

## **TELANGANA STATE ELECTRICITY REGULATORY COMMISSION** 5<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Lakdi-ka-pul, Hyderabad 500004

## O. P. No. 23 of 2020

### Dated 18.09.2020

Present

Sri T. Sriranga Rao, Chairman Sri M. D. Manohar Raju, Member (Technical) Sri Bandaru Krishnaiah, Member (Finance)

In the matter of mechanism for determination of stranded capacity and framing the terms & conditions for levy of Additional Surcharge on open access users to meet the fixed cost of the distribution licensee arising out of its obligation of supply

### ORDER (Suo-Moto)

1. Pursuant to the Commission's directions in its Order dated 27.03.2018 in O. P. Nos. 21 & 22 of 2017, the Distribution Licensees namely Southern Power Distribution Company of Telangana Limited (TSSPDCL) and Northern Power Distribution Company of Telangana Limited (TSNPDCL) [together referred as "DISCOMs" or "Licensees"] submitted their proposal on the mechanism for determination of stranded capacity and framing the terms & conditions for levy of Addition surcharge (AS) on Open Access (OA) users to meet the fixed cost of the distribution licensee arising out of its obligation to supply.

2. The Commission has initiated *Suo-Moto* proceedings for approval of the mechanism for determination of stranded capacity and framing the terms & conditions for levy of AS on OA users to meet the fixed cost of the distribution licensee arising out of its obligation to supply, and accordingly issued the Public Notice dated 25.01.2020 inviting the written comments, objections and suggestions from the stakeholders on the proposal of the DISCOMs on or before 15.02.2020 which was further extended to 29.02.2020. The Commission has received written comments,

objections and suggestions from six (6) stakeholders within the stipulated date, list enclosed in Annexure-1. The Commission has considered all the comments, objections and suggestions received from the stakeholders.

### **Statutory Provisions**

3. The following are the statutory provisions with regard to levy of Additional Surcharge on open access users.

i) Section 42 (4) of the Act specifies that –

"Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall 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 his obligation to supply."

With regard to Additional Surcharge para 5.8.3 of the National Electricity Policy (NEP) dated 12.02.2005 notified under Section 3 of the Act, states as under:

"... An additional surcharge may also be levied under sub-section (4) of Section 42 for meeting the fixed cost of the distribution licensee arising out of his obligation to supply in cases where consumers are allowed open access. The amount of surcharge and additional surcharge levied from consumers who are permitted open access should not become so onerous that it eliminates competition that is intended to be fostered in generation and supply of power directly to consumers through the provision of Open Access under Section 42(2) of the Act. ..."

iii) Clause 17.1(iv) of the Regulation No.2 of 2005 stipulates as under:

"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."

iv) Para 8.5.4 of the Tariff Policy, 2016 stipulates 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."

### Commission's Previous Orders on Additional Surcharge

- 4. The Commission, in its Orders
  - Dated 13.12.2017, in I.A.Nos.22&23 of 2017 in O.P.Nos.22&23 of 2016 respectively decided the applicability of AS to OA consumers, methodology for computation of AS and rate of AS applicable for the period from 01.01.2018 to 31.03.2018.
  - ii) Subsequently, in the Order dated 27.03.2018 in O.P.Nos.21&22 of 2017 adopted the same methodology and determined AS applicable for the period from 01.04.2018 to 31.03.2019. Further, the Licensees were directed to propose a mechanism to determine quantum of stranded power purchase commitment in each time block and the charges for same.

5. The DISCOMs proposals, stakeholders' comments, objections and suggestions and the Commission's view thereon, issue-wise have been summarised as below.

# **ISSUE-I: Mechanism for Demonstration of Stranded Capacity**

## **DISCOMs** proposal

6. The DISCOMs proposed for determination of Additional Surcharge for twice a year i.e., for 1<sup>st</sup> half of the financial year i.e., for the period from April to September along with the ARR for Retail Supply Tariff filings and for 2<sup>nd</sup> half of the financial year i.e., for the period from October to March within 2 months from the completion of the financial year. The DISCOMs stated that they have contracted capacity in order to meet the projected demand requirements of all the consumers including demand of the open access consumers contracted with DISCOMs. To conclusively demonstrate the stranding of assets, the DISCOMs propose 15-minute time-block analysis duly considering the actual data from the TSSLDC. The approach for computing the average capacity of stranded capacity due to open access is given below.

 The 15-minute time-block data of Available Capacity and Scheduled Capacity of all generating stations, and the scheduled capacity of OA consumers of six months period is to be taken.

- In case of Hydel Generating stations the scheduled capacity is to be treated as available capacity in that time block.
- The lower of the surplus capacity (i.e. available capacity less scheduled capacity) and capacity scheduled by OA consumers is to be considered as stranded capacity for the 15-minute time block.
- Accordingly, the average stranded capacity for six (6) months period due to open access has to be arrived."

