



TELANGANA STATE ELECTRICITY REGULATORY COMMISSION

5thFloor, Singareni Bhavan, Red Hills, Lakdi-ka-pul,

Hyderabad 500004.

Present

Sri Ismail Ali Khan, Chairman

Sri H. Srinivasulu, Member

Sri L. Manohar Reddy, Member

ORDER

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)

In the matter of determination of cross subsidy surcharge under Sections 39, 40 and 42 of the Electricity Act, 2003 for FY 2016-17

The Northern Power Distribution Company of Telangana Limited (TSNPDCL) and the Southern Power Distribution Company of Telangana Limited (TSSPDCL) filed separate Petitions under Sections 38, 39, 40, subsection 2 and 4 of section 42 of the Electricity Act, 2003, before the Telangana State Electricity Regulatory Commission (TSERC or the Commission) on 8th March, 2016 for determination of Cross Subsidy Surcharge and Additional surcharge for FY 2016-17 along with the filings made for approval of Aggregate Revenue Requirement (ARR) and Tariff proposal for Retail Supply Business for FY 2016-17. 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

Determination of Cross subsidy surcharge for FY 2016-17

Subsidy Surcharge applicable to different categories of consumers availing open access in Transmission and Distribution system at different voltages during FY 2016-17, as indicated hereinafter.

The Commission has passed a separate order dated 23rd June, 2016 filed with the same O.P. numbers, determining the ARR and Retail Supply Tariffs for all consumer categories for FY 2016-17.

CHAPTER-1: INTRODUCTION

Statutory Provisions

- 1.1 Sections 39(2) (d) (ii), 40(c) (ii) and 42(2) of the Electricity Act, 2003 (hereinafter referred to as 'the Act') provide for payment of a surcharge by the consumer (hereinafter also referred to as 'the Cross-subsidy Surcharge') when a consumer avails of power under open access. Further, Section 42(2) of the Act provides that the surcharge shall be determined by the State 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.
- 1.2 As per the afore-mentioned provisions, to maintain current level of subsidy, cross subsidy surcharge has to be levied on the consumers who opt for open access.
- 1.3 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.
- 1.4 This Commission was constituted as per section 82 of the Electricity Act 2003 and read in conjuncture with the AP State Reorganization Act, 2014 and started functioning with effect from 3rd November 2014. This Commission has determined the Cross Subsidy Surcharge for FY 2015-16 based on methodology prescribed in the National Tariff Policy (NTP) dated 6th January, 2006. The Commission intends to follow the methodology prescribed in the NTP date 28th January 2016, notified by the Ministry of Power, Government of India, for arriving at the Cross Subsidy Surcharge for FY 2016-17.
- 1.5 The methodology, for determining the Cross Subsidy Surcharge, prescribed by the NTP is as indicated below.

Tariff Policy - Methodology

- 1.6 As per the National Tariff Policy notified by MoP on 28th January 2016, 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.
- 1.7 The formula prescribed by National Tariff Policy dated 28th January 2016 for computation of Cross Subsidy Surcharge is as given below:
- 1.8 Surcharge formula:

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

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.

CHAPTER-2: CONSULTATION WITH STAKEHOLDERS

- 2.1 On receipt of the filings for determination of Cross Subsidy Surcharge and Additional Surcharge, 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 newspaper (in Urdu) on 10th March, 2016. The notice was to make the general public aware that the Licensees have filed before the Commission their Cross Subsidy Surcharge and Additional Surcharge proposal along with ARR and Tariff proposals in respect of their retail supply business for FY 2016-17.
- 2.2 The filings made by the Licensees along with supporting material were made available in 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 Licensees.
- 2.3 It was informed through the public notice that, objections/ suggestions on the Cross Subsidy Surcharge and Additional Surcharge proposal to be submitted by 30th March, 2016.
- 2.4 In response to the public notice, some objections/ suggestions have been received by the Commission both in writing and during the public hearing.
- 2.5 The Licensees were also directed to arrange their written replies to all the written objections received by 05th April, 2016, before the scheduled public hearing of the concerned Licensee. The replies were also to be posted on their respective websites and the copies of these replies were to be made available to the Commission also.
- 2.6 The Commission had conducted two public hearings one in each Licensee's area. The public hearings were held in Hyderabad on 06th & 7th April, 2016 on the filings of TSSPDCL and in 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 per the directions of the Commission, the respective Licensees have responded on the issues raised by the objectors during the hearing.
- 2.7 The Commission has conducted a meeting of the State Advisory Committee (SAC) on 17th March, 2016 to elicit views on the Cross Subsidy Surcharge and Additional Surcharge proposal in addition to the ARR and tariff proposals of Licensees.
- 2.8 Suggestions and objections on the Cross Subsidy Surcharge as submitted by the stakeholders and responses as submitted by the Licensees are summarized below.
- 2.9 **Waiver of Cross subsidy Surcharge for Railways:** Discoms have proposed cross subsidy surcharge for Railway traction computed as below for 2016-17.

