Commission for the year 2015-16

- g) Competitive bidding or the method of inviting expression of interest to be made mandatory, subject to further tariff negotiations for purchasing renewable energy. In view of the recent trends of renewable energy tariffs nearing conventional tariffs, there would be no need for RPPO.

Reply from Licensees

- c) The Licensees in Telangana have successfully finalized the procurement of 2,000 MW of solar in January this year. In addition procurement of 515 MW of solar power was finalized last year.

The above procurement was through competitive bidding and the Licensees have been successful in procuring the same at very competitive price. This is expected to reduce the burden on the consumer.

There is increased emphasis in India and across the globe for generation of energy from cleaner sources.

- d) Not all states in the country are endowed with the similar renewable energy potential. The potential is high in some states and minimal in some of the other states. In order to enable a state which is having a short-fall in renewable energy generation to meet the Renewable Purchase Obligation (RPO), the mechanism of Renewable Energy Certificates has been created.

The REC mechanism also promotes setting up of renewable energy plants across the country.

- e) The RPO targets fixed by the Hon'ble Commission was to encourage the use of renewable energy. The REC mechanism assists the states which are having lower renewable energy generation to meet the RPO targets.

- f) REC is a market based instrument to promote renewable energy and facilitate compliance of renewable purchase obligation (RPO). It is aimed at addressing the mismatch between availability of RE resources in the state and requirement of obligated entities to meet the RPO obligation. RECs are traded in the exchange and obligated entities can purchase them at competitive prices.

- g) As rightly pointed out by the objector, if a state is able to procure large quantities of renewable energy at a competitive price, compliance of the RPPO obligation may not be a concern at all.

Due to procurement of more than 2,500 MW of solar power at a competitive price, the licensee would be in a comfortable position to meet this requirement.

Commission' view

- c) The Commission has passed an order on 26-04-2016 on the petition filed by the Green Energy Association on this subject. Wherein the Commission has stated that

the reason for not insisting on procurement of Renewable Energy Certificates (REC) , in order to meet the shortfall of Renewable Energy to be procured as per Regulation No.1 of 2012 (RPPO) for FY 2012-13, FY 2014-15 and FY 2015-16.

- d) U/s 61 (g)& 86 (1) (e) of Electricity Act 2003, the appropriate Commission has responsibility to encourage the purchase of energy from Renewable sources. Further, the Commission is bestowed with a responsibility to specify the percentage of such purchase and also issue a preferential tariff. The GoI can make National Electricity Policy (NEP) and National Tariff Policy (NTP) under the said Act. It is not in the purview of this Commission to comment on the NEC and NTP.
- e) The GoI is vested with powers to issue NEP & NTP wherein a specified percentage of total energy requirement shall be procured from Renewable Energy Sources. Further the Electricity Act 2003 also speaks the same. Hence, it is an obligation on the part of the Commission to specify the same through Regulation. Hence, Regulation 1 of 2012 was issued.
- f) The Commission has examined the availability of Renewable Sources of Energy in the State of Telangana and allowed the procurement of solar energy of around 3000 MW. The Commission has also examined the availability of wind sources. To have a check on the depleting fossil fuels, increasing global warming, emission of greenhouse gasses, the Commission has examined such availability.

The cost of purchase from renewable sources appears to have been coming down with the decreasing costs of infrastructure for renewable generation. For the year FY 2016-17 the Commission observed that there is no shortfall of energy from NCE sources for Licensees to meet the RPPO.

- g) The Licensee is currently procuring renewable energy i.e. solar energy through competitive bidding process. Thus, the response furnished by the Licensee is found to be satisfactory.

Procurement of imported coal through competitive bidding

- i) UDAY scheme is silent on the complaints that manipulations have been taking place in the kind of contrived procedures being adopted for importing coal. There is every need to adopt international competitive bidding for importing coal, giving opportunity to foreign producers of coal and its Indian suppliers also to participate in the bidding, without confining it to a few select central public sector entities as has been the practice so far. There is every need to incorporate a provision to this effect in the PPAs the Licensees had and will be having with AP Genco, TS Genco, NTPC, etc. to ensure a fair deal to the consumers.

Reply from Licensees

Procurement of imported coal is done through transparent mechanisms.

Commission's view

Presently, there is no requirement for TSGENCO stations to procure imported coal. The procurement of imported coal for NTPC and APGENCO stations is not in the purview of the Commission. Their tariffs are determined by the appropriate Commissions and existing PPAs.

- j) The memorandum on UDAY also says:

“Participating States may get additional/priority funding through DDUGJAY, IPDS, Power Sector Development Fund (PSDF) or other such schemes of MoP and Ministry of New and Renewable Energy (MNRE), if they meet the operational milestones outlined in the Scheme. Such States shall also be supported with additional coal at notified prices and, in case of availability, through higher capacity utilization, low cost power from NTPC and other Central Public Sector Undertakings (CPSUs).”

In other words, these proposed benefits to the States are left to the discretion of the GoI, even if the States meet operational milestones stipulated under UDAY. The GoTS should have insisted on the GoI to specifically quantify these benefits linked to results achieved by the States in meeting operational milestones and make it obligatory on the part of GoI to provide the same to the successful States.

Reply from Licensees: GoTS has insisted that the benefits outlined in the UDAY notification needs to be quantified as this would give a clear idea to the state as well as to the licensees on the quantum of benefits available under various heads on successful meeting of the targets.

Commission's view:

The reply furnished by the Licensees is satisfactory. However when it comes to the Commission for any approval, the same will be examined.

2.103 **Projecting loss trajectory at circle level**

Under UDAY scheme, it is proposed to incorporate circle level targets of loss reduction in the MoU to be signed between Ministry of Power, GoI, the State Government and the Licensees. Based on Circle wise distribution losses, the Commission may consider fixing targets of loss reduction circle wise. Further, objectors have requested to elaborate on the current loss levels of the Licensees circle wise.

Reply from Licensees

The Licensees are striving to reduce the losses by implementation of various loss reduction measures by strengthening of the network infrastructure, addition of network elements and vigorously undertaking feeder-wise energy audit to keep a close tab on the losses. The distribution losses for TSSPDCL were brought down from 14.63% in FY 2013-14 to 14.19%

in FY 2014-15 and 11.14% in FY 2015-16 up to December 2015. And the Distribution losses for TSNPDCL for FY 2015-16 up to December, 2015 was 13.75%.

The circle wise distribution losses of TSSPDCL are shown in the following table:

Sl. No	Circle	Loss (%)
1	Hyderabad (Central)	11.20%
2	Hyderabad (North)	6.64%
3	Hyderabad (South)	43.11%
4	Mahbubnagar	10.62%
5	Medak	10.84%
6	Nalgonda	9.99%
7	Rangareddy (East)	7.36%
8	Rangareddy (North)	4.26%
9	Rangareddy (South)	10.50%
10	Siddipet	10.58%
TSSPDCL		11.14%

The circle wise distribution losses for TSNPDCL are shown below:

Sl. No	Circle	Loss (%)
1	Warangal	14.33
2	Karimnagar	13.03%
3	Khammam	12.62%
4	Nizambad	14.65%
5	Adilabad	13.95%
TSNPDCL		13.75%

Commission's view

The Commission can fix loss trajectory at Licensee level only. It is the obligation of the Licensee to reduce the overall losses by reviewing losses to the lowest level and strengthen the system. Licensees must ensure reduction of technical losses and to curb down the commercial losses. While trying up the cost, the Commission is limiting to the loss trajectory for the relevant year as approved in the MYT Order, in case of losses exceeding the proposed trajectory.

2.104 Benefits from UDAY scheme to be passed on to consumers

The Petitioner has made an outrageous submission which goes against the very preamble of the UDAY scheme when it states that the savings from the UDAY scheme may not be passed on to the consumers but passed on to the GoTS in the form of reduction in subsidy. The Objector wishes to place on record the extracts of the press release made by the Government of India upon launching the UDAY scheme:

"UDAY assures the rise of vibrant and efficient DISCOMs through a permanent resolution of past as well as potential future issues of the sector. It empowers DISCOMs with the opportunity to break even in the next 2-3 years. This is through four initiatives (i) Improving

operational efficiencies of DISCOMs; (ii) Reduction of cost of power; (iii) Reduction in interest cost of DISCOMs; (iv) Enforcing financial discipline on DISCOMs through alignment with State finances."

The Objector submits that there would be substantial savings to the Petitioner on account of interest, depreciation, etc. upon implementation of UDAY scheme and the same needs to be passed on to the consumers.

Reply from Licensees

The Licensee losses are mainly towards purchase of expensive power apart from other operational losses to meet short term demand crisis. These are not considered by the Hon'ble Commission in its true-up exercises over past years and led to accumulation of losses in the Licensee's Balance sheets.

It must be borne in mind that UDAY scheme is tri-partite in nature between the GoI, GoTS and the licensees and it seeks active co-operation with all the parties involved.

The state government, with focus on financial turnaround of the Licensees, has given its consent to take over all such losses over and above approved values under UDAY scheme.

Hence by its intent, it is prudent and sensible to transfer any savings accrued to the GoTS upon implementation of UDAY scheme.

Commission's view

The Commission accepts the reply of the Licensees. The UDAY scheme is meant for uplifting the Licensees by absorbing the losses, otherwise the consumers would have shared the losses.

2.105 **Loss trajectory for T&D losses**

It is pertinent to note that no provision has been made /shown for reducing of the T&D losses which includes theft, up-gradation of transmission and distribution system and also further electrification of un-electrified villages

Reply from Licensees

The T&D losses have been considered as fixed by the Hon'ble Commission in Distribution and Transmission Tariff orders as targets to the Licensees. Regarding electrification of rural areas, it is to inform all the rural areas in TSSPDCL area have been electrified

Commission's view:

The contention of the Objector is not correct since loss reduction trajectory is stipulated by the Commission in Multi Year Tariff (MYT) orders of Transmission and Distribution Business. The Commission while determining the MYT for Transmission and Distribution

Businesses is allowing additional investment for strengthening the network in order to reduce the losses and to accommodate the anticipated load growth.

Regarding electrification of un-electrified villages, the reply furnished is contradictory to the statement by the CMD of TSSPDCL made before the Commission. CMD has stated that there are still certain chenchu community habitations/ hamlets/ Thandas are to be electrified in Mahabubnagar district (Tiger reserve forest area). This aspect may be verified and reported to the Commission.

Objections/suggestions on Operational issues

2.106 Pending applications for agricultural connections

A news item from Eenadu daily newspaper (Mahabubnagar district edition page no. 16) 9th July, 2015 reads that for the period 2010 to 2015 there are 25,433 pending applications for transformers. The objector suggested the work of installing transformers be given either to TATA or L&T companies and see that there are no pending applications as on date.

Reply from Licensees

Yearly Quota of release of Agricultural supply as per government order is met. TSSPDCL is releasing the Agricultural services in all circles as per the quota issued by state government.

Commission's view

The reply furnished by the Licensee is in order.

2.107 Condition of RTC for issuing Open Access NOC to Mixed Feeder

TSSPDCL is issuing Open Access NOC to mixed feeders only if the consumer is signing Round the clock condition (RTC). This condition is not being insisted when Open Access NOC is being issued to consumers who are on dedicated feeders.

In this respect some consumers have approached High Court and got an order stating that the Licensee should not insist on RTC for issuing Open Access NOC. But the Licensee in clear violation and contempt of HC order is insisting for Round the clock condition (RTC) to be signed by Mixed Feeder Consumer in order to issue Open Access NOC.

Reply from Licensees

Open access is allowed on mixed feeders as per the TSERC proceeding Orders dated: 18-08-2015 and existing Regulations i.e. 2 of 2005 and 2 of 2006 and subsequent amendments.

Many consumers have filed petitions in High Court on the TSERC proceeding Order dated: 18-08-2015. Hence the matter is subjudice.

Commission's view

The reply of the Licensee is in order.

2.108 **Revision of Bills to reflect open access transactions**

The practice of the licensees is to issue the bill for the current month considering the entire energy consumed as supplied by the Licensees without giving effect to the open access energy. This entire amount is required to be paid on the due date on threat of disconnection. The open access transactions are reflected only in a revised bill issued some 3 to 4 months later. This practice is causing undue hardship and burden to the consumer. It is submitted that the Licensees be directed to issue current consumption bills taking into account the open access transactions in the first instance itself.

Reply from Licensees

The settlement of open access sales is being done in the same billing cycle verifying the 15-minutes time block schedule and the deviations from schedule if any for the total open access sales

Commission's view

The Licensees should adhere to the reply furnished to avoid such objections.

2.109 **PGCIL and distribution losses**

The Licensees state that they have considered distribution losses as per tariff order dated 27.03.2015 which is LT - 6.50%, HT – 11kV @ 5%, HT - 33 kV @ 3.99% and also PGCIL loss. The objector opined that, the PGCIL losses claimed by the Licensees are not under the purview of the Licensees. Hence, the Licensees cannot take the said losses in their account and pass on to the consumers effecting the projected tariff.

Reply from Licensees

The PGCIL (External) losses are estimated at 3.44%. This is applicable for procurement of power from Central Generating Stations and other medium & short term purchases which are not connected directly to Telangana State transmission network. However, these losses have not been considered for bilateral/ inter-state purchases due to consideration of average landed power purchase cost at TS Transco periphery. Also no additional losses have been considered for the AP Transco network.

Commission's view:

The losses for the inter-state transmission system (i.e. PGCIL) have to be considered in order to meet the requirement of power at state periphery from CGS stations.

2.110 **Negligence of Licensees in the implementation of DSM**

- i. In 10 years of the evolution of DSM policy, Licensees have completely neglected its implementation. Capacitors were not fixed to the pump sets.
- ii. The new agricultural consumers were not given poles and conductor forcing the user to run a service wire from a 2-3 pole distance.
- iii. Also, there is a significant delay in giving new connections.
- iv. In the past two years lakhs of pump sets are not working due to drought but all these connection are shown under consumption. Licensees are not maintaining the record of pump sets in actual use. The data available online reflects the past and not the present. There has been a demand to survey and listing of the pump sets in actual use. However, Licensees have not taken interest to pursue it.

Reply from Licensees

Pump sets that are under the free power scheme of the government but not following DSM measures are charged at INR. 1.00 per unit.

New connections are given only after LT line is laid. Agricultural power consumption has been calculated as per ISI sampling methodology approved by the Hon'ble Commission.

Commission's view

- i. The erstwhile APERC has issued directives in the previous Tariff Orders on implementation of DSM measures specifically for agricultural pump sets. The same has been adopted by this Commission in Regulation No. 1 of 2014. Hence the Licensees shall adhere to the same.
- ii. The Licensees are directed to inspect the agricultural services which have been released in the earlier years (on the orders of APSEB) under the scheme to regularize unauthorized connections but without erecting poles and hence availing supply through long distance service wires. For all such services, necessary infrastructure shall be created in order to avoid accidents. A report on such infrastructures made has to be submitted to the Commission by end of August, 2016.
- iii. The Licensees have stated that they are following FIFO approach to maintain seniority in order to avoid delay to the early applicants.
- iv. The Commission is assessing the agricultural consumption every year based on the sample DTR meter reading, growth rate of pump sets released, crop pattern in the Licensee's area, etc.

2.111 **Losses due to usage of conductors beyond their life time**

There are transmission losses due to the usage of same conductor beyond 3 decades. Use of long service wires also has been a problem. The Hon'ble Commission is requested to issue orders for replacement of conductors used beyond 2 decades and also to replace the damaged poles.

Reply from Licensees

Measures are in place to replace old conductors, transformers, etc. on regular basis

Commission's view

The Commission in its Distribution Tariff Order for the third control period has allowed required investment to replace the old/ damaged conductors.

2.112 **Maintenance of substations and energy losses**

The maintenance of substations is being done by selected contractors. An amount of INR. 1 - 1.5 lakhs is being spent on the annual maintenance of a substation. These selected contractors, do not render a quality service leading to increase in line losses and casualties of ground staff. As a result of these increased losses the consumer is being burdened through higher tariff. The objector requested the Licensees to act immediately on this issue.

Reply from Licensees

The maintenance of a substation is in the purview of the local A.E and A.D.E. If specific issue is reported to the Licensees, adequate action can be taken accordingly.

Commission's view

The Commission normally reviews the performance of the Licensee only. The Commission has allowed the expenditure to be incurred for R&M of the substations and lines as per norms specified for A&G and R&M in the Distribution Tariff Order for the third control period. The loss trajectory has also been specified in the same Tariff Order. The Licensees should adhere to the provisions made in the Tariff Order.

2.113 **Pending bills**

It is observed that few of the associations and/ or unions, government offices, etc. are not paying the current bills for their offices. It is requested to the Licensees to take adequate action and clear the bills.

A domestic consumer, if defaults, the connection will be withdrawn and after 3 months the meter will be removed. If the consumer wishes to repay the pending amount for reconnection then the additional charges for meter through DD will have to be paid. The displeased consumers are opting for alternative means to get new meter and completely defaulting the

earlier pending payments. The objector has requested the Licensees to conduct a weekly review meeting on the defaulted consumers and address the issue immediately.

Reply from Licensees

The Licensees are taking measure to recover pending bills from all departments such as trade unions and associations. It is to be noted that power supply will be withdrawn from any defaulter. Either after the completion of 2 years from the first agreement period or 4 months after the withdrawal of power supply, whichever comes later; the service will be categorized as OSL/ Bill stopped.

In case the consumer wishes to revive the earlier connection, the consumer will have to pay the pending charges and minimum energy charges till the end of agreement period. In case the service is categorized under OSL/ Bill stopped then the consumer can choose for a new connection only after submitting a No Due Certificate from the concerned authority.

Commission's view

The response of the Licensees is satisfactory so far as the procedure is concerned. But the objection is to treat equally all defaulting consumers while disconnecting the power supply. The Licensee should treat equally all consumers who are at default for disconnection.

2.114 **Consumer complaints and tracking**

Licensees are failing to address the consumer complaints (especially billing related) within the stipulated timelines and also at many times they are not even ready to take the complaint at EROs and Consumer Cells.

It is to bring to the notice of the Hon'ble Commission that prior to addressing the complaint the Licensee's staff are forcing us to pay abnormal bill amount and if not paid as per their demand, they are disconnecting the power supply without any prior intimation.

Hence it is requested to the Hon'ble Commission to direct the Licensees to maintain 24x7 online complaint center with an end to end tracking.

Reply from Licensees

With regard to billing complaints, the consumer has to represent to the concern section officer for revision of bills. Such billing complaints will be resolved within 7 working days (if any additional information is required) or within 24 Hrs. (if no additional information is required). If the grievance is not resolved within the above specified time period, the consumer may call "integrated call center" provided with toll free number 18004250028 for registration of the complaint.

Commission's view

To address the issues like above, the Licensees are directed to develop an IVRS system to aid the consumer to register complaints. The consumer should immediately be

communicated the complaint number and type along with date and time of registration through SMS on registered mobile number. The Complaint once resolved should again be communicated to the consumer through SMS on the registered mobile number by the concerned authority. The SMS after complaint resolution should capture details on time taken to resolve the complaint, hence enabling the consumer to claim compensation as per SoP regulations.

2.115 **Financial performance of Licensees**

Provision (b) of section 61 of Act 2003 orders the functioning of the distribution company to be on commercial lines. The objector opined that the company is being run on the whims and fancies of the officials, as a social welfare organization. It was felt that such functioning was in sheer contrast to BSNL, APSRTC etc., against all commercial principles. Further the higher tariffs to bulk consumers was matter of concern to the objector.

Reply from Licensees

Section 61(b) of the EA, 2003 has contemplated guidelines to be followed by the Commission in framing regulation in determination of tariff. Accordingly, the Hon'ble Commission has formulated Regulation 4 of 2005 in accordance with such guidelines and issuing tariff order duly considering Licensees as commercial entities by providing supply margin.

Commission's view

The response furnished by the Licensees is in order.

2.116 **Payments for agricultural connections**

For taking a single agricultural connection, the Licensees are insisting upon payment of charges for 3 agricultural connections.

Reply from Licensees

Out Right Contribution (ORC) amount has to be paid by the prospective consumer along with the development charges for energization of single Agricultural connection.

Commission's view

The Commission has established a Consumer Grievance Redressal Forum (CGRF) and Vidyut Ombudsman to resolve such issues by issuing necessary orders. The prospective/ existing consumers can approach the forum if the grievances are not resolved at Licensee level.

2.117 Though the billing is done as per HT service, certain services in Karimanagar are still available in LT database. On requesting for change in database, the Licensee is insisting to sign a revised agreement for 2 years under HT category.

Reply from Licensees

It is not required to sign a revised agreement for minimum period of 2 years.

Commission's view

The reply furnished by the Licensees is in order.

- 2.118 Development charges are being collected again for increasing the load to previous maximum contracted demand, despite such charges being paid earlier.

Reply from Licensees

The licensees are not collecting any development charges for restoration of their previous maximum contracted demand.

Commission's view

The reply furnished by the Licensees is in order.

- 2.119 **Payment of compensation**

The objector requested the Hon'ble Commission for compensation to damaged crop under the Indian Telegraph Act should be paid.

Reply from Licensees

The issue is not under the purview of the Licensee.

Commission's view

The reply of the Licensee is not in order. The Licensee would have examined the provisions of the Electricity Act 2003 before responding. The aggrieved person can file a petition under the provisions of Electricity Act 2003 so as to examine the same within the provisions of the Electricity Act 2003 and rules framed if any by GoTS under the said Act, by Commission.

- 2.120 The objector opined to have separate street lighting wires for dedicated control as there was no control over such usage.

Reply from Licensees

Providing of street light wire where it is not available is planned and represented Govt. for budget allocation. It will be taken up soon.

Commission's view

The Licensees are supposed to provide separate wire for street lighting while preparing the estimates for street light services. Accordingly the cost has to be recovered from the applicant authority as per the provisions of Electricity Act 2003 and regulations made therein by the Commission.

2.121 **Specific time for replacement of DTRs**

The objector opined that a specific time duration for replacement of DTRs was not mentioned in the ARR.

Reply from Licensees

The Hon'ble Commission has not given specific format for performance parameters. The licensees have provided the information of number of DTRs failed, replaced and additional new DTRs erected during the financial year.

Commission's view

The objector may please refer to the SoP regulations wherein the timelines are specified.

Objections/suggestions on Sales and revenue realization

2.122 **Prudent estimation of agricultural sales**

- a. The objector observed that the revised sale estimate in TSSPDCL for FY 2015-16 constitutes of 20.31% from agriculture. Whereas the revised estimates of revenue for FY 2015-16 constitutes only 0.26% from agriculture. Based on the above, the objector opined that the Licensees are passing on certain hidden expenses from agriculture to metered consumers. And this pass on is more than 20%.
- b. The objector opined that the agricultural demand has not increased in reality wherein the Licensees are projecting a very high demand.

Reply from Licensees

- a. In the table mentioned in page vi of ARR filings, the percentage of agriculture consumption is 20.31%. The Licensee has shown the requirement of power purchase for FY 2016-17 to all the categories of consumers as 39,292 MU at page no 31 and cost of power purchase is Rs 16,906 cr shown at page no. 63. The revenue from current tariffs is Rs 17,165 crore.

Even though the percentage of agricultural sales is 20.31% of the total sales, the revenue from the agriculture category is very less as the GoTS is contemplating free power supply for the agricultural consumption by providing a part of that amount as subsidy and the balance will be met from the cross subsidy.

- b. Agricultural consumption is expected to increase by 3.66% only due to addition of new connections. The Licensees have not projected any additional sales due to increase in supply hours due to the low ground water level in the state because of poor rainfall in the current year.

Commission's view:

The Commission examined the data filed by the Licensees in detail, i.e. the actual monthly sales data furnished based on ISI Methodology. The Commission noticed several discrepancies in the data furnished, such as, no continuous 12 months meter reading of the same meter and/ or same transformer being available. Thus it is not reflecting the agricultural consumption in the said area for the entire year so as to extrapolate the overall consumption in the surrounding area.

The consumption as per meter reading of the transformers has been observed to be in excess of the respective transformer capacity or the cumulative capacity of pump sets connected to that transformer for the number of hours of supply extended in a month.

Due to the above reasons the Commission has not relied upon the ISI methodology to gauge the Agricultural consumption for FY 2016-17. The Commission has assessed agriculture consumption considering the following:

- Number of service connections and capacity existing as on 31/03/2015 has been taken from the Sales database of the Licensees.
- Number of connections released during FY 2015-16 upto January with capacity has been considered.
- Thus the data on the total number of connections available with capacity is computed.
- Average capacity per pumpset is computed from the above data.
- No. of hours of supply likely to be utilized per pumpset Licensee wise based on the crop patterns of the area have been considered.
- Average annual consumption per HP (in KWh) as approved for FY 2015-16 has also been taken into consideration for estimation of consumption for FY 2016-17.

Based on the number of pumpsets available, average capacity of each pumpset, Licensee wise number of hours of supply likely to be used by each pumpset in a year based on the crop pattern, the Commission has computed the Agriculture consumption duly considering the consumption approved last year and additional growth rate for the year. The Commission has also verified with very limited data available under the ISI methodology to ensure correctness of projections.

Hence, it can be understood that the sales projections of Licensees were not considered simply.

2.123 **Higher sales projections**

Both Licensees in Telangana projected high growth rates in electricity consumption during the ensuing financial year 2016-17. SPDCL attributed this growth to additional power required for water grid, Hyderabad Metro Rail, 9 hour power supply to agriculture pump sets and new lift irrigation schemes. Similarly, NPDCL also attributed this growth to additional power required for water grid, 9 hour power supply to agriculture pump sets and new lift irrigation schemes. While SPDCL estimated growth rate of more than 10% NPDCL arrived at 13.5% growth rate in electricity consumption under its area. Further, NPDCL also estimated 32.58% growth rate in electricity consumption by HT services. During the preceding year (2015-16) growth in consumption is less than 50% of this. In the case of NPDCL it was only 5.16%. This historical experience demands a relook at the consumption growth estimated by both the Licensees.

Reply from Licensees

The Licensees have taken into consideration the historic growth rates and also the additional loads such as water grid, HMR in its area of operation. Detailed estimate has been carried out for each of the category. The projected growth rate of SPDCL and NPDCL cannot be compared as they have different consumer mix and differences in loads which are scheduled to be added. There is substantial capacity addition in Lift irrigation schemes leading to higher growth rate of 32.58% from HT services and also the overall growth rate in NPDCL.

Commission's view

The Commission before determining the sales of each category examined the following:

- i. Sales projection made by the Licensees,
- ii. Historical growth rate,
- iii. Partial end use like latest status of the projects which are under progress and expected date of completion (i.e. LI schemes, HMR, Mission Bhageeratha).

2.124 **Incentive on Prompt/early payment**

Railways are prompt in payment of energy bills to the Licensees and for these, Railways certainly deserve some rebate/incentive. Reasonable rebate/incentive for prompt payment be granted as done by other SERC viz. MERC, OERC, MPERC etc.

Reply from Licensees

The decision for such incentive is under the purview of Hon'ble Commission.

Commission's view

The consumer is supposed to pay the bills in time in order to avoid disconnection and delayed surcharge. Hence, the Commission is of the view not to consider any incentive for early payment in the ensuing year.

2.125 **Netting off of open access demand and Monthly energy charges**

The concept of minimum billing demand is tantamount to double charging when open access is availed and transmission / wheeling charges are paid. To the extent that open access is availed, the demand charges already include for the transmission and wheeling costs for the CMD. In addition, the transmission and wheeling charges paid is a charge for the second time. It is therefore necessary to provide that, where open access is availed, the demand attributable to open access shall be set off against the billing demand and the demand charges shall be applied only to the balance of the billing demand.

Under the previous tariff orders a minimum energy charge is payable by HT-I (A) consumers on 50 units per kVA of contracted demand irrespective of whether that energy was consumed or not. It is submitted that there is no need for any minimum energy charges and there is no reason or rationale to continue with such charge. Therefore the requirement for a minimum energy charge should be removed.

Reply from Licensees

Minimum billing demand is being levied on the consumers based on their Contracted Maximum Demand with the licensee. The minimum demand charges are levied as a part of recovery of fixed charges. Based on the nature of the system, the recovery of fixed charges will be either completely through levy of fixed charges or partially from fixed charges and partially from minimum charges. As it is evident that, when a consumer is connected to a system, the utility has to ensure readiness of network to meet the contracted demand of the consumers at any point of time especially for bulk consumers like industrial units. Fixed costs of generation, distribution & transmission system are not directly related to the consumption of energy but are to be met by the utility. This element of the fixed charges, as an accepted practice, is recovered through the mechanism of minimum monthly charges is highly justified.

Commission's view

The reply of the Licensee is not fully synchronous with objection raised. If the existing consumer is availing of open access which is within the contracted demand of Licensee (Open access demand + actual demand availed from Licensee is within the CMD), the licensee shall not charge the wheeling and transmission charges for such open access availed of.

Since the consumer is paying for minimum billing demand as per GTCS. Thus it will avoid double charging of demand i.e. demand charges on account of open access and demand charges on account of minimum billing demand.

Regarding minimum energy charges, the charges are levied as per the provisions in the Tariff Order.

2.126 **Cross Subsidy Surcharge and additional surcharge Proposals**

In their ARR/FPT proposals for FY 2016-2017, being O.P. Nos 6 & 7 of 2016, the Respondents have both proposed cross subsidy surcharge based on the National Tariff Policy 2016 Methodology. Further, the cross subsidy surcharge should reduce from time to time.

There is no specific proposal for additional surcharge, and there is only a vague and tentative reference to it. The licensees have not demonstrably shown that there is any fixed cost that would be definitely stranded.

The proper consideration would be that an additional surcharge may be considered only if the licensee shows clearly and indisputably that some costs arising out of its obligation to supply is left stranded. That is an onerous burden of evidence on the licensee and no additional surcharge may be imposed by mere surmise or merely because a charge under this head may be levied. Even then, the charge would be for a limited period, not exceeding 3 months, and cease after release of additional or new loads such that the costs are no longer stranded.

Reply from Licensees

The cross subsidy surcharge and additional surcharge for open access consumers has been proposed as per provisions made in sections 38, 39, 40 and 42 of the Electricity Act, 2003. The Licensee has proposed the Cross Subsidy Surcharge as per the procedure prescribed in National Tariff Policy notified by Ministry of Power on 28th January, 2016.

Commission's view

The section 42(4) of the Electricity Act 2003, says as follows:

“Where the State Commission permits a consumer or a class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer should be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such Distribution Licensee arising out of its obligation to supply.”

As per the provisions of the above section the Commission has to determine the additional surcharge. But in the filing, the Licensees have not indicated the cost of assets that is going to be stranded due to availing of Open Access by certain consumers. Hence, the Commission is of the view not to determine any additional surcharge at present. However, the Licensees

can come up with a proposal at any time during the year indicating the cost of assets getting stranded with the details on account of availing open Access by consumers

2.127 **Proposal on NTP methodology**

The NTP requires that the tariff payable by the relevant category of consumers is to be taken in account for the factor "T" which is the tariff payable by the relevant category of consumers. The average realization considered by the licensee is incorrect and not in conformity with the Policy.

Reply from Licensees

Tariff means both the applicable demand and energy charges of that category. Hence average realization is considered to reflect both demand & energy charges.

Commission's view

The Objector stated that the Cross Subsidy Surcharge computed will be different at different load factors and to compute such surcharge at more realistic load factors. The concept of arriving at more realistic load factor is difficult as the load factor of each consumer differs based on period and quantum of power utilized. In a system consisting of many consumers, taking an assumptive normative load factor may not represent true value. Hence, the Commission is of the view to arrive at the average tariff "T" based on the total revenue expected from a category (from the approved sales) other than the revenue from customer charges and minimum consumption charges (if any) and dividing the same with total approved sales. This will, therefore, help to arrive at a realistic average tariff "T".

2.128 **Prohibition to open access**

It shows that alternate sources of energy will hardly be available at affordable prices to consumers, if the cross subsidy at the proposed rates are levied. It is, in reality, prohibition of open access; and furthermore it is designed and calculated to defeat open access and competition.

If the proposed rate of cross subsidy surcharge is levied, the open access will be totally frustrated and rendered merely illusory. The Hon'ble Commission needs to carefully analyze these aspects.

Reply from Licensees

The cross subsidy surcharge and additional surcharge for open access consumers has been proposed as per provisions made in sections 38, 39, 40 and 42 of the Electricity Act, 2003. The Licensee has proposed the Cross Subsidy Surcharge as per the procedure prescribed in National Tariff Policy notified by Ministry of Power on 28th January, 2016.

Commission's view

The Commission has not simply accepted the charges proposed by the Licensees. The Commission after thorough scrutiny of the sales proposed, availability of power purchase quantum from sources (Long term, medium term, NCE sources and then considering short term purchases) and its cost arrived at the power purchase cost. Similarly, the Commission arrived at the ARR & tariff and then has determined Cross Subsidy Surcharge. While determining the Cross Subsidy Surcharge the Commission followed the method specified in National Tariff Policy notified by the GoI on 28th January, 2016.

2.129 Levy of penal Energy charges when CMD exceeded

Penal charges on energy are presently being levied when the Recorded Demand exceeds the CMD by over 20%. The levy of penal charges on energy when demand is exceeded is unlawful. The Hon'ble high court had held in Vishnu cements case that demand and energy were two separate components and unrelated and that therefore the penal energy charges for exceeding the CMD was set aside. That was also referred and followed by the Hon'ble High Court in respect of the penal energy charges sought to be levied for 2009-2010 also in Writ Petition 15410 of 2009 and batch.

It is therefore submitted that the provisions in the tariff for levy of penal energy charges for exceeding contracted demand be dropped.

Reply from Licensees

The Licensees have already appealed to the Division bench of High court on the single judge order in the WP 15410 of 2009.

It is to reiterate that demand and energy are not independent to each other but interdependent. The increase in load/demand increases the load current and thus the losses will become double as the losses are proportional to the square of the load current. Hence the increase in demand increases the energy consumption also.

Hence it is highly justified to continue with existing practice of levy of penal charges on both demand and energy on exceeding of CMD.

Commission's view

In the present situation, the Commission will oblige with the orders of the Hon'ble court on the W.P. 15410 of 2009. However, the Commission is of the view to accept the Licensees proposal on levying the penal charges on exceeding the contacted demand. Such exceeding demand causes increase in losses apart from damage to the lines which may cause breakdowns. If such overloading is allowed to the consumers, the stability of the Grid will also be affected. Hence levying of such penal charges is a must in order to maintain the discipline of the Grid.

2.130 **kVAh billing**

It is observed that there is no consistency in billing pattern by Licensees (kWh/kVAh). There is a constant change in the billing pattern - few months charging is on kWh and few months is on kVAh for the same services. Due to this inconsistency in billing pattern the billed units are overlapped at some services.

The Hon'ble Commission is requested to note that the Licensees are not supplying quality power and are not purchasing power on kVAh. Hence it is requested to review the clause (billing on kVAh) and amend the same by mutual consent in which both the consumer and Licensees will not be effected.

Further it is also requested to consider a power factor incentive.

Reply from Licensees

The billing is being done based on either kWh or kVAh recorded. In case of LT commercial services having loads 10 kW and above, the billing will be as per recorded kVAh only.

kVAh billing will also take care of the power factor incentive if good power factor is maintained the bill will be reduced in billing.

Commission's view

If the actual load of a service connection has not exceeded the contracted load but the billing is done on kVAh for certain months and kWh for the remaining months, then such issues should be brought to the notice of the CGRF. The Objector in such situation has to specify a particular case with Consumer number and category so that the issue can be taken up and resolved. If contracted load exceeded limits specified in the Tariff Order, the billing will be done on kVAh basis.

2.131 While assessing the quantum of power required, the sales in kWh and sales in kVAh along with power factor is considered to arrive at the total energy requirement. The objector has requested the Licensees to collect an amount of INR. 10,000 as minimum bill when the HT industries are not functioning. It is also requested to collect the balance amount from Government as subsidy.

Reply from Licensees

It is not under the purview of the licensee

Commission's view

The Commission has to function within the provisions of the Electricity Act, 2003. Accordingly, the Commission has to determine any charges to be levied.

2.132 The Objector requested the government to bear the bills of domestic consumers belonging to ST community

Reply from Licensees

No GO in this regard has been issued by the Government.

Commission's view

This is not under the purview of the Commission.

2.133 **Recovery of amount from Lanco**

The objector has requested the Licensees to explain the status of reimbursement from Lanco for the additional amount paid to the generation company.

Reply from Licensees

The four Licensees of the united Andhra Pradesh have to recover an amount of INR. 60 Crore towards LD from Lanco. To which Lanco approached the Supreme Court. Hon'ble Supreme Court has directed the Licensees to deposit an amount of INR. 100 Crore with Supreme Court. The final verdict is still awaited.

Lanco has received a favorable verdict in a case on MAT from the Supreme Court, to which the Licensees will have to pay a sum of INR. 100 Crore to Lanco. The Licensee have again filed an appeal on payment of interest with Supreme Court.

Commission's view

The reply furnished by the Licensees is in order.

Objections/suggestions on NCE and RPO

2.134 **Promotion of rooftop solar**

Rooftop solar power plants should have been promoted on a large scale among domestic, commercial and industrial electricity consumers given the decentralized nature of solar power. In developed countries like Germany more than 80% of the solar power capacity comes from rooftop plants. But in India the presence of rooftop solar plants is very limited.

According to SPDCL filing it received about 117.38 MW solar roof top net metering applications, out of which 7 MW were already connected to the grid. This programme is under implementation for more than three years. The gap between the number of applications and those that are already connected shows that there are problems that need to be addressed expeditiously.

Reply from Licensees

The use of the roof-top space for solar generation which other-wise would be have remained un-utilized offers an attractive solution in terms of harnessing solar potential and also in

economic benefits to the roof-top owner. Recognizing this, the licensee has proactively taken up solar rooftop tender for government buildings and is committed to take up solar rooftop program in a big way.

As on date, TSSPDCL has received 1010 application totaling to capacity of 20.45 MW. Technical feasibility has been issued for 900 applications totaling to a capacity of 19.60 MW

Capacity already installed in TSSPDCL under net-metering scheme is 7.83 MW. A single – window desk is established in TSSPDCL for expedited processing of solar applications

Commission’s view

The Licensee has stated that due to typographical error the figure reported in its filing is 117.38 MW. It has clarified that the actual applications for setting up rooftop solar power projects against net metering scheme accounted to 17.38 MW.

Subsequently few more applications have been received and the capacity for which the applications were filed stood at 20.45 MW. The License should take adequate measures to expedite the processing of the remaining applications and issue technical feasibility order.

The action taken by Licensees on utilizing the Government buildings to harness the rooftop solar potential is appreciated.

2.135 **Feeder level solar plants to meet agricultural demand**

News reports indicate that the state renewable energy promotion agency plans to install 1,000 solar pump sets in the state during this year. Under this solar pump set programme panels will be set up at individual farmer’s well to energize pump set. Given the high cost of solar pump sets – 11% contribution from farmers will be about INR. 50,000 – many farmers will find it difficult to participate in it.

An alternative proposal is that solar plants at feeders meeting agriculture loads; 0.5 MW to 2 MW solar plants may be set up depending on connected load on the feeders. Excess power generated from these plants after meeting agricultural loads can be fed in to the grid. This additional income will bring down financial burden of this programme. As the present subsidy covers 89% of the present cost the same can be used to set up feeder level solar plants. What is more this plant will remain as an asset of Licensees during its life of 25 years.

Reply from Licensees: The Licensees will be examining the models of solar pump set programme across different states and will be implementing the programme best suited for the state.

Commission’s view:

The Licensees shall take appropriate action in consultation with GoTS and MNRE/ GoI.

2.136 **Legislative mandate for promotion of renewable energy sources**

Insofar as the electricity generated from renewable sources of energy is concerned, the provisions of the Act contained in the preamble, section 61(h) and 86(1)(e) requiring promotion of such sources of energy has to be given due consideration. There has to be special consideration shown by way of exemption from cross subsidy surcharges and additional surcharges in respect of such energy. RPPO obligation is imposed upon various categories of obligated entities including licensees, captive consumers and open access consumers. The fulfillment of such obligation cannot be unreasonably coupled with the burden of cross subsidy surcharge. There is no justification on imposing an RPPO obligation on the one hand and mulcting the discharge of such obligation by cross subsidy surcharge. All electricity from renewable energy sources ought to be exempted from cross subsidy surcharge.

Reply from Licensees

To encourage renewable sources of energy, particularly for the Solar Generators, the Telangana Solar Power Policy-2015 has been declared by GoTS, wherein some incentives have been declared and one of which is the exemption of cross subsidy surcharge for the Open Access consumers who purchase power from the solar generators.

However, as per the National Tariff policy declared in January 2016, by Ministry of Power, the cost of power procurement from renewable energy sources is to be included while calculating average PP cost for arriving at cross subsidy surcharge.

Commission's view:

As per the regulation 1 of 2012, it is an obligation on the part of open access consumer to meet the RPO obligation which is in line with the section 61(g) and 86(1) (e) of Electricity Act 2003. Regarding levying of Cross Subsidy Surcharge on open access consumers, it has to be determined u/s 42 (2) of Electricity Act 2003. The Act does not say to exempt the CSS to the open access consumers availing supply from NCE sources

2.137 **NCE-contributing to increasing tariff**

Availability of 1,997.28 MU from non-conventional energy sources is estimated for FY 2016-17. Solar power accounts to 1,327.71 MU and wind power to 175.2 MU. Against the projected sale of 46,920.61 MU, purchase from NCE works out to 4.26% and solar works out to be 2.83%.

The obligation of Licensees is to purchase 5% of NCE out of their total consumption (sales), including 0.25% of solar power under Renewable Power Purchase Obligation (RPPO) order issued under Regulation 1 of 2012 by the erstwhile APERC. Purchasing NCE of 1997.28 MU at exorbitant tariffs imposes avoidable additional burden on the consumers and is unjustified.

Reply from Licensees

There has been emphasis across India to increase the share of renewables. This is likely to translate to a higher percentage of renewables to be used to meet the energy requirement. The RPO targets of states is likely to be revised upwards.

The state of Telangana with upcoming solar capacities would be in a position to meet the RPO requirements.

Commission's view

The Commission u/s 61 (g) & 86 (1) (e) of Electricity Act 2003 has responsibility to encourage the purchase of energy from Renewable sources. Further, the Commission is bestowed with a responsibility to specify the percentage of such purchase and also issue a preferential tariff.

The GoI is also vested with powers to issue NEP & NTP wherein a specified percentage of total energy requirement shall be procured from Renewable Energy Sources. Further the Electricity Act 2003 also speaks the same. Hence, it is an obligation on the part of the Commission to specify the same through Regulation. Accordingly, Regulation 1 of 2012 was issued by the erstwhile APERC and same was adopted by this Commission.

Hence, it is mandatory to encourage renewable sources of energy and the same must be procured. Now the cost of solar energy is found to be less than the cost of energy from marginal (thermal) stations. Further, the renewable sources of energy reduces the emission of greenhouse gasses which in-turn reduces global warming.

2.138 **Decreasing trend in solar tariff**

A decreasing trend in the solar tariff is observed in the recent rounds of international competitive bidding invited by NTPC and SECI. Further, MNRE through letter No.32/2/2014-15/GSP dated 28.12.2015 has reduced the benchmark solar tariff to INR. 4.50 per unit without any escalation for 25 years and SECI has set a tariff of INR. 4.43 per unit for power projects under VGF scheme.

It is to be noted that, SECI has informed that it would bring out state specific tenders based on the demand of various states. Despite of the available avenues to tap solar energy at lower rates, the Licensees had to purchase solar power at higher cost due to the haste of Govt. of Telanagana. It is hence requested that, the Hon'ble Commission exercise its authority to keep this unwarranted purchase on hold and protect the larger interest of the consumers.

Reply from Licensees

The tariff realized in solar park model is not directly comparable with that of the solar prices discovered in Telangana bid. The Licensees in Telangana have followed the distributed generation model for procuring solar power. The Licensees have been successful in concluding the tender for 2,000 MW at competitive rates

Distributed generation model of solar procurement is intended to result in lower losses, requirement of network strengthening. Further distributed generation model is expected to bring greater socio-economic benefits.

Commission's view

The Commission accepts the reply of the Licensees.

2.139 **Basis for extension of time to Solar Power Developers**

It is understood that the all solar power developers have not commissioned the plants as per the stipulated timelines. The objector was willing to know, if any penalties were levied on these developers.

An extension of time till 30th March 2016 was given to the solar power developers to commission their plants. The objector requested the Hon'ble Commission to direct the Licensees to cancel the PPAs, as per the terms and conditions of PPA, if the developer fails to commission the project as per the revised timelines. It was also requested to clarify, if the initial extension of time was given with the consent of the Hon'ble Commission.

Reply from Licensees

In order to avoid the assets getting stranded, extension was given to the solar developers for completing their plants. The discoms are monitoring the progress with a view to expedite them.

Commission's view

The Commission has examined the approval of PPAs on a case to case basis. Recently, PPAs of Enrich Energy Pvt. Ltd., Rays Power Infra Pvt. Ltd., received from TSSPDCL have been kept on Commission's website for stakeholder comments.

In case of a Commission approved PPA, the Licensees are directed to approach the Commission to amend any clause including extension of time.

2.140 **Incentive for early commissioning of solar power plants**

The draft solar PPA put on the web site of the Commission, clause 3.8.8 provides for one-time early commissioning incentive for solar power developer. Such incentive is unwarranted and unjustified. Such kind of incentive is not offered to conventional power plants which offer power at lower cost. If the government intends to pamper private developers, it is for it to offer the same directly. Incorporating such questionable provisions in the draft PPA by the Commission and imposing that burden on consumers of power goes against the regulatory purpose of protecting consumers' interest.

Reply from Licensees

Solar generation is expected to substantially meet the day time power demand. Since number of hours of supply to agricultural consumers has been increased to 9 hours, availability of solar generation is expected to greatly aid in grid management. With the above intention in mind, the licensees have offered an early commissioning incentive to expedite capacity additions.

Commission's view

The reply furnished by the Licensees is satisfactory. The advantages of procuring solar power is that it reduces greenhouse gasses thereby reducing carbon emission and global warming. While considering the cost of incentive these additional benefits to the society should also be seen.

2.141 **Review of solar tariff after 10 years of commissioning**

The clause 2.2 of the earlier draft solar PPA mentions that, the tariff after the 10 years of commissioning will be reviewed by the commission and adjusted based on the realities on that date. However, in the later version of the PPA such clause was removed. The objector requested the Commission to incorporate the earlier clause of the PPA and review the tariff after 10 years of operations.

Reply from Licensees

By going in for a levelized tariff of procurement for the entire period of the PPA, there is greater certainty to the developers.

This is also beneficial from the point of view of Licensee and to the consumers.

Commission's view

The reply furnished by the Licensees seems to be in order in view of the certainty of return on cost to the developer and to encourage the developers to come forward.

2.142 **Solar power initiative**

The objector has requested TSSPDCL to review their solar power initiative

Reply from Licensees

TSSPDCL has projected energy availability from NCE Solar Power for FY2016-17 as 1,244.34 MU considering initiatives namely GBI Schemes, Projects allocated to AP, Solar Bid 2013, Open Offer, REC to PPA, Bid 2014 and NTPC & NVVL Bundled Power as given in Page 42 of ARR Filings.

Commission's view

The reply furnished by the Licensee is in order.

2.143 **Need for alternate sources of energy**

The Telangana state is mostly dependent upon thermal power for the electricity which is based on coal mines. Due to the increasing environmental issues, legal issues on coal mining may arise. The objector, hence requested the Hon'ble Commission to envisage on alternate sources of energy; precisely nuclear power. The objector also opined that a research committee in this regard may be formed to look into the modalities of such alternate sources.

Reply from Licensees

To encourage Renewable energy Telangana government has issued Telangana Solar Policy and many incentives are being given for the solar power developers in the state.

As a part of encouraging the renewable energy generation, TSSPDCL has entered PPAs with Solar Power Developers for a capacity of 2,959.9 MW till date. Nearly 300 MW has been commissioned as on 01st April 2016.

Commission's view

The reply furnished by the Licensees on developing the alternate source of supply in respect of solar is in order. Regarding nuclear power, the establishment of such projects is under the purview of GoI/ DAE.

2.144 **Solar for remote villages**

Remote villages can be electrified by decentralized generation (preferably solar) through private organizations and at a reasonable cost

Reply from Licensees

Suggestions are being taken into consideration.

Commission's view

The reply of Licensees is appreciated. Further the Licensees shall take immediate steps to energize the remote habitants like chenchu community/ Thandas, etc. especially in the reserve forest area through decentralized (isolated mode) solar generation by taking necessary approvals.

Objections/ suggestions raised by Individuals

The Commission's response to all objections on particular topic is provided at the end of the compilation on each topic.

Operational issues

2.145 **Replacement of burnt cables and feeders**

It is submitted that the burnt LT AB cables and agricultural feeder need to be replaced.

Reply from Licensees

The burnt LT AB cables of LT AGL feeders will be replaced immediately.

2.146 **Insufficient ground staff**

The Licensee is not appointing sufficient Line men in the villages due to which in cases of breakdowns power is cut and no repairs are done immediately. This is leading to the occurrence of accidents and/ or deaths also, revenue collection is not properly done. A lot many problems and losses can be reduced if one line man for one gram panchayat or 20 line men for one section are appointed.

Reply from Licensees

Notification was issued for appointment to 1169 Nos. posts of Junior Linemen on 15.12.2011 in APCPDCL (now TSSPDCL). Due to Court Cases filed in the Hon'ble High Court challenging the Notification, further process of recruitment was stalled. The Cases are finalized and as per the Orders of the Hon'ble High Court, another Notification is to be issued.

2.147 **Overloading of feeder**

The Objector opined that, a feeder by name Rapalli in the area of TSNPDCL has been over loaded.

Reply from Licensees

In order to reduce the overload on existing Rapalli feeder, it will be bifurcated and one of the feeder will be fed from newly constructed Shakella substation, which is ready to commission.

2.148 **Breakdown of transformers and pump sets due to Licensee negligence**

In adequate staff and improper maintenance of the transformers, there is a frequent breakdown of transformers and pump sets resulting in heavy losses. Licensees should be held responsible for such losses.

Reply from Licensees

Since the matter is subjudice, the line man recruitments are on hold. At 33/11 kV substation 4 operators are currently posted. Appropriate measure are taken for maintenance of DTRs on a regular basis.

2.149 **Uninstalled AB switches and earthing**

About 6000 AB switches and about 3000 earthing in Mahabubnagar district are not installed due to which many farmers are losing their life. Hence, the department should see that all transformers should have Earthing, AB switches and SG sets.

Reply from Licensees

TSSPDCL is providing AB switches at locations where unavailable. Earthings to DTRs are being renewed wherever required/ brought to notice.

2.150 **Un-electrified villages**

There is no power connection for the villages located around Vatavarlappalli in Mahabubnagar district. Hence, adequate action to provide power connection is requested.

Reply from Licensees

The AE/Operation/Amrabad has personally visited Vatavarlappalli and surrounding hamlets and submitted a report stating that Rayaleti Penta Tanda H/o Vatavarlappalli village is 5 KM away from vatavarlappalli in deep forest area. There are 9 damaged houses and all the villagers have migrated to vatavarlappalli village.

2.151 **Attending to complaints**

The Licensees should see that bills are properly raised, replacement of meters for any reason are attended immediately. All the consumer disputes are settled at the earliest. No issue to be left unattended till the effected parties approach CGRF.

Reply from Licensees

Defective meters are replaced immediately. Bills to consumer are issued on the spot. In most of the places meter reading and Billing is done through IR Port without manual intervention. Consumer disputes are being settled at section level, Sub-divisional level, Divisional level and Superintending Engineer level in general.

2.152 **Management committees to be implemented**

At substation, Mandal and state level, there should be management committees. The committee member should be invited for the review meetings of the Licensees.

Reply from Licensees

Substation level committees are giving suggestions which are addressed on regular basis.

2.153 **Installation of unnecessary new breakers**

To provide uninterrupted and quality power to the consumers, new breakers at 33 kV and 11 kV substations are being installed. But the old breakers and scrap material is not being

deposited back to the stores. Further, claiming false requirement of breakers at certain location is pertinent. It is requested to reduce such unnecessary expenses to the Licensee through prudent verification of requirement.

Reply from Licensees

Only the spoiled or old breakers are being replaced based on the requirement.

2.154 **Regularization of contract employees**

It has been directed by the Hon'ble Chief Minister, to supply power for 9 hours to agriculture and uninterrupted power supply to domestic consumers. In order to implement such directives, it is requested to the Licensees to strengthen the ground staff at substation level and improve systems through augmentation. Also, if the contract employees are regularized as single cadre substation operators (No promotion – No demotion) then it will help the employees.

Reply from Licensees

In order to implement the directives of the Hon'ble Chief Minister; new substations, lines and transformers are being installed also system augmentation works are in place.

2.155 **Material in stores**

Despite the availability of material in the stores, the Licensees are purchasing new material through tenders without utilizing the existing material. This additional expenditure should be checked.

Reply from Licensees

Rolling stock of material will be maintained in the stores. Only the required material is being tendered out.

2.156 **Replacement of transformers**

In the substations of Ranga Reddy circle in TSSPDCL, Bores were arranged for the betterment of the contractors. Further, power transformers are being replaced through tenders even if unnecessary.

Reply from Licensees

For the purpose of earthing to power transformers and daily needs of the staff at the sub stations bore have been made. The power transformer enhancement is being made only in places of requirement.

2.157 **Recruitment of employees in new substations**

In the recruitment process for operators in the newly built substations, the attendees are being pestered for monetary benefits. It is requested that the Licensees take necessary action on this matter.

Reply from Licensees

It is requested to report a specific issue for taking necessary action.

2.158 **Online bill facility**

TSSPDCL is failing to facilitate online bill with full details (like kWh, kVAh, energy charges, other charges, arrears, total, etc.). So it is requested to make sure the complete bill information available in Licensee's portal.

Reply from Licensees

All the necessary details can be accessed through TSSPDCL website (www.tssouthernpower.in). The consumer has to register and login.

2.159 **O&M staff**

The objector requested TSNPDCL to strengthen its O&M staff in rural areas for maintenance of distribution network and avoid accidents. Further, new substations are not being commissioned due to lack of substation operators.

Reply from Licensees

Approval was accorded to take services through agency for 1,077 unmanned distributions to improve consumer services and maintenance works. And further, the licensee has requested state Govt. approval to fill existing 558 JLM posts. In according to increase of new services in the field, the licensee requested the government to sanction 2,220 additional posts.

Further, tender to fix manning contractors is in the process and for the selection of operators guidelines shall be given soon for transparent selection process.

2.160 **Replacement of failed DTRs**

The objector submitted that the failed DTRs are not being replaced in a colony at Peddatundla village. The village falls under the purview of TSNPDCL.

Reply from Licensees

The failed DTRs are replaced within the stipulated time. In this case, DTR was replaced after regularizing the unauthorized connections as there are no authorized connections as on the date of failure of DTR.

