

# **TELANGANA STATE ELECTRICITY REGULATORY COMMISSION** 5<sup>th</sup> Floor, Singareni Bhavan Lakdi-ka-pul Hyderabad 500 004

# Discussion Paper for inviting comments/objections from stakeholders/general public for finalization Telangana State Electricity Regulatory Commission (*Terms and conditions of Open Access*), Regulation, 2023

# 1. Background:

Telangana State Electricity Regulatory Commission (hereinafter referred to as TSERC or the Commission) was constituted by the Government of Telangana State (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 (Act) vide G.O.Ms.No.3, Energy (Budget) Department, dated 26.07.2014. This Commission had notified TSERC (Adoption) Regulation No.1 of 2014 on 10.12.2014 for adoption of previously subsisting regulations, decisions, directions or orders, licenses and practice directions, as such, all the Regulations framed by the erstwhile APERC shall continue to apply for the State of Telangana including the following Regulations relating to the Open Access:

- i) Terms and Conditions of Open Access, Regulation, 2005 [Regulation No.2 of 2005];
- ii) Interim Balancing and Settlement Code, Regulation, 2006 [Regulation No.2 of 2006];
- iii) Interim Balancing and Settlement Code for Open Access Transactions, First Amendment Regulation, 2013 [Regulation No.1 of 2013];
- iv) Interim Balancing & Settlement Code for Open Access Transactions, Second Amendment Regulation, 2014 [Regulation No.2 of 2014];

Subsequently, this Commission has notified the Third Amendment Regulation, 2017, viz.

i) Interim Balancing and Settlement Code for Open Access Transactions, Third Amendment Regulation, 2017 [Regulation No.1 of 2017];

Whereas, TSSPDCL in its petition O.P.(SR) No.10 of 2020 has sought amendments to certain clauses of Interim Balancing and Settlement Code, Regulation [Regulation No.2 of 2006] as amended from time to time, relating to the Banking facility for solar, wind and mini hydel renewable energy sources.

Ministry of Power, Government of India on 06.06.2022 has notified the Electricity (Promoting Renewable Energy Through Green Energy open access) Rules, 2022 which stipulates that "to provide Green Energy open access to consumers of green energy, the appropriate Commission may, if necessary, amend the relevant regulations made by it and such regulations shall be consistent with these rules".

The Commission is in the process of having its own consolidated and comprehensive open access Regulation has prepared the Discussion Paper on Telangana State Electricity Regulatory Commission (*Terms and conditions of Open Access*),

Regulation, 2022. The Commission intends to have the comments and suggestions of the DISCOMs, TSTRANSCO, TSSLDC, general public and interested consumers on the above discussion paper. The last date for submission of comments/suggestions is 23.02.2023 till 5 pm. Based on the comments/suggestions received on the discussion paper, the Commission shall frame the draft Open Access Regulation and place before stakeholders/general public for their comments/suggestions.

# 2 Definitions

- 2.1 In this Discussion paper unless the context otherwise requires;
  - a) **'Act**' means the Electricity Act, 2003 (36 of 2003) and its subsequent amendments thereof;
  - b) **'Applicant**' means a person who makes an application to the Nodal Agency for open access and includes any person engaged in generation, a licensee or any consumer eligible for open access under this Discussion paper;
  - c) **"Available capacity**" means the capability in megawatts (MW) or kilowatts (kW) of a transmission or distribution network to transfer power from one point to the other, after deducting the power requirements of already committed users;
  - d) **'Banking**' means a facility through which the unutilised portion of energy (underutilisation or excess generation over and above scheduled wheeling) from any of the renewable energy sources, during a billing month is kept in separate account and such energy accrued shall be treated in accordance with the clause 31 of this Discussion paper;
  - e) **'Billing month**' means the period between any two successive meterreading dates, as provided in the Open Access Agreement;
  - f) **'Central Commission or CERC**' means the Central Electricity Regulatory Commission referred to in Section 76 of the Act;
  - g) 'Central Nodal Agency' means a Central Nodal Agency as notified by the Central Government to set up and operate a single window green energy open access system for renewable energy;
  - h) **'Commission or TSERC**' means the Telangana State Electricity Regulatory Commission referred to in Section 82 of the Act;
  - **Contracted capacity**' in the context of open access for supply to consumers means the capacity contracted in megawatts (MW) or kilowatts (kW)for transmission and /or wheeling to a consumer under open access ;
  - ) **'Day**' means the day starting at 00:00 hours and ending at 24:00 hours;
  - bistribution Licensee' or 'DISCOM' means a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;
  - ) **'Entry point**' means a point at which electricity is injected into the electricity transmission network or the electricity distribution network ;
  - m) **'Exit point**' means a point at which electricity is drawn from the electricity transmission network or the electricity distribution network ;

- n) **"Green Energy**" means the electrical energy from renewable sources including Hydro and Storage ( if the storage uses Renewable Energy) or any other technology as may be notified by Government of India from time to time and also include any mechanism that that uses green energy to replace Fossil fuels including production of Green Hydrogen or Green Ammonia as per provision of clause –G of sub-rule-(2) of rule(4) ;
- "Green Energy Open Access" means providing open access to the consumers of Green Energy as prescribed in Rule 5 of Electricity (Promoting Renewable Energy through Green Energy Open Access) Rules, 2022;
- "Green Energy Open Access Consumer" means the open access consumer for the amount of Green Energy that is being drawn through open access;
- (Promoting Renewable Energy through Green Energy Open Access)
   Rules, 2022 and its subsequent amendments;
- r) 'Indian Electricity Grid Code or IEGC' means the Code specified by the Central Commission under clause (h) of sub-section (1) of Section 79 of the Act and as amended from time to time;
- s) **'Intra-Transmission System or In-STS**' means the transmission system within the Telangana State.
- t) 'Losses' means the energy losses in percentage for an EHT system as a single system and for all other voltage levels, the losses in percentage as provided in the applicable Tariff Order of the Commission, or the actual levels of energy losses as provided in this Discussion paper. Explanation –

(i) If the wheeling of electricity is through the distribution system of more than one distribution licensee or if the Entry/Exit point is connected to EHT system, the losses would include the transmission loss and the distribution loss up to the voltage level of the distribution licensee in whose area of supply such exit/entry point (whichever is lower) is located.

(ii) If the entry and exit points are located within the distribution system (33 kV and below) of the same distribution licensee, the losses would include only the distribution loss of the distribution licensee up to the voltage level at the relevant exit or the entry point(s), whichever is lower.

- u) '**Nodal Agency**' means the entities referred to in clause 5 of this Discussion paper;
- v) 'Open access agreement' means an agreement entered into between a licensee and the applicant to avail open access to the licensee's network for transmission and / or wheeling of electricity;
- w) 'Open Access Consumer' or 'OA Consumer' means a consumer not having a supply agreement with the distribution licensee in whose area of supply the consumer is located, but availing or intending to avail supply of energy from a person other than that distribution licensee under the Open Access Regulation and includes a consumer availing wheeling facility for carrying the electricity from his captive generating plant to the destination of his own use without having a supply

agreement with the distribution licensee of the area in which the consumer's premises is located.