Licensee	Cross subsidy surcharge (INR./ unit)
TSSPDCL	1.49

TSNPDCL	
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	1.50
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It is submitted that, National tariff policy was amended and notified on 28.01.2016 with a clause regarding exemption of cross subsidy surcharge on Railways has been introduced. National Tariff Policy 8.5.1 stipulates “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.”

Therefore Railway pleads Hon’ble commission to exempt Railways from cross subsidy surcharge and additional cross subsidy surcharge as per spirit and compliance of guidelines of National Tariff Policy.

Reply from Licensees

The Licensee has computed cross subsidy surcharge for every category. The Hon’ble Commission in consultation with the GoTS may decide appropriately.

Commission’s view

If the Indian Railways desires to avail of the deemed licensee status in order to avail exemption from cross subsidy surcharge, it can approach the Commission through a petition as per the regulations in force, for the Commission to examine.

2.10 Wavier 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.

2.11 Request for removal of CSS

The objector requested the Commission not to levy any cross subsidy surcharge to the industry and encourage it to go for cheaper power wherever available. In explanation to the levy of cross subsidy surcharge, the objector mentioned that, there was no CSS in the year 2014-15, but a charge of INR. 1.29 / kVA was levied and is now proposed to be increased to INR. 1.46/ kVA.

Reply from Licensees: The Cross subsidy surcharge is nil during FY2014-15 mainly because of implementation of R&C measures by the Discom due to power shortage in that year. Further, 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

The Commission has to determine the Cross Subsidy Surcharge (CSS) as per the provisions of the Electricity Act 2003. Further, the Commission while determining CSS follows the National Tariff Policy.

2.12 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, runs 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.”

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.

2.13 **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.

2.14 **Open access with no cross subsidy charges**

M/s Kamineni hospitals and others have requested to allow open access without the burden of cross subsidy charges.

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 Licensee's current level of cross subsidy. However, it may be noted the Hon'ble TSERC in its order dated 11.08.2015 has exempted the cross subsidy surcharge to the consumers who are availing solar power through open access from the Solar Generators located within the state of Telangana.

Commission's view

The Commission accepts the view of the Licensees regarding determination of cross subsidy surcharge based on guidelines of the National Tariff policy.

2.15 **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 stipulate to exempt the CSS to the open access consumers availing of supply from NCE sources.

CHAPTER-3: DETERMINATION OF CROSS SUBSIDY SURCHARGE FOR FY 2016-17

Licensees' Submissions

2.16 The Licensees filed for determination of Cross Subsidy Surcharge for FY 2016-17 based on the surcharge formula prescribed in the NTP dated January 28, 2016. The Cross Subsidy Surcharge filed by the Licensees for FY 2016-17 is given in the Tables below.