2.161 The objector opined that the quality of poles installed by the Licensees are of poor quality

Reply from Licensees

The Licensees are purchasing prescribed standard poles from suppliers and our civil engineers are testing the poles before dispatch.

- 2.162 The objector submitted that an amount of INR. 100 is being collected by the staff of TSNPDCL for replacement of wires

Reply from Licensees

No charges are being collected from the consumers for replacement of meters. If any specific instance is reported, action will be taken.

- 2.163 The objector requested the Licensees to consider payment of EPF to contract employees.

Reply from Licensees

As per the provision it will be considered.

- 2.164 The objector submitted that,

1. Reconnection charges are being collected without disconnection
2. Levied penalty charges are very high
3. The behavior of staff towards consumers is not polite

Reply from Licensees

The reconnection charges and penalties are being collected as per provisions of the Tariff Order issued by TSERC. On the behavior of staff, strict instructions have been given to all the staff to be courteous with the consumers.

- 2.165 **Bill collection**

It is requested by the objector to arrange for bill collection in the villages atleast twice before the due date.

Reply from Licensees

Pertains to RESCO

- 2.166 The objector submitted that new agricultural connections are not being released in view of the WALTA Act.

Reply from Licensees

As per certification of concerned VRO on application form the agricultural services will be released without mention to WALTA.

Commission's view

The Licensees are directed to take immediate appropriate action as replied during the public hearing and furnish objector wise action taken report by end of July, 2016.

Agricultural service connection issues

- 2.167 The agricultural connection registered on the name of a person has been changed to a third person's name without a proper documented proof.

Reply from Licensees

Pertains to RESCO

- 2.168 **Payment to transformer societies**

The objector submitted that, in order to get an agricultural connection, the farmer is forced to pay an amount INR. 45,000 to transformer societies.

Reply from Licensees

There is no right on DTR to the Transformer society for release of new agricultural connections. The department will arrange to release agricultural connection on the DTRs based on feasibility without interference from transformer committee.

- 2.169 **Issue of Agricultural DTRs**

As per the regulation 4 of 2013, the Licenses have to provide DTRs at their own expense. Only the amount for development has to be charged to the consumer. This is not being implemented by the Licensees. Request the Licensees to implement the regulation accordingly and also create awareness to the consumers on the rights.

Reply from Licensees

The agricultural DTRs are being issued to the consumers as per the Regulation 4 of 2013. In case an HT consumer purchases the DTR by him/ herself, then such amount will be adjusted against the development charges payable by the consumer. Also, this information is being shared with farmers in meetings of CGRF and TSERC. Any specific comments from the consumers are welcome.

- 2.170 **Automatic starter**

The objector requested the Licensees to continue providing automatic starter for agricultural pump sets.

Reply from Licensees

Due to the automatic starters, load on the System suddenly increases for a fraction of period and it leads to failure of DTRs and also feeder tripping.

2.171 **Supply to agriculture**

The objector has requested the Licensees to provide the 9 hour supply for agriculture in two spells during the day time.

Reply from Licensees

The licensees are ready to extend 9 hours power supply to agricultural consumers in the day time.

2.172 **Additional infrastructure to agricultural consumers**

The objector opined that TSNPDCL has not provided any additional infrastructure to agricultural consumers.

Reply from Licensees

The licensee has released 37,273 new agriculture connections during the FY 2015-16 duly providing infrastructure like 11KV line, LT line & DTRs.

Commission's view

The Licensees are directed to take action as replied during the public hearing and furnish a objector wise compliance report.

Corruption and other issues

2.173 **Misconduct in the system**

Except for the allotment of transformers, all other works for the agricultural connection is being done by the farmers themselves. The farmers are not reimbursed with the expenses. The cost of all the works done by farmers are claimed by contractor and officials. Further, the officials demand money from the farmers at different rates for each of the works. The solution for this problem is that you only sanction transformer and permit the farmers to buy other matching material from outside companies on reimbursable basis. The Licensee to reimburse for all the works done by the farmers for making the transformer operational. The reimbursement should be done by transferring the amounts directly to the accounts of the farmers.

Reply from Licensees

In view of the maintenance of the quality of materials, the required materials for erection of DTRs for release of agricultural services are being arranged by TSSPDCL. The contractors

engaged for erection of DTRs are carrying out the works. Consumers need not purchase any material or pay to the contractor.

2.174 **Use of personal cars on contract basis**

The officials in the Licensee's organization are eligible for transportation by car while on duty. But it is observed that, most of the employees are hiring their own cars with some contractor and in turn using it for both official and personal purposes. It is requested that the authorities take necessary action on these happenings which would save lot of money to the Licensees.

Reply from Licensees

Specific issue noticed in this regard should be brought to the notice of Licensees.

2.175 **Curb corruption**

For the betterment of the Licensee's organization, it is requested to curb corruption in the system. Strengthening of vigilance and installation of centralized CCTV cameras at every CSC center are recommended. Necessary action on any cadre of employee should be taken immediately.

Reply from Licensees

CCTV cameras have been installed in certain ICSC and CSC centers.

Commission's view

During the public hearing conducted in the areas of both the Licensees, many of the objectors have pointed out the growing corruption and no work (such replacement of transformers, release of new connections etc.) as is being taken up if such bribe is not given. The Commission noted the issue to be reviewed seriously.

The CMDs of both Licensees have replied on this issue stating that the corruption in the system will be curbed. In order to curb corruption and improve the image of the Licensees, the Commission opined that the team size of present vigilance department is not sufficient and hence shall be strengthened and also severe punishments should be imposed on corruptive employees, as per Licensee's rules of conduct in force.

Accidents and Ex-gratia

2.176 **Fatal accidents due to unattended conductor snapping**

Visits to villages show that the DTRs serving agriculture do not have fuse boxes or AB switches. There DTR is just a box. If there is a case of conductor snapping the service provided by Licensee is to give Line Clearance (LC) so that the problem can be attended to. It is not easy to get LC and even a small problem in rural areas need LC to be solved. Again it is the farmers who will repair the snapped conductor but not the Licensee staff. As there

is delay in obtaining LC unsuspecting farmers step on the fallen live conductors and get electrocuted. It will not be exaggeration to say that more than 90% of DTRs serving agriculture are not technically sound.

Reply from Licensees

As per the directions of the Hon'ble Commission, TSSPDCL has taken all preventive measures to avoid accidents. The measures taken are a) Implementation of HVDS, b) Rectification of loss lines c) rectification of AB switches, d) Replacement of broken poles, e) providing fuse controls to DTRs f) Re-conductoring with the above steps the accidents are prevented compared with last 2 years.

The line clears will be taken by the concerned O&M staff under the Guidance of engineers. The line clear consists of complexity which includes safety aspects. The concerned LMs are provided with department phones, Cell phone numbers are available at Gram Panchayati offices, cell phone numbers of AE and ADEs are made available to the public, in case of emergency, they may contact 1912/ LM/AE/Substation operators.

Under HVDS scheme, star rated 25 kVA DTRs are commissioned in place of 100 kVA, 63 kVA mother transformers.

- 2.177 The objector submitted that a person by name Kalva Tirupathi met with an electrical accident and was hospitalized with severe injuries. It was hence requested that the Licensee provide necessary financial aid.

Reply from Licensees

The issue is not under the purview of the Licensee.

- 2.178 **Resolution of accident cases**

The objector has requested to expedite the process of releasing ex-gratia amount to the families of the demised.

Reply from Licensees

All the accident cases will be examined and disposed within three months.

- 2.179 **Pending ex-gratia payments against fatal accidents**

The Licensees are requested to make all pending payments to the families of the demised farmers due to electrical accidents. The payment of INR. 4.0 lakhs as per TERC order of 01st January 2016 should be released immediately. Also, the farmers have to be informed about these available systems.

Reply from Licensees

Licensees are working towards addressing issues corresponding to fatal accidents and payment of exgratia at the earliest possible. Online systems for reporting accidents (application) are being developed. An accident reporting system is already enabled with the Licensees.

2.180 **Delay in payment of compensation in case of causality**

Compensation for the causalities of people or cattle due to electrical accidents is either kept pending or the Licensees deny their responsibility. Since there is no enquiry on these matters, the Hon'ble Commission is requested to conduct a survey through a commission.

Reply from Licensees

Ex-gratia for the causalities of people or cattle due to electrical accidents is paid to the family members after a detailed departmental investigation.

2.181 **Fatal accidents of agricultural consumers**

Every year the incidents of deaths due to electrical accidents are being brought to the attention of the Commission. These deaths are avoidable and occurrence of these tragic incidents show that the Licensees in the state are least concerned about these. Human fatalities due to electrical accidents increased from 436 in 2013-14 to 454 in 2014-15. In the first half of 2015-16 this number has already reached 246. The Hon'ble Commission is requested to direct the Licensees to take concrete steps to bring down these tragic incidents.

Under SPDCL area more than 85% of the fatal human accidents have taken place in Mahabubnagar, Medak and Nalgonda circles. Similarly, under NPDCL area more than 50% of these accidents have taken place in Warangal and Karimnagar circles. These circle have large number of agricultural services. It is the agricultural consumers at the receiving end.

Reply from Licensees

The Licensee is carrying out feeder-wise intensive inspections regularly including pre-monsoon inspections and taking up the following Operation & Maintenance (O&M) works, as and when necessitate, for improvement of the distribution system:

- Replacing the worn-out/damaged conductor.
- Replacing the bent/rusted poles
- Replacing the undersized conductor.
- Replacing the conductor having multiple joints.
- Replacing the damaged jumpers.
- Rectifying the defective AB switches.
- Providing adequate HT/LT clearances.
- Replacing the defective insulators, etc.

2.182 Despite heartrending accounts by farmer's representatives during the public hearings and the Commission's directives as well as allocation of funds through tariff orders, Licensees appear to have not moved. The Commission has been directing the Licensees to take all preventive measures to avoid accidents. Despite directions of the Commission, the sad part is that the number of accidents are increasing. Provision of INR. 200 crore for each Licensee has been made under Special appropriation for safety measures in the Tariff Order for 3rd Control period (Pg.No.125). It is requested that the Licensee take necessary action immediately.

Reply from Licensees

As per the directions of Hon'ble Commission, TSSPDCL has taken all preventive measures to avoid accidents. The measures taken are:

- a) Implementation of HVDS;
- b) Rectification of loss lines;
- c) rectification of AB switches;
- d) Replacement of broken poles;
- e) providing fuse controls to DTRs;
- f) Re-conductoring with the above steps the accidents are prevented compared with last 2 years.

Under HVDS scheme, star rated 25 kVA DTRs are commissioned in place of 100 kVA, 63 kVA mother transformers.

2.183 Licensees claim to take all necessary steps to prevent recurrence of fatal accidents. But they keep happening. For example, SPDCL in response to directives 7.11 and 7.12 claimed that the damaged conductors are being replaced regularly and that the staff are attending to replacement of fuses in agriculture DTRs (Pg. No. 16). This is far from truth. It is also worth noting that nearly 40% of the fatal accidents are taking place due to snapped conductors. Visits to villages show that the DTRs serving agriculture do not have fuse boxes or AB switches. There the DTR is just a box. It is not easy to get LC and even a small problem in rural areas need LC to be solved. Again it is the farmers who repairs the snapped conductor but not the Licensee staff. As there is delay in obtaining LC unsuspecting farmers step on the fallen live conductors and get electrocuted. It will not be exaggeration to say that more than 90% of DTRs serving agriculture are not technically sound.

Reply from Licensees

The line clears will be taken by the concerned O&M staff under the Guidance of engineers. The line clear consists of complexity which includes safety aspects. The concerned LMs are provided with department phones, Cell phone numbers are available at Gram Panchayathi offices, cell phone numbers of AE and ADEs are made available to the public, in case of emergency, they may contact 1912/ LM/ AE/ substation operators.

2.184 **Request for report on accidents promised during prior hearing**

During the public hearing on tariff proposals for the year 2015-16 CMD of SPDCL assured to conduct a study on these electrical accidents. In case the study the objector requested the Commission to direct SPDCL to share the report with the public.

Reply from Licensees

The issue of accidents have been reviewed by the management regularly. In order to prevent the accidents various measures have been taken by TSSPDCL and sanctioned INR. 232.10 crore to attend all the works like 1) rectification of loose lines, 2) providing intermediate poles, 3) renewal of earthing at DTR, 4) providing of AB Switches/rectification, 5) Re-conductoring of lines etc.. Further, as per the directions of Commission the ex-gratia amount has been enhanced to INR. 4.0 Lakhs for human beings. Facility has been provided to the legal heirs to upload the required documents for claim in TSSPDCL website.

Commission's view

- i. The Licensees are directed to make payment of ex-gratia for the fatal accident cases as per the Commission order on enhancement of ex-gratia amount, within the time specified. The same was promised by the Licensees while replying at the public hearing. The report of compliance objector wise shall be furnished to the Commission by end of July, 2016.**
- ii. The Commission noticed that some of the accidents could have been avoided if the staff of the Licensee acted on time in rectifying the defects pointed out by the public.
- iii. The Licensees are further directed to conduct pre-monsoon and periodic inspections of the lines and equipment so that the defects can be noticed and preventive measures can be taken in advance, thus avoiding occurrence of any accidents. The plan of action proposed shall be furnished to the Commission by the end of August, 2016.
- iv. Licensees shall ensure the quality of works as per existing standards so that accidents occurring on account of lengthy spans of lines, absence of guy insulator to the stay wire, bending of poles, low height plinth for DTRs, etc. can be avoided.

2.185 **Energy conservation progress and achievements**

The Licensees have explained the measures for energy conservation they have been taking. However, they have not given details of energy conserved so far and likely to be conserved during 2016-17 and benefits that accrued or would accrue as a result of the same. The objector has requested the Licensees to furnish the details.

Reply from Licensees

The Licensees will be implementing Domestic Efficient Lighting Program (DELP) which aims at reducing the demand of residential consumers through the installation of LEDs in place of CFLs/ incandescent bulbs.

- As on 01st April, 2016 no LED bulb was distributed. Distribution will be carried out during the months of April and May 2016.
- Total number of LED bulbs procured are 4,66,426. Amongst these 2,78,006 bulbs were procured by TSSPDCL for an amount of INR. 2,07,39,247.60 and TSNPDCL procured 1,88,420 bulbs for an amount of INR. 1,40,56,132.
- The amount is met by respective Licensees only.
- The Nagar Panchayat wise distribution of LEDs will be carried out as detailed below. The details of TSSPDCL are:

Circle	Name of the Nagar Panchayath	Quantity (Nos.)	Officer in-charge
Mahabubnagar	Kalwakurthy	16,644	AE/Opn/Kalwakurthy
	Achampet	12,528	AE/Opn/Achampet
	Kollapur	11,500	AE/Opn/Kollapur
	Ieeza	12,510	AE/Opn/Ieeza
	Badepalli	16,306	AE/Opn/Jadcherla
	Nagar Kurnool	12,290	AE/Opn/Nagar Kurnool
	Total	81,778	
Nalgonda	Devarakonda	16,018	AE/Opn/Devarakonda
	Huzurnagar	19,448	AE/Opn/Huzurnagar
	Total	35,466	
Medak	Gajwel	20,400	AE/Opn/Gajwel
	Andole-Jogipet	16,276	AE/Opn/Andole-Jogipet
	Dubbaka	12,800	AE/Opn/Dubbaka
	Total	49,476	
RR East	Ibrahimpattanam	10,720	AE/Opn/Ibrahimpattanam
	Pedda Amberpet	24,966	AE/Opn/Pedda Amberpet
	Total	35,686	
RR South	Badangpet	53,000	AE/Opn/Lenin Nagar
RR North	Medchal	22,600	AE/Opn/Medchal
	Total	1,11,286	
	Grand Total	2,78,006	

- The details of TSNPDCL are:

Panchayat	No. of LED bulbs	Nagar Panchayat	No. of LED bulbs
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Narsampet	26,230	Husnabad	11,558
Bhupalapalli	29,380	Vemulavada	18,650
Parkala	14,882	Peddapalli	23,626
Jammikunta	16,928	Madhira	16,900
Huzurabad	13,566	Sattupalli	16,700
Total		1,88,420	

- Each household will be given 2 LED bulbs only and an amount of INR. 10 per each bulb will be collected from the beneficiary towards distribution charges.

Commission’s view

The response (details) furnished by the Licensees for the objection seems adequate.

2.186 **Safety standards in DTR purchase and erection**

The objector requested TSSPDCL to identify the people responsible for allowing LT DTR constructions and fuse boxes without following BIS-ISI technical safety standards in Hyderabad city.

Reply from Licensees

TSSTPDCL has adopted a systematic e-procurement process for all equipment with ISI standards and guidance from central electricity authority. All such standards are part of tender specifications. The equipment thus procured are installed as per REC, CEA and EA 2003 safety standards. At present, TSSPDCL procures 3 star rating DTRs.

Commission’s view

The response furnished by the Licensees to the objection is satisfactory.

2.187 **Salaries to contract employees**

The objector has submitted that the contract employees in TSNPDCL have not received salaries in the past three months.

Reply from Licensees

The manning contractor’s dispute have been resolved and now they are paying salaries.

Commission’s view

This is not in the purview of the Commission

2.188 **Role of engineers**

Currently, engineers are being appointed to collect the revenue. This will demean the respect of an AE or ADE. Hence, it is requested to delegate works based on the role of an individual in the organization. It is also requested, to train the engineers in way to reduce energy losses and optimize the system.

Reply from Licensees

The AE and ADE of the organization are also lending a helping hand in the collection of revenue alongside their technical commitments. Revenue collection is also an important for the development of the organization.

Commission's view

This aspect i.e. utilization of engineer service is not in the purview of the Commission. The Commission will review the performance of the Licensees as per regulations.

2.189 **Hiring of Autos for resolving complaints**

Under FOC to help resolve issues immediately, autos were hired. But these autos are now not being used at all. Either due to lack of driver or nonfunctioning of the auto they are lying idle. The labor is having to travel on their personal motor cycle for any registered complaint. Hence, it is requested to release these auto which charge INR. 25,000 per month and instead hire motor cycle which would cost only INR. 10,000 per month.

Reply from Licensees

In the purview of TSSPDCL, these autos are being used during break downs, fuse replacement and repair of transformers. These are available 24 hours for FOC. The autos also help in adverse climatic conditions, to carry required material and three people can travel.

2.190 The objector opined that the staff of TSNPDCL is taking revenge on the village of Chityal Mandal by conducting raids for having spoken against the staff in the public hearing.

Reply from Licensees

The village is covered for inspections as a part of routine programme. Booking of direct tapping and theft is a routine duty of Licensee officials as there is rampant theft in villages.

Chapter-3: Sales projections

Energy Sales

- 3.1. This section deals with the methodology adopted by the Licensees to project sale of energy to different consumer categories in their respective licensed area of supply during FY 2016-17. The section deals with the methodology adopted by the Commission to determine the sales projections for FY 2016-17 after scrutiny of the data submitted by the Licensees and considering the objections /suggestions raised by various stakeholders in writing and during the public hearings.

Sales Projections

- 3.2. The Licensees projected the sale of energy to different consumer categories in their respective licensed area of supply at 46,921 MU for FY 2016-17. The Licensees have followed both trend and end use methods, and forecasted the sales volumes for FY 2016-17.
- 3.3. In the trend method, the Licensees has considered the historical growth rate of sales of each category and computed the CAGRs for 5 years, 4 years and 3 years for the period from FY 2010-11 to H1 of FY 2015-16. The Licensee has also considered the year-on-year growth rate to project H2 sales of FY 2015-16. While computing the CAGR the Licensees have considered the unrestricted sales by adding the curtailed demand due to R&C measures imposed in the years FY2012-13 to November 2014.
- 3.4. The Licensees have followed the end use method for HT-I (Industrial), HT-IV (Irrigation Agriculture and CPWS) and HT V (Railway Traction) categories since the historical growth rate will not present an accurate picture of sales for these categories due to the following reasons;
- GoTS has taken up LI schemes in a massive way from FY 2015-16 onwards, in order to improve irrigation facilities.
 - GoTS has initiated the Telangana Drinking Water Project for supplying drinking water to all households in the State, known as “Bhagirath Mission”.
 - GoTS has also initiated a policy called TS-iPASS for attracting new industries.
 - Hyderabad Metro Rail project is being taken up in a fast paced manner and two corridors will be ready to commission in the current financial year.
 - The Licensees have stated that nine hours of supply will be provided to agricultural consumers, but no additional sales have been considered on this account.
- 3.5. The category wise sales projected by the Licensees for FY 2016-17 is presented in the table below.

Table 1: Category wise sales projected by the Licensees for FY 2016-17(in MU)

Consumer Category	SPDCL	NPDCL	Total
LT Category	18,966	9,287	28,253
Category I (A&B) – Domestic	7,676	3,147	10,823
Category II (A,B,C&D) - Non-domestic/Commercial	2,315	628	2,943
Category III – Industrial	859	266	1,125
Category IV (A&B) - Cottage Industries & Dhobighats	10	7	16
Category V (A, B & C) - Irrigation and Agriculture	7,185	4,905	12,090
Category VI (A & B) - Local Bodies, St. Lighting & PWS	855	293	1,148
Category VII (A & B) - General Purpose	66	41	107
Category VIII -Temporary Supply	1	-	1
HT Category at 11 KV	5,181	1,392	6,573
HT-I Industry Segregated	3,449	563	4,012
HT-I (B) Ferro-Alloys	-	-	-
HT-II – Others	1,501	102	1,603
HT-III Airports, Railways and Bus stations	7	8	15
HT -IV (A) Lift Irrigation and agriculture	34	23	57
HT- IV (B) CP Water Supply Schemes	58	51	110
HT-VI Townships and Residential Colonies	94	16	109
HT -Temporary Supply	39	-	39
HT – RESCOs	-	628	628
HT Category at 33 KV	5,586	488	6,074
HT-I Industry Segregated	4,847	204	5,051
HT-I (B) Ferro-Alloys	58	44	103
HT-II – Others	597	20	617
HT-III Airports, Railways and Bus stations	-	-	-
HT -IV (A) Lift Irrigation and agriculture	25	23	48
HT- IV (B) CP Water Supply Schemes	4	95	99
HT-VI Townships and Residential Colonies	44	44	88
HT -Temporary Supply	11	-	11
HT – RESCOs	-	58	58
HT Category at 132 KV	3,931	2,089	6,020
HT-I Industry Segregated	2,471	658	3,129
HT-I (B) Ferro-Alloys	180	-	180
HT-II – Others	61	2	63
HT-III Airports, Railways and Bus stations	78	-	78
HT -IV (A) Lift Irrigation and agriculture	792	888	1,680

Consumer Category	SPDCL	NPDCL	Total
HT- IV (B) CP Water Supply Schemes	104	-	104
HT-V Railway Traction	246	451	697
HT-VI Townships and Residential Colonies	-	90	90
HT - Temporary Supply	-	-	-
Total Sales	33,665	13,255	46,921

Basis for approving Category-wise Sales for FY 2016-17 by the Commission

3.6. The Commission has prudently scrutinized the sales projections submitted by the Licensees based on the historical growth rates and additional information furnished. The Commission has taken due cognizance of the various submissions made by the Licensees and decided to accept the sales projected by the Discoms for all categories except for the categories mentioned below.

- LT-I Domestic
- LT-II Non-Domestic
- LT-V Agriculture
- HT-I (A) Industry
- HT-III Airports, Bus Stations and Railway Stations
- HT-IV Government Lift Irrigation Schemes & Agriculture
- HT – V Railway Traction and Hyderabad Metro Rail
- HT RESCOs

3.7. The key points considered for determining the sales projections for the above mentioned consumer categories are detailed in the following paragraphs.

Metered Sales:

3.8. **LT-I Domestic:** For FY 2016-17, the Commission has modified the sales projected under this category using the past growth trends duly considering the actual sales upto Jan 2016. The Commission has revised the sales for the Domestic category to the quantum of 10,864 MU as against a quantum of 10,823 MU as projected by the Licensees. The Discom-wise sales approved are as follows.

Table 2: LT I Domestic sales approved by the Commission for FY 2016-17 (in MU)

Category	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
Domestic sales Total	7,749	3,115	10,864

- 3.9. **LT-II Non-Domestic/Commercial:** The Licensees have considered a growth rate of more than 10% for FY 2016-17. But the Commission observed that both the Licensees have achieved a maximum growth of not more than 6% over the last four years. Considering the increasing commercial activity in the respective licensee areas, the Commission has allowed for 7% growth rate for all sub categories. Accordingly the Commission has revised the sales for this category to 2,912 MU against the projection of 2,943 MU by the Licensees. The Discom-wise sales approved are as follows.

Table 3: LT II Non-Domestic sales approved by Commission for FY 2016-17 (in MU)

Category	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
Non-Domestic/Commercial sales Total	2,300	612	2,912

- 3.10. **HT-I (A) Industry:** Based on the historical sales trend, the Commission has considered 2 year CAGR of respective Licensees for 11kV and 33kV voltage, as during these two years no R&C measures were imposed by the Licensee and the new Industrial policy initiated by the GoTS. Regarding approval of sales at 132kV, the Commission has accepted the sales projected by the Discoms. The revised sales for FY 2016-17 is 11,557 MUs against the proposed figure of 12,192 MU. The Discom-wise sales approved are as follows.

Table 4: HT-I Industry sales approved by Commission for FY 2016-17 (in MU)

HT-I Industry	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
11 kV	3,129	558	3,686
33 kV	4,505	203	4,708
132 kV	2,498	665	3,163
Total	10,132	1,426	11,557

- 3.11. **HT-III Airports, Bus Stations and Railway Stations:** The Commission observed that the sales projected for FY 2016-17 have been considered using a higher growth rate as compared to the historical growth trend. After a thorough scrutiny, the Commission has revised the sales projections downwards duly considering the historical growth rate. The Discom-wise sales approved are as follows.

Table 5: HT-III Airports, Bus Stations and Railway Stations sales approved by Commission for FY 2016-17 (in MU)

HT-III Airports, Bus Stations and Railway Stations	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
11 kV	6	8	14
33 kV	-	-	-
132 kV	67	-	67

- 3.12. **HT IV Government Lift Irrigation Schemes & Agriculture:** The Commission observed that the sales projected under this category by the Discoms are higher than what has been realized during the previous years. The sales in this category are dependent upon the completion of the Lift Irrigation Schemes (LI Scheme) in the State. After examining the latest work in progress of each LI Scheme and actual sales achieved during the last two years for the existing projects, the Commission has revised the sales projections for FY 2016-17 for all voltages to a quantum of 1164 MU as against 1785 MU filed. The Discom-wise sales approved are as follows.

Table 6: HT IV Government Lift Irrigation Schemes & Agriculture sales approved by Commission for FY 2016-17 (in MU)

Category	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
Government Lift Irrigation Schemes & Agriculture sales Total	764	400	1164

- 3.13. **HT V – Railway Traction:**

Under this category the sales projected for running of India Railways by the Licensees is in order hence the Commission has approved the same.

Regarding the upcoming Hyderabad Metro Rail project, the sales projected by the TSSPDCL has been examined on the following grounds.

- The latest work progress on each of the three corridors has been taken into consideration for determining the sales requirement under this category.
- The existing load and proportionate sales achieved during FY 2015-16 upto Jan has been considered.

- 3.14. Thus the Commission has determined the consumption for HMR as 37 MU as against 79 MU projected by the Licensee. The total sales approved for Railway Traction and metro rail by the Commission is 696 MU. The Discom-wise sales approved are as follows.

Table 7: HT V Railway Traction sales approved by Commission for FY 2016-17 (in MU)

Category	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
Railway Traction sales Total	246	451	696

3.15. **HT RESCOs:** The RESCO is existing in the licensed area of TSNPDCL and it is availing supply at 11kV only. Therefore, the consumption by RESCO at 33kV has been treated as consumption by RESCO at 11kV. However, the total sales to RESCOs remains the same as projected by the Licensees. The sales quantum of 685 MU has been accepted by the Commission.

Unmetered Sales:

3.16. **LT-V Agriculture:** Both the licensees have stated that as per the policy of the GoTS, nine hours supply will be extended from the existing 7 hours, but no additional sales have been projected on this account. For projecting sales for FY 2016-17 both Licensees have used a nominal growth of 3.6% over that of FY 2015-16 on account of new services released.

3.17. The Commission examined the data filed by the Licensees in detail, i.e. the actual sales data furnished every month based on ISI Methodology. The Commission noticed several discrepancies in the data furnished, such as no continuous 12 months meter reading of the same meter and/ or same transformer is available, thus not reflecting the realistic agricultural consumption in the said area for the entire year so as to extrapolate the overall consumption in the surrounding area.

3.18. The consumption as per meter reading of the transformers has been observed to be in excess of the respective transformer capacity or the cumulative capacity of pumpsets connected to that transformer for the number of hours of supply extended in a month.

3.19. Due to the above reasons the Commission has not relied upon the ISI methodology adopted by Licensees to gauge the Agricultural consumption for FY 2016-17. Instead the Commission has assessed the agriculture consumption considering the following:

- Number of service connections and capacity existing as on 31/03/2015 has been considered from the Sales database of the Licensees.
- Number of connections released during FY 2015-16 upto January with capacity has been considered.
- The data on the total number of connections available with capacity is computed.
- Average capacity per pumpset is computed from the above data.
- No. of hours of supply likely to be utilized per pumpset Licensee wise based on the crop patterns of the area have been considered.

- Average annual consumption per HP (in KWh) as approved for FY 2015-16 has also been taken into consideration for estimation of consumption for FY 2016-17.

3.20. Based on the number of pumpsets available, average capacity of each pumpset, Licensee wise number of hours of supply likely to be used by each pumpset in a year based on the crop pattern, the Commission has computed the Agriculture consumption duly considering the consumption approved last year and additional growth rate for the year. The Commission has also verified with very limited data available under the ISI methodology to ensure correctness of projections.

Table 8: LT V Agriculture sales approved by Commission for FY 2016-17 (in MU)

Category	Approved by Commission		
	TSSPDCL	TSNPDCL	Total
Agriculture sales Total	6,946	4,589	11,535

3.21. Based on the above basis and observations, the total sales approved by the Commission for FY 2016-17, amount to 45,118 MU. Summary of the same has been tabulated below.

Table 9: Sales Projections for FY 2016-17 as approved by the Commission (in MU)

Consumer Category	SPDCL	NPDCL	Total
LT Category	18,785	8,923	27,709
Category I (A&B) – Domestic	7,749	3,115	10,864
Category II (A,B & C) - Non-domestic/Commercial	2,300	612	2,912
Category III (A & B) – Industrial	859	266	1,125
Category IV (A&B) - Cottage Industries & Dhobighats	10	7	16
Category V (A, B & C) - Irrigation and Agriculture	6,946	4,589	11,535
Category VI (A & B) - Local Bodies, St. Lighting & PWS	855	293	1,148
Category VII (A & B) - General Purpose	66	41	107
Category VIII (A & B) -Temporary Supply	1	-	1
HT Category at 11 KV	4,854	1,435	6,289
HT-I Industry Segregated	3,129	558	3,686
HT-I (B) Ferro-Alloys	-	-	-
HT-II – Others	1,501	102	1,603
HT-III Airports, Railways and Bus stations	6	8	15
HT -IV (A) Lift Irrigation and agriculture	28	14	42
HT- IV (B) CP Water Supply Schemes	58	51	110
HT-VI Townships and Residential Colonies	94	16	109
HT -Temporary Supply	39	-	39
HT – RESCOs	-	685	685
HT Category at 33 KV	5,294	428	5,722
HT-I Industry Segregated	4,505	203	4,708

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Consumer Category	SPDCL	NPDCCL	Total
HT-I (B) Ferro-Alloys	58	44	103
HT-II – Others	606	20	626
HT-III Airports, Railways and Bus stations	-	-	-
HT -IV (A) Lift Irrigation and agriculture	65	22	87
HT- IV (B) CP Water Supply Schemes	4	95	99
HT-VI Townships and Residential Colonies	44	44	88
HT -Temporary Supply	11	-	11
HT Category at 132 KV	3,826	1,572	5,398
HT-I Industry Segregated	2,498	665	3,163
HT-I (B) Ferro-Alloys	180	-	180
HT-II – Others	61	2	63
HT-III Airports, Railways and Bus stations	67	-	67
HT -IV (A) Lift Irrigation and agriculture	670	364	1,035
HT- IV (B) CP Water Supply Schemes	104	-	104
HT-V (A) Railway Traction	209	451	660
HT-V (B) HMR Traction	37	-	37
HT-VI Townships and Residential Colonies	-	90	90
HT - Temporary Supply	-	-	-
Total Sales	32,759	12,358	45,118

The quantum of sales approved for TSSPDCL, TSNPDCL and for the entire state are enclosed as Annexures I, J and K.

Chapter-4: Power Purchase Requirement and Availability

Introduction

4.1 In this chapter, the Commission has examined the power purchase requirement filed by the Licensees in the light of the objections /suggestions raised by various stakeholders in writing and during the public hearings and determined the power purchase requirement of the licensees for FY 2016-17.

Energy requirement

4.2 The Licensees have arrived at the energy requirement by grossing up sales with approved transmission and voltage wise distribution losses in the transmission and distribution tariff orders of the relevant year for the third control period by the Commission. The external loss (PGCIL loss) on the power purchased from Central Generating Stations have also been factored in while estimating the energy requirement. The summary of losses as per the filings is given in the table below:

Table-10: Voltage wise losses for FY 2016-17 as filed by Licensees

Network	TSSPDCL	TSNPDCL
Distribution-33 kV	3.99%	4.00%
Distribution-11 kV	4.50%	4.23%
Distribution-LT	5.50%	5.50%
TSTRANSCO	4.01%	4.01%
PGCIL	3.44%	3.44%

4.3 The Commission has approved the transmission and distribution losses to be adopted in the Retail Tariff order for FY2016-17 in the following manner, for grossing up approved sales for procurement of power at periphery of the state:

(A) Distribution Loss

The Licensees have considered the distribution loss trajectory as approved by the Commission for FY 2016-17 in the tariff order dated 27th March 2015 on Wheeling Tariffs for Distribution Business for 3rd Control Period. The Commission has accepted the same.

(B) Transmission Loss

The Licensees have considered the transmission losses as approved by the Commission for FY 2016-17, in the tariff order dated 9th May 2014 on Transmission Tariffs for third control period. The Commission has examined the actual losses for FY 2015-16 against the approved loss trajectory for the relevant year in the third control period. But the actual transmission loss for FY 2015-16 is less than that approved in the MYT Tariff Order. The actual loss is 3.12% for FY 2015-16 vis-à-vis the approved loss of 4.02% for the same period.

The Commission has considered the lower actual loss percentage for estimating energy requirement at the state periphery.

(C) PGCIL Loss

The Licensees have considered external losses (PGCIL) to be at 3.44% for the proposed power purchase quantum from CGS stations. The Commission has considered 6 month (October 2015 to March 2016) average slab rate for Point of Connection (POC) losses based upon the average losses of each region computed from the Special Energy Meters (SEM) data of previous week and published by the Power System Operation Corporation Limited, National Load Dispatch Centre. The 6 month average for Telangana state is 2.49% and the same has been considered by the Commission. On the power purchase volumes from CGS (excluding NTPC Simhadri Stage I, since it is directly connected to State grid), additional loss of 2.49% has been considered towards loss in PGCIL network in computing the power purchase requirement at the state periphery.

4.4 The Commission has approved the sales in Chapter-3. The approved sales is grossed up with the losses as determined above to arrive at the energy requirement at the state periphery (Annex G). The approved energy requirement for each Licensee is given in the table below:

Table-11: TSSPDCL-energy requirement for FY 2016-17 as approved by Commission

Voltage	Loss (%)	Sales	LT	11 kV	33 kV	132 kV
LT	5.50%	18,785	19,878	20,815	21,680	22,378
11 kV	4.50%	4,854		5,083	5,294	5,465
33 kV	3.99%	5,294			5,514	5,692
132 kV	3.12%	3,826				3,949
Total		32,639	19,878	25,898	32,489	37,484
% Loss up to said voltage			5.50%	8.72%	10.94%	12.60%
CGS(MU)		8,054				
PGCIL Loss (%)		2.49%				
Distribution Loss		3,555				
Transmission Loss		11,69				
PGCIL Loss		201				
Total Power Purchase Requirement including PGCIL Loss		37,685				

Table-12: TSNPDCL-energy requirement for FY 2016-17 as approved by Commission

Voltage	Loss (%)	Sales	LT	11 kV	33 kV	132 kV
LT	5.50%	8,923	9,443	9,860	10,271	10,602

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11 kV	4.23%	1,435		1,498	1,561	1,611
33 kV	4.00%	428			446	460
132 kV	3.12%	1,572				1,622
Total		12,358	9,443	11,358	12,278	14,295
% Loss up to said voltage			5.50%	8.80%	12.14%	13.55%
CGS(MU)		3,362				
PGCIL Loss (%)		2.49%				
Distribution Loss		1,491				
Transmission Loss		446				
PGCIL Loss		84				
Total Power Purchase Requirement including PGCIL Loss		14,379				

- 4.5 The sales and energy requirement as approved by the Commission for FY 2016-17 is given in the table below:

Table-13: Sales and energy requirement for FY 2016-17(MUs)

Licensee	Filings by Licensee		Approved by Commission	
	Sales	Purchase	Sales	Purchase
TSSPDCL	33,665	39,292	32,759	37,685
TSNPDCIL	13,255	15,492	12,358	14,379
Total	46,920	54,884	45,118	52,063

Energy availability

- 4.6 The Licensees meet their energy requirements from TSGENCO and APGENCO stations, Central Generating Stations (CGS), gas based IPPs, Non-Conventional energy sources, other long term, medium term purchases and short term sources.
- 4.7 The Licensees have projected an availability of 64,669 MU (Annexure D) from different sources of power, including 7,447 MU from market purchases. They have projected 21,450 MU from TSGENCO & APGENCO thermal stations, 3,421 MU from TSGENCO & APGENCO Hydel Stations, 15,163 MU from CGS stations, 2075.15 MU from IPPs operating with Natural Gas and RLNG as fuel, 1997.28 MU from Non-conventional energy sources, 6159.17 MU from Singareni Thermal Power Project and 6500 MU from Thermal Power Tech Corporation Limited (TPCIL).
- 4.8 The Commission has analyzed the Plant Load Factors (PLF), Annual Maintenance Schedule, methodology for sharing of power as stipulated in the AP Reorganization Act, 2014 for all stations except Singareni Thermal Power Project, KTHP Stage II, Lower Jurala HEP, Pulichintala HEP, etc and examined the probable Commissioning Dates of new plants to

estimate the energy availability. The availability of energy is discussed source wise in the following order:

1. TSGENCO and APGENCO stations (Thermal and Hydel)
2. Central Generating Stations
3. Independent Power Producers
4. AP Gas Power Corporation Ltd (APGPCL)
5. Non-Conventional Energy (NCE) Sources
6. Other long term and medium term sources

TSGENCO and APGENCO stations (Thermal and Hydel)

4.9 The allocations from TS and AP generating stations to TS Discoms has been done as per G.O.Ms.No.20, Date 08.05.2014 after bifurcation of the state based on the AP Reorganization Act 2014. The allocation percentage for Telangana State is 53.89%. The sharing of allocated power to Telangana State is done at 70.55% for TSSPDCL and 29.45% for TSNPDCL.

4.10 In regard to upcoming plants like KTHP Stage-II, Lower Jurala and Pulichintala, 100% share has been considered. For Priyadarshini Jurala project, the sharing of energy between erstwhile AP and Karnataka is in the ratio 50:50. Thus TS share is 26.95% of the total project capacity. The following table gives the TS Share capacity in the total project installed capacity for TS and AP Genco stations.

Table-14: TS Share in TS and AP Genco Stations for FY 2016-17(MW)

Source	Project Installed Capacity(MW)	TS Share Capacity(MW)
Thermal		
KTPS(A,B,C)	720	388.01
KTPS-V	500	269.45
KTPS-VI	500	269.45
RTS-B	62.5	33.68
KTHP-I	500	269.45
KTHP-II	600	600
VTPS(I,II,III)	1260	679.02
VTPS-IV	500	269.45
RTHP-I	420	226.34
RTHP-II	420	226.34
RTHP-III	210	113.17
Total Thermal	5692.50	3344.35
Hydel		
MACHKUND PH	84	45.27
TUNGBHADRA PH	57.60	31.04

Source	Project Installed Capacity(MW)	TS Share Capacity(MW)
USL	240	129.34
LSR	460	247.89
DONKARAYI	25	13.47
SSLM RSPH	770	414.95
NSPH(Main)	815.6	439.53
NSRCPH	90	48.50
NSLCPH	60	32.33
POCHAMPAD PH	27	14.55
POCHAMPAD PH-Stage II	9	4.85
NIZAMSAGAR PH	10	5.39
PABM	20	10.78
MINI HYDRO&OTHERS	12.16	6.55
SINGUR	15	8.08
SSLM LSPH	900	485.01
Nagarjunasagar Tail Pond Dam Power House	50	27
Priyadarshini Jurala Hydro Electric Project	234	63.05
Lower Jurala Hydro Electric Project	240	240
Pulichintala	120	120
Total Hydel	4239.36	2387.53
Total TS & AP GENCO	9931.86	5731.88

Thermal availability

- 4.11 The availability from thermal generating stations has been estimated based on the approved PLF in Regulation 1 of 2008 issued by the erstwhile APERC. The target PLF considered is 80%. The auxiliary consumption considered is lower of actuals during FY 2015-16 (upto December 2015) against normative auxiliary consumption.
- 4.12 The proposed annual maintenance schedules for FY 2016-17 has also been considered while estimating month wise availability. The Licensees have proposed an availability of 21,449.61 MUs from TS GENCO and AP GENCO stations vis-à-vis Commission approved availability of 20452.94 MU. The Commission approved availability is lower than that proposed by the Licensees since the Commission has factored in the reduced generation owing to planned maintenance scheduled in FY 2016-17. The following table provides the station-wise availability as filed by the Licensees and approved by the Commission.

Table-15: Energy availability from TS and AP Genco Stations for FY 2016-17(MU)

Thermal generating stations	Filings by Licensee(MU)	Approved by Commission(MU)
KTPS(A,B,C)	2436.27	2343.18
KTPS-V	1718.36	1585.79
KTPS-VI	1746.68	1674.82
RTS-B	214.79	207.10
KTPP-I	1,746.68	1674.82

Thermal generating stations	Filings by Licensee(MU)	Approved by Commission(MU)
KTPP-II	3,889.44	3729.49
VTPS-(I,II,III)	4,342.16	4083.67
VTPS-IV	1,746.68	1674.82
RTPP-I	1,443.42	1391.71
RTPP-II	1,443.42	1391.71
RTPP-III	721.71	695.85
Total Thermal	21,449.61	20452.94

Hydro availability

- 4.13 The Licensees have estimated 3420.59 MU as availability from hydro generating stations based on average actual availability over last five years from APGENCO and TSGENCO hydel stations put together. The AP Reorganization Act 2014 stipulates allocation of energy from APGENCO hydel stations to TS Discoms, but the Commission after examining the actual dispatch situation has found that no energy had been dispatched to TS Discom in FY 2015-16. Hence the Commission has considered the total generation of TSGENCO hydel stations to the TS Discoms only. The Licensees have also made a revised submission of hydro availability as 3283 MU from only TSGENCO stations.
- 4.14 The Commission examined station wise design energy and as per design energy, the quantum of energy from all TSGENCO hydel stations is arrived at 3841 MU. Based on this assumption the Commission has determined availability of the hydel energy for FY 2016-17 at 3841 MU. The following table provides the station-wise availability as filed by the Licensees and approved by the Commission.

Table-16: Energy availability from TS Genco Hydel Stations for FY 2016-17(MU)

Hydro generating stations	Filings by Licensee(MU)		Approved by Commission(MU)
	53.89% Share Basis	Geographical Location Basis	
MACHKUND PH*	170.16	170.16	170.16
TUNGBHADRA PH*	73.41	73.41	73.41
USL-APGENCO	227.10	0.00	0.00
LSR-APGENCO	562.70	0.00	0.00
DONKARAYI-APGENCO	50.10	0.00	0.00
SSLM RSPH-APGENCO	532.90	0.00	0.00
NSPH(Main)	550.20	1020.90	1119.00
NSRCPH-APGENCO	74.80	0.00	0.00
NSLCPH	35.30	65.56	65.56
POCHAMPAD PH	34.80	64.60	91.00
POCHAMPAD PH-Stage II	10.30	19.20	12.54
NIZAMSAGAR PH	10.30	19.10	30.00
PABM-APGENCO	3.10	0.00	0.00
MINI HYDRO&OTHERS	10.90	20.30	16.47

Hydro generating stations	Filings by Licensee(MU)		Approved by Commission(MU)
SINGUR	12.60	23.40	49.00
SSLM LSPH	534.80	992.40	1350.00
Nagarjunasagar Tail Pond Dam Power House-APGENCO	88.30	0.00	0.00
Priyadarshini Jurala Hydro Electric Project	50.70	94.10	109.94
Lower Jurala Hydro Electric Project	237.90	441.50	534.43
Pulichintala	150.20	278.60	219.49
Total Hydel	3420.59	3283	3840.56

Note: * These are interstate hydro stations. The sharing of energy from each station is considered as per allocations made to Telangana State.

Central Generating Stations (CGS)

- 4.15 The allocation from CGS units has been done as per the weighted average actual allocation percentage certified by SRPC every month for the last one year.
- 4.16 For upcoming plant Kudgi Thermal Power Project (2400 MW), the then TS Discoms have signed a PPA with NTPC on 23.09.2010. Power shall be allocated as per the Gadgil formula. However, the same is yet to be allocated by the MoP, Govt. of India. Tentatively, as per the Gadgil formula, TS may get 9.43% power i.e. 226 MW from the said Power Project. As informed by NTPC, the scheduled COD of 1st Unit (800 MW) is September 2016.
- 4.17 The following table provides the TS Share from CGS units:

Table-17: TS Share in Central Generating Stations for FY 2016-17(MW)

Name of power plant	Project Installed Capacity(MW)	TS Share Capacity(MW)
NTPC-(SR) Ramagundam I&II	2100	372.34
NTPC-(SR) Ramagundam-III	500	93.25
NTPC-Talcher-II	2000	228.80
NLC TS II Stage-I	630	62.35
NLC TS II Stage-II	840	110.32
NPC MAPS	440	23.50
NPC Kaiga 1 & 2	440	73.11
NPC Kaiga 3 & 4	440	77.43
NTPC Simhadri Stage-II	1000	247.50
Vallur Thermal Power Plant	1500	115.45
Tuticorin	1000	155.63
Kudigi Thermal Power Plant	2400	226.32
Total	13290	1786.01
NTPC Simhadri Stage-I	1000	538.90
Grand Thermal	14290	2324.90

4.18 The availability from CGS units was examined i) based on the Plant Load Factor approved in the CERC (Terms and Conditions of Tariff) Regulations, 2014; ii) actual Plant Load Factor achieved during FY 2015-16 (upto December 2015). The Commission considered the actual or normative PLFs of a station whichever is higher. The auxiliary consumption considered is lower of actual against normative auxiliary consumption. The following table provides the PLFs as per filings, norms and that considered by the Commission.

Table-18: Summary of PLFs as per filings, norms and approved by the Commission for FY 2016-17

Name of power plant	As per filings	Normative PLFs	As adopted by Commission
NTPC-(SR) Ramagundam I&II	91%	85%	91%
NTPC-(SR) Ramagundam-III	86%	85%	86%
NTPC-Talcher-II	91%	85%	91%
NLC TS II Stage-I	68%	80%	80%
NLC TS II Stage-II	70%	80%	80%
NPC MAPS	91%	85%	91%
NPC Kaiga 1 & 2	82%	85%	85%
NPC Kaiga 3 & 4	75%	85%	85%
NTPC Simhadri Stage-I	82%	85%	85%
NTPC Simhadri Stage-II	83%	85%	85%
Vallur Thermal Power Plant	83%	85%	85%
Tuticorin	87%	85%	87%
Kudigi Thermal Power Plant	85%	85%	85%

4.19 Based on the PLFs and the auxiliary consumption as adopted by the Commission, the energy availability has been projected for FY 2016-17. The following table provides the station-wise availability as filed by the Licensees and approved by the Commission.

Table-19: Energy availability from Central Generating Stations for FY 2016-17(MU)

Central generating stations	Filings by Licensee(MU)	Approved by Commission(MU)
NTPC-(SR) Ramagundam I&II	2769.96	2769.96
NTPC-(SR) Ramagundam-III	660.58	660.58
NTPC-Talcher-II	1712.11	1712.11
NLC TS II Stage-I	333.93	393.26
NLC TS II Stage-II	605.29	695.82
NPC MAPS	168.34	172.20
NPC Kaiga 1 & 2	469.85	498.11
NPC Kaiga 3 & 4	457.00	527.55
NTPC Simhadri Stage-II	1705.52	1746.08
Vallur Thermal Power Plant	790.31	809.45
Tuticorin	1128.57	1128.57
Kudigi Thermal Power Plant	301.79	302.27
Total	11103.25	11415.97

Central generating stations	Filings by Licensee(MU)	Approved by Commission(MU)
NTPC Simhadri Stage-I	3656.98	3801.93
Grand Thermal	14760.23	15217.90

Independent Power Producers

4.20 The installed capacity of the gas based IPPs under commercial operation has been allocated to Telangana state at 53.89% of the total capacity as per G.O. Ms. No. 20. as given in the following table:

Table-20: TS Share in gas based IPP Stations for FY 2016-17(MW)

Gas based IPPs	Project Installed Capacity(MW)	TS Share Capacity(MW)
Old IPPs		
GVK	216	116
Spectrum	208	205
Lanco Kondapalli(Gas)	362	195
Reliance BSES	220	119
New IPPs		
GVK Extension Project	220	118.56
Vemagiri Power Generation Ltd	370	199.39
Konaseema	444.08	239.31
Lanco Kondapalli Power Ltd.	1108	554
Total	3148.08	1746.26

4.21 The natural gas supply to the new IPPs from RIL KG D-6 basin became zero from March 2013 onwards, hence there is no generation from these projects under long term PPA. However under the GoI scheme for utilization of stranded gas based power generation capacity using spot RLNG under e-bidding procurement, Licensees have entered into short term PPAs with these plants. The capacity corresponding to 50% PLF is further allocated to TS state at 53.89% for GVK Extension, Vemagiri and Konaseema. For Lanco Kondapalli, since the project did not have any PPA with the united Discoms it has offered 50% of Capacity at a PLF of 50% under e-bid RLNG. The Telangana state share under these short term PPAs is given in the table below:

Table-21: TS Share under e-bid RLNG Scheme for FY 2016-17(MW)

Gas based IPPs	Project Installed Capacity(MW)	Capacity corresponding to 50% PLF(MW)	TS Share under e-bid RLNG Scheme
New IPPs			
GVK Extension Project	220	110	59.28
Vemagiri Power Generation Ltd	370	185	99.69
Konaseema	444.08	222	119.63

Gas based IPPs	Project Installed Capacity(MW)	Capacity corresponding to 50% PLF(MW)	TS Share under e-bid RLNG Scheme
Lanco Kondapalli Power Ltd.	1108	554	277

4.22 The energy availability is considered from old gas based IPPs (operating on natural gas) based on PPA validity. The PPA status for each of the plants is given below:

- M/s. GVK Industries Limited: PPA expired on 19.06.2015. Hence, there is no energy available for FY 2016-17.
- M/s. Spectrum Power Generation Limited: PPA expired on 18.04.2016. Hence, in FY 2016-17 only 18 days energy availability is taken into consideration.
- M/s. Lanco Kondapalli Power Limited: PPA has expired by 01.01.2016. Hence, in FY 2016-17 there will be no energy available.
- M/s. Reliance Infrastructure Limited (BSES): PPA will expire on 23.12.2017. Hence, energy availability considered is till December 2017.

4.23 Currently the Licensees are also procuring power from new IPPs operating on e-bid RLNG (GVK Extension, Vemagiri, Konaseema and Lanco Kondapalli) as per LOA issued by MoP, GOI for the period from 1st October, 2015 to 31st March, 2016. The gas supply to these plants is under the GoI scheme for utilization of stranded gas based power generation capacity. This scheme envisages supply of imported spot RLNG “e-bid RLNG” to the stranded gas based plants receiving domestic gas upto target PLF of 30% selected through a reverse e-bidding process. The Licensees have submitted that the LOA is likely to be extended for FY 2016-17 and assumed a conservative PLF of 20%. The Commission has accepted the Licensees submission. The following table provides the station-wise availability as filed by the Licensees and approved by the Commission.

Table-22: Energy availability from gas based IPPs for FY 2016-17(MU)

Gas based IPPs	Filings by Licensee(MU)	Approved by Commission(MU)
Old IPPs		
GVK	0	0
Spectrum	30.68	30.68
Lanco Kondapalli(Gas)	0	0
Reliance BSES	97.60	97.60
New IPPs		
GVK Extension Project	207.71	207.71
Vemagiri Power Generation Ltd	349.34	349.34
Konaseema	419.20	419.20
Lanco Kondapalli Power Ltd.	970.61	970.61
Total	2075.15	2075.15

AP Gas Power Corporation Ltd (APGPCL)

4.24 APGPCL is a joint sector gas-based power project. The allocation of power from this project is in proportion to the equity share capital of participating industries. TS share is considered as 41.68% of the total capacity as per Go.Ms.No.26. The total installed capacity of the project along with the Licensee’s share is as given below:

Table-23: TS Share in APGPCL Projects for FY 2016-17(MW)

Name of power plant	Project Installed Capacity(MW)	TS Share Capacity(MW)
APGPCL I - Allocated capacity	100	6.67
APGPCL II - Allocated capacity	172	17.83
Total	272	24.50

4.25 The Licensees have factored in the actual availability from the above plants till September 2015 while projecting for FY 2016-17. The Commission has considered the Licensees submission and accepted the same. The following table provides the station-wise availability as filed by the Licensees and approved by the Commission.

Table-24: Energy availability from APGPCL Projects for FY 2016-17(MU)

APGPCL Projects	Filings by Licensee(MU)	Approved by Commission(MU)
APGPCL I - Allocated capacity	18.48	18.48
APGPCL II - Allocated capacity	62.27	62.27
Total	80.75	80.75

Non-Conventional Energy (NCE) Sources

4.26 NCE sources have been allocated to the Licensees based on their geographical location. The Licensees have submitted information on plant wise capacities that would supply in FY 2016-17 from various sources such as Biomass, Bagasse, and Municipal Solid Waste (MSW) to Energy, Industrial Waste, Wind, Mini-hydel and Solar. The Licensees have adopted the following approach to determine the availability from various sources:

- Biomass, Industrial Waste, Municipal Solid Waste: The availability for FY 2016-17 has been projected based on actual energy generation in H1 of FY 2015-16. In addition, the generation from SLT (poultry litter based) project is also considered.
- Bagasse: For Bagasse based plants, there has been no actual generation in H1 of FY 2015-16 since the notified crushing season is November to May of the succeeding year. Thus the actual generation data of FY 2014-15 has been used for projections of FY 2016-17. The Licensee also considered the generation from Gayatri Sugars.
- Wind: A total capacity of 300 MW has been considered to come up in a phased manner in FY 2016-17. Thus a PLF of 15% is assumed for estimating the availability.

