

# **GUJARAT ELECTRICITY REGULATORY COMMISSION**

## **(Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019**

Dated: 19/01/2019

### **NOTIFICATION No. 1 of 2019**

In exercise of the powers conferred under Sub-section (3) of Section 32, Sub-section (4) of Section 33, clause (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, the Gujarat Electricity Regulatory Commission hereby makes the following Regulations, namely:

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

- 1.1. These Regulations shall be called the **Gujarat Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019.**
- 1.2. These Regulations shall become effective from the date of Notification.
- 1.3. Deviation Charges specified in these Regulations shall be effective from 1<sup>st</sup> August, 2019.

#### **2. Applicability**

These Regulations shall apply to all wind and solar generators having combined installed capacity above 1 MW connected to the State grid/substation, including those connected via pooling stations, and selling generated power within or outside the State or consuming power generated for self-consumption.

### 3. Definitions and Interpretation

3.1. In these Regulations, unless the context otherwise requires, -

a) '**Absolute Error**' means the absolute value of the error in the actual injection of wind or solar generators with reference to the 'Scheduled Generation' and the 'Actual Generation' as calculated using the following formula for each 15-minute time block:

Absolute Error (%) = 100 X [Actual Injection – Scheduled Generation]/Available Capacity;

b) '**Act**' means the Electricity Act, 2003 (36 of 2003);

c) '**Actual Drawal**' in a time-block means electricity drawn by a buyer measured by the interface meters;

d) '**Actual Injection**' in a time-block means electricity generated or supplied 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) '**Beneficiary**' means a person procuring electricity generated from a generating station including solar/wind captive generating station;

g) '**Buyer**' means a person, including beneficiary, procuring electricity through a transaction scheduled in accordance with the Regulations applicable for short-term open access, medium-term open access and long-term access;

- h) **'CERC'** means the Central Electricity Regulatory Commission referred to in Sub-Section (1) of Section 76 of the Act;
- i) **'Commission'** means "GERC" (Gujarat Electricity Regulatory Commission) established under Sub-section 1 of Section 82 of the Act;
- j) **'Deviation'** in a time-block for a seller means its total actual injection of energy minus its total scheduled generation;
- k) **'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;
- l) **'Grid Code'** means the Grid Code specified by Gujarat Electricity Regulatory Commission under Clause (h) of Sub-section (1) of Section 86 of the Act;
- m) **'IEGC'** means the Grid Code specified by the CERC under Clause (h) of Sub-section (1) of Section 79 of the Act;
- n) **'Interconnection/Interface Point'** means a point at which an individual Wind / Solar Generating plant or a group of such generating plants are connected to the transmission system or distribution system as the case may be;
- 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) **'Intra-State Entity'** means an entity/entities which is/are under the control area of Gujarat SLDC and whose metering and energy accounting is done at State level;

q) **'Pooling Station'** means the sub-station where pooling of generation of individual wind generators or solar generators is done for interfacing with State Transmission Utility/Distribution licensee sub-station:

Provided that where there is no separate pooling station for a wind / solar generator and the generating station is connected through common feeder or individual 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;

r) **'Qualified Co-ordinating Agency or QCA'** means the mutually agreed agency registered with SLDC, to act as a coordinating agency on behalf of wind/solar generators connected to a pooling station/substation and may be one of the generators.

s) **'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;

t) **'Scheduled Drawal'** at any time or for a time block or any period means schedule of despatch in MW or MWh ex-bus given by the State Load Despatch Centre;

- u) **'Seller'** means a person, including a generating station, supplying electricity through a transaction scheduled in accordance with the Regulations applicable for short-term open access, medium-term open access and long-term access;
- v) **'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;
- w) **'State Pool Account'** means a separate account to be maintained by the SLDC for receipt and payments on account of deviations under these Regulations and it is a part of the State Deviation Settlement Account;
- x) **'Time-Block'** means a time block of 15 minutes, for which specified electrical parameters and quantities are recorded by Special Energy Meter, with first time block starting at 00.00 hrs;

3.2. All other words and expressions used in these Regulations although not specifically defined herein above, but defined in the Act, or defined under any law passed by the Parliament applicable to the electricity industry in the State or the Grid Code or any other Regulations of this Commission shall have the meaning assigned to them in the Act or in such law/Regulations.