Table 1: Cross Subsidy Surcharge for FY 2016-17 as filed by TSNPDCL

Categories	Average Realization (Rs./unit)	Weighted PP (Rs./unit)	Wheeling Charges (Rs./unit)	Applicable Loss%	Cross Subsidy Surcharge (Rs./unit)	20% Limit on the Average Realization	Cross Subsidy Surcharge as per Tariff Policy Jan 16.
HIGH TENSION							
HT Category at 11 kV							
HT-I Industry	8.70	4.11	0.74	11.75%	3.31	1.74	1.74
HT-II - Industrial Non Segregated	10.53	4.11	0.74	11.75%	5.13	2.11	2.11
HT-III - Aviation	9.20	4.11	0.74	11.75%	3.80	1.84	1.84
HT -IV Govt. Lift Irrigation and CPWS	5.55	4.11	0.74	11.75%	0.15	1.11	0.15
HT-VI -Colony Supply	6.82	4.11	0.74	11.75%	1.42	1.36	1.36
HT- VII Green Power	-	4.11	0.74	11.75%	0.00	0.00	0.00
Rural co-operatives	1.01	4.11	0.74	11.75%	0.00	0.20	0.00
HT Category at 33 kV							
HT-I Industry	6.86	4.11	0.18	7.85%	2.22	1.37	1.37
HT-II - Industrial Non Segregated	9.32	4.11	0.18	7.85%	4.68	1.86	1.86
HT-III - Aviation	-	4.11	0.18	7.85%	0.00	0.00	0.00
HT -IV Govt. Lift Irrigation and CPWS	5.34	4.11	0.18	7.85%	0.70	1.07	0.70
HT-VI -Colony Supply	7.08	4.11	0.18	7.85%	2.44	1.42	1.42
HT- VII Green Power	-	4.11	0.18	7.85%	0.00	0.00	0.00
Rural co-operatives	1.01	4.11	0.18	7.85%	0.83	0.20	0.20
HT Category at 132 kV and above							
HT-I Industry	6.71	4.11	0.16	4.01%	2.27	1.34	1.34
HT-II - Industrial Non Segregated	51.85	4.11	0.16	4.01%	47.40	10.37	10.37
HT-III – Aviation	-	4.11	0.16	4.01%	0.00	0.00	0.00
HT -IV Govt. Lift Irrigation and CPWS	6.46	4.11	0.16	4.01%	2.02	1.29	1.29
HT-V –Railway Traction	7.51	4.11	0.16	4.01%	3.06	1.50	1.50
HT-VI -Colony Supply	6.76	4.11	0.16	4.01%	2.32	1.35	1.35

Determination of Cross subsidy surcharge for FY 2016-17

Categories	Average Realization (Rs./unit)	Weighted PP (Rs./unit)	Wheeling Charges (Rs./unit)	Applicable Loss%	Cross Subsidy Surcharge (Rs./unit)	20% Limit on the Average Realization	Cross Subsidy Surcharge as per Tariff Policy Jan 16.
HT- VII Green Power	-	4.11	0.16	4.01%	0.00	0.00	0.00

Table 2: Cross Subsidy Surcharge for FY 2016-17 as filed by TSSPDCL

Categories	Average Realization (Rs./unit)	Weighted PP (Rs./unit)	Wheeling Charges (Rs./unit)	Applicable Loss%	Cross Subsidy Surcharge (Rs./unit)	20% Limit on the Avg Realization	CSS as per Tariff Policy Jan 16.
HIGH TENSION SUPPLY							
HT Category at 11 kV							
HT-I Industry	8.31	4.19	0.52	11.99%	3.03	1.66	1.66
HT-II Others	10.51	4.19	0.52	11.99%	5.23	2.10	2.10
HT-III Airports, Bus Stn and Rly. Stn.	9.63	4.19	0.52	11.99%	4.35	1.93	1.93
HT-IV Lift Irrigation & Agl.	5.61	4.19	0.52	11.99%	0.33	1.12	0.33
HT-VI Townships & Residential colonies	6.89	4.19	0.52	11.99%	1.61	1.38	1.38
HT Temporary	15.00	4.19	0.52	11.99%	9.71	3.00	3.00
HT Category at 33 kV							
HT-I Industry	7.32	4.19	0.19	7.84%	2.58	1.46	1.46
HT-II Others	9.37	4.19	0.19	7.84%	4.64	1.87	1.87
HT-III Airports, Bus Stn and Rly. Stn.	-	4.19	0.19	7.84%	0.00	0.00	0.00
HT-IV Lift Irrigation & Agl.	6.28	4.19	0.19	7.84%	1.55	1.26	1.26
HT-VI Townships & Residential colonies	6.96	4.19	0.19	7.84%	2.22	1.39	1.39
Temporary	18.67	4.19	0.19	7.84%	13.94	3.73	3.73
HT Category at 132 kV and above							
HT-I Industry	6.62	4.19	0.16	4.01%	2.10	1.32	1.32
HT-II Others	9.35	4.19	0.16	4.01%	4.83	1.87	1.87
HT-III Airports, Bus Stn and Rly. Stn.	8.20	4.19	0.16	4.01%	3.68	1.64	1.64
HT-IV Lift Irrigation & Agl.	6.30	4.19	0.16	4.01%	1.78	1.26	1.26

Determination of Cross subsidy surcharge for FY 2016-17

Categories	Average Realization (Rs./unit)	Weighted PP (Rs./unit)	Wheeling Charges (Rs./unit)	Applicable Loss%	Cross Subsidy Surcharge (Rs./unit)	20% Limit on the Avg Realization	CSS as per Tariff Policy Jan 16.
HT-V – Railway Traction	7.46	4.19	0.16	4.01%	2.93	1.49	1.49

