



**Telangana State Electricity Regulatory Commission**

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

**ORDER**

**Determination of Cross Subsidy Surcharge**

**and**

**Additional Surcharge for**

**FY 2018-19**

**27.03.2018**



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**TELANGANA STATE ELECTRICITY REGULATORY COMMISSION  
HYDERABAD**

**Present**

**Sri Ismail Ali Khan, Chairman**

**Sri H. Srinivasulu, Member**

Dated: 27.03.2018

**O. P. No. 21 of 2017**

Southern Power Distribution Company of Telangana Limited (TSSPDCL) ... Petitioner

**O. P. No. 22 of 2017**

Northern Power Distribution Company of Telangana Limited (TSNPDCL) ...Petitioner

AND

- Nil -

... Respondent

The Southern Power Distribution Company of Telangana Limited (TSSPDCL) and the Northern Power Distribution Company of Telangana Limited (TSNPDCL) [jointly known as DISCOMs] vide the O. P. Nos. 21 of 2017 and 22 of 2017 respectively have filed consolidated petitions under Section 64 of the Electricity Act, 2003 for determination of the retail supply tariff for FY 2018-19, cross subsidy surcharge and additional surcharge before the Telangana State Electricity Regulatory Commission (TSERC or the Commission). The Commission, in exercise of powers conferred on it under Sections 39, 40 and 42 of the Electricity Act, 2003 and all other powers enabling it in that behalf, hereby determines the cross subsidy surcharge and additional surcharge applicable to consumers availing open access from the transmission and distribution licensees for transmission and distribution system at different voltages during FY 2018-19, as indicated hereinafter.

The Commission has issued a separate Order dated 27.03.2018 filed with the same O. P. numbers for determining the retail supply tariffs for FY 2018-19 w.e.f. 01.04.2018. Now, therefore, the Commission hereby orders the following on cross subsidy surcharge and additional surcharge.

## ORDER

### 1. INTRODUCTION

#### 1.1 STATUTORY PROVISIONS

1.1.1. Sections 39 (2) (d) (ii), 40 (c) (ii) and 42 (2) of the Electricity Act, 2003 (Act, 2003) provides for payment of a surcharge by the consumer (CSS) when a consumer avails of power under the open access. Further, Section 42 (2) of the Act, 2003 provides that the surcharge shall be determined by the Commission and such surcharge shall be utilized to meet the requirements of current level of cross subsidy within the area of supply of the distribution licensee.

1.1.2. Clause 17.1(iii) of the Regulation No. 2 of 2005, reproduced below, specifies that the open access consumers shall pay CSS as determined by the Commission, to the distribution licensee.

*“The Open access users of the Transmission and / or Distribution System where such open access is for delivery of electricity to the consumer’s premises in the area of supply of a distribution licensee, shall pay to the distribution licensee the (cross-subsidy) surcharge as determined by the Commission from time to time under Section 42(2) of the Act :*

*Provided that no (cross-subsidy) surcharge shall be payable if the open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use.”*

1.1.3. As per the afore-mentioned provisions, to maintain current level of subsidy, CSS has to be levied on the consumers, who opt for open access.

1.1.4. Cross subsidy surcharge is normally computed as the difference between (i) the tariff applicable to the relevant category of consumers and (ii) the cost of the distribution licensee to supply electricity to the consumers of the applicable class i.e., Cost of Service (CoS) for a particular category of consumers.

1.1.5. Section 42 (4) of the Act, 2003 specifies that the Commission may specify the additional surcharge to be levied on the open access consumers to meet the fixed cost of distribution licensee arising out of its obligation to supply.

1.1.6. Clause 17.1 (iv) of the Regulation No. 2 of 2005, reproduced below, specifies that the open access consumer shall be liable to pay additional surcharge as specified by the Commission from time to time.

*“The Open Access user shall also be liable to pay additional surcharge on charges of wheeling as may be specified by the Commission from time to time under Section 42(4) of the Act, in case open access is sought for receiving supply*

*from a person other than the distribution licensee of such consumer's area of supply, to meet the fixed cost of the distribution licensee arising out of his obligation to supply."*

1.1.7. This Commission was constituted as per section 82 of the Act 2003 read with the AP Reorganisation Act, 2014 and started functioning with effect from 03.11.2014. This Commission has determined the cross subsidy surcharge and additional surcharge for FY 2018-19 in accordance with the provisions of the National Tariff Policy (NTP) dated 28.01.2016, notified by the Ministry of Power (MoP), Government of India (GoI).

## **1.2 TARIFF POLICY, 2016**

1.1.8. As per the NTP notified by the MoP on 28.01.2016, State Electricity Regulatory Commissions (SERCs) may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of (a) per unit weighted average cost of power purchase including meeting the renewable purchase obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable.

1.1.9. The formula prescribed in the NTP, 2016 for computation of CSS is as given below:

$$S = T - [C / (1-L/100) + D + R]$$

Where,

**S** - is the surcharge

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

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

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

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

**R** - is the per unit cost of carrying regulatory assets.

1.1.10. As regards the Additional Surcharge (AS), Clause 8.5.4 of the NTP, 2016 specifies as under:

*“The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.”*

## **2. STAKEHOLDER CONSULTATION**

### **2.1 CROSS SUBSIDY SURCHARGE AND ADDITIONAL SURCHARGE FOR OPEN ACCESS BY SOLAR DEVELOPERS**

#### ***Stakeholders' submissions***

2.1.1 The Commission vide its Order dated 22.12.2017 in O. P. Nos. 22 & 23 of 2016 passed an amendment Order to the Retail Supply Tariff Order for FY 2017-18, duly exempting solar projects from levy of CSS in line with the solar policies of the undivided Andhra Pradesh 2012 and Telangana State 2015. Similarly, the Commission is requested to exempt solar projects from levy of CSS and AS in the retail supply tariff order for FY 2018-19.

2.1.2 The solar projects commissioned during the intervening period from lapse of AP Solar Policy 2012 and commencement of Telangana Solar Policy 2015 were given the option to migrate into Telangana Solar Policy 2015. The migration of such solar projects, which have exercised the option, was accepted by the DISCOM and such projects are entitled for availing the incentives from the date of issue of Telangana Solar Policy i.e., 01.06.2015 and hence the exemption from CSS and AS should be extended to such migrated projects also.

