

**ODISHA ELECTRICITY REGULATORY COMMISSION  
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**PUBLIC NOTICE**

**Sub: Inviting Objection/ Suggestion on proposed OERC (Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Stations at the State Level) Regulations, 2021 under Section 181 (3) of the Electricity Act.**

The Commission in exercise of the powers conferred under Sections 66, 86(1)(b) 86(1)(e) and 181 read with Sections 32 and 33 of the Electricity Act, 2003 (36 of 2003) has framed the draft OERC (Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Stations at the State Level) Regulations, 2021. The said Regulation is also available in Commission's Website [www.orierc.org](http://www.orierc.org).

The Commission hereby publishes the proposed OERC (Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Stations at the State Level) Regulations, 2021 for information of the general public under Section 181(3) of the Electricity Act, 2003.

You are requested to furnish your considered views/suggestion/opinion on the said Regulation to the undersigned on or before **02.09.2021 (by 5.00 P.M.)**. On receipt of the responses from different quarters which will be received within due date, the Commission may, in appropriate cases, bring the modifications, if any, to the proposed Regulation and approve the same for publication in the official gazette.

By Order of the Commission

**Sd/-  
SECRETARY**

Bhubaneswar.

Date: 2<sup>nd</sup> August, 2021

## DRAFT ODISHA ELECTRICITY REGULATORY COMMISSION

### (Forecasting, Scheduling and Deviation Settlement of Wind and Solar Generating Stations at the State Level) Regulations, 2021

\_\_\_\_\_ 2021

No. \_\_\_/\_\_\_/2021/OERC.- In exercise of the powers conferred under Sections 66, 86(1)(b) 86(1)(e) and 181 read with Sections 32 and 33 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, and after previous publication, the Odisha Electricity Regulatory Commission hereby makes the following regulations, namely:

#### 1. Short title and commencement:

- (1) These regulations may be called the Odisha Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2021.
- (2) These regulations shall come into force from the date of notification in the official Gazette and institution of commercial arrangement for settlement of Deviation Charges and penalty in the State with respect to Solar and Wind Generation Sources.

Provided that the Commercial Arrangements specified in these Regulations, and the related provisions regarding Deviation Charges and penalty, shall come into force within six (6) months of the publication of the Regulations.

#### 2. Definitions and Interpretation

- (1) In these regulations, unless the context otherwise requires –
  - (a) **'Absolute Error'** means the absolute value of the error in the actual generation of wind or solar generators with reference to the scheduled generation and the 'Available Capacity' (AvC), as calculated using the following formula for each time block:  
$$\text{Error (\%)} = 100 \times [\text{Actual Generation} - \text{Scheduled Generation}] / (\text{AvC});$$
  - (b) **'Act'** means the Electricity Act, 2003 (36 of 2003);
  - (c) **'Actual drawal'** in a time-block means electricity drawn by a buyer, as the case may be, measured by the interface meters;
  - (d) **'Actual injection'** in a time-block means electricity generated or injected by the seller, as the case may be, measured by the Interface meters;
  - (e) **'Available Capacity or AvC'** for wind or solar generators means the cumulative capacity rating of the wind turbines or solar inverters that are capable of generating power in a given time-block;
  - (f) **'Buyer'** means a person, including Distribution Licensee or Open Access consumer, purchasing electricity through a transaction scheduled in accordance with the regulations applicable for short-term, medium-term and long-term Open Access;
  - (g) **'CERC'** means the Central Electricity Regulatory Commission referred to in subsection (1) of section 76 of the Act;
  - (h) **'Commission'** means Odisha Electricity Regulatory Commission established under sub-section 1 of Section 82 of the Act;
  - (i) **'Day'** means a continuous period starting at 00:00 Hrs and ending at 24:00 Hrs.