- x) 'Open Access Generator' means a generating company using or intending to use the transmission system and / or the distribution system of the licensees in the State for supply of electricity to a Scheduled Consumer or OA Consumer under the Open Access Regulation.
- y) **'Renewable Energy**' means the grid quality electricity generated from Renewable Energy sources as may be defined in TSERC Orders or TSERC Regulations governing Renewable Energy;
- z) 'Scheduled Consumer' means a consumer who has a supply agreement with the distribution licensee in whose area of supply the consumer is located and also has a supply agreement with a person other than the distribution licensee under the Open Access Regulation and includes a consumer of a distribution licensee who also avails of wheeling facility for carrying the electricity from his captive generating plant to the destination of his own use.
- aa) **'State**' means the State of Telangana.
- bb) **'State Nodal Agency'** or **'SNA**' means State Nodal Agency for grant of long-term and short-term green energy open access as specified in clause 5 of this Discussion paper.
- cc) **'Time Block**' means each block of fifteen (15) minutes for which the energy meters record specified electrical parameters and quantities, with the first time block for a day starting at 00:00 hours.
- dd) 'User' or 'Open access user' means a person using or intending to use the transmission system and / or the distribution system of the licensees in the state for receiving supply of electricity from a person other than the distribution licensee of his area of supply, and the expression includes a generating company and licensee.
- ee) **'Wheeling schedule'** means the schedule for a fifteen (15) minute time block provided by the Scheduled Consumer, an OA Consumer or an OA Generator, to the SLDC, pursuant to clause 23 of this Discussion paper, read with clause 25.
- f) **'Special Energy Meters or SEM**' means meters installed in accordance with the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time;
- gg) **'State Electricity Grid Code or SEGC**' means the Code specified by the Commission under clause (h) of sub-section (1) of Section 86 of the Act and as amended from time to time;
- hh) **'State Transmission Utility or STU**' means the 'Transmission Corporation of Telangana Limited or TSTRANSCO' or the Government Company notified by the Government of Telangana State under subsection (1) of Section 39 of the Act;
- i) 'Telangana State Load Despatch Centre or TSSLDC' means the State Load Despatch Centre established in the Telangana State under sub-section (1) of Section 31 of the Act;
- **Transmission Licensee'** means any person licensed under Part IV of the Act for transmission of electricity;

- (Working Day' means such day which is not declared as a gazetted holiday by the State Government;
- 2.2 Words and expressions used herein and not defined in this Discussion paper but defined in the Act or Indian Electricity Grid Code or the State Electricity Grid Code shall have the meaning assigned to them under the Act or IEGC or State Electricity Grid Code as the case may be.

# 3. Applicability

- 3.1 This Discussion paper shall apply to Open Access Users for use of intra-State transmission system (In-STS) and/or distribution system(s) in the Telangana State, including when such system is used in conjunction with inter-State transmission system.
- 3.2 This Discussion paper shall apply to Open Access Generators, Scheduled Consumers and OA Consumers.

# PART-A

# GENERAL PROVISIONS OF OPEN ACCESS

### 4. Categorization of open access users

The open access users of the transmission and/or distribution system(s) shall be classified as follows:

(a) Long-Term Open Access User: Any user of the transmission and/or distribution system(s) entering into an open access agreement with the concerned licensee(s) for a period of two years or more shall be categorised as a Long-Term Open Access User.

(b) Short-Term Open Access User: Any user other than a long-term user of the transmission and/or distribution system(s) entering into an open access agreement with the concerned licensee(s) shall be treated as Short-term open access user, but open access shall not be allowed at a time for a period of more than one year.

# 5. Nodal Agency

- 5.1 For all long-term open access transactions, the Nodal Agency for receiving and processing applications shall be the State Transmission Utility (STU).
- 5.2 For short-term open access transactions, the Nodal Agency for receiving and processing applications shall be the State Load Dispatch Centre (SLDC). The SLDC shall, however, allow short-term open access transactions only after consulting the concerned transmission and/or distribution licensee(s) whose network(s) would be used for such transactions:

Provided that for short-term transactions with duration of less than one week, the SLDC may not consult the concerned licensees for permitting such transactions. The SLDC and Licensees shall devise procedures for coordination among themselves for allowing such short-term transactions.

5.3 TSSLDC shall operate as the SNA for grant of long-term and short-term green energy open access.

SNA shall co-ordinate with transmission licensees including STU and the Distribution Licensees to make available all relevant information regarding green energy open access to the public on the portal of Central Nodal Agency.

5.4 All the applications related to green energy open access shall be submitted to the portal set up by the Central Nodal Agency. The applications shall be routed to State Nodal Agency (SNA) by the Central Nodal Agency.

Provided that, till such time the procedures and formats are devised by Central Nodal Agency, existing procedures/formats may be followed in the matter.

# 6. Criteria for allowing open access to transmission and/or distribution systems:

- 6.1 The long-term open access shall be allowed in accordance with the transmission planning criterion and distribution planning criterion stipulated in the State Grid Code and/or the Distribution Code and / or Indian Electricity Rules as the case may be.
- 6.2 The short-term open access shall be allowed, if the request can be accommodated by utilizing:
  - (a) Inherent design margins;
  - (b) Margins available due to variations in power flows and unutilised capacity, if any; and
  - (c) Margins available due to in-built spare capacity in transmission and/or distribution system(s) created to cater to future load growth.

### 7. Provision for existing users:

### 7.1 Existing distribution licensees:

The existing distribution licensee (s) shall be deemed to be the long-term open access user (s) of the Intra-State transmission system (s) and / or the distribution system (s) for the term specified in / under the existing agreement (s) or arrangement (s) and shall make payment of transmission charges, wheeling charges and other charges, as applicable, and as may be determined by the Commission from time to time.

The existing distribution licensee (s) shall, half yearly, furnish details of their use of intra-state transmission system (s) and/or distribution system (s) to the STU, SLDC and the Commission.

### 7.2 Existing users other than the distribution licensees:

The existing user(s) other than the existing distribution licensees may continue to avail themselves of the wheeling facility as per the existing agreements for the

period(s) specified in those agreement(s), to the extent they are not inconsistent with the Act and this Discussion paper:

Provided that such existing user (s) shall pay the transmission charges, wheeling charges and other charges as may be determined by the Commission from time to time:

Provided also that any additional capacity sought by such existing user(s) in addition to the capacity already contracted, shall be treated as new application for open access to the extent of additional capacity sought.

# 8 Capacities for allowing Open Access

8.1 Open Access user having Contracted Capacity of above 1 MVA are eligible for Open Access;

Provided further that the open access users having contracted capacity of 100 KW and above are eligible for green energy open access subject to the condition that there is no operational constraint in the Licensee's system and to conditions of resultant power flow;

Provided further that there is no load limitation for captive consumers for availing power under green energy open access;

Provided that the Commission shall allow open access to consumers with contracted capacity of 1 MW or less in due course at such time and in such phases as it may consider feasible having due regard to operational constraints and other factors:

8.2 The licensees shall make all reasonable attempts to ensure that operational constraints in the Transmission and / or Distribution systems as the case may be, including metering, communication systems, capacity determination, etc. are removed so that, as far as possible, no eligible consumer is denied open access on the grounds of operational constraints in the system.

# 9 Criteria for allotment/reservation of capacity:

- 9.1 A distribution licensee, due to its obligation to supply on request under section 43 of the Act, shall have the highest priority in allotment of capacity, long-term as well as short-term.
- 9.2 As regards the other applicants for allotment of capacity of transmission and/or distribution systems, the persons applying for Long-Term open access shall have priority over the persons applying for Short-Term open access. However, within a category, an applicant requesting transmission and/or distribution access for longer duration shall have priority over the person(s) seeking access for shorter duration.
- 9.3 Allotment of capacity in case of insufficient spare capacity/ congestion.
- 9.3.1 For Long-Term applicants: In the event of insufficient spare capacity in distribution system/congestion in the transmission system hindering

accommodation of all long-term open access applications, the Nodal Agency shall inform the applicants of the same and shall advise the concerned Licensee(s) to carry out an assessment of works required to create additional capacity by strengthening of the system to accommodate such applicant(s). After completion of such works, the Nodal Agency shall allot the capacity to such applicant(s). As regards capital expenditure incurred by the licensee(s) for system-strengthening, the licensee(s) can require a capital contribution from the applicant(s) subject to the provisions of clause 19.1 (v) of this Discussion paper.

9.3.2 For Short-Term applicants: In case of applicants for short-term open access with transactions required to be accommodated through congested corridors of the network, the Nodal Agency shall invite bids by Fax/e-mail with floor price equal to the un-congested price for the short-term users. The bidders shall quote percentage points above the floor price. The allotment of capacity shall be done in decreasing order of the price quoted. In case of quotes involving equal prices, the allotment of capacity shall be done, if required, pro rata to the capacity sought. The user getting allotment of capacity less than the capacity sought by him shall pay charges as per the price quoted by him. All other applicants getting capacity allotment equal to the capacity sought by them shall pay charges as per the price quoted by the shall pay charges as per the price quot

Explanation 1: For the purpose of clauses 9.3.1, and 9.3.2, "congestion" in the context of allotment of capacity for transmission of electricity shall be construed to have occurred when a transmission system cannot accommodate all transactions that would normally occur among users due to physical or engineering limitation.