3.3. Headings or Capital words are inserted for convenience and may not be taken into account for the purpose of interpretation of these Regulations;

3.4. Words in the singular or plural term, as the case may be, shall also be deemed to include the plural or the singular term, respectively;

#### **4. Objective**

4.1. 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 the generators.

4.2. In order to maintain system security, stability & reliability, the grid operator shall consider the Wind & Solar Power Generation forecast in the mid-term to long term, day ahead & intraday operation, for planning, and the process of scheduling. The grid operator shall make full use of the flexibility from conventional power plant as well as the capacity of inter grid tie lines to accommodate the maximum Wind & Solar Power while maintaining grid security.

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

5.1. This code provides methodology for day-ahead/intra-day scheduling of wind and solar energy generator(s) which are connected to the State Grid/Sub-Station, and revision of schedule(s) and methodology of handling deviations of such wind and solar energy generator(s) and its deviation charges. Revision of schedule shall be allowed if the revision is more than 2% of the previous schedule. For wind energy based generation (maximum 16 intra-day revisions) and solar energy based generation (maximum 9 intra-day revisions) shall be allowed.

- 5.2. Appropriate meters shall be provided for energy accounting. Telemetry/communication system & Data Acquisition System shall also be provided for transfer of information to the Gujarat SLDC by the generator or QCA appointed by it. Generator(s)/QCA shall install the meter/communication/data acquisition system etc.
- 5.3. Wind and Solar generators and those represented by Qualified Coordinating Agencies (QCAs), shall mandatorily provide the technical specifications of the associated equipment, at the beginning and whenever there is any change to the SLDC in the format prescribed by the SLDC. The data relating to power system output & parameters and weather related data as applicable shall also be mandatorily provided by such generators or QCA appointed by them to the SLDC in real time.
- 5.4. Forecasting shall be done by wind and solar generators connected to the State grid, or by QCAs on their behalf. The forecast by the QCA or wind and solar generator, as the case may be, shall be generator centric with intimation to SLDC containing the availability of WTGs/Solar generators based schedule for each pooling station separately.
- 5.5. SLDC shall also undertake forecasting of wind and solar power that is expected to be injected into the State grid. The forecast by the SLDC shall be with the objective of ensuring secure grid operation by planning for the requisite balancing resources and grid operation.
- 5.6. The QCA or wind and solar generator/generators may either derive its forecast based on the SLDC's forecast for preparing its schedule or provide the SLDC with a schedule based on their own forecast. However, if the generator(s)/QCA derive its schedule based on

SLDC's forecast, they shall not take a plea that the error is due to erroneous forecast by SLDC.

- 5.7. The QCA or individual generator, either injecting wind energy, solar energy or both, connected to a substation shall not be permitted aggregation of more than one pooling stations or individual generating station connected to a substation as the case may be.
- 5.8. The QCA shall co-ordinate the aggregation of schedules of all generators connected to a pooling station and communicate it to the SLDC. In case of the generators who are directly connected to the Sub-station, such generators or the QCA appointed/nominated by such generators shall communicate their schedule at interface / interconnection point to the SLDC.
- 5.9. The QCA or the wind and solar generator shall submit "Day-Ahead" and a "Week-Ahead" schedule by 9 AM everyday for each pooling station or each generating station, as the case may be, which shall be utilized for planning availability of energy and for calculating the margin available in the grid of the State. "Day-Ahead" schedule shall contain wind or solar energy generation schedule at intervals of 15 minutes (time-block) for the next day, starting from 00:00 hours of the day, and prepared for all 96 time-blocks. "Week-Ahead" schedule shall contain the same information for the next seven days.
- 5.10. The schedule of wind generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4<sup>th</sup> time block, the first being the time-block in which notice was given. There may be maximum of 16 revisions during the day.