- Solar: A combined solar capacity of 1889 MW has been considered by both the Licensees including the 500 MW under Group-1 of 2000 MW bid conducted in FY 2015-16. Since the capacity would come up in a phased manner, average PLF of 14% has been considered for estimating the availability.

4.27 The Commission has examined NCE availability based on the above approach and has accepted the Licensee’s submission. The following table provides the source-wise availability as filed by the Licensees and approved by the Commission.

Table-25: Energy availability from NCE Sources for FY 2016-17(MU)

NCE Sources	Filings by Licensee(MU)	Approved by Commission(MU)
Biomass	156.62	156.62
Bagasse	128.48	128.48
Municipal Waste Energy	154.33	154.33
Industrial Waste based power projects	54.61	54.61
Wind Power	175.02	175.02
Mini Hydel	0.34	0.34
NCL Energy Ltd	0.00	0.00
Solar Power	1327.71	1327.71
NTPC Bundled Power	402.73	402.73
Total	2399.84	2399.84

Other long term and medium term sources

- 4.28 **Thermal Power Tech Corporation India Limited (TPCIL):** The licensees had signed a Power Purchase Agreement with TPCIL for a contracted capacity of 500 MW under long term basis through Case-I bidding route for a period of 25 years. The supply commenced from 20th April 2015. Consequent to bifurcation of TS Discoms have 53.89% of share i.e. 269.45 MW. Further to that, TPCIL has emerged as a successful bidder for supplying 570 MW (net) power from its second unit of 600 MW on DBFOO basis for a period of 8 Years. LOA was issued on 1st February 2016 and supply shall commence from 1st April 2016.
- 4.29 **Singareni Thermal Power Project:** The Licensees have assumed commissioning of Unit-I in June 2016 and Unit-II in July 2016 and the entire energy available is for TS Discoms only. Upon assessment of actual progress of work completion, the Commission has considered commissioning of Unit-I in July 2016 and Unit-II in September 2016.
- 4.30 **KSK Mahanadi Power Limited:** The licensees have signed PPA’s with KSK Mahanadi for supply of power through medium term basis starting from June 2013 for a period of 3 years i.e., upto June 2016. Thus Commission has considered supply from KSK Mahanadi only upto June 2016.
- 4.31 Based on the above supply commencement dates, the Commission has determined the availability from the long and medium term sources. The following table provides the availability as filed by the Licensees and approved by the Commission.

Table-26: Energy availability from Long and Medium Term Projects for FY 2016-17(MU)

Long and Medium Term Projects	Filings by Licensee(MU)	Approved by Commission(MU)
KSK Mahanadi	376.15	376.84
TPCIL Unit I	2006.32	2006.30
TPCIL Unit II	4493.88	4493.83
Singareni Thermal Power Project	6159.00	5164.82
Total	13035.35	12041.79

Total energy available from all sources (excluding market purchases)

4.32

Based upon the above discussion in respect of individual sources, the total energy available from all sources as submitted in the Petition and as approved in this Order is tabulated below:

Table-27: Total energy availability from all sources (excluding market purchases) for FY 2016-17(MU)

Sources	Filings by Licensee(MU)	Approved by Commission(MU)
TS & AP GENCO-Thermal	21,449.62	20452.94
TS & AP GENCO-Hydel	3,420.59	3840.56
CGS	14,760.23	15217.90
IPPs	2,075.15	2075.15
APGPCL	80.75	80.75
NCE	2,400.00	2,400.00
Other Long and Medium Term Sources	13,035.35	12041.79
Total	57,221.69	56,109.09

Against the total power purchase requirement of 52,063 MU for FY2016-17 as determined by the Commission, the energy availability from different generation sources excluding market purchases has been placed at 56,109.09 MU (Annexure E) during FY2016-17.

Chapter-5: Aggregate Revenue Requirement and Cost of Service

Introduction

5.1 In this section of the Tariff Order, the approach followed to project all the components of Aggregate Revenue Requirement will be discussed. The Commission has examined the approach along with the details filed by the Licensees in the light of the objections /suggestions raised by various stakeholders in writing and during the public hearings and determined the aggregate revenue requirement of the licensees for FY 2016-17.

Power purchase cost

TSGENCO and APGENCO Thermal & Hydel Stations

Fixed cost

5.2 The Licensees have considered the fixed cost for TSGENCO and APGENCO stations as per the projections given by TSGENCO and APGENCO for FY 2016-17. The total fixed costs for all the TSGENCO and APGENCO Thermal and Hydel stations including both existing and new stations is Rs.4294.56 crore for FY2016-17 as estimated by the Licensees.

5.3 The Commission has examined the fixed cost of existing thermal and hydro stations submitted by the Licensees on the approach mentioned below:

- i. The Commission has examined the fillings of APGENCO stations and has noticed that the APERC has determined the fixed cost of stations located in Andhra Pradesh State for third control period vide its order dated 26.03.2016 in O.P.No.3 of 2016. The Commission is of the opinion that the fixed cost determined by the APERC for thermal and hydel stations filed by TSDISCOMS, located in Andhra Pradesh State seems to be reasonable, hence the Commission has considered the same fixed cost provisionally for FY 2016-17.
- ii. For TSGENCO stations, so far the tariff for third control period has not been determined. Hence the Commission has determined the provisional tariff for FY 2016-17 for the existing stations based on the following principles.
- iii. Considering the station-wise fixed charges for FY 2013-14 approved in the tariff order dated 31.05.2014 for the second control period in OP No. 15 of 2009 as basis for the stations covered in OP No. 15 of 2009, the Commission has arrived at fixed cost, the elements to be considered are ROCE and O&M expenses. The ROCE in turn depends on Net Fixed Assets and Working Capital. To arrive at ROCE, the weighted average cost of capital has to be applied on sum of Net Fixed Assets and Working Capital.

The Net fixed assets is computed as follows:

- Net fixed assets has been computed by deducting accumulated depreciation from the gross fixed assets. The accumulated depreciation has been worked out year on year from FY 2014-15 upto FY 2016-17;

Computation of Working Capital: This items consists of cost of fuel for one month, O&M expenses for one month, Maintenance spares @ 1 per cent of the historical cost as per indexation of O&M norms and Receivables for sale of electricity equivalent to two months of the sum of annual fixed charges and energy charges calculated on target availability.

- Cost of spares has been arrived at by escalating at 4% year on year upto FY 2016-17.
- The fuel cost has been considered based on actuals of FY 2015-16.

Computation of O&M expenses: The O&M expenses consist of employee cost, A&G expenses and R&M expenses. The Commission has used following approach:

- Employee expense: The actuals of last five year's (FY 2009-10 to FY 2013-14) average has been arrived at and escalated for the year FY 2014-15 on account of fitment benefits and service weightage increments given by the GoTS to TSGENCO employees and thereafter escalated at 4% upto FY 2016-17.
- The A&G and R&M expense has been escalated at 4% in accordance with Regulation 1 of 2008.

The sum of ROCE, O&M expenses and depreciation is the total fixed charge. The Commission has determined fixed charges on the above principles which are provisional only, since the Generation tariffs for the third control period are yet to be determined. After determination of station wise generation tariffs, variations, in cost if any, found with reference to provisional tariffs now considered, will be adjusted in subsequent year's tariff order.

- 5.4 For the new stations, the Licensees have submitted a fixed charge of INR 980.02 Crs for Kakatiya Thermal Power Plant Stage II, INR 335.55 Crs for Lower Jurala HEP and INR 62.07 Crs for Pulichintala HEP. The Commission has examined the capital costs of similar stations of same technology and commissioned during that relevant year. Considering this aspect assessed the capital cost provisionally and computed the fixed cost as per the norms specified in Regulation 1 of 2008. The fixed cost provisionally computed are INR 980.02 Crs for Kakatiya Thermal Power Plant Stage II, INR 269 Crs for Lower Jurala HEP and INR 62.07 Crs for Pulichintala HEP.
- 5.5 For Priyadarshini Jurala project, the sharing of energy between erstwhile AP and Karnataka is in the ratio 50:50. Out of the total fixed cost assessed provisionally of INR 117.91 Crores,

Karnataka ESCOMs are liable to pay 50% of the fixed cost i.e., INR 58.96 Crores irrespective of actual energy drawal and remaining 50% has to be borne by Telangana and AP Discoms as specified in AP Reorganization Act 2014. As of now no energy is being dispatched to AP Discoms from this project, hence the cost to be borne by the APDISCOMS for this station for FY 2016-17 has also to be recovered from TSDISCOMS.

5.6 The fixed cost and variable cost for hydel and thermal stations located in AP State and which are under control of APGENCO, if no energy is dispatched to TSDISCOMS, the TSDISCOMS need not pay any cost to APGENCO.

5.7 The following table provides the station wise fixed charges as filed by Licensees and approved (Annexure H) by Commission.

Table 28: Fixed cost for TS and APGENCO Stations for FY 2016-17(INR Crores)

Source	Filings by License	Approved by Commission
Thermal		
KTPS(A,B,C)	272.11	249.39
KTPS-V	143.81	122.42
KTPS-VI	299.92	294.52
RTS-B	34.05	27.38
KTPP-I	309.04	294.33
KTPP-II	980.02	980.02
VTPS(I,II,III)	321.54	353.54
VTPS-IV	345.50	253.78
RTPP-I	162.29	144.26
RTPP-II	326.68	229.03
RTPP-III	214.60	153.51
Total Thermal	3409.55	3102.18
Hydel		
MACHKUND PH	10.87	10.87
TUNGBHADRA PH	7.45	7.45
USL	30.93	0.00
LSR	59.29	0.00
DONKARAYI	3.22	0.00
SSLM RSPH	112.93	0.00
NSPH(Main)	132.10	132.14
NSRCPH	10.64	0.00
NSLCPH	0.00	9.72
POCHAMPAD PH	7.57	16.44
POCHAMPAD PH-Stage II	29.42	5.30
NIZAMSAGAR PH	2.80	6.09
PABM	6.25	0.00
MINI HYDRO&OTHERS	2.60	2.21
SINGUR	4.21	9.13
SSLM LSPH	256.73	461.16
Nagarjunasagar Tail Pond Dam Power House	27.29	0.00

Source	Filings by License	Approved by Commission
Priyadarshini Jurala Hydro Electric Project	34.04	58.96
Lower Jurala Hydro Electric Project	335.55	269.00
Pulichintala	2.80	6.09
Total Hydel	1135.97	1050.53
Total TS & AP GENCO	4545.51	4152.71

Variable cost

5.8 The Licensees have considered the average actual variable charge for Q2 of FY 2015-16 for projecting the variable cost for FY 2016-17. But the Commission has determined the variable cost taking into consideration the following factors:

- i. The station wise average variable cost for third quarter (Q3) of FY 2015-16 along with the 3rd quarter Fuel Cost Adjustment (FCA) charges have been considered to determine the variable cost of each station.
- ii. Considered the impact of increase in coal environment cess from 200 INR/Tonne to 400 INR/Tonne. For arriving at the impact of coal environment cess, the Commission has considered the actual specific coal consumption (kg/kWh) of the month of December 2015 of each thermal station to estimate the coal quantum on which additional cess will be levied.

5.9 The Commission has considered the variable cost of KTHPP Stage I to arrive at the variable cost of KTHPP Stage II.

5.10 Based on the above approach the Commission has approved the variable cost for each thermal generating station. The following table provides the station wise variable charge as filed by the Licensees and approved by the Commission.

Table 29: Variable charge for TS and APGENCO Stations for FY 2016-17(INR/kWh)

Thermal generating stations	Filings by Licensee	Approved by Commission		
		Base VC	Increase due to coal cess	Total VC
KTHPS(A,B,C)	2.48	2.53	0.20	2.73
KTHPS-V	2.15	1.86	0.16	2.02
KTHPS-VI	3.16	2.57	0.13	2.69
RTS-B	3.05	2.94	0.16	3.10
KTHPP-I	2.70	2.49	0.13	2.61
KTHPP-II	2.65	2.49	0.13	2.61
VTHPS-(I,II,III)	3.32	3.11	0.17	3.27
VTHPS-IV	3.17	2.93	0.13	3.06
RTHPP-I	3.88	3.69	0.15	3.84
RTHPP-II	3.88	3.69	0.15	3.84
RTHPP-III	3.88	3.69	0.15	3.84

Incentives and income tax

- 5.11 Incentive has been computed at a flat rate of 25.0 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to target Plant Load Factor in accordance with APERC Regulation No 1 of 2008.
- 5.12 Income Tax is a pass through at actuals as per Regulation No. 1 of 2008. Thus the Commission has not allowed any amount towards income tax payment since it is not actuals.
- 5.13 As and when the Commission determines the tariff for above stations for third control period (FY 2014-15 to FY 2018-19) including new stations, the TSDISCOMS shall make the true up filings duly adjusting the amount paid to GENCO stations based on the provisional tariffs considered in this order.

Central Generating Stations

Fixed cost

- 5.14 Central Electricity Regulatory Commission (CERC) has issued Tariff Regulation for FY 2014-2019 but not finalized the individual station wise orders for existing CGS stations for FY 2014-2019. Therefore the Commission has relied on the individual station wise orders issued based on the tariff order of the period FY 2009-2014 to determine the fixed cost. The Commission has noticed that for some stations, NTPC has made revised bill submissions with lower cost than that of fixed cost approved by CERC for the period FY 2009-2014. Hence the Commission has considered revised fixed cost for the stations wherever applicable.
- 5.15 The following table provides a comparative summary of the fixed cost approved for FY 2014 as per CERC Tariff Order 2009-2014 and the revised bill submission made by CGS(NTPC) stations based on actual cost:

Table 30: Comparative summary of Fixed Cost for Central Generating Stations (INR Crores)

Central generating stations	As per CERC T.O. 2009-2014	As per revised submission by NTPC
NTPC-(SR) Ramagundam I&II	881.92	850.63
NTPC-(SR) Ramagundam-III	334.02	321.26
NTPC-Talcher-II	1121.44	1075.16
NLC TS II Stage-I	231.25	-
NLC TS II Stage-II	314.82	-
NTPC Simhadri Stage-I	730.63	683.47
NTPC Simhadri Stage-II	1174.46	1157.62

- 5.16 For new generating stations such as Vallur Thermal Power Plant, Tuticorin Thermal Power Station and Kudigi Thermal Power Plant, the Commission has examined the fixed cost as proposed by the Licensee. The Commission noticed that there are no separate orders issued

by CERC for the above stations for period FY 2014-2019 other than the provisional order issued for Vallur Thermal Power Plant for FY 2012-2013 only. Hence the Commission has accepted the filings made by the Licensee towards fixed cost.

5.17 The following table provides the station wise fixed charges as filed by Licensees and approved by Commission.

Table 31: Fixed Cost for Central Generating Stations for FY 2016-17(INR Crores)

Central generating stations	Filings by Licensee	Approved by Commission
NTPC-(SR) Ramagundam I&II	148.10	133.63
NTPC-(SR) Ramagundam-III	53.77	48.27
NTPC-Talcher-II	120.65	113.23
NLC TS II Stage-I	27.50	22.89
NLC TS II Stage-II	47.02	41.35
NTPC Simhadri Stage-II	271.41	226.03
Vallur Thermal Power Plant	135.57	135.57
Tuticorin	163.43	163.43
Kudigi Thermal Power Plant	69.71	69.71
Total	1037.16	954.11
NTPC Simhadri Stage-I	351.84	368.32
Grand Thermal	1389	1322.43

Variable cost

5.18 The Licensees have projected the variable charge for FY 2016-17 for existing CGS stations based on the monthly energy bill of August 2015 and for new station such as Kudigi Thermal Power Plant, Licensee has stated that NTPC has estimated a provisional tariff which would be reconciled upon finalization of tariff by CERC.

5.19 The Commission has examined the tariff proposed by NTPC for Kudigi plant and accepted the same since CoD of the station is yet to be declared, but for existing stations the Commission has determined the variable cost taking into consideration the following factors:

- i. The average variable cost for third quarter Q3 (October-December) of FY 2015-16
- ii. Considered the impact of increase in coal environment cess from 200 INR/Tonne to 400 INR/Tonne. For arriving at the impact of coal environment cess, the Commission has considered the actual specific coal consumption (kg/kWh) of the month of December 2015 of each thermal station to estimate the coal quantum on which additional cess will be levied.

5.20 Based on the above approach the Commission has approved the variable cost for each CGS station. The following table provides the station wise variable charge as filed by Licensees and approved by Commission.

Table 32: Variable charge for CGS Stations for FY 2016-17(INR/kWh)

Thermal generating stations	Filings by Licensee	Approved by Commission		
		Base VC	Increase due to coal cess	Total VC
NTPC-(SR) Ramagundam I&II	2.49	2.18	0.13	2.32
NTPC-(SR) Ramagundam-III	2.53	2.16	0.13	2.29
NTPC-Talcher-II	1.41	1.15	0.16	1.31
NLC TS II Stage-I	2.38	2.40	0.00	2.40
NLC TS II Stage-II	2.38	2.39	0.00	2.39
NPC-MAPS	2.10	2.05	0.00	2.05
NPC-Kaiga unit I	3.09	3.03	0.00	3.03
NPC-Kaiga unit II	3.08	3.03	0.00	3.03
NTPC Simhadri Stage-II	2.51	2.35	0.14	2.48
Vallur Thermal Power Plant	1.88	1.78	0.14	1.92
Tuticorin	2.37	2.27	0.14	2.41
Kudigi Thermal Power Plant	1.90	1.80	0.14	1.93
NTPC Simhadri Stage-I	2.41	2.36	0.14	2.50

Incentives and income tax

- 5.21 Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in regulation 36 (B) of CERC Tariff Regulation 2014-19.
- 5.22 Income Tax is a pass through at actuals subject to the provisions of Regulations/PPAs and the actual payments made by the generators. Thus the Commission has not approved any amount towards income tax payment.
- 5.23 As and when the CERC determines the tariff for individual CGS stations for third control period (FY 2014-15 to FY 2018-19) including new stations, the TSDISCOMS shall make the true up filings duly adjusting the amount paid to CGS stations based on the provisional tariffs considered in this order.

Independent Power Producers

- 5.24 **M/s. Spectrum Power Generation Limited:** The fixed cost is fully recoverable at 68.50% PLF. The Licensees have submitted a variable charge of INR. 4.07/kWh for FY 2016-17 based on gas supplies by GAIL from ONGC, Ravva Satellite Fields and Reliance Gas. The fixed cost of Rs.5.6 crore has been adopted for FY 2016-17 as the PPA term is going to be completed by 18.04.2016. The fixed cost is inclusive of foreign exchange variations payable by TS & AP to the generator as per the provisions of Power Purchase Agreement. The Commission has vetted the Licensees submission and accepted the same.

5.25 **Reliance Infrastructure Limited (BSES):** The fixed charge is fully recoverable at 85 % PLF. The Licensees have submitted a variable charge of Rs 2.33/kWh for FY2016-17 based on gas supplies by GAIL from ONGC, Ravva Satellite Fields & RIL. The fixed cost payable to this generator is Rs.6.82 crore for FY 2016-17. The Commission has vetted the Licensees submission and accepted the same.

5.26 **New IPPs:** For arriving at power purchase cost for new IPPs, unit rate of Rs.4.70 is taken as per the PPAs entered under phase-II of the e-bid RLNG scheme for the period from 01.10.2015 to 31.03.2016. In regular long term PPA, the tariff is two part tariff i.e., Fixed and Variable cost, whereas during the operation of e-bid RLNG scheme, the targeted tariff fixed for TS DISCOMs by MoP is a single part tariff of Rs.4.70/kWh. Same tariff has been assumed for projecting costs for New IPPs for FY2016-17.

AP Gas Power Corporation Ltd (APGPCL)

5.27 The power purchase cost for FY 2016-17 has been considered as per the projections given by APGPCL. The cost estimate is done on the basis of availability of 0.65 MSCMD of Natural Gas with the usage of part load i.e., about 172 MW (out of 272 MW). The Commission has vetted the Licensees submission and accepted the same. The fixed cost considered for Stage I is INR 0.95 Crs and Stage II is INR 2.17 Crs. The variable charge considered for Stage I is INR 2.83/kWh and Stage II is INR 2.68/kWh.

Non-Conventional Energy (NCE) Sources

5.28 **Biomass, Bagasse and Industrial Waste Based Plants:** The variable cost considered by the Commission is as per the Suo-Motu Order dated 04.04.2016 for FY 2016-17 duly taking into account the actual fuel price escalation for plants based on NCE sources in state of Telangana. To determine the fixed cost, Commission has considered the CoD of plants and taken fixed cost as per order issued on 22.05.2013 for projects within 10 year of operation and as per order issued on 19.07.2014 for projects from 11th to 20th year of operation.

5.29 **Municipal to Solid Waste (MSW) Plants:** The Commission has considered the tariff for the energy anticipated from these plants for FY 2016-17 based on the tariff determined by it.

5.30 **Wind Power:** The tariff for wind power plants has been considered at INR. 4.70/kWh as per the existing Wind Power Policy, which in line with the Licensee's filings.

5.31 **Solar Power:** A total solar capacity of 1296 MW is considered for TSSPDCL and 124 MW for TSNPDCL. Out of the 1296 MW for TSSPDCL, 796 MW is at tariff of INR 6.49/kWh and 500 MW under the recently concluded bid in FY 2015-16 is at a tariff of INR 5.49/kWh. Thus the weighted average tariff of solar energy in TSSPDCL is INR 6.10/kWh. Regarding the tariff considered for solar energy in TSNPDCL, a tariff of INR 4.11/kWh is considered since bundled power of NVVNL is proposed to be drawn by the Discom.

The following table provides the source wise total per unit cost as filed by Licensees and approved by Commission.

Table 33: Total per unit cost for NCE Sources for FY 2016-17(INR/kWh)

NCE Sources	Filings by Licensee	Approved by Commission
Biomass	6.18	5.89
Bagasse	4.13	3.94
Municipal Waste Energy	7.90	7.11
Industrial Waste based power projects	6.18	6.01
Wind Power	4.70	4.70
Mini Hydel	2.30	2.30
NCL Energy Ltd	0.00	0.00
Solar Power	6.62(TSSPDCL) 4.11(TSNPDCL)	6.10(TSSPDCL) 4.11(TSNPDCL)

Renewable Power Purchase Obligation (RPPO)

5.32 As per Regulation No. 1 of 2012 issued by the Commission, every distribution licensee is obliged to purchase 5% of its consumption of energy from renewable energy sources. Out of which 0.25% shall be purchased from solar sources. The Commission has observed that at present the Licensees are meeting the required RPP Obligation.

Other long term and medium term sources

5.33 **Thermal Power Tech Corporation India Limited (TPCIL):** The fixed and variable charge approved for TPCIL Unit 1 and Unit 2 is as per PPA signed between TPCIL and TS Discoms.

5.34 **Singareni Thermal Power Project:** The TSDISCOMS expected the CoD of Unit 1 and Unit 2 as June 2016 and July 2016. The Licensee has filed a fixed cost of INR 1.76/kWh and variable cost of INR 2.12/kWh. The Commission has examined the work progress of this project and considered the CoD may be delayed to July 2016 and September 2016 for Unit 1 and Unit 2 respectively. The Commission also has examined the capital cost filed by SCCL and compared the cost structure of similar stations with similar technology and provisionally estimated the fixed cost at INR 1.4/kWh. The energy expected to be available is considered as 5165 MU. The total fixed cost computed is INR 722.68 Crores. Regarding variable cost the Commission has accepted the filing variable cost at INR 2.12/kWh (provisional).

5.35 **KSK Mahanadi Power Limited:** Since PPA for KSK Mahanadi is going to expire in June 2016, fixed cost only to the extent of 3 months has been allowed by the Commission. The variable cost of INR 2.215/kWh as per PPA has been approved by the Commission.

5.36 The financial impact due to increase in clean environment cess has also been factored into while allowing cost for the above thermal projects.

Pension liability of employees

- 5.37 The liability Rs 4,386.90 towards meeting the pension liability of the following was vested in the erstwhile APGENCO in terms of the statutory First Transfer Scheme dated 30/01/2000 notified by the State Government under the AP Electricity Reforms Act, 1998. Under this provision a Master Trust has been created and vested with the liabilities.
- i. The pensioners / family pensioners of the erstwhile APSEB as on 31/01/1999 and
 - ii. The employees of the erstwhile APSEB as on 31/01/1999 working thereafter for the APGENCO, APTRANSCO and the DISCOMs and since retired.
- 5.38 The additional fund required to meet the pension liabilities over and above the interest allowed on pension bonds (bonds were issued to meet the pension liabilities) has been recognized and allowed as pass through in the tariff on a year to year basis by the erstwhile APERC in the tariff orders dated 24/03/2003 and subsequent orders.
- 5.39 The liabilities of TSGENCO under AP Reorganization Act 2014 has been identified, the interest on pension bonds for TSGENCO is INR 593 Crores. Out of this amount of INR 593 Crores, INR 270.52 Crores is covered from the TSGENCO station allocated. The remaining amount of INR 322.48 Crores has to be allowed as a pass through on consumers through this tariff order as pension liability of TSGENCO. Hence the Commission has allowed this amount in the ARR.

Merit order dispatch

- 5.40 The monthly availability of energy from different Thermal Power stations along with variable costs as estimated by the Commission was used for monthly merit order dispatch for entire State of Telangana for FY 2016-17. In the merit order dispatch, the monthly energy availability from each generating station was stacked up in ascending order of variable cost and dispatch of the stations were made, after dispatch of must run stations like Renewable source of energy, hydel stations, Nuclear Power Stations (NPC). The gas based IPPs have also been considered as must run stations due to utilization of very low quantum of gas (e-bid RLNG) allocated to run stations at lower PLFs under the GoI scheme for utilization of stranded gas based power generation capacity, to meet requirements of both the Licensees. Accordingly, the merit order dispatch is drawn in such a manner that the cost of power procurement at State level is minimized to the extent possible with reference to monthly information on availability and requirement and to sell the excess power or back down. The details are given in Annexure F.
- 5.41 **Discom-to-Discom Energy Transfer**

Since the power from the generating stations is dispatched on the basis of central dispatch for the entire State i.e., State Load Dispatch Centre (SLDC), often the energy share of one Licensee happens to be utilized by another Licensee (DISCOM-to-DISCOM energy transfers). In the merit order process adopted for estimating the power purchase cost, such

transfer of energy is priced at sum of fixed cost per unit and variable cost per unit. The fixed cost considered is the weighted average fixed cost of TSGENCO and APGENCO thermal stations which is computed at INR 1.71/kWh and variable cost (INR 3.25/kWh) adopted are of those marginal stations which gets dispatched for the settlement period under consideration.

In FY 2016-17, based on the monthly availability and requirement for both the Licensees it has been estimated that D to D transfer of 943 MUs would be effected from TSNPDCL to TSSPDCL.

Table 34: D to D energy and cost transfer

Licensee	Energy available as per share	Energy requirement for FY 2016-17	Surplus/ (Deficit) (MU)	D to D transferred (MU)	Amount to be transferred (INR)
TSSPDCL	36451	37685	(1234)	943	468
TSNPDC	15321	14379	943	(943)	(468)
Total	51772	52063	291	Nil	Nil

5.42 Short term purchases

The Commission has estimated the month-wise shortfall based on the energy availability and requirement. A part of the shortfall would be met from Discom to Discom transfers and remaining would be purchased from market sources. The shortfall estimated for both the Licensees put together is 291 MUs for FY 2016-17, after making adjustment of Discom to Discom energy transfer, which shall be purchased from short term sources. The short term price considered by the Commission is INR 4.29/kWh. This price considered is as approved by Hon'ble APERC in Retail Supply Tariff Order FY 2016-17 for sale of surplus power by APDISCOMS. Under AP Reorganization Act 2014, for surplus power of APGENCO stations the first right of refusal is with TSDISCOMS.

5.43 Sale of surplus energy

The Commission after analyzing the previous year IEX/PXIL data for southern grid has considered the average rate of INR 4.09/kWh for sale of surplus power through IEX/PXIL/bilateral trading. For FY 2016-17, energy dispatch is 52,063 MU against an availability of 56,400 MU which leads to an excess energy quantum of 4337 MU. As sale of surplus energy has been considered at Rs 4.09 /kWh, stations having variable rate more than Rs 4.09 /kWh are to be backed-down even if there is excess available from those stations. Accordingly, only the quantum of surplus energy from stations having variable rate below Rs. 4.09/kWh are to be sold. The differential price (difference between the variable cost of the station and selling price of Rs. 4.09/kWh) is the savings in power purchase cost due sale of excess energy. The Commission has estimated savings to be INR 220 Crores for FY 2016-17 which has been reduced from the total power purchase cost to arrive at the net power purchase cost.

5.44 The energy available including market purchases as filed by Licensees and approved by the Commission is given in the table below:

Table 35: Total energy availability from all sources for FY 2016-17(MU)

Sources	Filings by Licensee(MU)	Approved by Commission(MU)
TS & AP GENCO-Thermal	21,449.62	20452.94
TS & AP GENCO-Hydel	3,420.59	3840.56
CGS	14,760.23	15217.90
IPPs	2,075.15	2075.15
APGPCL	80.75	80.75
NCE	2,399.84	2,399.84
Other Long and Medium Term Sources	13,035.35	12041.79
Market	7,447.55	291.33
Total	64,669.08	56400.26

5.45 **Cost of Backing down of Generating stations**

The Licensees have stated that during non-peak demand hours, the marginal variable cost generating stations have to be backed down. The energy quantum on account of backing down of stations proposed by the Licensees is 6,926 MU and the cost for such backing down is Rs. 692.61Crores.

The Commission recognizes that the generating stations have to be backed down on the following grounds.

- There will be a peak demand that arises due to the extension of 9 hours supply to agricultural pump sets. Apart from providing supply to HMR, Lift Irrigation schemes and to ensure 24x7 power supply to all other consumers which were not given earlier. In the power system, it is not possible to maintain flat demand curve since the demand for supply depends upon the seasonal load variations also. Even after trying to achieve a flat demand curve by providing ToD tariff, still there exists a peak demand in certain time periods. During the off peak period some of the stations may be asked to back-down in real scenario.

The Commission could not arrive at the exact quantum of back-down as it varies from time to time. Hence, the Commission, currently has not allowed cost against back-down of stations. Any actual quantum realized on back-down will be considered in the true up exercise.

5.46 **Summary of Discom wise power purchase cost**

The power purchase cost for FY 2016-17 is as given in the tables below:

Table 36: Total Power Purchase Cost approved for both Discoms for FY 2016-17

Sources	Power Purchase (MU)	Fixed Cost INR Crs	Variable Cost INR Crs	Incentive INR Crs	Total Cost INR Crs	Average Cost INR/Unit
TSGENCO & APGENCO	19958	4153	4518	0	8671	4.34
Thermal	16117	3102	4518	0	7620	4.73
Hydel	3841	1051	0	0	1051	2.74
CGS	15218	1322	3493	17	4833	3.18
NTPC(SR)	5177	408	1227	9	1644	3.18
NTPC(ER)	1712	113	224	5	343	2.00
NTPC Simhadri	3802	368	949	0	1318	3.47
NLC	1089	64	261	0	325	2.99
NPC	1198	0	346	1	347	2.90
New-CGS	2240	369	486	2	856	3.82
APGPCL	79	3	21	0	25	3.10
IPPs	2075	12	950	0	963	4.64
NCE	2400	1089	238	0	1327	5.53
Others LTPP & MTPP	12042	2296	2253	0	4549	3.78
Market purchases	291	0	125	0	125	4.29
D to D Purchases	943		468		468	4.96
D to D Sales	(943)		(468)		(468)	4.96
Total	52063	8875	11599	17	20492	3.94
Pension liabilities of TSGENCO					322	
Savings from excess energy sale					(220)	
Grand Total	52063	8875	11599	17	20594	3.96

Table 37: Total Power Purchase Cost approved for TSSPDCL for FY 2016-17

Sources	Power Purchase (MU)	Fixed Cost INR Crs	Variable Cost INR Crs	Incentive INR Crs	Total Cost INR Crs	Average Cost INR/Unit
TSGENCO & APGENCO	14080	2930	3188	0	6118	4.35
Thermal	11371	2189	3188	0	5376	4.73
Hydel	2710	742	0	0	742	2.74
CGS	10736	933	2465	12	3410	3.18
NTPC(SR)	3652	288	865	7	1160	3.18

Sources	Power Purchase	Fixed Cost	Variable Cost	Incentive	Total Cost	Average Cost
	(MU)	INR Crs	INR Crs	INR Crs	INR Crs	INR/Unit
NTPC(ER)	1208	80	158	4	242	2.00
NTPC Simhadri	2682	260	670	0	930	3.47
NLC	768	45	184	0	229	2.99
NPC	845	0	244	0	245	2.90
New-CGS	1581	260	343	1	604	3.82
APGPCL	56	2	15	0	17	3.04
IPPs	1464	9	670	0	679	4.64
NCE	1619	860	99	0	960	5.93
Others	8495	1620	1590	0	3209	3.77
Market purchases	291	0	125	0	125	4.30
D to D Purchases	943		468		468	4.96
D to D Sales						
Total	37685	6354	8620	12	14986	3.98
Pension liabilities of TSGENCO					228	
Savings from excess energy sale					(155)	
Grand Total	37685	6354	8620	12	15058	4.00

Table 38: Total Power Purchase Cost approved for TSNPDCL for FY 2016-17

Sources	Power Purchase	Fixed Cost	Variable Cost	Incentive	Total Cost	Average Cost
	(MU)	INR Crs	INR Crs	INR Crs	INR Crs	INR/Unit
TSGENCO & APGENCO	7146	5878	1223	1331	2553	3.57
Thermal	6023	4747	914	1331	2244	3.73
Hydel	1123	1131	309	0	309	2.75
CGS	4482	389	1029	5	1423	3.17
NTPC(SR)	1524	120	361	3	484	3.18
NTPC(ER)	504	33	66	2	101	2.00
NTPC Simhadri	1120	108	280	0	388	3.46
NLC	321	19	77	0	96	2.99
NPC	353	0	102	0	102	2.89
New-CGS	660	109	143	0	252	3.82
APGPCL	23	1	6	0	7	3.04
IPPs	611	4	280	0	284	4.65
NCE	781	229	138	0	367	4.70
Others	3546	676	664	0	1340	3.78

Sources	Power Purchase	Fixed Cost	Variable Cost	Incentive	Total Cost	Average Cost
	(MU)	INR Crs	INR Crs	INR Crs	INR Crs	INR/Unit
Market purchases	0	0	0	0	0	
D to D Purchases						
D to D Sales	(943)		(468)		(468)	4.96
Total	14379	2521	2980	5	5601	3.90
Pension liabilities of TSGENCO					95	
Savings from excess energy sale					(65)	
Grand Total	14379	2521	2980	5	5536	3.85

Transmission cost

5.47 The Licensees have projected the transmission charges for the year FY 2016-17 based on the transmission tariff order issued by the erstwhile APERC for the third control period. In their petition, the Licensees have considered the revised share of capacity to each of the distribution utility based on G.O.Ms No. 20 dated 08th May, 2014.

5.48 The revised share was on account of the segregated two districts (Ananthapur and Kurnool) from erstwhile APCPDCL (that were merged with APSPDCL) and 7 mandals of Khammam district from erstwhile APNPDCL (that were moved into APEPDCL) as per the AP Reorganization Act 2014. After which the Discoms in the state of Telangana were renamed as TSSPDCL and TSNPDCL.

5.49 Pursuant to the above considerations, the Licensees (TSSPDCL and TSNPDCL) have arrived at the transmission cost for FY 2016-17 at INR. 1,469.99 Crore.

Basis for approval

5.50 The transmission cost projected by the Licensees for the year FY 2016-17 has been approved by the Commission after analyzing the rationale of the Licensees to arrive at the cost.

5.51 The following table indicates the transmission cost projected by the Licensees and approved by the Commission.

Table 39: Transmission cost projections for FY 2016-17 (in INR. Crore)

	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
Transmission capacity (MW)	9,459.76	3,948.61	13,408.37	9,459.76	3,948.61	13,408.37
Tariff (INR./kW/ month)	91.36	91.36	91.36	91.36	91.36	91.36

Cost (INR. Crore)	1,037.09	432.89	1,469.99	1,037.09	432.89	1,469.99
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SLDC cost

5.52 The Licensees have computed the SLDC charges for the ensuing year based on the charges issued by the erstwhile APERC in its MYT order for the third control period. To arrive at the cost, the Licensees have considered the capacity from transmission tariff order and the SLDC charges from aforementioned SLDC order. The Licensees have projected an amount of INR. 40.90 Crore for the year FY 2016-17.

Basis of approval

5.53 The SLDC charges projected by the Licensees for FY 2016-17 were approved by the Commission after examining the conformity of the cost and capacity filed with the SLDC Order and the Transmission Tariff Order for the third control period respectively.

5.54 The table below details the amounts filed by Licensees and approved by the Commission against SLDC cost.

Table 40:SLDC charges for FY 2016-17 (in INR. Crore)

	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
Transmission capacity (MW)	9,459.76	3,948.61	13,408.37	9,459.76	3,948.61	13,408.37
Annual SLDC fees (INR./ MW/ Annum)	3,533.18	3,533.18	-	3,533.18	3,533.18	-
Annual SLDC cost (INR. Crore)	3.34	1.40	4.74	3.34	1.40	4.74
Operating charges (INR./ MW/ month)	2,247.62	2,247.62	-	2,247.62	2,247.62	-
Operating cost (INR. Crore)	25.51	10.65	36.16	25.51	10.65	36.16
SLDC charges (INR. Crore)	28.86	12.05	40.90	28.86	12.05	40.90

Distribution cost

5.55 Licensees have considered the distribution cost for the year FY 2016-17 as approved by TSERC in the Wheeling Tariff Order for the third control period. The total distribution cost arrived by the Licensees, based on the aforementioned approach is at INR. 3,658.15 Crore for FY 2016-17.

Basis of approval

5.56 The Commission has approved the distribution cost estimated by the Licensees after examining the cost approved (for FY 2016-17) in the Wheeling Tariff Order for the third control period.

5.57 The distribution cost projected by Licensees and approved by the Commission are detailed in the table below.

Table 41: Distribution cost projections for FY 2016-17 (in INR. Crore)

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
O&M Charges	1,505.78	955.05	2,460.83	1,505.78	955.05	2,460.83
RoCE	490.17	267.65	757.82	490.17	267.65	757.82
Depreciation	634.64	311.59	946.23	634.64	311.59	946.23
Taxes on Income & Special Appropriations & Other Expenditure	65.92	75.86	141.78	65.92	75.86	141.78
<i>Less: IDC/Expenses capitalized</i>	<i>107.98</i>	<i>72.41</i>	<i>180.39</i>	<i>107.98</i>	<i>72.41</i>	<i>180.39</i>
Distribution Cost	2,588.53	1,537.74	4,126.27	2,588.53	1,537.74	4,126.27
<i>Less: Wheeling revenue</i>	-	-	-	-	-	-
<i>Less: NTI</i>	<i>320.55</i>	<i>147.57</i>	<i>468.12</i>	<i>320.55</i>	<i>147.57</i>	<i>468.12</i>
Net distribution cost (INR. Crore)	2,267.98	1,390.17	3,658.15	2,267.98	1,390.17	3,658.15

PGCIL and ULDC charges

- 5.58 PGCIL charges, as approved by CERC, are levied on the Licensees to the extent of capacity (from various sources) being delivered by the Central Transmission Utility (CTU) at the State periphery.
- 5.59 To arrive at these charges, the Licensees in their calculation considered capacities from
1. Central generating stations - To the extent of state share,
 2. Short term purchases,
 3. KSK Mahanadi and two units of TPCIL - For the capacities as per the existing PPAs
- 5.60 The PGCIL charges for the above stations except unit-II of TPCIL were estimated based on the bills of October 2015, as issued by PGCIL. The charges for unit-II of TPCIL were computed based on (i) the charges indicated in the first quarter bills of FY 2015-16 issued by PGCIL and (ii) the capacity contracted from that unit.
- 5.61 Based on the above calculations, the Licensees have filed for an amount of INR. 1,257.11 Crore against PGCIL charges for FY 2016-17.
- 5.62 Further, the ULDC charges payable to SRLDC were projected based on the September 2015 monthly bill issued to the Licensees. The Licensees have filed for an amount of INR. 8.70 Crore towards ULDC charges for FY 2016-17.

Basis of approval

a. PGCIL charges

- 5.63 CERC determines the PGCIL charges for every quarter in accordance with the Regulation (17) of the Central Electricity Regulatory Commission Regulations, 2010 and amendments there to.
- 5.64 The Commission, to arrive at the PGCIL charges for the Licensees, considered the average of quarterly PGCIL charges for the State of Telangana as issued by CERC for FY 2015-16.
- 5.65 The availability of central generating stations and other plants (Viz., KSK Mahanadi, TPCIL Unit I & II and short term purchases) was considered as determined by the Commission. The detailed approach for arriving at the availability of the plants is given in the earlier chapters (Power Purchase Cost) of this Tariff Order.
- 5.66 For the months with short term power purchase, the Licensees realize certain amount as Short Term Open Access (STOA) credits in the succeeding months. Such realized credits are mostly equal to the PGCIL charges paid by the Licensees against short term purchases.
- 5.67 Based on the above considerations on PGCIL charges and STOA credits, the Commission has approved an amount of INR. 739.76 Crore against PGCIL charges for FY 2016-17.

5.68 The PGCIL charges filed by the Licensees in their petition and approved by the Commission for FY 2016-17 are detailed in the below table.

Table 42: PGCIL charges for FY 2016-17 (in INR. Crore)

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
PGCIL PoC charges for CGS plants	433.00	370.11	1,257.11	327.87	136.87	464.74
PGCIL PoC charges for other plants	454.00			194.03	80.99	275.02
PGCIL charges total	887.00	370.11	1,257.11	521.90	217.86	739.76

b. ULDC charges

5.69 ULDC charges are to be estimated based on the fixed charges determined by CERC for a period of 5 years. The ULDC charges filed by the Licensees were approved by the Commission after verifying the conformity of such charges with the corresponding CERC order for the relevant control period.

Table 43: ULDC charges for FY 2016-17 (in INR. Crore)

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
ULDC charges	6.14	2.56	8.70	6.14	2.56	8.70

Interest on consumer security deposit

5.70 As per the provisions of the Regulation No. 6 of 2004, the licensee shall pay interest on security deposit of a consumer at the Bank rate notified by Reserve Bank of India. Accordingly, TSSPDCL has considered an interest rate of 7.75% p.a. as per the recent notification of RBI. However, TSNPDCL has considered an interest rate of 9.00% p.a.

Basis of approval

5.71 Pursuant to the Regulations notified by the erstwhile APERC; adopted by TSERC, the Commission has approved an interest rate for consumer security deposit at 7.75% p.a. as notified by the Reserve Bank of India. The interest is calculated on the opening balance of security deposit in the beginning of the year and additional deposit anticipated on sales during the year. The Commission has considered the opening balance of security deposit as per the audited annual accounts of the Licensees.

5.72 The cost against interest on consumer security deposit as filed by the Licensees and approved by the Commission are detailed in the following table.

Table 44: Interest on consumer security deposit for FY 2016-17 (in INR. Crore)

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
Opening balance	2,590.22	588.57	3,178.79	2,440.21	588.57	3,028.78
Addition during the year	610.49	62.87	673.36	398.22	78.96	477.18
Deduction during the year	-	-	-	-	-	-
Closing balance	3,200.71	651.44	3852.15	2,838.43	667.53	3,505.96
Average balance	2,895.47	620.01	3,515.47	2,639.32	628.05	3,267.37
Interest rate (% p.a.)	7.75%	9.00%		7.75%	7.75%	
Interest Cost	224.40	55.80	280.20	204.55	48.67	253.22

Supply margin

5.73 For the Retail Supply Business, the Licensees have adopted a supply margin of 2% on the equity portion of regulatory rate base pertaining to Wheeling Business. The regulatory rate base for the ensuing year is considered as approved in the Wheeling Tariff Order for the third control period issued by the Telangana State Electricity Regulatory Commission on 27th March, 2015.

Basis of approval

5.74 The Commission, after analyzing the Licensees approach and conformity with the Wheeling Tariff Order has approved the Licensees proposal. The approved amount against supply margin of the Retail Supply Business accounted to INR. 30.31 Crore for FY 2016-17.

5.75 The table below details the amount filed by the Licensees against supply margin and the amount approved by the Commission.

Table 45: Supply margin projections for FY 2016-17 (in INR. Crore)

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCCL	Total	TSSPDCL	TSNPDCCL	Total
Regulated Rate Base (RRB)	3,921.33	2,141.24	6,062.57	3,921.33	2,141.24	6,062.57
Equity portion (25%) of RRB	980.33	535.31	1,515.64	980.33	535.31	1,515.64
Supply margin	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Supply margin cost	19.61	10.71	30.31	19.61	10.71	30.31

Other costs

5.76 TSNPDCL has a claimed for an amount of INR. 3.26 Crore against reactive charges (INR. 2.10 Crore) and wheeling charges (INR. 1.10 Crore) for FY 2016-17. However, TSSPDCL has not claimed for such costs in its petition.

Basis of approval

5.77 After examining the payments made by TSNPDCL against wheeling and reactive charges for the current year, the Commission has approved the cost proposed by the Licensee for FY 2016-17.

Aggregate revenue requirement

5.78 Pursuant to the above analysis, the Commission has determined the revenue requirement for FY 2016-17 at INR. 26,798.94 Crore as against INR. 30,207.55 Crore proposed by the Licensees.

5.79 A summary of all components of the aggregate revenue requirement as approved by the Commission against filings of the Licensees are detailed in the table below.

Table 46: Aggregate revenue requirement for FY 2016-17 (in INR. Crore)

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCCL	Total	TSSPDCL	TSNPDCCL	Total
Transmission charges	1,037.09	432.89	1,469.99	1,037.09	432.89	1,469.99
SLDC charges	28.86	12.05	40.90	28.86	12.05	40.90

<i>INR. Crore</i>	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDCL	Total	TSSPDCL	TSNPDCL	Total
Distribution cost	2,267.98	1,390.17	3,658.15	2,267.98	1,390.17	3,658.15
PGCIL & ULDC charges	893.14	372.67	1,265.81	528.04	220.42	748.46
Network and SLDC charges	4,227.07	2,207.78	6,434.85	3,861.97	2,055.53	5,917.50
Power purchase and procurement cost	16,906.14	6,552.78	23,458.93	15,058.10	5,535.67	20,593.77
Interest on consumer security deposit	224.40	55.80	280.20	204.55	48.67	253.22
Supply margin in retail supply business	19.61	10.71	30.31	19.61	10.71	30.31
Other costs (if any)	0.00	3.26	3.26	0.00	3.26	3.26
Supply related cost	17,150.15	6,622.55	23,772.70	15,282.26	5,598.31	20,880.56
Aggregate revenue requirement	21,377.22	8,830.33	30,207.55	19,144.23	7,653.84	26,798.06

Category Wise Allocation of Costs and Cost of Service

- 5.80 The Licensees have computed the Cost of Service (CoS) for each category based on Embedded cost methodology. They have computed CoS, considering two peak demands i.e. morning and evening peak. They have also utilized the Class Load Factor and Maximum Coincident factor peak demand for each category to arrive at the CoS.
- 5.81 The Commission after taking into consideration the public opinion during the public hearing has adopted the Embedded Cost Methodology to determine the Category wise CoS for each category. The Commission has considered only the evening peak demand, since it is a natural peak demand. The Commission has prudently checked the Class load factor and the

Maximum Coincident demand factors furnished by the Licensees, based on information available with the Commission. Under this method, all the cost components of the Annual Revenue Requirement as determined by the Commission for TSSPDCL and TSNPDCL have been allocated to the existing consumer categories to determine their respective CoS.

5.82 The above mentioned allocation has been done through the following steps.

- 1) Functionalization of cost under the heads of Generation, Transmission, Distribution and Retail Supply. PGCIL and ULDC charges are included under the Transmission cost category.
- 2) Post functionalization, all the costs are classified into demand related and energy related costs based on the nature of the cost components.
- 3) Further these three categories of costs are allocated to individual consumer categories based on the specific allocation factor mentioned below.

Demand related cost allocation:

- Generation fixed (capacity) cost has been allocated using Coincident Peak Demand (Evening).
- The transmission costs consists of Inter State and Intra State transmission costs which include SLDC and ULDC charges. These costs have been allocated using factors such as Contract Maximum Demand for categories where available and Non-Coincident demand for the remaining categories. Further the costs have been allocated considering the approved transmission losses.
- Distribution cost has been allocated in two stages as follows:
 - The cost has been first allocated based on voltage wise assets proportion i.e. 33kV, 11kV and LT voltage.
 - The costs have been allocated based on the voltage wise approved losses, which consists of technical and commercial losses.
 - Further cost has been allocated to categories based on Contract demand and Non-Coincident demand as done in the case of transmission costs.

Energy related cost allocation:

- Variable cost of Generators have been allocated in the proportion of sales to respective customer categories by duly grossing up sales at each voltage level with the approved voltage wise technical and commercial losses.
- Retail supply costs such as Interest on consumer security deposits, Other costs and Supply margin have been allocated in the proportion of sales to respective customer categories by duly grossing up sales at each voltage level with the approved voltage wise technical and commercial losses.
- Post such allocation of all cost components to the individual consumer categories, per unit CoS is arrived at by dividing such cost by the category approved sales.

5.83 Based on the above method used for cost allocation, the CoS for all customer categories by voltage level was determined as follows.

Category	FY 2016-17		TOTAL for Two Discoms
	TSSPDCL	TSNPDCL	
LT Categories			
LT Cat I – Domestic	6.93	7.78	7.17
LT Cat II - Non-domestic	7.02	8.44	7.32
LT Cat III - Industrial	6.20	7.17	6.43
LT Cat IV - Cottage Industries & Dhobighats	6.32	7.21	6.68
LT Cat V - Irrigation and Agriculture	4.91	5.26	5.05
LT Cat VI - Local Bodies, St. Lighting & PWS	7.00	8.82	7.47
LT Cat VII - General Purpose	7.28	8.71	7.83
LT Cat VIII - Temporary	7.75	0.00	7.75
HT Categories			
HT Cat I - Industry - General (11 kV)	6.30	6.65	6.36
HT Cat I - Industry - General (33 kV)	4.90	5.29	4.92
HT Cat I - Industry - General (220/132 kV)	4.74	4.77	4.74
HT I(B)- Ferro Alloys(33 kV)	4.47	4.53	4.50
HT I(B)- Ferro Alloys(132 kV)	4.21	0.00	4.21
HT Cat II - Industry - Other (11 kV)	6.69	6.05	6.65
HT Cat II - Industry - Other (33 kV)	5.97	6.17	5.98
HT Cat II - Industry - Other (220/132 kV)	5.10	8.35	5.19
HT Cat III- Airports, Buses & Railways(11KV)	6.87	8.88	8.03
HT Cat III- Airports, Buses & Railways(132KV)	4.57	0.00	4.57
HT Cat IV - Irrigation & Agriculture (11 kV)	5.76	6.32	6.00

Category	FY 2016-17		TOTAL for Two Discoms
	TSSPDCL	TSNPDCL	
HT Cat IV - Irrigation & Agriculture (33 kV)	4.67	5.69	5.31
HT Cat IV - Irrigation & Agriculture (132 kV)	4.27	5.31	4.60
HT Cat V - Railway Traction (EHT)	5.47	5.75	5.65
HT Cat VI - Colony Consumption	7.04	6.84	7.01
HT Cat VI - Colony Consumption (33 kV)	6.32	3.55	4.94
HT Cat VI - Colony Consumption (220/132 kV)	0.00	2.42	2.42
HT Rural Co-operatives (11 kV)	0.00	4.41	4.41
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00
HT Temporary	5.47	0.00	5.47
AVERAGE COST OF SERVICE	5.84	6.19	5.94

5.84 The CoS as computed above, is an indicator of the cost incurred by the Discoms to serve respective category of consumers. It throws light on the cross subsidy element in tariff and enables the Commission to take decisions on tariff setting for various consumer categories. Based on the ARR and sales as approved by the Commission, the Average Cost of Supply (ACoS) is Rs. 5.84/ kWh for TSSPDCL and Rs. 6.19/ kWh for TSNPDCL. The combined Average Cost of Supply for both the Discoms put together works out to Rs. 5.94/ kWh for FY 2016-17 (Annexures L, M and N) as compared to Rs. 5.64/ kWh during FY 2015-16.

True up for 1st and 2nd control period

5.85 The variations in cost and revenue from the tariff orders of the corresponding years during the first and second control period were presented by the Licensees. The true claims submitted were based on the segregated assets and liabilities in line with AP reorganization Act and the Government Orders (G.O.Ms. 20 and G.O.Ms. 24).

5.86 The true up claims submitted for both Distribution and Retail Supply Business of the Licensees for the 1st and 2nd control period amounted to INR. 7,701 Crore for TSSPDCL and INR. 3,388 Crore for TSNPDCL.

True up for FY 2014-15 and FY 2015-16

- 5.87 The Regulation 4 of 2005 (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) (Principal Regulation) adopted by TSERC stipulates that, the Distribution Licensee shall claim variations in uncontrollable items of the Distribution Business and Retail Supply Business. The power purchase cost is the main uncontrollable item in Retail Supply Business which can be true up in the ARR for the year succeeding the relevant year of the Control Period. The variation of power purchase cost has been passed on quarterly basis up to the year FY 2012-13 vide Regulation 1 of 2003. This Regulation 1 of 2003 has been repealed vide Regulation 2 of 2013.
- 5.88 In order to recover or refund the variation in power purchase cost to the consumers, under true up mechanism, the Commission has issued Regulation 1 of 2014 duly carrying out the amendment to the Principal Regulation 4 of 2005.
- 5.89 As per the provisions of the above said Regulation, the Licensees are entitled to the true up of final power purchase cost for the preceding year based on the actuals (audited accounts) only and the provisional true up of power purchase cost (based on actual of first 6 months and projected figures for later 6 months) for current year in which year ARR filings are made.
- 5.90 The total revenue gap claimed by the TSSPDCL for FY 2014-15 and FY 2015-16, as per the provisions of regulations, accounted to INR. 1,989 Crore and INR. 3,898 Crore respectively. Similarly, TSNPDCL has submitted claims amounting to INR. 1,340 Crore for FY 2014-15 and INR. 1,508 Crore for FY 2015-16.
- 5.91 The table below details the total revenue gap for the Retail Supply Business filed by the Licensees for FY 2014-15 and FY 2015-16:

Table 47: True up claims for FY 2014-15 and FY 2015-16 (in INR. Crore)

<i>INR. Crore</i>	TSSPDCL		TSNPDCL	
	FY 2014-15 (Actuals)	FY 2015-16 (Estimated)	FY 2014-15 (Actuals)	FY 2015-16 (Estimated)
Power purchase cost	13,301	16,427	5,243	6,222
Distribution cost	1,815	1,831	1,227	1,203
Transmission cost	619	821	258	343
SLDC charges	24	26	10	11
PGCIL charges	397	653	165	273
ULDC charges	6	6	3	3
Network Cost	2,242	3,337	1,662	1,832
Interest on consumer security deposits	164	188	42	50
Supply Margin	12	9	8	9
Other expenses	-	-	3	3

<i>INR. Crore</i>	TSSPDCL		TSNPDCL	
	FY 2014-15 (Actuals)	FY 2015-16 (Estimated)	FY 2014-15 (Actuals)	FY 2015-16 (Estimated)
CSD & other costs	176	196	53	63
Aggregate Revenue Requirement	16,339	19,960	6,958	8,117
Revenue	13,335	15,340	3,219	3,525
Subsidy for the year	1,014	724	2,399	3,533
Revenue gap	(1,989)	(3,896)	(1,340)	(1,058)

Participation in UDAY scheme

- 5.92 Ujwal Discom Assurance Yojana (UDAY), a scheme for financial turnaround of the power distribution companies (DISCOMs) has been approved by the Government of India. The objective of the scheme is to improve the operational and financial efficiency of the State DISCOMs.
- 5.93 The Government of Telangana has conveyed its intention of joining the UDAY scheme. Under this scheme, the State Government can take 75% of total loans outstanding on the books of DISCOMs as on 30th September, 2015.