#### ***Replies of Licensees***

2.1.3 The solar power policy of Telangana State is effective from 01.06.2015 for a period of 5 years. Therefore, the DISCOMs request the Commission to continue the exemption of CSS for the open access consumers within the state buying solar power from solar power developers for FY 2018-19. The exemption from levy of AS is not stipulated in the solar policy of undivided Andhra Pradesh, 2012 and the solar policy of the Telangana State, 2015. Hence, AS shall be levied on open access consumers availing power from solar power developers also, so that the DISCOMs shall not forego their legitimate revenue to recover its costs.

2.1.4 All the benefits stipulated in the Solar Policy, 2012 are being extended to the solar developers. Appropriate decision may be taken regarding exemption from payment of AS for the projects commissioned during this intervention period.

#### ***Commission's Views***

2.1.5 The Commission has given due consideration to the stakeholders' submissions and the replies of the Licensees while determining the CSS and AS for FY 2018-19. CSS shall not be applicable to solar projects commissioned during the period 01.07.2014 to 31.05.2015 i.e., the intervening period between the AP Solar Policy 2012 and new Telangana Solar Power Policy 2015 as per the Telangana State Govt. letter no.

1380/Budget.A2/2015 dated 29.03.2016. Effective date for availing the incentive will be from the issue of the Telangana Solar Power Policy i.e., 01.06.2015.

## **2.2 LEVY OF CROSS SUBSIDY SURCHARGE ON RAILWAYS**

### ***Stakeholders' submissions***

2.2.1 Indian Railways is availing power through open access in various states from Ratnagiri Gas and Power Pvt. Ltd. and is planning to avail of power from Bharatiya Rail Bijlee Company Ltd., a Joint Venture of Indian Railways and NTPC, at a lower tariff. Considering the higher tariff burden, Railways, as a deemed licensee, is planning to avail power through open access in Telangana State upto March, 2022. In view of the NTP, 2016, the Commission is requested to exempt railways, as a deemed licensee, from payment of CSS.

### ***Replies of Licensees***

2.2.2 As per Clause 11 of the Regulation No. 4 of 2016, the deemed licensee shall make an application in the form specified in Schedule 2 to the Commission to get identified as deemed licensee.

2.2.3 The DISCOMs have followed the principles outlined in the tariff policy and provisions of the Act, 2003 with regard to open access.

### ***Commission's Views***

2.2.4 As regards the exemption from payment of CSS for open access consumption by railways, the Commission does not find the prayer of the stakeholder acceptable on account of the following reasons.

2.2.5 The Commission recalls that the South Central Railway has filed a representation for approval of deemed licence, before the Commission. The same is under examination by the Commission and the Commission is yet to take a view in the matter.

2.2.6 As regards the exemption of CSS for railways, the NTP, 2016 specifies as under:

*“Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall exempt levy of cross subsidy charge on the Railways, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.”*

2.2.7 Further, Hon'ble Supreme Court vide its judgment dated 25.04.2014 in Civil Appeal No. 5479 of 2013 in the matter of M/s. Sesa Sterlite Ltd., Vs Orissa Electricity Regulatory Commission report at 2014 (8) SCC Page 444 ruled as under:

*“43. We are in agreement with the aforesaid rationale in the impugned order of the Appellate Tribunal as that is the only manner in which the two Acts can be harmoniously construed. To recapitulate briefly, in the present case no doubt by*

*virtue of the status of a developer in the SEZ area, the Appellant is also treated as deemed Distribution Licensee. .... In order to avail further benefits under the Act, the Appellant is also required to show that it is in fact having distribution system and has number of consumers to whom it is supplying the electricity. That is not the case here.....*

*44. Having regard to the aforesaid factual and legal aspects and keeping in mind the purpose for which CSS is payable, as explained in detail in the earlier part of this judgment, we are of the view that on the facts of this case it is not possible for the Appellant to avoid payment of CSS to WESCO. We, therefore, do not find any merit in this Appeal which is accordingly dismissed.”*

2.2.8 In the judgment reproduced above, the Hon’ble Supreme Court ruled that the deemed licensee is required to show that it is having distribution system and number of consumers to whom it is supplying electricity. In the instant case, the electricity drawn by the stakeholder is for its own consumption. The above stated judgment of the Hon’ble Supreme Court is based on the provisions of the Act, 2003. Further, the Hon’ble Supreme Court vide its judgment dated 11.04.2017 in C. A. No. 5399-5400 of 2016 held that the NTP, 2016 is a statutory document issued under Section 3 of the Act, 2003 and has the force of law. From the combined perusal of the NTP, 2016, and the judgment of the Hon’ble Supreme Court stated above, it appears that it is not a straight jacket case of exemption. One aspect that can be safely stated is that the policy makes it clear that the power drawn from self-generation can be exempted for CSS, but on the condition that power is drawn from its own unit. Hence, the prayer of the stakeholder to exempt it from payment of CSS cannot be accepted at this stage. This issue shall be addressed by the Commission while deciding on the representation of the stakeholder for deemed licence.

## **2.3 DETERMINATION OF ADDITIONAL SURCHARGE**

### ***Stakeholders’ submissions***

2.3.1 The DISCOMs have submitted that the total stranded fixed cost obligation to the generating stations will be around Rs. 429.29 crore corresponding to a backed down / open access sales of 2159.45 MU and have proposed the AS of Rs. 2.06 / kWh for FY 2018-19. The proposal of the DISCOMs is not maintainable in the present scenario as well as lacks merit due to the following reasons.

2.3.2 The DISCOMs have invoked Para 8.5.4 of the NTP, 2016 which inter-alia provides that AS becomes applicable in case existing long-term PPAs has been and continues to be stranded. In the light of the said position in the NTP, 2016, the words ‘has been’

mandates that AS becomes applicable only in case where losses have already been incurred by the DISCOM on account of open access availed by consumers. However, AS cannot be imposed in anticipation of the capacity becoming stranded. The DISCOMs while anticipating the need for AS have also anticipated that the state would be in power surplus in FY 2018-19 therefore as such in the recent past period DISCOMs have not claimed that they have incurred any losses on account of open access. The proposal of the DISCOMs for AS is based on the notional future that they would incur in FY 2018-19 on account of open access which is inter-alia contrary to the provisions of the NTP, 2016 which allows recovery of only past period losses.

