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**PUBLIC NOTICE**

**Sub: Inviting suggestion/opinions on the draft Odisha Electricity Regulatory Commission (Promotion of Renewable Energy through Green Energy Open Access) Regulations, 2023.**

The Commission has framed the draft OERC (Promotion of Renewable Energy through Green Energy Open Access) Regulations, 2023 in accordance with Section 181 read with Section 42, 61 & 86 of the Electricity Act, 2003. The proposed draft Regulations, 2023 is available in the website of the Commission [www.orierc.org](http://www.orierc.org). Notice is hereby given under Section 181(3) of the Electricity Act, 2003 inviting suggestion and objection from the interested persons/ institutions/ associations/ consumers and other stakeholders. The objections and suggestions shall reach the undersigned **by 28<sup>th</sup> August, 2023**. After considering such objections/suggestion, the Commission may bring about modification, if necessary, in the draft regulation for final publication.

By order of the Commission

Sd/-

**SECRETARY**

**ODISHA ELECTRICITY REGULATORY COMMISSION  
BIDYUT NIYAMAK BHAWAN  
PLOT NO 4, CHUNOKOLI, SHAILASHREE VIHAR,  
BHUBANESWAR - 751021**

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**NOTIFICATION**

**The \_\_\_\_\_ August, 2023**

**No. DIR (T)-419/2023/.....** - In exercise of the powers conferred under section 181, of the Electricity Act, 2003 (36 of 2003), read with section 42, section 61 and section 86 thereof and all other powers enabling it in this behalf, and after previous publication, the Odisha State Electricity Regulatory Commission hereby makes the following Regulations, namely:

**CHAPTER 1**

**PRELIMINARY**

**1. Short Title, Extent and Commencement**

- a) These regulations shall be called the Odisha Electricity Regulatory Commission (Promotion of Renewable Energy through Green Energy Open Access) Regulations, 2023.
- b) These Regulations will come into force from the date of their notification in the Official Gazette.
- c) These Regulations shall extend to the whole of the State of Odisha.
- d) These Regulations shall be applicable exclusively for availing renewable energy through open access by Intra-State consumers notwithstanding anything mentioned in OERC (Terms and Conditions of Intra-State Open Access) Regulations, 2020.

**2. Objective**

The objective of these regulations is to Promote Green Energy through Open Access and allowing Banking of the same.

### 3. Definitions

(1) In these regulations, unless the context otherwise requires,

- a) **"Act"** means the Electricity Act, 2003 (36 of 2003);
- b) **"Banking"** means surplus Green Energy of a Green Energy Generator injected into or drawn by Green Energy Open Access consumer from the licensee's network and is credited with DISCOM/GRIDCO and shall be drawn later with banking charge as per this regulation.
- c) **"Banking Charge"** means charges levied upon the Green Energy Generator/Green Energy Open Access Consumer and paid to DISCOM/GRIDCO for availing banking facility as determined by the Commission under this Regulations.
- d) **"Central Commission"** means the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Act;
- e) **"Central Nodal Agency"** means a Central Agency as notified by the Central Government to set up and operate a single window Green Energy Open Access system for renewable energy.
- f) **"Commission"** means the Odisha Electricity Regulatory Commission constituted under the Act.
- g) **"Day Ahead Market (DAM)"** means a market where Day Ahead Contracts are transacted on the Power Exchange(s);
- h) **"Entity"** means any consumer who has contracted demand or sanctioned load of 100 kW or more except for captive consumer;  
Provided that in case of Captive Consumer there shall not be any load limitation;
- i) **"Fossil Fuel"** means fuels such as coal, lignite, gas, liquid fuel or combination of these as its primary source of energy, which are used in Thermal Generating Station for generating electricity;
- j) **"Green Energy"** means the electrical energy from renewable sources of energy including hydro and storage (if the storage uses renewable energy) or any other technology as may be notified by the Government of India from time to time and shall

also include any mechanism that utilises green energy to replace fossil fuels including production of Green Hydrogen (GH) or Green Ammonia (GA);