- (j) **'De-Pooling'** means the disaggregation and apportionment of the deviations and the applicable charges among the Generators at a Pooling station;
- (k) **'Deviation'** in a time-block for a seller means its total actual injection minus its total scheduled generation and for a buyer means its total actual drawal minus its total scheduled drawal;
- (l) **'Gaming'** in relation to these regulations, shall mean an intentional mis-declaration of available capacity or schedule by any seller in order to make an undue commercial gain through Charge for Deviations;
- (m) **'Grid Code'** means the Grid Code specified by Odisha Electricity Regulatory Commission under clause (h) of sub-section (1) of Section 86 of the Act;
- (n) **'IEGC'** means the Grid Code specified by CERC under clause (h) of sub-section (1) of Section 79 of the Act;
- (o) **'Interface meters'** means interface meters as defined by the Central Electricity Authority under the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time;
- (p) **'Inter-connection point'** means the interface point of a generation facility with the transmission or distribution system; and shall mean, in relation to Wind or Solar Energy facility, the line isolator on the outgoing feeder on the High Voltage (HV) side of the Pooling station;
- (q) **'Pool Account'** means state account for receipts and payments on account of deviation by buyers or sellers including wind and solar generators;
- (r) **'Pooling station'** means the sub-station where pooling of generation of individual wind generators or solar generators is done for interfacing with the next higher voltage level:  
  
 Provided that where there is no separate pooling station for a wind / solar generator and the generating station is connected through common feeder and terminated at a sub-station of distribution company/STU/CTU, the sub-station of Distribution company/STU/CTU shall be considered as the pooling station for such wind/solar generator, as the case may be;
- (s) **'Qualified Coordinating Agency or QCA'** means the agency appointed by the wind or Solar energy generators connected to a pooling station, or by an individual generator directly connected to a sub-station, to perform the functions and discharge the obligations specified in these Regulations.
- (t) **'Scheduled generation'** at any time or for a time block or any period means schedule of generation in MW or MWh ex-bus given by the State Load Despatch Centre;
- (u) **'Scheduled drawal'** at any time or for a time block or any other period means schedule of despatch in MW or MWh ex-bus given by the State Load Despatch Centre;
- (v) **'Seller'** means a person, including a generating station, supplying electricity through a transaction scheduled in accordance with the regulations applicable for short-term, medium-term or long-term open access;
- (w) **'State Entity'** means an entity which is in the SLDC control area and whose metering and energy accounting is done at the state level;
- (x) **'State Load Despatch Centre or SLDC'** means Load Despatch Centre of the State, established under sub-section (1) of Section 31 of the Act, responsible for coordinating scheduling of the state entities in accordance with the provisions of the State Grid Code;

- (y) **'Time-block'** means a time block of 15 minutes or any such shorter duration as may be notified by CERC and OERC, for which specified electrical parameters and quantities are recorded by special energy meter, with first time block starting at 00.00 hrs, or such other period as the Commission may stipulate;
- (2) Words and expressions used and not defined in these regulations shall have the meaning assigned to them in the Act or the Grid Code or any other regulation framed thereunder.

## **PART – 1**

### **GENERAL**

#### **3. Objective**

- (1) The objective of these regulations is to facilitate large-scale grid integration of solar and wind generating stations while maintaining grid stability and security as envisaged under the Grid Code, through forecasting, scheduling and commercial mechanism for deviation settlement of these generators.
- (2) In order to maintain system security, stability and reliability, the SLDC shall take into consideration the forecasts of Wind and Solar generation for Week-Ahead, Day-Ahead and intra-Day operations and scheduling, and longer term forecasts for its planning.
- (3) The SLDC shall make use of the flexibility provided by conventional Generating Units and the capacity of inter-Grid tie-lines to accommodate Wind and Solar energy generation to the largest extent possible subject to Grid security.

#### **4. Applicability of the Regulations**

- (1) These Regulations shall apply to all wind and solar generators (including Rooftop PV solar and net-metered solar power projects which are connected through separate feeder at 33kV and above) connected to the State grid in Odisha, including those connected via pooling stations, and using the power generated for self-consumption or sale within or outside the State.

Provided that the combined installed capacity of the solar or wind generators connected to a particular Pooling Station, or that of an individual generator connected to some other sub-station, shall not be less than 5 MW.

