



No. IEX/RA/009/19-20

Date: 5<sup>th</sup> Sept, 2019

To,

The Secretary  
Central Electricity Regulatory Commission  
3rd & 4th Floor, Chanderlok Building  
36, Janpath  
New Delhi - 100 001,  
Fax: 011-23753923

**Sub: Comments on Proposed framework for Real-Time Market for Electricity.**

Sir,

This has reference to Public Notice dated 06.08.2019 inviting suggestions and comments from stakeholders on the subject matter. Accordingly, our comments are attached for the kind consideration of the Hon'ble Commission.

Thanking You!

Yours Sincerely,

A handwritten signature in blue ink, appearing to be 'Jogendra Behra', is written over a blue horizontal line.

Jogendra Behra

Vice President (Market Design & Economics)

# IEX comments on Proposed framework for Real-Time Market for Electricity

## A. Draft Central Electricity Regulatory Commission (Open Access in inter-State Transmission) (Sixth Amendment) Regulations, 2019.

1. **Definition of Intra-Day Transaction / Contingency Transaction:** Draft Open Access regulation has proposed following definition of intra-day transaction/contingency transactions:

*“(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.”*

### **IEX Comments:**

As provided under Open Access Regulations the intra day and contingency transactions are also carried out as bilateral transactions outside of the Exchange platform. Therefore, the modifications incorporating that that these transactions will be on continuous basis may not be appropriate to insert in the above definition.

Further, in the above definition, words “except for the duration of the specified hour of delivery of the real-time market” need further clarification. As all hours in a day will be available in real time market an ambiguity may arise regarding the scope of intra day market. Apparently, the intent of the above definition is to avoid overlapping of RTM and intra-day market; however the same is not getting clear through the above formulation.

2. **Definition of Real-time transactions:** Draft Regulations has proposed following definition of Real time transactions:

*“(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.”*

### **IEX Comments:**

In the above definition, words ‘operation’ may be replaced with ‘delivery’ for clarity and consistency with existing terminology. Accordingly, it is suggested that the above definition may be amended a follows:

*“(ma) “Real-time transactions” means the collective transactions which occur on the day of ~~operation~~delivery (TD) or (TD-1) after the right to revision of schedule ends for a specified duration of delivery during the day of ~~operation~~delivery (TD) and which are scheduled by Regional Load Despatch Centre or National Load Despatch Centre.”*

3. **Procedure for scheduling of transaction in Real-time market:** Draft Regulations proposed following procedure for scheduling of real time transactions:

***“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.”*

**IEX Comments:**

The delivery is proposed for each half an hour, however in 7<sup>th</sup> line of above provision delivery for hour is appearing. Therefore, same needs to be aligned.

Further, in the Explanatory Memorandum, it is mentioned that NLDC will communicate schedules to RLDC and SLDC, however the same is not reflecting in the above-mentioned provision. Therefore, above provision may be suitably amended.

As per the procedure, it is mentioned that NLDC shall announce the final schedule by 15 min before delivery and communicate it to the RLDCs and SLDCs to prepare the schedule for dispatch. We understand that the RLDC/SLDC have to communicate schedule to all the entities to take necessary action at their end. All of this has to take place within 15 min duration which seems to be difficult to attain. Therefore it is suggested that the time for communication to market participants should be increased by another 15 min. This may require extending the total lead time envisaged for RTM.

Clause 13A of CERC Open Access Regulations deals with the procedure for scheduling collective transaction through NOAR. The proposed clause 13B deals with the procedure for scheduling under Real-time Market which is also defined as collective transaction, hence suitable amendment may be incorporated in clause 13B to make it applicable for Real-time collective transactions.

In view of the above, it is suggested that, above provision may be amended as follows:

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

*All the entities ~~wish to participating~~ participate 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 (Do ~~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 half an 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, as may be prepared by NLDC with he approval of Commission, -shall announce the final schedule by 23.45 hrs of (D-1) and communicate to the RLDCs and SLDCs to prepare the schedule for dispatch. The Power Exchanges shall make an application to the nodal agency through the NOAR for scheduling of the RTM transactions from the date to be separately notified by the Commission.*

4. **Standing clearance/NOC from SLDC**: In addition to above, clarity is required on the requirement of Standing Clearance/NOC of RLDC/SLDC for participating in the Real-Time Market.

Clause 2 and (2A) of Open Access Regulations deals with the Standing Clearance and its applicability on collective transactions for Day Ahead Market on Power Exchanges and/or for bilateral intra-day/contingency transactions. However, it is not clear whether the same Standing Clearance/NOC shall be applicable for Real-Time Market.

In case the Standing Clearance/NOC issued for Day Ahead Market under the Clause 2 and (2A) of Open Access Regulations were to be applicable and an entity ends up completely utilizing it in the Day Ahead Market then it cannot participate in the Real-Time Market to manage its imbalances arising on account of any subsequent change in its demand/supply conditions. Further, it may also be noted that variability in buy/sell requirement may arise on account of any change in long term or medium-term contracts whereas Standing Clearance/NOC is issued looking at the short-term open access requirement of an entity.