2.3.3 Para 8.5.4 of the NTP, 2016 provides that the AS is applicable only when capacity continues to be stranded. The continuous period for which certain capacity has been stranded due to open access should be construed as the period for which AS is claimed. In the present case, since the period is FY 2018-19, therefore the AS can be claimed once the FY has concluded and the DISCOMs have conclusively demonstrated that there was no power shortage in any of the 15-minute time block of FY 2018-19 and the capacity was stranded / backed down primarily on account of open access. AS can be claimed only when the DISCOMs are able to meet its peak demand in FY 2018-19 and does not do any load shedding during such peak demand period. The DISCOMs did not demonstrate that there is continuous stranding of long-term PPAs on account of open access. As submitted in the petition, the estimated bilateral purchases from various traders / generators on short-term basis are estimated to be 1876.48 MU for FY 2017-18 H2 and 383.46 MU for FY 2018-19 up to 15.04.2018.

2.3.4. When the open access consumer procures power from sources other than incumbent distribution licensee, the distribution licensee avoids procuring power in merit order by avoiding the higher variable cost generation. In case of Telangana State, the average variable cost of power procurement of the DISCOMs is Rs. 2.54 / unit. Therefore, when the DISCOMs avoid procurement of any generation with variable cost of Rs. 2.19 / unit and above, it leads to savings for the DISCOMs. In the present case, the variable cost of generation from some APGENCO plants, TSGENCO plants, NLC plants is more than Rs.2.19 / unit and by backing down of these sources, the DISCOMs can make substantial savings. Since the DISCOMs have not incurred any loss on account of stranded capacity due to open access, hence, there is no case for claiming AS.

2.3.5. The DISCOMs have claimed AS simply based on the average peak demand of the state met and total fixed cost which does not reflect that in a given time block when open access consumer was procuring power through open access, DISCOMs have stranded capacity and had to back down certain generating stations in that time block. The

methodology adopted by the DISCOMs is not rational. The Commission is requested to analyze the generation back down date for each 15-minute time block period along with reason for such backdown since the backdown could also be on account of economical, operational and technical. Imprudent imposition of AS on the open access consumers will impede competition and power market in the State.

- 2.3.6. The methodology adopted by the DISCOMs for computing the AS has the following deficiencies: (i) since average fixed cost payable to generators has been considered, it does not reflect which specific generator was backed down due to open access which is the basic philosophy behind the AS that only such fixed cost of generators can be imposed as AS which is stranded due to open access, (ii) DISCOMs have projected 246.51 MW as the capacity which would be stranded due to open access. It is incorrect to average out the open access quantum as it cannot be presumed that in each time block of 15 minute in entire year, there will be a fixed quantum of power which will be stranded due to open access, and (iii) as per para 8.5.4 of the NTP, 2016, the fixed costs related to network assets would be recovered through wheeling charges. Therefore, network related cost cannot be recovered through AS. The Commission is bound by the principles set out in NTP, 2016 and should not consider any network related cost in determination of AS. Therefore, in view of the gaps in the proposed methodology of the DISCOMs, the Commission is requested to adopt a rational methodology for calculation of AS. Further, the AS can be maximum to the extent of loss incurred by the DISCOMs when a consumer opts for open access viz., Maximum Additional Surcharge = Average Fixed Cost of Generation – Demand Charges.

***Replies of Licensees***

- 2.3.7. The DISCOMs have projected energy availability from all generating stations in FY 2018-19 and at the state level the projected availability is 67573 MU. The DISCOMs are expecting the open access sales at the same level as in FY 2017-18 for FY 2018-19 also. The AS for FY 2018-19 has been calculated based on the stranded capacity limiting to projected open access sales of 2159 MU which is much lower than the backed down energy of 3666 MU in FY 2017-18 (upto October).
- 2.3.8. When the consumer opts for open access, the DISCOMs have to back down the generation due to decrease in demand and have to pay the fixed cost to the generator, but not the variable cost. The DISCOMs are claiming this stranded fixed cost from the open access consumers in the form of AS. DISCOMs have considered the stranded cost due to open access sales only to calculate AS.
- 2.3.9. The Commission in its AS order for FY 2017-18 had considered the average fixed cost per MW based on the total fixed charges and the long-term availability in MW. Open

access capacity in MW was also arrived based on the open access quantum in MU over the period. The same principle has been adopted for arriving the fixed cost per MW and open access capacity in MW in the proposal of the DISCOMs. As per Section 42 (4) of the Act, 2003 the SERC may specify the AS to be levied on the open access consumers to enable the licensee to recover its fixed costs arising out of its obligation to supply. As per the above provisions of the Act, 2003 and the NTP, 2016, DISCOMs have considered the fixed cost stranded due to power purchase commitments and network charges in calculating the AS. However, the wheeling charges paid by the open access consumers has been deducted while calculating the AS. The Commission may issue regulations specifying the methodology for determination of AS.

***Commission's Views***

2.3.10. The Commission has given due consideration to the stakeholders' submissions and the replies of the Licensees while determining the AS for FY 2018-19.

### 3. CROSS SUBSIDY SURCHARGE FOR FY 2018-19

#### 3.1 CROSS SUBSIDY SURCHARGE FOR FY 2017-18

##### *DISCOMs' submissions*

3.1.1 The DISCOMs have proposed the CSS for FY 2018-19 as per the NTP, 2016 notified by the MoP dated 28.01.2016. The CSS proposed by the DISCOMs for FY 2018-19 is as shown below:

**Table 3.1: Cross Subsidy Surcharge proposed by the DISCOMs for FY 2018-19 (Rs./kWh)**

Consumer Category		SPDCL	NPDCL
<b>HT Category at 11 kV</b>			
HT-I	Industry Segregated	1.62	1.65
HT-II	Others	1.98	2.05
HT-III	Airports, Railways and Bus Stations	1.75	1.77
HT-IV	Irrigation, Agriculture & CPWS	0.46	0.44
HT-VI	Townships and Residential Colonies	1.28	1.02
HT-VII	Temporary Supply	2.75	-
<b>HT Category at 33 kV</b>			
HT-I	Industry Segregated	1.49	1.45
HT-II	Others	1.74	1.90
HT-III	Airports, Railways and Bus Stations	-	-
HT-IV	Irrigation, Agriculture & CPWS	0.56	0.60
HT-VI	Townships and Residential Colonies	1.35	1.29
<b>HT Category at 132 kV</b>			
HT-I	Industry Segregated	1.36	1.33
HT-II	Others	1.65	5.82
HT-III	Airports, Railways and Bus Stations	1.43	-
HT-IV	Irrigation, Agriculture & CPWS	1.36	1.24
HT-V	Railway Traction/HMR	1.25	1.00
HT-VI	Townships and Residential Colonies	-	1.29

##### *Commission's Analysis and Ruling*

3.1.2 The Commission, in this order, has adopted the CSS computation formula as specified in the NTP, 2016 for determination of CSS for FY 2018-19.