## **PART – 2**

### **FORECASTING AND SCHEDULING CODE**

#### **5. Forecasting and Scheduling Code:**

- (1) This code provides methodology for day-ahead scheduling of wind and solar energy generators which are connected to the State grid and re-scheduling them on one and half hourly basis, and the methodology of handling their deviations from such schedule. Wind and Solar generators, either by themselves or represented by Qualified Coordinating Agencies (QCA) shall comply with the requirements of forecasting and scheduling code as stipulated under these Regulations.
- (2) The Wind and Solar Energy Generators at each Pooling station shall appoint a QCA.

Provided that an individual Generator connected to a sub-station that is designated as a Pooling Station may opt to function as a QCA on its own or appoint a separate entity as its QCA.

Provided further that, such wind/solar generators shall obtain concurrence of SLDC. The decision of SLDC in this regard shall be binding on the wind/solar generators.

- (3) The QCA(s) shall be treated as State Entity.
- (4) Every QCA shall be registered with the SLDC in accordance with the Detailed Procedure prescribed in pursuance of Regulation 6.
- (5) Notwithstanding the appointment of a QCA, the onus of complying with the relevant provisions of these Regulations shall remain that of the concerned Generators, and the commercial and other arrangements between the Generators and their QCA shall be governed by their inter-se agreements or terms of engagement.
- (6) The QCA shall be appointed by the Generators for the purposes specified in these Regulations, including but not limited to the following:
  - (a) Meter reading and data collection and its communication, and co-ordination with the Distribution Licensees, the SLDC and other agencies;
  - (b) De-pooling of Deviation Charges within the constituent Generators of the Pooling station and settlement of payments/receivables.
  - (c) Settlement of the Deviation Charges specified in these Regulations with the SLDC on behalf of the Generators.
- (7) The QCA shall be the Nodal Agency between the SLDC and its Generators for the purposes of these Regulations.
- (8) The QCA shall furnish the technical specifications of the Generators whom it represents to the SLDC in the prescribed format, at the time of its registration or within such period thereafter as may be stipulated by the SLDC in its Detailed Procedure, and also furnish details whenever there is a change in these specifications.
- (9) The QCA shall provide real-time data relating to the power generation parameters and weather-related data, as may be required to the SLDC.
- (10) Meters shall be installed for energy accounting in accordance with the relevant provisions of the Central Electricity Authority (CEA) Regulations and its amendments governing metering, along with telemetry/ communication and Data Acquisition Systems for the transfer of information to the SLDC by the QCA.
- (11) The QCA shall furnish to the SLDC aggregated forecasts relating to its Wind and Solar Energy Generators connected to intra-State transmission / distribution network along with details of their availability or in formats as specified by SLDC.
- (12) The SLDC shall also undertake forecasting of the Wind and Solar energy generation expected to be injected into the intra-State Transmission network at each location, by engaging forecasting agencies if required, so as to enable it to better plan for balancing the resources required for secure Grid operation.
- (13) The QCA shall aggregate the Schedules of all Wind Generators and Solar generators connected to a Pooling station separately, and communicate to the SLDC.
- (14) A QCA may undertake forecasting and scheduling for multiple pooling substations. However, scheduling, energy accounting and deviation monitoring for each Pooling station of wind and solar power generation shall be undertaken separately.
- (15) No Wind or Solar energy generation shall be despatched by the SLDC without schedule by the QCA on behalf of the Generators in accordance with the provisions of these Regulations.
- (16) The QCA may adopt the forecast of the SLDC for preparing its Schedule or provide SLDC with a Schedule based on its own forecast, which shall be the reference Schedule for the purposes of deviation determination and settlement:

Provided that, if the QCA opts to adopt the forecast of the SLDC, the consequences of any error in such forecast which results in deviations from scheduling shall be borne by the concerned Generators through their QCA.