Commission's Analysis

- 2.17 The Commission, in this Order, has adopted the cross subsidy surcharge computation formula as specified in National Tariff Policy dated January 28, 2016 for determination of Cross Subsidy Surcharge for FY 2016-17.
- 2.18 The suggestions made by the members of SAC and Objections and suggestions received during the public hearing were also considered by the Commission while determining the Cross Subsidy Surcharge and Additional Surcharge.
- 2.19 The Commission examined the component wise (T, C, L, D, R) values computed by the Licensees, based on the NTP.
- The value of component T has been computed by the Licensees based on the Tariff proposed, while Commission has determined different tariffs hence leading to revised values of T.
 - Similarly the value of component C computed is based on the Power purchase cost estimated, which in turn depends on the sales projected by the Licensees, whereas the Commission has modified and approved sales quantum and also revised the source wise cost of power purchase.
 - The value of component D computed by the Licensees appears erroneous and has been arrived at by the Commission at its estimation.
- 2.20 The Commission has computed the values of each component based on its approved numbers determined in its RST order for FY 2016-17 and as per the formula prescribed in the NTP. The method of computing each component has been detailed below.
- 2.21 The CSS formula specified in the NTP is as follows:

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

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.

- 2.22 The Commission has determined to compute Discom wise, category wise, voltage wise T, i.e. per unit tariff (Rs./unit) realised for FY 2016-17 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.
- 2.23 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 C computed for each Discom has been presented in Annexure 3.
- 2.24 The Commission has computed D, i.e. per unit aggregate of transmission, distribution and wheeling charges by taking Transmission charges approved for FY 2016-17 in the Transmission Tariff Order for the third control period (FY2014-15 to FY 2018-19) dated 9th May, 2014 by the erstwhile APERC and Distribution charges approved voltage wise for FY 2016-17 in the Distribution Tariff Order for the third control period (FY2014-15 to FY 2018-19) dated 27th March, 2015 approved by this Commission.
- 2.25 The Commission has computed L, i.e. aggregate of transmission, distribution and commercial losses voltage wise for FY 2016-17, based on the percentage loss in the transmission system considered in RST order for FY2016-17 and voltage wise approved distribution loss trajectory (including commercial losses) for the relevant year in the Distribution Tariff order for the third control period.
- 2.26 The Commission has not approved any regulatory assets in its RST order for FY 2016-17, hence R i.e. the per unit cost of carrying regulatory assets, does not arise.
- 2.27 Based on the above, the Commission has computed the Discom wise, voltage wise Cross Subsidy Surcharge for different categories of consumers applicable to consumers availing open access at different voltages in the area of supply of the respective Licensees, as below.

Sl. No	Category	CSS as per NTP dated 28th Jan 2016	
		TSSPDCL	TSNPDCL
	HIGH TENSION		
	HT Category at 11 kV		
1	HT-I Industry	1.65	1.66
2	HT-II – Others	2.03	2.03
3	HT-III Airports, Railways and Bus stations	1.88	1.78
4	HT -IV Lift Irrigation and agriculture & CPWS	0.36	0.21
6	HT-VI Townships and Residential Colonies	1.31	1.28

Determination of Cross subsidy surcharge for FY 2016-17

Sl. No	Category	CSS as per NTP dated 28th Jan 2016	
		TSSPDCL	TSNPDCL
7	HT-Temporary Supply	2.76	-
	HT Category at 33 kV		
8	HT-I Industry	1.48	1.44
9	HT-II – Others	1.81	1.78
10	HT -IV Lift Irrigation and agriculture & CPWS	1.26	0.86
11	HT-VI Townships and Residential Colonies	1.32	1.35
12	HT -Temporary Supply	3.34	-
	HT Category at 132 kV and above		
13	HT-I Industry	1.35	1.34
14	HT-II - Others	1.77	3.55
15	HT III-Airports, Railways and Bus Stations	1.51	-
16	HT -IV Lift Irrigation and agriculture & CPWS	1.24	1.28
17	HT-V Railway Traction	1.41	1.42
18	HT-VI Townships and Residential Colonies	-	1.28