## Stakeholders' submission

7. Some of the stakeholders have concurred with the DISCOMs proposal that stranded capacity has to be determined for intervals of six (6) months period.

8. Some of the stakeholders submitted that the proposal is not justifiable as narrated below:

- a) The quantum of stranded capacity and corresponding costs are to be correlated on a 15-minute time block basis giving due consideration to the factors for determination of AS under Section 42(4) of the Act.
- b) The concept of AS applies in a situation wherein the Distribution Licensee has entered into long-term Power Purchase Agreements (PPAs) and is under obligation to pay fixed charges, but a part of such contracted capacity is stranded on account of OA consumers procuring from third party sources. The following points need consideration for determination of stranded capacity.
  - Stranded capacity has to be the contracted capacity under the long-term PPAs which is in excess of demand in the State.
  - Stranded capacity has to be considered only on the drawl by the OA consumers and not backdown for any other reasons. The backing down on account of the generation from must run renewable sources is not attributable to the OA consumers and cannot be considered in determination of AS.
  - The fixed cost to be considered has to be out of such stranded capacity on account of OA consumers, which otherwise shall be passed on retail consumers.
  - There has to be continuous stranding of capacity for the period for which AS has to be determined e.g., six months and not individual time blocks.

- The un-requisitioned capacity arising out of the DISCOMs inability to supply electricity to its consumers and imposition of load shedding or load restrictions is not attributable to OA consumers.
- The un-requisitioned capacity arising out of DISCOMs power procurement under short-term is not attributable to OA consumers.
- The PPAs for procurement from renewable sources are being entered into for fulfilling the Renewable Power Purchase Obligation (RPPO), despite being power surplus.
- The power that is continuously stranded because of OA consumers has to be considered for determination of AS.
- c) The rationale for levying AS is to compensate DISCOMs for the fixed cost of the stranded capacity owing to their consumers opting for OA. Therefore, the criteria to be fulfilled for levy of AS is that the DISCOMs are in power surplus situation and had to incur fixed cost of the stranded capacity owing to OA consumers. The existence of any of the following circumstances would naturally disentitle the DISCOMs from claiming any stranded capacity.
  - i. Any load shedding carried out or load restrictions imposed on consumers in the State.
  - ii. Execution of new long-term PPAs by the DISCOMs if a part of current contracted capacity is already stranded.
  - iii. Short-term or medium-term power purchases by the DISCOMs.
  - iv. DISCOMs not being able to meet the peak demand for the period under consideration.
- d) If the State is in power deficit situation, the OA consumers are benefitting the DISCOMs by removing the burden on already stressed DISCOMs. The data of previous years shows that the DISCOMs are in power deficit situation due to which power is being purchased in the power exchanges and from traders. The DISCOMs were one of the major purchasers from traders and in the power exchanges during FY 2018-19 as per CERC's report on short-term market for FY 2018-19. If the DISCOMs are procuring power through short term contracts or power exchange to cater to the demand of their consumers, the issue of stranded capacity does not arise and as such, AS cannot not be levied.

### Commission's view

9. The Commission finds merit in DISCOMs proposal to determine the Additional Surcharge in intervals of six months period to which some of the stakeholders have concurred and accordingly the Commission directs the DISCOMs to submit their filings for determination of AS for the 1<sup>st</sup> half of the ensuing financial year i.e., for the period from April to September of the ensuing financial year latest by 30<sup>th</sup> November of the current financial year and for the 2<sup>nd</sup> half of the ensuing financial year i.e., for the period from October to March of the ensuing financial year latest by 31<sup>st</sup> May of the ensuing financial year. The Commission's view regarding the approach for determination of stranded capacity due to OA is as under.

10. The DISCOMs are obligated to meet the demand of its consumers up to the total contracted demand of all consumers. The DISCOMs are also under Section 43 of Act 'Duty to Supply on request' to provide connections to any new applicant within stipulated period. To meet this obligation, the DISCOMs have to source adequate generation capacity to meet the demand of its consumers at any time through PPAs. The DISCOMs are duty bound to execute the contracts for purchase of power for such a quantum that they are able to supply to the consumers under various conditions, including outages of the generating units, transmission constraints, peak demand in a particular season considering seasonal load variations, and also increase in demand due to addition of new consumers/loads. The procurement of power by the DISCOMs is governed by the Commission's regulations, guidelines and orders issued from time to time. Depending upon the type of power procurement, the DISCOMs are obligated to pay fixed/capacity and/or variable charges for their contracted capacities. Though, the capacity utilization is generally on the basis of the lowest variable cost under the merit order system, the capacity charges has to be paid for the total capacity declared as available even if the entire available capacity is not scheduled due to load variations or any other reason including procurement of power by consumers through OA.

11. The Commission finds merit in stakeholders' submission that only the contracted capacity under the long-term PPAs to be considered for determination of stranded capacity and the methodology for computation of AS adequately takes care of this aspect.

