

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

No. RA-14026(11)/2/2018/CERC

Dated: 6th August, 2019

PUBLIC NOTICE

Sub: Proposed framework for Real-Time Market for Electricity

The Electricity Act, 2003 and National Electricity Policy and Tariff Policy entrust on the Commission responsibility promoting development of market in power.

2. As a step towards creating a Market platform for trade of energy closer to the delivery of power in real time, a framework for Real-Time Market for electricity is proposed. Accordingly, in exercise of powers conferred under Section 178 of the Electricity Act, 2003 and all other powers enabling it in this behalf, draft amendments to the enabling provisions contained in: (i) Central Electricity Regulatory Commission (Indian Electricity Grid Code), 2010; (ii) Central Electricity Regulatory Commission (Power Market Regulation), 2010; (iii) Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008; are proposed. The draft regulations, along with the Explanatory Memorandum are posted on the Commission's website, i.e. www.cercind.gov.in and can be downloaded.

2. Notice is hereby given under sub-section (3) of section 178 of the Act read with Rule 3 of the Electricity (Procedure for Previous Publication) Rules, 2005 inviting comments / suggestions / objections from the stakeholders and interested persons on the draft regulations. The comments / suggestions / objections may be sent to the undersigned by 05.09.2019 (advisor-re@cercind.gov.in and cerc.ra@gmail.com). The comments/suggestions/objections shall also be uploaded through SAUDAMINI Portal for registered users after login and clicking: e-Regulation link on the e-filing Home Page. For more details or technical queries e-Court Helpdesk at 011-23353503 extn. 260 or 7042604928 may be contacted.

3. The comments / suggestions / objections received after the stipulated date in the Commission's office may not be considered while finalizing these regulations. The public hearing will also be held on the above subject. Date and venue of the public hearing will be issued separately.

Sd/-
(Sanoj Kumar Jha)
Secretary

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Dated: 6th August, 2019

DRAFT NOTIFICATION

L-1/13/2010/CERC In exercise of powers conferred under Section 66 read with Section 178(2)(y) 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 (Power Market) Regulations, 2010 (hereinafter referred to as Principal Regulations) namely:

1. Short title and commencement

- 1.1 These regulations may be called the Central Electricity Regulatory Commission (Power Market) (Second Amendment) Regulations, 2019.
- 1.2 These regulations shall come into force from 1st January, 2020 or such other date as may be notified by the Commission.

2. Amendment to Regulation 2 of the Principal Regulations

- 2.1 Two new Sub-clauses shall be added after Sub-clause (e) of Clause (i) of Regulation 2 of the Principal Regulations, as under :-

“(ea) “Collective Transaction” means a set of transactions discovered in power exchange(s) through anonymous, simultaneous competitive bidding by buyers and sellers.”

“(eb) “Continuous Transaction” means a transaction other than collective transaction, where the buy and the sell bids are matched on a continuous basis with price-time priority.”

- 2.2 A new sub-clause shall be added after sub clause (k) of clause (i) of Regulation 2 of the Principal Regulations, as under :-

“(ka) “Day Ahead Market (DAM)” means a market for collective transactions of ‘Day Ahead Contracts’ through Power Exchange(s).”

2.3 A new Sub-clause shall be added after Sub-clause (n) of Clause (i) of Regulation 2 of the Principal Regulations, as under :-

“(na) “Gate Closure” in reference to Real-Time Market refers to the time after which the bids submitted to the Power Exchange cannot be modified for a specified delivery period.”

2.4 Sub-clause (o) of Clause (i) of Regulation 2 of the Principal Regulations, shall be substituted as under :-

“(o) “Intraday Contract / Contingency Contract” means the contract where continuous transaction occurs on day (T) after the closure of day ahead transaction window and the delivery of power is on the same day (T) or next day (T+1) and which is scheduled by Regional Load Despatch Centre or National Load Despatch Centre.”