3.1.3 The formula prescribed in the NTP, 2016 for computation of CSS is as given below:

$$S = T - [C / (1 - L / 100) + D + R]$$

Where,

**S** is the surcharge

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

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

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

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

**R** is the per unit cost of carrying regulatory assets.

- 3.1.4 The Commission has computed DISCOM wise, category-wise, voltage-wise ‘T’, i.e. per unit tariff (Rs. / unit) realized for FY 2018-19 from the relevant category of consumers, calculated based on category wise revenue anticipated from the approved sales at tariff determined for that category, divided by the approved sales, as per the Retail Supply Tariff (RST) Order. The value of T computed for each category has been presented in **Annexure 2**.
- 3.1.5 The Commission has computed DISCOM wise ‘C’, i.e. per unit (Rs. / unit) weighted average cost of power purchase approved in the RST Order, divided by the approved energy requirement. The value of computed for each DISCOM has been presented in **Annexure 3**.
- 3.1.6 The Commission has computed ‘D’, i.e. per unit aggregate of transmission, distribution and wheeling charges by taking transmission charges approved for FY 2018-19 in the MYT Order dated 01.05.2017 and distribution charges approved voltage wise for FY 2018-19 in the distribution tariff order for the third control period (FY 2014-15 to FY 2018-19) dated 27.03.2015 approved by this Commission.
- 3.1.7 The Commission has computed ‘L’, i.e. aggregate of transmission, distribution and commercial losses voltage wise for FY 2018-19, based on the percentage loss in the transmission system considered in RST order for FY 2018-19 and voltage wise approved distribution loss trajectory (including commercial losses) for the relevant year in the distribution tariff order for the third control period.
- 3.1.8 The Commission has not approved any regulatory assets in its RST order for FY 2018-19, hence ‘R’ (i.e. per unit cost of carrying regulatory assets) does not arise.

3.1.9 Based on the above, the Commission has computed the DISCOM wise, voltage wise CSS for different categories of consumers applicable to consumers availing of open access at different voltages in the area of supply of the respective Licensees. As the Commission has not approved any Tariff increase in the RST Order for FY 2018-19, hence the CSS applicable for FY 2018-19 has been determined to be the minimum value of the CSS already approved for FY 2017-18 and that is arrived at for FY 2018-19 to be the CSS charge for the respective consumer category in FY 2018-19. Accordingly, the CSS applicable for FY 2018-19 as approved by the Commission is shown in the Table below:

**Table 3.2: Cross Subsidy Surcharge applicable for FY 2018-19 as approved by the Commission (Rs. / kWh)**

Category	CSS for FY 2018-19 as approved by the Commission	
	SPDCL	NPDCL
<b>HIGH TENSION</b>		
<b>HT Category at 11 kV</b>		
HT-I Industry Segregated	1.65	1.66
HT-II - Others	2.03	1.97
HT-III Airports, Railways and Bus stations	1.80	1.77
HT -IV Lift Irrigation and agriculture & CPWS	0.36	0.21
HT-VI Townships and Residential Colonies	1.31	0.90
HT-VII Temporary	2.76	-
<b>HT Category at 33 kV</b>		
HT-I Industry Segregated	1.46	1.44
HT-II - Others	1.76	1.78
HT -IV Lift Irrigation and agriculture & CPWS	1.07	0.86
HT-VI Townships and Residential Colonies	1.32	1.29
<b>HT Category at 132 kV</b>		
HT-I Industry Segregated	1.30	1.31
HT-II - Others	1.69	3.55
HT-III Airports, Railways and Bus stations	1.49	-
HT -IV Lift Irrigation and agriculture & CPWS	1.24	1.27
HT-V Railway Traction & HMR	1.27	1.05
HT-VI Townships and Residential Colonies	-	1.28

### 3.2 ADDITIONAL PRAYER ON CROSS SUBSIDY SURCHARGE

#### *DISCOMs' submissions*

- 3.2.1 The DISCOMs made the following additional prayer regarding the CSS for FY 2018-19.
- 3.2.2 The “Consultation Paper on Issues pertaining to open access, Aug ’17” issued by MoP, GoI highlighted the issue of limiting the CSS to 20% of tariff applicable to the consumer category which is presented below:
- “The Tariff Policy 2016 mandates SERCs to determine roadmap for reduction of cross subsidy and bring tariff at +/- 20% Average Cost of Supply, however it restricts Cross Subsidy Surcharge at 20% of the consumer tariff. In case the consumer tariff is more than 120% of Average Cost of Supply, DISCOM will not be able to recover losses through cross subsidy surcharge in case consumer opts for open access. It is essential for SERCs to implement both Para 8.3 -2 and First proviso to para 8.5.1 of the Tariff Policy 2016 simultaneously. If one of the provision could not be implemented due to some reason, the second provision should also not be implanted to that extent”.*
- 3.2.3 Citing the above, the DISCOMs requested the Commission not to restrict the CSS at 20% of tariff payable by the consumer as the tariffs are not within +/- 20% average cost of supply. Further, the DISCOMs submitted that the Commission may notify a roadmap / methodology for reduction of cross subsidy across the consumer categories to enable the DISCOMs in fixing up CSS without any under recovery.

***Commission’s Analysis and Ruling***

- 3.2.4 As regards the limiting of CSS at 20% of the tariff payable by the consumer, the views expressed in the consultation paper cited by the DISCOMs are not binding on the Commission as the consultation paper does not have the force of law. The NTP, 2016 is a statutory document issued under Section 3 of the Act, 2003 and has the force of law.
- 3.2.5 As regards the roadmap / methodology for reduction of cross subsidy across the consumer categories, the Commission directed the DISCOMs to submit a detailed proposal in this regard. The DISCOMs submitted that 9 consumer categories for SPDCL and 11 consumer categories for NPDCL have tariff beyond the range of +/- 20% average cost of service. As per Section 39 & 40 of the Act, 2003 the surcharges and cross subsidies shall be progressively reduced in a manner as specified by the Commission. As per Clause 8.3 of the NTP, 2016, for achieving the objective that the tariff progressively reflects the cost of supply of electricity, the cross subsidy may be reduced gradually in a phased manner to keep tariffs within +/- 20% average cost of supply. The DISCOMs requested the Commission to gradually reduce cross subsidy over a period of 5 years to avoid tariff shock to the consumers in order to achieve the

above objective.