12. The stakeholders submitted that the capacity continuously stranded because

of OA consumers and the backed down capacity due to no other reason should be considered in the determination of stranded capacity. 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 Distribution Licensee. As such the total quantum of backing down cannot be considered for determination of AS. Nevertheless the relevant figure would be the capacity stranded due to the consumer who opt to purchase power from third parties through open access instead of drawing their full requirement from the Distribution Licensee. As such, it is important to ascertain the surplus power available with the Distribution Licensee vis-à-vis power procured by the consumers from third parties. Therefore, this aspect is adequately taken care in methodology for computation of AS.

13. The Commission is of the view that the stakeholders submission that the existence of certain circumstances does not entitle the DISCOMs from claiming stranded capacity is not tenable due to the following reasons:

- Load shedding or imposition of load restrictions on the consumers could be due to varied reasons. It is incorrect to attribute load shedding or imposition of load restrictions entirely due to non-availability of power.
- ii. The power procurement planning is a dynamic process wherein the availability and variability of existing contracted capacities are evaluated, future demand growths are assessed and the necessity of contracting from new sources is decided. Some part of the current contracted capacity may be stranded but it is incorrect to imply that such capacity will always be stranded. The methodology for computation of AS ensures that the DISCOMs are compensated only to the extent of capacity stranded due to OA and for no other reason.
- iii. It is incorrect to state that short-term or medium-term purchases by DISCOMs imply that there is no stranded capacity. The demand pattern in the State varies over a wide range as evident from the demand pattern during FY 2018-19 and FY 2019-20.

Table 1: Demand pattern in State for FY 2016-19 and FY 2019-20		
Financial Year	Maximum Demand met	Minimum Demand met
	(MW)	(MW)
2018-19	9132	5715
2019-20	13168	6359
		0

Table 1: Demand pattern in State for FY 2018-19 and FY 2019-20

Source: www.tstransco.in

- iv. It is uneconomical and undesirable to plan to meet maximum demand entirely from long-term sources as the maximum demand may be witnessed for only some part of the day or even a fraction of time. Therefore, the power procurement planning entails contracting an optimal mix of long-term, mediumterm and short-term sources. When a consumer of the Distribution Licensee is provided the freedom to procure power through OA from a source other than the Distribution Licensee to reap the savings in cost, it is equally meritorious for the Distribution Licensee to prefer short-term or medium-term purchases over the existing long-term purchases as long as such preference leads to net savings ultimately in the interest of the consumers.
- v. Given a scenario that during a particular time period there is OA consumption as well as short-term purchases by the Distribution Licensee and the capacity is backed down, then the total backing down will be on account of both the reasons and the Distribution Licensee is still to be compensated for the backing down on account of OA and methodology of AS computation ensures the same.
- vi. Given another scenario that during a particular time period there is OA consumption as well as short-term purchases by the Distribution Licensee but no capacity is backed down, then compensating the Distribution Licensee does not arise and the methodology of AS computation ensures the same. Nevertheless, existence of such a scenario in a particular time period does not disqualify the backed down capacity due to OA in other time periods for being considered as stranded capacity.
- vii. It is incorrect to state that inability to meet the peak demand does not entitle for claiming stranded capacity. As stated earlier, the maximum demand may be witnessed for only some part of the day or even a fraction of time. Non-availability of power for such a short duration does not imply that there is no stranded capacity during the entire period under consideration.

14. As discussed earlier, there is wide variation in demand of the system over a period of time. Hence, it would not be appropriate to consider the continuous stranding of capacity for entire six months as suggested by some of the stakeholders. Hence, the Commission approves the DISCOMs proposal to consider 15-minute time block wise data for determining stranded capacity.

15. One important aspect which was not touched upon either by the DISCOMs or the stakeholders is whether the stranded capacity of power procurement for each DISCOM is required to be considered and AS has to be determined separately for each DISCOM or combined for both the DISCOMs. On this issue, the Commission observes that in the State of Telangana, the power planning for both the DISCOMs is co-ordinated at the level of Telangana State Power Co-ordination Committee (TSPCC). Hence, the quantum of stranded capacity and determination of AS has also to be the common basis and to computed for both the DISCOMs considering the consolidated data of both the DISCOMs.

16. Based on the above analysis, the Commission approves the following mechanism for demonstration of stranded capacity.

- i. The 15-minute time-block data of available capacity and scheduled capacity of all generating stations having long term PPAs with the DISCOMs and the scheduled capacity of OA consumers of six months period is to be taken.
- ii. In case of hydel generating stations, the scheduled capacity is to be treated as available capacity in that time block.
- iii. The lower of the surplus capacity (i.e., available capacity less scheduled capacity) and capacity scheduled by OA consumers is to be considered as stranded capacity for the 15-minute time block.
- iv. Accordingly, the average stranded capacity for six-month period due to open access has to be arrived.

