Telangana State Electricity Regulatory Commission

5th Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul,

Hyderabad 500004

Additional Surcharge Order for FY 2017-18

Date: December 13, 2017
I. A. No. 22 of 2017 in O. P. No.22 of 2016

Between:
1. M/s. Southern Power Distribution Company of Telangana Limited …… Applicant

And

-Nil-

…… Respondent

Between:
I. A. No. 23 of 2017 in O. P. No.22 of 2016

And

-Nil-

…… Respondent
Chapter 1 Introduction

1.1. Background

1.1.1. Telangana State Electricity Regulatory Commission (herein after referred to as TSERC or Commission) was constituted by the Government of Telangana (GoTS) in terms of the provisions of Schedule XII (C) (3) of the A.P. Reorganisation Act of 2014, read with Section 82 of the Electricity Act, 2003 vide G.O.Ms.No.3, (Energy) (Budget) Department Dt:26.07.2014

1.1.2. This Commission having been established u/s 82(1) of the Electricity Act, 2003 (herein 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.

1.1.3. The Commission issued its first Regulation, viz., Regulation No. 1 of 2014, on 10.12.2014 (Adoption of Previously Subsisting Regulations, Decisions, Directions or Orders, Licenses and Practice of Directions). Clause 2 of this Regulation specifies as follows:

“All regulations, decisions, directions or orders, all the licences 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in electricity in the State of Telangana including the Commission and shall continue to have effect until duly altered, repealed or amended, any of Regulation by the Commission with effect from the date of notification as per Notification issued by the Government of Telangana in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.”

1.1.4. In accordance with the above Regulations, all the Regulations framed by the erstwhile Andhra Pradesh Electricity Regulatory Commission (APERC) will continue to apply for the State of Telangana, till further modification. The two (2) Distribution Companies (referred to as the ‘Distribution Licensees’ or ‘DISCOMS’ or ‘Licensees’) namely, the Northern Power Distribution Company of Telangana Limited (referred to as “TSNPDCL” or “NPDCL”) and the Southern Power Distribution Company of Telangana Limited (referred to as “TSSPDCL” or “SPDCL”) filed the applications for levy of Additional Surcharge for FY 2017-18 on June 15, 2017.
1.1.5. In accordance with the provisions of Section 42 (4) of the Act, it is incumbent upon the Distribution Licensees to make an application to the Commission to determine the tariff in such manner and terms as may be specified by the Regulations framed by the Commission.

1.2. Admission of application and regulatory process

1.2.1. The applicant stated that the Licensees have filed the Aggregate Revenue Requirement (ARR) and tariff proposals for retail supply business for FY 2017 – 18 on 30.11.2016 and 13.04.2017 respectively and the same have been taken on record by the Commission. The Licensees in their ARR filings prayed the Commission to allow additional time for filing Additional Surcharge proposals separately.

1.2.2. The applications for approval of Additional Surcharge for FY 2017-18 submitted by the Distribution Licensees were scrutinised and found to be generally in order as required under the TSERC (Conduct of Business) Regulations, 2015 (Regulation No. 2 of 2015). The Commission admitted the application and the same were taken on record by assigning the following Interlocutory Application (I.A.) numbers:

- TSSPDCL : I.A. No. 22 of 2017 in O. P. No. 22 of 2016
- TSNPDCL : I. A. No. 23 of 2017 in O. P. No. 23 of 2016

1.2.3. Upon scrutiny of the applications submitted by the Licensees, the Commission identified certain data gaps and directed the Licensees to furnish additional information. As directed by the Commission, the Licensees furnished additional information and placed the same on their respective websites.

1.3. Overview of stakeholders’ consultation process

1.3.1. The Licensees, as directed by the Commission, published a public notice in Eenadu, Andhra Jyothi and Vaartha (Telugu) newspapers on August 9, 2017 and The Hans India (English) newspaper on August 12, 2017. The notice was to inform the general public that the Licensees have filed an application for determination of additional surcharge for the FY 2017-18 before the Commission.

1.3.2. The applications made by the Licensees along with supporting material were made available to the public at large at the corporate offices of the Licensees and also through the offices of the Superintending Engineer, operation circles. The applications and supporting material were also made available on the websites of the Commission and the Licensees.
1.3.3. It was also notified in the public notice (Annexure 2) that, objections / suggestions on the Licensees application may be filed with the Commission by 06.09.2017 with a copy marked to the Licensees for their response.

1.3.4. In response to the public notice, a number of objections / suggestions were received by the Commission both in writing as well as oral during the public hearing.

1.3.5. The Licensees were also directed to reply to all the written objections received 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.

1.3.6. The Commission organised a Public Hearing at Commissions’ court hall 5th Floor, Singareni Bhavan, Lakdi ka Pul, Hyderabad on October 11, 2017. During the public hearing, the Licensees made a brief presentation on their filings and then, the Commission heard all the objectors desiring to be heard in person. Apart from the registered Objectors, the persons/ organisations that had turned up at the venue directly were also heard and their objections/suggestion was also considered. Finally, following the directions of the Commission, the Licensees responded to the issues raised by the objectors during the hearing.