- 3.2.6 In reply to the query of the Commission regarding the detailed proposal, the DISCOMs have merely stated the statutory provisions. The DISCOMs have not proposed any tariff increase for FY 2018-19 from the tariffs approved by the Commission in the Tariff Order for FY 2017-18. Based on the prudence check of the ARR proposals of the DISCOMs for FY 2018-19, the Commission has approved the RST for FY 2018-19 without any increase from the RST approved in the tariff order for FY 2017-18. The Commission has taken note of the request of the DISCOMs to gradually reduce cross subsidy over a period of 5 years. The fourth Multi Year Tariff Control Period of 5 years commences from FY 2019-20. The DISCOMs are required to file the MYT petitions, in accordance with Regulation No. 4 of 2005, for the fourth control period by 30.11.2018. **The Commission directs the DISCOMs to submit the Tariff Proposals for the fourth MYT Control Period keeping in view of their proposal in the instant petition to reduce the cross subsidy over the period of next 5 years.**

#### 4. ADDITIONAL SURCHARGE FOR FY 2017-18

##### 4.1 ADDITIONAL SURCHARGE FOR FY 2018-19

###### *DISCOMs' submissions*

4.1.1 The Commission vide its Order dated 13.12.2017 had approved the AS for the period from 01.01.2018 to 31.03.2018.

4.1.2 The DISCOMs have made all the necessary arrangements for ensuring un-interrupted supply of power to all categories of consumers including 24 hours power supply to agricultural consumers, upcoming lift irrigation schemes and also the additional load growth from industrial consumers through advance planning and by entering into long-term power supply agreements. The contracting of power by consumers through open access arrangements would result in stranding of these assets leading to under-recovery of fixed costs. The DISCOMs requested the Commission to consider levy of AS for open access consumers i.e., surcharge in addition to the charges for wheeling to meet the fixed cost of the licensee arising out of its obligation to supply as per Section 42(4) of the Act, 2003 which includes the fixed cost commitments of power purchase arrangements.

4.1.3 The DISCOMs have followed the methodology adopted by the Commission in computation of AS vide its Order dated 13.12.2017.

4.1.4 The AS proposed by the DISCOMs is as shown below:

**Table 4.1: Additional Surcharge proposed by the DISCOMs for FY 2018-19**

S. No.	Particulars	Value	Unit	Remarks
A	Long Term Available Capacity (excluding market purchase)	7670.04	MW	Net Energy availability excluding Market Purchases converted in MW
B	Capacity stranded due to open access	246.51	MW	Projected Open Access demand
C	Approved/Actual Total Fixed Charges (excluding market purchase)	15317.16	Rs. crore	Fixed costs of Generating stations including NCEs
D = C/A	Fixed Charge/ MW available	2.00	Rs. crore/ MW	
E = D*B	Fixed Charge for Stranded Capacity	492.29	Rs. crore	
F	Transmission Charge Paid	2575.42	Rs. crore	Summation of Transmission, SLDC, PGCIL & ULDC costs
G	Projected Energy Requirement	64290.84	MU	Projected Energy requirement based on the sales forecast of licensees

S. No.	Particulars	Value	Unit	Remarks
H = F/G	Transmission Charges per kWh (Inclusive of PGCIL charges)	0.401	Rs./kWh	
I	Distribution Charges as approved in TO	0.78	Rs./kWh	Distribution cost per unit
J = H+I	Total T&D charges per kWh	1.181	Rs./kWh	
K	Projected Energy consumed by open access consumer from DISCOM	2162.74	MU	
L = K * J	T&D charges paid by Open access consumer to DISCOM	255.5	Rs. crore	
M	Projected Demand Charges recovered by DISCOMs from Open Access	303.29	Rs. crore	
N = M - L	Demand Charges to be adjusted	47.81	Rs. crore	
O = E - N	Net stranded charges recoverable	444.48	Rs. crore	
P	Open Access Sales	2159.45	MU	Projected Open access consumption
Q = O/P	Additional Surcharge derived	<b>2.06</b>	Rs./kWh	

### **Commission's Analysis and Ruling**

4.1.5 The Commission vide its Order dated 13.12.2017 in I. A. No. 22 of 2017 in O. P. No. 22 of 2016 and I. A. No. 23 of 2017 in O. P. No. 23 of 2016 filed by the DISCOMs, decided the applicability of AS to the open access consumers, methodology for computation of the surcharge and the rate of surcharge applicable for the period 01.01.2018 to 31.03.2018 as Rs. 0.52 / kWh.

4.1.6 The DISCOMs have proposed the AS for FY 2018-19 considering the projected data as per their ARR filings for FY 2018-19.

4.1.7 AS is to be levied to meet the fixed cost of the distribution licensee arising out of its obligation to supply power. As such the distribution licensee has to contract sufficient power to meet the aggregate demands of its consumers and to provide for unforeseen outages of the generators. However, even in normal scenario, full availability of such contracted capacity may not be required by the licensee. As such the total quantum of backing-down cannot be considered for determination of AS. The relevant figure would be the capacity stranded due to the consumers who opt to purchase power from third parties through open access instead of drawing their full requirement from the licensee. As such, it is important to ascertain the surplus power available with the licensee viz-a-viz power procured by the consumers from third parties. It is pertinent to consider the most recent data for the determination of AS for FY 2018-19. Accordingly, the Commission has obtained the following information from the DISCOMs for the period

from April 2017 to December 2017:

- i. Total contracted capacity in MW.
- ii. Hourly availability declared by the generator in MW.
- iii. Hourly schedules given by the DISCOMs in MW.
- iv. Hourly schedules of open access transactions by the open access consumers in MW.
- v. Total fixed charges paid by the DISCOMs.
- vi. Total transmission charges paid by the DISCOMs.
- vii. Total energy scheduled by the DISCOMs in MU.
- viii. Total energy consumed by the open access consumers for third parties.
- ix. Total energy consumed by the open access consumers from the DISCOMs.
- x. Total demand charges paid by the open access consumers having contracted demand with the DISCOMs.