- 5.11. The schedule of solar generator/generators connected to the State grid (excluding collective transactions) may be revised by giving advance notice to the SLDC. Such revisions shall be effective from 4<sup>th</sup> time block, the first being the time-block in which notice was given. There may be maximum of 9 revisions during the day starting from 05:30 hours to 19:00 hours of that day.
- 5.12. The declared Available Capacity (AvC) for a wind generating plant shall be applicable for the entire 24 hours in a day whereas considering the availability of solar irradiation only during the day, the AvC for a solar generating plants shall be applicable only between 05:30 to 19:00 hours.
- 5.13. The plan for data telemetry, formats of forecast submission, file upload facility in software etc. shall be provided by SLDC to the QCA/Generator and other details in this regard shall be provided in the Detailed Procedure to be prepared by SLDC and approved by the Commission. SLDC shall prepare the above details within one month from this notification and get it approved from the Commission.
- 5.14. Any commercial impact on account of deviation from schedule based on the forecast shall be borne by the wind and/or solar generator, either directly or transacted through the representing QCA.
- 5.15. In case of QCA appointed by renewable energy generator for forecasting and scheduling work, the QCA shall be responsible for the deviation charges payable on behalf of the generator. The individual generator and QCA shall execute an agreement specifying that the QCA shall be responsible for all obligations/liabilities arising out of the forecasting and scheduling work carried out by him on behalf of the renewable energy generator.

The QCA shall provide payment security to the extent of 110% against deviation charges in the form of Bank Guarantee / Revolving LC. The QCA may ensure similar payment security mechanism back to back with respective generators. The payment security amount for the first year shall be worked out considering average deviations observed during the mock trial for different set of sites:

- a) Wind generating plant of approximate 50 MW capacity at Pooling Sub-Station.
- b) Solar generating plant of approximate 25 MW capacity at Pooling Sub-Station.

For second year and onwards the payment security shall be reviewed based on the average deviations observed during the first year (previous year) and applying the aforesaid mechanism, the security amount shall be worked out and the same shall be provided by the QCA.

- 5.16. When the QCA is appointed by the generator for the purpose of these Regulations, the responsibility for all the payments related to deviation charges payable on behalf of the RE generators shall be that of QCA. The QCA shall be held responsible for the dues payable/receivable on behalf of the generator, if the generator fails to pay the deviation charges payable under these Regulations through the QCA. The RE generators and QCA shall sign an agreement in this regard.

## **6. ROLE OF QCA**

QCA may be one of the generators or any other mutually agreed agency for the following purposes:

- 6.1. Provide schedules with periodic revisions as per these Regulations on behalf of all the Wind/Solar Generators connected to the pooling station(s) or individual Wind/Solar generator connected directly to the sub-station of transmission licensee / State Transmission Licensee / distribution licensee/ transmission licensee network/ distribution licensee network.
- 6.2. Responsible for co-ordination with authorized agency DISCOM/STU/SLDC and other agencies in coordination with Generator /Developers for metering, data collection and its transmission and communication.
- 6.3. Undertake commercial settlement of deviation charges arising on account of forecasting/scheduling on behalf of the individual generators which is connected directly to substation of transmission licensee / State Transmission Licensee / distribution licensee/ transmission licensee network/ distribution licensee network or generators connected with pooling station, including payments to the State Pool account through SLDC.
- 6.4. Undertake de-pooling of payments received/payable on behalf of the individual generator/generators of the pooling station from the State Pool account and settling them with the individual generators
- 6.5. Undertake commercial settlement of any other charges on behalf of the generators as may be mandated from time to time.

Failure of QCA in carrying out above activities shall not relieve the Generators/Developers from the penalties etc. provided in these Regulations.

QCA shall be treated as a Forecasting and Scheduling Entity and will be the single point of contact with SLDC. QCA shall get registered with the SLDC.

## **7. Qualifying criteria for QCA**

7.1. The QCA shall be appointed by Wind/Solar Generators who may be one of the generators or any mutually agreed agency. Any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person shall be eligible to act as a QCA provided it satisfies the qualifying criteria as laid down hereunder:

- (i) The QCA shall have the experience of minimum 1 year in the field of Wind/Solar Power forecasting and scheduling,
- (ii) The financial strength of the QCA must be such that it should be in a position to handle the risk of penalties on account of deviation by the generator. Accordingly, the net worth of the QCA from forecasting & scheduling services must be positive amounting to at least Rs.2.5 Crores in the recent last financial year which should reflect from its audited balance sheet or from the certificate of a practicing Chartered Accountant,
- (iii) The QCA shall have the capability to provide real time monitoring systems or equivalent systems for seamless flow of information to and from SLDC and RLDC in order to facilitate scheduling, revision of schedule, intimation of outages/grid constraints etc.