## **ISSUE-II: Methodology for Computation of Additional Surcharge**

### **DISCOMs** proposal

17. The DISCOMs proposal on the methodology of AS computation is as under:

"After arriving at the stranded capacity due to open access, the additional surcharge against such assets is computed as below:

- Total fixed charges (in Rs.) (including Hydel and other must-run sources) paid during the six-month period is to be taken and Fixed charge (per MW) of available capacity is to be arrived at.
- The Fixed charges to consider above shall include fixed costs of all the generating stations including Hydel and the charges paid to the NCE generators as these are must-run stations.

- An average fixed charge per MW of available power is to be multiplied with the average stranded capacity due to open access. This forms the basis of total additional surcharge to be recovered from open access consumers.
- The demand charges paid by the open access consumers for six-month period are adjusted after deducting the transmission and wheeling charges related to energy drawn by Open access consumers from the Distribution Licensees to arrive net demand charges.
- The per unit additional surcharge recoverable from open access consumers was computed by deducting net demand charges from the fixed charges on account of stranded capacity divided by energy scheduled through open access.

The computation of Additional Surcharge is tabulated below:

<i>Table 2: L</i> SI. No.	Discom's proposed methodology for compu Description	<u>Itation of AS</u> Unit	Value
			value
1	Contracted Capacity	<u>MW</u>	
2	Maximum Availability	MW	
3	Minimum Availability	MW	
4	Average Availability	MW	
5	Maximum Scheduled	MW	
6	Minimum Scheduled	MW	
7	Average Scheduled	MW	
8	Capacity not availed (Max)	MW	
9	Capacity not availed (Min)	MW	
10	Capacity not availed (Avg)	MW	
11	OA Allowed (Max)	MW	
12	OA Allowed (Min)	MW	
13	OA Allowed (Avg)	MW	
14	Capacity Stranded due to OA	MW	
15	Total Fixed Charges	INR Crore	
16	Fixed Charges per MW available (=15/4)	INR Crore	
17	Fixed Charges of stranded capacity (=16*14)	INR Crore	
18	Transmission charge paid	INR Crore	
19	Energy Scheduled	MU	
20	Transmission Charges per kWh (=18/19)	INR/kWh	
21	Distribution charges (as approved in Tariff Order)	INR/kWh	
22	Total T&D Charges per kWh (=20+21)	INR/kWh	
23	Energy Consumed by OA consumer from DISCOMs	MU	
24	T&D Charges payable to DISCOMs by OA consumers (=22*23)	INR Crore	

SI. No.	Description	Unit	Value
25	Demand Charges Recovered by DISCOMs from OA	INR Crore	
26	Demand Charges to be adjusted (=25-24)	INR Crore	
27	Net stranded charges recoverable (=17-26)	INR Crore	
28	OA Scheduled Energy	MU	
29	Additional Surcharge (=27/28)	INR/kWh	

### Stakeholders' submission

18. The stakeholders sought the details of relevant cost pertaining to the period for which AS is to be determined. The stakeholders also sought the values for all the parameters in the mechanism proposed by the DISCOMs for computation of AS.

19. The DISCOMs can effectively and efficiently forecast the demand within their areas of supply and sell the surplus power in power exchanges for optimum utilisation of resources. The revenue realised from the sale of power in power exchanges amounts to recovery of fixed cost of stranded capacity. The quantum of power exchange transactions of the DISCOMs during the previous year has to be deducted from the head of stranded capacity as the cost of such capacity is recovered from the revenue from sale in power exchanges. Any differential quantum at the end of the year need to be reconciled in the subsequent financial year.

20. The concept of energy banking, where two utilities/DISCOMs enter into an energy barter arrangement depending upon the surplus/deficit power portfolios of the respective States. The DISCOMs can bank their surplus capacity with other utility(ies) either directly or through trader in order to utilise the equivalent energy at later stage. The quantum of banking transactions undertaken in previous year need to be deducted from the head of stranded capacity and the differential quantum can be reconciled in the subsequent year. The banking arrangements should be promoted in order to utilise stranded capacity effectively and efficiently without any adverse bearing on OA consumers.

21. The DISCOMs are entitled to receive Deviation Settlement Mechanism (DSM) charges for unutilised energy at the prevailing rates in power exchanges. The unutilised quantum against which the DSM charges have been recovered by the DISCOMs need to be deducted from the stranded capacity as the fixed cost has been recovered to that extent.

22. The OA consumers pay Cross Subsidy Surcharge (CSS) determined by the Commission, in addition to the applicable wheeling and transmission charges. CSS for a consumer category is computed based on Average Billing Rate (ABR) of the respective consumer category. Therefore, some part of the fixed cost obligation is recovered through CSS. The fixed cost recovered through CSS has to be deducted while determining AS.

23. The minimum stranded capacity has to be considered in place of average values as it is the capacity which will be continuously stranded on account of OA.

24. The DISCOMs should be encouraged to undertake energy portfolio management in order to forecast demand and supply effectively and efficiently for avoidance of fixed cost of stranded capacity.