- k) **“Green Hydrogen (GH)/Green Ammonia (GA)”** means Hydrogen/Ammonia produced by way of electrolysis of water using Renewable Energy; including Renewable Energy which has been banked and the Hydrogen /Ammonia produced from Bio-mass;
- l) **“Green Open Access Consumer”** means any person who has contracted demand or sanctioned load of 100 kW or more or such other limit as may be specified by Commission from time to time, except for captive consumers, who are supplied with electricity from green energy sources for their own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving green energy with the works of a licensee, the Government or such person, as the case may be.
- m) **“GRIDCO”** means the State designated entity responsible for power purchase & bulk supply of electricity to distribution licensee and acts as demand aggregator & State Nodal agency responsible for implementation of Odisha Renewable Energy Policy-2022.
- n) **“Obligated Entity”** means entities mandated under Clause (e) of sub-section (1) of Section 86 of the Act to fulfil Renewable Purchase Obligation, which includes distribution licensee, GRIDCO, Captive user and open access consumer;
- o) **“Rules”** means the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022 and subsequent amendments;
- p) **“Standby Charges”** means the charges applicable to green energy open access consumers against the standby arrangement provided by the distribution licensee, in case such green energy open access consumer is unable to procure/schedule power from the generating sources with whom they have the agreements to procure power due to outages of Generator, transmission systems and the like;

- q) **“State Nodal Agency”** means the State Load Despatch Centre (SLDC) of Odisha for grant of green energy Intra-State open access for short term and the State Transmission Utility (STU) for grant of Green Energy Intra-State Open Access for Medium Term Open Access (MTOA) and Long Term Access (LTA);
- (2) Words and expressions used and not defined in these regulations but defined in the Act or IEGC, OERC (Terms and Conditions of Intra-State Open Access) Regulations, 2020 or any other regulation of the Appropriate Commission shall have the meaning assigned to them under the Act or the IEGC or the State Grid Code or any other regulation of the Commission as the case may be.

#### **4. Applicability**

These regulations shall be applicable for generation, purchase and consumption of Green Energy as defined under Regulation 3(1) (j) including the energy from non-fossil fuel-based Waste-to-Energy plant.

#### **5. Purchase Obligation from Renewable Sources:**

There shall be a uniform renewable purchase obligation, on all obligated entities in the area of supply / operation of a distribution licensee. Any entity, whether obligated or not, may elect to generate, purchase and consume renewable energy as per their requirements by one or more of the following methods:-

- (1) Own Generation from renewable energy sources:

There shall not be any capacity limit for installation of any renewable energy source based power plant by the entity for his own consumption and such plant may be set up at any location in India and power shall be transmitted over Inter State Transmission system (ISTS) or Intra State Transmission System (InSTS) or both using Open Access.

Provided that the generating plant may be set up by the entity itself or by a developer with which the entity has entered into a Power Purchase Agreement (PPA).

- (2) By procuring Renewable Energy through Open Access from any Developer directly or through a trading licensee or through power market(s).

**Explanation:**

- (a) Developer means the generating company who generate electrical energy from Renewable sources of energy.
  - (b) Trading Licensee means a person who has been granted a license by the Commission/Central Commission, for purchase of electricity for resale thereof.
- (3) By requisition from distribution licensee/GRIDCO:
- (a) Any consumer may elect to purchase Green Energy either upto a certain percentage of its consumption or entire consumption through open access and place requisition accordingly with respective distribution licensee/GRIDCO, which shall procure and supply such quantity of Green Energy and the consumer shall have the flexibility to give separate requisition for wind, Hydro and other renewable power;
  - (b) The consumer may purchase on a voluntary basis, more renewable energy, than he is obligated to consume and for ease of implementation, this may be in steps of twenty-five per cent (25%) and going upto hundred per cent (100%);
  - (c) The tariff for the Green Energy shall be determined separately by the Commission.
  - (d) Any requisition for procurement of Green Energy from a distribution licensee / GRIDCO shall be for a minimum period of one year;
  - (e) The quantum of Green Energy shall be pre-specified for at least one year.
  - (f) The Green Energy purchased from distribution licensee/GRIDCO or from Renewable Energy sources other than distribution licensee/GRIDCO in excess of its Renewable Purchase Obligation (RPO) of obligated entity shall be accounted for RPO compliance of the distribution licensee/GRIDCO as the case may be;
  - (g) The energy Accounting of power purchased from renewable energy source(s) shall be on a monthly basis;

- (4) By consuming green energy from captive power plant.
- (5) By purchasing of renewable energy certificates in accordance with the regulations in this regard.
- (6) Purchase of Green Hydrogen (GH) or Green Ammonia (GA): The obligated entity can also meet their RPO by purchasing GH or GA and the quantum of such GH or GA would be computed by considering the equivalence to the GH or GA produced from one MWh of electricity from the renewable energy sources or its multiple and norms in this regard as notified by the Central Commission.
- (7) Any other sources, as may be, determined by the Central Government.

**6. Green Energy Open Access:**

The application of a Green Energy consumer for Green Energy open access shall be allowed by the nodal agency within a period of fifteen (15) days.