- (iv) QCA should have an established team of Renewable Resource Analysts, modeling Statisticians, Energy modelers, Software developers and 24x7 operation and monitoring team.
- (v) The QCA shall be using software developed by at least CMMI level 3 certified companies or as decided by SLDC or the Commission from time to time.

Provided that when a generator carries out forecasting and scheduling activity for itself, it need not avail the services of QCA and as such will be exempted from the qualifying criteria of QCA.

## **8. COMMERCIAL MECHANISM AND DEVIATION SETTLEMENT**

8.1. The commercial mechanism for deviation settlement is stated below:

- a) 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 at the tariff agreed in the power purchase agreement or wheeling agreement.
- b) The wind or solar generators connected to the State grid and selling power outside the State shall be paid by the buyer as per the terms of agreement at the tariff agreed in the power purchase agreement or wheeling agreement and pay deviation charges as per the CERC (Deviation Settlement Mechanism and Forecasting) Regulations, 2014 as amended from time to time.
- c) The wind or solar generators connected to the State grid and self-consuming power within the State, accounting of such energy generated shall be set off against consumption as per prevailing orders passed by the Commission.

d) The wind or solar generators who deviate from its given schedule shall be liable to pay deviation charges as per the provisions of these Regulations given at Table-I and Table-II.

8.2. The QCA /individual generator selling power/consuming power outside the State of Gujarat but connected with the State transmission network/distribution network shall give separate schedule for the energy generation as per these Regulations to the SLDC. The deviation settlement account for such generators shall be prepared by the SLDC for measurement of deviation of energy by such generator and its impact on the State periphery. Such generators shall pay the deviation charges within the State in the State Pool account in case of deviations by them.

8.3. In case where the QCA functions on behalf of individual generator at pooling sub-station, the QCA shall also de-pool the energy deviations as well as deviation charges to each generator using one of the options given in clause 16.

8.4. The QCA shall undertake all deviation related commercial settlement on behalf of the generator(s) connected to the respective pooling station(s) who are either selling / consuming power within the State (Intra-State) or selling/consuming power outside the State (Inter-State).

8.5. In the event of actual generation of a wind 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 generator or the QCA appointed on its behalf, as the case may be, to the State DSM Pool, as given in Table - I below.

Table – I

<b>Sr. No.</b>	<b>Absolute Error in the 15-minute time block</b>	<b>Deviation Charges payable to State DSM Pool</b>
1	< = 12%	None
2	>12% but <=20%	At Rs. 0.25 per unit for the shortfall or excess energy for absolute error beyond 12% and up to 20%
3	>20% but <=28%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 12% and up to 20% + Rs. 0.50 per unit for balance energy beyond 20% and up to 28%
4	> 28%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 12% and up to 20% + Rs. 0.50 per unit for balance energy beyond 20% and up to 28% + Rs. 0.75 per unit for balance energy beyond 28%

Provided that deviation charges for under or over injection by wind generator connected to the State grid and selling power outside the State shall be payable by wind generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC.

- 8.6. In the event of actual generation of a solar generating station or at 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 solar generator or the QCA appointed on its behalf, as the case may be, to the State DSM Pool, as given in Table – II below:

Table – II

Sr. No.	Absolute Error in the 15-minute time block	Deviation Charges payable to State DSM Pool
1	<= 7%	None
2	>7% but <=15%	At Rs. 0.25 per unit for the shortfall or excess energy for absolute error beyond 7% and up to 15%
3	>15% but <=23%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 7% and up to 15% + Rs. 0.50 per unit for balance energy beyond 15% and up to 23%
4	>23%	At Rs. 0.25 per unit for the shortfall or excess energy beyond 7% and up to 15% + Rs. 0.50 per unit for balance energy beyond 15% and up to 23% + Rs. 0.75 per unit for balance energy beyond 23%

Provided that deviation charges for under or over injection by solar generator connected to the State grid and selling power outside the State shall be payable by solar generators as per the framework provided by the CERC Regulations. The accounting for this purpose shall be done by the SLDC.