Request on True up claims

- 5.94 In view of participation in UDAY scheme, the Licensees have requested the Commission not to pass on to the consumers the aggregate losses and revenue gap from the first two control periods and FY 2014-15 & 2015-16 respectively in this Tariff Order.
- 5.95 It was further requested by the Licensees that the true up for FY 2015-16 will be filed in the next year filings (i.e. FY 2017-18) based on the actual audited accounts finalized after considering the takeover of loans by the State Government.

Commission's view

- 5.96 The Commission has taken cognizance of the filings made by the Licensees on true up. The Commission opined that any amount not covered under UDAY scheme by the Government of Telangana will be taken up in the subsequent orders in the matter.

Chapter-6: Revenue at Existing tariff and Revenue Gap

Introduction

6.1 The endeavor of any tariff exercise is to recover the revenue requirement through various revenue streams enabling the Licensees to meet the approved expenditure in full. The Revenue to Licensees accrues under two streams namely, revenue from sale (energy, fixed, minimum and customer charges) of power and non-tariff income (recoveries from theft of power or other malpractices, interest income and other miscellaneous receipts).

Revenue from sale of power at existing tariff

6.2 This section of the Tariff Order details the revenue at the existing tariff based on sales projected by the Licensees in their petitions and sales as revised and approved by the Commission for FY 2016-17. The charges for consumption during the peak hours have been taken into consideration while calculating the revenue at the existing tariff.

Table 48: Revenue at existing tariff for FY 2016-17 as filed by the Licensees and approved by the Commission (in INR Crore)

Consumer Category	Submitted by licensees			Approved by Commission		
	SPDCL	NPDCL	Total	SPDCL	NPDCL	Total
LT Category	6,565	1,963	8,528	6,523	1,936	8,459
Category I (A&B) - Domestic	3,138	941	4,080	3,164	923	4,088
Category II (A,B,C&D) - Non-domestic/Commercial	2,215	582	2,797	2,144	570	2,713
Category III (A&B) - Industrial	613	203	817	613	209	822
Category IV (A&B) - Cottage Industries & Dhobighats	4	3	7	4	3	7
Category V (A, B & C) - Irrigation and Agriculture	42	43	85	43	43	86
Category VI (A & B) - Local Bodies, St. Lighting & PWS	505	160	665	505	160	665
Category VII (A & B) - General Purpose	46	31	77	46	30	77
Category VIII (A & B) -Temporary Supply	1	-	1	1	-	1
HT Category at 11 KV	4,271	665	4,935	4,071	659	4,730
HT-I Industry Segregated	2,669	456	3,125	2,472	450	2,922
HT-I (B) Ferro-Alloys	-	-	-	-	-	-
HT-II - Others	1,435	98	1,533	1,436	98	1,534

Determination of Retail Supply Tariff- FY 2016-17

Consumer Category	Submitted by licensees			Approved by Commission		
	SPDCL	NPDCL	Total	SPDCL	NPDCL	Total
HT-III Airports, Railways and Bus stations	6	7	13	6	7	13
HT -IV A Lift Irrigation and agriculture	20	13	33	16	8	24
HT- IV B - CP Water Supply Schemes	27	24	51	27	24	51
HT-VI Townships and Residential Colonies	59	10	68	59	10	68
HT-VII - Green Power	-	-	-	-	-	-
HT -Temporary Supply	56	-	56	56	-	56
HT - RESCOs	-	57	57	-	62	62
HT Category at 33 KV	3,915	267	4,182	3,758	261	4,019
HT-I Industry Segregated	3,312	136	3,449	3,120	136	3,255
HT-I (B) Ferro-Alloys	31	24	55	31	24	55
HT-II - Others	509	17	526	521	17	538
HT-III Airports, Railways and Bus stations	-	-	-	-	-	-
HT -IV A Lift Irrigation and agriculture	14	13	27	37	12	50
HT- IV B - CP Water Supply Schemes	2	44	45	2	44	45
HT-VI Townships and Residential Colonies	28	28	56	28	28	56
HT-VII - Green Power	-	-	-	-	-	-
HT -Temporary Supply	20	-	20	20	-	20
HT - RESCOs	-	5	5	-	-	-
HT Category at 132 KV	2,414	1,286	3,700	2,347	986	3,333
HT-I Industry Segregated	1,551	410	1,962	1,564	414	1,978
HT-I (B) Ferro-Alloys	86	-	86	86	-	86
HT-II - Others	52	8	60	52	3	55
HT-III Airports, Railways and Bus stations	58	-	58	48	-	48
HT -IV A Lift Irrigation and agriculture	452	506	958	382	208	590
HT- IV B - CP Water Supply Schemes	48	-	48	48	-	48
HT-V (A) Railway Traction	168	306	474	142	306	449
HT-V (B) HMR	-	-	-	25	-	25

Consumer Category	Submitted by licensees			Approved by Commission		
	SPDCL	NPDCL	Total	SPDCL	NPDCL	Total
HT-VI Townships and Residential Colonies	-	55	55	-	55	55
HT-VII - Green Power	-	-	-	-	-	-
HT - Temporary Supply	-	-	-	-	-	-
HT – RESCOs	-	-	-	-	-	-
Total Revenue	17,165	4,181	21,346	16,699	3,842	20,541

Non-tariff income

6.3 The Licensees, in their filings have considered a growth rate of 2% over the non-tariff income from the annual audited accounts of FY 2014-15. Accordingly, the Licensees have proposed a non-tariff income of INR. 69.52 Crore and 72.68 Crore for the current and ensuing year respectively.

Basis of approval

6.4 The four year CAGR of non-tariff income (as per audited annual accounts up to FY 2014-15) exhibits a growth rate of 16.15% for TSSPDCL and 3.18% for TSNPDCL. Hence, the Commission while projecting the non-tariff income for FY 2016-17 has considered the aforementioned growth rates respectively. Based on the above approach, the Commission has arrived at a non-tariff income of INR. 108.00 Croe for FY 2016-17.

6.5 The table below details the non-tariff income for FY 2016-17 as filed by the Licensees and approved by the Commission:

Table 49: Non-tariff income for FY 2016-17 (in INR. Crore)

INR. Crore	Submitted by licensees			Approved by Commission		
	TSSPDCL	TSNPDC	Total	TSSPDCL	TSNPDC	Total
Interest Income from Bank Deposits / Investments etc.	1.32	-	1.32	-	-	-
Interest on ED	3.81	-	3.81	-	-	-
Reactive income	2.53	-	2.53	-	-	-
Reconnection Fee LT	1.45	10.51	11.96	29.18	10.75	39.93
Reconnection Fee HT	0.07	0.42	0.49	1.18	0.44	1.62
Application Registration Fee	1.47	0.57	2.04	1.56	0.57	2.13
Supervision Charges from customers	-	0.66	0.66	1.85	0.68	2.53
Capacitor Charges	-	2.95	2.95	8.20	3.02	11.23
Meter Testing / Shifting Charges	-	0.39	0.39	1.10	0.40	1.50

Grid support charges	0.69	-	0.69	-	-	-
Other Miscellaneous Income	32.00	13.84	45.84	35.85	13.21	49.06
Total	43.34	29.34	72.68	78.92	29.09	108.00

ARR and Revenue Gap at existing tariff

6.6 The table below captures the Revenue gap at the existing tariff as projected by the Licensees as well as determined by the Commission. Further the table below indicates the additional revenue required through tariff hike as well as Government subsidy to ensure full recovery of cost of the Licensees.

Table 50: Revenue gap at Existing Tariff as proposed by the Licensees and approved by the Commission for FY 2016-17 (in INR Crore)

Description	Submitted by licensees			Approved by Commission		
	TS SPDCL	TS NPDCL	Total	TS SPDCL	TS NPDCL	Total
Aggregate revenue requirement	21,376.86	8,830.33	30,207.19	19,144.23	7,653.84	26,798.06
Revenue from sale of power at existing tariff	17,164.83	4,180.71	21,345.54	16,699.03	3,842.01	20,541.04
Non-tariff income	43.34	29.34	72.68	78.92	29.09	108.00
Revenue gap	(4,168.69)	(4,620.29)	(8,788.97)	(2,366.28)	(3,782.74)	(6,149.02)

Chapter-7: Tariff design, Retail Supply Tariffs and other Charges

Tariff structure and design

7.1 The Commission while determining the Annual Revenue Requirement (ARR) and retail tariff for various consumers for FY2016-17 has been guided by the provisions of the Electricity Act, 2003, revised Tariff Policy, 2016 and regulations of this Commission. This chapter deals with the changes proposed by the Licensees in the existing tariff structure and the basis on which the Commission has made suitable changes in appropriate categories.

Restructuring of tariff slabs:

7.2 **LT-I Domestic:** The Commission after examining the changes proposed by the Licensee and with a view to simplifying the tariff structure, has combined two or more tariff slabs into one. The changes made in the tariff structure for the Domestic category are tabulated below.

Table 51: LT I: Revised slabs approved by the Commission for FY 2016-17

Existing Tariff Slabs	Licensee Proposed Tariff Slabs	Commission approved Tariff Slabs
I (A)(i) Up to 50 Units/Month	I (A)(i) Up to 50 Units/Month	I (A) Up to 100 Units/Month
0-50	0-50	0-50
I (A) (ii)Above 50 Units/Month & Up to 100 Units/Month	I (A)(ii) Above 50 Units/Month & Up to 100 Units/Month	
0-50	0-50	
51-100	51-100	51-100
I (B)(i) Above 100 Units/Month & Up to 200 Units/Month	I (B)(i) Above 100 Units/Month & Up to 200 Units/Month	I (B)(i) Above 100 Units/Month & Up to 200 Units/Month
0-50	0-100	0-100
51-100		
101-150		
151-200	101-200	101-200
I (B)(ii) Above 200 Units/Month	I (B)(ii) Above 200 Units/Month	I (B)(ii) Above 200 Units/Month
0-50	0-200	0-200
51-100		
101-150		
151-200		
201-250	201-400	201-300
251-300		301-400
301-400		401-800
Above 400 units	Above 400 units	Above 800 units

7.3 **LT-II Non-Domestic/Commercial:** The Commission in order to rationalize and simplify the tariff structure, has combined two or more tariff slabs under this category into one. The changes made in the tariff structure for the Non-Domestic category are tabulated below.

Table 52: LT II Revised slabs approved by the Commission for FY 2016-17

Existing Tariff Slabs	Revised Tariff Slabs
II (A) Up to 50 Units/Month	II (A) Up to 50 Units/Month
0-50	0-50
II (B) Above 50 Units/Month	II (B) Above 50 Units/Month
0-50	0-100
51-100	
101-300	101-300
301-500	301-500
Above 500	Above 500
II (C) Advertisement Hoardings	II (C) Advertisement Hoardings

7.4 **LT-VII General/ LT-VII (B) Wholly Religious Places:** The Commission received representation from consumers of this sub-category under main category LT VII-General, for segregating the consumption on the basis of load up to 2kW and above 2kW. The introduction of load based slabs was sought, as any consumption above 2kW is currently being billed under the sub-category LT-VII (A) General purpose under main category LT-VII General, which carries a higher tariff. Though there is no change proposed by the Licensee, yet the Commission based on the representations received from the consumers, has accepted the proposal and has introduced the load based slabs under this sub category as follows.

Table 53: LT VII Revised slabs approved by the Commission for FY 2016-17

Existing Tariff Slabs	Revised Tariff Slabs
LT-VII (B) Religious Places	LT-VII (B) Wholly Religious Places
Connected load Up to 2 kW	Connected load Up to 2 kW
	Connected load Above 2 kW

Applicability of this category shall be subject to the following conditions:

- i) The religious institution owning the place of worship should run such place of worship on no profit basis.
- ii) The religious institution should be registered under the Income Tax Act, 1961.
- iii) The premise for the place of worship shall be structurally distinct from premises running activities other than places of worship.
- iv) The premise for the purpose shall not be owned by any individual (name) but shall be owned by a religious institution or association of a community i.e. a class of

persons not less than 15 distinct individuals, having their names registered under one place of worship only.

- v) Premises with a connected load of more than 2 kW shall not consume energy more than 500 units in any month, otherwise they will be billed under the LT-VII (A) General Purpose category.

7.5 **Introduction of new time slots under Time of Day (ToD):** In order to flatten the load curve, the Licensees have proposed two time slots namely morning peak hours i.e. 06:00 AM to 10:00 AM and off peak hours i.e. 10:00 PM to 06:00 AM in addition to the existing evening peak hours between 06:00 PM to 10:00 PM and all hours other than peak and off-peak hours i.e. between 10:00 AM to 6:00 PM. In order to provide differentiated tariffs for different time slots of the day, the Commission has accepted the submission for introduction of Morning peak hours and Off-peak hours proposed by the Licensees for optimum utilisation of energy i.e. flattening the day load curve. The Commission has projected the energy sales in the respective ToD hours based on the following assumptions.

- For assessing energy consumption during the different time slots of the day for each ToD applicable category, the Commission has sought and received consumption during each time slot from the Licensees. The Commission examined the consumption information submitted and observed that during the off-peak hours i.e. 10:00 PM to 6:00 AM, the consumption proposed was found to be high because all industrial loads may not run with uniform consumption throughout the day and many industries are operating either under a single or double shifts. Hence the Commission has modified the consumption during off-peak hours and other than peak and off-peak hours duly considering these factors. The Commission has accepted the peak hour consumption projected by the Licensee.
- For computing the off-peak consumption for HT I – I (A) Industry category, in addition to the above procedure of sales computation, the Commission has considered that about 20% consumption of consumers operating in a single or double shifts may likely shift to off-peak hours to avail of the incentive. Hence by considering this factor the Commission has assessed the consumption during off-peak hours under this category.
- ToD is applicable only to HT-I(A) Industry (General), HT-II Others; and HT-III Airports, Bus Stations and Railway Stations. But ToD does not apply to Industrial colonies, Seasonal Industries and Optional Category. For remaining categories ToD is not extended.

Inclusion/ Modification of sub categories:

7.6 The Licensees have proposed to add the following sub-categories under the existing categories.

- 7.7 **Under LT-II Non-Domestic:** The sub category of LT-II(D) Hair cutting salons consuming up to 200 units/month has been proposed by the Licensees. Three (3) slabs viz., 0-50 units, 51-100 units and 101-200 units have been proposed under this sub-category. And it has also been stated that this sub-category shall receive the subsidy from the GoTS to the extent of Rs. 2.00 /unit. Hair cutting Salons having consumption of more than 200 units/month shall be billed under LT-II(B).The Commission has accepted the Licensees’ proposal for introduction of this sub category.

Table 54: LT-II introduction of sub-slab approved by the Commission for FY 2016-17

Existing Tariff Sub-Category	Revised Tariff Sub-Category
No existing sub-category called LT II (D) Haircutting Salons	II (D) Haircutting Salons: Up to 200 Units/Month
	0-50
	51-100
	101-200

- 7.8 **LT-III: Industry:** The Licensees have requested the Commission to include Reverse Osmosis (RO) water processing plants in the category of LT-III Industry. The Commission has examined and accepted the proposal made by the Licensee and brought the RO water processing plants under LT-III (i): Industry (General).
- 7.9 Further the Commission based on the requests made through written submissions and at the public hearing has included Sheep and Goat farms in the present sub-category namely Mushroom and Rabbit farms.

Table 55: LT-III inclusions to sub-slab approved by the Commission for FY 2016-17

Existing Tariff Sub-Category	Revised Tariff Sub-Category
LT-III: Industry	LT-III: Industry
LT-III(i): Industry (General)	LT-III(i): Industry (General)
LT-III(ii): Pisciculture/Prawn Culture	LT-III(ii): Pisciculture/Prawn Culture
LT-III(iii) Sugarcane Crushing	LT-III(iii) Sugarcane Crushing
LT-III(iv): Poultry Farms	LT-III(iv): Poultry Farms
LT-III(v): Mushroom & Rabbit Farms	LT-III(v): Mushroom, Rabbit, Sheep and Goat Farms
LT-III(vi): Floriculture in Green House	LT-III(vi): Floriculture in Green House
LT Seasonal Industries (off season)	LT Seasonal Industries (off season)

- 7.10 **LT-V Agriculture:** In this category, the Income Tax (IT) Assesseees along with Corporate farmers were been previously considered as paying consumers. During the public hearing many of the agricultural consumers’ associations have requested the Commission to exempt the IT Assesseees as paying consumers, since nowadays to open a bank account or to avail of bank loans, requirement of PAN card is mandatory. Because of this requirement most of the

farmers may fall in the purview of IT Assesses. Hence the Commission based on the above views has decided to exclude IT Assesseees from the paying consumers list.

- 7.11 During the public hearing, the horticulture nursery consumers falling under urban area have made a representation to treat them on par with rural horticulture nursery consumers so as to extend the same tariff to them. Hence the Commission has decided to remove the word ‘Rural’ from the current description and the sub-category is indicated as Horticulture Nurseries with connected load up to 15 HP.

Table 56: LT-V changes to sub-slab approved by the Commission for FY 2016-17

Existing Tariff Sub-Category	Revised Tariff Sub-Category
LT-V: Agriculture	LT-V: Agriculture
LT-V(A): Agriculture with DSM Measures	LT-V(A): Agriculture with DSM Measures
Corporate Farmers & IT Assesses	Corporate Farmers
Wet Land Farmers (holdings >2.5 acre)	Wet Land Farmers (holdings >2.5 acre)
Dry Land Farmers (connections > 3 Nos.)	Dry Land Farmers (connections > 3 Nos.)
Wet Land Farmers (holdings <=2.5 acre)	Wet Land Farmers (holdings <=2.5 acre)
Dry Land Farmers (connections <=3 Nos.)	Dry Land Farmers (connections <=3 Nos.)
LT-V(B): Agriculture without DSM Measures	LT-V(B): Agriculture without DSM Measures
Corporate Farmers & IT Assesses	Corporate Farmers
Wet Land Farmers (holdings >2.5 acre)	Wet Land Farmers (holdings >2.5 acre)
Dry Land Farmers (connections > 3 Nos.)	Dry Land Farmers (connections > 3 Nos.)
Wet Land Farmers (holdings <=2.5 acre)	Wet Land Farmers (holdings <=2.5 acre)
Dry Land Farmers (connections <=3 Nos.)	Dry Land Farmers (connections <=3 Nos.)
LT-V(C): Others	LT-V(C): Others
Rural Horticulture Nurseries upto 15HP	Horticulture Nurseries upto 15HP

- 7.12 **LT-VIII Temporary Supply - Construction activities:** The Licensees have proposed to bring construction activities under the purview of temporary service. The Commission has not accepted this proposal since temporary supply is to be given based on the request of the consumer only. The period of availing of temporary supply shall not exceed at a time 6 months and it can be extended up to one year (period of regular supply). If a consumer requests for extension beyond one year i.e. instead of opting for regular supply, after examining the reasons for seeking such extension, such extension can be considered by the Licensees for a further period of 1 year. The relevant details have been covered in the terms and conditions of Tariff schedule.
- 7.13 **HT-1 (A) - Industry at 11kV:** Several representations have been received from various types of industries such as Rice Mills Association, Stone cutting and polishing industries, Medium Small and Micro Enterprises (MSME) sector to restore the LT-III(B) category (upto a connected load of 150 HP) meant for SSI sector, which was existing in the tariff structure prior to FY 2013-14. Since these industries run only for limited hours during the

day with full load capacity, they are currently burdened through high demand charges under the HT-I (A) category.

- 7.14 Based on the above representations the Commission has introduced a sub-category with contract maximum demand up to 150 kVA under HT-1(A) category at 11kV voltage only and made it an Optional category. The consumers who qualify under this category are at liberty to opt to remain under HT-1(A) or choose the Optional sub-category for which the tariff rates are determined (compared to HT-I (A) General the demand charges are lower and energy charges are higher).

Table 57: HT-I (A) introduction of sub-slab by the Commission for FY 2016-17

Existing Tariff Sub-Category	Revised Tariff Sub-Category
No existing sub-category called Optional category (with contract maximum demand up to 150 kVA)	HT-I (A) General (11 kV)
	Optional category (with contract maximum demand up to 150 kVA)

- 7.15 **HT-V Railway traction:** TSSPDCL in its filings had proposed the sub category of HT-V (B) Hyderabad Metro Rail (HMR). Through an addendum petition dated 21/03/2016, TSSPDCL had requested the Commission to consider Hyderabad Metro Rail as a distinct specific tariff category called HT-IX: HMR. During the public hearing, objection was raised against the proposal of creating a separate category since the nature of business of HMR is similar to that of Indian Railways.

- 7.16 The Commission has examined the proposal for creating a separate category or sub-category to the exiting category and presents its reasoning as below:

- A. HMR will be engaged in the activities of providing mass rapid transit system for Hyderabad and is a public utility and a social sector project having many social benefits which would be bestowed upon a section of traveling public, majority of them belong to economically weaker sections of the society.
- B. Section 61 and 62 of The Electricity Act allow for differentiation on the basis of geographical positioning and the purpose for which supply is required. The nature of service provided, geographical area and purpose of HMR are different from that of the Indian Railways and hence it qualifies for separate category or sub-category.
- C. With regard to load factor of the service, when the HMR becomes fully operational, the movement of trains will be more frequent in the given limited area of operations and thus the load factor will be higher than that of the Railways.
- D. The HMR provides only passenger services unlike the Railways which carry goods and earn additional revenue from such services.

7.17 Hence, the Commission opines that HMR is eligible to be classified as a separate category. The commercial operations of the HMR are anticipated to be commenced during the year FY2016-17 covering only a limited area of operations and at present its load constitutes only construction and commercial loads. The Commission observes that the category cost of service cannot be ascertained at this stage and hence a sub-category can be created with a lower tariff than that of the Indian Railways to accommodate the unique requirement of this category prior to major commercial operations. **Meanwhile the Commission directs TSSPDCL to study the consumption pattern for the portion of the commercial operation to commence during the year FY 2016-17 and propose the Category CoS for the subsequent year.**

7.18 Thus the sub-category HT-V (B) Hyderabad Metro Rail (HMR) under HT-V Railway traction is created as requested by the Discom in its original petition. Categorization of Metro Rail as a separate category/ sub-category has also been allowed by Delhi Electricity Regulatory Commission and Karnataka Electricity Regulatory Commission respectively.

Table 58: HT-V (B) introduction of sub-slab approved by the Commission for FY 2016-17

Existing Tariff Sub-Category	Revised Tariff Sub-Category
HT-V (A) Railway Traction (132 kV)	HT-V (A) Railway Traction (132 kV)
No existing sub-category called HT-V (B) Hyderabad Metro Rail (HMR)	HT-V (B) Hyderabad Metro Rail (HMR)

7.19 **HT-VII Temporary service:** The licensees have proposed a separate tariff for consumers availing of temporary supply under HT voltage which was charged earlier at the rate of 1.5 times of the tariff for respective categories. The Commission accepted the proposal to introduce a separate tariff rate for the category.

7.20 **Minimum Agreement Period:** During the public hearing many stakeholders including FTAPCCI and MSME have requested the Commission to reduce the Minimum agreement period from 2 years to 1 year. The Commission has examined the issue thread bare and is of the view that the reduction of agreement period will not significantly affect the revenue of the Licensees since the power procurement cost is allowed by the Commission on a year on year basis. Further the Commission is permitting short term purchase to fulfil the energy requirement for the year. And if the period of agreement is reduced for the existing consumer, to that extent new consumers may avail of similar capacities. Hence the Commission has decided to reduce the minimum agreement period to one year. In due course, the necessary amendment shall be made to the General Terms and Conditions of Supply (GTCS) and in the relevant regulations.

7.21 **Voltage Surcharge:** The Commission examined the Voltage surcharge being levied on the consumers who are now getting supply at voltage different from the declared voltages and who want to continue taking supply at the same voltage, such consumers will be charged as per the rates indicated in the relevant Tariff Orders. There were objections on this issue as

at present there are no consumers already exiting at a different voltage than the declared voltage. However if any consumer avails of supply at a lower voltage than the declared voltage because of exceeding demand during any month, such consumer is being charged at a voltage in which supply is given i.e. at a higher tariff. Further as per GTCS if a consumer avails of excess contract load/ contracted maximum demand such consumer's supply can be disconnected by giving a notice. Provided such consumer does not reduce the recorded demand to the contract demand and during such months the additional charge can be levied for exceeding the contract demand as per the Tariff Order. Considering the above aspects the Commission is of the view to waive the voltage surcharge for FY 2016-17, which will also minimize the legal disputes with the consumer.

Reference tariff schedule

7.22 This section lays down the basis on which the Commission has determined the reference tariff schedule as against the tariff schedule proposed by the Licensees. The table below captures the retail supply tariff proposed by the Licensees vis-à-vis the current tariff as approved in the last tariff order.

Table 59: Summary of Existing and Licensees Proposed Electricity Retail Supply Tariffs

Consumer Category/ Sub-Category/ Slab Structure (units)	Energy Unit	Existing Tariff		Proposed Tariff	
		Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./Unit)	Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./unit)
LT-I Domestic					
LT-I(A)(i): Up to 50 units/month	kWh		1.45		1.45
LT-I(A)(ii): Above 50 units/month					
LT-I(B)(i): More than 50 & up to 100 units/month					
First 50	kWh		1.45		1.45
51-100	kWh		2.60		2.60
LT-I(B)(ii): More than 100 & up to 200 units/month					
First 100	kWh		2.60		3.25
101-200	kWh		3.60		4.25
LT-I(B)(iii): More than 200 units/month					
0-200 @	kWh		4.10		4.80
201-400 @@	kWh		7.43		8.15
Above 400	kWh		8.50		9.50
@ Existing Tariff considered based on weighted average tariff of four slabs					
@@ Existing Tariff considered based on weighted average tariff of three slabs					
LT-II Non-Domestic/Commercial					
LT-II(A): Up to 50 units/month	kWh/kVAh	50/kW	5.40	50/kW	5.94
LT-II(B): Above 50 units/month					
First 50	kWh/kVAh	50/kW	6.60	50/kW	7.26
51-100	kWh/kVAh	53/kW	7.80	53/kW	8.58

Determination of Retail Supply Tariff- FY 2016-17

Consumer Category/ Sub-Category/ Slab Structure (units)	Energy Unit	Existing Tariff		Proposed Tariff	
		Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./Unit)	Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./unit)
101-300	kWh/kVAh	53/kW	8.60	53/kW	9.46
301-500	kWh/kVAh	53/kW	9.10	53/kW	10.01
Above 500	kWh/kVAh	53/kW	9.70	53/kW	10.67
LT-II(C): Advertisement Hoardings	kWh/kVAh	53/kW	11.70	53/kW	12.87
LT-II(D): Haircutting Salons having monthly consumption upto 200 units					
First 50	kWh/kVAh			50/kW	5.26
51-100	kWh/kVAh			53/kW	6.58
101-200	kWh/kVAh			53/kW	7.46
LT-III: Industry					
LT-III(i): Industry (General)	kWh/kVAh	53/kW	6.40	53/kW	6.79
LT-III(ii): Pisciculture/Prawn Culture	kWh/kVAh	21/kW	4.90	21/kW	5.20
LT-III(iii) Sugarcane Crushing	kWh/kVAh	21/kW	4.90	21/kW	5.20
LT-III(iv): Poultry Farms	kWh/kVAh	50/kW	3.60	50/kW	3.82
LT-III(v): Mushroom & Rabbit Farms	kWh/kVAh	53/kW	6.00	53/kW	6.36
LT-III(vi): Floriculture in Green House	kWh/kVAh	53/kW	6.00	53/kW	6.36
LT Seasonal Industries (off season)	kWh/kVAh	53/kW	7.10	53/kW	7.53
LT-IV: Cottage Industries					
LT-IV(A): Cottage Industries	kWh	20/kW	3.75	20/kW	3.75
LT-IV(B): Agro Based Activity	kWh	20/kW	3.75	20/kW	3.75
LT-V: Agricultural					
LT-V(A): Agriculture with DSM Measures					
Corporate Farmers & IT Assesses	kWh		2.50		2.50
Wet Land Farmers (holdings >2.5 acre)	kWh	525/HP*	0.50	525/HP*	0.50
Dry Land Farmers (connections > 3 Nos.)	kWh	525/HP*	0.50	525/HP*	0.50
Wet Land Farmers (holdings ≤2.5 acre)	kWh		0.00		0.00
Dry Land Farmers (connections ≤3 Nos.)	kWh		0.00		0.00

Determination of Retail Supply Tariff- FY 2016-17

Consumer Category/ Sub-Category/ Slab Structure (units)	Energy Unit	Existing Tariff		Proposed Tariff	
		Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./Unit)	Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./unit)
LT-V(B): Agriculture without DSM Measures					
Corporate Farmers & IT Assesses	kWh		3.50		3.50
Wet Land Farmers (holdings >2.5 acre)	kWh	1050/HP*	1.00	1050/HP*	1.00
Dry Land Farmers (connections > 3 Nos.)	kWh	1050/HP*	1.00	1050/HP*	1.00
Wet Land Farmers (holdings <=2.5 acre)	kWh	525/HP*	0.50	525/HP*	0.50
Dry Land Farmers (connections <=3 Nos.)	kWh	525/HP*	0.50	525/HP*	0.50
* Equivalent flat rate tariff					
LT-V(C): Others					
Rural Horticulture Nurseries upto 15HP	kWh	20/HP	3.70	20/HP	3.70
LT-VI: Street Lighting and PWS Schemes					
LT-VI(A): Street Lighting					
Panchayats	kWh	32/kW	5.70	32/kW	6.27
Municipalities	kWh	32/kW	6.20	32/kW	6.82
Municipal Corporations	kWh	32/kW	6.70	32/kW	7.37
LT-VI(B): PWS Schemes					
Panchayats	kWh/kVAh	32/HP	4.60	32/HP	5.06
Municipalities	kWh/kVAh	32/HP	5.70	32/HP	6.27
Municipal Corporations	kWh/kVAh	32/HP	6.20	32/HP	6.82
LT-VII: General					
LT-VII(A): General Purpose	kWh/kVAh	21/kW	6.90	21/kW	7.59
LT-VII(B): Religious Places	kWh	21/kW	5.00	21/kW	5.50
LT-VIII: Temporary Supply	kWh/kVAh	21/kW	10.00	21/kW	11.00
HT-I: Industry					
HT-I(A): Industry-General					
11 kV	kVAh	370/kVA	6.00	398/kVA	6.45
33 kV	kVAh	370/kVA	5.60	398/kVA	6.02
132 kV & above	kVAh	370/kVA	5.10	398/kVA	5.49
Light and Fans					
11 kV	kVAh		6.00		6.45
33 kV	kVAh		5.60		6.02
132 kV & above	kVAh		5.10		5.49
Poultry Farms					

Determination of Retail Supply Tariff- FY 2016-17

Consumer Category/ Sub-Category/ Slab Structure (units)	Energy Unit	Existing Tariff		Proposed Tariff	
		Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./Unit)	Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./unit)
11 kV	kVAh	370/kVA	4.00	398/kVA	4.30
33 kV	kVAh	370/kVA	3.60	398/kVA	3.87
Industrial Colonies					
11 kV	kVAh		6.00		6.45
33 kV	kVAh		6.00		6.45
132 kV & above	kVAh		6.00		6.45
Seasonal Industries					
11 kV	kVAh	370/kVA	7.30	398/kVA	7.85
33 kV	kVAh	370/kVA	6.60	398/kVA	7.10
132 kV & above	kVAh	370/kVA	6.40	398/kVA	6.88
HT-I - Time of Day Tariffs (6 pm to 10 pm)					
11 kV	kVAh		7.00		7.45
33 kV	kVAh		6.60		7.02
132 kV & above	kVAh		6.10		6.49
HT-I - Time of Day Tariffs (6 am to 10 am)					
11 kV	kVAh				7.45
33 kV	kVAh				7.02
132 kV & above	kVAh				6.49
HT-I - Time of Day Tariffs (10 pm to 6 am)					
11 kV	kVAh				5.90
33 kV	kVAh				5.47
132 kV & above	kVAh				4.94
HT-I(B): Ferro Alloy Units					
11 kV	kVAh		5.70		5.70
33 kV	kVAh		5.30		5.30
132 kV & above	kVAh		4.80		4.80
HT-II: Others					
11 kV	kVAh	370/kVA	7.30	407/kVA	8.03
33 kV	kVAh	370/kVA	6.60	407/kVA	7.26
132 kV & above	kVAh	370/kVA	6.40	407/kVA	7.04
Time of Day Tariffs (6 pm to 10 pm)					
11 kV	kVAh		8.30		9.03
33 kV	kVAh		7.60		8.26
132 kV & above	kVAh		7.40		8.04
Time of Day Tariffs (6 am to 10 am)					
11 kV	kVAh				9.03
33 kV	kVAh				8.26
132 kV & above	kVAh				8.04
Time of Day Tariffs (10 pm to 6 am)					
11 kV	kVAh				7.48
33 kV	kVAh				6.71
132 kV & above	kVAh				6.49
HT-III: Airports, Bus Stations and Railway Stations					

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Consumer Category/ Sub-Category/ Slab Structure (units)	Energy Unit	Existing Tariff		Proposed Tariff	
		Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./Unit)	Fixed/ Demand Charge (Rs./month)	Energy Charge (Rs./unit)
11 kV	kVAh	370/kVA	7.00	407/kVA	7.70
33 kV	kVAh	370/kVA	6.40	407/kVA	7.04
132 kV & above	kVAh	370/kVA	6.00	407/kVA	6.60
Time of Day Tariffs (6 pm to 10 pm)					
11 kV	kVAh		8.00		8.70
33 kV	kVAh		7.40		8.04
132 kV & above	kVAh		7.00		7.60
Time of Day Tariffs (6 am to 10 am)					
11 kV	kVAh				8.70
33 kV	kVAh				8.04
132 kV & above	kVAh				7.60
Time of Day Tariffs (10 pm to 6 am)					
11 kV	kVAh				7.15
33 kV	kVAh				6.49
132 kV & above	kVAh				6.05
HT-IV: Irrigation & CPWS					
HT-IV(A): Lift Irrigation & Agriculture	kVAh		5.70		6.44
HT-IV(B): CPWS	kVAh		4.60		5.06
HT-V: Railway Traction					
HT-V(A): Railway Traction	kVAh		6.80		7.48
HT-V(B): HMR Traction	kVAh				7.30
HT-VI: Townships & Residential Colonies	kVAh	53/kVA	6.00	59/kVA	6.60
HT-VII: Green Power	kVAh		8.50		9.35
HT-VIII: Temporary	kVAh	1.5 times of corresponding HT category		500/kVA	12.00

* Equivalent flat rate tariff – INR/HP/year.

7.23 The Commission has examined the revenue anticipated at the current tariffs based on the approved sales for FY 2016-17 and the revenue gap is arrived. The Commission has arrived at the Reference Tariff Schedule by making certain modifications to the tariff rates (both energy and fixed charges) as proposed by the licensees in light of the objections/suggestions/views expressed by consumers/ organizations/ stakeholders in writing/ during public hearings and at the SAC meeting. In doing so, the Commission has made modifications for better cost recovery, better energy conservation, enabling of improved standards of performance, cost reflective tariffs, limiting cross subsidization,

avoiding tariff shocks, etc. The Commission has also examined additional proposals for tariff categorizations (as explained in the above section) for charges for FY 2016-17 and determined the same from the point of view of better revenue collections and enabling better standards of performance.

7.24 The approach for arriving at reference tariff schedule is explained below:

- For subsidizing categories the increase in Average Cost of Supply over that of last year has been considered on the existing tariff to ensure that the cross subsidy contribution does not increase.
- For subsidized categories except agriculture, in case the proposed charges are not resulting in reasonable recovery, such charges have been enhanced towards better cost recovery and at the same time avoiding tariff shock.
- For Domestic consumers whose consumption is Up to 50 units per month, the energy charge has been increased from Rs. 1.45/ kWh to INR 1.80/ kWh. The existing energy charge Rs. 1.45/ kWh has not been revised for many years despite the constant increase in the cost of power purchase consequently causing the increase in Cost of Supply of the Licensees. Hence Commission has increased the tariff for this category to a certain extent to move towards the cost reflective tariffs duly considering the National Tariff Policy, 2016 guidelines for BPL tariffs.
- Reducing the charges for certain consumer categories, proposed to be beyond the cost to tariff alignment and/ or limits of cross subsidization.
- The charges for agriculture consumer category who are traditionally receiving subsidy u/s 65 of the Act are retained as proposed by the Licensees. At present there are no individual meters to each connection and it is not possible to charge each consumer based on consumption.

7.25 The table below presents the Reference Tariff Schedule proposed by the Commission for FY 2016-17.

Table 60: Reference Tariff Schedule for FY 2016-17

Category	Fixed/ Demand Charge (Rs./month)		Energy Charge (Rs./kWh/kVAh)
	Unit	Rate	
Low Tension			
LT I: Domestic			
LT I (A): Up to 100 Units/Month			
0-50			1.80
51-100			2.80

Category	Fixed/ Demand Charge (Rs./month)		Energy Charge (Rs./kWh/kVAh)
	Unit	Rate	
LT I (B)(i): Above 100 Units/Month & Up to 200 Units/Month			
0-100			3.30
101-200			4.30
LT I (B)(ii): Above 200 Units/Month			
0-200			5.00
201-300			7.20
301-400			8.50
401-800			9.00
Above 800 units			9.50
LT II: Non-Domestic/Commercial			
LT II (A): Up to 50 Units/Month			
0-50	kW	50	6.00
LT II (B): Above 50 Units/Month			
0-100	kW	60	7.50
101-300	kW	60	8.90
301-500	kW	60	9.40
Above 500	kW	60	10.00
LT II (C): Advertisement Hoardings	kW	60	12.00
LT II (D): Haircutting salons consuming upto 200 units/month			
0-50	kW	50	5.30
51-100	kW	55	6.60
101-200	kW	55	7.50
LT III: Industry			
Industries	kW	60	6.70
Seasonal Industries (off season)	kW	60	7.40
Pisciculture/ Prawn culture	kW	21	5.20
Sugarcane crushing	kW	21	5.20
Poultry farms	kW	50	6.00
Mushroom, Rabbit, Sheep and Goat farms	kW	60	6.30
Floriculture in Green House	kW	60	6.30
LT IV: Cottage Industries			
(A) Cottage Industries	kW	20/kW subject to a minimum of Rs 30/month	4.00
(B) Agro Based Activities	kW	20/kW subject to a minimum of Rs 30/month	4.00
LT V: Agriculture			
LT V (A): Agriculture with DSM Measures			
Corporate Farmers			2.50
Wet Land Farmers (Holdings >2.5 acre)	HP	525 *	0.50

Category	Fixed/ Demand Charge (Rs./month)		Energy Charge (Rs./kWh/kVAh)
	Unit	Rate	
Dry Land Farmers (Connections > 3 nos.)	HP	525 *	0.50
Wet Land Farmers (Holdings <= 2.5 acre)			0.00
Dry Land Farmers (Connections <= 3 nos.)			0.00
LT V (B): Agriculture without DSM Measures			
Corporate Farmers			3.50
Wet Land Farmers (Holdings >2.5 acre)	HP	1050 *	1.00
Dry Land Farmers (Connections > 3 nos.)	HP	1050 *	1.00
Wet Land Farmers (Holdings <= 2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections <= 3 nos.)	HP	525 *	0.50
LT V (C): Others			
Horticulture Nurseries with CL up to 15 HP	HP	20	4.00
LT VI: Street Lighting & PWS			
LT VI (A): Street Lighting			
Panchayats	kW	32	6.10
Municipalities	kW	32	6.60
Municipal Corporations	kW	32	7.10
LT VI (B): PWS Schemes			
Panchayats	HP	32/ HP subject to a minimum of Rs 50/month	5.00
Municipalities	HP	32/ HP subject to a minimum of Rs 50/month	6.10
Municipal Corporations	HP	32/ HP subject to a minimum of Rs 50/month	6.60
LT VII: General			
LT VII (A): General Purpose	kW	21	7.30
LT VII (B): Wholly Religious Places			
Load up to 2 kW	kW	21	5.40
Load above 2 kW	kW	21	6.00
LT VIII: Temporary Supply	kW	21	11.00
High Tension			
HT I(A): Industry General			
11 kV	kVA	390	6.65
33 kV	kVA	390	6.15
132 kV and above	kVA	390	5.65

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Category	Fixed/ Demand Charge (Rs./month)		Energy Charge (Rs./kWh/kVAh)
	Unit	Rate	
HT I(A):Lights and Fans			
11 kV			6.65
33 kV			6.15
132 kV and above			5.65
HT I(A):Poultry Farms			
11 kV	kVA	390	6.65
33 kV	kVA	390	6.15
HT I(A):Industrial Colonies			
11 kV			6.30
33 kV			6.30
132 kV and above			6.30
HT I(A):Seasonal Industries			
11 kV	kVA	390	7.60
33 kV	kVA	390	6.90
132 kV and above	kVA	390	6.70
HT I(A):Optional Category with Load up to 150 kVA			
11 kV	kVA	80	7.00
HT I: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			5.65
33 kV			5.15
132 kV and above			4.65
HT I(B):Ferro Alloy Units			
11 kV			5.90
33 kV			5.50
132 kV and above			5.00
HT II Others			
11 kV	kVA	390	7.80
33 kV	kVA	390	7.00
132 kV and above	kVA	390	6.80
HT II: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80

Category	Fixed/ Demand Charge (Rs./month)		Energy Charge (Rs./kWh/kVAh)
	Unit	Rate	
HT II: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.80
33 kV			6.00
132 kV and above			5.80
HT III Airports, Bus stations and Railway stations			
11 kV	kVA	390	7.50
33 kV	kVA	390	6.85
132 kV and above	kVA	390	6.45
HT III: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.50
33 kV			5.85
132 kV and above			5.45
HT IV Irrigation and Agriculture			
11 kV			6.40
33 kV			6.40
132 kV and above			6.40
HT IV CP Water Supply Schemes			
11 kV			5.10
33 kV			5.10
132 kV and above			5.10
HT V (A) Railway Traction			
HT V (B) HMR			
HT VI Townships & Residential Colonies			
11 kV	kVA	60	6.30
33 kV	kVA	60	6.30
132 kV and above	kVA	60	6.30
HT VII: Temporary			
11 kV	kVA	500	10.80

Category	Fixed/ Demand Charge (Rs./month)		Energy Charge (Rs./kWh/kVAh)
	Unit	Rate	
33 kV	kVA	500	10.00
132 kV and above	kVA	500	9.80
HT VIII: RESCO			
11 kV			1.00

* Equivalent flat rate tariff – INR/HP/year.

Revenue from sale of power at reference tariff

The following table shows the category-wise revenue for FY 2016-17 as projected by the Licensees as well as approved by the Commission. The revenue shown in the table is based on the tariffs proposed by the Licensees and the tariff determined by the Commission respectively and is exclusive of subsidy.

Table 61: Revenue at proposed tariff for FY 2016-17 as filed by the Licensees and determined by the Commission (in INR Crore)

Consumer Category	Submitted by licensees			Determined by Commission		
	SPDCL	NPDCL	Total	SPDCL	NPDCL	Total
LT Category	7,288	2,140	9,428	7,226	2,147	9,372
Category I (A&B) - Domestic	3,572	1,040	4,612	3,647	1,085	4,731
Category II (A,B,C & D) - Non-domestic/Commercial	2,417	633	3,050	2,295	593	2,888
Category III (A & B) - Industrial	647	214	860	648	218	867
Category IV (A & B) - Cottage Industries & Dhobighats	4	3	7	4	3	7
Category V (A, B & C) - Irrigation and Agriculture	42	43	85	43	43	86
Category VI (A & B) - Local Bodies, St. Lighting & PWS	555	175	730	538	172	710
Category VII (A & B) - General Purpose	50	33	84	49	33	82
Category VIII (A & B) - Temporary Supply	1	-	1	1	-	1
HT Category at 11 KV	4,620	718	5,338	4,275	687	4,962
HT-I Industry Segregated	2,863	489	3,413	2,587	462	3,049
HT-I (B) Ferro-Alloys	-	-	0	-	-	-
HT-II - Others	1,576	108	1,707	1,520	104	1,623
HT-III Airports, Railways and Bus stations	6	8	14	6	7	13

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Consumer Category	Submitted by licensees			Determined by Commission		
	SPDCL	NPDCL	Total	SPDCL	NPDCL	Total
HT -IV A Lift Irrigation and agriculture	22	15	37	18	9	27
HT- IV B - CP Water Supply Schemes	30	26	56	30	26	56
HT-VI Townships and Residential Colonies	64	11	75	61	10	72
HT-VII - Green Power	-	-	-	-	-	-
HT -Temporary Supply	59	-	59	54	-	54
HT - RESCOs	-	62	62	-	68	68
HT Category at 33 KV	4,212	288	4,500	4,012	279	4,291
HT-I Industry Segregated	3,552	146	3,784	3,340	146	3,486
HT-I (B) Ferro-Alloys	31	24	55	32	24	56
HT-II - Others	559	19	587	548	18	565
HT-III Airports, Railways and Bus stations	-	-	-	-	-	-
HT -IV A Lift Irrigation and agriculture	16	15	31	42	14	56
HT- IV B - CP Water Supply Schemes	2	48	50	2	48	50
HT-VI Townships and Residential Colonies	31	31	62	29	30	59
HT-VII - Green Power	-	-	-	-	-	-
HT -Temporary Supply	21	-	21	19	-	19
HT - RESCOs	-	6	6	-	-	-
HT Category at 132 KV	2,619	1,419	4,038	2,536	1,059	3,595
HT-I Industry Segregated	1,665	440	2,149	1,689	447	2,136
HT-I (B) Ferro-Alloys	86	-	86	90	-	90
HT-II - Others	57	9	67	54	3	57
HT-III Airports, Railways and Bus stations	63	-	65	51	-	51
HT -IV A Lift Irrigation and agriculture	510	572	1,082	427	233	660
HT- IV B - CP Water Supply Schemes	52	-	52	52	-	52
HT-V (A) Railway Traction	156	337	521	148	319	467
HT-V (B) HMR	27	-	-	26	-	26
HT-VI Townships and Residential Colonies	-	60	60	-	58	58

Consumer Category	Submitted by licensees			Determined by Commission		
	SPDCL	NPDCL	Total	SPDCL	NPDCL	Total
HT-VII - Green Power	-	-	-	-	-	-
HT - Temporary Supply	-	-	-	-	-	-
HT – RESCOs	-	-	-	-	-	-
Total Revenue	18,738	4,565	23,304	18,048	4,173	22,221

7.26 The charges determined in the reference tariff schedule (as presented in the section above) does not provide for full recovery of the approved aggregate revenue requirement and results in a revenue gap of INR. 4,470.10 Crore for FY 2016-17.

7.27 The tables below captures the revenue gap at the reference supply tariff proposed by the Commission.

Table 62: Revenue gap at Reference Tariff for FY 2016-17

Description	Amount (INR. Crore)		
	TSSPDCL	TSNPDCL	Total
Aggregate revenue requirement	19,144.23	7,653.84	26,798.06
Revenue from sale of power at reference tariff	18,048.19	4,172.64	22,220.80
Non-tariff income	78.92	29.09	108.00
Revenue gap	(1,017.59)	(3,452.51)	(4,470.10)

Subsidy commitment required for Retail Supply Tariff Schedule

7.28 The Commission vide its letter reference No. TSERC/Secy/ARR 2016-17/7 D. No. 225/16, dated 23-04-2016 communicated to the Government of Telangana, the Commission determined,

- Revenue requirement;
- Full cost tariff recovery schedule;
- Retail supply tariff schedule and
- Subsidy requirement for FY 2016-17.

7.29 The Commission had worked out the licensee-wise requirement of subsidy amount u/s 65 of Electricity Act, 2003 for FY 2016-17 and the total subsidy requirement works out to INR. 4,598.45 Crore.

The Commission vide its letter reference No. TSERC/Secy/ARR 2016-17/9 D. No. 269/16, dated 07-05-2016 stated to the Government of Telangana that if the Government of Telangana is of the view that the subsidy is to be restricted to the budget allocated at Rs. 4470.10 Crores, the remaining gap has to be passed on to consumers by increasing the customer charges.

- 7.30 It was also informed to the Government of Telangana that, if it wished to further reduce the tariffs in the retail supply tariff schedule, the consequential additional subsidy should be borne by the government.
- 7.31 In response to the Commission’s letters dated 23rd April, 3rd May, 7th May and 17th June 2016, the Secretary to Government, Energy Department, Government of Telangana, vide Letter No. 432/Budget/2016 dated 23.06.2016 informed that “Government of Telangana have noted the retail sale tariffs proposed by the Hon’ble Commission for FY 2016-17 for the distribution companies in the State. While confirming its commitment to provide subsidy amount for a sum of Rs. 4470.10 Crores including a subsidy of Rs. 19.52 Crores towards reduction in tariff of Poultry farms, in accordance with Sec.65 of the Electricity Act, 2003 in the manner specified by the Commission in the reference cited, the Government of Telangana has further decided to provide additional subsidy of Rs 114.40 Crores to retain the tariff for the Domestic category in 0-50 units consumption @ Rs. 1.45 per unit and 51-100 units consumption @ Rs. 2.60 per unit. The Government of Telangan also directs the Commission, u/s 108 of the Electricity Act, 2003 to maintain the uniform retail supply tariff across the State of Telangana.”
- 7.32 Taking into consideration the amount of Rs. 4470.10 Crores plus Rs 114.40 Crores additional subsidy to retain the tariff for Domestic category consumers with consumption upto 100 units per month, indicated in GoTS Letter No. 432/Budget/2016 dated 23-06-2016, as subsidy u/s 65 of Electricity Act, 2003 for the tariff proposals of the DISCOMS, the Commission modified the rates for Domestic category consumers with consumption upto 100 units per month. The Commission also modified the tariff for Poultry industry under LT and HT supply considering that the Discoms will meet the amount of Rs. 19.52 Crores by improving their internal performance, in case of any shortfall in achieving the above amount of Rs. 19.52 Crores through internal performance improvements, such amount will be carried in the subsequent year ARR amount. Commission taking into consideration the above has prepared the Retail supply Tariff Schedule for FY 2016-17.
- 7.33 The table below details the subsidy commitment for both the Licensees communicated by the Government of Telangana:

Table 63: Subsidy commitment given by GoTS to maintain retail supply tariff schedule for FY 2016-17

Consumer Category	Amount (INR. Crore)		
	TSSPDCL	TSNPDCL	Total
LT-I: Domestic	53.93	1087.81	1141.74
LT-I: Domestic – Additional Subsidy***	56.68	57.72	114.40
LT-II: Non-Domestic/ Commercial			
LT-II (D): Haircutting Salons *	1.13	2.27	3.39
LT-V: Agricultural	946.43	2359.04	3305.48
Poultry Farms (LT+HT) – Subsidy @ INR. 2.00 per unit **	16.11	3.41	19.52
Total subsidy required	1,074.27	3,510.23	4,584.50

* Since the Government of Telangana has given a commitment to extend concessional tariff to Hair cutting salons with consumption up to 200 units/ month, the subsidy towards this sub-category has also been indicated above.

** In the previous year, the Government of Telangana has extended a concessional tariff to poultry farms. Hence, the subsidy for this category against reduction in tariff by INR. 2.00 per unit has been indicated separately. The Commission determined additional subsidy amount of INR. 19.52 Crore for this category.

***An additional subsidy of Rs. 114.40 Crores has been approved by the Government of Telangana to maintain the tariffs at the current levels for Domestic consumers consuming upto 100 units per month.

7.34 The Commission computed the anticipated revenue from approved sales based on the existing tariff for a period of one month and based on the category wise tariff determined for FY 2016-17 for a period of 11 months. Any consequent revenue shortfall shall be first met through internal performance improvements and any further shortfall may be considered in the subsequent year ARR, duly examining the same.

7.35 The tables below captures the summary of the Aggregate Revenue Requirement and how it will be met through the retail supply tariff approved by the Commission and Government subsidy and internal efficiencies of the utilities.

Table 64: Revenue gap at Retail Tariff for FY 2016-17

Description	Amount (INR. Crore)		
	TSSPDCL	TSNPDCL	Total
Aggregate revenue requirement	19,144.23	7,653.84	26,798.06
Revenue from sale of power at retail tariff	17,974.93	4,111.11	22,086.04
Non-tariff income	78.92	29.09	108.00
Government Subsidy commitment	1,074.27	3,510.23	4,584.50
Internal Performance efficiencies	16.11	3.41	19.52
Net gap	Nil	Nil	Nil

Full cost of recovery tariff schedule

7.36 In this section, the Commission, after examining the cost, revenue and cross subsidy for each consumer category, has determined the Full Cost Recovery Tariff Schedule (FCRTS) for FY 2016-17, by making necessary enhancements to the rates/charge for certain consumer categories as arrived in the reference tariff schedule. If this FCRTS is levied on different consumer categories for consumption during FY 2016-17, the Licensees will be able to recover the approved revenue requirement in full.