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 submissions on the Licensee’s applications. 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 attempted earnestly to respond to them wherever necessary the issues being germane to the determination of additional surcharge.

1.4. Data gaps and Licensee responses

1.4.1. The additional information / clarifications relating back-down and Open Access sales for FY 2016-17 and FY 2017-18 were sought from the Licensees by the Commission

1.4.2. The Commission considered the information submitted by the Licensees in its perusal of the application for levy of additional surcharge for FY 2017-18.

1.5. Structure of the Order

- Chapter 1 provides the background and details of the quasi-judicial regulatory process undertaken by the Commission
- **Chapter 2** summarises the interaction with the stakeholders including issues raised by stakeholders, Licensees’ responses, and the Commission’s views thereon.
- **Chapter 3** details the Applicants’ submissions, Commission’s analysis, scrutiny and conclusion on additional surcharge for FY 2017-18.
- **Chapter 4** details the Commission’s Directives.
Chapter 2 Stakeholder Consultation

The Commission has received several objections/suggestions/comments on the applications for determination of additional surcharge for FY 2017-18. The Commission has obtained replies from the Licensees on the objections/suggestions/comments received from the stakeholders. For the sake of clarity, the objections raised by the stakeholders and responses of the petitioner have been consolidated and summarised issue-wise.

The Commission has considered all the objections/suggestions/comments of the stakeholders submitted in writing and also during the course of public hearing and the Licensee’s responses to the same. In the subsequent Chapters of this Order, the Commission has kept in view the objections/suggestions/comments of the stakeholders and replies of the Licensees in determination of the additional surcharge for FY 2017-18.

2.1. Conclusive demonstration of stranded capacity

Objection
The Additional Surcharge shall become applicable only if obligation of Licensee in terms of power purchase commitments has been and continues to be stranded. There needs to be conclusive evidence that such generating capacities have been and will continue to be stranded solely due to such open access consumers

Licensee response

- The Licensees have an obligation to provide uninterrupted reliable power supply to all the consumers in its area of supply. As a part of its universal obligation, the Licensees to meet the increasing demand have tied up with power generators to remove demand-supply gaps. The Licensees have to bear the fixed cost even in case of no off take of energy through such source.

- The tariff design is not reflecting the actual break-up of fixed and variable components of cost structure which is leading to under-recovery of fixed cost commitment from the demand charges payable by the Consumers. If a consumer opts for open access during a financial year, the tied up resources with power purchase generators will get stranded to that extent as the power generation has to be forcibly backed down to counteract unanticipated fall in demand.

Commissions’ view
The Commission has examined this issue in detail and notes that the entire liability due to stranded capacity cannot be loaded in the retail tariff of general consumers who all are not beneficiaries of Open Access. Also at the same time it cannot be entirely levied as it may adversely impact the Open Access consumers. The Commissions’ approach has been elaborated
in Chapter 3 of this Order.

2.2. No surplus energy

*Objection*
- As per CEA Load Generation balance report there was no surplus or deficit for FY 2016-17 both for energy requirement and peak demand. Hence there are no stranded assets and the claim that generation capacity is being backed down/stranded due to Open Access is flawed.
- Further, Petitioners have consistently been procuring power in short term market through tendering process which inter-alia depicts that the Petitioners are aware of power shortage well in advance. In these circumstances, the question of there being stranded cost and the need to determine Additional Surcharge does not arise

*Licensee response*
As per CEA Load Generation Balance Report there was surplus of 12 MU for FY 2016-17 in energy requirement and for FY 2017-18 the projected surplus is 3,540 MU for FY 2017-18. The peak demand reached on 7th August 2017, is 9,397 MW and Licensees were able to supply this demand comfortably due to adequate contracted capacity.

*Commissions’ view*
The issue has been considered while determining the quantum of additional surcharge.

2.3. Additional charges are not to be levied as demand charges are paid based on contracted capacity

*Objection*
The demand charges being paid by the open access customers are being used to off-set the fixed charges towards power purchase. There is no scope for any stranded costs in the full cost tariff regime. Thus there is no need for additional surcharge.

*Licensee response*
As per ARR filings 2017-18, the total fixed costs to be recovered are Rs.1,515 per kVA/month while recovery in the form of demand charges are only Rs.390 per/kVA/month. Thus only 25% of the Licensees’ fixed cost commitment is being recovered. The difference is being levied as additional surcharge and reflected in the petition.

*Commissions’ view*
The payment of contract demand charges is for a different purpose, namely, for the option of the consumer to draw power at any time without prior intimation to the Licensees. Therefore it cannot be said that payment of contract demand charges is compensation for fixed charges. The matter is dealt with in detail in Chapter 3 of this order.
2.4. Competition vs. levy of additional surcharge

**Objection**

Levy of Additional Surcharge will curtail competition and would thus defeat the objective of competition as envisaged under the Electricity Act, 2003. Also all attempts directly or indirectly which discourage open access are against the basic spirit of Electricity Act, 2003.