4.1.8 Based on the information furnished by the DISCOMs and in accordance with the methodology specified by the Commission, the AS for FY 2018-19 has been computed as Rs. 1.01 / kWh.

4.1.9 The AS in the state was introduced from 01.01.2018 and the rate of Rs. 0.52 / kWh was applicable for a period of 3 months from 01.01.2018 to 31.03.2018. The AS computed cannot be wholly allowed considering the fact that the AS has been recently introduced in the state. In order to strike the balance between the interest of all the stakeholders, the Commission approves the AS for FY 2018-19 as Rs. 0.52 / kWh, at the same level of the AS applicable for the period 01.01.2018 to 31.03.2018.

4.1.10 The detailed computations for the AS for FY 2018-19 is as shown below:

**Table 4.2: Computations of Additional Surcharge for FY 2018-19**

S. No.	Particulars	Value	Unit
{A}	Long term available capacity	8869.59	MW
{B}	Capacity stranded due to open access	236.85	MW
{C}	Fixed Charges paid	7448.73	Rs. crore
{D}={C}÷{A}	Fixed Charges per MW	0.84	Rs. crore/MW
{E}={D}x{B}	Fixed Charges for stranded capacity	198.91	Rs. crore
{F}	Transmission charges paid	1316.54	Rs. crore
{G}	Actual Energy scheduled	42607.54	MU
{H}={F}÷{G}	Transmission charges per unit	0.31	Rs./kWh
{I}	Distribution charges as per Tariff Order	0.82	Rs./kWh

S. No.	Particulars	Value	Unit
{J}={H}+{I}	Total transmission and distribution charges per unit	1.13	Rs./kWh
{K}	Energy consumed by open access consumers from the DISCOM	1448.97	MU
{L}={K}x{J}	Transmission and distribution charges paid by open access consumers	163.91	Rs. crore
{M}	Demand charges recovered by the DISCOM from open access consumers	223.22	Rs. crore
{N}={M}-{L}	Demand charges to be adjusted	59.31	Rs. crore
{O}={E}-{N}	Net stranded charges recoverable	139.60	Rs. crore
{P}	Open access sales	1380.96	MU
{Q}={O}÷{P}	Additional Surcharge computed	1.01	Rs./kWh
	<b>Additional Surcharge approved</b>	<b>0.52</b>	<b>Rs./kWh</b>

4.1.11 The AS of Rs. 0.52 / kWh shall be applicable to the consumers of the DISCOMs who avail power through open access from any source other than their respective DISCOM and for the open access transactions from 01.04.2018 to 31.03.2019. However, this charge is not applicable to open access consumers for their captive consumption.

## 5. COMMISSION'S DIRECTIVES

The Commission in its previous orders had issued a number of specific directions to the DISCOMs with an objective of attaining operational efficiency and streamlining the flow of information, which would be beneficial for the sector and the DISCOMs both in short and long-term. This chapter deals with the compliance status and Commission's views thereon as well as the summary of new directions for compliance and implementation by the DISCOMs.

### *Compliance to Directives issued in the Commission's Order dated 13.12.2017*

#### 5.1 STEPS FOR RETENTION OF OPEN ACCESS CONSUMERS

5.1.1 The Licensees are directed to submit a detailed report on adoption of steps for retention of open access consumers.

##### *DISCOMs' submissions*

5.1.2 The consumers allowed for open access are HT consumers having connected loads more than 1 MW. The main reasons for consumers opting for open access are:

- i. Tariffs for some of the consumer categories are more than limit of  $\pm 20\%$  of average cost of service.
- ii. High level of cross subsidy component in the tariffs of some of the HT consumer categories like HT I, HT II and HT III to compensate a part of subsidy portion of domestic and agricultural consumers.
- iii. Availability of cheaper power in the power market in some time periods.
- iv. Exemption of CSS and wheeling charges for the power availed from open access through solar generators and wind generators.

5.1.3 There shall be a road map for gradual reduction in cross subsidy to make the tariffs competitive for HT consumers. The tariff shall be brought within  $\pm 20\%$  of average cost of supply. The Commission may notify a road map for gradual reduction in cross subsidy.

5.1.4 Tariff simplification and rationalization is one of the steps to make the tariff setting a transparent exercise. The MoP has identified guiding principles and recommendations for each category which are actionable points to be used for simplification. It is recommended to implement the simplification exercise over a course of 2-3 years. The Commission may simplify and rationalize tariffs for efficient and transparent tariffs to discourage the consumers to move out through open access.

5.1.5 In order to encourage renewables and make the prices competitive in the market, exemptions of CSS and wheeling charges are being provided for the consumers availing power through open access from solar generators and wind generators by the State Government and the Commission. however, with the technology breakthrough in the

solar power markets in the recent past and more number of generators entered into solar and wind generation business, the prices of renewable sources are drastically reduced to Rs. 2.44 / unit (in Rajasthan) which is much below the cost of power from thermal generating stations. This prompts more number of consumers opting for open access in years to come. Hence, the need of continuing the exemptions after 5 years (as stipulated in the solar policy) has to be re-examined in the wake of declining price trend and penetration of large number of players in the solar and wind market. The Commission is requested to examine the continuation of exemptions of CSS and wheeling charges to solar and wind power producers after 5-year period as determined the solar tariff policy.

- 5.1.6 Further, in order to retain the open access consumers, the DISCOMs are taking several measures as given below:
- i. DISCOMs are not going for Round the Clock (RTC) agreements with power generators, but are only procuring on need basis, on specific days for specific time periods.
  - ii. Procurement of power only on need basis would result in reduction in short-term power procurement cost.
  - iii. Strengthening the network and improving the efficiency, thereby reducing the commercial losses.
  - iv. Ensuring that there is no load shedding and improving the quality of power supply thereby improving the satisfaction levels of HT consumers.