7.37 The full cost recovery tariff charges were determined by the Commission through the following approach:

- The revenue was computed as per Reference Tariff Schedule, for each consumer category based on approved sales for FY 2016-17. The non-tariff income was then apportioned to various consumer categories.
- The category wise revenue including non-tariff income was compared with category wise cost of supply, based on cost of service arrived for each category. Based on the cost and revenue from each consumer category, some consumer categories were classified as subsidizing (if the revenue is more than the cost) while others as subsidized (if the revenue is less than the cost).
- The cumulative surplus revenue over cost available from subsidizing categories was first utilized to meet the deficit of subsidized consumer categories other than LT-I: Domestic, LT-II (D): Haircutting Salons, LT-V: Agriculture and Poultry farms (LT & HT).
- The remaining surplus, if any, was allocated to LT-I (A): Domestic and LT-V: Agriculture categories in the ratio of the category's deficit to the total deficit of these categories.
- After allocation of the surplus available, the net deficit (cost for that category less revenue from the category and surplus allocated to that category) was computed for LT-I: Domestic, LT-II (D): Hair cutting salons, LT-V: Agriculture and Poultry farms (LT & HT).
- To meet the remaining cost, the energy charges for LT-I: Domestic, LT-II (D): Hair cutting salons, LT-V: Agriculture categories and Poultry farms (LT & HT) were revised upwards by an amount equal to net deficit divided by approved sales. By doing so, the revenue from tariff and allocated surplus was sufficient to meet the cost.

7.38 The Commission has determined the full cost recovery tariff schedule for each of the Licensees by following the methodology enumerated above. If the Licensees levy the tariff as per the full cost recovery tariff schedule for FY 2016-17, they would recover the approved ARR in full.

7.39 The table below details the Commission determined full cost recovery tariff schedule for FY 2016-17.

Table 65: Full Cost Recovery Tariff Schedule for FY 2016-17

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)	
	Unit	Rate	TSSPDCL	TSNPDCL
Low Tension				
LT I: Domestic				
LT I (A): Up to 100 Units/Month				
0-50			2.32	7.44

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51-100			2.80	6.43
LT I (B)(i): Above 100 Units/Month & Upto 200 Units/Month				
0-100			3.30	6.20
101-200			4.30	4.30
LT I (B)(ii): Above 200 Units/Month				
0-200			5.00	5.00
201-300			7.20	7.20
301-400			8.50	8.50
401-800			9.00	9.00
Above 800 units			9.50	9.50
LT II: Non-Domestic/Commercial				
LT II (A): Up to 50 Units/Month				
0-50	kW	50	6.00	6.00
LT II (B): Above 50 Units/Month				
0-100	kW	60	7.50	7.50
101-300	kW	60	8.90	8.90
301-500	kW	60	9.40	9.40
Above 500	kW	60	10.00	10.00
LT II (C): Advertisement Hoardings				
	kW	60	12.00	12.00
LT II (D): Haircutting salons consuming upto 200 units/month				
0-50	kW	60	6.88	8.31
51-100	kW	60	6.89	8.31
101-200	kW	60	7.50	7.50
LT III: Industry				
Industries	kW	60	6.70	6.70
Seasonal Industries (off season)	kW	60	7.40	7.40
Pisciculture/ Prawn culture	kW	21	5.20	5.20
Sugarcane crushing	kW	21	5.20	5.20
Poultry farms	kW	50	6.00	6.00
Mushroom, Rabbit, Sheep and Goat farms	kW	60	6.30	6.30
Floriculture in Green House	kW	60	6.30	6.30
LT IV: Cottage Industries				
(A) Cottage Industries	kW	20/kW subject to a minimum of Rs 30/month	4.00	4.00
(B) Agro Based Activities	kW	20/kW subject to a minimum of Rs 30/month	4.00	4.00
LT V: Agriculture				
LT V (A): Agriculture with DSM Measures				
Corporate Farmers			3.15	5.10
Wet Land Farmers (Holdings >2.5 acre)	HP	525 *	1.70	4.13
Dry Land Farmers (Connections > 3 nos.)	HP	525 *	1.57	4.06

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Wet Land Farmers (Holdings <= 2.5 acre)			1.37	5.16
Dry Land Farmers (Connections <= 3 nos.)			1.37	5.14
LT V (B): Agriculture without DSM Measures				
Corporate Farmers			3.87	5.10
Wet Land Farmers (Holdings >2.5 acre)	HP	1050 *	1.77	2.92
Dry Land Farmers (Connections > 3 nos.)	HP	1050 *	1.87	2.93
Wet Land Farmers (Holdings <= 2.5 acre)	HP	525 *	1.63	2.39
Dry Land Farmers (Connections <= 3 nos.)	HP	525 *	1.58	2.39
LT V (C): Others				
Horticulture Nurseries with CL up to 15 HP	HP	20	4.00	4.00
LT VI: Street Lighting & PWS				
LT VI (A): Street Lighting				
Panchayats	kW	32	6.10	6.10
Municipalities	kW	32	6.60	6.60
Municipal Corporations	kW	32	7.10	7.10
LT VI (B): PWS Schemes				
Panchayats	HP	32/ HP subject to a minimum of Rs 50/month	5.00	5.00
Municipalities	HP	32/ HP subject to a minimum of Rs 50/month	6.10	6.10
Municipal Corporations	HP	32/ HP subject to a minimum of Rs 50/month	6.60	6.60
LT VII: General				
LT VII (A): General Purpose	kW	21	7.30	7.30
LT VII (B): Wholly Religious Places				
Load upto 2 kW	kW	21	5.40	5.40
Load above 2 kW	kW	21	6.00	6.00
LT VIII: Temporary Supply	kW	21	11.00	11.00
High Tension				
HT I(A): Industry General				
11 kV	kVA	390	6.65	6.65
33 kV	kVA	390	6.15	6.15
132 kV and above	kVA	390	5.65	5.65
HT I(A): Lights and Fans				
11 kV			6.65	6.65
33 kV			6.15	6.15
132 kV and above			5.65	5.65
HT I(A): Poultry Farms				
11 kV	kVA	390	6.65	6.65

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33 kV	kVA	390	6.15	6.15
HT I(A):Industrial Colonies				
11 kV			6.30	6.30
33 kV			6.30	6.30
132 kV and above			6.30	6.30
HT I(A):Seasonal Industries				
11 kV	kVA	390	7.60	7.60
33 kV	kVA	390	6.90	6.90
132 kV and above	kVA	390	6.70	6.70
HT I(A):Optional Category with Load up to 150 kVA				
11 kV	kVA	80	7.00	7.00
HT I(B):Ferro Alloy Units				
11 kV			5.90	5.90
33 kV			5.50	5.50
132 kV and above			5.00	5.00
HT II Others				
11 kV	kVA	390	7.80	7.80
33 kV	kVA	390	7.00	7.00
132 kV and above	kVA	390	6.80	6.80
HT III Airports, Bus stations and Railway stations				
11 kV	kVA	390	7.50	7.50
33 kV	kVA	390	6.85	6.85
132 kV and above	kVA	390	6.45	6.45
HT IV Irrigation and Agriculture				
11 kV			6.40	6.40
33 kV			6.40	6.40
132 kV and above			6.40	6.40
HT IV CP Water Supply Schemes				
11 kV			5.10	5.10
33 kV			5.10	5.10
132 kV and above			5.10	5.10
HT V (A) Railway Traction				
HT V (B) HMR				
			7.00	7.00
HT VI Townships & Residential Colonies				
11 kV	kVA	60	6.30	6.30
33 kV	kVA	60	6.30	6.30
132 kV and above	kVA	60	6.30	6.30
HT VII: Temporary				
11 kV	kVA	500	10.80	10.80
33 kV	kVA	500	10.00	10.00
132 kV and above	kVA	500	9.80	9.80
HT VIII: RESCO				
11 kV			1.00	1.00

* Equivalent flat rate tariff – INR/HP/year.

7.40 In the absence of any external subsidy u/s 65 of the Electricity Act, 2003 the Licensees will have to charge the rates contained in the above full cost recovery schedule to generate the revenue required to meet the approved cost.

Chapter-8: Retail supply tariff Schedule for FY 2016-17

Retail supply tariff schedule

- 8.1 The details of subsidy amount as committed by the Government through the consent letter are presented in the table below:

Table 66: Subsidy commitment of GoTS to maintain retail supply tariff schedule for FY 2016-17

Consumer Category	Amount (INR. Crore)		
	TSSPDCL	TSNPDCL	Total
LT-I: Domestic	53.93	1087.81	1141.74
LT-I: Domestic – Additional Subsidy***	56.68	57.72	114.40
LT-II: Non-Domestic/ Commercial			
LT-II (D): Haircutting Salons *	1.13	2.27	3.39
LT-V: Agricultural	946.43	2359.04	3305.48
Poultry Farms (LT+HT) – Subsidy @ INR. 2.00 per unit **	16.11	3.41	19.52
Total subsidy required	1,074.27	3,510.23	4,584.50

- 8.2 The Commission in accordance with the decisions enumerated in earlier chapters and the consent from Government of Telangana for provision of subsidy, hereby determines the retail supply tariff rates for FY 2016-17. The retail supply tariff rates and the terms & conditions shall be applicable with effect from 01st July 2016 to 31st March 2017 in respect of the two Licensees in the state of Telangana.
- 8.3 The Commission has passed an order to continue the existing retail supply tariff (as determined in the Retail Supply Tariff Order for FY 2015-16) from 1st April 2016 onwards until the Commission passes the Retail Supply Tariff Order for FY2016-17, vide its Interim Order dated 29th March 2016 in OP. No. 6,7 & 12 of 2016. In view of passing this Retail Supply Tariff Order, the said Order (dated 29th March 2016) is rendered inoperative with effect from 1st July, 2016.

Table 67: Retail Supply Tariff Schedule for FY 2016-17

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
Low Tension			
LT I: Domestic			
LT I (A): Up to 100 Units/Month			
0-50			1.45
51-100			2.60

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
LT I (B)(i): Above 100 Units/Month & up to 200 Units/Month			
0-100			3.30
101-200			4.30
LT I (B)(ii): Above 200 Units/Month			
0-200			5.00
201-300			7.20
301-400			8.50
401-800			9.00
Above 800 units			9.50
LT II: Non-Domestic/Commercial			
LT II (A): Up to 50 Units/Month			
0-50	kW	50	6.00
LT II (B): Above 50 Units/Month			
0-100	kW	60	7.50
101-300	kW	60	8.90
301-500	kW	60	9.40
Above 500	kW	60	10.00
LT II (C): Advertisement Hoardings	kW	60	12.00
LT II (D): Haircutting salons consuming upto 200 units/month			
0-50	kW	60	5.30
51-100	kW	60	6.60
101-200	kW	60	7.50
LT III: Industry			
Industries	kW	60	6.70
Seasonal Industries (off season)	kW	60	7.40
Pisciculture/ Prawn culture	kW	21	5.20
Sugarcane crushing	kW	21	5.20
Poultry farms	kW	50	4.00
Mushroom, Rabbit, Sheep and Goat farms	kW	60	6.30
Floriculture in Green House	kW	60	6.30
LT IV: Cottage Industries			
(A) Cottage Industries	kW	20/kW subject to a minimum of Rs 30/month	4.00
(B) Agro Based Activities	kW	20/kW subject to a minimum of Rs 30/month	4.00
LT V: Agriculture			
LT V (A): Agriculture with DSM Measures			

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
Corporate Farmers			2.50
Wet Land Farmers (Holdings >2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections > 3 nos.)	HP	525 *	0.50
Wet Land Farmers (Holdings <= 2.5 acre)			0.00
Dry Land Farmers (Connections <= 3 nos.)			0.00
LT V (B): Agriculture without DSM Measures			
Corporate Farmers			3.50
Wet Land Farmers (Holdings >2.5 acre)	HP	1050 *	1.00
Dry Land Farmers (Connections > 3 nos.)	HP	1050 *	1.00
Wet Land Farmers (Holdings <= 2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections <= 3 nos.)	HP	525 *	0.50
LT V (C): Others			
Horticulture Nurseries with CL up to 15 HP	HP	20	4.00
LT VI: Street Lighting & PWS			
LT VI (A): Street Lighting			
Panchayats	kW	32	6.10
Municipalities	kW	32	6.60
Municipal Corporations	kW	32	7.10
LT VI (B): PWS Schemes			
Panchayats	HP	32/ HP subject to a minimum of Rs 50/month	5.00
Municipalities	HP	32/HP subject to a minimum of Rs 100/month	6.10
Municipal Corporations	HP	32/HP subject to a minimum of Rs 100/month	6.60
LT VII: General			
LT VII (A): General Purpose	kW	21	7.30
LT VII (B): Wholly Religious Places			
Load up to 2 kW	kW	21	5.40
Load above 2 kW	kW	21	6.00
LT VIII: Temporary Supply	kW	21	11.00
High Tension			

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
HT I(A): Industry General			
11 kV	kVA	390	6.65
33 kV	kVA	390	6.15
132 kV and above	kVA	390	5.65
HT I(A):Lights and Fans			
11 kV			6.65
33 kV			6.15
132 kV and above			5.65
HT I(A):Poultry Farms			
11 kV	kVA	390	4.65
33 kV	kVA	390	4.15
HT I(A):Industrial Colonies			
11 kV			6.30
33 kV			6.30
132 kV and above			6.30
HT I(A):Seasonal Industries			
11 kV	kVA	390	7.60
33 kV	kVA	390	6.90
132 kV and above	kVA	390	6.70
HT I(A):Optional Category with Load up to 150 kVA			
11 kV	kVA	80	7.00
HT I: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			5.65
33 kV			5.15
132 kV and above			4.65
HT-I (A) – Poultry Farms - Time of Day Tariffs (6 pm to 10 pm)			
11 kV			5.65
33 kV			5.15
HT-I (A) – Poultry Farms - Time of Day Tariffs (6 am to 10 am)			

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
11 kV			5.65
33 kV			5.15
HT-I (A) – Poultry Farms - Time of Day Tariffs (10 pm to 6 am)			
11 kV			3.65
33 kV			3.15
HT I(B):Ferro Alloy Units			
11 kV			5.90
33 kV			5.50
132 kV and above			5.00
HT II Others			
11 kV	kVA	390	7.80
33 kV	kVA	390	7.00
132 kV and above	kVA	390	6.80
HT II: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.80
33 kV			6.00
132 kV and above			5.80
HT III Airports, Bus stations and Railway stations			
11 kV	kVA	390	7.50
33 kV	kVA	390	6.85
132 kV and above	kVA	390	6.45
HT III: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.50
33 kV			7.85

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
132 kV and above			7.45
HT III: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.50
33 kV			5.85
132 kV and above			5.45
HT IV Irrigation and Agriculture			
11 kV			6.40
33 kV			6.40
132 kV and above			6.40
HT IV CP Water Supply Schemes			
11 kV			5.10
33 kV			5.10
132 kV and above			5.10
HT V (A) Railway Traction			7.10
HT V (B) HMR			7.00
HT VI Townships & Residential Colonies			
11 kV	kVA	60	6.30
33 kV	kVA	60	6.30
132 kV and above	kVA	60	6.30
HT VII: Temporary			
11 kV	kVA	500	10.80
33 kV	kVA	500	10.00
132 kV and above	kVA	500	9.80
HT VIII: RESCO			
11 kV			1.00

* Equivalent flat rate tariff – INR/HP/year.

Chapter-9: Terms and conditions

- 9.1 Applicable with effect from 1st July, 2016 to 31st March, 2017 in respect of the two Licensees in the state of Telangana (i.e. TSSPDCL and TSNPDCL) and also RESCO.
- 9.2 The L.T. Tariffs determined in PART 'A' and H.T tariffs determined in PART 'B' below are subject to the following two general conditions.
- Fuel Surcharge Adjustment (FSA) will be extra as applicable as notified by the Commission from time to time.
 - The Tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act as adopted by Government of Telangana.

Part 'A'

LT-Tariffs

- 9.3 **System of supply** Low Tension A.C. 50 Cycles
Three Phase Supply at 415 Volts
Single Phase supply at 240 Volts
- 9.4 These tariffs are applicable for supply of Electricity to L.T consumers with a contracted load of 56 kW/ 75 HP and below. (However, contracted load up to 75 kW/ 100 HP will be treated as LT, for LT-III Industrial category).

LT-I: Domestic

Applicability

- 9.5 This tariff is applicable for supply of electricity for lights, fans and other domestic purposes to domestic premises. *Domestic establishment /Premises is one which is used for dwelling/residential purpose.*
- Note: For domestic category, the households having a separate kitchen will be treated as a separate establishment.
- 9.6 The LT Domestic consumers are divided broadly into two groups, Viz. LT-I (A), LT-I (B).
- The sub category LT I (A) shall be applicable to the consumers having consumption of units 100 and below per month.
 - The sub category LT-I (B) has been further sub-divided into LT-I (B)(i) and LT-I (B)(ii).

- LT-I (B)(i) shall be applicable to the consumers with consumption above 100 units and up to 200 units per month.
- LT-I (B)(ii) shall be applicable to the consumers having consumption above 200 units per month.

9.7 The consumers shall be billed electricity charges as shown below:

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
LT I: Domestic			
LT I (A): Up to 100 Units/Month			
0-50			1.45
51-100			2.60
LT I (B)(i): Above 100 Units/Month & up to 200 Units/Month			
0-100			3.30
101-200			4.30
LT I (B)(ii): Above 200 Units/Month			
0-200			5.00
201-300			7.20
301-400			8.50
401-800			9.00
Above 800 units			9.50

9.8 Subject to monthly minimum energy charges of

Single phase supply:

Contracted load up to 1 kW: INR. 25 per month

Contracted load above 1 kW: INR. 50 per month

Three phase supply: INR. 150 per month

LT-II: Non-Domestic/ Commercial

This category has been sub-divided into LT-II (A), LT II (B), LT II (C) and LT II (D).

LT-II (A) and LT-II (B)

Applicability

- Consumers who undertake Non Domestic activity.
- Consumers who undertake Commercial activity.
- Consumers who do not fall in any other LT category i.e., LT-I, LT-III to LT-VIII categories.

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kVAh or INR./ kWh)
	Unit	Rate	
LT II (C): Advertisement Hoardings	kW	60	12.00

9.14 Subject to a monthly minimum energy charge of INR. 300 per month

LT-II (D): Haircutting Salons

Applicability

9.15 The tariff is applicable for supply of electricity to hair cutting salons with consumption up to 200 units per month. For consumers whose consumption is above 200 units per month shall be billed under LT-II (B) sub-category.

9.16 The consumer shall be billed electricity charges as shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kVAh or INR./ kWh)
	Unit	Rate	
LT II (D): Haircutting salons consuming upto 200 units/month			
0-50	kW	60	5.30
51-100	kW	60	6.60
101-200	kW	60	7.50

9.17 Monthly minimum energy charges: INR. 65 per month for single phase supply
INR. 200 per month for three phase supply

LT-III: Industry

Applicability

9.18 The tariffs are applicable for supply of electricity to Low Tension Industrial consumers with a Contracted load of 75 kW/ 100 HP and below. Industrial purpose shall mean, supply for purpose of manufacturing, processing and/or preserving goods for sale, but shall not include shops, business houses, offices, public buildings, hospitals, hotels, hostels, choultries, restaurants, clubs, theaters, cinemas, bus stations, railway stations and other similar premises, notwithstanding any manufacturing, processing or preserving goods for sale.

9.19 This tariff will also apply to;

- i. Water Works & Sewerage Pumping Stations operated by Government Departments or Co-operative Societies and pumpsets of Railways, pumping of water by industries as subsidiary function and sewerage pumping stations operated by local bodies and Drinking Water filtering plants using only Reverse Osmosis (RO) process.
- ii. Workshops, flour mills, oil mills, saw mills, coffee grinders and wet grinders, Ice candy units with or without sale outlets, Goshalas, grass cutting and fodder cutting units.
- iii. The Information Technology (IT) units identified and approved by the Consultative Committee on IT Industry (CCITI) constituted by GoTS.
- iv. Newspaper printing units.
- v. Poultry Farming Units.
- vi. Pisciculture and Prawn culture units.
- vii. Mushroom production units, Rabbit Farms, Sheep Farms and Goat Farms other than those coming under LT-IV with load exceeding 10 HP.
- viii. Floriculture in Green Houses.
- ix. Sugar cane crushing.

9.20 The rates for LT-III: Industry are shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kVAh or INR./ kWh)
	Unit	Rate	
LT III: Industry			
Industries	kW	60	6.70
Pisciculture/ Prawn culture	kW	21	5.20
Sugarcane crushing	kW	21	5.20
Poultry farms	kW	50	4.00
Mushroom, Rabbit, Sheep and Goat farms	kW	60	6.30
Floriculture in Green House	kW	60	6.30
<ul style="list-style-type: none"> • 1 HP = 0.75 kW • For the purpose of billing, 1 kVA shall be treated as being equal to 1 kW. 			

- If the metering is on HT side, 1% of total energy consumed shall be deducted from recorded energy for the purpose of billing.
- No manufacturing/ production certification shall be required, if the poultry farm has no in-house manufacturing activity such as feed mills. Poultry farms are exempted from general condition of 3 HP minimum load for releasing the service.

- No manufacturing/ production certification shall be required for drinking water filtering plants using R.O. process.

Rates for seasonal industries under LT-III

9.21 Where a consumer avails supply of energy under LT- III for manufacture of sugar or ice or salt, decorticating, seed processing, fruit processing, ginning and pressing, cotton seed oil mills, tobacco processing and re-drying and for such other industries or processes as may be approved by the Commission from time to time principally during certain seasons or limited periods in the tariff year and if the main plant is regularly closed down during certain months of the tariff year, such consumer may be charged for the months during which the plant is shut down (which period shall be referred to as the off-season period) as follows.

9.22 The LT-III off season rates are

Fixed charge

On 30% of contracted load INR. 60/ kW/ Month

Energy charges

For energy consumed at kVAh or kWh: INR. 7.40

- If the metering is on HT side, 1% of total energy consumed shall be deducted from recorded energy for the purpose of billing.

LT-IV (A): Cottage Industries

Applicability

9.23 Applicable for supply of energy to Dhobighats & bonafide (as certified by D.E(operations)) small Cottage Industries specifically power looms, Carpentry, blacksmithy, Kanchari, Gold smithy, shilpi, pottery, Mochi, Phenoyl production units, Agarbathi production units, Wax Candle making units, Papads Manufacturing units, Leather (Chappals) making, Soap Industry, Plaster of Paris units, Laque toy making units, Pop Toys, Wood carving/toy making units, Pickles Manufacturing, Mango jelly units, Adda leaf plate industry having connected load not exceeding 10 HP including incidental lighting in the premises.

9.24 The consumer shall be billed electricity charges as shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT IV (A): Cottage Industries	kW	Rs 20 /- per month per kW of contracted load subject to a minimum of Rs 30/- per month	4.00
Note: Units which exceed 10 HP connected load shall be billed at tariff specified for LT-III Industry category			

LT-IV (B): Agro Based Activities

Applicability

9.25 This tariff is applicable to bonafide (as certified by DE/Operations) small agro based industrial units located in rural areas covering Sisal fibre extraction co-operative units, Vermiculture, Sericulture, Mushroom growing, Rabbit farming, Sheep farming, Goat farming, Emu birds farming, Apiculture (honey making), Chaff-cutting, Millets making and Dairy farming activities with connected load upto 10 HP (including incidental lighting load).

9.26 The consumer shall be billed electricity charges as shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT IV (B): Agro Based Activities	kW	Rs 20 /- per month per kW of contracted load subject to a minimum of Rs 30/- per month	4.00
Note: Units which exceed 10 HP connected load shall be billed at tariff specified for LT-III Industry category			

LT-V: Agricultural

9.27 The charges applicable to LT-V (A): Agricultural with DSM measures are shown below

Category	Fixed Charge (INR/ year)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT V (A): Agriculture with DSM Measures			
Corporate Farmers			2.50
Wet Land Farmers (Holdings >2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections > 3 nos.)	HP	525 *	0.50
Wet Land Farmers (Holdings <= 2.5 acre)			0.00
Dry Land Farmers (Connections <= 3 nos.)			0.00
* Equivalent flat rate tariff			

9.28 The charges applicable to LT-V (B): Agriculture without DSM measures are shown below

Category	Fixed Charge (INR/ year)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT V (B): Agriculture without DSM Measures			
Corporate Farmers			3.50
Wet Land Farmers (Holdings >2.5 acre)	HP	1050 *	1.00
Dry Land Farmers (Connections > 3 nos.)	HP	1050 *	1.00
Wet Land Farmers (Holdings <= 2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections <= 3 nos.)	HP	525 *	0.50
* Equivalent flat rate tariff			

Note: For LT lift irrigation schemes, if supply is made beyond 9 hours per day, such additional consumption shall be billed at INR. 3.50 per unit

9.29 The charges applicable for LT-V (C): Others are shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT V (C): Others			
Horticulture Nurseries with CL up to 15 HP	HP	20	4.00

Note: Horticulture Nurseries with connected load of more than 15 HP shall be billed under LT-III: Industry (General) tariff.

LT-VI: Street lighting and PWS schemes

Applicability

9.30 Applicable for supply of energy for lighting on public roads, streets, thoroughfares including parks, markets, cart-stands, taxi stands, bridges and also for PWS schemes in the Local Bodies viz., Panchayats/Municipalities/Municipal Corporations. Metering is compulsory irrespective of tariff structure.

9.31 The charges for LT-VI (A): Street lighting are as shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT VI (A): Street Lighting			
Panchayats	kW	32	6.10
Municipalities	kW	32	6.60
Municipal Corporations	kW	32	7.10

9.32 The charges for LT-VI (B): PWS schemes are as shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kVAh or INR./ kWh)
	Unit	Rate	
LT VI (B): PWS Schemes			
Panchayats	HP	Rs 32/HP of contracted load subject to a minimum of Rs 50	5.00
Municipalities	HP	Rs 32/HP of contracted load subject to a minimum of Rs100	6.10
Municipal Corporations	HP	Rs 32/HP of contracted load subject to a minimum of Rs100	6.60

LT-VII: General

LT-VII (A): General purpose

Applicability

9.33 Applicable for supply of energy to places of worship like Churches, Temples, Mosques, Gurudwaras, Crematoriums which are not covered under LT-VII (B), Government Educational Institutions and Student Hostels run by Government agencies, Charitable Institutions i.e., Public charitable trusts and societies registered under the Societies Registration Act running educational and medical institutions on a no profit basis, recognized service institutions and registered old age homes.

9.34 The charges applicable are shown below.

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kVAh or INR./ kWh)
	Unit	Rate	
LT VII (A): General Purpose	kW	21	7.30
Note: Trivector meters shall be provided for all 10 kW and above services. Energy charges shall be billed on kVAh for all 10 kW & above services. For loads below 10 kW, energy charges shall be billed on kWh basis.			

9.35 Monthly minimum energy charges: INR.50 per month for single phase supply
INR. 150 per month for three phase supply

LT-VII (B): Wholly Religious places

Applicability

9.36 Applicable for supply of energy to places of worship such as Churches, Temples, Mosques, Gurudwaras and Crematoriums.

Applicability of this category shall be subject to the following conditions:

- i. The religious institution owning the place of worship should run such place of worship on no profit basis.

- ii. The religious institution should be registered under the Income Tax Act, 1961.
- iii. The premise for the place of worship shall be structurally distinct from premises running activities other than places of worship.
- iv. The premise for the purpose shall not be owned by any individual (name) but shall be owned by a religious institution or association of a community i.e. a class of persons not less than 15 distinct individuals, having their names registered under one place of worship only.

9.37 Premises with a connected load of more than 2 kW shall also be covered but consumption shall not exceed 500 units in any month, otherwise they will be billed under the LT-VII (A) General Purpose category.

9.38 The charges applicable are shown below.

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT VII (B): Wholly Religious Places			
Load upto 2 kW	kW	21	5.40
Load above 2 kW	kW	21	6.00
Note: Trivector meters shall be provided for all 10 kW and above services. Energy charges shall be billed on kVAh for all 10 kW & above services. For loads below 10 kW, energy charges shall be billed on kWh basis.			

9.39 Minimum monthly charges shall not be levied on this sub-category.

LT-VIII: Temporary supply

9.40 The charges applicable are shown below

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ kWh)
	Unit	Rate	
LT VIII: Temporary Supply	kW	21	11.00
Note: Trivector meters shall be provided for all 10 kW and above services. Energy charges shall be billed on kVAh for all 10 kW & above services. For loads below 10 kW, energy charges shall be billed on kWh basis.			

9.41 A monthly minimum energy charge at INR. 125 per kW or part thereof of the contracted load for first 30 days or part thereof and for every subsequent period of 15 days or part thereof a charge of INR. 75 per kW to be levied.

Terms and conditions of LT supply

9.42 General conditions of LT tariff

1. Fuel Surcharge Adjustment (FSA) will be extra as applicable as notified by the Commission from time to time.
2. For Categories LT-I, II and VII supply will be extended on single phase only up to 5 kW of Contracted Load.
3. The Tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act as adopted by Government of Telangana.
4. The Licensee shall have the right to classify or re-classify the category of supply of energy to any premises under an appropriate category of L.T. Tariff.

9.43 Additional charges for belated payments of charges

- i. The C.C. bills shall be paid by the consumers within the due date mentioned in the bill, i.e. 15 days from and including the date of the bill.
- ii. In case of LT- I (A), LT-I (B), LT-II(A),LT-II(D), LT-IV and LT-V (C), if payment is made after due date, the consumers are liable to pay, Delayed Payment Surcharge (DPS) per month on the bill amount at the rates given in table below.

LT-I (A)	INR. 10 per month
LT-I (B), LT-II (A), LT-II (D), LT-IV and LT-V (C)	INR. 25 per month

- iii. In case of LT- II(B), LT-II(C), LT-III, LT-VI and LT-VII, the Licensee shall levy Delayed Payment Surcharge (DPS) on the bill amount at the rate of 5 paisa/ INR.100/ day calculated from the due date mentioned on the bill, up to the date of payment or INR. 150 whichever is higher. In case of grant of installments, the Licensees shall levy interest at the rate of 18% per annum on the outstanding amounts compounded annually and the two (DPS and Interest) shall not be levied at the same time.
- iv. If the C.C. bills amount is not paid within 15 days from the due date the power supply is liable for disconnection.
- v. For re-connection of power supply after disconnection, the consumer has to pay reconnection fees. The re- connection charges shall not be collected without actual disconnection.

Category wise specific conditions of LT tariff

LT-I: Domestic

- 9.44 If electricity supplied in domestic premises is required to be used for non- domestic or commercial purposes, a separate connection should be taken for such loads under LT-II category, failing which the entire supply shall be charged at LT-II category tariff, apart from liability for penal charges as per the terms and conditions of the supply.
- 9.45 For common services like Water supply, common lights in corridors and supply for lifts in multistoried buildings, consumers shall be billed electricity charges as follows:
- i. At LT-I (B) if the plinth area occupied by the domestic consumers is 50% or more of the total plinth area.
 - ii. At LT-II (B), if the plinth area occupied by the domestic consumers is less than 50% of the total plinth area.
 - iii. If the service in a flat is for domestic purpose, it will be charged at LT-I (Domestic) as applicable. If the service in a flat is for commercial or office use or any other purpose, which does not fall under any of LT-I and/or LT III to VIII, it will be charged at LT-II (A), II (B) or II (D) Non-Domestic/Commercial as applicable.
- 9.46 Single Point LT services released to residential complexes of State Government/Central Government Departments under specific orders of Licensee with Contracted Load/ Connected Load in excess of 56 kW/ 75 HP shall continue to be billed under LT-I (B) Domestic tariff slab rate applicable based on the average monthly energy consumption per each authorized dwelling i.e., total energy consumption in the month divided by the number of such dwelling units, in the respective residential complexes. The above orders are subject to the following conditions, namely:
- i. Orders are applicable to Police Quarters and other State/Central Government residential complexes specifically sanctioned by the Licensee.
 - ii. Provided that, it is at the request of the designated officer, who shall give an unconditional undertaking that he will pay up the bill for CC charges to the Licensee irrespective of collection from the individual occupants.
 - iii. The consumers shall be billed at the appropriate slab rate in tariff based on the average monthly consumption per dwelling unit in the complex.
 - iv. Meter reading shall be taken monthly in all such cases.
 - v. Customer charges calculated at corresponding rate applicable slab-wise per month for each dwelling unit shall be billed.

- 9.47 Where an individual consumer seeks to avail supply for Domestic purpose with a connected load of over 56 kW/75 HP, such consumers may be given supply under this category subject to the following conditions.
- i. The metering shall be provided by the DISCOMs on HT side of the distribution transformer.
 - ii. Meter reading shall be done monthly and the energy recorded in the HT metering shall be billed at tariff rates under LT-I (B).

LT-II: Non-Domestic/ Commercial

- 9.48 For loads 10 kW and above, a LT tri-vector meter shall be provided and energy charges shall be billed on kVAh.
- 9.49 For loads below 10 kW, the billing shall be based on kWh only.
- 9.50 In respect of the complexes having connected load of more than 56 kW / 75 HP released under specific orders of Licensee for Single Point Bulk supply, where such complex is under the control of a specified organization/ agency taking responsibility to pay monthly current consumption bills regularly and abide by the Terms and Conditions of supply as per agreement, the billing shall be done at the highest slab tariff rate under LT-II (B). The energy shall be measured on the High Tension side of the transformer. In case, where energy measured on LT side of the transformer, 3% of the recorded energy during the month shall be added to arrive at the consumption on High Tension side of the transformer.

LT-III: Industry

- 9.51 The connected load shall not exceed the contracted load specified in the agreement as per sanction accorded for the service. The fixed charges shall be computed based on contracted Load or actual Recorded Demand whichever is higher. For the purpose of billing, 1 kVA shall be treated as being equal to 1 kW.
- 9.52 **Sugarcane Crushing**
- Sugar cane crushing operations will be allowed under existing agricultural connections with the specific permission from concerned DE (Operation).
- 9.53 **Metering and load Conditions**
- i. A LT Tri-vector meter shall be provided for the consumers with contracted load of 15 kW/ 20 HP to 37.5 kW/ 50 HP.
 - ii. For loads above 37.5 kW/ 50 HP to 75 kW/ 100 HP, the metering will be provided on HT side of the Distribution Transformer.

- iii. Energy charges shall be billed on kVAh basis, for all consumers with contracted load of 15 kW/ 20 HP and above. For loads below 15 kW/ 20 HP, billing shall be done based on kWh.
- iv. If the recorded demand of any service connection under this category exceeds the 75 kVA (1 kVA = 1 kW), such excess demand shall be billed at the demand charge prescribed under HT-I (11 kV supply).
- v. In cases where metering is provided on LT side of transformer (due to space constraints), 3% of the recorded energy during the month shall be added to arrive at the consumption on High Tension side of the transformer.

Seasonal industries

- 9.54 Consumers, classified as seasonal load consumers, who are desirous of availing the seasonal benefits shall specifically declare their season at the time of entering into agreement that their loads should be classified as seasonal loads.
- 9.55 The period of season shall not be less than 4(four) continuous months. However, consumer can declare longer seasonal period as per actuals.
- 9.56 Existing eligible consumers who have not opted earlier for availing of seasonal tariffs will also be permitted to opt for seasonal tariff on the basis of application to the concerned Divisional Engineer of the Licensee.
- 9.57 Consumer, who desires to have a change in the period classified as “season” declared by him, shall file a declaration at least a month before commencement of the respective tariff year.
- 9.58 The seasonal period once notified cannot be changed, during one Tariff year.
- 9.59 The off-season tariff is not available to composite units having seasonal and other categories of loads.
- 9.60 Any consumer who after declaring the period of season consumes power for his main plant during the off-season period, shall not be entitled to this concession during that tariff year.
- 9.61 Development charges as applicable to regular LT consumers shall be paid by the consumers for availing supply under the above said category with seasonal benefits. Consumers who have paid the development charges already as regular consumers need not pay the development charges.

LT-V: Agriculture

- 9.62 Agricultural consumers are permitted to use one lamp of 15 watts or three lamps of 5 watts each, near the main switch as pilot lamps.

- 9.63 Supply to the L.T. Agricultural services will be suitably regulated as notified by Licensee from time to time.
- 9.64 The Farmer eligible for free supply under Dry Land as well as Wet Lands have to comply with the following Demand Side Management measures (DSM) as applicable for his pumping system viz., submersible and surface pump set otherwise he shall not be eligible for free supply.
- 9.65 DSM measures include frictionless foot valve, capacitor of adequate rating, HDPE or RPVC piping at suction and/or delivery and ISI marked mono- block or submersible pump-sets.
- 9.66 Farmers in dry land areas shall not be eligible for free supply if they grow Paddy in second crop.
- 9.67 All new connections shall be given only if the farmer uses a 5 star rated pump and complies with the DSM measures and with meters.

LT-VI: Street lighting and PWS scheme

LT-VI (A): Street lighting

- 9.68 The cost of fittings shall be borne or paid for by Local bodies. The responsibility for maintenance including renewals and replacements rests with the Local bodies viz., Panchayats, Municipalities, Municipal Corporations.
- 9.69 Where the cost of fittings is borne by the Licensee, the first supply of filament lamps, fluorescent tubes, mercury vapor lamps including special type lamps along with their fittings will be made by the Licensee at its cost. In such cases, consumer (Local bodies) will have to pay fixed charges. However, where the cost of fittings is borne by the consumer but maintenance is done by the Licensee, the consumer will have to pay fixed charges. The details of the fixed charges to be paid in each of the case are detailed below

Si. No	Fittings for	Fixed charges Per Month where the cost of fittings is borne by Licensee	Fixed charges per month where the cost of fittings is borne by the Local Body but maintenance by Licensee
		INR	INR
1	Ordinary Filament Lamp	2	1
2	Fluorescent Lamp 40 W Single Fixture	7	4
3	Fluorescent Lamp 40 W Double Fixture	8	4
4	M.V. Lamps 80 W Fixture	12	6
5	M.V. Lamps 125 W Fixture	15	8

Si. No	Fittings for	Fixed charges Per Month where the cost of fittings is borne by Licensee	Fixed charges per month where the cost of fittings is borne by the Local Body but maintenance by Licensee
		INR	INR
6	M.V. Lamps 250 W Fixture	45	23
7	M.V. Lamps 400 W Fixture	50	25

- 9.70 The replacement of filament lamps, fluorescent tubes, mercury vapor and other special type of lamps will be done by the Local Body at its cost. However, in urban areas till such time the Municipalities and Corporations make their own arrangements for such replacements the Licensee may, if the consumer so desires, carry out the replacement provided the Local Body supplies the lamps and tubes. The consumer will in such cases be billed labor charges at the rate of INR. 2 per replacement. However, in rural areas, such replacement of bulbs supplied by the Local Body will be made by the Licensee without collecting labor charges. For this purpose the area coming under Gram Panchayat shall constitute 'Rural Area'.
- 9.71 Additional charges: Every local body shall pay an additional charge equivalent to any tax or fee levied by it under the provisions of any law including the Corporation Act, District Municipalities Act or Gram Panchayat Act on the poles, lines, transformers and other installations through which the local body receives supply.

LT-VIII: Temporary supply

- 9.72 Temporary supply can be given on the request of a consumer initially for a period up to 6 months as per the tariff applicable under the Temporary supply category. In case, the consumer requests for further extension, the same can be extended for another 6 months with the same tariff as applicable to Temporary supply category. After the expiry of 12 months, the consumer is at liberty to seek further extension provided, the consumer pays twice the regular tariff (i.e. the corresponding category) or the consumer has the choice of availing of regular supply.
- 9.73 Requests for temporary supply of energy cannot be considered unless there is a clear notice of at least one week in the case of domestic and three months in case of other types of supply. If supply is required at short notice, in addition to the charges mentioned below, an urgency charge, as specified in miscellaneous charges is also to be paid.
- 9.74 Estimated cost of the works means the cost of works for making necessary arrangements for supplying energy including the cost of distribution lines, switchgear, metering equipment, etc., as may be worked out on the basis of standards and norms prescribed by the Licensee, from time to time plus cost of dismantling the lines and other works when the supply is no more required less the cost of retrievable material.

- 9.75 (a) Estimated cost of the works, as detailed above, shall be paid by the consumer in advance. After the works are dismantled and retrievable materials returned to stores, a bill for the actual amount payable by the consumer shall be prepared and the difference would be collected from or refunded to the consumer, as the case may be. No development charges shall be collected for temporary supply.
- (b) In addition to the aforesaid charges payable by consumers availing temporary supply, they shall pay hire charges at 2% on cost of retrievable material per month or part thereof, for the duration of temporary supply. These charges will be claimed along with the consumption bills.
- 9.76 (a) The consumer requiring supply on temporary basis shall be required to deposit in advance, in addition to the estimated cost of works, the estimated consumption charges at the rate stipulated in Tariff Order for Temporary supply, and worked out on the basis for use of electricity by the consumer for 6 hours per day for a period of 2 months in case the supply is required for more than 10 days. If the period of temporary supply is for 10 days or less, the advance consumption charges for the actual period requisitioned shall be paid.
- (b) The Bill for electricity consumed in any month shall be prepared at the tariff applicable plus hire charges as mentioned above in 9.75 (b). The consumers have to pay monthly CC charges regularly during the period of availing temporary supply and the estimated energy consumption deposit shall be adjusted with the last month consumption and the balance if any shall be refunded.
- (c) In the case of consumers requiring temporary supply for the purposes of Cinema, the estimated energy charges for a minimum period of 3 months shall have to be deposited by the consumer subject to the condition that the consumer shall pay every month energy and other miscellaneous charges for the preceding month and the amount deposited by him in advance shall be adjusted with the last month consumption and the balance amount shall be refunded.
- (d) In the event of estimated energy charges deposited by the consumer having been found insufficient, the consumer shall deposit such additional amount, as may be demanded by the Licensee failing which the Licensee may discontinue the supply of electricity.
- 9.77 **Estimated cost of works and estimated energy charges**
- These charges shall be paid in advance by the consumer in accordance with the procedure prescribed above.
- 9.78 **Regular consumers requiring temporary additional supply**
- In cases where consumers availing regular supply of energy require additional supply for temporary period, the additional supply shall be given as a temporary service under a separate connection and charged as such in accordance with the above procedure.

Other charges in LT

Service connection charges

- 9.79 The service connection charges shall be collected as per the Regulations issued by the Commission from time to time. Service connection wires for LT-V Irrigation and Agricultural purposes shall be laid collecting an amount of INR. 25/- per HP of contracted load towards service connection charges.

Reconnection

LT service	
LT-I (A)	INR. 25
Overhead LT services	INR. 75
U.G. services	INR. 200

Testing

Installation	Charges
The first test and inspection of a new installation or of an extension to an existing installation.	Nil
Charges payable by the consumer in advance for each subsequent test and/or inspection if found necessary owing to any fault in the installation or to non-compliance of the conditions of supply	INR. 20
Meter	Charges
A.C. Single Phase Energy meter	INR. 100
A.C. Three Phase Energy meter	INR. 300
LT Tri Vector meter	INR. 2,000

Service calls

Charges for attendance of fuse man for Low Tension Consumers	
i. Replacing of Licensee's cut out fuses	Nil
ii. Replacing of consumer's fuses	INR. 3
Charges for attendance of fuse man/ Wireman at the consumer's premises during any function or temporary illumination provided a Fuse man/ Wireman can be spared for such work	INR. 100 for each day or part thereof.
Charges for infructuous visit of Licensee employees to the consumer's premises	INR. 25 for each visit when there is no defect in Licensee's equipment

Miscellaneous charges

Application Registration Fees	
i. For LT Agricultural & Domestic	INR. 25
ii. For all other LT Categories	INR. 50
Revision of estimates	INR. 10

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Fee for re-rating of consumer's installation at the request of the consumer. This does not include the additional charges payable by the consumer for increasing his connected load in excess of the contracted load, as provided in General Terms and conditions of supply.	INR. 20
Resealing of	
i. LT Meter Cut outs in the consumer's Premises	INR. 5
ii. M.D. Indicator meters and other apparatus in the consumer's premises. For all other LT Categories	INR. 100
The aforesaid charges do not include the additional charges payable by the consumer for breaking the seals	
For changing meter only at the request of the consumer (where it is not necessitated by increase in demand permanently)	INR. 25
For changing or moving a meter board	Actual cost of material and labor plus 25% supervision charges on cost of materials and labor
Customer charges	
Consumer category	INR./ month
LT-I: Domestic (Units/ month)	
0-50	INR. 25
51-100	INR. 30
101-200	INR. 50
201-300	INR. 60
301-400	INR. 80
401-800	INR. 80
Above 800 units	INR. 80
LT-II: Non-Domestic/ Commercial (Units/ month)	
0-50	INR. 45
51-100	INR. 55
101-300	INR. 65
301-500	INR. 65
Above 500 units	INR. 65
LT-II (C): Advertisement Hoardings	INR. 70
LT-II (D): Hari cutting Salons with consumption up to 200 units per month	
0-50	INR. 45

51-100	INR. 55
101-300	INR. 65
LT-III: Industry up to 20 HP	INR.75
LT-III: Industry 21-50 HP	INR. 300
LT-III: Industry 51-100 HP	INR. 1125
LT IV: Cottage Industries	INR. 45
LT V: Agriculture	INR. 30
LT VI: Street Lighting& PWS	INR. 50
LT-VII: General purpose	INR. 60
LT-VIII: Temporary supply	INR. 65
Urgency charges for temporary supply at short notice	INR. 100
Special rates chargeable for theft/pilferage and malpractice cases	As per the General Terms and Conditions of Supply (GTCS) approved by the Commission from time to time.
Supervision/Inspection & checking charges	
i. For LT I(A) Domestic	INR. 100
ii. For LT I(B) Domestic	INR. 100
iii. LT Agricultural	INR. 100
iv. For all other LT Categories	INR. 100

Miscellaneous works in LT

- 9.80 The charges for any work which the Licensee may be required to undertake for the consumer and which is not included in the foregoing schedule, shall be the actual cost of labour and material plus 25% on cost of labour and material to cover overhead charges. The aforesaid charges shall be paid by the consumer in advance.

Power factor apparatus and capacitor surcharge for LT

- 9.81 Every LT consumers not provided with tri-vector meters, except LT-I Domestic, using induction motors and/or welding transformers shall install shunt capacitors of the rating specified by the Licensees in the General Terms and Conditions of supply (GTCS) approved by the Commission from time to time. In case the rated capacity of the induction motor or welding transformer falls in between the steps of the stipulated ratings, the capacitors suitable for the next higher step shall be installed by the consumer.
- 9.82 The failure on part of the consumer with the above requirement shall be treated as violation of the terms and conditions of supply and the Licensee can terminate the contract and collect the sum equivalent to the minimum charges for the balance initial period of

agreement, apart from disconnection of supply as provided in the General Terms and Conditions of Supply.

- 9.83 In the case of LT consumers (except LT Domestic, LT-IV, LT-VI (A), LT-VII (B)) not covered by kVAh billing, if during inspection, no capacitor is found, or the capacitors already installed are found damaged or having defect or ceased to function, such consumer shall be liable to pay capacitor surcharge at 25% of the monthly bill amount, as per the terms and conditions of supply notified by the licensee and Licensees shall not levy LPF surcharge.
- 9.84 LT consumers, except LT-I Domestic, who are provided with metering capable of measuring active and reactive power under the orders of the Commission, shall maintain their power factor preferably in between 0.95 lag and 0.95 lead in the interest of the system security. The consumers should not maintain the power factor on leading side less than 0.95. If any consumer maintain the power factor less than 0.95 lead for a period of 2 consecutive months, it must be brought back in the range of + or -0.95 within a period of 3 months failing which without prejudice to such other rights as having accrued to the licensee or any other right of the Licensee the supply to the consumer may be discontinued. However, for the purpose of kVAh billing leading kVAh shall be blocked.

Part 'B'

HT-Tariffs

- 9.85 These tariffs are applicable for supply of Electricity to HT consumers, having loads with a contracted demand of 70 kVA and above and/or having a contracted load exceeding 56 kW/ 75 HP, excluding LT-III industrial categories. For LT-III Industrial category having contracted load more than 100 HP, the HT tariffs are applicable.

HT-I: Industry

Applicability

- 9.86 This tariff is applicable for supply to all HT consumers using electricity for industrial purpose. Industrial purpose shall mean manufacturing, processing and/or preserving goods for sale, but shall not include shops, Business Houses, Offices, Public Buildings, Hospitals, Hotels, Hostels, Choultries, Restaurants, Clubs, Theatres, Cinemas, Printing Presses, Photo Studios, Research & Development Institutions, Airports, Bus Stations, Railway Stations and other similar premises (The enumeration above is illustrative but not exhaustive) not withstanding any manufacturing, processing or preserving goods for sale.
- 9.87 This tariff will also apply to:
- i. Water Works & Sewerage Pumping Stations operated by Government Departments or Co-operative Societies and pump sets of Railways, pumping of water by

industries as subsidiary function and sewerage pumping stations operated by local bodies.

- ii. Workshops, flour mills, oil mills, saw mills, Ice candy, Ice manufacturing units with or without sale outlets.
- iii. The Information Technology (IT) units identified and approved by the Consultative Committee on IT Industry (CCITI) constituted by GoTS.
- iv. Newspaper printing units.
- v. Poultry Farming.
- vi. Pisciculture and Prawn culture units.

HT-I (A): Industry – General

A time of day tariff of INR. 1.00 per kVAh in addition to the normal energy charges at respective voltages is applicable during peak hours of 06:00 am to 10:00 am and 06:00 pm to 10:00 pm. Similarly, a reduction in tariff (incentive) of INR. 1.00 per kVAh to the normal energy charges at respective voltages is applicable during the night time i.e. 10:00 pm to 06:00 am. The normal energy charges for respective voltages are applicable during 10:00 am to 06:00 pm.

The normal energy charges applicable (for this category other than Poultry farms) between 10:00 am to 06:00 pm are as follows.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I(A): Industry General			
11 kV	kVA	390	6.65
33 kV	kVA	390	6.15
132 kV and above	kVA	390	5.65
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

- 9.88 The energy charges applicable (for this category other than Poultry farms) during the peak hours and night time hours is shown below.

Category	Demand Charge (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			7.65
33 kV			7.15

Category	Demand Charge (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
132 kV and above			6.65
HT I: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			5.65
33 kV			5.15
132 kV and above			4.65

HT-I (A): Industry – General – Optional Category for contract maximum demand upto 150 kVA

This Optional category is applicable to HT-I –Industry-General consumers whose contracted maximum demand is upto 150 kVA and availing supply at 11 kV only. The consumers who qualify under this category are free to opt to remain under HT-1(A) or choose this Optional sub-category.

The energy charges applicable are as follows.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I(A): Industry General			
11 kV	kVA	80	7.00

HT-I (A): Industry – General - Poultry farms

A time of day tariff of INR. 1.00 per kVAh in addition to the normal energy charges at respective voltages is applicable during peak hours of 06:00 am to 10:00 am and 06:00 pm to 10:00 pm. Similarly, a reduction in tariff (incentive) of INR. 1.00 per kVAh to the normal energy charges at respective voltages is applicable during the night time i.e. 10:00 pm to 06:00 am. The normal energy charges for respective voltages are applicable during 10:00 am to 06:00 pm.

The normal energy charges applicable for Poultry farms, between 10:00 am to 06:00 pm are as follows.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I(A):Poultry Farms			
11 kV	kVA	390	4.65
33 kV	kVA	390	4.15
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

9.89 The energy charges applicable for Poultry farms, during the peak hours and night time hours is shown below.

Category	Demand Charge (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			5.65
33 kV			5.15
HT I: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			5.65
33 kV			5.15
HT I: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			3.65
33 kV			3.15

Colony consumption

- 9.90 The consumption of energy exclusively for the residential colony/ township in a month, separately metered with meters installed by the consumer and tested and sealed by the Licensee shall be billed at INR. 6.30 per kVAh.
- 9.91 In case segregation of colony consumption has not been done, 15% of the total energy consumption shall be billed at INR. 6.30 per kVAh and the balance kVAh shall be charged at the corresponding energy tariff under HT-I (A): Industry - General.
- 9.92 Wherever possible colonies of Industry shall be given a separate HT service under HT-VI: Townships and Residential Colonies.

Seasonal Industries coming under HT-I (A)

- 9.93 Where a consumer avails supply of energy for manufacture of sugar or ice or salt, decorticating, ginning and pressing, cotton seed oil mills, seed processing, fruit processing, tobacco processing and re-drying and for such other industries or processes as may be approved by the Commission from time to time principally during certain seasons or limited periods in the tariff year and the main plant is regularly closed down during certain months, such consumer shall be charged for the months during which the plant is shut down (which period shall be referred to as the off-season period) as follows.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I(A):Seasonal Industries			
11 kV	kVA	390	7.60
33 kV	kVA	390	6.90
132 kV and above	kVA	390	6.70
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand Billing Demand is based on Recorded Maximum Demand or 30% of the Contracted Demand whichever is higher.			

HT-I (B): Ferro Alloys

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT I(B):Ferro Alloy Units			
11 kV			5.90
33 kV			5.50
132 kV and above			5.00
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

HT-II: Others

Applicability

9.94 This tariff is applicable to all HT Consumers other than those covered under HT Categories I and III to VII.

A time of day tariff of INR. 1.00 per kVAh in addition to the normal energy charges at respective voltages is applicable during peak hours of 06:00 am to 10:00 am and 06:00 pm to 10:00 pm. Similarly, a reduction in tariff (incentive) of INR. 1.00 per kVAh to the normal energy charges at respective voltages is applicable during the night time i.e. 10:00 pm to 06:00 am. The normal energy charges for respective voltages are applicable during 10:00 am to 06:00 pm.

9.95 The normal energy charges applicable for HT-II Others, between 10:00 am to 06:00 pm are as follows.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT II Others			
11 kV	kVA	390	7.80
33 kV	kVA	390	7.00
132 kV and above	kVA	390	6.80
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

9.96 The energy charges applicable for HT-II Others, during the peak hours and night time hours is shown below.

Category	Demand Charge (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT II: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.80

Category	Demand Charge (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.80
33 kV			6.00
132 kV and above			5.80

Note: In respect of Government controlled Auditoriums and Theatres run by public charitable institutions for purpose of propagation of art and culture which are not let out with a profit motive and in respect of other Public Charitable Institutions rendering totally free service to the general public, the overall kVAh rate (including customer charges) may be limited to the tariff rates under LT-VII: General purpose, in specific cases as decided by the Licensee.

HT-III: Airports, Railway stations and Bus stations

Applicability

9.97 This tariff is applicable to Airports, Railway stations and Bus stations.

A time of day tariff of INR. 1.00 per kVAh in addition to the normal energy charges at respective voltages is applicable during peak hours of 06:00 am to 10:00 am and 06:00 pm to 10:00 pm. Similarly, a reduction in tariff (incentive) of INR. 1.00 per kVAh to the normal energy charges at respective voltages is applicable during the night time i.e. 10:00 pm to 06:00 am. The normal energy charges for respective voltages are applicable during 10:00 am to 06:00 pm.

9.98 The normal energy charges applicable for HT-III Airports, Railway stations and Bus stations, between 10:00 am to 06:00 pm are as follows.

Category	Demand Charge *		Energy Charge
	(INR/ month)		(INR./ kVAh)
	Unit	Rate	
HT III Airports, Bus stations and Railway stations			
11 kV	kVA	390	7.50
33 kV	kVA	390	6.85
132 kV and above	kVA	390	6.45

Category	Demand Charge *		Energy Charge
	(INR/ month)		(INR./ kVAh)
	Unit	Rate	
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

9.99 The energy charges applicable for HT-III Airports, Railway stations and Bus stations, during the peak hours and night time hours is shown below.