Explanation 2 : For the purpose of clause 9.3.2, the term "un-congested price" means the transmission and / or wheeling charges required to be paid by the short-term users as per the rates approved by the Commission and published by the Nodal Agency from time to time.

# 10. Procedure of application for Long Term open access

- 10.1 The Nodal Agency (STU) shall make available the format of application for open access requiring broadly the details as set out in Annexure-1 to this Discussion paper, to the general public in physical form at its offices and in electronic printable form at its website.
- 10.2 An application for long-term open access shall be filed with the STU by the applicant, with a copy to the concerned transmission / distribution licensee(s). The application shall be accompanied by a non-refundable processing fee as prescribed by the Commission in the Tariff Orders, or otherwise, from time to time:

Provided that till such time the processing fee is so prescribed by the Commission, it shall be Rs.10,000.

Provided that the Green Energy open Access consumers shall file the application for grant of open access and the application will be processed in accordance with clause 12 of this Discussion paper.

- 10.3 The Nodal Agency shall acknowledge the receipt of an application made under clause 10.2 above within 24 hours of the receipt of the application.
- 10.4 If after submission of the open access application, the applicant becomes aware of any material alteration in the information contained in the application, the applicant shall promptly notify the Nodal Agency of the same:

Provided that in case the Nodal Agency is made aware of the material alteration in the information contained in the application already submitted under clause 10.2 above, the Nodal Agency shall treat the application as if the same was received on the date the applicant notifies it of the said alteration.

- 10.5 All applications received within a calendar month e.g. during 1st April to 30th April, shall be considered to have been filed simultaneously. This window of a calendar month shall keep rolling over i.e. after the expiry of a monthly window, another window of the duration of the next calendar month shall commence.
- 10.6 Based on system studies conducted in consultation with other agencies involved including other Licensees, if it is determined that Long-Term open access sought can be allowed without further system-strengthening, the Nodal Agency shall, within 30 days of closure of a window, intimate the applicant(s) of the same.
- 10.7 If, on the basis of the results of system studies, the Nodal Agency is of the opinion that the Long-Term open access sought cannot be allowed without further system- strengthening, the Nodal Agency shall notify the applicant of the same within 30 days of closure of a window. Thereafter, at the request of the applicant, which shall be made within 15 days of such notification by the Nodal Agency, the Nodal Agency shall carry out further studies, if required, to identify the scope of works involved and intimate the same to applicant within 30 days of receipt of such request from the applicant. The Nodal Agency shall also inform the applicant of the probable time frame for execution of the works involved after consultation with the concerned licensee(s).

Provided that in such cases, the applicant shall fully reimburse the Nodal Agency for actual expenditure incurred to carry out such system studies to identify the scope of works involved in system-strengthening. The fee, as prescribed in clause 10.2, paid by the applicant shall be adjusted against the actual expenditure to be reimbursed by the applicant:

Provided further that while identifying the scope of works for such systemstrengthening, the Nodal Agency shall follow the standards required under the Grid Code and / or Distribution Code and / or CEA Standards , as the case may be.

### 11. Procedure of application for Short-Term open access

11.1 The SLDC shall make available the format of application similar to the one referred to the clause 10.1 above, to the general public in physical form at its office and in electronic printable form at its website.

11.2 The application for short-term open access to Transmission and / or Distribution system(s) shall be filed with, the SLDC with copies to concerned licensees. The application shall be accompanied by a non-refundable processing fee as prescribed by the Commission in the Tariff Orders, or otherwise, from time to time:

Provided that till such time the processing fee is so prescribed by the Commission, it shall be Rs.1,000.

Provided that the Green Energy open Access consumers shall file the application for grant of open access and the application will be processed in accordance with clause 12 of this Discussion paper.

11.3 The SLDC shall process the applications for Short-Term open access within the following time limits:

Duration for which open access is 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

# 12. Procedure for grant of Green Energy Open Access:

**12.1** The GEOA applicant shall submit an application complete in all respects, in the format as notified by Central Nodal Agency, on the central portal setup by the Central Nodal Agency.

12.2 The application shall be forwarded to the concerned State Nodal Agency by Central Nodal Agency for further verification. The following schedule shall be followed for processing the application:

SI. No	Particulars	Time-line	Remarks
1	Date of receipt of application by SNA from CNA	Zero date	
2	Acknowledgeme nt of receipt of application	Zero date	The acknowledgement shall be provided immediately by electronic mode
3	Acceptance of application by SNA after confirming that	Within three working days from zero date	In case application is incomplete, the SNA shall inform the same in writing rejecting the application and furnishing the details of the defects.

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	all the relevant documents are furnished by the applicant including processing fee and BG		After rectifying the defects, a fresh application shall be made.
4	Forwarding of application to TSTRANSCO/ Discoms	Within five working days from zero date	On acceptance of the application, the same shall be forwarded to TSTRANSCO/Concerned Discoms for ensuring system availability and that there is no subsisting PPA for the capacity for which the OA is sought.
6	Concurrence from TSTRANSCO/ Discoms	Within ten working days from zero date	In case system strengthening is required, the probable date of granting OA shall be intimated to SNA within the same time. In case concurrence is not received within the specified time, SNA shall consider it to be deemed concurrence. Provided that the system studies at the drawl point to ascertain the availability is not required for a consumer of the Licensee availing open access , subject to the applicant furnishing the undertaking that, he would not exceed the Contracted demand specified in his supply agreement with the licensee even after opting for Open access. The SNA shall intimate the applicant, grant of open access within the time specified. In case open access is not granted, the same shall be intimated within the above time furnishing the reasons in writing and also the probable date from which the OA can be granted. In case SNA fails to intimate the grant of OA or otherwise, within the above specified time, the same
7	Submission of agreement by the applicant for	Within twenty working days from zero date	<ul> <li>shall be deemed to have been granted, which is subject to system availability.</li> <li>The applicant shall submit copies of signed agreement to the SNA/parties to the agreement in the</li> </ul>

	long-term open access		standard format approved by Commission. In case the applicant fails to submit OA agreement within the specified time
8	Submission of signed copies of agreement by TSTRANSCO/ Concerned Discoms	Within twenty- five working days from zero date	In case TSTRANSCO/Discoms fails to submit the copies to the SNA within the specified time, the OA agreement is deemed to have been approved.
9	Effective date of wheeling	In case SNA receives the copy of the agreement signed by the applicant, the effective date of commencement of operation of wheeling of electricity by the applicant shall be the next date from the date of submission of signed copy of the agreement to the SNA. Provided that the above effective date for commencement of wheeling operation shall also be applicable for banking in case of solar, wind and mini-hydel plants	The applicant is allowed to wheel the energy from the effective date.

- 12.3 The SNA shall ensure that non-refundable processing fee of five thousand rupees for long-term open access and one thousand rupees for short-term open access is paid by the applicant and shall intimate the same through electronic mode of communication, immediately after receipt of application form from Central Agency. The applicant shall pay the processing fee within one working day.
- 12.4 An application for a short-term GEOA, for power plant(s) or its/their generating unit(s) which are yet to be commissioned, shall be made not before two months prior to the commissioning date of such power plant(s) or it's/their generating unit(s), to avoid unnecessary blocking of corridor.
- 12.5 An application for long-term GEOA shall be accompanied by a Bank Guarantee (BG) of Five thousand rupees per MW, which shall be kept valid and subsisting till the signing of agreement for wheeling of electricity and such BG shall be encashed by Nodal Agency, if the application is withdrawn by the applicant prior to the signing of such agreement. On signing of the agreement for wheeling of electricity, the BG shall be returned immediately to the applicant by the State

Nodal Agency. The BG shall be submitted within three working days from the date of intimation by the SNA.

