



# THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

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GOVERNMENT OF ASSAM  
ORDERS BY THE GOVERNOR  
ASSAM ELECTRICITY REGULATORY COMMISSION

## NOTIFICATION

The 6th September, 2018

### **ASSAM ELECTRICITY REGULATORY COMMISSION (FORECASTING, SCHEDULING, DEVIATION SETTLEMENT AND RELATED MATTERS OF SOLAR AND WIND GENERATION SOURCES) REGULATIONS, 2018**

**No. AERC.674/2018/28** - In exercise of the powers conferred under sub-section (3) of Section 32, sub-section (4) of Section 33, Clauses (b), (e) and (h) of sub-section (1) of Section 86, and Clauses (g) and (zp) of sub-section (2) of Section 181 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, and after previous publication, the Assam Electricity Regulatory Commission (AERC) hereby makes the following regulations, namely:

#### **1. Short title and commencement**

- 1.1. These regulations may be called the Assam Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2018.
- 1.2. These regulations shall come into force from the date of their publication in the official Gazette:

Provided that the commercial arrangements specified in these Regulations, and the related provisions regarding Deviation Charges and penalty, shall come into force six month thereafter.

## 2. Definitions and Interpretation

### 2.1. 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 15-minute time block:

$$\text{Absolute Error (\%)} = 100 \times [\text{Actual Generation} - \text{Scheduled Generation}] / (\text{AvC});$$

- b) **'Act'** means the Electricity Act, 2003 (36 of 2003); as amended from time to time;
- c) **'Actual drawal'** in a time-block means electricity drawn by a beneficiary or a buyer, as the case may be, as measured by the interface meters;
- d) **'Actual Generation'** in a time-block means the electricity generated and injected into the Grid by a Generator, as measured by the Interface meters;
- e) **'Available Capacity' (or 'AvC')** of wind or solar generators means the cumulative capacity of the wind turbines, solar inverters that are capable of generating power in a given time-block as declared by such Generators or QCA, as the case may be;
- f) **'Buyer'** means a person, including the distribution licensee or open access consumer, purchasing electricity through a transaction scheduled in accordance with the regulations applicable for short-term open access, medium-term open access and long-term access;
- g) **'CERC'** means the Central Electricity Regulatory Commission referred to in subsection (1) of section 76 of the Act;
- h) **'Day'** means a continuous period starting at 00:00 Hrs and ending at 24:00 Hrs.
- i) **'De-Pooling'** means the disaggregation and apportionment of the deviations and the applicable charges among the Generators at a Pooling Sub-Station;
- j) **'Deviation'** in a time-block means the difference between the actual injection of energy and scheduled generation;
- k) **'DISCOM'** means the Assam Power Distribution Company Ltd (APDCL) or any other Distribution company in the State of Assam.
- l) **'Forecasting'** means the projection of likely future electricity generation based on scientific analysis of meteorological data and other relevant parameters;
- m) **'Forecasting tools'** for the purposes of this regulation include Telemetry, Communication system, IT-enabled tools and Data Acquisition System for transfer of information to SLDC and appropriate meters for energy accounting.
- n) **'Gaming'** in relation to these regulations, shall mean an intentional misdeclaration of available capacity or schedule by any generator in order to make an undue commercial gain through Charge for Deviations;

- o) **'Grid Code'** means the Assam Grid Code specified by the Commission under Section 86(1)(h) of the Act;
- p) **'Interface meter'** shall have the same meaning as in the Regulations of the Central Electricity Authority governing the installation and operation of Meters.
- q) **'IEGC'** means the Grid Code specified by Central Electricity Regulatory Commission Section 79(1)(h) of the Act;
- r) **'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 Sub-Station;
- s) **'Pool Account'** means the state account for receipts and payments on account of deviation by Procurers and wind and solar energy generators;
- t) **'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;