**Licensee response**

The introduction of open access is backed with recovery of CSS and additional surcharge under Section 42 of the Act which is to be implemented in a holistic manner to have a win-win situation to both consumers and Licensees who have universal obligation to provide power supply to all.

**Commissions’ view**

The Commission has considered this issue so as to strike a balance amongst the stakeholders.

2.5. Accuracy of computations by Licensees

**Objection**

- The calculation of Licensees is based on the assumption that whatever power has been surrendered by Licensees is only on account of drawl of open access power which is misleading.
- Licensee has claimed fixed costs incorrectly as Rs.13,898 crores instead of Rs.11,055 crores and has included variable costs of renewable energy.
- “Fixed cost to be recovered” is to be based on connected load of Licensees and not on average peak demand.
- Only actual units which were backed down should be the basis of computation of fixed charges.
- There are no findings or discussions in the petition on reasons for surrender / back down of power.
- The stranded capacity due to only OA sales are to be considered based on data for such time slots. Currently Licensees are seeking to recover fixed costs of surplus power from OA consumers.
- Power factor considered for conversion of kW to kVA is unclear in the petition.

**Licensee response**

- Fixed costs in the petition includes NCE costs of Rs.2,843 Crores and thereby total fixed costs is Rs.13,898 (11,055+2,843) Crores. The approved fixed cost by Honourable Commission in the Retail Supply Tariff Order for FY 2017-18 is Rs.12,643 Crores (10,212.53 Crores+ 2,430.42 Crores).
Demand charges are based on recorded demand and not just on contracted demand hence average peak demand has been considered.

Renewable generating stations are must-run stations so their generation remains fixed and is not affected by change in requirement therefore variable cost has been included.

4,910 MU was backed down in FY 2016-17 which was mainly due to Open Access sales of 2,134 MU.

Unity power factor has been considered for converting kW to kVA.

Commissions’ view
Noted and the Commissions’ approach has been elaborated in Chapter 3 of this Order.

2.6. Inadequate data not submitted by Licensee

Objection

- The Licensees have to provide hourly data of stranded capacity to be conclusively demonstrate stranded capacity
- The Licensees’ have not shown the roadmap on the trend of load and sales which shall give the roadmap on how to 'progressively reduce' the charges and surcharges as per Sec 42, Clause 2 of Electricity Act, 2003

Licensee response

- Details of backing down have been submitted to the Honourable Commission as part of Additional Information.
- The Licensees’ shall file resource plan for control period commencing 01.04.2019 in accordance with Regulation 4 of 2005.

Commissions’ view
The Commissions’ workings are on the basis of application, additional information and proceedings of the public hearing.

2.7. Additional surcharge on renewable energy

Objection

The progressive fall in capital cost of solar power projects has led to decrease in power tariff and has toughened the competition. Any levy of additional surcharge cannot be forced on the open access consumer as the same has not been considered while entering into PPA. The aforesaid will make the projects financially unviable. Thus, levy of Additional Surcharge will be deterrent to the development of renewable energy in the state.
Licensee response

In the current scenario where the state is moving from power deficit to power surplus and the consumers opting for open access have significantly increased, the Licensee are straddled with fixed cost to the generators due to back down on account of open access by the consumers. The Licensees proposed additional surcharge from the open access consumers is to recover such financial loss due to under recovery of fixed costs.

Commissions’ view

The request is noted and Commission’s view on this matter is dealt with in Chapter 3 of this order.

2.8. Additional Surcharge should be on the charges of wheeling

Objection

Section 42 (4) of the Electricity Act, 2003 specifies that Additional Surcharge should be on the charges of wheeling whereas the DISCOMS have proposed levying Additional Surcharge on total fixed cost which is contrary to the Act and under no circumstances should be permissible

Licensee response

The additional surcharge is a charge on wheeling charge which is to meet the fixed cost arising out of the obligation of supply. Hence any fixed cost in terms of power purchase commitments which are stranded forms part of additional surcharge.

Commissions’ view

While first provision to Section 42 (2) speaks of payment of a surcharge in addition to the charges for wheeling as determined by the State Commission, Section 42 (4) talks of paying an additional surcharge on the charges of wheeling, as may be specified by the State Commission. Therefore, it is very clear under the Act that while ‘Open Access Surcharge’ is in addition to the ‘Wheeling Charges’, the Additional Surcharge is a surcharge on the Charges of wheeling or in other language Additional surcharge will be worked out on the Charges of wheeling and that too if it is established beyond doubt that there was stranding of the PPAs and the quantum of power wheeled was effected thereof. Moreover, the extent to which such stranding of the PPAs was on account of the open access consumers.
2.9. Burden of Licensee’s improper planning should not be levied as additional surcharge

**Objection**

The Licensees have added contracted capacity in excess of its requirement and hence burdening the consumers with stranded capacity and additional fixed costs. Further the basis for projection of energy sales for FY 2017-18 is with the assumption of retention of open access consumers which is not indicated. The Licensees should ensure that their decisions for procurement of power should not lead to availability of unwarranted surplus power.