- 12.6 in case there is any material change with regard to the location of the injection point or quantum of power to be interchanged (by more than ten percent) using intra-state transmission and/or distribution system, a fresh application shall be made for the entire capacity to ascertain the system availability and such application shall be accompanied by relevant documents, application fee and in case of long-term open access with required bank guarantee for additional capacity and in case the additional capacity sought for cannot be accommodated in the existing network, the applicant is entitled for open access to the extent of his original allotment.
- 12.7 Where any application is rejected for any deficiency or defect, the processing fees and Bank Guarantee, if submitted, shall be returned to the applicant and in such cases a fresh application to the Central Nodal Portal shall be made by the applicant after curing the deficiency or defect.
- 12.8 The SNA shall communicate to the applicant through a recognized mode of communication, the grant of open access or otherwise.
- 12.9 Further, during the pendency of application for grant of GEOA, the applicant shall not inject any energy to the Licensee's network and the licensee shall not be liable to pay any charges for the energy injected during such period.
- 12.10 Any energy injected into the licensee's network from the date of grant of open access till the date of submission of agreement for wheeling, the applicant is entitled for payment of energy charges at Average Pooled Power Purchase Cost (APPC) rate or 75% of the generic tariff determined by the Commission for the relevant year for the relevant RE source, whichever is lower.
- 12.11 The person seeking open access shall execute the agreement for wheeling of electricity within the time specified above, failing which the open access granted or deemed to have been granted shall stand cancelled.
- 12.12 The transmission licensee(s), distribution licensee(s) and SLDC shall ensure proper co-ordination while arranging for open access.
- 12.13 New generating plant(s) or generating unit(s) seeking long-term open access and entering agreement into for wheeling, shall commission such Plant(s) or unit(s) within twelve months from the effective date, failing which the open access granted shall be deemed to have been cancelled, to avoid unnecessary blocking of corridor.
- 12.14 An open access consumer shall enter into commercial agreements with the generators, traders and others as applicable, and such agreements shall include provisions pertaining to payment security mechanism.
- 12.15 The SNA shall host on its website the details of every application received from Central Nodal Agency and the status of such application on a continuous basis, which shall be made available to the public.

12.16 Provided further that the SNA shall prepare formats in line with the procedure followed by Central Nodal Agency, for smooth implementation of GEOA in the State.

# **13 Procedure for applying for Day ahead GEOA transactions:**

- 13.1 The applicant shall apply to the Central Portal for the Day ahead GEOA transactions in the standard format.
- 13.2 For the applications received by the SNA from the Central Nodal Agency before 13.00 hrs of the day immediately preceding the day of scheduling for the Day ahead GEOA transaction, the SNA shall check for congestion in the system and convey grant of approval or otherwise to the applicant through e-mail not later than 15.00 hrs of the day immediately preceding the day of scheduling for day ahead transaction, after ensuing that there is no subsisting PPA for the capacity sought under open access.
- 13.3 Non-refundable fee of One thousand rupees for each transaction shall be paid by the applicant, in cash or by way of demand draft or proof of payment through electronic transfer in favour of the SNA.

Provided that the actual operationalisation of open access shall be effected subject to payment by the applicant of the charges as specified in this Discussion paper and orders passed by Commission from time to time, before 17.00 hrs of the day immediately preceding the day of scheduling for the day ahead transaction.

13.4 When open access is denied, the SNA shall furnish reasons thereof to the applicant.

### 14. Open Access Agreement

- 14.1 Based on the intimation by the Nodal Agency to the open access applicant, the applicant shall execute an open access agreement with the concerned Licensee(s), which shall broadly set out the information as given in Annexure-2 to this Discussion paper. The Licensees shall draft a standard open access agreement format and get the same approved by the Commission within 30 days of coming into effect of this Discussion paper.
- 14.2. The open access agreement referred to in clause 14.1 shall be bipartite, tripartite or multi-partite involving the applicant, the concerned Distribution Licensee in whose area of supply the applicant's exit point is located and the concerned Transmission Licensee or Licensees. The Open Access Agreement shall clearly bring out the rights and obligations of all parties which are broadly set out in Annexure 3 with respect to exit points on transmission and distribution systems separately:

Provided that in cases where the open access applicant's point(s) of entry as well as the point(s) of exit are located within the distribution system of the same Distribution Licensee (at voltages 33KV and below), the applicant shall be

required to execute an open access agreement only with such Distribution Licensee.

14.3 Subject to the capacity being available, the Licensee(s) shall, after the applicant for long-term open access has completed all the pre-requisite formalities, including the execution of open access agreement, make arrangements to provide access to the applicant within the time period specified in the (Licensees' Duty for Supply of Electricity on Request) Regulation, 2004 (No. 3 of 2004):

Provided that in the case of short-term users, the open access shall be allowed as early as possible notwithstanding the time frame specified in the aforementioned Regulation.

14.4 Minimum term and renewal of the Open Access Agreement: The minimum term of an open access agreement is such term as the parties may agree and set out in the agreement subject to the provisions of clause 4 above. A long-term open access agreement between a long-term user and the licensee may be renewed for a further term of two years or more without the requirement of a fresh open access application, on receipt of at least three (3) months' notice from the concerned long-term user to the concerned licensee(s) and the Nodal Agency, before the expiry of the Agreement. In case, no notice is provided by the Long-Term user, the Long-Term user shall forgo his right over the allotted capacity.

In case of short-term users, however, no extension of the original open access agreement shall be allowed, and a user wanting extension shall have to apply afresh to the Nodal Agency for open access.

# 15. Metering

15.1 All Long-Term and Short-Term open access users shall provide special energy meters capable of measuring active energy, reactive energy, average frequency and Demand integration in each 15-minute time block, with a built-in calendar and clock and conforming to BIS/CBIP Technical Report / IEC standards at all entry and exit points. This shall however be subject to the regulations to be made by the Central Electricity Authority under section 55 of the Act.

# 16. Procedure for determining the available capacity of transmission and distribution (T&D) networks

16.1 The licensees shall carry out load flow studies, system impact studies, etc. taking into account the existing capacity commitments and future projections of capacity requirements for open access users, load growth as projected by distribution licensees, growth of generation, network topology and consumption pattern, network investments, Repairs and Maintenance programs, etc. to determine the capacity available to accommodate open access transactions. While so determining the capacity available for open access transactions, capacity commitments to all existing users of the network and the system reliability margin shall be deducted.

- 16.2 The Licensees shall keep updating the data on available capacity, taking into account the contracts with open access users, the impact of such transactions on the capacity of system elements, the increase/decrease in native load, changes in consumption pattern, network strengthening programs actually carried out and those projected, etc.
- 16.3 In order to decide the availability of sufficient spare capacity in the T&D networks so as to permit an open access transaction applied for, the Nodal Agency may also carry out load flow studies to simulate the impact of power flows associated with such open access transaction on the network and thus determine whether capacity is available to permit such open access transaction (in conformity with technical standards according to Grid Code and / or Distribution Code and / or Indian Electricity Rules, as the case may be) or there is a need to carry out system-strengthening works to ensure availability of sufficient capacity. The Nodal Agency may have to carry out this exercise on a case-to-case basis as and when an open access application is received.
- 16.4 The licensees shall carry out information exchange among themselves and keep one another and the Nodal Agency informed of the transactions on their respective networks.
- 16.5 The Nodal Agencies and Transmission / Distribution Licensees shall post details of available capacity on their respective websites, including the details of open access transactions permitted on different Licensees' networks with their respective entry and exit points, etc. on a daily basis

# 17. Underutilization

- 17.1 In the event a user expects to underutilize the capacity contracted under open access, the user may surrender a part of the capacity subject, however, to an advance notice as set out in the terms of the open access agreement, along with an explanation for such underutilization.
- 17.2 In the event of underutilization of the capacity contracted by the open access user, which, if made available, could be used to meet requirements of other applicant(s), the concerned licensee may file an application with the Nodal Agency to reduce or cancel the capacity allocated to the open access user:

Provided that the Licensee shall not so approach the Nodal Agency without first issuing a notice to the concerned user as set out in the open access agreement:

Provided further that the Nodal Agency shall not reduce or cancel the capacity allotted without giving a notice of at least 15 days, in advance, to enable the concerned open access user to file his objections if any in writing.