2.5 Two new Sub-clauses shall be added after sub clause (cc) of clause (i) of Regulation 2 of the Principal Regulations, as under :-

“(cca) “Real-time Contract” means the contract other than day ahead contract and intraday or contingency contract, where collective transactions occur on the day of operation (T) or (T-1) after the right to revision of schedule ends for a specified delivery period during the day of operation (T) and which are scheduled by Regional Load Despatch Centre or National Load Despatch Centre.”

“(ccb) “Real-Time Market” means a market for collective transactions of Real time Contracts through Power Exchange(s).”

3. Amendment to Regulation 4 of the Principal Regulations

3.1 A new Sub-clause (d) shall be added after Sub-clause (c) of Clause (iii) of Regulation 4 of the Principal Regulations, as under :-

“(d) Real Time Contract”

4. Amendment to Regulation 11 of the Principal Regulations

- 4.1 In Regulation 11 of Principal Regulations, the words “and Real-time markets” shall be added after the words “day ahead markets”.
- 4.2 In Clause (ii) of Regulation 11, the words “and real-time basis” shall be added after the words “day ahead basis”.

(Sanoj Kumar Jha)
Secretary

Note:

The Principal Regulations were published in the Gazette of India Extraordinary, Part III, Section 4, Sr. No. 33, dated 21.1.2010 and the same were amended vide,

- a. Central Electricity Regulatory Commission (Power Market) (First Amendment) Regulations, 2014 published in the Gazette of India Extraordinary, Part III, Section 4, Sr. No. 110, dated 3.4.2010

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Dated: 6th August, 2019

DRAFT NOTIFICATION

No. L-1/18/2010-CERC: In exercise of powers conferred under clause (h) of subsection (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 as amended from time to time (hereinafter referred to as “the Principal Regulations”).

1. Short title and commencement

- 1.1 These regulations may be called the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Sixth Amendment) Regulations, 2019.
- 1.2 These regulations shall come into force from 1st January, 2020 or such other date as may be notified by the Commission.

2. Amendment to Part 6 of the Principal Regulations

2.1 In Sub-clauses (a), (b) and (c) of clause 4 of Regulation 6.5 of Part 6 of the Principal Regulation, the word ‘market’ wherever it appears shall be substituted by the words ‘Day Ahead Market’.

2.2 In Sub-clause (a) of clause (5) of Regulation 6.5 of Part 6 of the Principal Regulations, the words “Scheduling of Day-Ahead Collective transaction :” shall be added before the words “NLDC shall indicate to Power Exchange(s)”

2.3 A new sub clause shall be added after sub clause (a) of clause (5) of Regulation 6.5 of Part 6 of the Principal Regulations, as under:-

“(aa) Scheduling of Real-time collective transaction: NLDC shall indicate to Power Exchange(s), margin available in each of the transmission corridors before the gate closure, i.e. before the window for trade closes for a specified duration. Power Exchange(s) shall clear the buy and sell bids for the said duration under consideration on various interfaces or control areas or regional transmission systems as intimated by NLDC. The limit for scheduling of collective transaction during real time for respective Power Exchanges shall be worked out in accordance with the directives of the Commission. NLDC shall furnish the available transmission corridors to the Power Exchange(s) before the trading for real time market or a specified duration closes. Based on the information furnished by NLDC, Power Exchange shall clear the RTM bids and announce the Market Clearing price and volume. Based on the volume cleared by the Power Exchanges, NLDC shall communicate the schedules to the respective RLDCs. After getting confirmation from RLDCs, NLDC shall convey the acceptance of scheduling of collective transaction to Power Exchange(s). RLDCs shall schedule the Collective Transaction at the respective periphery of the Regional Entities.”