**Licensee response**

The peak demand in Telangana for FY 2016-17 was 9,191 MW versus 6,849 MW for FY 2015-16. The Licensees were able to meet this increased peak demand of FY 2016-17 only through advance planning and contracting adequate quantities of power. The total contracted capacity of the state for FY 2017-18 would be 14,695 MW.

The Licensees’ have estimated the demand based on past and current trend which is approved by the Honourable Commission. The fixed cost commitment towards power purchase liability is to be borne by the Licensee and is currently under recovered due to consumers moving out to open access.

**Commissions’ view**

The daily load curve indicates considerable difference between off-peak demand and peak-demand requirement, therefore certain quantum of stranded assets are necessary to serve the fluctuating demand. The Commission has considered this aspect while determining the additional surcharge.

2.10. Arrangement of open access is not substitute for development of planned sector

**Objection**

Open access just for asking may not be feasible and desirable for excess Transmission and Distribution (T&D) system has to be created which involves substantial investments. Unless T&D system is strengthened to meet requirements problems of overloading and higher loss will continue. Hence arrangement of open access is no substitute for planned development of power sector to ensure quality supply of adequate power at reasonable prices to consumers.

**Licensee response**

- Open access promotes competition in the sector and the Electricity Act,2003 has allowed the Licensees to collect the cross subsidy surcharge and additional surcharge to recoup any financial losses suffered from open access consumers.
- The Licensees are strengthening its distribution system and plan to provide 24 hours power supply to agriculture consumers in a phased manner.
Commissions’ view
Noted

2.11. Network cost and Transmission charges not to be included in Addl. Surcharge computation

Objection
The fixed cost commitment to maintain a robust distribution network, as well as payment of transmission charges to TS Transco is not to be included to compute additional surcharge to be collected from open access consumers.

Licensee response
To be able to deliver quality power Licensees are to have contracted sufficient power quantum as well as have a robust T&D network in place. Thus any costs due to stranded T&D assets are to be recovered from open access consumers.

Commissions’ view
Noted and the Commissions’ approach has been elaborated in Chapter 3 of this Order.

2.12. Increased overhead costs for industry upon levy of additional surcharge

Objection
Additional surcharge would increase the overhead costs of industries that purchase power through open access thereby impacting their ability to compete in the market. Industries are to be supported so as to effect the industrial growth in the state and thereby the GDP

Licensee response
Open access sales are undermining the recovery of costs of Licensees as they stand to pay fixed costs and penalties to generators. Thus Licensees have proposed for levy of additional surcharge.

Commissions’ view
Noted.
Chapter 3 Submissions, analysis and conclusion

3.1. Licensees Applications

The Licensees have filed an Interlocutory Application (IA) on 15.06.2017 praying for determination of additional surcharge to be levied on open access consumers as per provisions of the Electricity Act, 2003 and National Tariff Policy, 2016 and Andhra Pradesh Electricity Regulation Commission Regulation No. 2 of 2005 for the FY 2017-18.

3.2. Licensees submissions

The following is the submitted by the Licensees

3.2.1. Open access consumers are now purchasing considerable quantum of power under open access while the Licensees have tied up considerable quantum of power considering the overall growth of the state. This situation results into stranded generation capacity and under recovery of fixed cost.

3.2.2. Further, Section 42 (4) of the Act, Section 8.5 of the Tariff Policy, provide for levy of additional surcharge on open access consumption to recover the fixed costs incurred due to obligation of power supply.

3.2.3. Sales information

A total of 2,135 MUs were procured in FY 2016-17 via open access registering a growth rate of more than 100 per cent

<table>
<thead>
<tr>
<th>Sales (in million units)</th>
<th>2015-16</th>
<th>2016-17</th>
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</thead>
<tbody>
<tr>
<td>HT – I (A) (General)</td>
<td>10,132</td>
<td>9,151</td>
</tr>
<tr>
<td>Open Access Withdrawal units</td>
<td>902</td>
<td>2,135</td>
</tr>
</tbody>
</table>

The month wise – sales (in MUs) are furnished in Annexure – 3.

3.2.4. The power procurement is split between TSSPDCL and TSNPDCL in ratio of 70.55 to 29.45. The Telangana State Load Dispatch Centre (TSSLDC) schedules from various plants based on load at the whole state level. Hence proposed surcharge is the same for both the Licensees.
3.2.5. The Licensees submitted the following approach

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td>Rs. Crs</td>
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<tr>
<td>b</td>
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<td>Rs. Crs</td>
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<td>INR per KvA per month</td>
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<td>INR per KvA per day</td>
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<td>i</td>
<td></td>
<td>INR per KvAh</td>
</tr>
</tbody>
</table>

- The above table reflects the fixed cost commitment arising out of the power purchase agreements entered.
- The Licensees have a fixed cost commitment of INR 7,245 Crores arising out of its obligation to maintain a robust distribution network as well as payment of transmission charges to Telangana Transco. The Licensees have not included these costs while arriving at additional surcharge.