Category	Demand Charge (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT III: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.50
33 kV			5.85
132 kV and above			5.45

HT-IV: Irrigation & CPWS

HT-IV (A): Lift irrigation

Applicability

9.100 This tariff is applicable to lift irrigation schemes managed by Government of Telangana and for consumers availing HT supply for Irrigation and Agricultural purposes.

Category	Demand Charge *		Energy Charge
	(INR/ month)		(INR./ kVAh)
	Unit	Rate	
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			
HT IV Irrigation and Agriculture			
11 kV			6.40
33 kV			6.40
132 kV and above			6.40

HT-IV (B): Composite Protected Water Supply schemes

Applicability

- 9.101 This tariff is applicable to energy consumption by HT services pertaining to Composite Protected Water Supply (PWS) schemes in rural areas. The composite PWS schemes shall be as defined and modified by the Commission from time to time.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT IV Irrigation and Agriculture			
11 kV			5.10
33 kV			5.10
132 kV and above			5.10
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

- 9.102 Subject to a minimum charge of INR. 300/ kVA/ year.

HT-V: Railway traction

HT-V (A): Railway Traction

Applicability

- 9.103 This tariff is applicable to HT Railway traction loads (other than Hyderabad Metro Rail traction load).

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT V (A) Railway Traction			7.10
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

HT-V (B): Hyderabad Metro Rail

Applicability

- 9.104 This tariff is also applicable to Hyderabad Metro Rail traction load.

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT V (B) HMR			7.00
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

HT-VI: Townships and residential colonies

Applicability

9.105 This tariff is applicable exclusively for (i) Townships and Residential colonies of Cooperative group housing societies who own the premises and avail supply at single point for making electricity available to the members of such society residing in the same premises at HT, (ii) any person who avails supply at single point at HT for making electricity available to his employees residing in contiguous premises, the supply in all cases being only for domestic purposes, such as lighting, fans, heating etc., provided that the connected load for common facilities such as non-domestic supply in residential area, street lighting and water supply etc., shall be within the limits specified hereunder.

Water Supply & Sewerage and Street Light put together	10% of total connected load
Non-domestic/Commercial& General purpose put together	10% of total connected load

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT VI Townships & Residential Colonies			
11 kV	kVA	60	6.30
33 kV	kVA	60	6.30
132 kV and above	kVA	60	6.30
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

HT-VII: Temporary supply

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT VII: Temporary			
11 kV	kVA	500	10.80
33 kV	kVA	500	10.00
132 kV and above	kVA	500	9.80
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

HT Rural Electric Co-Operative Societies (RESCO)

Category	Demand Charge * (INR/ month)		Energy Charge (INR./ kVAh)
	Unit	Rate	
HT VIII: RESCO			
11 kV			1.00
* Demand charge is calculated at INR/ kVA/ month of the Billing Demand			

- i. RESCO, being a Licensee, shall, as far as possible maintain a power factor of +/- 0.95 at its drawl points.

9.110 **Maximum demand**

The maximum demand of supply of electricity to a consumer during a month shall be twice the largest number of kilo-volt- ampere hours (kVAh) delivered at the point of supply to the consumer during any consecutive 30 minutes in the month. However, for the consumers having contracted demand above 4,000 kVA the maximum demand shall be four times the largest number of kilo-volt-ampere-hours (kVAh) delivered at the point of supply to the consumer during any consecutive 15 minutes in the month.

9.111 **Billing demand**

The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher, except HT-VI category i.e., Townships & Residential Colonies. For HT-VI category the minimum billing demand shall be the recorded maximum demand. Condition of 80% Contract Maximum Demand is not applicable.

9.112 **Monthly minimum charges**

Every consumer whether he consumes energy or not shall pay monthly minimum charges calculated on the billing demand plus energy charges specified for each category in this Part (B) to cover the cost of a part of the fixed charges of the Licensee.

9.113 **Additional charges for maximum demand exceeding the contracted demand**

In case, in any month the Recorded Maximum Demand (RMD) of the consumer exceeds his Contracted Demand with the Licensee, the consumer shall pay the following charges on excess demand recorded and on the entire energy consumed.

RMD over CMD	Demand charges on excess demand	Energy charges on full energy
100 to 120%	2 times of normal charge	Normal
Above 120% and up to 200%	2 times of normal charge	1.15 times of normal charge
More than 200%	2 times of normal charge	1.20 times of normal charge

In case of HT-V (A) & HT-V (B): Railway Traction and Hyderabad Metro Rail, the energy charges shall be computed at 1.05 times of normal charges on the entire consumption, if RMD exceeds 120% of Contracted Demand.

9.114 **Additional charges for belated payment of charges**

The Licensees shall charge the Delayed Payment Surcharge (DPS) per month on the bill amount at the rate of 5 paisa/ INR. 100/ day or INR. 550 whichever is higher. In case of grant of installments, the Licensee shall levy interest at the rate of 18% per annum on the outstanding amounts, compounded annually and the two charges shall not be levied at the same time.

9.115 **Customer charges**

Every HT consumer shall pay customer charges as applicable to them, in addition to demand and energy charges billed.

9.116 **Maintenance of power factor at consumer end**

HT consumers, who are provided with metering capable of measuring active and reactive power under the orders of the Commission, shall maintain their power factor preferably in between 0.95 lag and 0.95 lead in the interest of the system security. The consumers should not maintain the power factor on leading side less than 0.95. If any consumer maintain the power factor less than 0.95 lead for a period of 2 consecutive months, it must be brought back in the range of ± 0.95 within a period of 3 months failing which without prejudice to such other rights as having accrued to the licensee or any other right of the Licensee the supply to the consumer may be discontinued. However, for the purpose of kVAh billing leading kVAh shall be blocked.

Category wise specific condition of HT Tariff

HT-I: Industry

HT-I (A): Industry – General

9.117 The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.

9.118 Energy charges will be billed on the basis of actual energy consumption or 50 kVAh per kVA of billing demand whichever is higher.

HT-I (B): Ferro Alloy

9.119 Guaranteed energy off-take at 6,701 kVAh per kVA per annum on Average Contracted Maximum Demand or Average Actual Demand whichever is higher. The energy falling short of 6,701 kVAh per kVA per annum will be billed as deemed consumption. This shall be calculated on an annual basis and not on a monthly basis and disconnection periods shall be exempted while computing the minimum off-take energy.

HT-I (A): Industry – Seasonal Industries

9.120 Consumers, classified as seasonal load consumers, who are desirous of availing the seasonal benefits shall specifically declare their season at the time of entering into agreement that their loads should be classified as seasonal loads.

9.121 The period of season shall not be less than 4 (four) continuous months. However, consumer can declare longer seasonal period as per actual.

- 9.122 Consumer, who desires to have a change in the period classified as “season” declared by him, shall file a declaration at least a month before commencement of the respective tariff year.
- 9.123 Existing eligible consumers who have not opted earlier for seasonal tariffs will also be permitted to opt for seasonal tariff on the basis of application to the concerned Divisional Engineer of the Licensee.
- 9.124 The seasonal period once notified cannot be changed, during one Tariff year.
- 9.125 The off-season tariff is not available to composite units having seasonal and other categories of loads.
- 9.126 The off-season tariff is also not available for such of those units who have captive generation exclusively for process during season and who avail supply from Licensee for miscellaneous loads and other non-process loads.
- 9.127 Any consumer who after declaring the period of season consumes power for his main plant during the off-season period, shall not be entitled to this concession during that year.
- 9.128 Development charges as applicable to regular HT consumers shall be paid by the consumers for availing supply under the above said category with seasonal benefits. Consumers who have paid the development charges already as regular consumers need not pay the development charges.

HT-II: Others

- 9.129 The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand, whichever is higher.
- 9.130 Energy charges will be billed on the basis of actual Energy consumption or 25 kVAh per kVA of Billing Demand, whichever is higher.

HT-III: Airports, Railway stations and Bus stations

- 9.131 The billing demand shall be the maximum demand recorded during the month or 80% of the contracted demand whichever is higher.
- 9.132 Energy charges will be billed on the basis of actual energy consumption or 50 kVAh per kVA of billing demand whichever is higher.

HT-IV: Lift Irrigation, Agriculture and CPWS

- 9.133 The metering is mandatory for this category i.e. HT-IV (A) & HT-IV (B).

HT-V: Railway Traction

- 9.134 Energy charges will be billed on the basis of actual energy Consumption or 32 kVAh per month per kVA of Contracted Demand whichever is higher.

HT-VI: Townships and residential colonies

- 9.135 The billing demand shall be the recorded maximum demand during the month.
- 9.136 Energy Charges will be billed on the basis of actual consumption or 25kVAh per kVA of Contracted Demand, whichever is higher.
- 9.137 The above provisions shall not in any way affect the right of a person residing in the housing unit sold or leased by such Cooperative Group Housing Society, to demand supply of electricity directly from the distribution licensee of the area.

HT-VII: Temporary supply

- 9.138 (a) Temporary supply can be given on the request of a consumer initially for a period up to 6 months as per the tariff applicable under the Temporary supply category. In case, the consumer requests for further extension, the same can be extended for another 6 months with the same tariff as applicable to Temporary supply category. After the expiry of 12 months, the consumer is at liberty to seek further extension provided, the consumer pays twice the regular tariff or the consumer has the choice of availing of regular supply.
- (b) The billing demand for Temporary supply shall be contracted demand or recorded maximum demand registered during the month whichever is higher.
- 9.139 Requests for temporary supply of energy cannot be considered unless there is a clear notice of at least one week in the case of domestic and three months in case of other types of supply. If supply is required at a short notice, in addition to the charges mentioned below, an urgency charge, as specified in miscellaneous charges is also to be paid.
- 9.140 Estimated cost of the works means the cost of works for making necessary arrangements for supplying energy including the cost of distribution lines, switchgear, metering equipment, etc., as may be worked out on the basis of standards and norms prescribed by the Licensee, from time to time plus cost of dismantling the lines and other works when the supply is no more required less the cost of retrievable material.
- 9.141 (a) Estimated cost of the works, as detailed above, shall be paid by the consumer in advance. After the works are dismantled and retrievable materials returned to stores, a bill for the actual amount payable by the consumer shall be prepared and the difference would be collected from or refunded to the consumer, as the case may be. No development charges shall be collected for temporary supply.

(b) In addition to the aforesaid charges payable by consumers availing temporary supply, they shall pay hire charges at 2% on cost of retrievable material per month or part thereof, for the duration of temporary supply. These charges will be claimed along with the consumption bills.

9.142 (a) The consumer requiring supply on temporary basis shall be required to deposit in advance, in addition to the estimated cost of works mentioned in 9.141(a), the estimated consumption charges at the rate stipulated in Tariff Order for Temporary supply, and worked out on the basis for use of electricity by the consumer for 6 hours per day for a period of 2 months in case the supply is required for more than 10 days. If the period of temporary supply is for 10 days or less, the advance consumption charges for the actual period requisitioned shall be paid.

(b) The Bill for electricity consumed in any month shall be prepared at the tariff applicable plus hire charges as mentioned above. The consumers have to pay monthly CC charges regularly during the period of availing temporary supply and the estimated energy consumption deposit shall be adjusted with the last month consumption and the balance if any shall be refunded.

(c) In the case of consumers requiring temporary supply for the purposes of Cinema, the estimated energy charges for a minimum period of 3 months shall have to be deposited by the consumer subject to the condition that the consumer shall pay every month energy and other miscellaneous charges for the preceding month and the amount deposited by him in advance shall be adjusted with the last month consumption and the balance amount shall be refunded.

(d) In the event of estimated energy charges deposited by the consumer having been found insufficient, the consumer shall deposit such additional amount, as may be demanded by the Licensee failing which the Licensee may discontinue the supply of electricity.

9.143 Existing consumers requiring temporary supply or temporary increase in supply: If any consumer availing regular supply of electricity at High Tension requires an additional supply of electricity at the same point for a temporary period, the temporary additional supply shall be treated as a separate service and charged as per clause 1 above of H.T Temporary supply, subject to the following conditions.

9.144 (a) The contracted demand of the temporary supply shall be the billing demand for that service. The recorded demand for the regular service shall be arrived at by deducting the billing demand for the temporary supply from the maximum demand recorded in the month.

(b) The total energy consumed in a month including that relating to temporary additional supply, shall be apportioned between the regular and temporary supply in proportion to the respective billing demands.

Others charges in HT

Service connection charges

9.145 The service connection charges shall be collected as per the Regulations issued by the Commission from time to time.

Reconnection charges

HT service	
11 kV	INR. 1,000
33 kV	INR. 2,000
132/ 220 kV	INR. 3,000

Testing charges

Consumer Installation	
The first test and inspection of a new installation or of an extension to an existing installation.	Nil
Charges payable by the consumer in advance for each subsequent test and/or inspection if found necessary owing to any fault in the installation or to non-compliance of the conditions of supply	INR. 200
HT Meter	INR. 3,000
Transformer oils	
For each sample of oil	INR. 150

Miscellaneous charges

Application Registration Fees	INR. 100
For changing meter only at the request of the consumer (where it is not necessitated by increase in demand permanently)	INR. 100
For changing or moving a meter board	Actual cost of material and labor plus 25% supervision charges on cost of materials and labor
Customer charges	
Consumer category	INR./ month
HT Consumer at 11 kV	INR. 1,685
HT Consumers at 33 kV	INR. 1,685
HT Consumers at 132 kV and above	INR. 3,370
Urgency charges for temporary supply at short notice	INR. 200
Special rates chargeable for theft/pilferage and malpractice cases	As per the General Terms and Conditions of Supply (GTCS) approved by the Commission from time to time.

Supervision/Inspection & checking charges	INR. 600
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Miscellaneous works in HT

- 9.146 The charges for any work which the Licensee may be required to undertake for the consumer and which is not included in the foregoing schedule, shall be the actual cost of labour and material plus 25% on cost of labor and material to cover overhead charges. The aforesaid charges shall be paid by the consumer in advance.
- 9.147 The Commission has decided to reduce the minimum agreement period from two years to one year. In the due course the necessary amendment will be issued under the General Terms and Conditions of Supply (GTCS) and in the relevant regulations by the Commission.
- 9.148 The abstract of the tariff rates determined above, together with the terms & conditions governing the same is enclosed at Annexure A.
- 9.149 The Directives to be complied by the Licensees for FY 2016-17 are detailed in Annexure B.
- 9.150 The rates indicated in the Retail Supply Tariff Schedule for FY 2016-17, together with the terms and conditions prescribed there under shall be applicable in the areas of operation of two Distribution Companies viz., Southern Power Distribution Company of T.S. Limited (TSSPDCL), Northern Power Distribution Company of T.S. Limited (TSNPDCL) and Rural Electric Co-operative Society, Sircilla for FY2016-17 with effect from 01-07-2016 to 31-03-2017.
- 9.151 This Order is signed on this day 23rd June, 2016.

Sd/-
(L MANOHAR REDDY)
MEMBER

Sd/-
(H SRINIVASULU)
MEMBER

Sd/-
(ISMAIL ALI KHAN)
CHAIRMAN

ANNEXURE-A

(Applicable with effect from 01-07-2016 to 31-03-2017 in respect of the two Distribution Licensees (TSSPDCL & TSNPDCL) in the State of Telangana and the Rural Electrical Supply Co-Operative society, Sircilla in the State)

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
Low Tension			
LT I: Domestic			
LT I (A): Up to 100 Units/Month			
0-50			1.45
51-100			2.60
LT I (B)(i): Above 100 Units/Month & upto 200 Units/Month			
0-100			3.30
101-200			4.30
LT I (B)(ii): Above 200 Units/Month			
0-200			5.00
201-300			7.20
301-400			8.50
401-800			9.00
Above 800 units			9.50
LT II: Non-Domestic/Commercial			
LT II (A): Up to 50 Units/Month			
0-50	kW	50	6.00
LT II (B): Above 50 Units/Month			
0-100	kW	60	7.50
101-300	kW	60	8.90
301-500	kW	60	9.40
Above 500	kW	60	10.00
LT II (C): Advertisement Hoardings	kW	60	12.00
LT II (D): Haircutting salons consuming upto 200 units/month			
0-50	kW	60	5.30
51-100	kW	60	6.60
101-200	kW	60	7.50
LT III: Industry			
Industries	kW	60	6.70
Seasonal Industries (off season)	kW	60	7.40
Pisciculture/ Prawn culture	kW	21	5.20
Sugarcane crushing	kW	21	5.20
Poultry farms	kW	50	4.00
Mushroom, Rabbit, Sheep and Goat farms	kW	60	6.30
Floriculture in Green House	kW	60	6.30
LT IV: Cottage Industries			

Determination of Retail Supply Tariff- FY 2016-17

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
(A) Cottage Industries	kW	20/kW subject to a minimum of Rs 30/month	4.00
(B) Agro Based Activities	kW	20/kW subject to a minimum of Rs 30/month	4.00
LT V: Agriculture			
LT V (A): Agriculture with DSM Measures			
Corporate Farmers			2.50
Wet Land Farmers (Holdings >2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections > 3 nos.)	HP	525 *	0.50
Wet Land Farmers (Holdings <= 2.5 acre)			0.00
Dry Land Farmers (Connections <= 3 nos.)			0.00
LT V (B): Agriculture without DSM Measures			
Corporate Farmers			3.50
Wet Land Farmers (Holdings >2.5 acre)	HP	1050 *	1.00
Dry Land Farmers (Connections > 3 nos.)	HP	1050 *	1.00
Wet Land Farmers (Holdings <= 2.5 acre)	HP	525 *	0.50
Dry Land Farmers (Connections <= 3 nos.)	HP	525 *	0.50
LT V (C): Others			
Horticulture Nurseries with CL up to 15 HP	HP	20	4.00
LT VI: Street Lighting & PWS			
LT VI (A): Street Lighting			
Panchayats	kW	32	6.10
Municipalities	kW	32	6.60
Municipal Corporations	kW	32	7.10
LT VI (B): PWS Schemes			
Panchayats	HP	32/ HP subject to a minimum of Rs 50/month	5.00
Municipalities	HP	32/HP subject to a minimum of Rs 100/month	6.10
Municipal Corporations	HP	32/HP subject to a minimum of Rs 100/month	6.60
LT VII: General			
LT VII (A): General Purpose	kW	21	7.30
LT VII (B): Wholly Religious Places			
Load upto 2 kW	kW	21	5.40
Load above 2 kW	kW	21	6.00
LT VIII: Temporary Supply	kW	21	11.00
High Tension			
HT I(A): Industry General			
11 kV	kVA	390	6.65
33 kV	kVA	390	6.15

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
132 kV and above	kVA	390	5.65
HT I(A):Lights and Fans			
11 kV			6.65
33 kV			6.15
132 kV and above			5.65
HT I(A):Poultry Farms			
11 kV	kVA	390	4.65
33 kV	kVA	390	4.15
HT I(A):Industrial Colonies			
11 kV			6.30
33 kV			6.30
132 kV and above			6.30
HT I(A):Seasonal Industries			
11 kV	kVA	390	7.60
33 kV	kVA	390	6.90
132 kV and above	kVA	390	6.70
HT I(A):Optional Category with up to 150 kVA			
11 kV	kVA	80	7.00
HT I: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			7.65
33 kV			7.15
132 kV and above			6.65
HT I: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			5.65
33 kV			5.15
132 kV and above			4.65
HT-I (A) – Poultry Farms - Time of Day Tariffs (6 pm to 10 pm)			
11 kV			5.65
33 kV			5.15
HT-I (A) – Poultry Farms - Time of Day Tariffs (6 am to 10 am)			
11 kV			5.65
33 kV			5.15
HT-I (A) – Poultry Farms - Time of Day Tariffs (10 pm to 6 am)			
11 kV			3.65
33 kV			3.15
HT I(B):Ferro Alloy Units			

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
11 kV			5.90
33 kV			5.50
132 kV and above			5.00
HT II Others			
11 kV	kVA	390	7.80
33 kV	kVA	390	7.00
132 kV and above	kVA	390	6.80
HT II: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.80
33 kV			8.00
132 kV and above			7.80
HT II: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.80
33 kV			6.00
132 kV and above			5.80
HT III Airports, Bus stations and Railway stations			
11 kV	kVA	390	7.50
33 kV	kVA	390	6.85
132 kV and above	kVA	390	6.45
HT III: Time of Day Tariffs (6 PM to 10 PM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (6 AM to 10 AM)			
11 kV			8.50
33 kV			7.85
132 kV and above			7.45
HT III: Time of Day Tariffs (10 PM to 06 AM)			
11 kV			6.50
33 kV			5.85
132 kV and above			5.45
HT IV Irrigation and Agriculture			
11 kV			6.40
33 kV			6.40
132 kV and above			6.40
HT IV CP Water Supply Schemes			

Category	Fixed Charge (INR/ month)		Energy Charge (INR./ unit)
	Unit	Rate	
11 kV			5.10
33 kV			5.10
132 kV and above			5.10
HT V (A) Railway Traction			7.10
HT V (B) HMR			7.00
HT VI Townships & Residential Colonies			
11 kV	kVA	60	6.30
33 kV	kVA	60	6.30
132 kV and above	kVA	60	6.30
HT VII: Temporary			
11 kV	kVA	500	10.80
33 kV	kVA	500	10.00
132 kV and above	kVA	500	9.80
HT VIII: RESCO			
11 kV			1.00

* Equivalent flat rate tariff – INR/HP/year.

Terms and conditions

- i. Fuel Surcharge Adjustment (FSA) is applicable in accordance with the provisions of the Electricity Act, 2003.
- ii. The tariffs are exclusive of Electricity duty payable as per the provisions of AP Electricity Duty Act as adopted by Government of Telangana.
- iii. **Voltage surcharge**
The voltage surcharge for FY 2016-17 has been withdrawn.
- iv. **Additional charges for maximum demand exceeding the contracted demand**

In case, in any month the Recorded Maximum Demand (RMD) of the consumer exceeds his Contracted Demand with the Licensee, the consumer shall pay the following charges on excess demand recorded and on the entire energy consumed.

RMD over CMD	Demand charges on excess demand	Energy charges on full energy
100 to 120%	2 times of normal charge	Normal
Above 120% and up to 200%	2 times of normal charge	1.15 times of normal charge
More than 200%	2 times of normal charge	1.20 times of normal charge

In case of HT-V (A) & HT-V (B): Railway Traction and Hyderabad Metro Rail, the energy charges shall be computed at 1.05 times of normal charges on the entire consumption, if RMD exceeds 120% of Contracted Demand.

v. **Minimum charges**

Category		Rates for the year 2016-17
LT Categories		
LT-I (A)	Domestic	Contracted load of 1,000 watts and below Single phase
LT-I (B)(i)		Contracted load of above 1,000 watts Single phase
LT-I (B)(ii)		Three phase
LT-II (A) & II (B)	Non-Domestic/ Commercial	Single phase
LT-II (C)		Three phase
LT-II (D)		Advertisement Hoardings
		Single phase
LT-VI (A)		Street lighting
LT-VII (A)		General purpose
LT-VIII		Temporary supply
HT Categories		
Billing demand		Billing demand shall be maximum demand recorded during the month or 80% of contracted demand whichever is higher except HT-VI (i.e. Township and Residential Colonies, for this category the billing demand is Actual Demand Recorded)
Minimum energy charges		
HT-I (A)	Industry – General	50 kVAh/ kVA of billing demand per month
HT-I (B)	Ferro Alloy units	Maximum Demand or Average Actual Demand whichever is higher. The energy falling short of 6,701 kVAh per kVA per annum will be billed as deemed consumption. This shall be calculated on an annual basis and not on a monthly basis and disconnection periods shall be exempted while computing the minimum off-take.
HT-II	Others	25 kVAh/ kVA of billing demand per month
HT-III	Airports, Bus stations and Railway stations	50 kVAh/ kVA of billing demand per month
HT-V (A) & (B)	Railway traction and HMR	32 kVAh /kVA of Contracted demand per month
HT-VI	Townships and residential colonies	Billing demand shall be Actual Recorded demand. 25 units/ kVA of contracted demand per month

vi. **Customer charges**

Consumer category	INR./ month
Low Tension	
LT-I: Domestic (Units/ month)	
0-50	INR. 25
51-100	INR. 30
101-200	INR. 50
201-300	INR. 60
301-400	INR. 80
401-800	INR. 80
Above 800 units	INR. 80
LT-II: Non-Domestic/ Commercial (Units/ month)	
0-50	INR. 45
51-100	INR. 55
101-300	INR. 65
301-500	INR. 65
Above 500 units	INR. 65
LT-II (C): Advertisement Hoardings	INR. 70
LT-II (D): Haircutting Salons with consumption up to 200 units per month	
0-50	INR. 45
51-100	INR. 55
101-200	INR. 65
LT-III: Industry up to 20 HP	INR.75
LT-III: Industry 21-50 HP	INR. 300
LT-III: Industry 51-100 HP	INR. 1125
LT IV: Cottage Industries	INR. 45
LT V: Agriculture	INR. 30
LT VI: Street Lighting & PWS	INR. 50
LT-VII: General purpose	INR. 60
LT-VIII: Temporary supply	INR. 65
High Tension	
HT Consumer at 11 kV	INR. 1,685
HT Consumers at 33 kV	INR. 1,685
HT Consumers at 132 kV and above	INR. 3,370

vii. **Delayed Payment Surcharge (DPS)**

LT Category

- a) In case of LT- I (A), LT-I (B), LT-II(A), LT-II(D), LT-IV and LT-V (C), if payment is made after due date, the consumers are liable to pay, Delayed Payment Surcharge (DPS) per month on the bill amount at the rates given in table below.

LT-I (A)	INR. 10 per month
LT-I (B), LT-II (A), LT-II (D), LT-IV and LT-V (C)	INR. 25 per month

- b) In case of LT- II(B), LT-II(C), LT-III, LT-VI and LT-VII, the Licensee shall levy Delayed Payment Surcharge (DPS) on the bill amount at the rate of 5 paisa/ INR.100/ day calculated from the due date mentioned on the bill, up to the date of payment or INR. 150 whichever is higher. In case of grant of installments, the Licensees shall levy interest at the rate of 18% per annum on the outstanding amounts compounded annually and the two (DPS and Interest) shall not be levied at the same time.

HT Category

- a) The Licensees shall charge the Delayed Payment Surcharge (DPS) per month on the bill amount at the rate of 5 paisa/ INR. 100/ day or INR. 550 whichever is higher. In case of grant of installments, the Licensee shall levy interest at the rate of 18% per annum on the outstanding amounts, compounded annually and the two charges shall not be levied at the same time.

viii. **Reconnection charges**

Low Tension services	
LT-I (A)	INR. 25
Overhead LT services	INR. 75
U.G. services	INR. 200
High Tension service	
11 kV	INR. 1,000
33 kV	INR. 2,000
132 kV and above	INR. 3,000

ix. **Testing charges**

Installation	LT	HT
The first test and inspection of a new installation or of an extension to an existing installation.	Nil	Nil
Charges payable by the consumer in advance for each subsequent test and/or inspection if found necessary owing to any fault in the installation or to non-compliance of the conditions of supply.	INR. 20	INR. 200
Meter		
A.C. Single Phase Energy meter	INR. 100	
A.C. Three Phase Energy meter	INR. 300	
LT Tri Vector meter	INR. 2,000	
11 kV		INR. 3,000
33 kV		INR. 3,000
132 kV and above		INR. 3,000
Transformer oil		
Each sample of oil	INR. 150 per sample	

x. **Supervision/ inspection and checking charges**

For LT I(A) Domestic	INR. 100
For LT I(B) Domestic	INR. 100

LT Agricultural	INR. 100
For all other LT Categories	INR. 100
For all HT Categories	INR. 600

xi. **Low power factor charges**

For all consumer categories where kVAh billing is done, no Low Power Factor surcharge shall be levied.

xii. **Capacitor surcharge**

LT consumers (except LT-I Domestic) having connected loads mentioned in table below shall pay capacitor surcharge (as per rules in vogue) at the rate of 25% of the billed amount, if capacitors are found defunct.

Category	Connected load
LT-II and LT-VII (A)	<10 kW
LT-III and LT-VI (B)	<20 HP

xiii. Fixed charges – Seasonal industries

LT-III: INR. 50/ HP/ month on 30% contracted load

HT: Demand charges – 30% of CMD or recorded demand whichever is higher

xiv. **Temporary Supply for LT and HT consumers**

Temporary supply can be given on the request of a consumer initially for a period up to 6 months as per the tariff applicable under the Temporary supply category. In case, the consumer requests for further extension, the same can be extended for another 6 months with the same tariff as applicable to Temporary supply category. After the expiry of 12 months, the consumer is at liberty to seek further extension provided, the consumer pays twice the regular tariff or the consumer has the choice of availing of regular supply.

ANNEXURE-B

Directives

A: Earlier directives

1. **Imported coal**

The Discoms are directed to verify whether APGENCO is procuring imported coal through the competitive bidding process, or under any guidelines issued in this regard by GoI, before admitting the Station wise power purchase bills claimed/submitted by APGENCO. Regarding NTPC Stations, DISCOMs have to take-up the pricing issue of imported coal, if any, with CERC.

2. **Quality of domestic coal**

The Discoms are directed to “appoint independent agency to ensure that the coal of agreed quality and price as per the fuel supply agreement (FSA) is used for generation of power at all coal based Thermal Power Stations. Before making final payment such audit reports should be verified by the concerned officers of the DISCOMs”.

TSGENCO is also directed to adopt proper sampling technique both at sending and receiving end for coal supply from each source separately, keeping in view, the importance of coal audit as directed to DISCOMs.

3. **Metering of agricultural DTRs**

The Discoms are directed to chalk out a timeline program and submit to the Commission for approval for installation of meters to all the agricultural DTRs in order to compute the metered agricultural consumption and losses in the system. In the meantime, for assessing the agricultural consumption based on ISI methodology, provide additional meters to new sample DTRs instead of shifting of the existing sample DTR meters to the new sample DTRs, as prescribed in the ISI methodology. Further, the DISCOMs are directed to follow the report of the Indian Statistical Institution which was submitted to the erstwhile APERC(which was approved) in estimation of agricultural consumption for FY 2017-18.

4. **T&D Losses**

The Discoms are directed to take stringent action to reduce the losses duly spending investment approved for this purpose. The Discoms are directed to examine the possibility of franchising the high loss feeders, to curb the commercial losses, before making claim that the actual losses are more than the approved losses.

5. **Submission of tariff proposals**

The Discoms are directed to submit the ARR and Tariff proposals on time i.e. by 30th November of current year in order to make the Tariff Order effective from 1st April of the next year.

6. **Replacement of fuses in agriculture DTRs**

The Discoms are directed to ensure that the field staff, to whom cell phone service (SIM card) are given, should attend to the fuse off calls within time, on the receipt of calls from a farmer over phone. For ensuring the same, register the time of call, and confirm the action taken from the consumer is required. For achieving this, the Licensee may examine on usage of advanced IT solutions.

The Licensee shall examine other alternate approaches to achieve the above objective such as creating a central monitoring team to ensure that the field staff is responding properly to the farmers fuse off calls. The action taken in this regard shall be intimated within two months.

7. **Directive on resolving the problems faced by Rural area Consumers**

a) The Discoms are directed to examine the possibility of establishing operational crew consisting of two or three staff members with a vehicle and spare parts, to attend rectification of defects in AB switches of substations, DTR structures, carrying the minor repairs to the transformers at site, etc. in rural areas, for improving the quality of supply and to minimise problems faced by rural consumers.

b) During the public hearing it was noticed that the staff members are not staying at headquarters (especially during night time) and causing problems to the consumers. The Discoms are directed to ensure that the staff members and all cadre of officers shall reside at the place of posting so as to make them easily accessible to the consumers and quarterly report ensuring the same shall be furnished to the Commission.

8. **Unauthorized agricultural loads**

The Discoms are directed to take necessary steps for removal/ regularization of remaining number of un-authorized agricultural services on priority basis.

B: New directives

9. **Short term purchases**

The DISCOMS are directed to take the prior approval for the quantum of procurement of power from short term supply sources duly indicating the reasons for such procurement. After obtaining the approval, the Licensees shall follow the guidelines issued by the Ministry of Power, Government of India u/s 63 of the Electricity Act, 2003 i.e, web based competitive procurement, for all such purchases from Short Term Sources. And also take the approval of the price. In case of emergency, any procurement is done through power exchanges the necessity for such procurement should be brought to the notice of the Commission fortnightly once.

10. **True up proposal of Distribution Licensees**

The DISCOMs are directed to file the true up of Distribution business for the first two control periods. And also directed to file the true up of Retail Supply Business under Regulation 1 of 2014 of erstwhile APERC for FY 2014-15 and FY 2015-16 in order to issue necessary directives to improve the performance of DISCOMs even though the DISCOMs have stated that the debts of the DISCOMs are taken over by the Government of Telangana under UDAY scheme.

11. **Transportation of failed transformers**

The Discoms shall ensure that the transportation of failed transformers is done at the cost of Discoms. In case, vehicle provided to sub-division, for this purpose, is unable to meet the requirement, replacement of failed DTRs should be done by hiring a private vehicle for this purpose only. For hiring the vehicles (the tractor trailers are available in villages) where ever necessary, the schedule of rates either on kilometer basis or on per day basis may be fixed.

12. **Segregation of loads in airports**

The Commission has directed in the RST Order FY 2015-16, to the TSSPDCL to segregate the aviation activity loads and non-aviation activity loads of the consumer (GMR International Airport at Hyderabad) at the Discom metering point itself so as to have separate metering for both categories of loads. This work ought to have been completed by 30th September, 2015. The Licensee stated that it is segregating the Novotel Hotel loads from the aviation activity loads. The Licensee is directed to examine the possibility of segregation of remaining loads so that separate metering can be provided in order to bill under appropriate category and submit the report to the Commission by the end of August, 2016. The Licensee is also directed to conduct a study on the load pattern of aviation activity for computing the cost of service as directed during FY 2015-16.

13. **Agricultural service connections**

The DISCOMs have stated that on releasing of new agriculture connections, they are following First In First Out (FIFO) system. While following the FIFO approach, the Licensees are directed to ensure that prospective consumer should be sent status of application through a text message (on number furnished in the application). The status update should include priority number, sanction details, details of payment to be made to the Licensees by the consumer, quantum of major materials (poles, conductor and transformers) allocated with date, material drawn and completion of work. They are also directed to make available, the list of pending applications, and operation section wise in the sequential order of applications pending on the website of the DISCOMs. A similar list should also be displayed at the section office and should be updated monthly. As far as possible, new agricultural connections released hereinafter (After the date of this Order) by the Discoms, the pump sets used by the agriculture consumers should be of 5(five) star rating as it leads to conservation of energy.

14. **Non departmental accidents**

The DISCOMs are directed to establish a non-departmental accident registration system and give wide publicity. Necessary instructions to the staff shall be issued for acknowledging the accident claim applications at section office/ sub-division office. They are directed to make payment of ex-gratia for the fatal accident cases as per the Commission order on enhancement of ex-gratia amount, within the time specified. This was promised by the Licensees while replying at the public hearings. The report of compliance objector wise shall be furnished to the Commission by end of July, 2016.

15. **Monthly Billing**

The Licensees are directed to develop a software system in the spot billing machines such that the consumption is limited to the billing month (for example, if previous month reading was taken on 5th day of the month, the next reading taken on 7th day instead of taking on 5th day of current month, the consumption shall be apportioned to 30/31 days depending on the number of days in that particular calendar month so that it avoids the shifting of consumption to higher slabs).

16. **Staff shortage in rural areas**

In public hearing it was brought to the notice of the Commission that an acute shortage of operational staff exists in rural areas. We direct the Discoms to examine this issue and initiate appropriate action.

17. **Open Access**

In public hearing it was brought to the notice of the Commission that the applications of consumers who intend to go for open access are being delayed without any valid reasons. We direct the Discoms to dispose of all the applications seeking open access within ten (10) days from the date of receipt of the application.

18. **Filing of Multi Year Tariffs and True ups by TSTRANSCO**

The TS Transco has mentioned that the assets and liabilities of erstwhile AP Transco have not yet been bifurcated between AP and TS Transco. The TS Transco has, hence, stated that it will file the ARR and tariff for the balance of the third control period during the year 2016-17 along with True up for the second control period vide its letter No. CE/Plg.,Cooml.&Co-ordn./DE/RAC/F.ARR(FY16-17)/D.No.68/15 dated 24th November, 2015. The TS Transco is directed to file the ARR and tariff proposals for the balance period of third control period along with filing of true ups for first and second control period before the end of November 2016 without fail.

19. **Filing of Tariff of TSGENCO stations for third control period and PPAs for consent**

The TSDISCOMs/TSGENCO is directed to file the tariff proposals, station wise for the third control period (FY 2014-15 to FY 2018-19) along with capital cost of new stations which have not been determined by the erstwhile APERC, by end of October 2016. The TSGENCO is also directed to file the station wise PPAs of its stations for Commission's approval.

20. **Cost of Supply of HT V(B)-HMR Railway Traction Category**

The Commission directs TSSPDCL to study the consumption pattern for the portion of energy likely to be consumed for the commercial operation (after commencement) of HMR Metro Railways out of the total energy to be consumed during the year FY 2016-17 and propose the Category CoS for the subsequent year so as to examine the same.

21. **Non availability of toll free number, developing the IVRS system for registering the consumer complaints such as fuse off Calls, billing issues, etc.**

During public hearing it was stated by the stakeholders that at many times the toll free number is not reachable or some of them stated that they are not aware of the number. In this regard, the Licensees are directed to widely publicize the toll free number and ensure its operation 24x7. The Licensees should also ensure sufficient lines for the toll free service are available to avoid congestion in communication. The DISCOMs shall ensure that the registered complaint, as per the existing practice, on Fuse off Calls, repair/ replacement of agricultural DTRs and they shall be resolved within the stipulated time as per SoP norms. In the meanwhile the Licensee shall develop a software to register complaint through IVRS system equipped to issue a docket number (i.e. complaint number) along with date and time of registration and send through SMS on registered mobile number. The Complaints once resolved should again be communicated to the consumer through SMS on the registered mobile number by the concerned authority. The SMS after complaint resolution should capture details on time taken to resolve the complaint, hence enabling the consumer to claim compensation as per Standard of Performance (SoP) regulations, in case of delay in compliance.

22. **Reduction of interruptions in GHMC area**

It has been noticed by the Commission that 11/33 kV lines as well as overhead lines are damaged due to heavy winds and rain causing interruptions in power supply for a large section of GHMC area. Some such outages have continued for more than 24 hours in some parts of the city. The Discoms are directed to prepare a plan for replacing the overhead lines with the underground cable system of appropriate voltage level in a phased manner and submit the proposal for the consolidation of the Commission for investment approval.

ANNEXURE-C**List of stakeholders who submitted the objections/suggestions**

Sl. No	Name and Address of the Objector	Objection related to
1	Palamoor R.O. Water Plants Association, Mahabubnagar	TSSPDCL
2	Sri M Jaipal Reddy, Aqua Priyadarshini Industries, Mahabubnagar	TSSPDCL
3	Sri Swami Jagannayananda, Mahabubnagar	TSSPDCL
4	Sri S Venkataratnam, KavadiGuda, Hyderabad	TSSPDCL
5	Sri Y Chandrashekar, Nalgonda	TSSPDCL
6	Sri Thimma Reddy, Convenor, Peoples Monitoring Group on Electricity Regulation, 139, Kakatiya Nagar, Hyderabad	TSSPDCL
7	Sri P S R Krishana Prasad, Kukatpally, Hyderabad	TSSPDCL
8	Sri C Ravinder Reddy, President Offset Printers Association, Hyderabad	TSSPDCL
9	Flat Owners & Residents of Happy Home Housing Towers and Palace , Hyderabad	TSSPDCL
10	Sri S Malla Reddy, Akhila Bharata Kisan Sabha, Hyderabad	TSSPDCL
11	Kamineni steel & power India Pvt. Ltd., Hyderabad	TSSPDCL
12	Dr S Jeelani, University of Hyderabad, Hyderabad	TSSPDCL
13	Sri Narsi Reddy, Paddaooru, Nalgonda	TSSPDCL
14	Sri K Shankar Tolukatta, Moinabad, Ranga Reddy District	TSSPDCL
15	Sri Singi Reddy Srinivas Reddy, Shamirpet, Ranga Reddy District	TSSPDCL
16	Sri Lakshma Reddy, Bantaram, Ranga Reddy District	TSSPDCL
17	Sri Subba Reddy, Parigi, Ranga Reddy District	TSSPDCL
18	Sri C Praveen Reddy, Vikarabad, Ranga Reddy District	TSSPDCL
19	Sri C Narshima Reddy, Vikarabad, Ranga Reddy District	TSSPDCL
20	Sri P Sadanand Reddy, Shivampet, Medak	TSSPDCL
21	Sri P Narshimha Reddy, Sadhashivapet, Medak	TSSPDCL
22	Sri G Ganandera, Shabad, Ranga Reddy District	TSSPDCL
23	Sri M Madhusudhan Reddy, Ramanthapur, Hyderabad	TSSPDCL
24	Sri P Venkat Reddy, 1-10-1/2139/95, Srichakarapuram, Kapara, Kushaiguda, Hyderabad	TSSPDCL
25	Sri S Madhava Reddy, Moinabad, Ranga Reddy District	TSSPDCL
26	Sri K AmbaReddy, Vikarabad, Ranga Reddy District	TSSPDCL
27	Sri K Malla Reddy, Vikarabad, Ranga Reddy District	TSSPDCL
28	Sri Sama Narayana Reddy, Moinabad, Ranga Reddy District	TSSPDCL
29	Sri Pandu, Shankerpally, Ranga Reddy District	TSSPDCL
30	Sri Ram Reddy, Shankerpally, Ranga Reddy District	TSSPDCL
31	Sri E Lakshmaiah, Sultanpally, Shamshabad, Ranga Reddy District	TSSPDCL
32	Sri Adi Reddy, Sultanpally, Shamshabad, Ranga Reddy District	TSSPDCL
33	Sri R Narshima Reddy, Atnoor, Medak	TSSPDCL
34	Sri A Surender Reddy, Flat No.102, EPL, Veera Apartment, C-Block, Serlingampally, Ranga Reddy District	TSSPDCL
35	Sri K Anantha Reddy, 5-116, Adrash Nagar, Lingampally, Hyderabad	TSSPDCL

Determination of Retail Supply Tariffs for FY 2016-17

Sl. No	Name and Address of the Objector	Objection related to
36	Sri S Prabhakar Reddy, Shameerpet, Ranga Reddy District	TSSPDCL
37	Sri K Surender Reddy, Shameerpet, Ranga Reddy District	TSSPDCL
38	Sri M Raji Reddy, 20-160/1, R.B Nagar, Shamshabad, Ranga Reddy District	TSSPDCL
39	Sri Y Narsi Reddy, Veligonda Mandal, Nalgonda	TSSPDCL
40	Sri Kondaiah, Nalgonda	TSSPDCL
41	Sr A Konda Reddy, Anumula, Nalgonda	TSSPDCL
42	Sri Saidulu Singam, Tripuram M, Nalgonda	TSSPDCL
43	Sri A Raghurami Reddy, Anumula, Nalgonda	TSSPDCL
44	Sri K Soma Reddy, Veellagadda Tanda, Anmula Mandal, Nalgonda	TSSPDCL
45	Sri Srinivas Goud, Jadcharla, Mahabubnagar	TSSPDCL
46	Sri Balaiah, Chegunta, Mahabubnagar	TSSPDCL
47	Sri Shyam Sunder Reddy, Flat No 154, Nagarjuna Colony, Vansathalipuram, Hyderabad	TSSPDCL
48	Sri Balachandra Reddy, Mahabubnagar	TSSPDCL
49	Sri Jangaiah, H.No 11-99/1, Jaganmohan Reddy Compound, Mahabubnagar	TSSPDCL
50	Sri Parvath Reddy, Tadoor, Mahabubnagar	TSSPDCL
51	Sri Srihari, Shadnagar, Mahabubnagar	TSSPDCL
52	Sri K Krishana Reddy, H.No 11-99/1, Jaganmohan Reddy Compound, Mahabubnagar	TSSPDCL
53	Gobal Hospitals, Hyderabad	TSSPDCL
54	KIMS, Secunderabad	TSSPDCL
55	Poulomi Hospital, Dr. A S Rao Nagar, Secunderabad	TSSPDCL
56	Kamineni Educational Society, Hyderabad	TSSPDCL
57	Kamineni Hospitals, Hyderabad	TSSPDCL
58	Kamineni Steel & Power India Pvt. Ltd, Hyderabad	TSSPDCL
59	Inox Air Products, Hyderabad	TSSPDCL
60	Super Aluminium Wire & Wire, 1-8-673, Azamabad, Hyderabad	TSSPDCL
61	Sri K M Manoj, L&T Metro Rail, Q 3rd & 4th floor, Cyber Tower, Hi-Tech City, Madhapur, Hyderabad	TSSPDCL
62	Apollo Hospitals, Apollo Health City Campus, Jubilee Hills, Hyderabad	TSSPDCL
63	Sri P Ram Reddy, Zilla Raithu Samkshema Sangam, Nalgonda	TSSPDCL
64	Sri P Kodanda Ramaiah, Hyderabad	TSSPDCL
65	Sri Ahmed Bin Abdullah Balala, H.No.22-5-484, Balala Mansion, Opposite Royal Plaza Function Hall, Panjasha, Charminar, Hyderabad	TSSPDCL
66	Sri C H Venkata reddy, Star Hospital, 8-2-596/5, Road No.10, Banjara Hills, Hyderabad	TSSPDCL
67	Sri Chandra Sekar Patnaik, Virinchi Health Care Private Limited, H.No.6-3-2,6-3-3/1, Road No.1 & 12 Banjara Hills, Hyderabad	TSSPDCL
68	Dr B S V Raju, Prime Hospital, Plot No. 4, Behind Maitrivanam Building, Ameerpet, Hyderabad	TSSPDCL

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Sl. No	Name and Address of the Objector	Objection related to
69	Sri Kausar Mohiuddin, Karwan Constituency, H.No.9-4-29/86, Hakimpet, Tolichowki, Hyderabad	TSSPDCL
70	Sri R P Singh, Road.No. 10, Banjara Hills, Hyderabad	TSSPDCL
71	Sri Raghu N Reddy, Continental Hospital, Hyderabad	TSSPDCL
72	Sri Syed Ahmed Pasha Quadri, H.No.19-5-16/2/1, Bahadurpura, Kishanbagh Road, Hyderabad	TSSPDCL
73	Sri Syed Altaf Hyder Razvi, Darusalam, Aghapura, Hyderabad	TSSPDCL
74	Sri Asaduddin Owaisi, Memeber of Parliament, Darusalam, Aghapura, Hyderabad	TSSPDCL
75	Sri G Prabhakar Rao, Plot No.24/102, Opposite Jaya Residency, Kukatpally, Hyderabad	TSSPDCL
76	Sri Mohd. Quasim Ali, H.No.6-3-1242/3/, Maktha , Opposite Raj Bhavan, Hyderabad	TSSPDCL
77	Sri Mumtaz Ahmed Khan, Darusalam, Aghapura, Hyderabad	TSSPDCL
78	Dr A R Reddy, S K S Neuro Hospital Pvt. Ltd., 3-4-1, Station Road, Kachiguda, Hyderabad	TSSPDCL
79	Sri G Mukunda Reddy, Karimnagar	TSNPDCL
80	Telangana Offset Printers Association	TSNPDCL
81	Sri Chinthalapalli Veera Rao, Warangal, Cotton Millers & Traders Welfare Association	TSNPDCL
82	Sri Bommineni Ravinder Reddy, Telangana Cotton Miller's & Traders Welfare Association	TSNPDCL
83	Sri D Malla Reddy, Ginning & Pressing mills Welfare Assocation, Karimnagar District	TSNPDCL
84	Sri G Prasad Rao, Karimnagar	TSNPDCL
85	Sri D Sridhar Babu, K Sasi Bhushan, #9-36, Nadi Veedhi, Mandhani, Karimnagar	TSNPDCL
86	Sri Siva Ramakrishna, Agro Industries, H.No.6-95/A, Shed No. 2, Madhapur, Korutla, Karimnagar	TSNPDCL
87	Sri D Ravi, Bharatiya Kisan Sangh, Metpalli, Karimnagar	TSNPDCL
88	Sri Sama Ramesh Reddy, Metpalli, Karimnagar	TSNPDCL
89	Sri K Rajpal Reddy, H.No.7-92, Karimnagar	TSNPDCL
90	Sri B Raji Reddy, Warangal	TSNPDCL
91	Sri Kodela Sammaiah	TSNPDCL
92	Sri K Sai Reddy, 11-1-1815, Maruthinagar, Nizamabad	TSNPDCL
93	Sri J Sampath Rao, 9-6-22, Ramnagar, Karimnagar	TSNPDCL
94	Sri D Ravi, Motpalli, Karimnagar	TSNPDCL
95	Sri E Rajender, Mallapur, Karimnagar	TSNPDCL
96	Sri A C Reddy, Macha Reddy Mandal, Nizamabad	TSNPDCL
97	Sri Vilas Deshmukh, Kotagiri, Nizamabad	TSNPDCL
98	Sri M Sanjeev Kumar, Kotagiri, Nizamabad	TSNPDCL
99	Sri K Tirupati Reddy, Parakal Mandal, Warangal	TSNPDCL
100	Sri B Bal Reddy, Karimnagar	TSNPDCL
101	Sri M Raj Reddy, Karimnagar	TSNPDCL
102	Sri Mittapalli Ramesh, Karimanagar	TSNPDCL
103	Sri Baddam Sandramma, Korutla, Karimnagar	TSNPDCL
104	Sri Peddala Gangarajan, Mallapur, Karimnagar	TSNPDCL

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Sl. No	Name and Address of the Objector	Objection related to
105	Sri S Ramreddy, Jagityal, Karimnagar	TSNPDCL
106	Sri Kunta Mallareddy, Velagatur, Karimnagar	TSNPDCL
107	Sri D Rajanna, Karimnagar	TSNPDCL
108	Sri G Ganga Reddy, Karimnagar	TSNPDCL
109	Sri P Lingareddy, Karimnagar	TSNPDCL
110	Sri R Lingareddy, Karimnagar	TSNPDCL
111	Sri Bapadevaiah, Karimnagar	TSNPDCL
112	Sri Narayana Reddy, Ellareddypet, Karimnagar	TSNPDCL
113	Sri C Surender, Karimnagar	TSNPDCL
114	Sri Ashok Reddy, Adilabad	TSNPDCL
115	Sri Raji Reddy, Adilabad	TSNPDCL
116	Sri Pramod Kumar, Adilabad	TSNPDCL
117	Sri Bhim Reddy, Adilabad	TSNPDCL
118	Sri Janardhan Reddy, Adilabad	TSNPDCL
119	Sri J Bhagvan Reddy, Adilabad	TSNPDCL
120	Sri Soma Rajeshwar Reddy, Nizamabad	TSNPDCL
121	Sri M Lakshma Reddy, Nizamabad	TSNPDCL
122	Smt E Rajamma, Eesayipeta, Nachareddy Mandal, Nizamabad	TSNPDCL
123	Sri A Malla Reddy, Ramulapalle, Karimnagar	TSNPDCL
124	Sri Venkat Reddy, Adilabad	TSNPDCL
125	Sri Harigopal, Pegadapalle, Karimnagar	TSNPDCL
126	Sri G Surender Reddy, Pegadapalle, Karimnagar	TSNPDCL
127	Sri K Sammaiah, Chityal, Warangal	TSNPDCL
128	Sri K Surender Reddy, Chityal, Warangal	TSNPDCL
129	Sri V Sambaiah, Warangal	TSNPDCL
130	Sri P Ravinder, Warangal	TSNPDCL
131	Sri G Narender Reddy, Karimnagar	TSNPDCL
132	Sri Anil Reddy Vennam, The Federation of Telangana & AP Chambers of Commerce and Industry	TSSPDCL and TSNPDCL
133	Sri Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, H.No.7-1-408 to 413, Sri Sai Darshan Residency, Balkampet Road, Ameerpet, Hyderabad	TSSPDCL and TSNPDCL
134	South Central Railways	TSSPDCL and TSNPDCL
135	Sri D Narsimha Reddy, 201, Aarti Residency, Lakshminagar Colony, Saidabad, Hyderabad	TSSPDCL and TSNPDCL
136	Sri D Pandu Ranga Reddy, 201, Pallavi Residency, H.No.12-13-662, Nagarjunanagar, 5-1-14, Lane 1, Tarnaka, Hyderabad	TSSPDCL and TSNPDCL
137	Sri N Venugopal Reddy, 23-6-202, Near Nature Cure Hospital, Dwarakanagar, Hanamkonda	TSSPDCL and TSNPDCL
138	Sri M Kodanda Reddy, Hyderabad	TSSPDCL and TSNPDCL
139	Sri G Venkat Reddy, Hyderabad	TSSPDCL and TSNPDCL
140	Sri Anugula Rakesh Reddy, Hyderabad	TSSPDCL and TSNPDCL
141	Sri M Ravikanth, Biomass Energy Developers Association, 6-2-913/914, Towers, 1st Floor, Khairatabad, Hyderabad	TSSPDCL and TSNPDCL
142	Sri S Jeevan Kumar, Human Rights Forum, H.No.3-12-117/A2/B, P S Colony, Ramanthapur, Hyderabad	TSSPDCL and TSNPDCL

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Sl. No	Name and Address of the Objector	Objection related to
143	Aam Admi Party, Telangana, 1-2-1/6, 1st floor, ING Vysya ATM, Hyderabad	TSSPDCL and TSNPDCL
144	Sri M Srinivas, 1-7-144, Golconda X Road, Musheerabad, Hyderabad	TSSPDCL and TSNPDCL
145	Sri V Lakshmi Kumar, ITC Ltd., Virginia House, 37, J L Nehru Road, Kolkata	TSSPDCL and TSNPDCL
146	Sri R K Agarwal, Telangana Spinning & Textile Mills Association, Secunderabad	TSSPDCL and TSNPDCL
147	Sri J Sri Ranga Rao, Flat No.503, Sri Lakshmi Solitude, H.No.2-2-18/80/7, DD Colony, Hyderabad	TSSPDCL and TSNPDCL
148	Sri M M Hussain, Raj Bhavan Road, Somajiguda, Hyderabad	TSSPDCL and TSNPDCL
149	Sri M Sreedhar Reddy, 504, Rajput Residency, H.No.2-1-174 & 175, Nallakunta, Hyderabad	TSSPDCL and TSNPDCL
150	Sri Anantha Reddy, Indian Nursery Association, Hyderabad	TSSPDCL and TSNPDCL
151	Sri G Narender Reddy, Pegatapalli, Karimnagar	TSSPDCL and TSNPDCL
152	Sri P Anji Reddy, G2, 2-1-174&175, Nallakunta, Hyderabad	TSSPDCL and TSNPDCL
153	Sri D Ramprasad, 2-1-1-74, Rajput Residency, Flat No.42, Hyderabad	TSSPDCL and TSNPDCL
154	Sri K Eshwar Rao, 1-7-144, Golconda X roads, Musheerabad, Hyderabad	TSSPDCL and TSNPDCL
155	Sri G Nagraj, 6-1-44/3, Mint Compound, Khairatabad, Hyderabad	TSSPDCL and TSNPDCL
156	Sri R Narsing Rao, H.No.1-2-111, New Bowenpalli, Secunderabad	TSSPDCL and TSNPDCL
157	Dr Nagam Janardhan Reddy, Villa No.23, Hill Ridge Villas, Beside ISB, Gachibowli, Hyderabad	TSSPDCL and TSNPDCL
158	Viom Networks Limited, 4th Floor, Gowra Plaza, Door No. 1-8-304-307/381/444, Sardar Patel Road, Begumpet, Secunderabad	TSSPDCL and TSNPDCL