2.4 The clause (18) of Regulation 6.5 of Part 6 of the Principal Regulations, shall be substituted as under:

“18. Revision of declared capability by the ISGS(s) having two part tariff with capacity charge and energy charge and requisition by beneficiary (ies) for the remaining period of the day shall also be permitted with advance notice. Any revision in schedule made in odd time blocks shall become effective from 7th time block and any revision in schedule made in even time blocks shall become effective from 8th time block, counting the time block in which the request for revision has been received by the RLDCs to be the first one.

Note: Odd Time blocks referred in this clause, are the Time blocks 00:00 to 00:15, 00:30 to 00:45, 01:00 to 01:15 and so on. Even Time blocks referred in this clause, are the Time blocks 00:15 to 00:30, 00:45: 01:00, and 01:15 to 01:30 and so on.

Illustration:

If a request for revision in schedule or declared capability has been made in Time block 17:00 to 17:15 (odd Time block) of a day D, it shall be effective from Time block 18:30 to 18:45 of the day D (7th Time block from the Time block in which the request for revision was made). Similarly, if a request for revision in schedule or declared capability has been made in Time block 17:15 to 17:30 (even Time block) of a day D, it shall be effective from Time block 19:00 to 19:15 of the day (D) (8th Time block from the Time block in which request of revision was made).

2.5 Sub clause (a) of clause 18 of Regulation 6.5 of the Principal Regulations, shall be substituted as under:

“In case of forced outages of a unit, for those stations who have a two part tariff based on capacity charge and energy charge for long term and medium term contracts, the RLDC shall revise the schedule on the basis of revised declared capability. The revised declared capability and the revised schedules shall become effective from the time block and in the manner as specified in Regulation 6.5.18.”

2.6 Clause 19 of Regulations 6.5 of Part 6 of the Principal Regulations shall be substituted as under:

“In case of forced outage of a unit of a generating station (having generating capacity of 100 MW or more) and selling power under Short Term bilateral transaction (excluding collective transactions through power exchange), the generator or electricity trader or any other agency selling power from the unit of the generating station shall immediately intimate the outage of the unit along with the requisition for revision of schedule and estimated time of restoration of the unit, to SLDC/RLDC, as the case may be. The schedule of beneficiaries, sellers and buyers of power from this generating unit shall be revised accordingly. The revised schedules shall become effective from the time block

and in the manner as specified in Regulation 6.5.18. The SLDC/RLDC as the case may be, shall inform the revised schedule to the seller and the buyer. The original schedule shall become effective from the estimated time of restoration of the unit. However, the transmission charges as per original schedule shall continue to be paid for two days.

Provided that the schedule of the buyers and sellers shall be revised after forced outage of a unit, only if the source of power for a particular transaction has clearly been indicated during short-term open access application and the said unit of that generating station goes under forced outage”

2.7 In Regulation 6.5(A) of part 6 of the Principal Regulations, the following amendments shall be made:

2.6.1 The title “Scheduling and commercial settlement of energy exchanged under Ancillary services, Spinning Reserves, URS”, shall be substituted by “Scheduling and commercial settlement of energy exchanged under Ancillary services, Spinning Reserves, URS and Real-Time transactions:”

2.6.2 Clause (c) shall be substituted as under:

“(c) An ISGS may sell power from the share of its original beneficiaries in the day-ahead Market with the consent of such beneficiaries; and in the real-time market without the requirement of consent from the beneficiaries, before the trading for the real time market for a specified duration commences. In both the cases, the realized gains shall be shared between the ISGS and the concerned beneficiary in the ratio of 50:50 or as mutually agreed between the ISGS and concerned beneficiary in the billing of the following month. This gain shall be calculated as the difference between selling price of such power and fuel charge including incidental expenses.

Provided that such sale of power by ISGS shall not result in any adverse impact on the original beneficiary (ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without such sale:

Provided further that there shall be no sharing of loss between the ISGS and the beneficiary (ies):

Provided also that, the liability of fixed charge in such cases shall remain with original beneficiary (ies) as determined in accordance with the Tariff Regulations notified by the Commission from time to time.”