### Commission's view

25. The current proceedings are only for approval of mechanism to determine the stranded capacity and framing the terms & conditions for levy of Additional Surcharge on open access users to meet the fixed cost of the distribution licensee arising out of its obligation of supply. The methodology of AS computation was approved by the Commission in its Order dated 13.12.2017 in I.A.Nos.22&23 of 2017 in O.P.Nos.22&23 of 2016 respectively and the same has attained finality. Therefore, the Commission is not revisiting the same in this Order and reproducing below for reference.

SI. No.	Description	Unit	Value
{A}	Long term available capacity	MW	
{B}	Capacity stranded due to OA	MW	
{C}	Fixed Charges paid	Rs. Crore	
$\{D\}=\{C\}\div\{A\}$	Fixed Charges per MW	Rs. Crore/MW	
{E}={D}x{B}	Fixed Charges for stranded capacity	Rs. Crore	
{F}	Transmission charges paid	Rs. Crore	
{G}	Actual Energy scheduled	MU	
{H}={F}÷{G}	Transmission charges per unit	Rs./kWh	
{I}	Distribution charges as per Tariff Order	Rs./kWh	
{J}={H}+{I}	Total transmission and distribution charges per unit	Rs./kWh	
{K}	Energy consumed by OA consumers from the DISCOMs	MU	

 Table 3: Approved Methodology for Computation of Additional Surcharge

SI. No.	Description	Unit	Value
$\{L\}=\{K\}\times\{J\}$	Transmission and distribution charges paid by OA consumers	Rs. Crore	
{M}	Demand charges recovered by the DISCOMs from OA consumers	Rs. Crore	
${N}={M}-{L}$	Demand charges to be adjusted	Rs. Crore	
${O}={E}-{N}$	Net stranded charges recoverable	Rs. Crore	
{P}	OA sales	MU	
{Q}={O}÷{P}	Additional Surcharge	Rs./kWh	

# ISSUE-III: Terms & Conditions for Levy of Additional Surcharge on OA Users DISCOMs proposal

26. The DISCOMs proposal on the terms & conditions for levy of AS on OA users is as under:

"The key Terms & Conditions proposed for levy of Additional Surcharge on open access consumers are as follows. These are in addition to the Terms & Conditions specified in the Open Access Regulation.

- Additional surcharge determined on Per Unit basis shall be payable, on monthly basis, by the open access customers based on the actual energy drawn during the month through open access. The additional surcharge determined by the Commission on the basis of data for April to September of a particular year shall be applicable for April to September period of next year and so on.
- Further any consumer of the DISCOM intends to avail power through open access and intends to source power through open access should convey the same to DISCOM at least six months before the occurrence of the open access transaction along with the quantum.
- For a scheduled consumer who is availing power from both the DISCOMs and open access source, minimum energy consumption from the DISCOM will be stipulated. This will enable the usage of minimum quantum of energy from DISCOM when market prices are low.
- In case a consumer has conveyed that he would be sourcing power through open access but opts to take power from DISCOM, such power would be made available by the DISCOM after levying the penalty as determined by the Commission.
- In any financial year, eligible OA consumer will be allowed to source power either from a DISCOM or through open access consumer. Once a decision is

conveyed to DISCOM, such consumer will not be allowed to change the source of supply i.e., DISCOM or supply through open access. This will enable in reducing the instances of frequent switching of the consumers from DISCOM supply and supply from open access sources.

 Selective sourcing of power in specific time slots should not be allowed and the OA & Scheduled consumer should be contracting power for entire day."

### Stakeholders' submission

27. The terms and conditions proposed by the DISCOMs should not be approved as the same are against the letter and spirit of the Act.

28. Regulation 9 of the Central Electricity Regulatory Commission (CERC) (Open Access in Inter-State Transmission) Regulations, 2008 provides the procedure for advance scheduling of bilateral transaction under OA and states that an application for advance scheduling for a bilateral transaction may be submitted to the nodal agency up to fourth month, the month in which an application is made being the first month. For day ahead transactions, all applications for bilateral transactions received within three days prior to the date of scheduling and up to 1500 hrs. of the day immediately preceding the date of scheduling. Regulation No.2 of 2005 stipulates the maximum processing time for OA transactions as under:

Duration for which OA required	Maximum processing time
Up to one day	12 hours
Up to one week	Two days
Up to one month	Seven days
Up to one year	Thirty days

 Table 4: Maximum processing time for OA transaction

29. The condition of conveying the OA schedule six months in advance does not hold good in light of the provisions of the Act, Regulations, etc. This proposal amounts to restraining the freedom of the consumer, in as much as it restricts the consumer to switch to OA, if he desires. Section 66 of the Act as well as the Judgments of the Hon'ble Appellate Tribunal for Electricity (APTEL) and the Hon'ble Supreme Court mandates the Commission to promote the development of power market. The DISCOMs proposal will lead to restricting the consumers access to market for procuring power at competitive prices.