2.28 The calculations in arriving at the above rates of Cross Subsidy Surcharge are shown in Annexures 1 to 4.

CHAPTER-4: DETERMINATION OF ADDITIONAL SURCHARGE FY 2016-17

- 2.29 The Licensees have filed before the Commission to determine the Additional Surcharge 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 subsection 4 of section 42 of the Electricity Act, 2003 including the fixed cost commitments of power purchase agreements.
- 2.30 Further, Licensees have also highlighted the clause from National Tariff Policy (NTP) Notified by Ministry of Power on 28th January, 2016 which has the following provision on the Additional Surcharge:
- Clause 8.5.4: “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”.*
- 2.31 However the Licensees have not provided any information on the cost to be incurred on account of fixed cost of stranded generation capacity. Further the Licensees have not shown any other costs which will become stranded if any existing eligible consumer avails open access. In the absence of such information the Commission is not inclined to determine additional surcharge to be made applicable for open access consumers for FY 2016-17. However the Licensees are at liberty to file at any time during FY 2016-17, to determine the additional surcharge to be levied to open access consumers, duly establishing the costs that is going to be stranded, to be examined by the Commission and to pass necessary order.
- 2.32 The Cross Subsidy Surcharge rates determined in this Order are effective from 1st July, 2016 to 31st March, 2017.
- 2.33 This order is signed on this 23rd June, 2016

Sd/-
(L MANOHAR REDDY)
MEMBER

Sd/-
(H SRINIVASULU)
MEMBER

Sd/-
(ISMAIL ALI KHAN)
CHAIRMAN

ANNEXURE-1

Table 1: Cross Subsidy Surcharge for FY 2016-17 as approved for TSNPDCL

Category	Average realization	Weighted average PP cost	Aggregate AT&C loss %	Aggregate T & D charge	Cost of carrying Regulatory asset	CSS	20% limit of AR	Approved CSS
HIGH TENSION								
HT Category at 11 kV								
HT-I Industry	8.29	3.85	11.17%	0.87	-	3.09	1.66	1.66
HT-II - Others	10.14	3.85	11.17%	0.87	-	4.94	2.03	2.03
HT-III Airports, Railways and Bus station	8.89	3.85	11.17%	0.87	-	3.69	1.78	1.78
HT -IV Lift Irrigation and agriculture & CPWS	5.41	3.85	11.17%	0.87	-	0.21	1.08	0.21
HT-VI Townships and Residential Colonies	6.48	3.85	11.17%	0.87	-	1.28	1.30	1.28
HT – RESCOs	0.99	3.85	11.17%	0.87	-	-	0.20	-
HT Category at 33 kV								
HT-I Industry	7.18	3.85	6.99%	0.31	-	2.73	1.44	1.44
HT-II - Others	8.90	3.85	6.99%	0.31	-	4.46	1.78	1.78
HT –IV Lift Irrigation and agriculture & CPWS	5.31	3.85	6.99%	0.31	-	0.86	1.06	0.86
HT-VI Townships and Residential Colonies	6.74	3.85	6.99%	0.31	-	2.29	1.35	1.35
HT Category at 132 kV and above								
HT-I Industry	6.72	3.85	3.12%	0.14	-	2.60	1.34	1.34
HT-II - Others	17.76	3.85	3.12%	0.14	-	13.64	3.55	3.55
HT -IV Lift Irrigation and agriculture & CPWS	6.40	3.85	3.12%	0.14	-	2.28	1.28	1.28
HT-V Railway Traction	7.08	3.85	3.12%	0.14	-	2.96	1.42	1.42
HT-VI Townships and Residential Colonies	6.41	3.85	3.12%	0.14	-	2.30	1.28	1.28

Table 2: Cross Subsidy Surcharge for FY 2016-17 as approved for TSSPDCL

Category	Average realization	Weighted average PP cost	Aggregate AT&C loss %	Aggregate T & D charge	Cost of carrying Regulatory asset	CSS	20% limit of AR	Approved CSS
HIGH TENSION								
HT Category at 11 kV								
HT-I Industry	8.27	4.00	11.17%	0.65	-	3.12	1.65	1.65
HT-II – Others	10.13	4.00	11.17%	0.65	-	4.98	2.03	2.03