- u) **"Qualified Co-ordinating Agency" (or "QCA")** means the agency coordinating on behalf of Wind/Solar Generators connected to a pooling station. QCA may be one of the generators or any other mutually agreed agency for the following purposes:
- Provide schedules with periodic revisions as per this regulation on behalf of all the Wind/Solar Generators connected to the pooling station(s),
  - Responsible for metering, data collection/transmission, communication, coordination with DISCOMS, SLDC and other agencies.
  - Undertake commercial settlement of all charges on behalf of the generators, including payments to the pool accounts through the concerned SLDC.
  - Undertake de-pooling of payments received on behalf of the generators from the State UI Pool account and settling them with the individual generators
  - Undertake commercial settlement of any other charges on behalf of the generators as may be mandated from time to time.
- v) **'Scheduled generation'** for a time block or other time period means the schedule of generation in MW or MWh ex-bus given by the concerned Load Despatch Centre;
- w) **'Scheduled drawal'** for a time block or other time period means the schedule of despatch in MW or MWh ex-bus given by the concerned Load Despatch Centre;
- x) **'State Commission'** means Assam Electricity Regulatory Commission (AERC) established under sub-section 1 of Section 82 of the Act;

- y) **'State Entity'** means a such person who is in the SLDC control area and whose metering and energy accounting is undertaken at the state level;
- z) **'State Load Despatch Centre' (or 'SLDC')** means the Load Despatch Centre of Assam, established under Section 31(1) of the Act and responsible for coordinating the scheduling of the state entities in accordance with the provisions of the State Grid Code;
- aa) **'Time-block'** means a period of 15 minutes or any such shorter duration as may be notified by Central Commission and State Commission for which specified electrical parameters and quantities are recorded by a Special Energy Meter, with the first time block starting at 00.00 hrs., or such other period as the Commission may stipulate
- 2.2. Save as aforesaid and unless repugnant to the context or the subject-matter otherwise requires, words and expressions used in these regulations and not defined, but defined in the Act, or the Grid Code or any other regulations of this Commission shall have the meaning assigned to them respectively in the Act or the Grid Code or any other regulation.

## **PART A**

### **GENERAL**

#### **3. Objective**

- 3.1. The Regulations are intended to facilitate grid integration of solar and wind energy generated in Assam while maintaining grid stability and security as envisaged under the Assam Grid Code and the Act, through forecasting, scheduling and a mechanism for the settlement of deviations by such generators.
- 3.2. 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.
- 3.3. The SLDC shall make use of the flexibility provided by the conventional Generating unit 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**

- 4.1. These Regulations shall apply to all wind and solar energy generators in Assam connected to the Intra-State Transmission /Distribution System, including those connected through pooling sub-stations, and using the power generated for self-consumption or selling power within or outside the State of Assam:

**PART B****TECHNICAL ARRANGEMENTS: FORECASTING AND SCHEDULING CODE****5. Forecasting and Scheduling Code**

- 5.1. This Forecasting and Scheduling Code specifies the methodology for day-ahead scheduling of wind and solar energy generators which are connected to the Intra-State Transmission/Distribution Network, its revisions on a one and half-hourly basis, and the treatment of their deviations from such schedules.
- 5.2. The Wind and Solar Energy Generators at each Pooling Sub-Station shall appoint a QCA.  
Provided that an individual Generator not connected to a Pooling Sub-Station may opt to be its own or to appoint a separate entity as its QCA.
- 5.3. The QCA shall be treated as a State Entity.
- 5.4. Every QCA shall be registered with the SLDC in accordance with the Detailed Procedure prescribed in pursuance of Regulation 5.21.
- 5.5. 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 them and their QCA shall be governed by their inter-se agreements or terms of engagement.
- 5.6. The QCA shall be appointed by the Generators for the purposes specified in these Regulations, including but not limited to the following:
- a) Analysis of Weather Forecasting and other relevant data and scheduling of RE generation as specified in these Regulations;
  - b) Meter reading and data collection and its communication, and co-ordination with the Distribution Licensees, the SLDC and other agencies;
  - c) De-pooling of amounts payable on behalf of the constituent Generator of the Pooling Sub-Station from the State Deviation Pool account and settling them with each Generator;
  - d) Settlement of the Deviation Charges specified in these Regulations with the SLDC on behalf of the Generators.
- 5.7. The QCA shall be the single point of contact between the SLDC and its Solar and/or wind Generators for the purposes of these Regulations.
- 5.8. 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 when there is a change in these specifications.