ANNEXURE-D
STATION WISE AND MONTH WISE COMBINED AVAILABILITY OF ENERGY FOR FY 2016-17 – FILINGS

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
TSGENCO													
Thermal													
VTPS I	129.33	133.83	97.00	133.83	66.92	97.00	133.83	129.33	133.83	133.83	124.84	133.83	1,447.39
VTPS II	126.41	130.59	126.41	99.20	130.59	84.13	109.66	126.41	130.59	130.59	122.22	130.59	1,447.39
VTPS III	123.69	127.78	123.69	97.07	127.78	123.69	117.54	103.21	127.78	127.78	119.59	127.78	1,447.39
VTPS IV	149.79	154.61	149.79	154.61	154.61	149.79	154.61	149.79	74.90	154.61	144.97	154.61	1,746.68
RTPP I	123.74	127.84	123.74	96.92	127.84	123.74	127.84	92.79	127.84	127.84	115.47	127.84	1,443.42
RTPP Stage-II	123.74	127.84	123.74	127.84	127.84	92.79	127.84	123.74	96.92	127.84	115.47	127.84	1,443.42
RTPP Stage-III	61.87	63.92	61.87	63.92	33.00	61.87	63.92	61.87	63.92	63.92	57.73	63.92	721.71
KTPS A	70.81	73.17	70.81	63.73	64.32	61.96	64.32	70.81	64.32	73.17	67.86	73.17	818.47
KTPS B	71.48	73.86	71.48	73.86	55.99	71.48	36.93	55.99	73.86	73.86	66.71	73.86	799.34
KTPS C	70.25	72.60	52.69	72.60	72.60	70.25	55.03	70.25	71.43	72.60	65.57	72.60	818.47
KTPS D	154.11	159.25	154.11	159.25	159.25	115.58	79.62	115.58	159.25	159.25	143.84	159.25	1,718.36
KTPS Stage VI	149.72	154.71	74.86	154.71	154.71	149.72	154.71	149.72	154.71	154.71	139.73	154.71	1,746.68
RTS B	18.41	19.02	9.21	19.02	19.02	18.41	19.02	18.41	19.02	19.02	17.18	19.02	214.79
Kakatiya Thermal Power Plant Stage I	149.72	154.71	149.72	154.71	154.71	149.72	154.71	149.72	154.71	79.85	139.73	154.71	1,746.68
Kakatiya Thermal Power Plant Stage II	333.38	344.49	333.38	344.49	344.49	333.38	344.49	333.38	344.49	177.80	311.15	344.49	3,889.44
Total Thermal	1,856.45	1,918.20	1,722.49	1,815.74	1,793.66	1,703.51	1,744.07	1,751.00	1,797.55	1,676.66	1,752.09	1,918.20	21,449.62
Hydro													
MACHKUND PH TS Share	15.16	14.40	11.54	13.90	14.35	15.26	15.46	13.85	13.62	14.87	13.59	14.16	170.16
TUNGBHADRA PH TS Share	1.34	0.25	0.08	3.91	11.23	11.88	10.52	8.76	7.09	7.42	5.62	5.31	73.41
USL	19.11	15.71	14.64	19.28	18.80	15.41	15.99	15.10	18.18	22.45	23.49	28.92	227.07
LSR	49.86	42.56	36.14	45.17	47.14	46.21	46.31	40.58	43.59	52.49	52.94	59.65	562.66
DONKARAYI	4.18	3.28	2.40	3.18	3.87	4.05	4.31	3.88	4.44	5.33	5.35	5.85	50.12
SSLM	33.88	11.98	6.57	12.76	125.46	135.88	63.92	30.62	14.51	24.06	28.41	44.86	532.91
NSPH	25.24	10.09	15.14	15.14	100.95	138.80	100.95	50.47	30.28	30.28	15.14	17.67	550.17
NSRCPH	0.82	-	-	0.30	6.75	13.33	16.53	14.66	10.62	6.62	3.31	1.88	74.82
NSLCPH	-	-	-	-	4.54	7.57	8.58	6.56	4.54	2.52	1.01	-	35.33
POCHAMPAD PH	-	-	-	2.02	6.06	6.06	6.06	1.51	1.51	3.53	4.04	4.04	34.83

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
NIZAMSAGAR PH	-	-	0.01	0.01	0.01	0.01	0.87	0.46	5.67	0.04	1.83	1.38	10.28
PABM	0.01	0.04	0.04	0.04	0.68	0.59	0.51	0.49	0.25	0.09	0.17	0.13	3.05
MINI HYDRO&OTHERS	0.07	-	0.03	0.19	0.15	0.17	0.04	0.03	0.14	0.20	0.14	0.19	1.34
SINGUR	-	0.50	0.50	0.50	0.50	1.51	1.51	1.51	1.51	1.51	1.51	1.51	12.62
SSLM LCPH	18.21	1.46	3.90	5.36	132.98	152.84	86.64	21.65	22.45	23.47	31.96	33.86	534.79
Nagarjunasagar Tail Pond Dam Power House	2.52	2.52	2.52	5.55	9.09	9.09	9.09	12.62	12.62	12.62	7.57	2.52	88.33
Priyadarshini Jurala Hydro Electric Project-TS Share	-	-	-	0.76	17.67	21.45	7.57	2.52	0.76	-	-	-	50.73
Lower Jurala Hydro Electric Project	-	-	-	4.68	46.83	70.25	70.25	23.42	14.05	4.68	1.87	1.87	237.90
Pochampad-II,Pulichintala(New),Mini Hydrel&Others	-	-	7.49	31.71	44.36	42.76	14.67	5.51	10.50	4.29	4.86	3.93	170.08
Total Hydro	170.40	102.80	101.01	164.46	591.43	693.12	479.77	254.21	216.35	216.47	202.82	227.73	3,420.59
TOTAL GENCO	2,026.86	2,021.01	1,823.51	1,980.20	2,385.09	2,396.63	2,223.84	2,005.21	2,013.90	1,893.13	1,954.90	2,145.94	24,870.21
Central Generating Stations													
NTPC													
NTPC (SR)													
NTPC (SR)	192.90	250.35	225.70	211.70	186.34	238.47	246.45	240.95	250.35	250.35	226.06	250.35	2,769.96
NTPC (SR) Stage III	61.36	63.41	61.36	62.85	62.85	6.71	33.76	60.80	63.41	63.41	57.26	63.41	660.58
Total NTPC(SR)	254.26	313.76	287.06	274.55	249.19	245.18	280.20	301.75	313.76	313.76	283.31	313.76	3,430.54
NTPC (ER)													
Talcher Stage 2	149.41	154.33	117.72	116.34	127.33	146.09	152.61	147.69	152.61	154.33	139.34	154.33	1,712.11
Total NTPC(ER)	149.41	154.33	117.72	116.34	127.33	146.09	152.61	147.69	152.61	154.33	139.34	154.33	1,712.11
Total NTPC	403.67	468.08	404.78	390.89	376.52	391.27	432.81	449.44	466.37	468.08	422.65	468.08	5,142.65
NLC TS-II													
NLC TS-II Stage-I	31.88	32.97	31.98	32.87	32.67	30.20	14.75	14.26	19.31	30.89	29.60	32.57	333.93
NLC TS-II Stage-II	57.77	59.61	57.90	44.64	37.55	35.71	51.21	42.94	45.96	59.22	53.70	59.09	605.29
Total NLC	89.65	92.58	89.88	77.51	70.22	65.91	65.96	57.19	65.26	90.10	83.30	91.66	939.22

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
NPC													
NPC-MAPS	14.53	14.96	14.53	14.96	14.96	14.53	14.96	10.65	10.38	14.96	13.99	14.96	168.34
NPC-Kaiga unit I	40.22	41.55	40.22	41.55	41.55	40.22	41.55	40.22	20.78	41.55	38.89	41.55	469.85
NPC-Kaiga unit II	39.07	40.48	19.54	40.48	40.48	39.07	40.48	39.07	40.48	40.48	36.61	40.48	456.72
Total NPC	93.82	96.99	74.28	96.99	96.99	93.82	96.99	89.94	71.64	96.99	89.49	96.99	1,094.91
NTPC - Simhadri													
NTPC Simhadri Stage I	317.41	325.50	317.41	325.50	264.06	182.69	325.50	315.26	325.50	325.50	305.02	327.65	3,656.98
NTPC Simhadri Stage II	145.78	149.49	145.78	86.38	149.49	144.79	149.49	144.79	149.49	149.49	140.09	150.48	1,705.52
Total NTPC- Simhadri	463.19	474.99	463.19	411.87	413.55	327.47	474.99	460.04	474.99	474.99	445.10	478.13	5,362.50
CGS - New													
Vallur Thermal Power Plant	69.40	71.70	69.40	71.70	71.70	46.27	55.54	54.71	71.70	71.70	64.81	71.70	790.31
Tuticorin	100.02	103.27	100.02	103.42	103.42	100.02	93.83	60.63	63.58	103.56	93.24	103.56	1,128.57
Kudigi	-	-	-	-	-	42.71	44.13	42.71	44.13	44.13	39.86	44.13	301.79
Total CGS	1,219.75	1,307.60	1,201.55	1,152.37	1,132.39	1,067.47	1,264.24	1,214.67	1,257.66	1,349.55	1,238.45	1,354.25	14,759.95
APGPCL													
APGPCL I - Allocated capacity	1.52	1.57	1.52	1.57	1.57	1.52	1.54	1.52	1.57	1.57	1.42	1.57	18.48
APGPCL I - Unutilised capacity	-	-	-	-	-	-	-	-	-	-	-	-	-
APGPCL II - Allocated capacity	5.12	5.30	5.12	5.30	5.30	5.13	5.30	5.12	5.30	5.22	4.78	5.30	62.27
APGPCL II - Unutilised capacity	-	-	-	-	-	-	-	-	-	-	-	-	-
Total APTPCL	6.64	6.87	6.64	6.87	6.87	6.65	6.84	6.64	6.87	6.79	6.20	6.87	80.75
IPPS													
Spectrum	30.68	-	-	-	-	-	-	-	-	-	-	-	30.68
Kondapalli (Gas)	79.78	82.44	79.78	82.44	82.44	79.78	82.44	79.78	82.44	82.44	74.46	82.44	970.61
BSES	8.02	8.29	8.02	8.29	8.29	8.02	8.29	8.02	8.29	8.29	7.49	8.29	97.60
GVK Extension	17.07	17.64	17.07	17.64	17.64	17.07	17.64	17.07	17.64	17.64	15.93	17.64	207.71

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
Vemagiri	28.71	29.67	28.71	29.67	29.67	28.71	29.67	28.71	29.67	29.67	26.80	29.67	349.34
Konaseema	34.46	35.60	34.46	35.60	35.60	34.46	35.60	34.46	35.60	35.60	32.16	35.60	419.20
Total IPPS	198.72	173.64	168.04	173.64	173.64	168.04	173.64	168.04	173.64	173.64	156.84	173.64	2,075.15
NCE													
NCE - Bio-Mass	11.23	12.85	11.52	14.03	14.34	14.34	11.23	12.85	11.52	14.03	14.34	14.34	156.62
NCE - Bagasse	8.37	13.31	12.46	6.30	6.71	4.95	5.77	2.31	18.86	20.82	16.29	12.33	128.47
NCE - Municipal Waste to Energy	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	18.45	18.45	18.45	154.33
NCE - Industrial Waste based power project	3.84	3.13	4.26	4.48	4.42	4.42	3.84	3.13	4.26	6.32	6.26	6.26	54.61
NCE - Wind Power	3.33	33.33	33.33	33.33	33.33	33.33	3.33	0.37	0.37	0.37	0.37	0.37	175.20
NCE - Mini Hydel	0.17	-	-	-	-	-	0.17	-	-	-	-	-	0.34
NCE-Others	105.58	107.44	103.93	121.06	120.87	118.49	169.56	164.98	167.91	167.93	155.10	227.58	1,730.43
Total NCE	143.52	181.07	176.50	190.20	190.67	186.52	204.90	194.64	213.92	227.92	210.81	279.32	2,400.00
Others													
KSK Mahanadi (MT)	124.00	128.14	124.00	-	-	-	-	-	-	-	-	-	376.15
Singareni	-	-	319.68	660.67	660.67	639.36	660.67	639.36	660.67	660.67	596.74	660.67	6,159.17
Thermal Power Unit 1	164.90	170.40	164.90	170.40	170.40	164.90	170.40	164.90	170.40	170.40	153.91	170.40	2,006.32
Thermal Power Unit 2	369.36	381.67	369.36	381.67	381.67	369.36	381.67	369.36	381.67	381.67	344.74	381.67	4,493.88
Total Others	658.27	680.21	977.95	1,212.74	1,212.74	1,173.62	1,212.74	1,173.62	1,212.74	1,212.74	1,095.38	1,212.74	13,035.52
Market													
Other Short Term Sources (Only SPDCL)	556.62	579.79	406.37	419.92	419.92	406.37	419.92	406.37	419.92	419.92	379.28	419.92	5,254.33
Bilateral Purchases (Only NPDCL)	232.34	242.01	169.63	175.28	175.28	169.63	175.28	169.63	175.28	175.28	158.32	175.28	2,193.22
Total Market	788.95	821.80	576.00	595.20	595.20	576.00	595.20	576.00	595.20	595.20	537.60	595.20	7,447.55
Total (From All Sources)	5,042.71	5,192.19	4,930.19	5,311.23	5,696.61	5,574.93	5,681.40	5,338.83	5,473.93	5,458.97	5,200.18	5,767.96	64,669.13

ANNEXURE-E
STATION WISE AND MONTH WISE AVAILABILITY OF ENERGY FOR FY 2016-17 – TSERC

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
TSGENCO													
Thermal													
VTPS I	119.29	123.27	89.47	123.27	61.63	91.46	123.27	119.29	123.27	123.27	111.34	123.27	1,332.06
VTPS II	119.29	123.27	119.29	93.44	123.27	77.54	103.38	119.29	123.27	123.27	111.34	123.27	1,359.90
VTPS III	119.29	123.27	119.29	93.44	123.27	119.29	113.32	99.41	123.27	123.27	111.34	123.27	1,391.71
VTPS IV	143.56	148.34	143.56	148.34	148.34	143.56	148.34	143.56	76.56	148.34	133.99	148.34	1,674.82
RTPP I	119.29	123.27	119.29	93.44	123.27	119.29	123.27	89.47	123.27	123.27	111.34	123.27	1,391.71
RTPP Stage-II	119.29	123.27	119.29	123.27	123.27	89.47	123.27	119.29	93.44	123.27	111.34	123.27	1,391.71
RTPP Stage-III	59.64	61.63	59.64	61.63	31.81	59.64	61.63	59.64	61.63	61.63	55.67	61.63	695.85
KTPS A	68.17	70.44	68.17	61.35	62.48	59.64	61.92	68.17	61.92	70.44	63.62	70.44	786.74
KTPS B	68.17	70.44	68.17	70.44	53.40	68.17	35.22	52.26	70.44	70.44	63.62	70.44	761.18
KTPS C	68.17	70.44	51.12	70.44	70.44	68.17	53.40	68.17	70.44	70.44	63.62	70.44	795.26
KTPS D	142.01	146.74	142.01	146.74	146.74	106.51	73.37	108.88	146.74	146.74	132.54	146.74	1,585.79
KTPS Stage VI	143.56	148.34	71.78	148.34	148.34	143.56	148.34	143.56	148.34	148.34	133.99	148.34	1,674.82
RTS B	17.75	18.34	8.88	18.34	18.34	17.75	18.34	17.75	18.34	18.34	16.57	18.34	207.10
Kakatiya Thermal Power Plant Stage I	143.56	148.34	143.56	148.34	148.34	143.56	148.34	143.56	148.34	76.56	133.99	148.34	1,674.82
Kakatiya Thermal Power Plant Stage II	319.67	330.33	319.67	330.33	330.33	319.67	330.33	319.67	330.33	170.49	298.36	330.33	3,729.49
Total Thermal	1,770.69	1,829.71	1,643.17	1,731.15	1,713.26	1,627.26	1,665.73	1,671.94	1,719.59	1,598.10	1,652.64	1,829.71	20,452.94
Hydro													
MACHKUND PH TS Share	15.16	14.40	11.54	13.90	14.35	15.26	15.46	13.85	13.62	14.87	13.59	14.16	170.16
TUNGBHADRA PH TS Share	1.34	0.25	0.08	3.91	11.23	11.88	10.52	8.76	7.09	7.42	5.62	5.31	73.41
USL	-	-	-	-	-	-	-	-	-	-	-	-	-
LSR	-	-	-	-	-	-	-	-	-	-	-	-	-
DONKARAYI	-	-	-	-	-	-	-	-	-	-	-	-	-
SSLM	-	-	-	-	-	-	-	-	-	-	-	-	-
NSPH	51.33	20.53	30.80	30.80	205.32	282.32	205.32	102.66	61.60	61.60	30.80	35.93	1,119.00
NSRCPH	-	-	-	-	-	-	-	-	-	-	-	-	-
NSLCPH	-	-	-	-	8.43	14.05	15.92	12.18	8.43	4.68	1.87	-	65.56

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
POCHAMPAD PH	-	-	-	5.28	15.83	15.83	15.83	3.96	3.96	9.23	10.55	10.55	91.00
NIZAMSAGAR PH	-	-	0.01	0.01	0.01	0.01	2.53	1.34	16.56	0.12	5.35	4.04	30.00
PABM	-	-	-	-	-	-	-	-	-	-	-	-	-
MINI HYDRO&OTHERS	0.12	-	0.06	0.36	0.28	0.31	0.07	0.05	0.26	0.37	0.26	0.35	2.48
SINGUR	-	1.96	1.96	1.96	1.96	5.88	5.88	5.88	5.88	5.88	5.88	5.88	49.00
SSLM LCPH	45.98	3.69	9.85	13.53	335.68	385.84	218.71	54.67	56.67	59.24	80.67	85.46	1,350.00
Nagarjunasagar Tail Pond Dam Power House	-	-	-	-	-	-	-	-	-	-	-	-	-
Priyadarshini Jurala Hydro Electric Project-TS Share	-	-	-	1.64	38.29	46.49	16.41	5.47	1.64	-	-	-	109.94
Lower Jurala Hydro Electric Project	-	-	-	10.52	105.20	157.80	157.80	52.60	31.56	10.52	4.21	4.21	534.43
Pochampad-II,Pulichintala(New),Mini Hydrel&Others	-	-	10.57	44.90	63.32	60.99	21.84	8.14	15.18	6.84	7.55	6.25	245.58
Total Hydro	113.93	40.82	64.89	126.80	799.91	996.66	686.29	269.54	222.46	180.76	166.35	172.13	3,840.56
TOTAL GENCO	1,884.61	1,870.53	1,708.06	1,857.95	2,513.17	2,623.91	2,352.02	1,941.48	1,942.05	1,778.86	1,818.99	2,001.84	24,293.50
Central Generating Stations													
NTPC													
NTPC (SR)													
NTPC (SR)	227.67	235.26	227.67	235.26	235.26	227.67	235.26	227.67	235.26	235.26	212.49	235.26	2,769.96
NTPC (SR) Stage III	54.29	56.10	54.29	56.10	56.10	54.29	56.10	54.29	56.10	56.10	50.67	56.10	660.58
Total NTPC(SR)	281.96	291.36	281.96	291.36	291.36	281.96	291.36	281.96	291.36	291.36	263.16	291.36	3,430.54
NTPC (ER)													
Talcher Stage 2	140.72	145.41	140.72	145.41	145.41	140.72	145.41	140.72	145.41	145.41	131.34	145.41	1,712.11
Total NTPC(ER)	140.72	145.41	140.72	145.41	145.41	140.72	145.41	140.72	145.41	145.41	131.34	145.41	1,712.11
Total NTPC	422.68	436.77	422.68	436.77	436.77	422.68	436.77	422.68	436.77	436.77	394.50	436.77	5,142.65
NLC TS-II													
NLC TS-II Stage-I	32.32	33.40	32.32	33.40	33.40	32.32	33.40	32.32	33.40	33.40	30.17	33.40	393.26
NLC TS-II Stage-II	57.19	59.10	57.19	59.10	59.10	57.19	59.10	57.19	59.10	59.10	53.38	59.10	695.82

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
Total NLC	89.51	92.50	89.51	92.50	92.50	89.51	92.50	89.51	92.50	92.50	83.55	92.50	1,089.08
NPC													
NPC-MAPS	14.15	14.63	14.15	14.63	14.63	14.15	14.63	14.15	14.63	14.63	13.21	14.63	172.20
NPC-Kaiga unit I	40.94	42.31	40.94	42.31	42.31	40.94	42.31	40.94	42.31	42.31	38.21	42.31	498.11
NPC-Kaiga unit II	43.36	44.81	43.36	44.81	44.81	43.36	44.81	43.36	44.81	44.81	40.47	44.81	527.55
Total NPC	98.45	101.74	98.45	101.74	101.74	98.45	101.74	98.45	101.74	101.74	91.89	101.74	1,197.86
NTPC - Simhadri													
NTPC Simhadri Stage I	312.49	322.90	312.49	322.90	322.90	312.49	322.90	312.49	322.90	322.90	291.66	322.90	3,801.93
NTPC Simhadri Stage II	143.51	148.30	143.51	148.30	148.30	143.51	148.30	143.51	148.30	148.30	133.95	148.30	1,746.08
Total NTPC- Simhadri	456.00	471.20	456.00	471.20	471.20	456.00	471.20	456.00	471.20	471.20	425.60	471.20	5,548.02
CGS - New													
Vallur Thermal Power Plant	66.53	68.75	66.53	68.75	68.75	66.53	68.75	66.53	68.75	68.75	62.10	68.75	809.45
Tuticorin	92.76	95.85	92.76	95.85	95.85	92.76	95.85	92.76	95.85	95.85	86.58	95.85	1,128.57
Kudigi	-	-	-	-	-	42.77	44.20	42.77	44.20	44.20	39.92	44.20	302.27
Total CGS	1,225.94	1,266.81	1,225.94	1,266.81	1,266.81	1,268.72	1,311.01	1,268.72	1,311.01	1,311.01	1,184.14	1,311.01	15,217.90
APGPCL													
APGPCL I - Allocated capacity	1.52	1.57	1.52	1.57	1.57	1.52	1.54	1.52	1.57	1.57	1.42	1.57	18.48
APGPCL I - Unutilised capacity	-	-	-	-	-	-	-	-	-	-	-	-	-
APGPCL II - Allocated capacity	5.12	5.30	5.12	5.30	5.30	5.13	5.30	5.12	5.30	5.22	4.78	5.30	62.27
APGPCL II - Unutilised capacity	-	-	-	-	-	-	-	-	-	-	-	-	-
Total APGPCL	6.64	6.87	6.64	6.87	6.87	6.65	6.84	6.64	6.87	6.79	6.20	6.87	80.75
IPPS													
Spectrum	30.68	-	-	-	-	-	-	-	-	-	-	-	30.68

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Gross energy availability (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
Kondapalli (Gas)	79.78	82.44	79.78	82.44	82.44	79.78	82.44	79.78	82.44	82.44	74.46	82.44	970.61
BSES	8.02	8.29	8.02	8.29	8.29	8.02	8.29	8.02	8.29	8.29	7.49	8.29	97.60
GVK Extension	17.07	17.64	17.07	17.64	17.64	17.07	17.64	17.07	17.64	17.64	15.93	17.64	207.71
Vemagiri	28.71	29.67	28.71	29.67	29.67	28.71	29.67	28.71	29.67	29.67	26.80	29.67	349.34
Konaseema	34.46	35.60	34.46	35.60	35.60	34.46	35.60	34.46	35.60	35.60	32.16	35.60	419.20
Total IPPS	198.72	173.64	168.04	173.64	173.64	168.04	173.64	168.04	173.64	173.64	156.84	173.64	2,075.15
NCE													
NCE - Bio-Mass	11.23	12.85	11.52	14.03	14.34	14.34	11.23	12.85	11.52	14.03	14.34	14.34	156.62
NCE - Bagasse	8.37	13.31	12.46	6.30	6.71	4.95	5.77	2.31	18.86	20.82	16.29	12.33	128.47
NCE - Municipal Waste to Energy	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	18.45	18.45	18.45	154.33
NCE - Industrial Waste based power project	3.84	3.13	4.26	4.48	4.42	4.42	3.84	3.13	4.26	6.32	6.26	6.26	54.61
NCE - Wind Power	3.33	33.33	33.33	33.33	33.33	33.33	3.33	0.37	0.37	0.37	0.37	0.37	175.20
NCE - Mini Hydel	0.17	-	-	-	-	-	0.17	-	-	-	-	-	0.34
NCE-Others	105.58	107.44	103.93	121.06	120.87	118.49	169.56	164.98	167.91	167.93	155.10	227.58	1,730.43
Total NCE	143.52	181.07	176.50	190.20	190.67	186.52	204.90	194.64	213.92	227.92	210.81	279.32	2,400.00
Others													
KSK Mahanadi (MT)	124.23	128.37	124.23	-	-	-	-	-	-	-	-	-	376.84
Singareni	-	-	-	329.44	329.44	637.63	658.89	637.63	658.89	658.89	595.12	658.89	5,164.82
Thermal Power Unit 1	164.90	170.40	164.90	170.40	170.40	164.90	170.40	164.90	170.40	170.40	153.91	170.40	2,006.30
Thermal Power Unit 2	369.36	381.67	369.36	381.67	381.67	369.36	381.67	369.36	381.67	381.67	344.73	381.67	4,493.83
Total Others	658.49	680.44	658.49	881.51	881.51	1,171.89	1,210.95	1,171.89	1,210.95	1,210.95	1,093.76	1,210.95	12,041.79
Total (From All Sources)	4,117.94	4,179.36	3,943.67	4,376.98	5,032.67	5,425.74	5,259.36	4,751.41	4,858.43	4,709.17	4,470.74	4,983.63	56,109.09

ANNEXURE-F
MERIT ORDER DISPATCH OF ENERGY FOR FY 2016-17 – TSERC

Generating Station	Variable Cost (INR/kWh)	Gross Energy Dispatch (MU)												
		April	May	June	July	August	September	October	November	December	January	February	March	Total
NCE														
NCE - Bio-Mass	4.37	11.23	12.85	11.52	14.03	14.34	14.34	11.23	12.85	11.52	14.03	14.34	14.34	156.62
NCE - Bagasse	2.78	8.37	13.31	12.46	6.30	6.71	4.95	5.77	2.31	18.86	20.82	16.29	12.33	128.47
NCE - Municipal Waste to Energy	7.11	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	18.45	18.45	18.45	154.33
NCE - Industrial Waste based power project	4.37	3.84	3.13	4.26	4.48	4.42	4.42	3.84	3.13	4.26	6.32	6.26	6.26	54.61
NCE - Wind Power	-	3.33	33.33	33.33	33.33	33.33	33.33	3.33	0.37	0.37	0.37	0.37	0.37	175.20
NCE - Mini Hydel	-	0.17	-	-	-	-	-	0.17	-	-	-	-	-	0.34
NCE-Solar	-	105.58	107.44	103.93	121.06	120.87	118.49	169.56	164.98	167.91	167.93	155.10	227.58	1,730.43
Total NCE		143.52	181.07	176.50	190.20	190.67	186.52	204.90	194.64	213.92	227.92	210.81	279.32	2,400.00
NPC														
NPC-MAPS	2.05	14.15	14.63	14.15	14.63	14.63	14.15	14.63	14.15	14.63	14.63	13.21	14.63	172.20
NPC-Kaiga unit I	3.03	40.94	42.31	40.94	42.31	42.31	40.94	42.31	40.94	42.31	42.31	38.21	42.31	498.11
NPC-Kaiga unit II	3.03	43.36	44.81	43.36	44.81	44.81	43.36	44.81	43.36	44.81	44.81	40.47	44.81	527.55
Total NPC		98.45	101.74	98.45	101.74	101.74	98.45	101.74	98.45	101.74	101.74	91.89	101.74	1,197.86
Total Must Run Stations:		241.98	282.80	274.95	291.94	292.41	284.98	306.63	293.10	315.65	329.66	302.70	381.06	3,597.86
Gas based IPPs														
Spectrum	4.07	30.68	-	-	-	-	-	-	-	-	-	-	-	30.68
Kondapalli (Gas)	4.70	79.78	82.44	79.78	82.44	82.44	79.78	82.44	79.78	82.44	82.44	74.46	82.44	970.61
BSES	2.33	8.02	8.29	8.02	8.29	8.29	8.02	8.29	8.02	8.29	8.29	7.49	8.29	97.60
GVK Extension	4.70	17.07	17.64	17.07	17.64	17.64	17.07	17.64	17.07	17.64	17.64	15.93	17.64	207.71

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Variable Cost (INR/kWh)	Gross Energy Dispatch (MU)												
		April	May	June	July	August	September	October	November	December	January	February	March	Total
Vemagiri	4.70	28.71	29.67	28.71	29.67	29.67	28.71	29.67	28.71	29.67	29.67	26.80	29.67	349.34
Konaseema	4.70	34.46	35.60	34.46	35.60	35.60	34.46	35.60	34.46	35.60	35.60	32.16	35.60	419.20
Total IPPS		198.72	173.64	168.04	173.64	173.64	168.04	173.64	168.04	173.64	173.64	156.84	173.64	2,075.15
MACHKUND PH TS Share	-	15.16	14.40	11.54	13.90	14.35	15.26	15.46	13.85	13.62	14.87	13.59	14.16	170.16
TUNGBHADRA PH TS Share	-	1.34	0.25	0.08	3.91	11.23	11.88	10.52	8.76	7.09	7.42	5.62	5.31	73.41
USL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LSR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DONKARAYI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSLM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSPH	-	51.33	20.53	30.80	30.80	205.32	282.32	205.32	102.66	61.60	61.60	30.80	35.93	1,119.00
NSRCPH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NSLCPH	-	-	-	-	-	8.43	14.05	15.92	12.18	8.43	4.68	1.87	-	65.56
POCHAMPAD PH	-	-	-	-	5.28	15.83	15.83	15.83	3.96	3.96	9.23	10.55	10.55	91.00
NIZAMSAGAR PH	-	-	-	0.01	0.01	0.01	0.01	2.53	1.34	16.56	0.12	5.35	4.04	30.00
PABM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MINI HYDRO&OTHERS	-	0.12	-	0.06	0.36	0.28	0.31	0.07	0.05	0.26	0.37	0.26	0.35	2.48
SINGUR	-	-	1.96	1.96	1.96	1.96	5.88	5.88	5.88	5.88	5.88	5.88	5.88	49.00
SSLM LCPH	-	45.98	3.69	9.85	13.53	335.68	385.84	218.71	54.67	56.67	59.24	80.67	85.46	1,350.00
Nagarjunasagar Tail Pond Dam Power House	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Priyadarshini Jurala Hydro Electric Project-TS Share	-	-	-	-	1.64	38.29	46.49	16.41	5.47	1.64	-	-	-	109.94
Lower Jurala Hydro Electric Project	-	-	-	-	10.52	105.20	157.80	157.80	52.60	31.56	10.52	4.21	4.21	534.43
Pochampad-II,Pulichintala(New),Mini Hydel&Others	-	-	-	10.57	44.90	63.32	60.99	21.84	8.14	15.18	6.84	7.55	6.25	245.58
Talcher Stage 2	1.31	141	145	141	145	145	141	145	141	145	145	131	145	1,712.11
Thermal Power Unit 2	1.54	369	382	369	382	382	369	382	369	382	382	345	382	4,493.83
Thermal Power Unit 1	1.85	165	170	165	170	170	165	170	165	170	170	154	170	2,006.30

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Variable Cost (INR/kWh)	Gross Energy Dispatch (MU)												
		April	May	June	July	August	September	October	November	December	January	February	March	Total
Vallur Thermal Power Plant	1.92	67	69	67	69	69	67	69	67	69	69	62	69	809.45
Kudigi	1.93	0	0	0	0	0	43	44	43	44	44	40	44	302.27
KTPS D	2.02	142	147	142	147	147	107	73	109	147	147	133	147	1,585.79
Singareni	2.15	0	0	0	329	329	638	659	638	659	659	595	659	5,164.82
KSK Mahanadi (MT)	2.24	124	128	124	0	0	0	0	0	0	0	0	0	376.84
NTPC (SR) Stage III	2.29	54	56	54	56	56	54	56	54	56	56	51	56	660.58
NTPC (SR)	2.32	228	235	228	235	235	228	235	228	235	235	212	235	2,769.96
NLC TS-II Stage-II	2.39	57	59	57	59	59	57	59	57	59	59	53	59	695.82
NLC TS-II Stage-I	2.40	32	33	32	33	33	32	33	32	33	33	30	33	393.26
Tuticorin	2.41	93	96	93	96	96	93	96	93	96	96	87	96	1,128.57
NTPC Simhadri Stage II	2.48	144	148	144	148	148	144	148	144	148	148	134	148	1,746.08
NTPC Simhadri Stage I	2.50	312	323	312	323	323	312	323	312	323	323	292	323	3,801.93
Kakatiya Thermal Power Plant Stage I	2.61	144	148	144	148	148	144	148	144	148	77	134	148	1,674.82
Kakatiya Thermal Power Plant Stage II	2.61	320	330	320	330	330	320	330	320	330	170	298	330	3,729.49
APGPCL II - Allocated capacity	2.68	5	5	5	5	5	5	5	5	5	5	5	5	62.27
KTPS Stage VI	2.69	144	148	72	148	148	144	148	144	148	148	134	148	1,674.82
KTPS A	2.73	68	70	68	61	62	48	62	68	62	70	64	70	774.89
KTPS B	2.73	68	70	68	70	53	0	35	52	70	70	64	70	693.01
KTPS C	2.73	68	70	51	70	70	0	53	68	70	70	64	70	727.10
APGPCL I - Allocated capacity	2.83	2	2	2	2	2	0	2	2	2	2	1	2	16.96
VTPS IV	3.06	144	148	144	148	148	0	148	144	77	148	134	148	1,531.26
RTS B	3.10	18	18	9	18	18	0	18	18	9	18	17	18	179.79
VTPS I	3.27	119	123	89	123	62	0	123	19	0	123	111	123	1,016.72
VTPS II	3.27	119	123	119	93	123	0	103	0	0	30	96	123	931.20
VTPS III	3.27	119	123	119	93	121	0	84	0	0	0	0	40	700.42

Determination of Retail Supply Tariffs for FY 2016-17

Generating Station	Variable Cost (INR/kWh)	Gross Energy Dispatch (MU)												
		April	May	June	July	August	September	October	November	December	January	February	March	Total
RTPP I	3.84	119	123	111	93	0	0	0	0	0	0	0	0	446.56
RTPP Stage-II	3.84	119	88	0	123	0	0	0	0	0	0	0	0	330.31
RTPP Stage-III	3.84	60	0	0	62	0	0	0	0	0	0	0	0	121.28
Total Despatch(MU)		4,117.94	4,082.21	3,756.01	4,376.98	4,751.80	4,558.04	4,922.12	4,163.69	4,200.73	4,184.75	4,065.45	4,592.35	51,772.09
Monthly Requirement		4141.80	4082.21	3756.01	4644.45	4751.80	4558.04	4922.12	4163.69	4200.73	4184.75	4065.45	4592.35	52,063.42
Market Purchase		23.86	-	-	267.47	-	-	-	-	-	-	-	-	291.33
Monthly Availability		4,117.94	4,082.21	3,756.01	4,376.98	4,751.80	4,558.04	4,922.12	4,163.69	4,200.73	4,184.75	4,065.45	4,592.35	51,772.09

ANNEXURE-G
ENERGY REQUIREMENT AT THE STATE PERIPHERY FOR FY 2016-17-TSERC

Particulars	TSSPDCL	TSNPDCL
Energy delivered to LT system from 11/400 V DTRs	19878.47	9442.84
Energy sold to metered categories	11838.76	4334.47
Energy sold to un-metered categories	6946.40	4589.01
% Losses (LT System)	5.50%	5.5%
Total Energy delivered into 11 KV and LT Distribution System	25898.03	11358.31
Energy consumed by HT consumers at 11KV	4854.14	1435.02
Total Output from 11kV to LT	19878.47	9442.84
% Losses (11kV System)	4.50%	4.23%
Total Energy delivered into 33 KV Distribution System from EHT SSs	32488.53	12277.52
Energy consumed by HT consumers at 33KV	5294.21	428.10
Energy Delivered into 11 KV and LT System from 33/11 KV SSs	25898.03	11358.31
% Losses (33 kV System)	3.99%	0.04
Total Input to the distribution system	32488.53	12277.52
Total Output from the Distribution System	28933.51	10786.60
EHT Sales	3825.86	1571.65
Distribution System Losses	3555.02	1490.91
% Distribution System Losses (Excluding EHT Sales)	10.94%	12.1%
% Distribution System Losses (Including EHT Sales)	9.79%	10.8%
Total Energy available at 132 kV	36314.40	13849.17
TRANSCO losses	3.12%	0.03
Total Energy input at State Periphery	37483.89	14295.18
CGS (Mus)	8054.07	3361.90
PGCIL Losses(%)	2.49%	2.49%
PGCIL Losses(MU)	200.61	83.74
Total Power Purchase Requirement at State Periphery	37684.50	14378.92

ANNEXURE-H
TSGENCO & APGENCO STATION WISE FIXED COSTS FOR FY 2016-17-TSERC

	Generating Station	Plant Capacity (MW)	Energy Availability (Telangana Share) (MU)	Energy Despatch (MU)	Fixed Cost (Telangana Share)
					INR Crores
	TSGENCO & APGENCO				
1	VTPS I	420.00	1,332.06	1,016.72	117.85
2	VTPS II	420.00	1,359.90	931.20	117.85
3	VTPS III	420.00	1,391.71	700.42	117.85
4	VTPS IV	500.00	1,674.82	1,531.26	253.78
5	RTPP I	420.00	1,391.71	446.56	144.26
6	RTPP Stage-II	420.00	1,391.71	330.31	229.03
7	RTPP Stage-III	210.00	695.85	121.28	153.51
8	KTPS A	240.00	786.74	774.89	83.13
9	KTPS B	240.00	761.18	693.01	83.13
10	KTPS C	240.00	795.26	727.10	83.13
11	KTPS D	500.00	1,585.79	1,585.79	122.42
12	KTPS Stage VI	500.00	1,674.82	1,674.82	294.52
13	RTS B	62.50	207.10	179.79	27.38
14	Kakatiya Thermal Power Plant Stage I	500.00	1,674.82	1,674.82	294.33
15	Kakatiya Thermal Power Plant Stage II	600.00	3,729.49	3,729.49	980.02
	Total Thermal	5,692.50	20,452.94	16,117.46	3,102.18
	HYDRO				
18	MACHKUND PH TS Share	84.00	170.16	170.16	10.87
19	TUNGBHADRA PH TS Share	57.60	73.41	73.41	7.45
20	USL	240.00	-	-	-

Determination of Retail Supply Tariffs for FY 2016-17

	Generating Station	Plant Capacity (MW)	Energy Availability (Telangana Share) (MU)	Energy Despatch (MU)	Fixed Cost (Telangana Share)
					INR Crores
21	LSR	460.00	-	-	-
22	DONKARAYI	25.00	-	-	-
23	SSLM RBPH	770.00	-	-	-
24	NSPH	815.60	1,119.00	1,119.00	132.14
25	NSRCPH	90.00	-	-	-
26	NSLCPH	60.00	65.56	65.56	9.72
27	POCHAMPAD PH	27.00	91.00	91.00	16.44
28	NIZAMSAGAR PH	10.00	30.00	30.00	6.09
29	PABM	20.00	-	-	-
30	MINI HYDRO&OTHERS	12.16	2.48	2.48	-
31	SINGUR	15.00	49.00	49.00	9.13
32	SSLM LCPH	900.00	1,350.00	1,350.00	461.16
33	Nagarjunasagar Tail Pond Dam Power House	50.00	-	-	-
34	Priyadarshini Jurala Hydro Electric Project- TS Share*	234.00	109.94	109.94	58.96
35	Lower Jurala Hydro Electric Project	240.00	534.43	534.43	269.00
36	PochampadII,Pulichintala (New),Mini Hydrel&Others	129.00	245.58	245.58	69.58
	Total Hydro	4,239.36	3,840.56	3,840.56	1,050.53
	Total TSGENCO & APGENCO	9,931.86	24,293.50	19,958.02	4,152.71

*For Priyadarshini Jurala project, the sharing of energy between erstwhile AP and Karnataka is in the ratio 50:50. Out of the total fixed cost assessed provisionally of INR 117.91 Crores, Karnataka ESCOMs are liable to pay 50% of the fixed cost i.e, INR 58.96 Crores irrespective of actual energy drawal and remaining 50% has to be borne by Telangana and AP Discoms as specified in AP Reorganization Act 2014.

ANNEXURE-I
TSSPDCL – CATEGORY WISE AND MONTH WISE SALES FOR FY 2016-17

Category	Sales (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
LT Category	1,483.37	1,626.31	1,317.29	1,737.20	1,661.05	1,539.87	1,673.01	1,503.83	1,574.41	1,535.72	1,384.24	1,748.85	18,785.16
Category I (A&B) - Domestic	716.51	769.66	638.04	693.41	656.28	624.28	643.90	581.96	576.70	557.17	571.90	719.67	7,749.47
Category II (A,B,C&D) - Non-domestic/Commercial	208.03	212.10	189.25	203.40	195.01	181.85	190.33	180.33	183.03	172.59	174.83	208.88	2,299.63
Category III (A & B) - Industrial	74.14	68.68	67.88	69.29	69.33	63.61	68.13	75.24	82.62	74.77	69.79	75.07	858.55
Category IV (A & B) - Cottage Industries & Dhobighats	0.83	0.79	0.76	0.77	0.82	0.70	0.83	0.86	0.87	0.80	0.75	0.88	9.66
Category V (A, B & C) - Irrigation and Agriculture	408.46	500.80	347.53	695.83	664.77	593.40	686.67	586.95	652.08	652.17	493.05	664.69	6,946.40
Category VI (A & B) - Local Bodies, St. Lighting & PWS	70.02	69.29	68.76	68.35	68.85	70.31	77.76	72.98	73.52	73.37	68.49	73.53	855.23
Category VII (A & B) - General Purpose	5.29	4.86	4.98	6.05	5.90	5.64	5.40	5.50	5.60	4.87	5.43	6.13	65.63
Category VIII (A & B) -Temporary Supply	0.08	0.12	0.09	0.10	0.10	0.09	0.01	0.00	-	-	-	-	0.58
HT Category at 11 KV	422.31	397.11	438.50	414.31	421.34	410.85	405.74	396.76	385.46	383.59	401.47	376.71	4,854.14
HT-I Industry Segregated	269.73	239.42	273.64	268.03	270.48	262.33	257.99	251.77	255.15	258.58	269.20	252.22	3,128.55
HT-I (B) Ferro-Alloys	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-II - Others	131.01	139.99	146.83	129.63	134.12	132.36	125.40	118.21	111.76	106.82	114.65	109.82	1,500.60
HT-III Airports, Railway and Busstations	0.53	0.56	0.59	0.50	0.51	0.48	0.60	0.53	0.44	0.42	0.52	0.52	6.19
HT -IV A Private Irrigation & Agriculture	4.88	0.99	0.51	0.89	0.97	0.97	5.06	9.55	1.68	1.26	0.53	0.53	27.80
HT- IV B - CP Water Supply Schemes	4.80	4.38	4.62	4.41	4.24	3.93	5.10	5.73	5.66	5.65	5.70	4.09	58.33
HT-VI Townships and Residential Colonies	8.28	8.40	9.15	7.69	7.74	7.58	8.27	7.48	7.23	7.39	7.61	6.79	93.60
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	3.08	3.38	3.17	3.17	3.28	3.20	3.32	3.49	3.55	3.46	3.27	2.73	39.08
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
HT Category at 33 KV	462.58	407.33	456.45	443.32	487.72	479.88	490.25	434.89	390.52	378.82	438.15	424.30	5,294.21
HT-I Industry Segregated	398.75	343.81	388.38	371.11	413.02	405.73	409.30	371.21	331.25	321.49	381.13	369.69	4,504.87
HT-I (B) Ferro-Alloys	4.59	3.75	4.08	2.83	3.10	2.69	7.14	6.62	7.33	6.01	5.62	4.73	58.48
HT-II - Others	50.72	52.92	58.03	54.23	55.91	55.27	56.80	48.02	44.92	43.44	43.77	42.43	606.47
HT-III Airports, Railway and Busstations	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -IV A Private Irrigation & Agriculture	2.54	0.84	0.63	11.23	12.07	12.64	12.56	3.43	2.01	2.95	2.38	2.02	65.28
HT- IV B - CP Water Supply Schemes	0.35	0.29	0.44	0.37	-	-	0.37	0.37	0.40	0.35	0.38	0.31	3.64

Determination of Retail Supply Tariffs for FY 2016-17

Category	Sales (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
HT-VI Townships and Residential Colonies	4.01	4.30	4.60	3.56	3.62	3.55	3.92	3.39	3.20	3.28	3.41	3.20	44.03
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	1.63	1.44	0.29	-	-	-	0.15	1.84	1.41	1.30	1.47	1.91	11.44
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
HT Category at 132 KV	299.21	264.73	275.56	344.77	385.53	391.02	416.32	295.19	295.88	302.40	280.64	274.62	3,825.86
HT-I Industry Segregated	205.40	186.34	195.68	183.93	215.61	210.38	216.56	212.80	217.09	237.63	210.22	205.87	2,497.52
HT-I (B) Ferro-Alloys	14.43	12.81	10.26	13.51	14.52	14.40	18.84	18.97	16.20	16.94	15.47	13.44	179.78
HT-II - Others	5.59	6.16	6.09	5.50	6.14	5.44	5.01	4.17	4.09	4.04	4.35	4.57	61.16
HT-III Airports, Railway and Busstations	5.56	6.04	6.41	5.82	6.07	6.01	5.87	5.35	4.68	4.39	5.62	5.62	67.45
HT -IV A Private Irrigation & Agriculture	37.64	22.92	27.11	107.69	114.81	126.51	139.43	26.37	25.79	10.36	14.48	17.37	670.48
HT- IV B - CP Water Supply Schemes	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	103.68
HT-V Railway Traction	18.87	18.75	18.31	16.61	16.68	16.59	18.91	15.83	16.33	17.34	18.80	16.04	209.07
HT-V (B) HMR	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	36.72
HT-VI Townships and Residential Colonies	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2,667.47	2,695.48	2,487.80	2,939.60	2,955.64	2,821.61	2,985.33	2,630.66	2,646.27	2,600.53	2,504.51	2,824.47	32,759.38

Determination of Retail Supply Tariffs for FY 2016-17

ANNEXURE-J
TSNPDCL – CATEGORY WISE AND MONTH WISE SALES FOR FY 2016-17

Category	Sales (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
LT Category	658.44	597.16	537.68	796.67	826.09	795.34	940.44	672.74	718.78	752.68	744.01	883.46	8,923.48
Category I (A&B) - Domestic	265.15	273.09	301.17	265.86	285.64	280.12	330.77	247.77	220.76	209.55	208.41	226.55	3,114.85
Category II (A,B,C&D) - Non-domestic/Commercial	52.51	55.46	60.30	48.75	53.24	52.24	62.84	47.19	44.84	43.66	43.85	47.07	611.96
Category III (A & B) - Industrial	22.16	22.46	23.92	18.69	18.63	18.30	18.81	20.63	26.50	29.24	25.75	21.40	266.46
Category IV (A &B) - Cottage Industries & Dhobighats	0.57	0.55	0.62	0.50	0.54	0.54	0.62	0.57	0.51	0.54	0.49	0.52	6.58
Category V (A, B & C) - Irrigation and Agriculture	289.57	218.83	124.62	437.19	441.44	416.95	494.25	327.45	397.93	441.71	437.64	561.43	4,589.01
Category VI (A & B) - Local Bodies, St. Lighting & PWS	24.74	23.90	24.41	22.47	22.80	23.09	28.85	25.51	24.71	24.76	24.70	23.17	293.12
Category VII (A & B) - General Purpose	3.73	2.87	2.64	3.20	3.80	4.09	4.30	3.62	3.53	3.22	3.17	3.33	41.50
Category VIII (A & B) -Temporary Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
HT Category at 11 KV	128.08	102.46	98.97	111.01	114.51	115.69	128.29	116.22	131.73	130.85	138.05	119.16	1,435.02
HT-I Industry Segregated	46.44	43.65	44.32	39.93	38.51	38.59	36.84	48.71	60.75	56.59	56.90	46.48	557.71
HT-I (B) Ferro-Alloys	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-II - Others	9.16	9.68	9.55	8.71	9.08	9.61	9.13	8.58	7.02	6.54	7.60	7.73	102.37
HT-III Airports, Railway and Busstations	0.79	0.79	0.84	0.71	0.73	0.76	0.64	0.67	0.59	0.56	0.62	0.67	8.38
HT -IV A Private Irrigation & Agriculture	1.83	1.15	0.40	0.33	1.01	1.44	1.66	1.78	0.84	1.12	1.39	1.18	14.11
HT- IV B - CP Water Supply Schemes	4.30	4.27	4.18	4.27	4.18	4.28	4.11	4.42	4.35	4.34	4.58	4.20	51.46
HT-VI Townships and Residential Colonies	0.87	1.62	1.68	1.47	1.24	1.19	1.60	1.40	1.19	1.21	1.27	1.17	15.90
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
HT - RESCOs	64.69	41.31	38.01	55.60	59.76	59.81	74.31	50.67	56.99	60.49	65.68	57.74	685.07
HT Category at 33 KV	33.80	33.53	34.11	32.56	37.33	39.64	38.72	38.13	35.49	35.10	35.06	34.63	428.10

Determination of Retail Supply Tariffs for FY 2016-17

Category	Sales (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
HT-I Industry Segregated	17.44	16.36	16.44	15.96	16.28	17.06	16.07	17.42	17.96	17.62	17.52	16.92	203.03
HT-I (B) Ferro-Alloys	2.64	3.59	3.98	3.52	4.07	3.93	3.94	3.74	3.74	3.74	3.74	3.74	44.37
HT-II - Others	1.61	1.60	1.46	1.29	1.51	1.60	1.61	1.90	1.76	1.71	1.95	1.90	19.89
HT-III Airports, Railway and Busstations	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -IV A Private Irrigation & Agriculture	0.48	0.10	0.07	0.06	3.87	5.06	5.75	3.57	0.84	0.96	0.51	0.48	21.75
HT- IV B - CP Water Supply Schemes	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	95.04
HT-VI Townships and Residential Colonies	3.71	3.96	4.24	3.81	3.69	4.06	3.43	3.58	3.27	3.16	3.43	3.67	44.03
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
HT Category at 132 KV	104.60	99.34	105.21	141.85	196.44	194.11	182.10	153.82	98.20	97.42	101.63	96.94	1,571.65
HT-I Industry Segregated	56.61	52.50	56.24	54.92	64.58	59.83	49.91	58.06	52.49	52.00	54.85	53.28	665.27
HT-I (B) Ferro-Alloys	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-II - Others	0.13	0.00	0.14	0.00	0.32	0.37	0.01	0.05	0.23	0.00	0.33	0.17	1.75
HT-III Airports, Railway and Busstations	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -IV A Private Irrigation & Agriculture	1.00	0.99	1.11	43.70	85.46	87.33	87.02	51.43	2.52	1.31	1.26	1.14	364.28
HT- IV B - CP Water Supply Schemes	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-V Railway Traction	38.72	37.36	38.57	35.92	37.44	37.54	37.39	37.61	37.18	38.24	39.15	35.53	450.64
HT-VI Townships and Residential Colonies	8.14	8.49	9.16	7.31	8.63	9.04	7.77	6.68	5.78	5.86	6.04	6.82	89.71
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	924.91	832.49	775.98	1,082.09	1,174.37	1,144.78	1,289.55	980.90	984.21	1,016.05	1,018.74	1,134.18	12,358.26

ANNEXURE-K
BOTH DISCOMS – CATEGORY WISE AND MONTH WISE SALES FOR FY 2016-17

Category	Sales (MU)												Total
	April	May	June	July	August	September	October	November	December	January	February	March	
LT Category	2,141.81	2,223.47	1,854.97	2,533.87	2,487.14	2,335.21	2,613.46	2,176.57	2,293.19	2,288.40	2,128.25	2,632.30	27,708.64
Category I (A&B) - Domestic	981.66	1,042.75	939.21	959.28	941.92	904.40	974.67	829.73	797.46	766.71	780.31	946.22	10,864.32
Category II (A,B & C) - Non-domestic/Commercial	260.54	267.56	249.55	252.15	248.24	234.09	253.17	227.53	227.87	216.25	218.68	255.95	2,911.59
Category III (A & B) - Industrial	96.30	91.14	91.80	87.98	87.96	81.90	86.93	95.87	109.12	104.01	95.54	96.47	1,125.01
Category IV (A & B) - Cottage Industries & Dhobighats	1.41	1.34	1.38	1.28	1.36	1.24	1.45	1.42	1.39	1.34	1.24	1.40	16.25
Category V (A, B & C) - Irrigation and Agriculture	698.03	719.64	472.16	1,133.02	1,106.21	1,010.35	1,180.93	914.40	1,050.00	1,093.88	930.69	1,226.11	11,535.41
Category VI (A & B) - Local Bodies, St. Lighting & PWS	94.76	93.19	93.17	90.82	91.65	93.40	106.61	98.50	98.22	98.13	93.19	96.70	1,148.35
Category VII (A & B) - General Purpose	9.02	7.73	7.62	9.25	9.70	9.73	9.70	9.11	9.13	8.09	8.59	9.45	107.13
Category VIII (A & B) -Temporary Supply	0.08	0.12	0.09	0.10	0.10	0.09	0.01	0.00	-	-	-	-	0.58
HT Category at 11 KV	550.39	499.57	537.47	525.32	535.85	526.53	534.03	512.98	517.19	514.44	539.52	495.87	6,289.16
HT-I Industry Segregated	316.17	283.07	317.95	307.97	308.99	300.92	294.83	300.48	315.90	315.18	326.10	298.70	3,686.26
HT-I (B) Ferro-Alloys	-	-	-	-	-	-	-	-	-	-	-	-	-
HT-II - Others	140.16	149.66	156.38	138.34	143.20	141.98	134.53	126.79	118.77	113.36	122.24	117.55	1,602.97
HT-III Airports, Railway and Busstations	1.33	1.34	1.43	1.20	1.25	1.24	1.25	1.19	1.03	0.98	1.14	1.19	14.57
HT -IV A Private Irrigation & Agriculture	6.71	2.14	0.90	1.21	1.97	2.40	6.72	11.33	2.52	2.37	1.92	1.71	41.91
HT- IV B - CP Water Supply Schemes	9.10	8.65	8.80	8.67	8.42	8.21	9.20	10.15	10.01	9.99	10.28	8.29	109.79
HT-VI Townships and Residential Colonies	9.15	10.02	10.83	9.15	8.97	8.77	9.86	8.87	8.42	8.60	8.88	7.96	109.50
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	3.08	3.38	3.17	3.17	3.28	3.20	3.32	3.49	3.55	3.46	3.27	2.73	39.08
HT - RESCOs	64.69	41.31	38.01	55.60	59.76	59.81	74.31	50.67	56.99	60.49	65.68	57.74	685.07
HT Category at 33 KV	496.38	440.86	490.56	475.88	525.05	519.52	528.97	473.02	426.01	413.93	473.21	458.93	5,722.32
HT-I Industry Segregated	416.19	360.17	404.82	387.07	429.29	422.79	425.37	388.63	349.22	339.11	398.64	386.61	4,707.90
HT-I (B) Ferro-Alloys	7.22	7.34	8.06	6.34	7.16	6.61	11.08	10.36	11.07	9.75	9.36	8.48	102.85
HT-II - Others	52.33	54.52	59.49	55.52	57.42	56.88	58.41	49.92	46.68	45.15	45.72	44.33	626.36
HT-III Airports, Railway and Busstations	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -IV A Private Irrigation & Agriculture	3.02	0.94	0.70	11.29	15.94	17.70	18.31	7.00	2.85	3.90	2.89	2.50	87.03
HT- IV B - CP Water Supply Schemes	8.27	8.21	8.36	8.29	7.92	7.92	8.29	8.29	8.32	8.27	8.30	8.23	98.68