Provided that only the consumers who have contracted demand or sanctioned load of **one hundred kW (100 kW)** and above shall be eligible to take power through Green Energy Open Access and there shall be no limit of supply of power for the captive consumers taking power under Green Energy Open Access.

Provided further that consumer shall not change the quantum of power consumed through open access within 12-time loss, may be imposed so as to avoid high variation in demand to be met by the distribution licensee / GRIDCO.

**7. Nodal Agency:**

- (1) The State Load Dispatch Centre (SLDC) shall act as the nodal agency for grant of Intra State Green Energy open access on short term basis and the State Transmission Utility (STU) shall be the nodal agency for grant of Intra State (InSTS) Green Energy Open Access for Medium and Long-Term Access. All applications of InSTS Green Energy Open Access consumers shall be submitted on the portal developed by the State Nodal Agency.
- (2) For ISTS, a Central Nodal Agency shall be notified by the Central Government to set up and operate a single window Green Energy Open Access system for renewable energy. All applications of ISTS Green Energy Open Access consumers shall be

submitted on the portal developed by the Central Nodal Agency and these applications shall be routed to SLDC or STU for grant of Green Energy Open Access.

- (3) All relevant information regarding Green Energy Open Access shall be available to the public on the portal of the Central Nodal Agency /SLDC/STU.

## **8. Procedure for grant of Green Energy Open Access:**

- (1) All the applications for the Green Energy Open Access complete in all respects as per format prescribed by Central Nodal Agency / SLDC/STU shall be submitted on the portal set up by the Central Nodal Agency /SLDC/STU as the case may be.
- (2) The concerned nodal agency shall, by an order in writing, approve the applications for the Green Energy Open Access within a period of fifteen (15) days from the receipt of application completed in all respect.

Provided that the order of processing of such applications for Green Energy Open Access shall be on first in first out basis.

- (3) The Short-Term Open Access (STOA) and Medium-Term Open Access (MTOA) shall be allowed, if sufficient spare capacity is available in the transmission system without any augmentation whereas for Long Term Access, the transmission/ distribution system may be augmented / strengthened based on Load flow study, if required:

Provided that priority shall be given to Long Term Access (LTA) in the existing system, if spare capacity is available and further open access for generation from non-fossil fuel sources shall be given priority over the generation from the fossil fuel.

**Explanation:** For the purposes of this rule, the expression - Fossil Fuel includes the fuels such as coal, lignite, gas, liquid fuel or combination of these as its primary source of energy, which are used in Thermal Generating Station for generating electricity.

- (4) No application for open access shall be denied unless the applicant has been given an opportunity of being heard in the matter and all orders denying open access shall be speaking orders.

- (5) Appeals against an order of the concerned nodal agency shall lie before the Commission, within a period of thirty days from the date of receipt of order. The Commission shall dispose the appeal within a period of three months and the order issued by the Commission, shall be binding on the parties.

**CHAPTER 2**  
**GREEN ENERGY OPEN ACCESS CHARGES**

**9. Charges to be levied for Green Energy Open Access**

The charges to be levied on Green Energy Open Access consumers shall be as follows:

- (a) Transmission charges;
- (b) Wheeling charges;
- (c) Cross subsidy Surcharge;
- (d) Standby charges wherever applicable;
- (e) Banking Charge and
- (f) Other fees and charges such as SLDC fees and scheduling charges, Deviation settlement charges as per the relevant regulations of the Commission which are not specifically mentioned in these Regulations.

**(1) Transmission Charges**

Green Energy Open Access consumer shall pay the charge for use of Intra-State Transmission System (InSTS) & Inter-State Transmission System (ISTS) as follows:

- a) **For use of ISTS:** As specified by the Central Electricity Regulatory Commission (CERC) from time to time.
- b) **For use of InSTS:** As determined by the Commission in the ARR & Tariff order for the relevant year. It shall be Rs./MW-Day for Long Term Access (LTA) and Medium Term Open Access (MTOA) whereas it shall be Rs./kWh for Short Term Open Access (STOA). For RE generation inside the State, the transmission charges & losses shall be computed Rs./kWh for long, medium and short term open access. For RE generation outside the State, the Intra-State transmission charges & losses shall be borne by Green Energy Open Access consumers as per applicable Regulations.

Provided that the concession/exemption of the transmission charges applicable for Green Energy Open Access transaction shall be as determined & approved by the Commission in the tariff order of relevant year.

**(2) Wheeling Charges**

Wheeling charges shall be determined by the Commission. For Green Energy Open Access Consumer it shall be computed in Rs/kWh and shall be charged on the actual energy wheeled. In addition to Wheeling Charge, Wheeling loss shall be applicable to consumers seeking Green Energy Open Access and it shall be determined as approved by the Commission in the Tariff order of the relevant year.