- (17) The SLDC shall recover such charges as may be approved by the Commission for providing its forecasting services to the QCA and the amount so recovered shall be treated as 'other income' in the Aggregate Revenue Requirement of the SLDC for the determination of its Fees and Charges.
- (18) The QCA shall provide to the SLDC a Day-Ahead and a Week-Ahead Schedule for each Pooling station to enable it to assess the Availability of energy and the margin available in the State Grid.
- (19) The Day-Ahead Schedule shall comprise of the Wind or Solar energy generation to be scheduled in each 15-minute time block starting from 00:00 hours of the following day, and for all 96 time blocks of that day and the Week-Ahead Schedule shall contain the same information for the next seven days.
- (20) The QCA may revise the Schedule of Generators connected to the Intra-State Transmission Network (excluding collective transactions) by giving an advance notice to the SLDC.

Provided that, such revisions shall be effective from the 4th time block following the time block in which notice was given;

Provided further that, there may be one revision for each time slot of one and half hours starting from 00.00 hours of a particular day, subject to a maximum of 16 revisions during the day.

- (21) The plan for data telemetry, formats of forecast submission and other modalities and requirements shall be stipulated in the Detailed Procedure to be submitted by the SLDC within three months, which the Commission shall endeavour to approve within a month thereafter.

Provided that, SLDC shall undertake stakeholder consultation by uploading the Draft procedure on SLDC's website before submission of procedure to the Commission for approval.

- (22) The Detailed Procedure should contain the following:
  - (a) The procedure and requirements, including the payment of fees and penalties, for the registration and de-registration of QCAs by the SLDC.
  - (b) The information and data, and the formats, required by the SLDC from the QCAs and to be provided by the SLDC to them.
  - (c) The mode and protocol of communication for exchange of information and data between the QCAs and the SLDC.
  - (d) The guidelines for energy and deviation accounting of Wind and Solar energy transactions under the State energy accounting framework, with illustrative examples, in accordance with the principles specified in these Regulations.
  - (e) The mechanism for monitoring compliance of the Forecasting and Scheduling Code by the QCAs.
  - (f) The default conditions in the State Pool Settlement by QCAs and their treatment.
- (23) The commercial impact of deviations from Schedules based on the forecasts shall be borne by the Generators through their QCAs.

## **6. Procedure for appointment of QCA**

- (1) The Generators connected to each Pooling station shall appoint a generator as QCA from among themselves or any other entity as a QCA.
- (2) The QCA shall be appointed with the approval of majority of the Generators at a pooling station, in terms of their combined installed capacity.
- (3) In case the RE generators failed to appoint QCA within stipulated time frame, SLDC shall nominate the professional agency from among the list of empanelled list of QCAs which shall be binding on the RE generators at the pooling sub-station, until such time the RE generators appoint their own QCA. The cost associated with the QCA in such cases will be borne by the RE generators.
- (4) The Generators shall satisfy themselves that the QCA is technically and financially competent to undertake on their behalf the functions and discharge the obligations specified in these Regulations.
- (5) The terms of engagement of the QCA shall include provisions on the following aspects:
  - (a) The respective roles and responsibilities of the QCA and Generators;
  - (b) The metering, billing and energy accounting arrangements;
  - (c) The modalities for recovery of Deviation Charges from the Generators and their settlement, including the principles for de-pooling;
  - (d) The payment security mechanism and related provisions; and
  - (e) The events of default and their mitigation.

## **7. Treatment to Gaming**

- (1) Any intentional mis-declaration of Available Capacity to the SLDC by the QCA for its own undue commercial gain or that of a Generator shall be considered as gaming and shall constitute a breach of these Regulations.
- (2) Upon identification of gaming by SLDC, the QCA shall be liable to pay a penalty of three times the Deviation Charges that would have been applicable had the Available Capacity been correctly declared.
- (3) The amount of penalty shall be payable by the QCA to the Pool Account, through the SLDC.
- (4) The SLDC may, after giving due notice, as stipulated in the Detailed Procedure, cancel the registration of the QCA upon repeated events of mis-declaration.

## **PART – 3**

### **COMMERCIAL AND DEVIATION SETTLEMENT**

## **8. Deviation Settlement for Intra-state Transactions:**

- (1) The sale of power within Odisha by Wind and Solar Energy Generators connected to the Intra-State Transmission Network shall be settled by the buyers on the basis of their actual generation, and the Deviation Settlement shall be undertaken as specified in these Regulations.