Determination of Retail Supply Tariffs for FY 2016-17

Category	Sales (MU)												
	April	May	June	July	August	September	October	November	December	January	February	March	Total
HT-VI Townships and Residential Colonies	7.72	8.26	8.84	7.37	7.31	7.61	7.36	6.96	6.47	6.44	6.84	6.87	88.05
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	1.63	1.44	0.29	-	-	-	0.15	1.84	1.41	1.30	1.47	1.91	11.44
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
HT Category at 132 KV	403.80	364.07	380.77	486.63	581.97	585.13	598.42	449.00	394.09	399.82	382.27	371.55	5,397.52
HT-I Industry Segregated	262.02	238.84	251.92	238.84	280.19	270.21	266.47	270.86	269.58	289.63	265.07	259.16	3,162.79
HT-I (B) Ferro-Alloys	14.43	12.81	10.26	13.51	14.52	14.40	18.84	18.97	16.20	16.94	15.47	13.44	179.78
HT-II - Others	5.72	6.16	6.23	5.51	6.47	5.81	5.02	4.22	4.33	4.04	4.68	4.74	62.92
HT-III Airports, Railway and Busstations	5.56	6.04	6.41	5.82	6.07	6.01	5.87	5.35	4.68	4.39	5.62	5.62	67.45
HT -IV A Private Irrigation & Agriculture	38.65	23.92	28.22	151.39	200.28	213.83	226.45	77.79	28.31	11.67	15.74	18.50	1,034.76
HT- IV B - CP Water Supply Schemes	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	103.68
HT-V Railway Traction	57.59	56.11	56.88	52.53	54.12	54.13	56.30	53.44	53.51	55.58	57.95	51.57	659.71
HT-V (B) HMR	11.20	11.55	12.22	10.37	11.69	12.10	10.83	9.74	8.84	8.92	9.10	9.88	126.43
HT-VI Townships and Residential Colonies	8.14	8.49	9.16	7.31	8.63	9.04	7.77	6.68	5.78	5.86	6.04	6.82	89.71
HT-VII - Green Power	-	-	-	-	-	-	-	-	-	-	-	-	-
HT -VIII - Temporary Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
HT - RESCOs	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3,592.38	3,527.97	3,263.78	4,021.69	4,130.01	3,966.39	4,274.88	3,611.57	3,630.48	3,616.58	3,523.25	3,958.65	45,117.63

ANNEXURE-L
TSSPDCL – COST OF SERVICE

SPDCL	Generation					
	Demand			Energy		
	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Recovery basis - Energy sales (MU)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	2,289.12	2,248.95	848.22	2,095.55	7,749.47	2.70
LT Cat II - Non-domestic	677.42	673.43	838.27	642.45	2,299.63	2.79
LT Cat III - Industrial	198.03	197.75	834.51	247.29	858.55	2.88
LT Cat IV - Cottage Industries & Dhobighats	2.32	2.34	825.99	2.78	9.66	2.88
LT Cat V - Irrigation and Agriculture	436.31	2,665.45	136.41	1,805.46	6,946.40	2.60
LT Cat VI - Local Bodies, St. Lighting & PWS	248.83	246.65	840.67	241.16	855.23	2.82
LT Cat VII - General Purpose	20.38	20.22	839.71	18.51	65.63	2.82
LT Cat VIII - Temporary	0.20	0.21	804.85	0.16	0.58	2.82
HT						
HT Cat I - Industry - General (11 kV)	639.84	1,391.13	383.28	795.51	3,128.55	2.54
HT Cat I - Industry - General (33 kV)	823.17	1,263.30	543.00	1,093.83	4,504.87	2.43
HT Cat I - Industry - General (220/132 kV)	482.29	609.70	659.18	582.14	2,497.52	2.33
HT I(B)- Ferro Alloys(33 kV)	11.58	-	NA	14.20	58.48	2.43
HT I(B)- Ferro Alloys(132 kV)	28.68	23.34	1,024.19	41.91	179.78	2.33
HT Cat II - Industry - Other (11 kV)	324.23	777.71	347.42	381.05	1,500.60	2.54
HT Cat II - Industry - Other (33 kV)	155.89	263.57	492.89	147.26	606.47	2.43
HT Cat II - Industry - Other (220/132 kV)	11.86	27.78	355.80	14.26	61.16	2.33
HT Cat III - Airport, Bus & Railway st. (11 kV)	1.68	2.61	535.79	1.57	6.19	2.53
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	NA	-	-	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	12.26	14.45	707.09	15.72	67.45	2.33
HT Cat IV - Irrigation & Agriculture (11 kV)	12.33	45.61	225.31	21.88	86.13	2.54
HT Cat IV - Irrigation & Agriculture (33 kV)	9.23	34.38	223.85	16.73	68.92	2.43
HT Cat IV - Irrigation & Agriculture (220/132 kV)	98.57	366.90	223.89	180.45	774.16	2.33
HT Cat V - Railway Traction (EHT)	59.89	93.93	531.36	57.29	245.79	2.33
HT Cat VI - Colony Consumption (11 kV)	26.64	40.10	553.57	23.77	93.60	2.54
HT Cat VI - Colony Consumption (33 kV)	12.07	22.97	437.98	10.69	44.03	2.43
HT Cat VI - Colony Consumption (220/132 kV)	-	-	NA	-	-	NA
HT Rural Co-operatives (11 kV)	-	-	NA	-	-	NA

Determination of Retail Supply Tariffs for FY 2016-17

HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	10.87	11.23	806.79	12.81	50.52	2.54
Open Access - 33 kV	-	-	-	-	-	-
Open Access - 11 kV	-	-	-	-	-	-
Total	6,593.69	11,043.73	497.54	8,464.41	32,759.38	2.58

SPDCL	Transmission - Inter-state			Transmission - Intra-state		
	Demand			Demand		
	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	95.01	2,248.95	35.20	191.79	2,248.95	71.07
LT Cat II - Non-domestic	28.45	673.43	35.20	57.43	673.43	71.07
LT Cat III - Industrial	8.35	197.75	35.20	16.86	197.75	71.07
LT Cat IV - Cottage Industries & Dhobighats	0.10	2.34	35.20	0.20	2.34	71.07
LT Cat V - Irrigation and Agriculture	112.60	2,665.45	35.20	227.31	2,665.45	71.07
LT Cat VI - Local Bodies, St. Lighting & PWS	10.42	246.65	35.20	21.03	246.65	71.07
LT Cat VII - General Purpose	0.85	20.22	35.20	1.72	20.22	71.07
LT Cat VIII - Temporary	0.01	0.21	35.20	0.02	0.21	71.07
HT						
HT Cat I - Industry - General (11 kV)	77.65	1,391.13	46.52	156.76	1,391.13	93.90
HT Cat I - Industry - General (33 kV)	70.52	1,263.30	46.52	142.35	1,263.30	93.90
HT Cat I - Industry - General (220/132 kV)	34.03	609.70	46.52	68.70	609.70	93.90
HT I(B)- Ferro Alloys(33 kV)	-	-	NA	-	-	NA
HT I(B)- Ferro Alloys(132 kV)	1.30	23.34	46.52	2.63	23.34	93.90
HT Cat II - Industry - Other (11 kV)	43.41	777.71	46.52	87.63	777.71	93.90
HT Cat II - Industry - Other (33 kV)	14.71	263.57	46.52	29.70	263.57	93.90
HT Cat II - Industry - Other (220/132 kV)	1.55	27.78	46.52	3.13	27.78	93.90
HT Cat III - Airport, Bus & Railway st. (11 kV)	0.15	2.61	46.52	0.29	2.61	93.90
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	NA	-	-	NA

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HT Cat III - Airport, Bus & Railway st. (220/132 kV)	0.81	14.45	46.52	1.63	14.45	93.90
HT Cat IV - Irrigation & Agriculture (11 kV)	1.93	45.61	35.20	3.89	45.61	71.07
HT Cat IV - Irrigation & Agriculture (33 kV)	1.45	34.38	35.20	2.93	34.38	71.07
HT Cat IV - Irrigation & Agriculture (220/132 kV)	15.50	366.90	35.20	31.29	366.90	71.07
HT Cat V - Railway Traction (EHT)	5.24	93.93	46.52	10.58	93.93	93.90
HT Cat VI - Colony Consumption (11 kV)	2.24	40.10	46.52	4.52	40.10	93.90
HT Cat VI - Colony Consumption (33 kV)	1.28	22.97	46.52	2.59	22.97	93.90
HT Cat VI - Colony Consumption (220/132 kV)	-	-	NA	-	-	NA
HT Rural Co-operatives (11 kV)	-	-	NA	-	-	NA
HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	0.47	11.23	35.20	0.96	11.23	71.07
Open Access - 33 kV	-	-	-	-	-	-
Open Access - 11 kV	-	-	-	-	-	-
Total	528.04	11,043.73	39.84	1,065.95	11,043.73	80.43

SPDCL	Distribution			Retail supply		
	Demand			Energy		
	Cost (INR Crore)	Rate basis - Contracts/ NCP T-D interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Recovery basis - Energy sales (MU)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	643.36	2,127.82	251.96	55.50	7,749.47	0.07
LT Cat II - Non-domestic	190.92	631.42	251.96	17.01	2,299.63	0.07
LT Cat III - Industrial	54.83	181.34	251.96	6.55	858.55	0.08
LT Cat IV - Cottage Industries & Dhobighats	0.64	2.11	251.96	0.07	9.66	0.08
LT Cat V - Irrigation and Agriculture	779.31	2,577.46	251.96	47.82	6,946.40	0.07
LT Cat VI - Local Bodies, St. Lighting & PWS	71.00	234.83	251.96	6.39	855.23	0.07
LT Cat VII - General Purpose	5.80	19.17	251.96	0.49	65.63	0.07
LT Cat VIII - Temporary	0.05	0.17	251.96	0.00	0.58	0.07
HT						
HT Cat I - Industry - General (11 kV)	281.52	1,343.84	174.58	21.07	3,128.55	0.07
HT Cat I - Industry - General (33 kV)	50.53	751.27	56.05	28.97	4,504.87	0.06

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HT Cat I - Industry - General (220/132 kV)	-	2.52	-	15.42	2,497.52	0.06
HT I(B)- Ferro Alloys(33 kV)	-	42.85	-	0.38	58.48	0.06
HT I(B)- Ferro Alloys(132 kV)	-	-	NA	1.11	179.78	0.06
HT Cat II - Industry - Other (11 kV)	157.38	751.27	174.58	10.09	1,500.60	0.07
HT Cat II - Industry - Other (33 kV)	10.54	255.01	34.45	3.90	606.47	0.06
HT Cat II - Industry - Other (220/132 kV)	-	-	NA	0.38	61.16	0.06
HT Cat III - Airport, Bus & Railway st. (11 kV)	0.53	2.52	174.58	0.04	6.19	0.07
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	NA	-	-	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	-	32.78	-	0.42	67.45	0.06
HT Cat IV - Irrigation & Agriculture (11 kV)	8.98	42.85	174.58	0.58	86.13	0.07
HT Cat IV - Irrigation & Agriculture (33 kV)	1.36	32.78	34.45	0.44	68.92	0.06
HT Cat IV - Irrigation & Agriculture (220/132 kV)	-	22.22	-	4.78	774.16	0.06
HT Cat V - Railway Traction (EHT)	-	-	NA	1.52	245.79	0.06
HT Cat VI - Colony Consumption (11 kV)	8.12	38.74	174.58	0.63	93.60	0.07
HT Cat VI - Colony Consumption (33 kV)	0.92	22.22	34.45	0.28	44.03	0.06
HT Cat VI - Colony Consumption (220/132 kV)	-	-	NA	-	-	NA
HT Rural Co-operatives (11 kV)	-	-	NA	-	-	NA
HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	2.19	10.47	174.58	0.34	50.52	0.07
Open Access - 33 kV	-	-	NA	-	-	NA
Open Access - 11 kV	-	-	NA	-	-	NA
Total	2,267.98	9,125.66	207.11	224.17	32,759.38	0.07

SPDCL	Cost Allocation (INR Crore)				
	Demand - G	Demand - T	Demand - D	Energy	Customer INR Crore
LT					
LT Cat I – Domestic	2,289.12	286.79	643.36	2,151.05	-
LT Cat II - Non-domestic	677.42	85.88	190.92	659.47	-
LT Cat III - Industrial	198.03	25.22	54.83	253.85	-
LT Cat IV - Cottage Industries & Dhobighats	2.32	0.30	0.64	2.86	-
LT Cat V - Irrigation and Agriculture	436.31	339.91	779.31	1,853.28	-
LT Cat VI - Local Bodies, St. Lighting & PWS	248.83	31.45	71.00	247.55	-
LT Cat VII - General Purpose	20.38	2.58	5.80	19.00	-
LT Cat VIII - Temporary	0.20	0.03	0.05	0.17	-

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HT					
HT Cat I - Industry - General (11 kV)	639.84	234.41	281.52	816.57	-
HT Cat I - Industry - General (33 kV)	823.17	212.87	50.53	1,122.80	-
HT Cat I - Industry - General (220/132 kV)	482.29	102.74	-	597.56	-
HT I(B)- Ferro Alloys(33 kV)	11.58	-	-	14.58	-
HT I(B)- Ferro Alloys(132 kV)	28.68	3.93	-	43.01	-
HT Cat II - Industry - Other (11 kV)	324.23	131.05	157.38	391.14	-
HT Cat II - Industry - Other (33 kV)	155.89	44.41	10.54	151.16	-
HT Cat II - Industry - Other (220/132 kV)	11.86	4.68	-	14.63	-
HT Cat III - Airport, Bus & Railway st. (11 kV)	1.68	0.44	0.53	1.61	-
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	-	-	-
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	12.26	2.44	-	16.14	-
HT Cat IV - Irrigation & Agriculture (11 kV)	12.33	5.82	8.98	22.45	-
HT Cat IV - Irrigation & Agriculture (33 kV)	9.23	4.38	1.36	17.18	-
HT Cat IV - Irrigation & Agriculture (220/132 kV)	98.57	46.79	-	185.23	-
HT Cat V - Railway Traction (EHT)	59.89	15.83	-	58.81	-
HT Cat VI - Colony Consumption (11 kV)	26.64	6.76	8.12	24.40	-
HT Cat VI - Colony Consumption (33 kV)	12.07	3.87	0.92	10.97	-
HT Cat VI - Colony Consumption (220/132 kV)	-	-	-	-	-
HT Rural Co-operatives (11 kV)	-	-	-	-	-
HT Rural Co-operatives (33 kV)	-	-	-	-	-
HT Temporary	10.87	1.43	2.19	13.15	-
Open Access - 33 kV	-	-	-	-	-
Open Access - 11 kV	-	-	-	-	-
Total	6,593.69	1,593.99	2,267.98	8,688.58	-

SPDCL	Cost allocation			Total cost	Sales	Per unit cost
	Demand	Energy	Customer			
	INR Crore			INR Crore	MU	INR/ unit
LT						
LT Cat I - Domestic	3,219.27	2,151.05	0.00	5,370.32	7,749.47	6.93
LT Cat II - Non-domestic	954.21	659.47	0.00	1,613.68	2,299.63	7.02
LT Cat III - Industrial	278.08	253.83	0.00	531.91	858.55	6.20
LT Cat IV - Cottage Industries & Dhobighats	3.25	2.86	0.00	6.11	9.66	6.32
LT Cat V - Irrigation and Agriculture	1,555.53	1,853.28	0.00	3,408.80	6,946.40	4.91

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LT Cat VI - Local Bodies, St. Lighting & PWS	351.28	247.55	0.00	598.83	855.23	7.00
LT Cat VII - General Purpose	28.75	19.00	0.00	47.75	65.63	7.28
LT Cat VIII - Temporary	0.28	0.17	0.00	0.45	0.58	7.75
HT						
HT Cat I - Industry - General (11 kV)	1,155.77	816.57	0.00	1,972.34	3,128.55	6.30
HT Cat I - Industry - General (33 kV)	1,086.57	1,122.80	0.00	2,209.37	4,504.87	4.90
HT Cat I - Industry - General (220/132 kV)	585.03	597.56	0.00	1,182.58	2,497.52	4.74
HT I(B)- Ferro Alloys(33 kV)	11.58	14.58	0.00	26.15	58.48	4.47
HT I(B)- Ferro Alloys(132 kV)	32.62	43.01	0.00	75.63	179.78	4.21
HT Cat II - Industry - Other (11 kV)	612.66	391.14	0.00	1,003.80	1,500.60	6.69
HT Cat II - Industry - Other (33 kV)	210.85	151.16	0.00	362.01	606.47	5.97
HT Cat II - Industry - Other (220/132 kV)	16.54	14.63	0.00	31.18	61.16	5.10
HT Cat III - Airport, Bus & Railway st. (11 kV)	2.64	1.61	0.00	4.25	6.19	6.87
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	14.70	16.14	0.00	30.83	67.45	4.57
HT Cat IV - Irrigation & Agriculture (11 kV)	27.13	22.45	0.00	49.58	86.13	5.76
HT Cat IV - Irrigation & Agriculture (33 kV)	14.97	17.18	0.00	32.15	68.92	4.67
HT Cat IV - Irrigation & Agriculture (220/132 kV)	145.36	185.23	0.00	330.59	774.16	4.27
HT Cat V - Railway Traction (EHT)	75.72	58.81	0.00	134.53	245.79	5.47
HT Cat VI - Colony Consumption (11 kV)	41.51	24.40	0.00	65.91	93.60	7.04
HT Cat VI - Colony Consumption (33 kV)	16.86	10.97	0.00	27.84	44.03	6.32
HT Cat VI - Colony Consumption (220/132 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Rural Co-operatives (11 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	14.50	13.15	0.00	27.65	50.52	5.47
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00
Total	10,455.66	8,688.58	0.00	19,144.23	32,759.38	5.84

**ANNEXURE-M
TSNPDCL – COST OF SERVICE**

NPDCL	Generation					
	Demand			Energy		
	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Recovery basis - Energy sales (MU)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	1,086.91	898.30	1,008.30	790.92	3,114.85	2.54
LT Cat II - Non-domestic	233.77	202.94	959.92	165.91	611.96	2.71
LT Cat III - Industrial	61.51	61.80	829.40	93.93	266.46	3.53
LT Cat IV - Cottage Industries & Dhobighats	1.50	1.58	791.30	2.32	6.58	3.53
LT Cat V - Irrigation and Agriculture	342.79	1,699.48	168.09	1,008.63	4,589.01	2.20
LT Cat VI - Local Bodies, St. Lighting & PWS	89.74	76.63	975.93	123.68	293.12	4.22
LT Cat VII - General Purpose	12.28	10.64	961.99	17.51	41.50	4.22
LT Cat VIII - Temporary	-	-	NA	-	-	NA
HT						
HT Cat I - Industry - General (11 kV)	147.38	275.67	445.51	120.67	557.71	2.16
HT Cat I - Industry - General (33 kV)	55.04	49.19	932.38	42.07	203.03	2.07
HT Cat I - Industry - General (220/132 kV)	156.79	150.80	866.45	132.34	665.27	1.99
HT I(B)- Ferro Alloys(33 kV)	9.88	4.31	1,910.90	9.19	44.37	2.07
HT I(B)- Ferro Alloys(132 kV)	-	-	NA	-	-	NA
HT Cat II - Industry - Other (11 kV)	20.26	52.44	321.95	22.15	102.37	2.16
HT Cat II - Industry - Other (33 kV)	6.53	8.03	677.65	4.12	19.89	2.07
HT Cat II - Industry - Other (220/132 kV)	0.41	4.13	83.45	0.35	1.75	1.99
HT Cat III - Airport, Bus & Railway st. (11 kV)	3.63	8.78	344.43	1.81	8.38	2.16
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	NA	-	-	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	-	-	NA	-	-	NA
HT Cat IV - Irrigation & Agriculture (11 kV)	16.59	30.44	454.02	14.19	65.58	2.16
HT Cat IV - Irrigation & Agriculture (33 kV)	31.03	58.15	444.65	24.20	116.80	2.07
HT Cat IV - Irrigation & Agriculture (220/132 kV)	91.58	172.59	442.19	72.46	364.28	1.99
HT Cat V - Railway Traction (EHT)	144.83	133.99	900.78	89.64	450.64	1.99
HT Cat VI - Colony Consumption (11 kV)	5.72	4.52	1,053.77	3.44	15.90	2.16
HT Cat VI - Colony Consumption (33 kV)	0.45	30.64	12.20	9.12	44.03	2.07
HT Cat VI - Colony Consumption (220/132 kV)	0.45	18.17	20.57	17.85	89.71	1.99
HT Rural Co-operatives (11 kV)	101.88	138.53	612.86	148.23	685.07	2.16

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HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	-	-	NA	-	-	NA
Open Access - 33 kV	-	-	-	-	-	-
Open Access - 11 kV	-	-	-	-	-	-
Total	2,620.94	4,091.74	533.79	2,914.73	12,358.26	2.36

NPDCL	Transmission - Inter-state			Transmission - Intra-state		
	Demand			Demand		
	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	48.01	898.30	44.54	96.91	898.30	89.90
LT Cat II - Non-domestic	10.85	202.94	44.54	21.89	202.94	89.90
LT Cat III - Industrial	3.30	61.80	44.54	6.67	61.80	89.90
LT Cat IV - Cottage Industries & Dhobighats	0.08	1.58	44.54	0.17	1.58	89.90
LT Cat V - Irrigation and Agriculture	90.83	1699.48	44.54	183.34	1699.48	89.90
LT Cat VI - Local Bodies, St. Lighting & PWS	4.10	76.63	44.54	8.27	76.63	89.90
LT Cat VII - General Purpose	0.57	10.64	44.54	1.15	10.64	89.90
LT Cat VIII - Temporary	0.00	0.00	NA	0.00	0.00	NA
HT						
HT Cat I - Industry - General (11 kV)	15.39	275.67	46.52	31.06	275.67	93.90
HT Cat I - Industry - General (33 kV)	2.75	49.19	46.52	5.54	49.19	93.90
HT Cat I - Industry - General (220/132 kV)	8.42	150.80	46.52	16.99	150.80	93.90
HT I(B)- Ferro Alloys(33 kV)	0.24	4.31	46.52	0.49	4.31	93.90
HT I(B)- Ferro Alloys(132 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Cat II - Industry - Other (11 kV)	2.93	52.44	46.52	5.91	52.44	93.90
HT Cat II - Industry - Other (33 kV)	0.45	8.03	46.52	0.90	8.03	93.90
HT Cat II - Industry - Other (220/132 kV)	0.23	4.13	46.52	0.47	4.13	93.90
HT Cat III - Airport, Bus & Railway st. (11 kV)	0.47	8.78	44.54	0.95	8.78	89.90
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	0.00	0.00	NA	0.00	0.00	NA

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HT Cat IV - Irrigation & Agriculture (11 kV)	1.63	30.44	44.54	3.28	30.44	89.90
HT Cat IV - Irrigation & Agriculture (33 kV)	3.11	58.15	44.54	6.27	58.15	89.90
HT Cat IV - Irrigation & Agriculture (220/132 kV)	9.22	172.59	44.54	18.62	172.59	89.90
HT Cat V - Railway Traction (EHT)	7.48	133.99	46.52	15.10	133.99	93.90
HT Cat VI - Colony Consumption (11 kV)	0.25	4.52	46.52	0.51	4.52	93.90
HT Cat VI - Colony Consumption (33 kV)	1.71	30.64	46.52	3.45	30.64	93.90
HT Cat VI - Colony Consumption (220/132 kV)	1.01	18.17	46.52	2.05	18.17	93.90
HT Rural Co-operatives (11 kV)	7.40	138.53	44.54	14.95	138.53	89.90
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.00	0.00	NA	0.00	0.00	NA
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00
Total	220.42	4091.74	44.89	444.94	4091.74	90.62

NPDCL	Distribution			Retail supply		
	Demand			Energy		
	Cost (INR Crore)	Rate basis - Contracts/ NCP T-D interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Recovery basis - Energy sales (MU)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	384.58	855.27	374.72	17.00	3,114.85	0.05
LT Cat II - Non-domestic	80.38	178.75	374.72	3.57	611.96	0.06
LT Cat III - Industrial	23.50	52.26	374.72	2.02	266.46	0.08
LT Cat IV - Cottage Industries & Dhobighats	0.63	1.39	374.72	0.05	6.58	0.08
LT Cat V - Irrigation and Agriculture	765.67	1,702.75	374.72	21.67	4,589.01	0.05
LT Cat VI - Local Bodies, St. Lighting & PWS	30.16	67.07	374.72	2.66	293.12	0.09
LT Cat VII - General Purpose	4.27	9.50	374.72	0.38	41.50	0.09
LT Cat VIII - Temporary	-	-	NA	-	-	NA
HT						
HT Cat I - Industry - General (11 kV)	53.58	266.30	167.65	2.59	557.71	0.05
HT Cat I - Industry - General (33 kV)	1.14	47.59	19.95	0.90	203.03	0.04
HT Cat I - Industry - General (220/132 kV)	-	4.17	-	2.84	665.27	0.04
HT I(B)- Ferro Alloys(33 kV)	0.10	7.77	10.71	0.20	44.37	0.04
HT I(B)- Ferro Alloys(132 kV)	-	2.62	-	-	-	NA

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HT Cat II - Industry - Other (11 kV)	10.19	50.66	167.65	0.48	102.37	0.05
HT Cat II - Industry - Other (33 kV)	0.19	7.77	19.95	0.09	19.89	0.04
HT Cat II - Industry - Other (220/132 kV)	-	2.62	-	0.01	1.75	0.04
HT Cat III - Airport, Bus & Railway st. (11 kV)	0.55	2.74	167.65	0.04	8.38	0.05
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.06	2.62	19.95	-	-	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	-	55.55	-	-	-	NA
HT Cat IV - Irrigation & Agriculture (11 kV)	5.47	27.19	167.65	0.30	65.58	0.05
HT Cat IV - Irrigation & Agriculture (33 kV)	1.33	55.55	19.95	0.52	116.80	0.04
HT Cat IV - Irrigation & Agriculture (220/132 kV)	-	29.64	-	1.56	364.28	0.04
HT Cat V - Railway Traction (EHT)	-	-	NA	1.93	450.64	0.04
HT Cat VI - Colony Consumption (11 kV)	0.88	4.37	167.65	0.07	15.90	0.05
HT Cat VI - Colony Consumption (33 kV)	0.71	29.64	19.95	0.20	44.03	0.04
HT Cat VI - Colony Consumption (220/132 kV)	-	-	NA	0.38	89.71	0.04
HT Rural Co-operatives (11 kV)	26.79	133.15	167.65	3.19	685.07	0.05
HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	-	-	NA	-	-	NA
Open Access - 33 kV	-	-	NA	-	-	-
Open Access - 11 kV	-	-	NA	-	-	-
Total	1,390.17	3,596.96	322.07	62.64	12,358.26	0.05

NPDCL	Cost Allocation (INR Crore)				
	Demand - G	Demand - T	Demand - D	Energy	Customer
	INR Crore				
LT					
LT Cat I - Domestic	1,086.91	144.92	384.58	807.91	-
LT Cat II - Non-domestic	233.77	32.74	80.38	169.47	-
LT Cat III - Industrial	61.51	9.97	23.50	95.96	-
LT Cat IV - Cottage Industries & Dhobighats	1.50	0.25	0.63	2.37	-
LT Cat V - Irrigation and Agriculture	342.79	274.17	765.67	1,030.30	-
LT Cat VI - Local Bodies, St. Lighting & PWS	89.74	12.36	30.16	126.34	-
LT Cat VII - General Purpose	12.28	1.72	4.27	17.89	-
LT Cat VIII - Temporary	-	-	-	-	-
HT					
HT Cat I - Industry - General (11 kV)	147.38	46.45	53.58	123.26	-
HT Cat I - Industry - General (33 kV)	55.04	8.29	1.14	42.97	-

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HT Cat I - Industry - General (220/132 kV)	156.79	25.41	-	135.18	-
HT I(B)- Ferro Alloys(33 kV)	9.88	0.73	0.10	9.39	-
HT I(B)- Ferro Alloys(132 kV)	-	-	-	-	-
HT Cat II - Industry - Other (11 kV)	20.26	8.84	10.19	22.63	-
HT Cat II - Industry - Other (33 kV)	6.53	1.35	0.19	4.21	-
HT Cat II - Industry - Other (220/132 kV)	0.41	0.70	-	0.36	-
HT Cat III - Airport, Bus & Railway st. (11 kV)	3.63	1.42	0.55	1.85	-
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	0.06	-	-
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	-	-	-	-	-
HT Cat IV - Irrigation & Agriculture (11 kV)	16.59	4.91	5.47	14.49	-
HT Cat IV - Irrigation & Agriculture (33 kV)	31.03	9.38	1.33	24.72	-
HT Cat IV - Irrigation & Agriculture (220/132 kV)	91.58	27.84	-	74.02	-
HT Cat V - Railway Traction (EHT)	144.83	22.58	-	91.57	-
HT Cat VI - Colony Consumption (11 kV)	5.72	0.76	0.88	3.51	-
HT Cat VI - Colony Consumption (33 kV)	0.45	5.16	0.71	9.32	-
HT Cat VI - Colony Consumption (220/132 kV)	0.45	3.06	-	18.23	-
HT Rural Co-operatives (11 kV)	101.88	22.35	26.79	151.41	-
HT Rural Co-operatives (33 kV)	-	-	-	-	-
HT Temporary	-	-	-	-	-
Open Access - 33 kV	-	-	-	-	-
Open Access - 11 kV	-	-	-	-	-
Total	2,620.94	665.36	1,390.17	2,977.37	-

NPDCL	Cost allocation			Total cost	Sales	Per unit cost
	Demand	Energy	Customer			
			INR Crore	INR Crore	MU	INR/ unit
LT						
LT Cat I - Domestic	1,616.41	808.02	0.00	2,424.32	3,114.85	7.78
LT Cat II - Non-domestic	346.89	169.50	0.00	516.36	611.96	8.44
LT Cat III - Industrial	94.98	95.96	0.00	190.93	266.46	7.17
LT Cat IV - Cottage Industries & Dhobighats	2.38	2.37	0.00	4.75	6.58	7.21
LT Cat V - Irrigation and Agriculture	1,382.63	1,030.44	0.00	2,412.94	4,589.01	5.26
LT Cat VI - Local Bodies, St. Lighting & PWS	132.26	126.35	0.00	258.60	293.12	8.82
LT Cat VII - General Purpose	18.26	17.89	0.00	36.15	41.50	8.71
LT Cat VIII - Temporary	0.00	0.00	0.00	0.00	0.00	0.00

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HT						
HT Cat I - Industry - General (11 kV)	247.41	123.28	0.00	370.67	557.71	6.65
HT Cat I - Industry - General (33 kV)	64.47	42.98	0.00	107.44	203.03	5.29
HT Cat I - Industry - General (220/132 kV)	182.20	135.20	0.00	317.39	665.27	4.77
HT I(B)- Ferro Alloys(33 kV)	10.70	9.39	0.00	20.09	44.37	4.53
HT I(B)- Ferro Alloys(132 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Cat II - Industry - Other (11 kV)	39.29	22.63	0.00	61.92	102.37	6.05
HT Cat II - Industry - Other (33 kV)	8.07	4.21	0.00	12.28	19.89	6.17
HT Cat II - Industry - Other (220/132 kV)	1.11	0.36	0.00	1.47	1.75	8.35
HT Cat III - Airport, Bus & Railway st. (11 kV)	5.59	1.85	0.00	7.45	8.38	8.88
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.06	0.00	0.00	0.06	0.00	0.00
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Cat IV - Irrigation & Agriculture (11 kV)	26.97	14.50	0.00	41.46	65.58	6.32
HT Cat IV - Irrigation & Agriculture (33 kV)	41.74	24.73	0.00	66.46	116.80	5.69
HT Cat IV - Irrigation & Agriculture (220/132 kV)	119.42	74.03	0.00	193.44	364.28	5.31
HT Cat V - Railway Traction (EHT)	167.41	91.58	0.00	258.98	450.64	5.75
HT Cat VI - Colony Consumption (11 kV)	7.36	3.51	0.00	10.87	15.90	6.84
HT Cat VI - Colony Consumption (33 kV)	6.32	9.32	0.00	15.64	44.03	3.55
HT Cat VI - Colony Consumption (220/132 kV)	3.51	18.23	0.00	21.74	89.71	2.42
HT Rural Co-operatives (11 kV)	151.02	151.43	0.00	302.43	685.07	4.41
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00
Total	4,676.47	2,977.77	0.00	7,653.84	12,358.26	6.19

**ANNEXURE-N
BOTH THE DISCOMS – COST OF SERVICE**

Both the DISCOMS	Generation					
	Demand			Energy		
	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Recovery basis - Energy sales (MU)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	3,376.03	3,147.25	893.91	2,886.46	10,864.32	2.66
LT Cat II - Non-domestic	911.18	876.36	866.44	808.36	2,911.59	2.78
LT Cat III - Industrial	259.54	259.55	833.29	341.22	1,125.01	3.03
LT Cat IV - Cottage Industries & Dhobighats	3.82	3.92	812.02	5.10	16.25	3.14
LT Cat V - Irrigation and Agriculture	779.10	4,364.93	148.74	2,814.09	11,535.41	2.44
LT Cat VI - Local Bodies, St. Lighting & PWS	338.57	323.28	872.73	364.84	1,148.35	3.18
LT Cat VII - General Purpose	32.65	30.86	881.86	36.02	107.13	3.36
LT Cat VIII - Temporary	0.20	0.21	804.85	0.16	0.58	2.82
HT						
HT Cat I - Industry - General (11 kV)	787.22	1,666.81	393.58	916.17	3,686.26	2.49
HT Cat I - Industry - General (33 kV)	878.21	1,312.50	557.59	1,135.90	4,707.90	2.41
HT Cat I - Industry - General (220/132 kV)	639.08	760.50	700.28	714.48	3,162.79	2.26
HT I(B)- Ferro Alloys(33 kV)	21.45	4.31	4,151.05	23.39	102.85	2.27
HT I(B)- Ferro Alloys(132 kV)	28.68	23.34	1,024.19	41.91	179.78	2.33
HT Cat II - Industry - Other (11 kV)	344.50	830.15	345.81	403.20	1,602.97	2.52
HT Cat II - Industry - Other (33 kV)	162.42	271.60	498.35	151.38	626.36	2.42
HT Cat II - Industry - Other (220/132 kV)	12.27	31.91	320.56	14.60	62.92	2.32
HT Cat III - Airport, Bus & Railway st. (11 kV)	5.30	11.38	388.24	3.38	14.57	2.32
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	NA	-	-	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	12.26	14.45	707.09	15.72	67.45	2.33
HT Cat IV - Irrigation & Agriculture (11 kV)	28.92	76.06	316.85	36.06	151.71	2.38
HT Cat IV - Irrigation & Agriculture (33 kV)	40.26	92.53	362.61	40.94	185.71	2.20
HT Cat IV - Irrigation & Agriculture (220/132 kV)	190.15	539.49	293.73	252.91	1,138.44	2.22
HT Cat V - Railway Traction (EHT)	204.72	227.92	748.53	146.93	696.43	2.11
HT Cat VI - Colony Consumption (11 kV)	32.36	44.62	604.25	27.21	109.50	2.48
HT Cat VI - Colony Consumption (33 kV)	12.52	53.61	194.65	19.81	88.05	2.25
HT Cat VI - Colony Consumption (220/132 kV)	0.45	18.17	20.57	17.85	89.71	1.99

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HT Rural Co-operatives (11 kV)	101.88	138.53	612.86	148.23	685.07	2.16
HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	10.87	11.23	806.79	12.81	50.52	2.54
Open Access - 33 kV	-	-	NA	-	-	NA
Open Access - 11 kV	-	-	NA	-	-	NA
Total	9,214.63	15,135.47	507.34	11,379.14	45,117.63	2.52

Both the DISCOMS	Transmission - Inter-state			Transmission - Intra-state		
	Demand			Demand		
	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Rate basis - Contracts/ NCP G-T interface (MW)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	143.02	3147.25	37.87	288.70	3147.25	76.44
LT Cat II - Non-domestic	39.29	876.36	37.37	79.32	876.36	75.43
LT Cat III - Industrial	11.66	259.55	37.43	23.53	259.55	75.55
LT Cat IV - Cottage Industries & Dhobighats	0.18	3.92	38.96	0.37	3.92	78.65
LT Cat V - Irrigation and Agriculture	203.43	4364.93	38.84	410.65	4364.93	78.40
LT Cat VI - Local Bodies, St. Lighting & PWS	14.52	323.28	37.42	29.30	323.28	75.53
LT Cat VII - General Purpose	1.42	30.86	38.42	2.87	30.86	77.56
LT Cat VIII - Temporary	0.01	0.21	35.20	0.02	0.21	71.07
HT						
HT Cat I - Industry - General (11 kV)	93.04	1666.81	46.52	187.82	1666.81	93.90
HT Cat I - Industry - General (33 kV)	73.26	1312.50	46.52	147.90	1312.50	93.90
HT Cat I - Industry - General (220/132 kV)	42.45	760.50	46.52	85.70	760.50	93.90
HT I(B)- Ferro Alloys(33 kV)	0.24	4.31	46.52	0.49	4.31	93.90
HT I(B)- Ferro Alloys(132 kV)	1.30	23.34	46.52	2.63	23.34	93.90
HT Cat II - Industry - Other (11 kV)	46.34	830.15	46.52	93.54	830.15	93.90
HT Cat II - Industry - Other (33 kV)	15.16	271.60	46.52	30.60	271.60	93.90
HT Cat II - Industry - Other (220/132 kV)	1.78	31.91	46.52	3.60	31.91	93.90
HT Cat III - Airport, Bus & Railway st. (11 kV)	0.61	11.38	44.99	1.24	11.38	90.82
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	0.81	14.45	46.52	1.63	14.45	93.90
HT Cat IV - Irrigation & Agriculture (11 kV)	3.55	76.06	38.94	7.17	76.06	78.61
HT Cat IV - Irrigation & Agriculture (33 kV)	4.56	92.53	41.07	9.21	92.53	82.90

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HT Cat IV - Irrigation & Agriculture (220/132 kV)	24.72	539.49	38.19	49.91	539.49	77.09
HT Cat V - Railway Traction (EHT)	12.72	227.92	46.52	25.68	227.92	93.90
HT Cat VI - Colony Consumption (11 kV)	2.49	44.62	46.52	5.03	44.62	93.90
HT Cat VI - Colony Consumption (33 kV)	2.99	53.61	46.52	6.04	53.61	93.90
HT Cat VI - Colony Consumption (220/132 kV)	1.01	18.17	46.52	2.05	18.17	93.90
HT Rural Co-operatives (11 kV)	7.40	138.53	44.54	14.95	138.53	89.90
HT Rural Co-operatives (33 kV)	0.00	0.00	NA	0.00	0.00	NA
HT Temporary	0.47	11.23	35.20	0.96	11.23	71.07
Open Access - 33 kV	0.00	0.00	NA	0.00	0.00	NA
Open Access - 11 kV	0.00	0.00	NA	0.00	0.00	NA
Total	748.46	15135.47	41.21	1510.89	15135.47	83.19

Both the DISCOMS	Distribution			Retail supply		
	Demand			Energy		
	Cost (INR Crore)	Rate basis - Contracts/ NCP T-D interface (MW)	CoS - INR/ kVA/ month	Cost (INR Crore)	Recovery basis - Energy sales (MU)	CoS - INR/ kVA/ month
LT						
LT Cat I - Domestic	1,027.95	2,983.09	287.16	72.49	10,864.32	0.07
LT Cat II - Non-domestic	271.30	810.18	279.05	20.58	2,911.59	0.07
LT Cat III - Industrial	78.33	233.60	279.43	8.57	1,125.01	0.08
LT Cat IV - Cottage Industries & Dhobighats	1.26	3.50	300.78	0.12	16.25	0.08
LT Cat V - Irrigation and Agriculture	1,544.98	4,280.21	300.80	69.49	11,535.41	0.06
LT Cat VI - Local Bodies, St. Lighting & PWS	101.16	301.90	279.24	9.04	1,148.35	0.08
LT Cat VII - General Purpose	10.07	28.67	292.63	0.87	107.13	0.08
LT Cat VIII - Temporary	0.05	0.17	251.96	0.00	0.58	0.07
HT						
HT Cat I - Industry - General (11 kV)	335.10	1,610.14	173.43	23.66	3,686.26	0.06
HT Cat I - Industry - General (33 kV)	51.67	798.86	53.90	29.87	4,707.90	0.06
HT Cat I - Industry - General (220/132 kV)	-	6.68	-	18.26	3,162.79	0.06
HT I(B)- Ferro Alloys(33 kV)	0.10	50.62	1.64	0.57	102.85	0.06
HT I(B)- Ferro Alloys(132 kV)	-	2.62	-	1.11	179.78	0.06
HT Cat II - Industry - Other (11 kV)	167.58	801.93	174.14	10.57	1,602.97	0.07
HT Cat II - Industry - Other (33 kV)	10.73	262.77	34.03	3.99	626.36	0.06
HT Cat II - Industry - Other (220/132 kV)	-	2.62	-	0.39	62.92	0.06

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HT Cat III - Airport, Bus & Railway st. (11 kV)	1.08	5.26	170.96	0.08	14.57	0.06
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.06	2.62	19.95	-	-	NA
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	-	88.33	-	0.42	67.45	0.06
HT Cat IV - Irrigation & Agriculture (11 kV)	14.45	70.05	171.89	0.88	151.71	0.06
HT Cat IV - Irrigation & Agriculture (33 kV)	2.69	88.33	25.33	0.96	185.71	0.05
HT Cat IV - Irrigation & Agriculture (220/132 kV)	-	51.87	-	6.34	1,138.44	0.06
HT Cat V - Railway Traction (EHT)	-	-	NA	3.44	696.43	0.05
HT Cat VI - Colony Consumption (11 kV)	8.99	43.11	173.87	0.70	109.50	0.06
HT Cat VI - Colony Consumption (33 kV)	1.63	51.87	26.17	0.48	88.05	0.05
HT Cat VI - Colony Consumption (220/132 kV)	-	-	NA	0.38	89.71	0.04
HT Rural Co-operatives (11 kV)	26.79	133.15	167.65	3.19	685.07	0.05
HT Rural Co-operatives (33 kV)	-	-	NA	-	-	NA
HT Temporary	2.19	10.47	174.58	0.34	50.52	0.07
Open Access - 33 kV	-	-	NA	-	-	NA
Open Access - 11 kV	-	-	NA	-	-	NA
Total	3,658.15	12,722.63	239.61	286.80	45,117.63	0.06

Both the DISCOMS	Cost Allocation (INR Crore)				
	Demand - G	Demand - T	Demand - D	Energy	Customer
	INR Crore				
LT					
LT Cat I - Domestic	3,376.03	431.71	1,027.95	2,958.96	-
LT Cat II - Non-domestic	911.18	118.62	271.30	828.94	-
LT Cat III - Industrial	259.54	35.19	78.33	349.78	-
LT Cat IV - Cottage Industries & Dhobighats	3.82	0.55	1.26	5.23	-
LT Cat V - Irrigation and Agriculture	779.10	614.08	1,544.98	2,883.58	-
LT Cat VI - Local Bodies, St. Lighting & PWS	338.57	43.82	101.16	373.89	-
LT Cat VII - General Purpose	32.65	4.29	10.07	36.88	-
LT Cat VIII - Temporary	0.20	0.03	0.05	0.17	-
HT					
HT Cat I - Industry - General (11 kV)	787.22	280.86	335.10	939.84	-
HT Cat I - Industry - General (33 kV)	878.21	221.16	51.67	1,165.77	-
HT Cat I - Industry - General (220/132 kV)	639.08	128.15	-	732.74	-
HT I(B)- Ferro Alloys(33 kV)	21.45	0.73	0.10	23.97	-

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HT I(B)- Ferro Alloys(132 kV)	28.68	3.93	-	43.01	-
HT Cat II - Industry - Other (11 kV)	344.50	139.88	167.58	413.76	-
HT Cat II - Industry - Other (33 kV)	162.42	45.77	10.73	155.37	-
HT Cat II - Industry - Other (220/132 kV)	12.27	5.38	-	14.99	-
HT Cat III - Airport, Bus & Railway st. (11 kV)	5.30	1.85	1.08	3.46	-
HT Cat III - Airport, Bus & Railway st. (33 kV)	-	-	0.06	-	-
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	12.26	2.44	-	16.14	-
HT Cat IV - Irrigation & Agriculture (11 kV)	28.92	10.73	14.45	36.95	-
HT Cat IV - Irrigation & Agriculture (33 kV)	40.26	13.77	2.69	41.90	-
HT Cat IV - Irrigation & Agriculture (220/132 kV)	190.15	74.63	-	259.25	-
HT Cat V - Railway Traction (EHT)	204.72	38.41	-	150.38	-
HT Cat VI - Colony Consumption (11 kV)	32.36	7.52	8.99	27.91	-
HT Cat VI - Colony Consumption (33 kV)	12.52	9.03	1.63	20.29	-
HT Cat VI - Colony Consumption (220/132 kV)	0.45	3.06	-	18.23	-
HT Rural Co-operatives (11 kV)	101.88	22.35	26.79	151.41	-
HT Rural Co-operatives (33 kV)	-	-	-	-	-
HT Temporary	10.87	1.43	2.19	13.15	-
Open Access - 33 kV	-	-	-	-	-
Open Access - 11 kV	-	-	-	-	-
Total	9,214.63	2,259.35	3,658.15	11,665.94	-

Both the DISCOMS	Cost allocation			Total cost	Sales	Per unit cost
	Demand	Energy	Customer			
	INR Crore			INR Crore	MU	INR/ unit
LT						
LT Cat I - Domestic	4,835.69	2,958.96	0.00	7,794.65	10,864.32	7.17
LT Cat II - Non-domestic	1,301.10	828.94	0.00	2,130.04	2,911.59	7.32
LT Cat III - Industrial	373.05	349.78	0.00	722.83	1,125.01	6.43
LT Cat IV - Cottage Industries & Dhobighats	5.63	5.23	0.00	10.86	16.25	6.68
LT Cat V - Irrigation and Agriculture	2,938.16	2,883.58	0.00	5,821.74	11,535.41	5.05
LT Cat VI - Local Bodies, St. Lighting & PWS	483.54	373.89	0.00	857.43	1,148.35	7.47
LT Cat VII - General Purpose	47.01	36.88	0.00	83.90	107.13	7.83
LT Cat VIII - Temporary	0.28	0.17	0.00	0.45	0.58	7.75
HT						

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HT Cat I - Industry - General (11 kV)	1,403.17	939.84	0.00	2,343.01	3,686.26	6.36
HT Cat I - Industry - General (33 kV)	1,151.04	1,165.77	0.00	2,316.81	4,707.90	4.92
HT Cat I - Industry - General (220/132 kV)	767.23	732.74	0.00	1,499.97	3,162.79	4.74
HT I(B)- Ferro Alloys(33 kV)	22.28	23.97	0.00	46.25	102.85	4.50
HT I(B)- Ferro Alloys(132 kV)	32.62	43.01	0.00	75.63	179.78	4.21
HT Cat II - Industry - Other (11 kV)	651.96	413.76	0.00	1,065.72	1,602.97	6.65
HT Cat II - Industry - Other (33 kV)	218.92	155.37	0.00	374.28	626.36	5.98
HT Cat II - Industry - Other (220/132 kV)	17.65	14.99	0.00	32.64	62.92	5.19
HT Cat III - Airport, Bus & Railway st. (11 kV)	8.24	3.46	0.00	11.70	14.57	8.03
HT Cat III - Airport, Bus & Railway st. (33 kV)	0.06	0.00	0.00	0.06	0.00	0.00
HT Cat III - Airport, Bus & Railway st. (220/132 kV)	14.70	16.14	0.00	30.83	67.45	4.57
HT Cat IV - Irrigation & Agriculture (11 kV)	54.09	36.95	0.00	91.04	151.71	6.00
HT Cat IV - Irrigation & Agriculture (33 kV)	56.72	41.90	0.00	98.61	185.71	5.31
HT Cat IV - Irrigation & Agriculture (220/132 kV)	264.78	259.25	0.00	524.03	1,138.44	4.60
HT Cat V - Railway Traction (EHT)	243.13	150.38	0.00	393.51	696.43	5.65
HT Cat VI - Colony Consumption (11 kV)	48.87	27.91	0.00	76.78	109.50	7.01
HT Cat VI - Colony Consumption (33 kV)	23.18	20.29	0.00	43.48	88.05	4.94
HT Cat VI - Colony Consumption (220/132 kV)	3.51	18.23	0.00	21.74	89.71	2.42
HT Rural Co-operatives (11 kV)	151.02	151.41	0.00	302.43	685.07	4.41
HT Rural Co-operatives (33 kV)	0.00	0.00	0.00	0.00	0.00	0.00
HT Temporary	14.50	13.15	0.00	27.65	50.52	5.47
Open Access - 33 kV	0.00	0.00	0.00	0.00	0.00	0.00
Open Access - 11 kV	0.00	0.00	0.00	0.00	0.00	0.00
Total	15,132.13	11,665.94	0.00	26,798.06	45,117.63	5.94

ACRONYMS

Agl	Agriculture/Agricultural
APERC	Andhra Pradesh Electricity Regulatory Commission
APGENCO	Andhra Pradesh Power Generation Corporation Limited
APGPCL	Andhra Pradesh Gas Power Corporation Limited
ARR	Aggregate Revenue Requirement
ATE/APTEL	Appellate Tribunal for Electricity
CAG	Comptroller and Auditor General of India
CERC	Central Electricity Regulatory Commission
CGRF	Consumer Grievance Redressal Forum
CGS	Central Generating Station
CL	Connected Load/Contracted Load
CMD	Contracted Maximum Demand
CoD	Commercial Operation Date
CoS	Cost of Service /Cost of Supply
CPWS	Composite Protected Water Supply
Cr	Crore
D-to-D	Discom to Discom
DISCOMs	Distribution Companies, Distribution Licensees, Licensees
DPS	Delayed Payment Surcharge
DSM	Demand Side Management
DSTPP	Damodaram Sanjeevaiah Thermal Power Project
DTR	Distribution Transformer
EHT	Extra High Tension
ERC	Electricity Regulatory Commission
FAPCCI	The Federation of Telangana & Andhra Pradesh Chamber of Commerce and Industry (Formerly the Federation of Andhra Pradesh Chamber of Commerce and Industry)
FCRTS	Full Cost Recovery Tariff Schedule
FPT	Filing for Proposed Tariff
FRP	Financial Restructuring Plan
FSA	Fuel Surcharge Adjustment
FY	Financial Year
GAIL	Gas Authority of India Limited
GCV	Gross Calorific Value
GOI	Government of India

Determination of Retail Supply Tariffs for FY 2016-17

GoTS	Government of Telangana
GTCS	General Terms & Conditions of Supply
HNPCL	Hinduja National Power Corporation Limited
HP	Horse Power
HT/HV	High Tension/High Voltage
HVDS	High Voltage Distribution System
IPPs	Independent Power Producers
ISI	Indian Standards Institute / Indian Statistical Institute
IT	Information Technology
KG	Krishna Godavari
Kg	Kilogram
KTPP	Kakatiya Thermal Power Plant
kV	Kilo Volt
kVAh	Kilo-Volt-Ampere-hour
kWh	Kilo Watt hour
LI	Lift Irrigation
LR	Load Relief
LT/LV	Low Tension/Low Voltage
MMBTU	Million Metric British Thermal Unit
MoP	Ministry of Power
MOU	Memorandum of Understanding
MU	Million Units
MW	Mega Watt
MYT	Multi Year Tariff
NCE	Non Conventional Energy
NGOs	Non-Government Organisations
NTP	National Tariff Policy
NTPC	National Thermal Power Corporation Limited
ONGC	Oil and Natural Gas Corporation
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PPA	Power Purchase Agreement
POSOCO	Power System Operation Corporation Limited
PWS	Protected Water Supply
R&C	Restriction and Control
REC	Renewable Energy Certificate/Rural Electrification Corporation Limited
RESCO	Rural Electricity Cooperative Society
RMD	Recorded Maximum Demand

Determination of Retail Supply Tariffs for FY 2016-17

RTC	Round the Clock
RTPP	Rayalaseema Thermal Power Project
SAC	State Advisory Committee
SCCL	Singareni Collaries Company Limited
SLDC	State Load Despatch Centre
SOP	Standards of Performance
T&D	Transmission and Distribution
ToD	Time of the Day
TRANSCO	Transmission Corporation
TSERC	Telangana State Electricity Regulatory Commission
TSGENCO	Telangana Power Generation Corporation Limited
TSNPDCL/NPDCL	Northern Power Distribution Company of Telangana Limited
TSPCC	Telangana Power Coordination Committee
TSSPDCL/SPDCL	Southern Power Distribution Company of Telangana Limited
ULDC	Unified Load Despatch Centre
VTPS	Vijayawada Thermal Power Station