

July 2019

Suggestions on Draft RERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017

Submitted to Rajasthan Electricity Regulatory Commission



The RERC vide public notice uploaded on RERC's website has invited comments and suggestions from all stakeholders on Rajasthan Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017.

- A. The present submission is in response to the said notice and the draft regulations published thereunder. We request the Commission to accept this submission on record.

Definitions And Interpretation

(1) (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:

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

Our Submission

CEEP submits that the computation of Absolute Error should be with Scheduled Generation as denominator as typically deviations are calculated with respect to the Scheduled Generation. It is further highlighted that the deviations in case of thermal generation is with respect to the scheduled generation only.

General

3. Applicability of the Regulations

(1) For wind power generators supplying power to the Discoms, or to the third-party consumers through Open Access (OA) or for captive consumption through OA within or outside the State:

(a) Wind power generators having individual or combined capacity of 5 MW and above whether connected to the State Grid independently or through polling stations;

(b) Wind power generators of any capacity connected to the State Grid through polling stations with a total capacity of 5 MW and above.

(2) For solar power generators supplying power to the Discoms, or to the third-party consumers through Open Access (OA) or for captive consumption through OA within or outside the State:

(a) Solar power generators having Individual or combined capacity of 5 MW and above whether connected to the State Grid independently or through polling stations and/or solar parks;

(b) Solar power generators of any capacity connected to the State Grid through polling stations and /or solar parks with a total capacity of 5 MW and above.”

Our Submission:

Draft Regulations are applicable to generators connected to the Intra – State Transmission System including those connected to the Pooling Sub- Stations. However, by excluding RE generator or a group of generators which are connected to the Intra – State Distribution System from the ambit of this regulation, it is feared that the very purpose of this regulation is being defeated. Hence, we suggest bringing generators connected to the state distribution system under the ambit of this regulation.

Role Of Qualified Coordinating Agency (QCA)

4. The Qualified Coordinating Agency (QCA) as defined at Regulation 2(1)(o) shall be nominated based on consensus and mutually agreed terms and conditions amongst the wind and solar generators. ...”

Our Submission:

Methodology for recovery of DSM charges and professional fees from generators should be clearly defined, and the same may be done in consultation with generators. Otherwise, this is likely to cause dispute among generators and possible failure to meet desired end goals. A model agreement may be provided for appointment of QCA.

Forecasting And Scheduling

7. “... . The 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. ...”

Our Submission:

Forecasting of RE generation is dependent on meteorological data and operational parameters of the plant. Since RE generators are familiar with operating parameters such as plant yield, efficiency and scheduled down-time etc. it won't be feasible for SLDC to provide accurate forecasts. Hence, responsibility of forecasting should stay with the individual generator. QCA may aggregate data and communicate with SLDC on behalf of generators. SLDC & QCA may provide appropriate tools and platforms to generators for the purpose of forecasting.

9. “... . 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. ...”

Our Submission:

Forum of Regulators and CERC in order to promote grid discipline are pushing implementation of 5-minute scheduling, metering, accounting and settlement. Regulation should have provision for change in number of revisions allowed as per duration of a block.

In our opinion, generation forecasting for wind generators is more complex in nature than solar generators. Also, wind turbines generate round the clock but generation from solar plants is limited by sunshine hours. Hence, the number of deviations allowed per day shall be done considering mode of operation of both the plants.

Commercial And Deviation Settlement

In the event of actual generation of a generating station or a pooling station being less or more than the generation scheduled as per Regulation 16 above, 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 Pool, as prescribed in Table – I below:

Table – I: Deviation Charges in case of under or over-injection for sale of power within the State S. No.	Absolute Error in the 15-minute time block	Deviation charges payable to the State DSM pool
1.	$\leq 15\%$	None
2.	$>15\%$ but $\leq 25\%$	At Rs. 0.50 per unit for the shortfall or excess of energy for absolute error beyond 15% and upto 25%
3.	$>25\%$ but $\leq 35\%$	At Rs. 0.50 per unit for the shortfall or excess energy beyond 15% and upto 25% + Rs. 1.0 per unit for balance energy beyond 25% and upto 35%
4.	$>35\%$	At Rs. 0.50 per unit for the shortfall or excess energy beyond 15% and upto 25% + Rs. 1.0 per unit for shortfall or excess energy beyond 25% and upto 35% + Rs. 1.50 per unit for balanced energy beyond 35%.

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Our Submission

Allowed error in generation should be linked to real error in meteorological/weather data made available by authorised agencies. The regulation should either mandate SLDC to provide data or recommend sources of data for the purpose of forecasting.

You are kindly requested to accept this submission on record and to allow us to make further submissions in person in this matter, if any.