

CENTRAL ELECTRICITY REGULATORY COMMISSION

(Procedure for implementation of the framework on Forecasting, Scheduling and Imbalance Handling for Renewable Energy (RE) Generating Stations including Power Plants based on wind and solar at Inter-State level)

Sl. No.	Description	Summary
1.	Applicability	<ol style="list-style-type: none"> 1. All RE Generators, which are regional entities as defined in Grid Code are covered under the ambit of this procedure. 2. RE Generators connected to ISTS and having aggregate generation capacity of 50 MW and above. 3. Any renewable energy generating station of 5 MW capacity and above but less than 50 MW capacity developed by a generating company in its existing generating station in accordance with the CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) (Third Amendment) Regulations 2013, and connected to the existing connection point with inter-State Transmission System through the electrical system of the generating station. 4. Lead Generator 5. Principal Generator 6. Solar Power Park Developer 7. Wind Power Park Developer
2.	RLDC	<ol style="list-style-type: none"> 1. The concerned RLDC shall be responsible for scheduling, communication, coordination with RE Generators or Lead Generator or Principal Generator. 2. Forecasting of the renewable energy generation shall be done by the RLDCs and the forecast will be available on the website of the concerned RLDC. 3. The concerned RLDC will be responsible for processing the interface meter data and computing the net injections by each RE Generator or Lead Generator or Principal Generator or Solar Power Park or Wind Power Park.
3.	Forecasting	RE Generators or Lead Generator or Principal Generator may prepare their schedule based on the forecast done by RLDC or their own forecast. Any commercial impact on account of deviation from schedule based on the forecast chosen by the wind and solar generator shall be borne by the respective generator.
4.	Connectivity	<ol style="list-style-type: none"> 1. The application for connectivity shall be made in accordance with the provisions of the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 as amended from time to time. 2. SPPD / WPPD shall be responsible for sending the SCADA data to the RLDC and to the Renewable Energy Management Centre (REMC). 3. In a solar /wind power park, Lead Generator shall undertake all operational and commercial responsibilities for the solar energy generating station(s) for less than 50 MW aggregating to 50MW and above in following the provisions of the Indian Electricity Grid Code and all other regulations of the Commission, such as grid security,

		scheduling and dispatch, collection and payment/adjustment of Transmission charges, DSM charges, congestion and other charges etc., and submit a copy of the agreement and authorization documents to the respective RLDC in whose control area it is located.
5.	Scheduling and Despatch	<p>In case of multiple generation developers:</p> <ol style="list-style-type: none"> 1. The concerned RLDC shall be responsible for the scheduling, communication, coordination with RE Generators of 50 MW and above and connected to Inter State Transmission System (ISTS). 2. Lead generator or Principal generator shall be responsible for the coordination and communication with RLDC, SLDC, RPC and other agencies for scheduling of RE Generators individually having less than 50 MW, but collectively having an aggregate installed capacity of 50 MW and above and connected within the solar park. 3. RLDC shall upload day ahead schedules of energy generation with an interval of 15 minutes for the 24 hours period commencing at 00:00 hrs. on the website of the concerned RLDC as per regulation 6.5 of the IEGC. 4. The schedule by RE generators or lead generator or principal generator may be revised by giving advance notice to the concerned RLDC, as the case may be. Such revisions shall be effective from 4th time block, the first being the time-block in which notice was given. 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 maximum of 16 revisions during the day. 5. Revision in schedules by RE Generator or lead generator or principal generator selling power through collective transactions shall not be allowed.
6.	Metering	<ol style="list-style-type: none"> 1. Interface Energy Meters at interstate level shall be installed by the Central Transmission Utility as per CEA Metering Regulations, 2006 and amendments thereof. 2. Automated meter reading (AMR) system shall be used for communicating interface meter data at RLDCs. Internal Clock of the interface meter shall be time synchronized with GPS. 3. Frequency of real-time data updation to be shared with concerned RLDC shall be 10 second or less as per prevailing practice followed by RLDCs.
7.	Treatment of RECs	<ol style="list-style-type: none"> 1. Deviations by all RE Generators shall first be netted off by concerned RPC for the entire pool on a monthly basis and if Actual Generation is more than schedule generation, Notional RECs shall be credited to the respective Regional DSM Pool on Monthly Basis and carried forward for settlement in future. 2. If after netting off, including any carried forwarded notional RECs, the remaining shortfall in renewable energy generation shall be balanced through purchase of equivalent solar and non-solar Renewable Energy Certificates (RECs) through Power Exchanges by RLDC/ NLDC by utilising funds from the respective Pool Account at the end of the financial year within three months of finalization of accounts by concerned RPC.
8.	Commercial Settlement	<ol style="list-style-type: none"> 1. All the commercial settlement among the generators beyond the connection point shall be done by the RLDC/SLDC/RE Generators or lead generator or principal generator as the case may be. 2. All the transactions shall be through ECS only.

9.	Application of Losses and Charges	Transmission charges and losses for ISTS shall be applicable as per the IEGC and CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and amendments thereof.
10.	RLDC Fees and Charges	<ol style="list-style-type: none"> 1. RE Generators or lead generator or principal generator shall be registered as User with the respective Regional/State Load Despatch Centre responsible for scheduling, metering and energy accounting. 2. RE Generators or lead generator or principal generator shall pay RLDC fees and charges as per Hon'ble CERC's Regulation "Fees and charges of Regional Load Despatch Centre and other related matters", Regulation 2015 and further amendment thereof after getting registered with respective RLDCs as a User of RLDC.