30. The day ahead OA transactions were permitted in order to source power depending upon daily requirements and to meet contingency. The decision to procure power under short-term is dependent on availability of affordable power from third-party sources. The DISCOMs themselves are procuring power under short-term to take benefit of competitive prices. In collective transactions, the price is discovered through a dynamic algorithm and the also the availability of required power is not guaranteed. Conveying information for day ahead basis six months in advance would not be technically possible and thereby short-term day ahead basis transactions would effectively be reduced to zero.

31. The Act provides that the Distribution Licensee shall grant access to its network for OA on non-discriminatory basis. The condition of stipulating minimum consumption from the Distribution Licensee should not be applicable for the scheduled consumer as such consumer is already being levied demand charges corresponding to minimum of 80% of Contracted Maximum Demand (CMD). Such a condition is restrictive and defeats the purpose of OA allowed under the Act. The condition of minimum consumption cannot be enforced on OA consumers as they are paying the demand charges for their contracted demand with the Distribution Licensee.

32. The condition of restricting the OA consumer to procure only from the sources conveyed in advance and the imposition of penalty for availing power from the Distribution Licensee on account of non-availability of OA power will be violation of the provisions of the Act. In accordance with Section 42(2) of the Act, the OA consumers can be levied only wheeling charge, CSS and AS and no other charge can be imposed. If a consumer has contracted demand with the Distribution Licensee and also procures power through OA, no penalty can be levied on such consumer as long as the power availed from the Distribution Licensee is within the contracted demand. The imposition of penalty in such a case is against the letter and spirit of the Universal Service Obligation (USO) of the Distribution Licensee under Section 43 of the Act. Imposition of such a penalty is also not provided in Regulation No.2 of 2005.

33. The Hon'ble APTEL in its various Judgments observed that nothing in the Act directs or mandates that a consumer who applies for OA should cease to be a consumer of the respective Distribution Licensee. The consumer's choice is of utmost importance and the same cannot be curtailed by imposing unreasonable restrictions

on procuring power through OA. The OA consumer should be given maximum facilities to consume power from competitive market for improvement in efficiency and quality of service and promotion of competition contemplated under the Act and the Tariff Policy.

34. The condition of restricting the OA consumer from altering the source of supply during the financial year is prohibited under the Act and is contrary to the provisions of Regulation No.2 of 2005. Such restriction amounts to denial of OA. The procurement under short-term OA is a right vested in the consumers and such right cannot be taken away by specifying the minimum period for availing OA as one year. The Act does not envisage a scenario wherein the consumer is obligated to procure power from only one source i.e., either DISCOM or OA, for the entire financial year. The consumer should not be denied OA as long as there are no grid constraints. Further the DISCOMs proposal is self-contradicting wherein the consumer has to inform his OA schedule six months in advance whereas the source of power cannot be altered for the entire year.

35. The condition of restricting power procurement through OA for specific time slots amounts to curtailing the freedom of the consumer provided under the Act to procure power through OA. Even the scheduled consumers of the DISCOMs are not obligated to purchase power from the DISCOMs for the entire day. The Act is silent on the period for which OA can be availed meaning thereby, the same is to the complete discretion of the consumer. The consumer opts of OA only when the same is competitive in comparison to the existing source. Currently, the minimum duration for which a consumer can avail OA is 15 min. The inherent feature of OA mandated under the Act is that the consumer can opt for OA in such time blocks when such OA procurement is competitive in comparison to the regular source. OA cannot be denied as long as there is no grid constraint. The DISCOMs proposal inhibits competition and is contrary to the provisions of the Act.

36. The terms and conditions proposed by the DISCOMs seek to amend the provisions of OA Regulations. The present exercise may be limited to the mechanism for determination of stranded capacity and AS and the related terms and conditions only. The amendments to the OA Regulations need detailed deliberations and should not be considered now.

37. The terms and conditions proposed by the DISCOMs are in violation of the Competition Act, 2002. The Commission may determine AS balancing the interests of the DISCOMs and OA consumers in order to effectively compensate the DISCOMs for the fixed cost of stranded capacity owing to OA and at the same time procurement through OA is not hindered.

38. The terms & conditions applicable to OA consumers and OA generators should be made applicable to the DISCOMs, Telangana State Power Generation Corporation Ltd. (TSGENCO), etc.

### Commission's view

39. The DISCOMs have proposed the levy of AS on monthly basis and the stakeholders have not made any submissions on the same. The standard OA agreement specifies the periodicity of invoice and accordingly AS shall be billed along with the other charge payable by the OA consumer in accordance with the provisions of the OA agreement.

