## TAMIL NADU ELECTRICITY REGULATORY COMMISSION

## (Forecasting, Scheduling and Deviation settlement and Related Matters for Wind and Solar Generation) Regulations, 2019, Dated: 01.03.2019

SI. No.	Description	Summary		
1.	Applicability	<ol> <li>These Regulations shall apply to all Wind and Solar Energy Generators (excluding Rooftop PV Solar power projects) in Tamil Nadu connected to the Intra-State Transmission System or Distribution System, including those connected through Pooling sub-stations, and using the power generated for self-consumption or sale within or outside the State.</li> <li>The Commission shall review these Regulations including formulation for Absolute Error, Accuracy <b>Band</b> Deviation charge thereof after two years, or earlier if it considers necessary.</li> </ol>		
2.	Scheduling and Forecasting Code	<ol> <li>Wind/solar generators of the Pooling sub-station(s) having aggregate capacity upto 25 MW may aggregate their forecast, schedule with the QCA of the nearest Pooling sub-station.</li> <li>The QCA shall aggregate the Schedules of all Wind Generators and Solar generators connected to a Pooling sub-station separately, and communicate to the SLDC.</li> <li>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.</li> <li>The QCA shall provide to the SLDC a Day-Ahead and a Week-Ahead Schedule for each Pooling sub-station to enable it to assess the Availability of energy and the margin available in the State Grid.</li> <li>The Day-Ahead Schedule shall comprise of the Wnd 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.</li> <li>The commercial impact of deviations from Schedules based on the forecasts shall be borne by the Generators through their QCAs.</li> </ol>		
3.	Treatment to Gaming	<ol> <li>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.</li> <li>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.</li> <li>The amount of penalty shall be payable by the QCA to the State Deviation Settlement Mechanism (DSM) Pool. through the SLDC.</li> </ol>		
4.	Deviation Settlement for Intra- State Transactions	<ul> <li>A Generator who deviates from its given Schedule shall be liable to pay a Deviation Charge under the provisions of these Regulations.</li> <li>The QCA shall undertake the settlement of the Deviation Charges with the SLDC on behalf of the concerned Generators.</li> <li>Deviation Charge for under- or over-injection, for sale or self-consumption of power within Tamil Nadu:</li> </ul>		

		s. No.	Absolute Error in % age terms in minute time block	Deviation Charge payable to State Deviation Pool Account (Wind and Solar)
		1.	< = 10%	None
		2.	>10%but<=20%	At Rs. 0.25 per unit
		3.	>20% but <=30%	At Rs. 0.25 per unit for the shortfall or excess beyond 10% and upto 20% + Rs. 0.50 per unit for the balance energy beyond 20% and upto 30%
		4.	>30%	At Rs. 0.25 per unit for the shortfall or excess beyond 10% and upto 20% + Rs. 0.50 per unit for the shortfall or excess beyond 20% and up to 30% + Rs 1.00 per unit for the balance energy beyond 30%
5.	Metering	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.		
6.	Deviation Settlement for Inter- State Transactions	<ul> <li>Inter-State transactions at a Pooling sub-station shall be permitted only if the concerned Generator is connected through a separate feeder.</li> <li>The SLDC shall prepare the deviation settlement account for such Generator on the basis of measurement of the deviation in the energy injected.</li> <li>The Deviation Charges for under-injection by Generators connected to the Intra-State Transmission Network and selling power outside Tamil Nadu shall be as specified in the these Regulations, the accounting for which shall be done by the SLDC.</li> </ul>		
7.	Deviation Settlement for Inter- and Intra- State transactions	<ol> <li>Deviations in respect of Inter-State and Intra-State transactions for each source of RE <i>i.e.</i> wind and solar Generation shall be accounted for separately at each Pooling Sub-Station.</li> <li>The SLDC shall provide separate energy and Deviation Accounts for Inter-State and Intra-State transmission in respect of wind and solar Generation to the QCA, who shall settle the Deviation Charges with the concerned Generators.</li> </ol>		
8.	Deviation Accounting	<ul> <li>The Deviation Charges payable or receivable for the State as a whole at the State periphery shall be computed by the SLDC.</li> <li>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 State Deviation Pool Account (Wind and Solar) separately for the same.</li> </ul>		
9.	Settlement of Deviation Charges	<ul> <li>The SLDC shall compute the deviations from the Schedule, determine the Deviation Charges payable/ receivable and bill the QCA accordingly.</li> <li>The charges collected in the State Deviation Pool (wind and solar) shall be utilised to offset the shortfall in the State Deviation Pool Account (DSM).</li> </ul>		
10.	Payment Mechanism for Deviation Settlement and	1. The Deviation Charges shall be paid within ten days from the date of issue of statement of accounts and billing by the SLDC. If payments of the above charges are delayed by more than 2 days <i>i.e.</i> beyond 12 days from the date of issue of statement, a simple interest of 0.06% for each day of delay shall be levied.		

	Payment security	<ol> <li>All payments to the QCAs/generators entitled to receive any amount on account of charges for deviation shall be made within 2 working days of receipt of payments in the State Deviation Pool Account (wind and solar).</li> <li>The liability to pay interest for the delay in payments to the State Deviation Pool Account (Wind and Solar) shall remain till interest is not paid, irrespective of the fact that QCAs/generators who have to receive payments, have been paid from the State Deviation Pool Account (Wind and Solar) in part or full.</li> </ol>	
11.	Pooling of Deviation Charges	<ol> <li>The QCA shall de-pool the Deviation Charges against each Generator in proportion to the actual generation by the generators.</li> <li>Any curtailment imposed on the energy injection for reliable and secure Grid operation in emergent situations <b>shall be</b> communicated by the SLDC to the QCA through an IT-enabled communication, and no Deviation Charges <b>shall be</b> payable for any consequent deviations if the SLDC fails to do so.</li> <li>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 <b>Schedule</b> accordingly, failing which the SLDC shall revise the Schedule as required.</li> </ol>	
12.	Energy Accounting	All accounts relating to deviations within pooling sub-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. 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 Sub-Station. 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 procurers on monthly basis for the purpose of billing. The billing centre of the distribution licensee shall be responsible for energy accounting, raising and settlement of bills with the procurers.	