- 5.9. The QCA shall provide real-time data relating to the power system output and parameters and weather-related data, as may be required, real-time to the SLDC.
- 5.10. Meters shall be for energy accounting in accordance with the relevant provisions of the Central Electricity Authority (CEA) Regulations governing metering, along with telemetry /communication and Data Acquisition Systems for the transfer of information to the SLDC by the QCA installed by generating companies at their own cost.
- 5.11. The QCA shall furnish to the SLDC the aggregated forecasts relating to its Wind and Solar Energy Generators connected to the intra-State Transmission/Distribution network, with details of their Availability.
- 5.12. 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 the balancing resources required for secure Grid operation.
- 5.13. The QCA shall aggregate the Schedules of all Generators connected to a Pooling Sub-Station and communicate to the SLDC.
- 5.14. No Wind or Solar energy generation shall be considered for Despatch by the SLDC if it is not scheduled by the QCA on behalf of the Generators in accordance with the provisions of these Regulations.
- 5.15. 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 a deviation from scheduling shall be borne by the concerned Generators through their QCA.
- 5.16. 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.
- 5.17. The QCA shall provide to the SLDC a day-ahead and a week- ahead schedule for each pooling sub-station or each stand-alone generating station, as the case may be, to enable it to assess the availability of energy and the margin available in the State Grid.
- 5.18. The Day-ahead schedule shall contain wind or solar energy generation to be schedule in each 15-minutes 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.

5.19. The QCA may revise the schedule of generators connected to the Intra-State grid (excluding collective transactions) by giving 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 the maximum of 16 revisions during the day.

a) In respect of wind generators, 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 sixteen (16) revisions during the day.

b) In respect of solar generators, there may be one revision for each time slot of one and half hours starting from 5:30 hours upto 19:00 hours of a particular day subject to a maximum of nine (9) revisions during the day.

5.20. The plan for data telemetry, formats of forecast submission and other details in this regard shall be provided in the Detailed Procedure to be prepared by SLDC and approved by the State Commission.

5.21. The Detailed Procedure shall address the following aspects:

- a) The procedure and requirements, including the payment of fees and penalties, for the registration and de-registration of QCAs by the SLDC, payment security mechanism between QCA and 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 Deviation Pool Settlement by QCAs and their treatment.

5.22. Any commercial impact on account of deviation from the schedule based on the forecast shall be borne by the wind and solar generator, either directly or transacted via the representing QCA.

## **6. Principles of Appointment of QCA**

6.1. The Generators at a Pooling Sub-Station may appoint one amongst themselves or any other entity as a QCA.

Provided that, for each Pooling Station, there shall be only one QCA.

Provided further that, an individual Generator not connected through a Pooling Sub-Station may opt to be its own QCA or to appoint a separate entity.

6.2. 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.

6.3. 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 between QCA and Generators;
- e) The events of default and their mitigation.

## **7. ROLE OF QCA**

7.1. QCA shall be the single point of contact with SLDC on behalf of its coordinated generators) connected to a pooling station for the following purposes:

- a) providing schedules with periodic revisions on behalf of the Wind / Solar generators.
- b) coordinating with DISCOM / STU / SLDC for metering, data collection, communication and issuance of instructions for despatch/curtailment
- c) undertaking commercial settlement on behalf of the generators pertaining to generation deviations including payment of deviation charges to the State Pool Account
- d) undertaking de-pooling of payments received on behalf of the generators from the State Pool Account and settling them with the individual generators.
- e) undertaking the commercial settlement of any other charges on behalf of the generators connected to a pooling station, as may be mandated from time to time.
- f) all other ancillary and incidental matters.

7.2. The SLDC shall give appropriate directions under sub-section ( I ) of Section 33 of the Act in consonance with this Regulation about the guidelines for registration of QCAs, the data/information to be exchanged between the QCA, SLDC and the generator, the protocol for sharing the same etc.