40. As regards the other terms & conditions proposed by the DISCOMs, the stakeholders submitted that the same are in contradiction to the provisions of the Act and Regulations. The stakeholders have also submitted that the same are essentially in the form of amendments to OA Regulations. The Commission concurs with the stakeholders' submission that the terms & conditions (from 2<sup>nd</sup> bullet onwards) proposed by the DISCOMs are essentially in the form of amendments to OA Regulations. The form of amendments to OA negulations (from 2<sup>nd</sup> bullet onwards) proposed by the DISCOMs are essentially in the form of amendments to OA Regulations. The Regulations can neither be amended through an Order nor the objective of the current proceedings is to amend the OA Regulations. Therefore, the Commission rejects the DISCOMs proposal in this regard.

41. The stakeholders' submission that the terms and conditions applicable to OA consumers and OA generators should be made applicable to the DISCOMs, Telangana State Power Generation Corporation Limited (TSGENCO) etc. is devoid of any consideration in this Order for the reasons stated above.

42. One important aspect which was not touched upon either by the DISCOMs or the stakeholders is the applicability of Additional Surcharge in cases of consumers availing OA to wheel power from their own Captive Power Plants (CPPs). In case, a

consumer is meeting his full demand from his captive generation, there is no question of any stranded capacity due to such consumer. As such, AS will not be leviable on such OA consumers who wheel power from their own CPPs. On the other hand, where the consumers are meeting their demand partially from the Distribution Licensee and partially from its own CPP. In such cases, if the consumer avails OA to purchase power from any third party, AS shall be levied to the extent of power purchased from third party.

43. Based on the above, the terms & conditions for levy of Additional Surcharge on open access users to meet the fixed cost of the distribution licensee arising out of its obligation of supply are as under:

- i. The AS determined by the Commission shall be applicable to the consumers of the DISCOMs who avail power through OA from any source other than their respective DISCOM.
- ii. The AS shall be levied on the quantum of electricity scheduled by such consumers.
- iii. The AS shall not be levied on such OA consumers for their captive consumption to the extent of OA availed for wheeling power from their own CPPs.
- iv. Exemption from payment of AS for the eligible OA consumers shall be as per the Government policy in force. The DISCOMs may take up the issue of making good of revenue loss due to such exemption with the State Government for proper relief.

## **ISSUE-IV: Certain Additional Issues**

44. In addition to the comments, objections and suggestions on the DISCOMs proposals, the stakeholders have raised certain additional issues which have been dealt with in the following paragraphs.

### Stakeholders' submission

45. The Act has promulgated the concept of OA in distribution to promote competition and to provide freedom to the consumer to procure power from source of his choice, but the OA transactions are only 4% in the total electricity market. There is a need to promote OA so that the consumers can choose their sources of power and the DISCOMs can be motivated to supply at competitive prices by increasing their efficiencies.

46. The stakeholders sought the details of Cross Subsidy Surcharge (CSS) collected from OA consumers as on 31.03.2019 and the details of its utilisation to meet the requirement of current level of cross subsidy as on 31.03.2019 or 31.01.2020.

47. As per Section 42(2) of the Act, the CSS has to be reduced progressively from the levels determined for the first year, but CSS has increased over the years.

48. In accordance with Clause 8.4 of the Regulation No.2 of 2006 (viz., Interim Balancing and Settlement Code for Open Access Transactions), the Distribution Licensee should adjust the demand supplied by OA generator. In spite of the issue of Proceeding No.APERC/Secy/25/2013 dated 04.05.2013 by the then Andhra Pradesh Electricity Regulatory Commission (APERC), the Distribution Licensee is not adjusting the demand. The stakeholders requested the Commission to take up this issue in the present proceedings.

49. Section 42(4) of Act provides for levy of AS on charges of wheeling for use of distribution system and hence the OA consumers connected to 132 kV system of the State Transmission Utility (STU) and not distribution system, are not liable to pay AS under Section 42(4) of the Act as such consumers pay transmission charges for use of transmission system.

### **Commission's view**

50. The stakeholders have raised issues related to CSS and demand adjustment which are not the subject matter of the current proceedings.

51. The Commission opines that the contention of the stakeholders that consumers connected to 132 kV system of the STU are not liable to pay AS is not tenable. The consumer who is supplied with electricity for its own use by the Distribution Licensee can be at any level of voltage which is operated either by Distribution Licensee or Transmission Licensee. The fact that a consumer is connected to the transmission network does not alter his relationship with the Distribution Licensee as the Distribution Licensee is obligated to meet his demand and the bills for electricity consumed by such consumers are raised by the Distribution Licensee and not the Transmission Licensee. The contention that such consumers are not liable to pay AS since they are connected to the transmission network and paying transmission charges is not correct.

So long as the supplier-consumer relationship exists between the Distribution Licensee and the consumer, the Distribution Licensee has to meet its obligation to supply power to such consumer on demand and Section 42(4) of the Act provides for levy of AS to meet the fixed cost of the Distribution Licensee arising out of his obligation to supply. Hence, the contention of the stakeholders on this ground is not tenable and rejected.

