## **Central Electricity Regulatory Commission**

## **Notification**

## **New Delhi,** the 7<sup>th</sup> August, 2015

No. 1/14/2015-Reg.Aff.(FSDS)(i)/CERC - In exercise of powers conferred under clause (h) of sub-section (1) of Section 79 read with clause (g) of sub-section (2) of Section 178 of the Electricity Act, 2003 (36 of 2003), and all other powers enabling it in this behalf, the Central Electricity Regulatory Commission hereby makes the following regulations to amend the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 including the first and second amendments thereof (hereinafter referred to as "the Principal Regulations"), namely:-

- 1. Short title and commencement (1) These regulations shall be called the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015,
  - (2) These regulations shall come into force with effect from 1<sup>st</sup> November, 2015
- 2. Amendment of Regulation 1 of Part 1 of Principal Regulations: Sub-Regulation (v) under Regulation 1.4 of the Principal Regulations, shall be substituted as under:-
  - "Part 6: Scheduling and Despatch Code: This section deals with the procedure to be adopted for scheduling and despatch of generation of the Inter-State Generating Stations (ISGS) and scheduling for other transactions through long-term access, medium-term and short-term open access including complementary commercial mechanisms, on a day-ahead and intra-day basis with the process of the flow of information between the ISGS, National Load Despatch Centre (NLDC), Regional Load Despatch Centre (RLDC), Power Exchanges and the State Load Despatch Centres (SLDCs), and other concerned persons.

Most of the wind and solar energy generators are presently connected to intra-State network and in future are likely to be connected to the inter-state transmission system (ISTS) as well. Keeping in view the variable nature of generation from such sources and the effect such variability has on the inter-state grid, and in view of the large-scale integration of such sources into the grid envisaged in view of the Government of India's thrust on renewable sources of energy, scheduling of wind and solar generators which are regional entities, has been incorporated in this code."

## 3. Amendment of Regulation 2 (Definitions) of Principal Regulations:

(i) Sub-Regulation (eee) of Regulation 2 of the Principal Regulations, shall be substituted as under:-

- (eee) "Pool Account" means regional account for (i) payments regarding Deviation Charges (Deviation Charge Account) or (ii) reactive energy exchanges (Reactive Energy Account) (iii) Congestion Charge, as the case may be;
- 4. Amendment of Regulation 2 of Part 2 of Principal Regulations: Regulation 2.4.5 of the Principal Regulations, shall be substituted as under
  - "2.4.5 RPC Secretariat or any other person as notified by the Commission from time to time, shall prepare monthly Regional Energy Account (REA), weekly deviation charge account, reactive energy account, and congestion charge account, based on data provided by RLDC, and deviation charge account for wind and solar generators which are regional entities, based on data provided by SLDC/RLDC of the State/Region in which such generators are located and any other charges specified by the Commission for the purpose of billing and payments of various charges."
- 5. Amendment of Regulation 5.5 of Part 5 of Principal Regulations: Regulation 5.5.1 (b) of the Principal Regulations, shall be substituted as under:-
  - "A daily report covering the performance of the regional grid shall be prepared by each RLDC based on the inputs received from SLDCs / Users and shall be put on its website. This report shall also cover the wind and solar power generation and injection into the grid."
- 6. Amendment of Regulation 6.2 of Part 6 of Principal Regulations: In Regulation 6.2 of the Principal Regulations, the sentences "This code also provides the methodology for re-scheduling of wind and solar energy on three (3) hourly basis and the methodology of compensating the wind and solar energy rich State for dealing with the variable generation through a Renewable Regulatory charge. For this, appropriate meters and Data Acquisition System facility shall be provided for accounting of UI charges and transfer of information to concerned SLDC and RLDC." shall be substituted by the sentences "This code also provides the methodology for re-scheduling of wind and solar energy generators which are regional entities, on one and half hourly basis and the methodology of handling deviations of such wind and solar energy generators. Appropriate meters shall be provided for accounting of charges for deviation under DSM Regulations. Telemetry/communication system & Data Acquisition System shall also be provided for transfer of information to the concerned SLDC and RLDC."
- 7. Amendment of Regulation 6.4(2) of Part 6 of Principal Regulations: Regulation 6.4(2)(b) of the Principal Regulations shall be substituted as under:-
  - "(b) Ultra Mega Power Projects including projects based on wind and solar resources and having capacity of 500 MW and above"

- 8. Amendment of Regulation 6.5 of Part 6 of Principal Regulations: Regulation 6.5 (23) of the Principal Regulations, shall be substituted as under:-
  - "(i) Wind and Solar generators shall mandatorily provide to the concerned RLDC, in a format as prescribed by RLDC, the technical specifications at the beginning and whenever there is any change. The data relating to power system parameters and weather related data as applicable shall also be mandatorily provided by such generators to concerned RLDC in real time. The frequency and other details in this regard shall be provided in the Detailed Procedure to be prepared by NLDC and approved by the Commission.
  - (ii) Forecasting shall be done by wind and solar generators which are regional entities as well as the concerned RLDC. The concerned RLDC may engage forecasting agency(ies) and prepare a schedule for such generating stations. The forecast by the concerned RLDC shall be with the objective of ensuring secure grid operation. The forecast by the wind and solar generator shall be generator centric. The wind and solar generators which are regional entities will have the option of accepting the concerned RLDC's forecast for preparing its schedule or provide the concerned RLDC with a schedule based on its 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 it.
  - (iii) The schedule by wind and solar generators which are regional entities (excluding collective transactions) may be revised by giving advance notice to the concerned RLDC, as the case may be. 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 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.
  - (iv) The schedule of solar generators which are regional entities shall be given by the generator based on availability of the generator, weather forecasting, solar insolation/irradiance, season and normal solar generation curve."
- 9. **Amendment of Annexure-1 of Principal Regulations:** Regulation 4 of the Annexure-1 of the Principal Regulations, shall be substituted as under:-
  - "The wind and solar generators which are regional entities shall forecast renewable energy generation at the following time intervals:
  - (i) Day ahead forecast: Wind and solar energy generation forecast with an interval of 15 minutes for the next 24 hours for the aggregate generation capacity of 50 MW and above.
  - (ii) The schedule by such wind and solar generators which are regional entities, supplying inter-state power under long-term access or mediumterm open access or short-term open access may be revised by giving

advance notice to RLDC. 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 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."

10. Amendment of Annexure-1 of Principal Regulations: Para 5 of the Annexure-1 of the Principal Regulations, shall be substituted as under:-

"The charges payable for deviation from schedule by the wind and solar generators which are regional entities, shall be delinked from frequency and shall be accounted for and settled in accordance with the provisions of the Central Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2014 as amended from time to time."

11. Amendment of Annexure-1 of Principal Regulations: Paras 6, 7 and 9 of the Annexure-1 of the Principal Regulations, shall be deleted.

(Shubha Sarma) Secretary

Note: Principal Regulations were published in Gazette of India, Extraordinary, Part-III, Section 4 at Serial No. 115 on 28.4.2010, the first amendment to the Principal Regulations were published in the Gazette of India, Extraordinary, Part-III, Section 4 at Serial No. 60 on 6th March, 2012 and the second amendment to the Principal Regulations were published in the Gazette of India, Extraordinary, Part-III, Section 4 at Serial No. 08 on 6<sup>th</sup> January, 2014.