## **8. Treatment to the Gaming**

- 8.1. Any intentional mis-declaration of Available Capacity to the SLDC for its own undue commercial gain or that of a Generator shall be considered as gaming and shall constitute a breach of these Regulations.
- 8.2. 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.
- 8.3. The amount of penalty shall be payable by the QCA to the State Deviation Settlement Pool, through the SLDC.
- 8.4. The SLDC may, after giving due notice and as stipulated in the Detailed Procedure, cancel the registration of the QCA upon repeated events of mis-declaration.

## **PART C**

### **COMMERCIAL ARRANGEMENTS**

## **9. Commercial and Deviation Settlement**

- 9.1. Energy accounting and payment for the energy generated to the wind and solar generators connected to the Grid shall be in accordance with the procedures prescribed and specified, therefore.
- 9.2. The wind or solar generators connected to the State grid and selling power within the State shall be paid by the buyer as per actual generation.
- 9.3. The wind or solar generators connected to the State grid and selling power outside the State shall be paid by the buyer as per scheduled generation.
- 9.4. The wind and solar generator or the QCA, as the case may be, shall have the option of accepting the concerned SLDC's forecast for preparing its schedule or provide the concerned SLDC with a schedule based on its own forecast, and such schedule shall be used as a reference for deviation settlement.
- 9.5. The QCA shall undertake all commercial settlement on behalf of the generator(s) connected to the respective pooling station(s).
- 9.6. In the event of actual generation of a generating station or a pooling station, as the case may be, being less or more than the scheduled generation, the deviation charges for shortfall or excess generation shall be payable by the wind and solar generator or the QCA, as the case may be, to the State DSM Pool, as given in **Table – I** below:

**Table – I: Deviation Charges for under or over-injection, for sale or self-consumption of power within Assam**

Sr. No.	Absolute Error in %age terms in 15- minute time block	Deviation Charges payable to State Deviation Pool
1	$\leq 10\%$	None*
2	$>10\%$ but $\leq 20\%$	At Rs. 0.50 per unit for the shortfall or excess energy for absolute error beyond 10% and up to 20%
3	$>20\%$ but $\leq 30\%$	At Rs. 0.50 per unit for the shortfall or excess energy beyond 10% and up to 20% + Rs. 1.0 per unit for balance energy beyond 20% and up to 30%
4	$> 30\%$	At Rs. 0.50 per unit for the shortfall or excess energy beyond 10% and up to 20% + Rs. 1.0 per unit for the shortfall or excess energy beyond 20% and up to 30% + Rs. 1.50 per unit for balance energy beyond 30%

9.7. Provided that deviation charges for under or over injection by wind or solar generator connected to the State grid and selling power outside the State shall be payable or receivable as per the framework provided in **Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2015** or amended from time to time, The accounting for this purpose shall be done by the SLDC.

9.8. Deviations for Inter-State and Intra-State transactions at Pooling Station shall be accounted for separately.

9.9. The SLDC shall provide separate Energy and Deviation accounts for inter-State and intra-State transactions to QCA or the wind or solar generators.

9.10. QCA shall separately settle Deviation Charges with Wind or Solar Generators for inter-State and intra-State transactions.

- a) The QCA shall also de-pool the energy deviations as well as deviation charges to each generator in proportion to actually generated units for each time-block for each generator.

9.11. In order to aggregate the forecasting and scheduling of different pooling stations to avail the benefit of larger geographical area and diversity, a QCA in agreement with the generators in different pooling stations shall have the freedom to go for the option of Virtual Pool. Under a virtual Pool, the declaration of the availability/schedule in respect of the generators shall be made

available pooling station wise to SLDC, in order to maintain the sanctity of a control area. However, while computing the deviations, they shall be considered as a combined pool and the QCA shall be responsible for de-pooling the deviations, first amongst the different pooling stations and then amongst the different generators of the respective pooling station.

9.12. The SLDC shall maintain all necessary and required records, registers and accounts in respect of forecasting, scheduling and deviation settlement in accordance with this Regulation.

9.13. The SLDC shall give appropriate directions under sub-section (I) of Section 33 of the Act in consonance with this Regulation on the manner of making the State Pool Account settlement and dealing with the default in respect of the same; the manner of de-pooling of energy deviations and deviation charges, operation of virtual pool and State Pool Account on or before the first (1<sup>st</sup>) day of December, 2018.