3.3. Licensees Prayer

The Licensees’ pray to permit the recovery of additional surcharge of INR 1.95 per kV Ah as highlighted in the table above to safeguard the interest of all other consumers.

3.4. Commissions considerations

3.4.1. The Commission in its considerations relied on the following:
- Section 42 read with Section 43 of the Electricity Act, 2003
- Paragraph 8.5 of National Tariff Policy 2006

3.4.2. The Licensees’ are obligated to meet the demand of its consumers up to the total contracted demand of all consumers. Further the Licensees’ are duty bound to provide connections to
any new applicant within stipulated period. To meet such obligation, the Licensees’ have to source adequate capacity of generation to meet the demand of its consumers at any time through Power Purchase Agreements.

3.4.3. It is also required by the Licensees’ to ensure that the power procurement quantum is in line with peak demand of a particular season whilst considering seasonal load variation.

3.4.4. The Licensees are procuring power on long-term/medium-term basis only with prior approval of the Commission while in case of an emergency they opt for procurement of power under short term open access to fulfil their universal service obligation (USO) through competitive bidding with the approval of the Commission.

3.4.5. In case of power procurement by the Licensees’ on the basis of long-term power purchase agreement, it is required to pay the fixed charges even when power is not scheduled. Back down of power could be due to multiple reasons such as reduction in load during non-peak hours, increased load during peak hours, seasonal variance in demand (rainfall, summer peak), and increase in agricultural load due to delayed rains etc. Thus, it is not possible for Licensees’ to have long-term contracted power, in line with varying requirements at all times. This variation in load profile over the year reflects in terms of significant quantity of power in MW to be served for maintaining system stability and security. In such case, certain quantity of back-down becomes essential leading to stranded assets.

3.4.6. Also with consumers frequently switching their mode of supply between DISCOMs and open access, it is challenging for the DISCOMs to assess the quantum of power that will continue to remain stranded. Further the quantum of stranded power varies throughout.

3.4.7. Several objectors have referred to the provisions of Electricity Act, 2003, and submitted that the Additional Surcharge payable is required to be determined on the charges of wheeling in addition to wheeling charges and cross subsidy surcharge to meet the fixed cost of Licensees’ arising out of its obligation to supply as provided under sub-section 4 of Section 42 of the Act. In this context it is necessary to refer the definition of “Wheeling” in the Electricity Act, 2003, which is as under:

(76) "wheeling" means the operation whereby the distribution system and associated facilities of a transmission licensee or distribution licensee, as the case may be, are used by another person for the conveyance of electricity on payment of charges to be determined under section 62;
Thus, the wheeling charges are charges payable by a consumer towards utilisation of network for conveyance of electricity. Additional surcharge on other hand is towards recovery of stranded fixed cost of Licensees’ arising out of their obligation to supply as provided under Section 42 (4) of the Electricity Act, 2003.

The above provision provides that the Additional Surcharge is in addition to wheeling charges.

The fixed costs incurred by a Licensee’s comprise of the following:

   a. Fixed charges to the generating companies for contracted capacity
   b. Transmission charges to the transmission licensee for conveyance
   c. Cost payable for utilisation of distribution network from the input point to place of consumption of electricity

The wheeling charge calculated under Section 62 of the Electricity Act, 2003 is with regard to the cost payable for utilisation of distribution network and transmission network. Therefore, the Fixed Cost required to be recovered by Licensees’ to meet USO is with respect to fixed cost payable to generating companies for contracted capacity and to transmission licensee for conveyance.

In the Section 42 (4), the word Additional Surcharge on charges of wheeling means that the Additional Surcharge shall be over and above the charges of Wheeling. As such the Licensees are entitled to recover the additional surcharge (in addition to the Wheeling Charge) to meet their fixed cost commitments on capacity that remains stranded due to some of its consumers opting to purchase power from third party sources through open access.

Based on the above observations, the Commission is of the view that Additional Surcharge is required to be based on stranded capacity of the generating stations for which the Licensees’ are required to pay fixed charges and the transmission charges for conveyance from generating station to Licensees’ network and fixed cost of stranded capacity of distribution network assets.

3.4.8. In case, a consumer is meeting his full demand from his own captive generation, there is no stranded power purchase cost. As such, the additional surcharge is not levied on such open access customers who wheel power from their own captive generation plant. However, if the consumer avails open access to purchase power partially from any third party, the additional surcharge shall be levied to the extent of power purchased from third party

3.4.9. The Licensee has to contract sufficient power to meet the aggregate demand 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 recovery of fixed cost should be based on stranded cost due to the consumers who opt to purchase power through open access.**

3.4.10. Further the Commission decided to consider the actual data for FY 2016-17 so as to base on actual parameters for the immediate past and assume that conditions would remain same for corresponding period next year. For this purpose additional data was obtained.