- 8.7. When all settlement pertaining to a pooling station is carried out by the QCA, in that case the QCA shall also de-pool the energy deviations as well as deviation charges to each generator for each time-block as defined in 'De-pooling mechanism'.
- 8.8. The SLDC, QCA and individual generator shall maintain separate records and account of time-block wise schedules, actual generation and deviations for all Pooling Sub-Stations, generators, including wind and solar generators.

- 8.9. The wind /solar generator shall be liable to pay the deviation charges for the deviation made between the actual energy generated and scheduled energy as per these Regulations at the rates specified in these Regulations.
- 8.10. Once the accounting procedures as above are put in place, all Wind and Solar Energy generators having installed capacity of above 1 MW shall be covered within the State Pool Account of the renewable energy created separately. The Energy Accounting of DSM shall be settled at the rates and methodology stipulated above for wind and solar generators separately.
- 8.11. State Pool Accounts / Energy Accounts as mentioned above shall be prepared by the SLDC on Weekly / Monthly (30/31 days) basis.

## **9. Implementation procedure with respect to Regulations**

The complete accounting process will be operationalized in the following manner:

### **9.1. Metering:**

Interface Metering for intra-state entities shall be undertaken on an urgent basis. Every entity must be metered with a Special Energy Meter (SEM) i.e. ABT compliant meter, capable of recording the energy in 15 minutes time block.

Authorized representative of the distribution licensee/GETCO/QCA/generator, as the case may be, shall forward weekly/monthly meter readings to the SLDC latest by Wednesday of the previous week / 5<sup>th</sup> day of the next month of a previous month in addition to data acquisition provided to SCADA for energy accounting purpose under these Regulations.

## 9.2. Energy Accounting

Every intra-State grid connected entity shall be metered with a Special Energy Meter (SEM), i.e. ABT compliant meter, capable of recording the energy in 15 minutes time block and the energy accounting for each such entity shall be done with consideration of such meter data.

## 10. Means of Communication between QCA & SLDC

QCA and SLDC should communicate using software developed by the QCA duly approved by the SLDC for following:

- a) Communicating day ahead, intra-day and/or week ahead schedule along with revisions to SLDC.
- b) Informing real time generation at pooling station and/or at individual generator level, as required.
- c) Providing information of grid constraints and curtailments from SLDC side to QCA.
- d) QCA should provide software login to the SLDC, wherein live data for all schedules and information on the deviations shall also be made available. This method will help in online communication without time lag and facilitate prompt payment of deviation charges by the generator/QCA to SLDC.
- e) The software should facilitate information from the generator side/QCA to SLDC on generator outage with reasons for outage.
- f) It should intimate the QCA on the DSM charges at the pooling station by the SLDC.

- g) It should provide basic information of the site and turbines/inverters (Static Sheet).
- h) SLDC should be able to view the State level schedule alongwith actual generation being handled by QCA/generator.

## **11. Access to Meters:**

It is necessary that the agreement between the generator(s) and QCA provides for the following:

- a) Access to the QCAs to modem installed on existing ABT meters for getting data on 15 minutes basis, or
- b) Permit access to the API link for getting the data from the meter to the QCA's central server to facilitate better forecasting.
- c) Alternatively, allow the QCA to install additional meters on the existing CT/PT to facilitate acquisition of real time data so that best schedule can be submitted to SLDC.

## **12. Deviation Accounting**

Deviation settlement for the State shall be governed by the following provisions:

- 12.1. Computation of Deviation Charges: Deviation charges shall be computed in the following manner:
  - a) SLDC to calculate Absolute Error occurred in the scheduled energy and actual energy for each pooling station and for each generator which feed the energy directly to the substation.