## **SUMMARY**

52. The DISCOMs to submit their filings for determination of AS for the 1<sup>st</sup> half of the ensuing financial year i.e., for the period from April to September of the ensuing financial year latest by 30<sup>th</sup> November of the current financial year and for the 2<sup>nd</sup> half of the ensuing financial year i.e., for the period from October to March of the ensuing financial year latest by 31<sup>st</sup> May of the ensuing financial year.

## a) Mechanism for Demonstration of Stranded Capacity

- i. The 15-minute time-block data of available capacity and scheduled capacity of all generating stations having long term PPAs with the Discoms, and the scheduled capacity of OA consumers of six months period is to be taken.
- ii. In case of hydel generating stations, the scheduled capacity is to be treated as available capacity in that time block.
- iii. The lower of the surplus capacity (i.e., available capacity less scheduled capacity) and capacity scheduled by OA consumers is to be considered as stranded capacity for the 15-minute time block.
- iv. Accordingly, the average stranded capacity for six-month period due to open access has to be arrived.

Table 5: Approved Methodology for Computation of Additional Surcharge			
SI. No.	Description	Unit	Value
{A}	Long term available capacity	MW	
{B}	Capacity stranded due to OA	MW	
{C}	Fixed Charges paid	Rs. Crore	
{D}={C}÷{A}	Fixed Charges per MW	Rs. Crore/MW	
{E}={D}x{B}	Fixed Charges for stranded capacity	Rs. Crore	
{F}	Transmission charges paid	Rs. Crore	
{G}	Actual Energy scheduled	MU	

## b) Approved Methodology for Computation of Additional Surcharge

Description	Unit	Value
Transmission charges per unit	Rs./kWh	
Distribution charges as per Tariff Order	Rs./kWh	
Total transmission and distribution charges per unit	Rs./kWh	
Energy consumed by OA consumers from the DISCOMs	MU	
Transmission and distribution charges paid by OA consumers	Rs. Crore	
Demand charges recovered by the DISCOMs from OA consumers	Rs. Crore	
Demand charges to be adjusted	Rs. Crore	
Net stranded charges recoverable	Rs. Crore	
OA sales	MU	
Additional Surcharge	Rs./kWh	
	Transmission charges per unitDistribution charges as per TariffOrderTotal transmission and distribution charges per unitEnergy consumed by OA consumers from the DISCOMsTransmission and distribution charges paid by OA consumersDemand charges recovered by the DISCOMs from OA consumersDemand charges to be adjusted Net stranded charges recoverableOA sales	Transmission charges per unitRs./kWhDistribution charges as per Tariff OrderRs./kWhTotal transmission and distribution charges per unitRs./kWhEnergy consumed by OA consumers from the DISCOMsMUTransmission and distribution charges paid by OA consumersRs. CroreDemand charges recovered by the DISCOMs from OA consumersRs. CroreDemand charges to be adjustedRs. CroreNet stranded charges recoverableRs. CroreOA salesMU

c) <u>Terms & Conditions for levy of Additional Surcharge on OA Users</u>

- The AS determined by the Commission shall be applicable to the consumers of the DISCOMs who avail power through OA from any source other than their respective DISCOM.
- ii. The AS shall be levied on the quantum of electricity scheduled by such consumers.
- iii. The AS shall not be levied on such OA consumers for their captive consumption to the extent of OA availed for wheeling power from their own CPPs.
- iv. Exemption from payment of AS for the eligible OA consumers shall be as per the Government policy in force. The DISCOMs may take up the issue of making good of revenue loss due to such exemption with the State Government for proper relief.

### This order is corrected and signed on this the 18<sup>th</sup> day of September, 2020.

Sd/-	Sd/-	Sd/-
(BANDARU KRISHNAIAH)	(M.D. MANOHAR RAJU)	(T. SRIRANGA RAO)
MEMBER	MEMBER	CHAIRMAN

## //CERTIFIED COPY//

# **ANNEXURE 1**

### LIST OF STAKEHOLDERS WHO SUBMITTED WRITTEN COMMENTS OBJECTIONS AND SUGGESTIONS

S. No.	Name of the Stakeholder
1.	M/s Sugna Metals Ltd., 1-8-673, Azamabad, Hyderabad 500 020
2.	M/s Penna Cement Industries Ltd., Lakshmi Nivas 705, Road # 3, Banjara Hills, Hyderabad 500 034
3.	Open Access Users Association, 2 <sup>nd</sup> Floor, D21, Corporate Park, Sector- 21, Dwarka, New Delhi 110 075
4.	M/s MS Agarwal Foundries (P) Ltd., Rama Tower, 5-4-83, Opp. Ranigunj Bus Depot, M.G. Road, Secunderabad 500 003
5.	The Federation of Telangana Chambers of Commerce and Industry, Federation House, FAPCCI Marg, 11-6-841, Red Hills, Hyderabad 500 004
6.	M/s Indian Energy Exchange Ltd., Unit No.3, 4, 5 & 6, Plot No.7, 4 <sup>th</sup> Floor, TDI Centre District Centre, Jasola, New Delhi 110 025