

HARYANA ELECTRICITY REGULATORY COMMISSION

(Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2019, Dated: 29.04.2019

Sl. No.	Description	Summary
1.	Control Period	The Commission shall review these Regulations after two years, or earlier if it considers necessary.
2.	Applicability	<ol style="list-style-type: none"> 1. These Regulations shall apply to all Wind and Solar Energy Generators in Haryana connected to the Intra-State Transmission/Distribution System, including those connected through Pooling Sub-Stations, and using the power generated for self-consumption or sale within or outside the State. 2. The combined installed capacity of the Solar or Wind Generators connected to a particular Pooling Sub-Station, or that of an individual Generator connected to some other Sub-Station, shall not be less than 1 MW.
3.	Forecasting and Scheduling Code	<ol style="list-style-type: none"> 1. This Forecasting and Scheduling Code specifies the methodology for Day-Ahead scheduling of Wind and Solar Energy Generators connected to the intra-State Transmission /Distribution Network, its revisions on a one and a half hourly basis, and the treatment of their deviations from such Schedules. 2. The Wind and Solar Energy Generators at each Pooling Sub-Station shall appoint a QCA. The QCA shall be treated as a State Entity. 3. The QCA shall provide real-time data to SLDC relating to the power system output and parameters and weather-related data, as may be required. 4. 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. 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. 6. 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. 7. The Day-Ahead Schedule shall comprise 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. 8. The commercial impact of deviation from Schedule based on the forecast shall be borne by the Generators through their QCAs.
4.	Treatment for Gaming	<ul style="list-style-type: none"> • 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. • 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. • The amount of penalty shall be payable by the QCA to the State Deviation Settlement Pool, through the SLDC. • 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.

5.	Deviation Settlement for Intra-State Transactions	<ul style="list-style-type: none"> The sale of power within Haryana by Solar and Wind Energy Generators connected to the Intra-State Transmission Network shall be settled by the Procurers on the basis of their actual generation, whereas the Deviation Settlement shall be undertaken as specified in these Regulations. A Generator who deviates from its given Schedule shall be liable to pay a Deviation Charge under the provisions of these Regulations. <p>Deviation Charge for under- or over-injection, for sale or self-consumption of power within Haryana</p>															
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6.	Deviation Settlement for Inter-State Transactions	<ol style="list-style-type: none"> The sale or self-consumption of power outside Haryana by Solar and Wind Energy Generators connected to the Intra-State Transmission Network shall be settled by the Procurers on the basis of their scheduled generation. Inter-State transactions at a Pooling Sub-Station shall be permitted only if the concerned Generator is connected through a separate feeder. The Generator shall pay the Deviation Charges applicable within Haryana in case of deviations in the State Deviation Pool Account, the consequences of such deviation at the Inter-State level being governed by the CERC Regulations governing the Deviation Settlement Mechanism and related matters. The Deviation Charges for under- or over-injection by Generators connected to the Intra-State Transmission Network and selling or consuming power outside Haryana shall be specified in these Regulations, the accounting for which shall be done by the SLDC. 															
7.	Deviation Settlement for Inter- and Intra-State Transactions	<ul style="list-style-type: none"> Deviations in respect of Inter-State and Intra-State transactions shall be accounted for separately at each Pooling Sub-Station. The SLDC shall provide separate energy and Deviation Accounts for Inter-State and Intra-State transactions to the QCA, who shall settle the Deviation Charges with the concerned Generators. 															
8.	Metering	<ol style="list-style-type: none"> Every Pooling Station and stand-alone Generator with installed capacity of 1 MW or above 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 each Wednesday for the 7 days 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. 															

9.	Communication between QCA and SLDC	The SLDC shall equip itself with the necessary Information Technology (IT)-enabled communication platform and software for communication between it and the QCA.
10.	Deviation Accounting	<ul style="list-style-type: none"> • The Deviation Charge payable or receivable for the State as a whole at the State periphery shall first be computed by the SLDC. • Any shortfall in the aggregate amount of Deviation Charge payable by Solar and Wind Energy Generators at the State periphery and the amount receivable from them by the State Deviation Pool Account shall be accounted for separately.
11.	Settlement of Deviation Charges	The SLDC shall compute the deviations from the Schedule, determine the Deviation Charges payable or receivable and bill the QCA accordingly.
12.	Payment Mechanism for Deviation Settlement, and Payment Security	<ol style="list-style-type: none"> 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. 2. The Deviation Charges shall be paid within ten days from the issuance of invoice along with statement of account by the SLDC, failing which an interest of 0.4 percent per day for each day shall be levied for the period of delay.
13.	Intimation of Curtailment	<ol style="list-style-type: none"> 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. 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	<ul style="list-style-type: none"> • The SLDC shall furnish the processed data on a weekly basis by Wednesday 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 Deviation Accounts of energy from the Pooling Sub-Station or the stand-alone Generator, as the case may be. • 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 or in proportion to Available Capacity, as may be mutually agreed between QCA and the Generators.