- b) Energy Account specifying the Deviation Charges for the renewable energy generators based on these Regulations prepared by the SLDC for the pooling stations/wind energy generators/solar generators, with consideration of the actual deviation in the energy from scheduled energy made by the pooling station or individual generator directly feeding energy in to the substation.
- c) SLDC to prepare the energy account specifying the deviation made in the scheduling by the pooling substation or individual generator directly feeding to sub-station and collect the deviation settlement charges from the entity concerned for the amount payable by them as per the provisions of these Regulations.
- d) SLDC is required to adjust the deviation settlement charges received from the renewable energy generators/QCAs under these Regulations in the State Pool for deviation charges payable / receivable. The said State DSM pool account is required to be maintained as revenue neutral in accordance with current practice.

The above mechanism shall be applicable up to 31<sup>st</sup> July, 2019 without any financial implications (as stated in Regulation 8 above).

## 12.2. Settlement of deviation charge

- a) SLDC shall compute the deviation from schedule and compute the deviation charges payable/receivable for the distribution licensees / conventional generators/renewable generators in proportion to their respective deviation.

b) SLDC shall collect deviation charge from the RE generators (Pooling station/individual generator connected with the sub-station) based on the charges for deviation as specified in these Regulations.

**13. Payment Mechanism for Settlement of Deviations by Wind/Solar Generators and Payment Security:**

- 13.1. The payment settlement of deviations charges for deviations beyond permissible limit shall be the prime responsibility of all the wind generators connected to respective pooling stations and solar generators connected with the sub-station or pooling station as the case may be. The QCA shall collect the applicable deviation charges from all the generators as agreed between them and pay to SLDC.
- 13.2. The wind/solar generators/QCA shall provide payment security to SLDC in the form of Bank Guarantee and/or revolving LC covering 110% of DSM payment for one month.
- 13.3. In case the wind or solar generator defaults in payment to QCA, then QCA shall inform about the default by the generator to the SLDC and request disconnection of such defaulting generator from the grid.
- 13.4. Payment of all charges on account of deviations beyond the permissible limit at a Pooling Station by Wind and Solar generators shall have priority over other payments and shall be paid within 10 (ten) days from the issuance of the account. In case of default in payment exceeding more than 2 days, interest of 0.04% per day for each day of delay shall be levied.

#### **14. Information about Curtailment:**

14.1. Curtailment in the injection shall be intimated by the generator/QCA/SLDC through software enabled communication or any other mode of communication.

In case if SLDC fails to communicate about the curtailment to QCA/generator, deviation penalty shall not be levied for those given time blocks.

14.2. In case there is a planned curtailment due to line maintenance or for any other reasons in certain time blocks of a day by the SLDC, Generator / QCA shall be responsible to curtail the generation as per the advice of the SLDC. The QCA/generator shall amend the schedule and in case QCA/generator fails to revise the schedule, SLDC shall revise the schedule as per requirement.

#### **15. Energy Accounting (Deviation charges and de-pooling of deviation charges of Wind/Solar generators connected to pooling stations)**

15.1. All accounts related to deviation shall be prepared by the generator/QCA on a weekly basis, based on inputs from the SLDC. The same is to be made available to SLDC by the generator/QCA through software/online.

15.2. SLDC shall furnish the processed energy account data along with release of every DSM account.

15.3. The data furnished by SLDC shall be open to all entities for checking/verification for a period of 15 days. In case any mistake is detected, SLDC shall forthwith make a complete check and rectify the mistakes.

## **16. De-pooling of Deviation charges:**

16.1. QCA shall de-pool the energy deviations as well as deviation charges to each generator connected at the respective pooling station, using one of the following options:

- a) In proportion to available capacity of each generator,
- b) In proportion to energy generated in each time block by each generator,
- c) In proportion to absolute error of Individual generator schedule.
- d) Any other methodology/criteria mutually agreed between QCA and generators.

They may adopt any one of the above methods, declaring that the same shall apply to all the members of the pooling station.

16.2. Finalization of a methodology shall be on majority ( $\geq 51\%$ ) consensus basis measured in terms of MW capacity and a methodology once finalized shall not be changed without majority consensus.

## **17. 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.

**18. 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.

**19. Power to amend:**

The Commission may, at any time, vary, alter, modify or amend any provision of these Regulations.

Sd/-  
[Roopwant Singh, IAS]  
Secretary  
Gujarat Electricity Regulatory Commission

Date: 19/01/2019

Place: Gandhinagar.