(Sanoj Kumar Jha)
Secretary

Note:

Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 were notified in Part III, Section 4 No. 115 of the Gazette of India (Extraordinary) dated 28.4.2010 and amended vide:-

- a. Corrigendum published in Part III, Section 4, No. 168 of the Gazette of India (Extraordinary) dated 03.07.2010
- b. Addendum published in Part III, Section 4, No. 168 of the Gazette of India (Extraordinary) dated 03.07.2010
- c. Central Electricity Regulatory Commission (Indian Electricity Grid Code) (First Amendment) Regulations, 2012 published in Part III, Section 4, No. 60 of the Gazette of India (Extraordinary) dated 06.03.2010
- d. Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2014 published in Part III, Section 4, No. 08 of the Gazette of India (Extraordinary) dated 07.01.2014
- e. Corrigendum published in Part III, Section 4, No. 64 of the Gazette of India (Extraordinary) dated 21.2.2014
- f. Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Third Amendment) Regulations, 2015 published in Part III, Section 4, No 271 of the Gazette of India (Extraordinary) dated 07.08.2015
- g. Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulation, 2016 published in Part III, Section 4, No 162 of the Gazette of India (Extraordinary) dated 29.04.2016
- h. Corrigendum published in Part III, Section IV, No. 162 of the Gazette of India (Extraordinary) dated 16.5.2017
- i. Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fifth Amendment) Regulation, 2017 published in Part III, Section 4, No 148 of the Gazette of India (Extraordinary) dated 12.04.2017

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Dated: 6th August, 2019

DRAFT NOTIFICATION

No. L-7/105(121)/2007-CERC – In exercise of powers conferred by Section 178 of the Electricity Act, 2003 and all other powers enabling it in this behalf and after previous publication, the Central Electricity Regulatory Commission, hereby makes the following regulations, to amend the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 (hereinafter referred to as the "Principal Regulations") namely:-

Preliminary

1. Short title and commencement

- 1.1 These regulations may be called the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Sixth Amendment) Regulations, 2019.
- 1.2 These regulations shall come into force from 1st January, 2020 or such other date as may be notified by the Commission.

2. Amendment to Regulation 2 of the Principal Regulations

- 2.1 Sub-clause (g-a) of clause (1) of Regulation 2 of Principal Regulation shall be substituted as under:-

“(ga) “Intra-Day Transaction / Contingency Transaction” means the continuous transaction which occurs on day (T) after the closure of day ahead market window for delivery of power on the same day (T) except for the duration of the specified hour of delivery of the real-time market, or for the next day (T+1) and which are scheduled by Regional Load Despatch Centre or National Load Despatch Centre.”

2.2 A new sub-clause shall be added after Sub-clause (m) of clause (1) of Regulation 2 of the Principal Regulations, as under :-

“(ma) ‘Real-time transactions’ means the collective transactions which occur on the day of operation (T) or (T-1) after the right to revision of schedule ends for a specified duration of delivery during the day of operation (T) and which are scheduled by Regional Load Despatch Centre or National Load Despatch Centre.”

3. Amendment to Regulation 13 of the Principal Regulations

3.1 A new clause shall be added after clause 13(A) of Regulation 13 of the Principal Regulations, as under:-

“13(B) Procedure for scheduling of transaction in Real-time market”

All the entities participating in the real-time market for a specified duration may place their bids and offers on the Power Exchanges for purchase and sale of power. The window for trade in real-time market for day (Do) shall open from 22.45 hrs to 23.00 hrs of (D-1) for the delivery of power for the first two time blocks of 1st hour of (Do) i.e., 00.00 hrs to 00.30 hrs, and will be repeated every half an hour thereafter. The bidding mechanism for the real-time market shall be double-side closed bid auction for delivery of power in each time block of that hour. The Nodal Agency shall indicate to the Power Exchange(s) the available margin on each of the transmission corridors before the gate closure, i.e. before the window for trade closes for specified duration. The power exchanges shall clear the real-time market from 23.00 hrs till 23.15 hrs based on the available transmission corridor and the buy and sell bids for the RTM for the specified duration. Then the cleared bids shall be submitted by the Power Exchanges to the Nodal Agency for scheduling. The Nodal agency in accordance with the detailed procedure shall announce the final schedule by 23.45 hrs of (D-1) and communicate to the RLDCs to prepare the schedule for dispatch.