17.3 In the event of user's surrender of whole or part of contracted capacity as per clause 17.1, or reduction/cancellation of the capacity allotted to the user as per clause 17.2, the user shall pay compensatory charges to the licensees concerned as follows:

(a) An amount equivalent to 50% of current application fee for Long-Term or Short-Term users, as the case may be, if all the capacity surrendered or reduced/cancelled is fully re-allotted to other applicants within the notice period so given by the user or the licensee, as the case may be.

(b) If the capacity surrendered or reduced/cancelled could not be fully reallotted to other applicants within the notice period, then –

(i) In case of Long-Term users, the user shall, as a one-time exit fee, pay 25% of the transmission charges and / or wheeling charges as the case may be, and the scheduling and system operation charges in force at that point in time, applied on the capacity that could not be re-allotted for the remaining term of the agreement; and

(ii) In case of Short-Term users, the user shall bear the full transmission charges and / or wheeling charges, as the case may be, and the scheduling and system operation charges in force at that point in time, applied on the capacity that could not be re-allotted for the remaining term of the agreement.

### 18. Flexibility to change entry and exit points

- 18.1 The Long-Term users shall have the flexibility to change entry and/or exit points twice a year subject to the results of system impact studies to be carried out by the concerned Licensees at the behest of such users. All expenses incurred by the Licensees to carry out such studies shall be reimbursed in full by such users.
- 18.2 A Short-Term user availing of open access for one full year may also change entry and/or exit points twice, subject to feasibility.

### 19. Open Access charges

- 19.1 The charges for the use of the transmission and / or distribution system by an open access user shall be regulated as under:
  - (i) Open Access users connected to the transmission/distribution system shall pay the transmission charges and / or wheeling charges and any other applicable charges as determined by the Commission from time to time, and notified in the relevant Tariff Order or otherwise, and as per the conditions stipulated therein:

Provided that the wheeling charges so payable shall be subject to a minimum level, as fixed by the Commission in the relevant Tariff Order or otherwise.

- (ii) In case of utilization of inter-state transmission system in addition to the intrastate transmission system and/or distribution system by an open access user, the transmission charges and / or wheeling charges shall be payable for the use of intra-state system in addition to the charges for utilization of the interstate transmission system
- (iii) The Open access users of the Transmission and / or Distribution System where such open access is for delivery of electricity to the consumer's premises in the

area of supply of a distribution licensee, shall pay to the distribution licensee the (cross-subsidy) surcharge as determined by the Commission from time to time under Section 42 (2) of the Act :

Provided that the cross subsidy surcharge for Green Energy Open Access Consumer purchasing green energy, from a generating plant using renewable energy sources, shall not be increased, during twelve years from the date of operating of the generating plant using renewable energy sources, by more than fifty percent of the surcharge fixed for the year in which open access is granted;

Provided also that in case within the 12 years as mentioned in the first proviso, the Green Energy Open Access Consumer shifts to other Open Access source(s) of green energy other than the generating plant at different tenure in continuous or intermittent phase then also the start date of open access for such facility of limitation of cross-subsidy surcharge within 50% of the first year shall remain unchanged.

Provided also that in case within the above mentioned 12 years, the power is drawn from open access sources other than green energy, such ceiling of 50% increase in cross-subsidy surcharge within next 12 years will not be applicable on such power drawal.

Provided also that cross subsidy surcharge shall not be applicable in case power produced from a Waste-to-Energy plant is supplied to the Open Access Consumer.

Provided also that Cross subsidy surcharge shall not be applicable if green energy is utilized for production of green hydrogen and green ammonia.

No surcharge shall be levied in case open access is provided to a captive user for carrying the electricity produced in a Captive Generating plant for his own use. Provided that such exemption shall be available only for captive use of electricity in compliance with the requirements of Electricity Rules, 2005.

(iv) 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;

Provided that Green Energy Open Access consumer, in addition to transmission, wheeling charges and cross subsidy surcharge, shall pay additional surcharge as determined by Commission from time to time on the actual energy drawn during the month through open access:

Provided also that additional surcharge shall not be applicable in case power produced from a Waste-to-Energy plant is supplied to the Open Access Consumer.

Provided also that additional surcharge shall not be applicable if green energy is utilized for production of green hydrogen and green ammonia.

(v) Where an electrical plant or electrical line is to be constructed by the Licensee in order to extend power supply to an open access user, the Licensee may

recover such expenditure as per the (Licensee's Duty for Supply of Electricity on Request) Regulation, 2004(Regulation No.3 of 2004)

(vi) If network augmentation is required for providing access to an applicant, the Licensee shall carry out such augmentation only if (a) the Licensee can recover within a reasonable time the costs, the capital investment and a reasonable rate of return on the capital investment in respect of the augmentation, and (b) the Licensee has the ability to raise funds to finance such capital expenditure:

Provided that the Licensee may require the open access user to make a capital contribution towards such network augmentation.

- (vii) Scheduling and system operation charges shall be payable by all open access users under scheduling by SLDC. Such charges shall be governed by the relevant Regulations issued by the Commission.
- (viii) The standby charges, wherever applicable, shall be specified by the State Commission and such charges shall not be applicable if the Green Energy Open Access Consumers have given notice, in advance at least twenty four hours before the time of delivery of power, for standby arrangement to the distribution licensee:

Provided that the applicable standby charges shall not be more than Ten per cent of the energy charges applicable to consumer tariff category.

Explanation: For the purposes of this Discussion paper,

(a) The expression —standby chargesII means the charges applicable to open access consumers against the standby arrangement provided by the distribution licensee, in case the open access consumer is unable to procure power from the generating sources with whom they have the agreements to procure power due to outages of generator, transmission assets and the like.
(b) It is hereby clarified that in such situations the open access consumer has to take power from an alternate sources like the distribution licensee and the charges for maintaining standby arrangements for such consumers should be reflective of the costs incurred by distribution licensee for providing these support services.

# 20. Payment terms and conditions

20.1 In case of Long-Term users, the concerned Distribution Licensee may invoice a user in respect of the open access charges as set out in clause 19 of this Discussion paper and the open access user must pay those charges, in accordance with the procedures set out in the open access agreement between the Licensees and the user:

Provided that the Distribution Licensee shall have appropriate back-to-back arrangements in place with the Transmission Licensee(s) in order to pass on the transmission charges so collected from the user to the concerned Transmission Licensee.

- 20.2 In case of short-term users, the Distribution Licensee(s) may invoice the user and the user shall pay the charges to the concerned Licensee(s) directly. The SLDC shall assist / advise the Distribution Licensee in the matter of energy accounting and allocation.
- 20.3 All open access users shall pay the charges payable under the open access agreement from the date of commencement of open access specified in the open access agreement, regardless of whether or not such open access is used on and from that date, except if the failure to use such open access is due to the default of the concerned licensee(s) whose networks are being used.
- 20.4 In case of underutilization leading to surrender or cancellation of contracted capacity, the user shall pay such charges and in such manner as set out in clause 17 above.
- 20.5 Meter readings and Billing in respect of open access for supply to consumers:

The Distribution Licensee in whose area the consumer is located shall take the meter readings at the exit point. The billing shall be done by the respective Licensees as per the open access agreement under clause 14 read with the provisions of clauses 19 and 22 of this Discussion paper.

20.6 For the purpose of clause 20.5 above, a consumer using the Transmission and /or Distribution systems for his total power requirements without any contracted maximum demand (CMD) from the Distribution licensee shall be deemed to be a consumer of the distribution licensee in whose area the consumer is located.

# 21. Other matters

- 21.1 **Coordination among licensees and SLDC:** For the success of open access implementation, the licensees and the State Load Dispatch Centre shall carry out information exchange among themselves on a daily basis to determine the level of open access transactions in their respective areas of supply, energy flows, loading of transmission and distribution lines and equipment to determine system stability, available capacity, congestions in the networks, etc.
- 21.2 **Information requirements:** The licensees and the State Load Dispatch Centre shall maintain the following information on their websites in order to ensure transparency and carry out information exchange among themselves required to process open access applications:

(i) Transmission and / or wheeling charges, as the case may be, for open access users located within the State; and

(ii) A status report on the current long-term users indicating name of user, period of the access granted (start date and end date), point(s) of injection and point(s) of drawal, capacity contracted and applicable charges. This report shall be updated as and when the status changes; and

(iii) Information regarding usage of the inter-regional links as well as interface between the Central Transmission Utility and State systems and inter-state links indicating time of updating, name of the link, total transmission capacity of the link, scheduled capacity use and current capacity of the link in use. This information shall be updated at least on hourly basis and wherever feasible on 15-minute basis.