## **PART D**

### **IMPLEMENTATION AND ARRANGEMENTS**

#### **10. Implementation Procedure**

##### **10.1. Metering**

Every Pooling Station and stand-alone Generator shall have a Special Energy Meter (SEM) capable of recording the energy in 15 minute time blocks as specified in the CEA Regulations governing metering.

The QCA shall furnish weekly meter readings to the SLDC by 00.00 hours on the Thursday of the previous week, in addition to the data provided to the Supervisory Data and Control Acquisition (SCADA) Centre, for the purpose of energy accounting under these Regulations.

##### **10.2. Energy Accounting**

The energy accounting shall be undertaken on the basis of the data recorded by the SEM.

#### **11. Communication between QCA and SLDC**

11.1. 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 with regard to the following aspects:

- a) Communication of the Day-Ahead, intra-Day and Week-Ahead Schedule and any revisions to the SLDC.

- b) Communication of the real-time generation at the Pooling Sub-Station or by the stand-alone Generator.
- c) Communication of Grid constraints and curtailments by the SLDC to the QCA.

11.2. The SLDC shall equip itself with the necessary Information Technology (IT)-enabled communication platform and software for communication between it and the QCA.

11.3. 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.

11.4. IT-enabled communication platform and software should enable the SLDC and QCA to exchange information, including with regard to the following:

- i. Generator outages and their reasons;
- ii. Deviation Charges payable by the QCA;
- iii. Site characteristics and details of the Wind Turbines, Solar Inverters, etc.;
- iv. Schedules and generation handled by the QCA.

#### **11.5. Settlement of Deviation Charges**

The SLDC shall compute the deviations from the Schedule, determine the Deviation Charge payable and bill the QCA accordingly.

### **12. Payment Mechanism for Deviation Settlement, and Payment Security**

12.1. The QCA shall pay the amount of Deviation Charges 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.

### **13. Intimation of Curtailment**

13.1. 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 do so.

13.2. 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.

**14. Energy Accounting**

- 14.1. All accounts relating to deviations 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.
- 14.2. 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 Energy Accounts of energy from the Pooling Sub-Station or the stand-alone Generator, as the case may be.
- 14.3. Any discrepancy communicated by the QCA within 15 days shall be corrected forthwith by the SLDC after verification.

**15. De-Pooling of Deviation Charges**

The QCA shall de-pool the energy deviations and the Deviation Charges against each Generator in proportion to its actual generation.

**PART E****MISCELLANEOUS****15.1. 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, may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person

**15.2. Issue of orders and directions**

Subject to the provisions of the Act, 2003 and this Regulations, the Commission may, from time to time, issue orders and directions in regard to the implementation of the regulation and procedure to be followed and various matters which the Commission has been empowered by this Regulation to specify or direct, as may be considered necessary in furtherance of the objective and purpose of this Regulation.

**15.3. Power to Amend**

The Commission may, at any time and on such terms as to costs or otherwise, as it may think fit, rectify any defect or error in any proceeding before it, and all acts shall be done for the purpose of determining the real question or issue arising in the proceedings.

**15.4. Power to remove difficulties.**

Where any difficulty arises in giving effect to any of the provisions of this Regulation, the Commission may, by general or special order, do anything not being inconsistent with the provisions of the Act, 2003 or Reform Act, 1998, which appears to it to be necessary or expedient for the purpose of removing the difficulties.

**15.5. Interpretation**

All issues arising in relation to the interpretation of these regulations shall be determined by the Commission and the decision of the Commission on such issues shall be final.