### 3.5. Determination of Additional Surcharge

3.5.1. The stranded cost is the fixed cost arrived at for the stranded capacity attributable only to the Open Access Consumers for which the Licensees’ are to be appropriately compensated for allowing such open access.

3.5.2. In order to derive the stranded capacity due to Open Access Consumers the lower of OA sales (2,159.45 MU) and back down (4,911 MU) has been considered.

3.5.3. The approved fixed charges payable to generators as per RST Order for FY 2016-17 is Rs.8,875 Crores (Table 36 of FY 2016-17 RST Order) and approved available capacity is 6,405.15 MW (Table 27 of 2016-17). Thus, the average fixed charges approved are INR 1.39 Crores per MW capacity. (i.e. 8,875 Crores /6,405.15 MW).

3.5.4. The total back-down of 4,911 MU may not be due to only open access consumers. Hence the Commission has considered stranded capacity of the Licensees limited to the quantum of open access consumption i.e. 2,159.45 MU. Considering the quantity, the stranded generation capacity works out to 246.51 MW (for details see **Annexure-1**).

3.5.5. Accordingly the fixed charges for stranded capacity of 246.51 MW works out as INR 342.65 Crores (i.e. 246.51 MW X INR 1.39 Crores)

The open access consumers have paid demand charges (levied at Rs.390/kVA as per Tariff Order for FY 2016-17) to the Licensee’s’ as per the supply contract. Thereby, such charges are adjusted against the stranded costs after giving effect of the transmission and wheeling charges for supply drawn by Open access consumers from the Licensees.

3.5.6. The Open Access consumers have paid INR 234.54 Crores as demand charges to the Licensees’ and drawn 1,209.78 MU from the Licensees’ as retail consumers.
3.5.7. The actual transmission charges paid by the Licensees’ for FY 2016-17 are INR 2,556.13 Crores and scheduled energy for that period is 51,772.09 MUs (MOD - Annexure F of FY 2016-17 RST Order). Hence, the actual transmission cost works out as INR. 0.49 per kWh.

3.5.8. The distribution wheeling charges as approved by the Commission for the FY 2016-17 is INR 0.71 per kWh. (Distribution charges of INR 3,658.15 Crores as approved in Table 41 of 2016-17 order divided by MOD units of 51,772.09 MU)

3.5.9. The total T & D costs are INR 1.20 per kWh. (INR 0.49/unit + INR 0.71/unit). Thereby, the Open Access consumers have to compensate INR 145.17 Crores (i.e. 1,209.78 MUs x 1.20 INR/Unit) to the Licensees towards the transmission and distribution charges.

3.5.10. The demand charges to be adjusted against the stranded capacity charges are INR 89.37 Crores. (i.e. 234.54-145.17 Crores.)

3.5.11. The net stranded charges are INR 253.28 Crores (i.e. INR 342.64 Crores – INR 89.37 Crores) which are to be considered for determination of additional surcharge.

The OA scheduled energy during FY 2016-17 is 2,159.45 MU and hence the additional surcharge per unit works out as Rs. 1.17 per kWh.

The Commission has closely looked into the calculation provided by the Licensees in order to arrive at what could be the reasonable Additional Surcharge.

The Commission observed that not all stranded capacity is due to open access as open access sales for FY 2016-17 constitutes 44% of back down of FY 2016-17 (See Annexure 1 for details).

There are sufficient reasons for levying Additional Surcharge; otherwise the entire liability due to stranded capacity would be loaded in the retail consumers when not all of them are beneficiaries of Open Access.

Further the Additional Surcharge worked out cannot be wholly allowed to be passed on considering the fact that no Additional Surcharge has been allowed by this Commission thus far and levying of entire Additional Surcharge calculated above may adversely impact the Open Access consumers.

In view of the above to strike a balance between the Commissions determines the Additional Surcharge at Rs. 0.52/unit (i.e. 44% of Rs.1.17).

Hence, the Commission determined the additional surcharge at Rs. 0.52 per kWh.

Detailed computation worksheet attached at Annexure-1.
The Additional Surcharge determined based on data for FY 2016-17 of the applicants is INR. 0.52/kWh and shall be applicable to the consumers who avail power through open access from any source other than their respective DISCOMs and for the open access transaction commencing from January 1, 2018 to 31st March, 2018.

The Additional Surcharge shall be levied on the quantum of electricity scheduled by such consumer. However, this charge is not applicable to captive power producers.

As per para 11(g) 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 cross subsidy surcharge 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 additional surcharge but to encourage the renewable energy projects established under the Solar Policy 2015, additional surcharge will not be levied on such solar power projects 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 additional surcharge to DISCOMs. This applies to wind generators also which are under operation and with PPAs. For new wind based projects additional surcharge shall be levied. This order is applicable from January 1, 2018 to March 31, 2018.
Chapter 4 Directives

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

4.2. 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 Commission by March 31, 2018.