Provided that a generator who deviates from its given Schedule shall be liable to pay a Deviation Charge under the provisions of these Regulations.

- (2) In respect of sale or self-consumption of power within Odisha, if the actual injected generation of wind or solar power at a Pooling station, differs from the scheduled generation, the Deviation Charge for the excess or shortfall shall be payable by the QCA to the Pool Account, through the SLDC, as specified in Table 1 below:

Table 1: Deviation Charges in case of under or over-injection, for sale of power within the State

Sl..	Absolute Error in the 15minute time block	Deviation Charges payable to Pool Account
1	< = 15%	None
2	>15% but <=25%	At Rs. 0.50 per unit for the shortfall or excess energy for absolute error beyond 15% and up to 25%
3	>25% but <=35%	At Rs. 0.50 per unit for the shortfall or excess energy for absolute error beyond 15% and up to 25%+ Rs. 1.0 per unit for balance energy beyond 25% and up to 35%
4	> 35%	At Rs. 0.50 per unit for the shortfall or excess energy for absolute error beyond 15% and up to 25%+ Rs. 1.0 per unit for shortfall or excess energy beyond 25% and up to 35% + Rs. 1.50 per unit for balance energy beyond 35%

- (3) The SLDC and the QCA shall maintain records and accounts of the time block-wise Schedules, the actual generation injected and the deviations, for every Pooling station and the individual Generators separately.
- (4) The QCA shall undertake the settlement of the Deviation Charges with the SLDC on behalf of the concerned Generators.
- (5) The QCA shall undertake de-pooling of the energy deviations and the Deviation Charges against each Generator at the Pooling station in proportion to its actual generation or in proportion to available capacity, as may be mutually agreed between QCA and the generators.
- (6) The Deviation charges for under or over-injection by generators connected to the intra-state transmission network and selling or consuming power outside Odisha shall be governed by the regulations of the CERC governing inter-state deviation settlement mechanism and related matters; and the accounting for this purpose shall be done by the SLDC limited to the deviations in the intra-state transmission network resulting from such under or over-injection.

## 9. Deviation Settlement for Inter-State Transactions

- (1) The sale of power outside state of Odisha by Wind and Solar Energy Generators connected to the Intra-State transmission system or distribution system shall be settled by the buyers on the basis of their scheduled generation.
- (2) Inter-State transactions at a Pooling station shall be permitted only if the concerned Generator is connected through a separate feeder.
- (3) The generator shall submit, through the QCA, a separate Schedule for its energy generation, in accordance with these Regulations, to the SLDC and to the concerned Regional Load Despatch Centre (RLDC).
- (4) The SLDC shall prepare the deviation settlement account for such Generator on the basis of measurement of the deviation in the energy injected.
- (5) The generator shall pay the Deviation charges applicable within Odisha in case of deviations in the State DSM Pool Account, the consequences of such deviation at the inter-state level being governed by the CERC Regulations governing Deviation Settlement Mechanism and related matters.

- (6) The Deviation Charges for under-injection or over-injection by Generators connected to the Intra-State Transmission Network and selling power outside Odisha shall be as specified in the Annexure to these Regulations, the accounting for which shall be done by the SLDC.

#### **10. Deviation Settlement for Inter and Intra-State Transactions: Other provisions**

- (1) Deviations in respect of Inter-State and Intra-State transactions shall be accounted for separately at each Pooling Sub-Station.
- (2) The SLDC shall provide separate energy and DSM accounts for Inter-State and Intra-State transactions to the QCA, who shall settle the Deviation Charges with the concerned Generators.