### ***Fresh Directives***

- 5.1.7 The Commission has taken note of the request of the DISCOMs to gradually reduce cross subsidy over a period of 5 years. The fourth Multi Year Tariff Control Period of 5 years commences from FY 2019-20. The DISCOMs are required to file the MYT petitions, in accordance with Regulation No. 4 of 2005, for the fourth control period by 30.11.2018. **The Commission directs the DISCOMs to submit the tariff proposals for the fourth MYT control period keeping in view their proposal in the instant petition to reduce the cross subsidy over the period of next 5 years.**
- 5.1.8 The Commission has taken note of the request of the DISCOMs to gradually simplify and rationalise the tariff categories over a period of 2-3 years. The fourth Multi Year Tariff Control Period of 5 years commences from FY 2019-20. The DISCOMs are required to file the MYT petitions, in accordance with Regulation No. 4 of 2005, for the fourth control period by 30.11.2018. **The Commission directs the DISCOMs to submit the tariff proposals for the fourth MYT control period, giving due consideration to the guiding principles and recommendations of the MoP**

**regarding tariff simplification and rationalisation, submitted in the instant proceedings.**

## **5.2 MECHANISM FOR DETERMINATION OF STRANDED POWER**

5.2.1 The Licensees are directed to propose a mechanism to determine quantum of stranded power purchase commitment in each time block and the charges for same and present the same before the Commission by March 31, 2018.

### *DISCOMs' submissions*

5.2.2 The DISCOMs submitted that the direction will be complied with.

### *Fresh Directives*

**5.2.3 The Licensees are directed to propose a mechanism to determine quantum of stranded power purchase commitment in each time block and the charges for same and present the same before the Commission by March 31, 2018.**

## **5.3. FRAMING OF TERMS AND CONDITIONS OF ADDITIONAL SURCHARGE**

5.3.1 The Licensees shall finalize the terms and conditions of AS applicable to consumers and submit the same for Commission's approval prior to March 31, 2018.

### *DISCOMs' submissions*

5.3.2 The DISCOMs submitted that the direction will be complied with.

### *Fresh Directives*

**5.3.3 The Licensees shall finalize the terms and conditions of AS applicable to consumers and submit the same for Commission's approval prior to March 31, 2018.**

## 6. APPLICABILITY OF THE ORDER

6.1 The CSS and AS applicable for FY 2018-19 as approved by the Commission in this order shall be effective from 01.04.2018 to 31.03.2019.

6.2 Provided that the CSS shall not be applicable to the solar power projects as per the policy directive of the then Government of Andhra Pradesh and Government of Telangana State as given below:

S. No.	A.P. Solar Power Policy, 2012	Telangana Solar Power Policy, 2015
1	<b>Cross Subsidy Surcharge</b>	
	<p>Cross subsidy surcharge shall not be applicable for Open Access obtained for third party sale within the state subject to the industries maintaining their demand within its contracted demand with the DISCOMs. It is not applicable for captive use.</p> <p>These incentives will be in force for a period of seven years from the date of implementation of the Policy.</p>	<p>For SPP located within the state and selling power to third parties within the state, 100% exemption shall be provided on the cross subsidy surcharge as determined by TSERC for five years from the date of commissioning of the SPP.</p>

6.4 Provided further that the Government of Telangana State shall reimburse the DISCOMs, the sum of money foregone by them due to the exemption of the CSS to the solar power projects. **In the event of non-reimbursement by the Government of Telangana State of the CSS so exempted, the DISCOMs shall continue to levy the CSS as applicable.**

6.5 As per para 11 (g) of the Telangana Solar Power Policy, 2015 effective from 01.06.2015 (Solar Policy 2015) for solar power projects (SPP) located within the state and selling power to third parties within the state, 100% exemption is provided on the CSS as determined by TSERC for five years from the date of commissioning of the SPP. Also, as per para 11 (e) of the Solar Policy, banking of 100% of energy shall be permitted for all captive and open access / scheduled consumers during all 12 months of the year. Based on the aforesaid the developers have entered into PPAs with third parties. The solar policy does not specifically mention about AS but to encourage the renewable energy projects established under the Solar Policy 2015, AS shall not be levied on such SPPs commissioned during the operative period of the Solar Policy 2015. The projects not commissioned under the Solar Policy 2015 will be liable to pay to AS to

DISCOMs. This applies to wind generators also which are under operation and with PPAs. For new wind based projects, AS shall be levied.

**This Order is corrected and signed on this day the 27<sup>th</sup> March, 2018.**

**Sd/-  
H. SRINIVASULU  
MEMBER**

**Sd/-  
ISMAIL ALI KHAN  
CHAIRMAN**

**Annexure 1: Cross Subsidy Surcharge for FY 2018-19 as determined by the Commission**

**SPDCL - Cross Subsidy Surcharge for FY 2018-19 as computed by the Commission  
(Rs./kWh)**

Category	Average realisation (AR)	Weighted average PP cost	Aggregate loss %	Aggregate T & D charge	Cost of carrying Regulatory asset	CSS	20% limit of AR	CSS arrived by Commission (as per NTP 2016)
	(T)	(C)	(L)	(D)	(R)	(S)	(20% of AR)	Least value
<b>HIGH TENSION</b>								
<b>HT Category at 11 kV</b>								
HT-I Industry Segregated	8.61	4.04	10.91%	0.81	0.00	3.26	1.72	<b>1.72</b>
HT-II - Others	10.39	4.04	10.91%	0.81	0.00	5.53	2.08	<b>2.08</b>
HT-III Airports, Railways and Bus stations	9.04	4.04	10.91%	0.81	0.00	4.19	1.81	<b>1.81</b>
HT -IV Lift Irrigation and agriculture & CPWS	6.55	4.04	10.91%	0.81	0.00	1.69	1.31	<b>1.31</b>
HT-VI Townships and Residential Colonies	6.75	4.04	10.91%	0.81	0.00	1.90	1.35	<b>1.35</b>
HT Temporary	14.99	4.04	10.91%	0.81	0.00	10.13	3.00	<b>3.00</b>
<b>HT Category at 33 kV</b>								
HT-I Industry Segregated	7.74	4.04	6.96%	0.26	0.00	3.14	1.55	<b>1.55</b>
HT-II - Others	9.06	4.04	6.96%	0.26	0.00	4.46	1.81	<b>1.81</b>
HT -IV Lift Irrigation and agriculture & CPWS	5.67	4.04	6.96%	0.26	0.00	1.07	1.13	<b>1.07</b>
HT-VI Townships and Residential Colonies	6.81	4.04	6.96%	0.26	0.00	2.21	1.36	<b>1.36</b>
<b>HT Category at 132 kV</b>								
HT-I Industry Segregated	7.25	4.04	3.09%	0.11	0.00	2.97	1.45	<b>1.45</b>
HT-II - Others	9.71	4.04	3.09%	0.11	0.00	5.43	1.94	<b>1.94</b>
HT-III Airports, Railways and Bus stations	7.43	4.04	3.09%	0.11	0.00	3.15	1.49	<b>1.49</b>
HT -IV Lift Irrigation and agriculture & CPWS	6.58	4.04	3.09%	0.11	0.00	2.30	1.32	<b>1.32</b>
HT-V Railway Traction & HMR	8.39	4.04	3.09%	0.11	0.00	4.11	1.68	<b>1.68</b>