4.3. The Licensees are directed to submit the following:

   4.3.1. Category wise data on open access and captive sales migration, revenue loss and revenue from additional surcharge, CSS and wheeling.

   4.3.2. Information on whether the open access was for renewable energy or conventional power, the duration of the contract, the type of contract (RTC, peak, off-peak), standby power supplied, penalties imposed and the contracted demand the open access consumer has retained with the DISCOM.

   4.3.3. With respect to captive sales migration for FY 2017-18, a report on open access sales to captive consumers, current shareholding pattern for group captive options as well as standby power provided to captive consumers.

4.4. The Licensees shall frame terms and conditions of additional surcharge applicable to consumers and submit the same for Commission’s approval prior to March 31, 2018.

The Order is signed on this day 13th December, 2017.

Sd/-
(H.SRINIVASULU)
MEMBER

Sd/-
(ISMAIL ALI KHAN)
CHAIRMAN
## ANNEXURE – 1
(calculations based on FY 2016-17 data)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>{A}</td>
<td>Long Term Available Capacity (excluding market purchase)</td>
<td>6,405.15</td>
<td>MW</td>
</tr>
<tr>
<td>{B}</td>
<td>Capacity Stranded due to open access (minimum of open access sales and back-down)</td>
<td>246.51</td>
<td>MW</td>
</tr>
<tr>
<td>{C}</td>
<td>Approved total fixed charges (excluding market purchase)</td>
<td>8,875.00</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{D} = {C} /{A}</td>
<td>Fixed Charge / MW available</td>
<td>1.39</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{E} = {D} X {B}</td>
<td>Fixed Charge for Stranded Capacity</td>
<td>342.65</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{F}</td>
<td>Transmission Charge Paid</td>
<td>2,556.13</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{G}</td>
<td>Approved Energy Scheduled</td>
<td>51,772.09</td>
<td>MUs</td>
</tr>
<tr>
<td>{H} = {F}/(G)</td>
<td>Transmission Charges per kWh</td>
<td>0.49</td>
<td>Rs. / kWh</td>
</tr>
<tr>
<td>{I}</td>
<td>Distribution Charges as approved in TO</td>
<td>0.71</td>
<td>Rs. / kWh</td>
</tr>
<tr>
<td>{J} = {H} + {I}</td>
<td>Total T&amp;D charges per kWh</td>
<td>1.20</td>
<td>Rs. / kWh</td>
</tr>
<tr>
<td>{K}</td>
<td>Energy consumed by open access consumer from DISCOM</td>
<td>1,209.78</td>
<td>MUs</td>
</tr>
<tr>
<td>{L} = {K} X {J}</td>
<td>T&amp;D Charges paid by open access Consumer to DISCOM</td>
<td>145.17</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{M}</td>
<td>Demand Charges recovered by DISCOMs from open access</td>
<td>234.54</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{N} = {M} - {L}</td>
<td>Demand charges to be adjusted</td>
<td>89.37</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{O} = {E} - {N}</td>
<td>Net Stranded Charges Recoverable</td>
<td>253.28</td>
<td>INR Crs</td>
</tr>
<tr>
<td>{P}</td>
<td>Open Access Sales</td>
<td>2,159.45</td>
<td>MUs</td>
</tr>
<tr>
<td>{Q} = {O} / {P}</td>
<td>Additional Surcharge derived</td>
<td>1.17</td>
<td>Rs. / kWh</td>
</tr>
<tr>
<td>{Q} X 44%**</td>
<td>Additional Surcharge determined</td>
<td>0.52</td>
<td>Rs./kWh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Back-down (MUs)</th>
<th>OA Sales (MUs)</th>
<th>OA as % of back-down</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,911</td>
<td>2,159.45</td>
<td>44.0%**</td>
</tr>
</tbody>
</table>
ANNEXURE – 2
PUBLIC NOTIFICATION

TELUGU Vaartha August 9, 2017  
TELUGU Andhra Jyothi August 9, 2017

ENGLISH The Hans India August 12, 2017

ANNEXURE – 3
Month-wise Open Access Sales for FY 2016-17

<table>
<thead>
<tr>
<th>Month</th>
<th>Intra State Units</th>
<th>OA Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>April, 2016</td>
<td>11.04</td>
<td>69.64</td>
<td>80.68</td>
</tr>
<tr>
<td>May, 2016</td>
<td>10.43</td>
<td>94.30</td>
<td>104.73</td>
</tr>
<tr>
<td>June, 2016</td>
<td>9.76</td>
<td>187.64</td>
<td>197.40</td>
</tr>
<tr>
<td>July, 2016</td>
<td>8.47</td>
<td>199.69</td>
<td>208.16</td>
</tr>
<tr>
<td>August, 2016</td>
<td>9.67</td>
<td>234.30</td>
<td>243.97</td>
</tr>
<tr>
<td>September, 2016</td>
<td>8.82</td>
<td>202.38</td>
<td>211.20</td>
</tr>
<tr>
<td>October, 2016</td>
<td>9.43</td>
<td>195.95</td>
<td>205.38</td>
</tr>
<tr>
<td>November, 2016</td>
<td>11.60</td>
<td>152.93</td>
<td>164.53</td>
</tr>
<tr>
<td>December, 2016</td>
<td>12.13</td>
<td>154.19</td>
<td>166.32</td>
</tr>
<tr>
<td>January, 2017</td>
<td>15.54</td>
<td>181.14</td>
<td>196.68</td>
</tr>
<tr>
<td>February, 2017</td>
<td>15.46</td>
<td>212.26</td>
<td>227.72</td>
</tr>
<tr>
<td>March, 2017</td>
<td>13.63</td>
<td>139.05</td>
<td>152.68</td>
</tr>
<tr>
<td>Total</td>
<td>135.98</td>
<td>2,023.47</td>
<td>2,159.45</td>
</tr>
</tbody>
</table>
## Annexure-4