### **PART – 4**

#### **IMPLEMENTATION ARRANGEMENTS**

#### **11. IMPLEMENTATION ARRANGEMENTS**

- (1) Metering:
  - (a) Every Pooling station shall have a Special Energy Meter (SEM) capable of recording the energy in time blocks as specified in the CEA Regulations governing metering. The meters shall be time synchronised through command instruction from the centralised Automated Meter Reading system.
  - (b) The QCA shall furnish weekly meter readings to the SLDC by 00.00 hours on the Thursday for the seven day period ending on the previous Sunday mid night, in addition to the data provided to the Supervisory Control and Data Acquisition (SCADA) Centre, for the purpose of energy accounting under these Regulations.
- (2) The energy accounting shall be undertaken on the cases of the data recorded by the SEM referred to in Regulation 11(1).
- (3) Communication of QCA with SLDC: The Detailed Procedure prescribed by the SLDC shall set out the protocol for communication and exchange of information between the QCA and the SLDC, including but not limited to the following aspects:
  - (a) Communication of the Day-Ahead, Week-Ahead Schedule and intra-Day schedule and any revisions to the SLDC.
  - (b) Communication of the time block-wise availability and actual generation data at the Pooling station.
  - (c) Communication of Grid constraints and curtailments by the SLDC to the QCA.
- (4) The SLDC shall equip itself with the necessary Information Technology (IT)-enabled communication platform and software for communication between it and the QCA.
- (5) The QCA shall provide the IT-enabled communication software log-in details to enable the SLDC to access live data of all Schedules and deviations and facilitate the timely billing and payment of Deviation Charges. The QCA shall use automatic meter reading facilities for transfer, analysis and processing interface meter data of the generators.
- (6) The IT-enabled communication platform and software should enable the SLDC and QCA to exchange information, including but not limited to the following:
  - (a) Generator outages and their reasons;
  - (b) Deviation Charges payable/receivable by the QCA;

- (c) Site characteristics and details of the Wind Turbines, Solar Inverters, etc.; and
- (d) Schedules and generation handled by the QCA.

## **12. Deviation Accounting**

- (1) The methodology for deviation settlement for the State shall be as follows:
  - (a) The SLDC shall compute the Absolute Error, i.e. the difference between the scheduled and the actual energy injected, in respect of each Pooling station and shall accordingly determine the amounts payable/ receivable on account of the Deviation Charge in accordance with Regulations 8 and 9.
  - (b) The Deviation Charges payable or receivable for the State as a whole at the State periphery shall be computed by the SLDC.
  - (c) The SLDC shall also compute the impact of the deviation of the Wind and Solar Energy Generation and its contribution to the Deviation Charge at the State periphery and maintain Pool Account separately for the same.

## **13. Settlement of Deviation Charges**

- (1) The SLDC shall compute the deviations from the Schedule, determine the Deviation Charges payable/ receivable and bill the QCA accordingly.
- (2) The charges collected in the Pool Account shall be utilised to offset the shortfall in the State DSM Pool Account.

## **14. Payment Mechanism for Deviation Settlement and Payment security**

- (1) Every QCA shall pay the total amount of Deviation Charges pertaining to the Pooling Station to the SLDC, and collect it from the concerned Generators in proportion to their actual generation:

Provided that the onus of ensuring the payment of the Deviation Charges to the SLDC by the QCA shall remain that of the concerned Generators.

- (2) The Deviation Charges shall be paid within ten (10) days from the date of issue of statement of accounts and billing by the SLDC. In case of any delay in payment of the deviation charges beyond ten (10) days of issue of invoice, a simple interest of 0.04% for each day of delay shall be levied.
- (3) The wind/solar energy generator or the QCA shall maintain corpus of Rs. 25,000/- (Twenty five thousand Rupees only) per MW with SLDC to ensure payment security mechanism. No interest shall be payable on this corpus. In case of insufficient funds in the corpus, the wind/solar energy generator or the QCA shall make up corpus amount within five (5) working days from receipt of such information from SLDC. Failure to make up corpus amount within prescribed time limit, the wind/solar generation of the respective generator shall not be scheduled.
- (4) When there is no feed in tariff, the prevailing adopted tariff discovered in bidding in the State and if no bid tariff exists for the year, the tariff obtained in the latest bidding conducted by State may be taken in place of feed in tariff. The details of the payment security payable shall be covered in the detailed procedure of SLDC to be formulated as per Regulation 5(22).
- (5) Notwithstanding levy of interest specified in 14(2) of this Regulation, for delay in payment of deviation charges, in case of failure to pay the deviation charges into the State Deviation Pool (wind and solar), the SLDC shall be entitled to utilize the corpus of the concerned constituent to the extent of default and the concerned constituent shall recoup the corpus amount within five (5) working days.