- 21.3 **Quality of supply:** The licensee(s) shall ensure compliance with Grid Code wherever applicable. The Distribution Licesees shall also comply with the quality of supply standards as prescribed under the Telangana State Electricity Regulatory Commission (Licensees' Standards of Performance) Regulation, 2016 (Regulation No.5 of 2016) in respect of all open access users of its network.
- 21.4 **Energy and Demand Balancing:** All open access users, and the users covered under clause 7.2, shall make reasonable endeavour to ensure that their actual demand or actual sent-out capacity, as the case may be, at an interconnection does not exceed the Contracted Maximum Demand or allocated sent-out capacity for that inter-connection:

Provided that for carrying out balancing and settlement of energy and demand at all entry and exit points relating to open access agreements, the licensee shall strictly adhere to the Clauses in Part-B of this Discussion paper.

21.5 **Curtailment due to constraints**: The licensee, based on directions from SLDC, may curtail power to any open access user or users, whether long-term or short-term, in an event of emergency threatening grid security and stability. As far as practicable, the priority in curtailment shall be as prescribed hereunder:

(a) Short-term open access users of the network shall be curtailed in the first step, followed by

(b) All other consumers including long-term access users, but excluding distribution licensees, in ascending order of contract period, followed by

(c) Distribution licensees.

# 22. General Terms and Conditions of Supply

With regard to matters not contained herein, including but not limited to the following, and wherever the context so requires, the conditions set forth in the General Terms and Conditions of Supply shall generally be applicable:

- (a) Voltage of supply vis-à-vis total Contracted Demand;
- (b) Security Deposit;
- (c) Disconnection for non-payment of charges;
- (d) Title Transfer to successor entity; and
- (e) Levy and collection of Customer Charges

### PART-B

### **BALANCING & SETTLEMENT CODE**

### 23. SCHEDULING

23.1 Each Open Access Generator, Scheduled Consumer and OA Consumer shall provide a Wheeling Schedule in the format as at Appendix– 1(a), to the SLDC/DISCOM for each fifteen (15) minute time block for a day, on a day-ahead basis by 10:00 a.m. on the day preceding the commencement of the first time block for which the wheeling of energy is scheduled, with a copy each to the State Transmission Utility (TSTRANSCO) and the concerned DISCOM;

Provided that all Open Access Generators except Solar & Wind Generators, Scheduled Consumer and OA Consumer shall provide the Wheeling Schedule in accordance with the TSERC (Deviation Settlement Mechanism and Related Matters) Regulation, 2021 and Wind & Solar Generators shall provide the Wheeling Schedule in accordance with TSERC (Forecasting, Scheduling, Deviation Settlement and Related Matters) Regulation, 2018.

Provided that an Open Access Generator, Scheduled Consumer and OA Consumer requiring to wheel electricity from more than one generating station with the interface points located at different locations (with separate metering at each entry point) shall provide separate wheeling schedule for the entry point(s) of each generating station :

Provided also that the Solar & Wind -based or Mini-hydel Open Access Generators of contracted capacity up to 5 MW shall not be required to provide a day-ahead wheeling schedule and the actual electricity injected by them shall be deemed to be the scheduled energy.

- 23.2 The OA generators scheduling their supply to more than one scheduled/OA consumer or the scheduled/OA consumer receiving supply from more than one OA generator shall communicate to the SLDC/DISCOM (along with the day-ahead schedule) the inter-se order of allocation of the actual generation among the Schedule/OA consumers or the inter-se order of allocation of the actual consumption among the OA generators as the case may be. Such communication of inter-se order of allocation/consumption to the SLDC/DISCOM shall be deemed to have been done with prior consent of all the parties involved and binding on all the OA generators, Scheduled consumers and OA consumers.
- 23.3 In the event of failure to submit the wheeling schedule in accordance with clause 23.1, the latest wheeling schedule available with the SLDC/DISCOM shall be treated as the effective wheeling schedule.
- 23.4 SLDC shall communicate the final day-ahead schedule to the respective parties along with inter-se order of allocation of consumption/generation capacities wherever applicable as per the time-frame setout in the State Grid Code and the same shall be binding on all parties.

# 24. ALLOCATION OF CAPACITY BY OA GENERATORS

- 24.1 The sum total of the capacity allocations by an OA Generator for any time block to all the Scheduled Consumers and OA Consumers shall not exceed the available capacity from his generating plant being not higher than the installed capacity or contracted Open Access capacity, whichever is lower.
- 24.2 The OA Generator shall also indicate the allocated capacity in kW at the exit point(s) for each consumer in the Format at Appendix 1 (a) using the loss levels as specified in the applicable Tariff Order of the Commission. The energy account of the billing month shall be finalized based on the transmission and distribution losses specified by the Commission in the applicable Tariff Order.
- 24.3 The SLDC/DISCOM shall verify the capacity allocated at the Exit point(s) and correct it in case of discrepancy, if any. The computations of SLDC shall be final and binding on all.

# 25. REVISION OF WHEELING SCHEDULE

25.1 In case of any system constraint, the SLDC/DISCOM may modify the schedules of Open Access Generators, Scheduled Consumers and/or the OA Consumers, as the case may be, at any time in accordance with this Discussion paper and the Grid Code Regulation, which shall be conveyed to them. Compliance with the instructions of SLDC shall not be reckoned as a deviation by the concerned Generator/Consumer from the schedule. The Open Access Generator, Scheduled Consumer or OA Consumer, shall not, however, be entitled to revise a wheeling schedule during the course of a day.

# 26. METER READING, ENERGY ACCOUNTING AND SETTLEMENT

- 26.1 SLDC shall undertake the accounting of energy for each time block on monthly basis with the assistance of the Energy Billing Centre (EBC) of the State Transmission Utility (STU) in respect of the Open Access Generators, Scheduled Consumers and the OA Consumers who are connected to the transmission system, In respect of the Open Access Generators, Scheduled Consumers and the OA Consumers who are connected to the distribution system, it is the EBC that shall be responsible for energy accounting and settlement in co-ordination with the DISCOMs.
- 26.2 Such Account shall be examined and signed by a Committee comprising the STU, DISCOMs and Generators:

Provided that in the case of Generators, only one representative, as approved by the Commission, from each class of Generators mentioned below shall be represented on the Committee:

- Central Generating Stations (CGS)
- TSGENCO
- Independent Power Producers (IPPs)

• Non-conventional Energy (NCE) Developers (Biomass, Mini-hydel, Hydro, Solar, Wind, etc.)

- Captive Power Plants (CPPs)
- 26.3 The monthly meter readings shall be taken by the respective DISCOM at all the entry points at 33 kV and below and at all the exit point(s) of the Open Access Generators located in its licensed area, as identified in the wheeling schedules. Where, however, the entry point is connected to the Transmission system, such monthly readings shall be taken by the Transmission Licensee:

Provided that the readings for each time block shall be retrieved through a Meter Reading Instrument (MRI) or otherwise by the respective Licensees mentioned above once in a week and shall be transmitted to the SLDC. The meter readings as and when taken shall also to be made available to the Open Access Generator/Consumer in whose premises the readings are taken, or to his representative, if available.

In case of failure of metering equipment or non-availability of MRI data, a suitable methodology as approved by the Commission may be employed for finalising the energy account.

26.4 The SLDC shall finalize the energy account of the Open Access transactions of a billing month with the assistance of EBC and arrive at the deviations for each time block and the consequent adjustments integrated over the month in respect of all Open Access Generators, Scheduled Consumers and the OA Consumers in accordance with the procedure specified herein.