(By the order of the Commission)

**S. K. ROY,**  
Secretary,  
Assam Electricity Regulatory Commission.

**ANNEXURE****Framework for Deviation Charges for under- or over-injection by Solar and Wind Generators connected to the Intra-State Transmission network and selling or consuming power outside the Assam**

1. The Deviation Charges in respect of Solar and Wind Energy Generators connected to the Intra-State Transmission Network and selling or consuming power outside Assam shall be as follows:
- a) If the actual generation is lower than scheduled, the Deviation Charges for the shortfall shall be payable by the QCA to the State DSM Pool Account as given in Table A below:

**Table A: Deviation Charges in case of under-injection**

<b>Sr. No.</b>	<b>%age Absolute Error in 15-minute time block</b>	<b>Deviation Charges payable to State DSM Pool Account</b>
1	<=10%	At the fixed rate for the shortfall in energy for Absolute Error upto 10%
2	>10% but <= 20%	At the fixed rate for the shortfall in energy for Absolute Error upto 10% + 110% of the fixed rate for the balance energy beyond 10% and upto 20%
3	>20% but <=30%	At the fixed rate for the shortfall in energy for Absolute Error upto 10% + 110% of the fixed rate for the balance energy beyond 10%, and upto 20% + 120% of the fixed rate for the balance energy beyond 20% and upto 30%
4	> 30%	At the fixed rate for the shortfall in energy for Absolute Error upto 10% + 110% of the fixed rate for the balance energy beyond 10% and upto 20% + 120% of the fixed rate for balance energy beyond 20% and upto 30% + 130% of the fixed rate for the balance energy beyond 30%

The 'fixed rate' referred to in Table A is the Power Purchase Agreement (PPA) rate determined by the Commission under Section 62 of the Act or adopted by the Commission under Section 63. In case of multiple PPAs, the fixed rate shall be the weighted average of the PPA rates. The Solar and Wind Energy Generators shall furnish the PPA rates on affidavit to the SLDC for the purpose of preparation of the Deviation Charge account, along with copies of the PPAs.

The fixed rate for Solar and Wind Energy Captive Power Plants or Open Access Generators selling power which is not counted against the Renewable Purchase Obligation (RPO) compliance of the Procurer shall be the Average Power Purchase

Cost (APPC) rate at the national level, as determined by the CERC from time to time.

- b) If the actual generation is higher than scheduled, the Deviation Charges for the excess generation shall be payable to the Solar or Wind Energy Generator through the QCA from the State DSM Pool Account, as given in Table - B below:

**Table B: Deviation Charges in case of over-injection**

Sr. No	%age Absolute Error in 15-minute time block	Deviation Charges payable from State DSM Pool Account
1	<=10%	At the fixed rate for the excess energy upto 10%
2	>10% but <= 20%	At the fixed rate for the excess energy upto 10% + 90% of the fixed rate for excess energy beyond 10% and upto 20%
3	>20% but <=30%	At the fixed rate for the excess energy upto 10% + 90% of the fixed rate for excess energy beyond 10% and upto 20 + 80% of the fixed rate for excess energy beyond 20% and upto 30%
4	> 30%	At the fixed rate for excess energy upto 10% + 90% of the fixed rate for excess energy beyond 10% and upto 20 + 80% of the fixed rate for excess energy beyond 20% and upto 30% +70% of the fixed rate for excess energy beyond 30%

The 'fixed rate' referred to in Table B is the PPA rate determined by the Commission under Section 62 of the Act or adopted by the Commission under Section 63. In case of multiple PPAs, the fixed rate shall be the weighted average of the PPA rates. The Solar and Wind Energy Generators shall furnish the PPA rates on affidavit to the SLDC for the purpose of preparation of the Deviation Charge account, along with copies of the PPAs.

- c) The fixed rate for Solar and Wind Energy Captive Power Plants and Open Access Generators selling power which is not counted against the RPO compliance of the Procurer shall be the APPC rate at the national level, as determined by the CERC from time to time. For the balancing of the deemed RPO compliance of Procurers with respect to Schedule, the aggregate deviations by Solar and Wind Energy Generators selling power outside the State shall first be netted off for the entire Pool on a monthly basis, and any remaining shortfall in generation shall be balanced through purchase of equivalent Solar or non-Solar Renewable Energy Certificates (RECs), as the case may be, by the SLDC by utilising funds from the State DSM Pool Account. In case of a positive balance of Solar or Wind Energy generation, equivalent notional RECs shall be credited to the State DSM Pool Account and carried forward for settlement in future.