A view may be taken regarding issuance and applicability of Standing Clearance/NOC for Real-Time Market taking the above into consideration.

**6-5. Application Fee, Transmission Charges and Operating Charges:** The proposed framework has not covered Application Fee, Transmission Charges and Operating Charges applicable for Real-Time transactions; therefore, the same needs to be clarified. Our suggestions regarding the above are as given below:

- a. **Application Fee:** Regulation 7 of Open Access Regulations provides for Application Fee of Rs. 5000 for each collective transaction. If the same were to be applicable the Application Fee would amount to Rs. 2.4 Lakh (48 Applications) in a day for Real-Time Market which is impractical. Therefore, it is suggested that Application Fee may be waived off for RTM transactions.
- b. **Transmission Charges:** Regulation 16 of Open Access Regulations provides for levy of transmission charges. It is suggested that considering ease of operation the transmission charges may be waived off for RTM transactions.
- c. **NLDC Operating Charges:** Regulation 17(3) of Open Access Regulations provides for NLDC Operating Charges @ Re 1/MWh, same may be applicable in RTM also.
- d. **SLDC Operating Charges:** Regulation 17(5) of Open Access Regulations provides that the successful buyers and sellers shall also pay Rs 1000/- per day for the SLDC involved for each point of the collective transaction. It is submitted that there would be 48 RTM sessions therefore 48 applications for scheduling will be required to be submitted. If a participant is participating in all auctions, he would be required to pay Rs. 48000 towards SLDC Operating Charges which again is impractical. Therefore, it is suggested that NLDC may share its Operating Charges (@ Rs.1/MWh) with SLDC in the ratio as be decided by the Hon'ble Commission.

**7-6. Curtailment in case of Grid disturbance:** Regulation 15 of Open Access Regulations deals with the curtailment of transactions. Due to stringent timelines of operating the Real-Time Market, it is suggested that no curtailment may be imposed on Real-Time Market transactions.

**B. Draft Central Electricity Regulatory Commission (Power Market) (Second Amendment) Regulations, 2019:**

1. **Definition of Gate Closure:** Draft Regulations provides following definition of "Gate Closure":

*"(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."*

The Gate Closure is a generic term and should be defined in generic way so that it can be applied across different contracts. It is suggested that Gate Closure may be defined as follows:

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

2. **Definition of Intraday Contract / Contingency Contract:** Draft Regulations provides following definition of “Intraday Contract / Contingency Contract”:

*“(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.”*

In the above definition, it is mandated to adopt matching methodology of the contract, however, Regulation 7 (2)(ii) of Power Market Regulations provide flexibility to Power Exchanges to propose the matching methodology. Therefore, it is suggested that the flexibility to propose the matching methodology should remain with the Power Exchange so that there would be room for innovation in the market.

Further, the definition may be amended to align the timelines (Round the clock) with the present practice.

In view of the above, it is suggested that, above provision may be amended as follows:

*“(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.”*

3. **Definition of Real-time Contract:** Draft Regulations has proposed following definition of Real time Contract:

*“(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.”*

In the above definition, it is suggested that for clarity and consistency, word ‘operation’ may be replaced with ‘delivery’. Further, since the nodal agency for Real-Time Market being a collective transactions is NLDC, RLDC appearing in the definition may not be required. The above provision may be amended 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-delivery (TD)~~ or ~~(TD-1)~~ after the right to revision of schedule ends for a specified delivery period during the day of ~~operation-delivery (TD)~~ and which are scheduled by ~~Regional Load Despatch Centre or~~ National Load Despatch Centre.”*

**C. Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Sixth Amendment) Regulations, 2019:**

- 1. Scheduling of Real-time collective transaction:** A new clause has been proposed to be added in Regulation 6.5 of IEGC for scheduling of real-time collective transaction. The proposed clause provides for confirmation of RLDC for acceptance of schedule by NLDC. In this regard, it is submitted that since margin available in each of the transmission corridors is provided by NLDC before the gate closure and such availability may have been already provided in consultation with RLDC, the requirement of RLDC acceptance of the schedule post clearing may be avoided to adhere to the stringent timelines. It is suggested that the schedule provided by Power Exchanges need to be accepted by NLDC after comparing the schedules with the margins provided by NLDC to each Power Exchange. Further, as provided in Clause 3.2.4 in Explanatory Memorandum NLDC should communicate schedules to SLDC through RLDC for smooth implementation of schedules.
- 2. Allowing generators to purchase power in RTM:** In Para 3.1.11 of Explanatory Memorandum, it is proposed that in case of forced outages the generator can participate in the Real Time Market and buy power for the beneficiary to honour its commitment. In this regard, it is submitted that a provision for enabling Generators to buy power should be incorporated in IEGC. It is also suggested that Hon'ble Commission may also consider buying power by generators for other than forced outage in Real Time Market. In the discussion paper on Real-Time Market it was envisaged that the generator may buy power for making up for shortfall from its day ahead commitment. This will provide an opportunity to the generators to correct their positions in the real time market which may also improve the liquidity of the market and dispatch of cheaper generating stations in real time. Further, it is submitted that for the purpose of buying by Generators, the buy NOC may not be required as there would be no actual physical flow of electricity..