Provided that the concession/exemption of the wheeling charges applicable for Green Energy Open Access transaction as determined and approved by the Commission in the tariff Order of relevant year.

**(3) Cross Subsidy Surcharge (CSS)**

In addition to transmission and wheeling charges, Green Energy Open Access consumer shall pay Cross Subsidy Surcharge (CSS) as determined by the Commission in the Tariff order of the relevant year. Cross Subsidy Surcharge shall be payable by the green energy open access consumers on monthly basis for actual energy drawn during the month through open access. The amount of surcharge shall be paid to the distribution licensee of the area of power supply from whom the consumer was availing power supply before seeking open access. The cross subsidy surcharge shall be computed in Rs./kWh.

Provided that the Commission may fix a lower surcharge in the situation of shortages and load shedding by the distribution licensee;

Provided further that such CSS shall not be levied if the consumer is availing green power from his own captive generating plant;

Provided also that CSS and additional surcharge shall not be applicable in case power produced from a non-fossil fuel-based Waste-to-Energy plant is supplied to the Open Access Consumer;

Provided that additional surcharge shall not be applicable in case electricity produced from offshore wind projects, which are commissioned upto December 2025 and supplied to the open access consumer.

Provided further that CSS & additional surcharge shall not be applicable, if green energy is utilized for production of GH and GA.

**(4) Standby Facility and Charges**

a) In case the Green Energy Open Access consumer is unable to procure/schedule power from the generating sources with whom they have the agreements to procure power due to outages of generator / transmission systems or both, standby charges shall be applicable to Green Energy Open Access consumer as per standby arrangement provided by the respective distribution licensee / GRIDCO.

b) The Standby Charges shall not be applicable, if the Green Energy Open Access Consumers have given notice in advance, at least a day in advance before closure time of Day Ahead Market (DAM) on 'D-1' day, 'D' being the day of delivery of power, for standby arrangement to the distribution licensee.

Provided that the applicable Standby Charges for Green Energy Open Access shall not be more than 25% (i.e. 125%) of normal tariff of the respective consumer category:

c) The Standby Charges for Green Energy Open Access consumer shall be computed in Rs/kWh and it shall be charged based on the actual energy drawn by the consumer from distribution licensee during the period of standby availed by Green Energy Open Access consumer in case of outage of RE generator under Green Energy Open Access.

**(5) Banking Facility and Charges:**

The generation from Renewable Energy (RE) Sources (Solar, Wind) are variable & intermittent in nature. The surplus power generated from RE plants can be banked. The basic premise of the RE banking is to bank energy during surplus generation and utilize / draw the banked energy during lean RE period.

Banking facility shall be provided to the consumers availing Green Energy Open Access. The surplus energy from a 'Green Energy' Generating Station after setting off shall be banked with the Distribution Licensee/ GRIDCO as follows.

- a) The banking facility including injection of surplus energy and drawal of banked energy shall be subject to scheduling. The SLDC shall formulate a mechanism for scheduling of injection & drawl of energy linked to banking of RE.
- b) The quantum of energy Banked shall be limited to **30%** of the total monthly generation (within the State) or consumption of electricity from Distribution Licensee by the consumer. The energy banked from the RE generator/consumer within the State shall be limited to 200 MW for all the open access consumers of the State except the consumer consuming power for production of Green Hydrogen / Green Ammonia. The Consumer drawing renewable power from RE sources within the State or outside the State for producing Green Hydrogen and or Green Ammonia, may avail banking facility cumulatively for all the consumers in this category limited to 10% of the energy injected by their RE generators during the month or energy equivalent to 200 MW (i.e. 144 MUs) or actual injection in a month whichever is less. However, the total quantum of banking of renewable energy with GRIDCO at any point of time shall not be more than 400 MW or equivalent energy for above categories taken together.
- c) The Banking Charge for solar generation shall be @ 10% of the energy banked. The Banking Charge for wind or solar & wind hybrid generation, shall be 5% of the energy banked.

Provided that the charges for banking in respect of Renewable Energy (RE) used for producing GH/GA shall not be more than the cost differential of Average tariff of RE Purchased by GRIDCO during previous financial year and the Average Market Clearing Price (MCP) in Day Ahead Market (DAM) during the month in which the RE has been banked.