Determination of Cross subsidy surcharge for FY 2016-17

Category	Average realization	Weighted average PP cost	Aggregate AT&C loss %	Aggregate T & D charge	Cost of carrying Regulatory asset	CSS	20% limit of AR	Approved CSS
HT-III Airports, Railways and Bus station	9.41	4.00	11.17%	0.65	-	4.26	1.88	1.88
HT -IV Lift Irrigation and agriculture & CPWS	5.50	4.00	11.17%	0.65	-	0.36	1.10	0.36
HT-VI Townships and Residential Colonies	6.56	4.00	11.17%	0.65	-	1.42	1.31	1.31
HT -Temporary Supply	13.80	4.00	11.17%	0.65	-	8.66	2.76	2.76
HT Category at 33 kV								
HT-I Industry	7.41	4.00	6.99%	0.31	-	2.80	1.48	1.48
HT-II - Others	9.03	4.00	6.99%	0.31	-	4.42	1.81	1.81
HT -IV Lift Irrigation and agriculture & CPWS	6.31	4.00	6.99%	0.31	-	1.70	1.26	1.26
HT-VI Townships and Residential Colonies	6.62	4.00	6.99%	0.31	-	2.01	1.32	1.32
HT -Temporary Supply	16.71	4.00	6.99%	0.31	-	12.10	3.34	3.34
HT Category at 132 kV and above								
HT-I Industry	6.76	4.00	3.12%	0.14	-	2.50	1.35	1.35
HT-II - Others	8.83	4.00	3.12%	0.14	-	4.57	1.77	1.77
HT-III Airports, Railways and Bus station	7.54	4.00	3.12%	0.14	-	3.27	1.51	1.51
HT -IV Lift Irrigation and agriculture & CPWS	6.19	4.00	3.12%	0.14	-	1.92	1.24	1.24
HT-V Railway Traction	7.06	4.00	3.12%	0.14	-	2.79	1.41	1.41

ANNEXURE-2

Table 3: Average Revenue Realization for TSSPDCL and TSNPDCL for FY 2016-17

Sl. No	Category	TSSPDCL			TSSPDCL		
		Sales (MU)	Revenue (INR Crores)	Avg Realisation (INR/kWh)	Sales (MU)	Revenue (INR Crores)	Avg Realisation (INR/kWh)
	HIGH TENSION						
	HT Category at 11 kV						
1	HT-I Industry	3,129	2,587	8.27	558	462	8.29
2	HT-II – Others	1,501	1,520	10.13	102	104	10.14
3	HT-III Airports, Railways and Bus stations	6	6	9.41	8	7	8.89
4	HT -IV Lift Irrigation and agriculture & CPWS	86	47	5.50	66	35	5.41
6	HT-VI Townships and Residential Colonies	94	61	6.56	16	10	6.48
7	HT-Temporary Supply	39	54	13.80	-	-	-
8	HT – RESCOs	-	-	-	685	68	0.99
	HT Category at 33 kV						
8	HT-I Industry	4,505	3,340	7.41	203	146	7.18
9	HT-II - Others	606	548	9.03	20	18	8.90
10	HT -IV Lift Irrigation and agriculture & CPWS	69	43	6.31	117	62	5.31
11	HT-VI Townships and Residential Colonies	44	29	6.62	44	30	6.74
12	HT -Temporary Supply	11	19	16.71	-	-	-
	HT Category at 132 kV and above						
13	HT-I Industry Segregated	2,498	1,689	6.76	665	447	6.72
14	HT-II - Others	61	54	8.83	2	3	17.76
15	HT III-Airports, Railways and Bus Stations	67	51	7.54	-	-	-
16	HT -IV Lift Irrigation and agriculture & CPWS	774	479	6.19	364	233	6.40
17	HT-V Railway Traction	246	174	7.06	451	319	7.08
18	HT-VI Townships and Residential Colonies	-	-	-	90	58	6.41

ANNEXURE-3

Table 4: Calculation of weighted average cost of power purchase for FY 2016-17

Calculation weighted average cost of power purchase			
Sl. No	Sources	SPDCL	NPDCCL
		INR Crores	INR Crores
1	CGS	3409	1423
2	GENCO Thermal	5376	2244
3	GENCO Hydel	742	309
4	APGPCL	17	7
5	IPPs	679	284
6	NCE	960	367
7	Other LTPP & MTPP	3209	1340
8	Short term sources	125	0
9	Cost of meeting RPO	0	0
10	Interest on Pension Bonds	228	95
11	D to D Purchases	468	0
12	D to D Sales	0	-468
13	Revenue from sale of excess energy	155	65
	Total	15058	5536
	Total Power purchased (MU)	37685	14379
	Weighted average cost per unit	4.00	3.85

ANNEXURE-4

Table 5: Calculation of voltage wise distribution charge for FY 2016-17

Voltage	SPDCL		NPDCL	
	Charge (Rs./kVA/month)	Rs./ kWh	Charge (Rs./kVA/month)	Rs. /kWh
LT	406.84	1.21	691.33	1.92
11kV	191.53	0.50	321.20	0.72
33kV	16.63	0.17	13.20	0.17
>=132kV	82.22	0.14	82.22	0.14