- (6) All payments to the QCAs/ generators entitled to receive any amount on account of charges for deviation shall be made within five (5) working days of receipt of payments in the Pool Account.

Provided that

- (a) In case of delay in the Payment of Deviation Charges and interest thereon if any, beyond twelve (12) days from the date of issue of the statement of charges for deviations, the QCAs/ generators who have to receive payments for Deviation Charges and interest thereon, shall be paid from the balance available in the Pool Account. In case the balance available is not sufficient to meet the payments to the QCAs, the payment shall be made on pro-rata basis from the balance available.
- (b) The liability to pay interest for the delay in payments to the Pool Account shall remain till interest is not paid, irrespective of the fact that QCAs/generators who have to receive payments, have been paid from the Pool Account in part or full.

#### **15. Intimation of Curtailment**

- (1) Any curtailment imposed on the energy injection for reliable and secure Grid operation in emergent situations shall be communicated by the SLDC to the QCA through an IT-enabled communication, and no Deviation Charges shall be payable for any consequent deviations if the SLDC fails to discharge its duties/ functions as specified in these Regulations.
- (2) In case of any curtailment planned and communicated by the SLDC due to line maintenance or other reasons in certain time blocks of a day, the QCA shall be responsible for curtailing the generation at site and amending the Schedule accordingly, failing which the SLDC shall revise the Schedule as required.

#### **16. Energy Accounting**

- (1) The energy accounting shall be undertaken on the basis of the data recorded by the SEM referred to in Regulation 11(1).
- (2) All accounts relating to deviations within Pooling Station shall be prepared by the QCA on a weekly basis based on inputs from the SLDC, and be accessible to the SLDC through an IT-enabled system and software.
- (3) The SLDC shall furnish the processed data on a weekly basis by Thursday mid-night for the seven-day period ending on the previous Sunday mid-night to the concerned QCA in the prescribed format for the preparation of weekly accounts of energy from the Pooling Station.
- (4) Any discrepancy communicated by the QCA within fifteen (15) days shall be corrected forthwith by the SLDC after verification.
- (5) The SLDC/Distribution licensee as mutually agreed shall prepare the statement of accounting of energy in each time block for the wind and solar energy generators and the buyers on monthly basis for the purpose of billing.
- (6) The billing centre of the Distribution licensee shall be responsible for energy accounting, raising and settlement of bills with the buyers.
- (7) A detailed energy accounting procedure shall be prepared by SLDC and submitted for approval to the Commission after undertaking stakeholder consultation in accordance to Regulation 5(22).

## **PART – 5**

### **MISCELLANEOUS**

#### **17. Power to amend**

The Commission may, at any time vary, modify or amend any provision of these Regulations with pre-publication.

#### **18. Power to remove difficulties**

If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

#### **19. Power to Relax**

The Commission may by general or special Order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected by grant of relaxation, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.

#### **20. Power to issue directions**

If any difficulty arises in giving effect to these regulations, the Commission may on its own motion or on an application filed by any affected party, issue such directions as may be considered necessary in furtherance of the objective and purpose of these regulations.