- d) The Banking of energy shall be permitted only on monthly basis as per Calendar month (i.e. banking cycle):

Provided that the credit for banked energy shall not be permitted to be carried forward to subsequent banking cycle / month and shall be adjusted during the same month / banking cycle;

Provided further that, the energy whether banked during peak / off-peak TOD slots shall be permitted to be drawn during off-peak TOD slot only by paying the banking charges as specified in this Regulation. The TOD slot shall be determined by the Commission in their tariff order from time to time.

Provided that the unutilised banked energy would be treated as deemed purchase by GRIDCO on the expiry of banking cycle at lowest RE procurement price of GRIDCO or lowest price discovered by SECI through competitive bidding process in last financial year whichever is less.

Provided that the payment for deemed purchase by GRIDCO shall be limited to 10 % of the banked energy.

Provided that Green Energy consumed for production of Green Ammonia/ Green Hydrogen or any other activity shall be accounted for RPO compliance for such open access consumers. The RE consumption beyond obligation of the open access consumer shall be counted towards RPO compliance of GRIDCO / DISCOMs.

Provided that unutilized banked energy shall also be accounted for the RPO compliance of DISCOMs/GRIDCO.

- e) The Generating Station shall provide Standard Energy Meters (SEMs) and the monthly settlement of energy sales shall be done based on Power injected to the system as per the meter readings. The banking as well as withdrawal of banked energy shall be subject to day ahead scheduling. The energy settlement shall be on a real time basis in 15 minutes time block.
- f) Distribution licensee / GRIDCO may also procure and supply RE to the manufacturers of GH / GA in the state. In such cases, the Distribution licensee / GRIDCO shall only charge the cost of procurement as well as the wheeling charges and a small margin as determined by the Commission.

- (6) If transmission and wheeling charges/losses have been levied on full quantum of energy injected to the Grid, then no further transmission and wheeling charges/losses shall be levied on banked energy.

**TYPICAL ILLUSTRATION OF CALCULATION OF BANKING CHARGE**

Sl. No.	Banking for solar/ wind/ Hybrid power Installation		Solar (10% banking charge)		Wind / Hybrid (5% / Nil banking charge)	
1	Energy injected to Grid after auxiliary consumption of the RE Generator corresponding to the installed capacity	kWh	100.00	100.00	100.00	100.00
2	Quantum of energy banked with GRIDCO (Max. 30%) [(1) x 0.3]	kWh	30.00	30.00	30.00	30.00
3	Banking Charge (10% /5%/ Nil) KWh [(2) x 0.1/0.05/0]	kWh	3.00	3.00	1.5/0	1.5/0
4	Quantum of banked energy to be returned by GRIDCO (Considering Banking Charge of 10%/5%/ Nil) [(2) – (3)]	kWh	27.00	27.00	28.50/30	28.50/30
5	Actual Banked power availed by generator	kWh	25.00	20.00	25.00	28.00
6	Unutilised banked power [(4) – (5)]	kWh	2.00	7.00	3.50/5	0.50/2
7	10% of Banked Power [(2) x 0.1]	kWh	3.00	3.00	3.00	3.00
8	Unutilised banked power treated as deemed purchase by GRIDCO (10% of banked power or actual unutilised banked power whichever is less) [(6) or (7) whichever is less]	kWh	2.00	3.00	3.00	0.5/2
9	Energy charge for deemed purchase by GRIDCO (based on last year lowest bidding price of RE power i.e. Rs.3.00/kWh) [(8) x Rs.3]	kWh	3x2.0= 6.00	3x3 = 9	3x3 = 9	3x0.5 = 1.5/ 3x2=6
10	Balance free power [(6) – (8)]	kWh	0	4.00	0.5/2	0

**(6) Other Charges :**

In addition to above charges, the consumer availing Green Energy Open Access shall also pay the following charges determined by the Commission as per the provisions of the relevant regulations of the Commission:

- a) Applicable SLDC fees and charges
- b) Scheduling charges
- c) RE Deviation Settlement Charges (RE-DSM)

**CHAPTER 3**  
**MISCELLANEOUS**

**10. Power to give directions:**

The Commission may from time to time issue such directions and orders as considered appropriate for implementation of these Regulations.

**11. Power to relax:**

The Commission, by a special-order recording reason in writing and giving opportunity to hear the parties likely to be affected, may relax any of the provisions of these Regulations Suo Motu or based on an application made before the Commission by an interested person.

**12. Power to amend:**

The Commission may from time to time add, vary, alter, suspend, modify, amend, or repeal any provisions of these Regulations.

**13. Power to remove difficulties:**

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by an order, make such provisions, not inconsistent to the provisions which are of the Act and these Regulations, as may appear to be necessary for removing the difficulty.

**By Order of the Commission**

**Sd/-**

**SECRETARY**