# 27. SETTLEMENT OF ENERGY/DEMAND AT EXIT POINT IN RESPECT OF SCHEDULED CONSUMER

- 27.1 The Scheduled energy (in kWh) at exit point shall be calculated for each time block from the scheduled capacity (kW) at the Exit point, as provided in the wheeling schedule, by multiplying it with the period of time block in hours.
- 27.2 The Scheduled demand at exit point shall be calculated by dividing the scheduled capacity (kW) at exit point by the power factor for the time block, for which purpose the Power factor shall be equal to the recorded kWh divided by kVAh.
- 27.4 The Scheduled energy of a Scheduled Consumer from an OA Generator for each time-block shall be deducted from the recorded energy (in the inter-se order of such Generators, as and if intimated by the consumer, in case the consumer is availing of energy from more than one Generator) as a first charge. The balance energy shall be deemed to have been supplied by the DISCOM and shall have to be paid for as per the terms of the supply agreement with the DISCOM:

Provided that where there is a deviation between the scheduled capacity and actual capacity being injected at an Entry point in a time block, the shortfall, if any, in the capacity allocated to the Scheduled Consumer shall be deemed to have been drawn by the Scheduled Consumer from the DISCOM and the energy corresponding to such shortfall shall be paid for by the party which has contracted

for the Open Access capacity with the Licensee to the DISCOM as per the energy tariff applicable for the same consumer category of DISCOM under which the Scheduled Consumer would normally fall.

27.5 The Scheduled demand at Exit point or the actual demand made available to a consumer from each OA Generator at that Exit point in a time-block whichever is less, shall be deducted from the recorded demand (in the inter-se order of such Generators, as confirmed by the SLDC while finalising the day-ahead schedule, in case the consumer is availing of energy from more than one Generator). The balance demand for each time-block shall be deemed to have been consumed from the DISCOM and shall be paid for as per the terms of the supply agreement with the DISCOM.

# 28 SETTLEMENT OF ENERGY AT EXIT POINT IN RESPECT OF OA CONSUMERS:

- 28.1 The Scheduled Energy at Exit point of an OA Consumer shall be calculated from the Scheduled capacity from an OA Generator at the Exit point for each time block as provided in clause 27.1 above.
- 28.2 In case the Open Access Consumer is receiving supply from more than one Open Access generator, the total energy and demand recorded shall be deemed to have been consumed from the respective Open Access Generators in the interse order of Generators as confirmed by the SLDC while finalizing the day-ahead schedule.
- 28.3 The excess energy recorded, if any, at the exit point for any time block with reference to scheduled energy or the actual energy available at that Exit point, whichever is less, shall be deemed to have been consumed by the Generator or the OA consumer whoever has contracted for the Open Access capacity with the Licensee, from the DISCOM and shall be paid for by the Open Access Generator/Consumer at the energy tariff applicable for the same consumer category of DISCOM to which the OA Consumer would normally belong. Such excess consumption shall also attract all penal provisions provided in the applicable Tariff Order like those in respect of Low Power Factor, voltage surcharge, etc and wherever applicable, the relevant charges shall also be paid for by the OA generator/OA consumer.
- 28.4 The Scheduled demand at Exit point or the actual demand made available to a consumer from each OA Generator at that Exit point in a time-block whichever is less, shall be deducted from the recorded demand (in the inter-se order of such Generators, as confirmed by the SLDC while finalising the day-ahead schedule, in case the consumer is availing of energy from more than one Generator). The balance demand for each time-block shall be deemed to have been consumed from the DISCOM and shall be paid at twice the demand charges applicable for the same consumer category of DISCOM to which the OA Consumer would normally belong.

# 29. SETTLEMENT FOR OA GENERATORS AT ENTRY POINT:

- 29.1 The excess drawals of energy and demand by Scheduled Consumers on account of under-generation by the Generator for each time block shall be deemed to have been drawn from the DISCOM. The energy and demand charges for such excess drawls shall be paid for by the Scheduled Consumer in accordance with the proviso to clause 27.3 and as per clause 27.4 respectively.
- 29.2. The excess drawal of energy and demand by an OA Consumer on account of under-generation by the Generator for each time block shall be deemed to have been drawn by the Generator (or Open Access Consumer whoever has contracted for Open Access Capacity) and shall be paid for by the Generator/Consumer as per the normal energy tariff and twice the demand charges applicable for the same consumer category to which the OA Consumer would normally belong.
- 29.3. The underdrawals by Scheduled Consumers and/or OA Consumers shall have impact on the Generator and on the DISCOM in whose area of supply the Exit point is located. Such underdrawals at Exit point shall be treated as inadvertent energy supplied by the Generator to the DISCOM(s) and shall not be paid for by the DISCOM;

Provided that, such under drawals shall be treated as input into Banking in accordance with clause 2.1 (d), if such energy is sourced from Renewable energy source.

- 29.4. Injection of energy by an OA Generator over and above the scheduled capacity at an Entry point shall not be accounted for. In such cases, only the scheduled capacity at exit point shall be accounted for as having been supplied by the Generator to the Scheduled Consumer or the OA Consumer, as the case may be.
- 29.5. In case of solar and wind OA generators upto 5 MW contracted capacity, the actual generation during the month shall be deemed as scheduled energy and for the purpose of settlement in respect of scheduled/OA consumer availing supply from these OA generators, the actual generation during the month will be apportioned for each time block of the month and deviations reckoned accordingly.

# **30. LEVY OF SURCHARGE AND ADDITIONAL SURCHARGE:**

Each Open Access Generator, Scheduled Consumer and OA Consumer shall, in addition to the tariff and other charges mentioned in the preceding clauses, also be required to pay, wherever applicable, the surcharge in accordance with the provisions of the Open Access Regulation as also the applicable additional surcharge, if any, under Section 42 (4) of the Act.

# 31. Banking of Renewable Energy Generation:

31.1 Banking facility shall be provided to the consumers availing Green Energy Open Access. The surplus energy of a green energy open access consumer, from a 'Green Energy' Generating Station, after own consumption in its premises, may be banked with the Distribution Licensee.

- 31.2 The banking facility including injection of surplus energy and drawal of banked energy shall be subject to scheduling
- 31.3 Banking shall be permitted on a monthly basis on collection of banking charges of 8% in kind from the energy banked by GEOA consumer.
- 31.4 The permitted quantum of banked energy by the Green Energy Open Access consumers shall be at least thirty percent of the total monthly consumption of electricity from the distribution licensee by the consumers.

Explanation: For the purposes of this rule, the expression—Banking means the surplus green energy injected in the grid and credited with the distribution licensee energy by the Green Energy Open Access consumers and that shall be drawn along with charges to compensate additional costs if any.

31.5 The Banking settlement period shall be a calendar month. There would be no "carry forward" or "deemed purchase" of un-utilised banked quantum of energy. Such un-utilised energy shall be considered as lapsed at the end of each calendar month;

Provided that, Green Energy Open Access consumer would be entitled to Renewable Energy Certificates to that extent.

Provided that the credit for energy banked during the month shall be adjusted during the same month as per the energy injected in the respective Time of Day ('TOD') slots determined by the Commission in its Orders determining the Tariffs of the Distribution Licensees;

Provided further that, the energy banked during peak TOD slots shall be permitted to draw during peak as well as off-peak TOD slot by paying the banking charges as specified in Clause 31.3 of this Discussion paper. However, the energy banked during off-peak TOD slots shall be permitted to draw during off-peak ToD slot only.

31.6 To facilitate accounting of energy for banking by a generating companies, having captive consumption and has a connection agreement only, a separate agreement to be known as "Banking Agreement", which shall contain, inter alia the terms and conditions, has to enter by the Distribution and Retail Supply licensee with such generating companies.

### **32. DISPUTE RESOLUTION**

All disputes and complaints shall be referred to the SLDC for resolution, which shall not decide a matter without first affording an opportunity to the concerned parties to represent their respective points of view. The decisions of the SLDC shall be binding on all parties.

# 33. ISSUE OF ORDERS AND PRACTICE DIRECTIONS

Subject to the provisions of the Act, the A.P Electricity Reform Act, 1998, and this Discussion paper, the Commission may, from time to time, issue orders and practice directions in regard to the implementation of this Discussion paper, the

procedure to be followed and other matters, which the Commission has been empowered to specify or direct.