**Appendix –I:** Framework for deviation charges for under or over injection by Solar and Wind Generators connected to the State grid and selling power outside the State:

- (1) The deviation charges applicable to wind or solar generators connected to the State grid and selling power outside the State boundary shall be as per following schedule:
  - (a) In the event of actual generation being less than the scheduled generation, the deviation charges for shortfall in generation shall be payable by such wind or solar generator, or the QCA on their behalf, to the State DSM Pool Account as given in Table 2 below:

*Table 2: Deviation Charges in case of under injection*

Sl.	Absolute Error in the 15minute time block	Deviation Charges payable to State DSM Pool Account
1	< = 15%	At the Fixed Rate for the shortfall energy for absolute error up to 15%
2	>15% but <= 25%	At the Fixed Rate for the shortfall energy for absolute error up to 15%+110% of the Fixed Rate for balance energy beyond 15% and up to 25%
3	>25% but <=35%	At the Fixed Rate for the shortfall energy for absolute error up to 15%+110% of the Fixed Rate for balance energy beyond 15% and up to 25%+ 120% of the Fixed Rate for balance energy beyond 25% and up to 35%
4	>35%	At the Fixed Rate for the shortfall energy for absolute error up to 15%+110% of the Fixed Rate for balance energy beyond 15% and up to 25%+ 120% of the Fixed Rate for balance energy beyond 20% and up to 35%+130% of the Fixed Rate for balance energy beyond 35%

Where the Fixed Rate is the PPA rate as determined by the Appropriate Commission under section 62 of the Act or adopted by the Appropriate Commission under section 63 of the Act. In case of multiple PPAs, the weighted average of the PPA rates shall be taken as the Fixed Rate. The wind and solar generators shall furnish the PPA rates on affidavit for the purpose of Deviation charge account preparation to the SLDC supported by copy of the PPA.

Fixed Rate for Open Access participants selling power which is not accounted for Renewable Purchase Obligation compliance of the buyer, and the captive wind or solar plants shall be the Average Power Purchase Cost (APPC) rate at the National level, as determined by CERC from time to time.

- (b) In the event of the actual generation being more than the scheduled generation, the Deviation Charges for excess generation shall be payable to the wind or solar generator, or the QCA on their behalf, from the State DSM Pool Account as given in Table 3below:

*Table 3: Deviation Charges in case of over injection*

Sl.	Absolute Error in the 15minute time block	Deviation Charges payable from State DSM Pool Account
1	< = 15%	At the Fixed Rate for excess energy for absolute error up to 15%
2	>15% but <= 25%	At the Fixed Rate for excess energy for absolute error up to 15% + 90% of the Fixed Rate for excess energy beyond 15% and up to 25%

Sl.	Absolute Error in the 15minute time block	Deviation Charges payable from State DSM Pool Account
3	>25% but <=35%	At the Fixed Rate for excess energy for absolute error up to 15% + 90% of the Fixed Rate for excess energy beyond 15% and up to 25%+ 80% of the Fixed Rate for excess energy beyond 25% and up to 35%
4	>35%	At the Fixed Rate for excess energy for absolute error up to 15% + 90% of the Fixed Rate for excess energy beyond 15% and up to 25% + 80% of the Fixed Rate for excess energy beyond 25% and up to 35%+ 70% of the Fixed Rate for excess energy beyond 35%

Where the Fixed Rate is the PPA rate as determined by the Appropriate Commission under section 62 of the Act or adopted by the Appropriate Commission under section 63 of the Act. In case of multiple PPAs, the weighted average of the PPA rates shall be taken as the Fixed Rate. The wind and solar generators shall furnish the PPA rates on affidavit for the purpose of Deviation charge account preparation to SLDC supported by copy of the PPA.

Fixed Rate for Open Access participants selling power which is not accounted for Renewable Purchase Obligation compliance of the buyer, and the captive wind or solar plants shall be the Average Power Purchase Cost (APPC) rate at the National level, as determined by the CERC from time to time.

- (c) In reference to clauses (a) and (b) as above, for balancing of deemed Renewable Purchase Obligation compliance of buyers with respect to schedule, deviations by all wind and solar generators which are selling power outside the State boundary shall first be netted off for the entire pool on a monthly basis and any remaining shortfall in renewable energy generation must be balanced through purchase of equivalent solar and non-solar Renewable Energy Certificates (RECs), as the case may be, by SLDC by utilising funds from the Pool Account. For positive balance of renewable energy generation, equivalent notional RECs shall be credited to the State DSM Pool Account and carried forward for settlement in future.