<table>
<thead>
<tr>
<th>SL No</th>
<th>Name &amp; Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Suguna Metals Ltd. 1-8-673, Azamabad, Hyderabad- 500020</td>
</tr>
<tr>
<td>2</td>
<td>Salasar Iron and Steel Pvt. Ltd. Flat No.101, 1st Floor, Satya, Sarovar Complex, High Court Road Hyderabad -50002</td>
</tr>
<tr>
<td>3</td>
<td>Sri Navdurga Billets (Private) Ltd. 21-1-820, Patel Market Hyderabad 50002</td>
</tr>
<tr>
<td>4</td>
<td>M/s Mylan Laboratories Limited, Reg. Office Flat No.564/A/22, Road No.92 Jubilee Hills Hyderabad -34</td>
</tr>
<tr>
<td>5</td>
<td>M/s Astrix Laboratories Limited, Gaddapotharam Village Kazipally Industrial area, Medak District Telangana.</td>
</tr>
<tr>
<td>6</td>
<td>M/s, Telangana Solar Open Access Developers Association, Madhuranagar, Yousufguda Hyderabad -500038</td>
</tr>
<tr>
<td>7</td>
<td>M/s. Arhyama Solar Power Pvt. Ltd. Margi Building, Yousufguda Main road, Madhuranagar, Hyderabad - 500038</td>
</tr>
<tr>
<td>8</td>
<td>Peritus Corporation Private Ltd., 301, Cyber Heights, Plot 13 Road No.2 Banjara Hills, Hyderabad-34</td>
</tr>
<tr>
<td>9</td>
<td>M/s. The Federation of Telangana &amp; Andhra Pradesh Chambers of Commerce and Industry (FTAPCCI)</td>
</tr>
<tr>
<td>10</td>
<td>M/s. Sarvotham Care, I-20-248, Umajay Complex Rasoolpura Secunderabad-03</td>
</tr>
<tr>
<td>11</td>
<td>M Venugopala Rao - Senior Journalist &amp; Convener, Centre for Power Studies, Ameerpet, Hyderabad-500 016</td>
</tr>
<tr>
<td>12</td>
<td>M/s. Fusion Solar Farms Pvt. Ltd. Flat No. 606 Jubilee Hills Road No.33 Hyderabad-500033</td>
</tr>
<tr>
<td>13</td>
<td>M/s. Bhagyanagar India Limited, 5th Floor Surya tower S.P. Road Secunderabad-500 003</td>
</tr>
<tr>
<td>14</td>
<td>M/s.SMS Lifesciences India Ltd , Jubilee hills, Hyderabad-96</td>
</tr>
<tr>
<td>15</td>
<td>M/s. Surana Solar Systems Pvt. Ltd. 5th Floor Surya Towers S.P. Road Secunderabad-500 003</td>
</tr>
<tr>
<td>16</td>
<td>S. Surya Prakasa Rao - Former Director (Comml.), APCPDCL &amp; Former Secy., erstwhile APERC, Red hills, Hyderabad -500004</td>
</tr>
<tr>
<td>17</td>
<td>Indian Energy Exchange, 4th Floor, TLOT No.7 TDI Center Dist center Jasola New Delhi 110025</td>
</tr>
<tr>
<td>18</td>
<td>InWEA</td>
</tr>
<tr>
<td>19</td>
<td>Open Access User Association (OAUA), 2nd Floor, D21 Corporate Park Sector-21 Dwarka, New Delhi-110075</td>
</tr>
<tr>
<td>20</td>
<td>Tropical Flavours Pvt. Ltd. Kadaiyurppu Kolenchery, Cochin - 682311</td>
</tr>
<tr>
<td>21</td>
<td>Value Labs LLP, Plot 41 Hightech City Phase II Madhapur Hyderabad-500081</td>
</tr>
<tr>
<td>22</td>
<td>P Madhav Rao - Yantra Green Power</td>
</tr>
<tr>
<td>25</td>
<td>Aurobindo Pharma Limited, Hitech City, Kondapur, Hyderabad – 500 084</td>
</tr>
</tbody>
</table>