**NPDCL - Cross Subsidy Surcharge for FY 2018-19 as computed by the Commission  
(Rs./kWh)**

Category	Average realisation (AR)	Weighted average PP cost	Aggregate loss %	Aggregate T & D charge	Cost of carrying Regulatory asset	CSS	20% limit of AR	CSS computed by the Commission
	(T)	(C)	(L)	(D)	(R)	(S)	(20% of AR)	Least value
<b>HIGH TENSION</b>								
<b>HT Category at 11 kV</b>								
HT-I Industry Segregated	8.57	4.15	10.83%	1.00	0.00	2.91	1.71	1.71
HT-II - Others	10.28	4.15	10.83%	1.00	0.00	4.62	2.06	2.06
HT-III Airports, Railways and Bus stations.	8.85	4.15	10.83%	1.00	0.00	3.19	1.77	1.77
HT -IV Lift Irrigation and agriculture & CPWS	6.14	4.15	10.83%	1.00	0.00	0.49	1.23	0.49
HT-VI Townships and Residential Colonies	6.56	4.15	10.83%	1.00	0.00	0.90	1.31	0.90
<b>HT Category at 33 kV</b>								
HT-I Industry Segregated	7.55	4.15	6.97%	0.26	0.00	2.84	1.51	1.51
HT-II - Others	9.46	4.15	6.97%	0.26	0.00	4.74	1.89	1.89
HT -IV Lift Irrigation and agriculture & CPWS	5.73	4.15	6.97%	0.26	0.00	1.01	1.15	1.01
HT-VI Townships and Residential Colonies	6.45	4.15	6.97%	0.26	0.00	1.73	1.29	1.29
<b>HT Category at 132 kV</b>								
HT-I Industry Segregated	6.64	4.15	3.09%	0.11	0.00	2.24	1.33	1.33
HT-II - Others	29.10	4.15	3.09%	0.11	0.00	24.70	5.82	5.82
HT -IV Lift Irrigation and agriculture & CPWS	6.35	4.15	3.09%	0.11	0.00	1.95	1.27	1.27
HT-V Railway Traction & HMR	5.54	4.15	3.09%	0.11	0.00	1.14	1.11	1.11
HT-VI Townships and Residential Colonies	6.44	4.15	3.09%	0.11	0.00	2.04	1.29	1.29

**Annexure 2: Average Revenue realization for SPDCL and NPDCL for FY 2018-19**

Consumer Category		FY 2018-19					
		SPDCL			NPDCL		
		Sales (MU)	Revenue (Rs. crore)	Average Realisation (Rs./kWh)	Sales (MU)	Revenue (Rs. crore)	Average Realisation (Rs./kWh)
<b>HT Categories</b>							
<b>HT I</b>	<b>Industry Segregated</b>						
	11 kV	3333.26	2868.72	<b>8.61</b>	533.82	457.39	<b>8.57</b>
	33 kV	3219.27	2492.89	<b>7.74</b>	183.98	138.98	<b>7.55</b>
	132 kV	2010.83	1457.44	<b>7.25</b>	695.18	461.69	<b>6.64</b>
<b>HT II</b>	<b>Others</b>						
	11 kV	1543.57	1603.32	<b>10.39</b>	128.90	132.45	<b>10.28</b>
	33 kV	672.20	608.81	<b>9.06</b>	18.51	17.51	<b>9.46</b>
	132 kV	86.47	83.99	<b>9.71</b>	3.03	8.82	<b>29.10</b>
<b>HT III</b>	<b>Airports, Railways and Bus Stations</b>						
	11 kV	5.03	4.55	<b>9.04</b>	7.73	6.84	<b>8.85</b>
	33 kV	0.00	0.00	<b>NA</b>	0.00	0.00	<b>NA</b>
	132 kV	54.57	40.56	<b>7.43</b>	0.00	0.00	<b>NA</b>
<b>HT IV(A&amp;B)</b>	<b>Lift Irrigation &amp; Agriculture</b>						
	11 kV	107.47	70.37	<b>6.55</b>	83.41	51.22	<b>6.14</b>
	33 kV	131.58	74.67	<b>5.67</b>	144.67	82.94	<b>5.73</b>
	132 kV	1717.45	1129.27	<b>6.58</b>	2025.04	1286.19	<b>6.35</b>
<b>HT V(A)</b>	<b>Railway Traction</b>	145.80	122.31	<b>8.39</b>	368.47	204.02	<b>5.54</b>
<b>HT V(B)</b>	<b>Hyderabad Metro Rail (HMR)</b>	120.00	66.16	<b>5.51</b>	0.00	0.00	<b>NA</b>
<b>HT VI</b>	<b>Townships and Residential Colonies</b>						
	11 kV	89.54	60.48	<b>6.75</b>	12.18	7.99	<b>6.56</b>
	33 kV	51.18	34.85	<b>6.81</b>	41.80	26.96	<b>6.45</b>
	132 kV	0.00	0.00	<b>NA</b>	105.09	67.71	<b>6.44</b>
<b>HTVII</b>	<b>Temporary Supply</b>	32.76	49.10	<b>14.99</b>	0.00	0.00	<b>NA</b>

**Annexure 3: Weighted Average Power Purchase Cost for FY 2018-19**

<b>Particulars</b>	<b>SPDCL</b>	<b>NPDCL</b>
Power Purchase Quantum (MU)	39547.14	18084.13
Power Purchase Cost (Rs. crore)	15964.63	7508.78
Average Power Purchase Cost per unit (Rs./kWh)	<b>4.04</b>	<b>4.15</b>

**Annexure 4: Calculation of Voltage wise Distribution Charges for FY 2018-19**

Voltage	SPDCL		NPDCL	
	Charge (Rs./kVA/month)	Rs./kWh	Charge (Rs./kVA/month)	Rs./kWh
LT	485.45	1.39	743.42	2.03
11 kV	231.52	0.55	346.34	0.74
33 kV	19.95	0.15	15.62	0.14
132 kV & above	65.81	0.11	65.81	0.11