Illustration:

The complete timelines for scheduling of the real-time collective transaction is shown in the table below:

| RTM Auction Start Time | RTM Auction End Time | RTM Clearing Interval and publication in the website | Communication of Schedule to NLDC/RLDCs/ SLDCs | Final Schedule Preparation | Preparation time for despatch | Delivery Period |
|---------------------------------|---------------------------------|--|--|---|---|---------------------|
| Illustration - A | | | | | | |
| 22:45 Hrs (of the previous day) | 23:00 Hrs (of the previous day) | 23:00 Hrs – 23:15 Hrs (of the previous day) | 23:15 Hrs – 23:30 Hrs (of the previous day) | 23:30 Hrs – 23:45 Hrs (of the previous day) | 23:45 Hrs – 24:00 Hrs (of the previous day) | 00:00:00 – 00:30:00 |
| 23:15 Hrs (of the previous day) | 23:30 Hrs (of the previous day) | 23:30 Hrs - 23:45 Hrs of the previous day | 23:45 Hrs – 00:00 Hrs (of the previous day) | 00:00 Hrs – 00:15 Hrs | 00:15 Hrs – 00:30 Hrs | 00:30:00 – 01:00:00 |
| Illustration - B | | | | | | |
| 07:45 Hrs | 08:00 Hrs | 08:00 Hrs - 08:15 Hrs) | 08:15 Hrs – 08:30 Hrs | 08:30 Hrs – 08:45 Hrs | 08:45 Hrs – 09:00 Hrs | 09:00:00 – 09:30:00 |
| Illustration - C | | | | | | |
| 20:45Hrs | 21:00Hrs | 21:00 Hrs – 21:15 Hrs | 21:15 Hrs – 21:30 Hrs | 21:30 Hrs – 21:45 Hrs | 21:45 Hrs - 22:00 Hrs | 22:00:00 – 22:30:00 |

4. Amendment to Regulation 20 of the Principal Regulations

4.1 Clause (1) of Regulation 20 of the Principal Regulations shall be substituted as under:

“(1) All transactions for State utilities and for intra-State entities scheduled by the nodal agency under these regulations, after accounting the changes in the schedules after the execution of the real-time market, shall be accounted for and included in the respective day-ahead net interchange schedules of the concerned regional entity issued by the Regional Load Despatch Centre.”

(Sanoj Kumar Jha)
Secretary

Note:

The Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 were notified on 7.2.2008 in the Gazette of India Extraordinary Part-III, Section 4, Sr. No. 10 and the same were amended vide,

- a. Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Amendment) Regulations, 2009 notified on 29.5.2009 in Part III, Section 4, Sr. No.10 of the Gazette of India Extraordinary.
- b. Corrigendum notified on 10.6.2009 in Gazette of India Extraordinary Part-III, Section 4, Ser. No. 10
- c. Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Second Amendment) Regulations, 2013, notified on 11.9.2013 in the Gazette of India Extraordinary Part-III, Section 4, Sr. No. 237
- d. Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Third Amendment) Regulations, 2015, notified on 12.5.2015 in the Gazette of India Extraordinary Part-III, Section 4, Sr. No. 237
- e. Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Fourth Amendment) Regulations, 2016, notified on 22.6.2016 in the Gazette of India Extraordinary Part-III, Section 4, Sr. No. 279
- f. Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Fifth Amendment) Regulations, 2018, notified on 2.1.2019 in the Gazette of India Extraordinary Part-III, Section 4, Sr. No. 23