# 34. POWER TO REMOVE DIFFICULTIES

In case of any difficulty in giving effect to any of the provisions of this Discussion paper, the Commission may by general or special order, issue appropriate directions to Open Access Generators, Scheduled Consumers, OA Consumers, Transmission Licensee(s), Distribution licensee(s) etc., to take suitable action, not being inconsistent with the provisions of the Act, which appear to the Commission to be necessary or expedient for the purpose of removing the difficulty.

# 35. SAVING

Nothing contained in this Discussion paper shall affect the rights and privileges of the Consumers under any other law for the time being in force, including the Consumer Protection Act, 1986 (68 of 1986).

# **36. POWER TO AMEND**

The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of this Discussion paper.

# (BY ORDER OF THE COMMISSION)

### NAGARAJ NARAM

Commission Secretary [FAC]

### Annexure-1:

# Suggested contents of Open Access Application

(a)

- (i) Name and address of the applicant
- (ii) Details of applicant's installation
- (iii) Nature of wheeling i.e., whether it is for captive use or third party sale.
- (iv) Name and address of consumers to whom the power is to be wheeled
- (b) Type of open access required, whether long-term, or short-term
- (c) Capacity in KW or MW required for open access in respect of each consumer
- (c) Point(s) of Entry
- (d) Point(s) of Exit
- (e) Period for which open access is required
- (f) Details of metering arrangements at the entry points and exit points as required under the Metering Code (part of the Grid Code or the Distribution Code, as the case may be) as amended from time to time
- (g) Information whether the recipients of power are already consumers of Distribution licensee of their area. If so, furnish the Contracted Maximum Demand (CMD) of each of them with the Distribution Licensee concerned

Any other information reasonably required by the licensee / Nodal Agency.

# Annexure-2:

# Suggested essential features of Open Access Agreement

- (a) The Entry and Exit points
- (b) Allotted capacity (in kW or MW) for open access in the Transmission and / or Distribution system
- (c) The rates and charges for providing various access services, such as:
  - (i) Transmission and/or Wheeling charges as the case may be;
  - (ii) Transmission losses and / or wheeling losses to be deducted;
  - (iii) Cross-subsidy Surcharge;
  - (iv) Additional surcharge;
  - (v) SLDC charges;
  - (vi) Reactive energy charges, if applicable; and
  - (vii) Any other charges

- (d) A requirement that the applicant's equipment / installations at all times for the entire duration of the contract complies with the provisions of the Grid Code and/or the Distribution Code, as the case may be
- (e) The date of commencement of Open Access
- (f) The manner of accounting of energy and demand balancing procedures, as per the Balancing and Settlement Code to be approved by the Commission, from time to time
- (g) The billing cycle and the payment terms and conditions;
- (h) The Agreement period and its termination / deration conditions
- Other terms and conditions including powers of the Nodal Agency on surrender of capacity, premature termination of open access agreement, penalty for underutilisation of allotted capacity, etc.
- (j) Provision for renewal of open access Agreement in applicable cases

Any other information as considered reasonable by the Licensee.

# Annexure – 3:

# Duties, rights and obligations of parties, inter-alia, in case of Tripartite Open Access Agreements referred to in clause 14.2 of the Regulation

# Exit Points location on 132 KV and above (Transmission System):

- (a) Concerned Transmission Licensee's obligation to provide transmission capacity – User's right on transmission capacity contracted :
- (b) Duties of Distribution Licensee of that area of supply where such exit point is located for meter reading and billing (for transmission charges, surcharges, outof-balance payments, etc.);
- (c) User's duty to pay the charges, as billed for ; and
- (d) Distribution Licensee's obligation to pass on the transmission charges so collected from the user to the concerned Transmission Licensee.

### Exit Points location on 33 KV and below (Distribution System):

- (a) Concerned Transmission Licensee's obligation to provide Transmission capacity User's right on Transmission capacity contracted;
- (b) Concerned Distribution Licensee's obligation to provide Distribution system capacity –User's right on Distribution capacity contracted;
- (c) Distribution Licensee's duties for meter reading and billing (for Transmission charges, Wheeling charges, applicable surcharges, out-of-balance payments, etc.);
- (d) User's duty to pay for charges as billed for ; and
- (e) Distribution Licensee's obligation to pass on the transmission charges collected from the user to the concerned Transmission Licensee

# APPENDIX – 1 (a)

Format for the Day-ahead Wheeling Schedule for each 15-minute time block of the day

Date:

Name of the Generator:

Address of the Generating Station:

Declared capacity for the day:

Time block	Available Capacity

Entry point voltage:

DISCOM	Name of the consumer	Voltage level of Exit point	Time Blocks	Allocated capacity at Entry point kW	Net capacity at Exit point kW

	r	r	r	

Any other information to be provided:

# Signature of the OA Generator

# /Scheduled Consumer/OA Consumer

Note: An example each for computation of Net capacity at Exit point is given in Appendix – 1(b) and examples for Settlement are given in Appendix - 2

# APPENDIX – 1 (b)

# Computation of Net capacity at the Exit point

Date:

Name of the Generator: Z in SPDCL

Entry point voltage: 132 kV

Declared capacity for the day:

Time block	Available Capacity

DISCOM	Name of the consumer	Voltage level of Exit point	Time Blocks	Allocated capacity at Entry point kW	Net capacity at Exit point kW
TSNPDCL	1. Sch. Consr.	11 kV	1 to 96	1,000	904.47
	2. Sch. Consr.	132 kV	1 to 96	2,000	1948.60
	3. OA Consr.	33kV	1 to 96	1,000	940.20
Total for TSNPDCL					
TSSPDCL	SSPDCL 1. Sch. Consr.		1 to 96	1,000	900.25
	2. Sch. Consr.	33kV	1 to 96	3,000	2817.10
	3. OA Consr.	132 kV	1 to 96	5,000	4871.5

Total for TSSPDCL			
Grand Total		13,000	12382.11

N.B.: In the Table above, the following loss levels have been taken into consideration for FY 2022-23, sourced from the Commission's MYT Wheeling and Transmission Tariff Order for 4<sup>th</sup> Control Period. The loss levels of corresponding FY as per the Tariff Order of the Commission for the relevant year should be taken for computation of the net capacity at exit point.

### Transmission losses: 2.57%

Voltage	TSSPDCL in %	TSNPDCL in %
33 kV	3.62	3.50
11 kV	4.13	3.80
LT	4.80	4.80

# Distribution loss upto voltage level of the exit point:

# APPENDIX – 2

# (A). Where Generator is Generating at the level of Scheduled Capacity in kW:

DISCOM	Consum er	Sch. Cap at Exit Point	Recorded consumpti on	Account able to Generato r	Accountab le to DISCOM	Deviatio n at Exit point
NPDCL	1. Sch.	004 47	1000	004 47	95.53	Nil
NFDCL	Consr.	904.47	1000	904.47	95.55	INII
	2. Sch.					
	Consr.	1948.60	2000	1948.60	51.4	Nil
	3. OA					
	Consr.	940.20	1200	940.20	259.80	259.80
	1. Sch.					
SPDCL	Consr.	900.25	600	600	0.00	(-)300.25
	2. Sch.					
	Consr.	2817.10	3000	2817.10	182.90	Nil
	3. OA					
	Consr.	4871.5	4000	4000	0.00	(-)871.50

# (B). Where Generator is under Generating w.r.t Scheduled Capacity:

Scheduled capacity = 13,000 kW Actual capacity = 11,000 kW

Consumer	Entry	Sch. Cap at Exit	Entry	Cap at Exit	consum	Deviation
	Point	Point	Point	Point	ption	

1. Sch. Consr.						
	1,000	904.47	846.15	765.32	1000	139.15
2. Sch. Consr.						
	2,000	1948.60	1692.31	1648.82	2000	299.78
3. OA Consr.						
	1,000	940.20	846.15	795.55	1200	344.65
4. Sch. Consr.						
	1,000	900.25	846.15	761.75	600	-161.75
5. Sch. Consr.						
	3,000	2817.10	2538.46	2383.70	3000	433.40
6. OA Consr.						
	5,000	4871.5	4230.77	4122.04	4000	-122.04