

Ref: PXIL/S&R/30062021/1

Date: 30th June 2021

To
The Secretary
Central Electricity Regulatory Commission
3rd and 4th floor, Chanderlok Building
36 Janpath
New Delhi - 110001

Sub: Public notice issued by CERC on “Draft Central Electricity Regulatory Commission (Ancillary Services) Regulations 2020” – Observations, comments and suggestions from Power Exchange India Limited.

Ref: Public Notice No. RA-14026(11)/3/2019-CERC dated 29th May, 2021

Dear Sir,

The Electricity Act 2003 mandates the Commission to develop a framework that provides for guidelines and standards to be followed by market participants in the system to plan, develop, maintain and operate the power systems, in the most secure, reliable, economic and efficient manner, while facilitating healthy competition for transaction in electricity.

Ancillary services are aimed at supplementing efforts at maintaining power quality, reliability and security of the electricity grid and optimum utilisation of resources. Section 5.2.3 of the National Electricity Policy (NEP) mandates that adequate reserves may be maintained to ensure secure grid operation (extract given below).

“5.2.3 In order to fully meet both energy and peak demand by 2012, there is a need to create adequate reserve capacity margin. In addition to enhancing the overall availability of installed capacity to 85%, a spinning reserve of at least 5%, at national level, would need to be created to ensure grid security and quality and reliability of power supply.”

Further, Section 5.2.3 of the draft National Electricity Policy, 2021 has laid emphasis on equipping the System Operators with Ancillary Services to ensure safety and security of supply by introduction of regulations on various kinds of ancillary services:

“Clause 8.0

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The System Operator has to be equipped with state-of-the-art technologies to ensure safety and security of supply with load variations and variations of the intermittent generation, causing fluctuating active and reactive power injection and drawal and consequent stability implications. Ancillary Services would need to be made available to the System Operator for active and reactive power balancing, black start services etc. Demand response is a quick mechanism for active power balancing for tackling the variability of intermittent sources of generation and should be enabled by the State Regulators through appropriate Regulations. The CERC should introduce regulations on various kinds of ancillary services based on response time in consultation with Central Electricity Authority. SERCs should also introduce matching provisions in their regulations.

Ancillary Services are defined, under Regulation (2)(1)(b) of the CERC (Indian Electricity Grid Code), Regulations, 2010 (IEGC) is as follows :

“in relation to power system (or grid) operation, the services necessary to support the power system (or grid) operation in maintaining power quality, reliability and security of the grid, e.g. active power support for load following, reactive power support, black start, etc.”

Regulation 8 of the CERC (Power Market Regulations) Regulations, 2010, provides for the introduction of new products in Indian Electricity Market in the future, including Ancillary Services Contract:

“Notwithstanding anything contrary contained in these Regulations, no person shall enter into or transact in any of the following types of contracts unless the same has been permitted to be so launched or introduced by the Commission in terms of notification issued in this behalf -

- (i) Derivatives Contracts*
- (ii) Ancillary Services Contracts*
- (iii) Capacity Contracts”*

Regulation 4 of the CERC (Power Market Regulations) Regulations, 2021, issued on 15.02.2021 provides for regulatory oversight on array of Contracts including Ancillary Services Contract:

“4. These regulations shall apply to the following types of contracts:

- (1) Contracts transacted on the Power Exchange:*

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(a) Delivery based electricity contracts:

(i) Day Ahead Contracts;

(ii) Real-time Contracts;

(iii) Intraday Contracts;

(iv) Contingency Contracts;

(v) Term Ahead Contracts; and

(vi) Any other contracts, including Capacity Contracts and Ancillary Services Contracts, as may be approved by the Commission;

(b) Contracts relating to Renewable Energy Certificates;

(c) Contracts relating to Energy Saving Certificates; and

(d) Any other contracts, as may be approved by the Commission”

We take this opportunity to welcome this structural change in the market which will usher market-based services to ensure secure, reliable and efficient operation of the grid.

We request the Hon'ble Commission to kindly take our suggestions on record and grant us an opportunity to present them to the Commission and its staff.

Thanking You,

Yours faithfully,

For **Power Exchange India Limited**

Authorised Signatory

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PXIL suggestions and observation on Draft CERC (Ancillary Services) Regulations, 2021

Ancillary Services are an integral part of the electricity ecosystem all over the world. The basic services such as frequency and voltage control are embedded in the electricity supply system, starting from power generation at generator end, transmission to the load centre and lastly, power delivery to all the consumers. To enable provision of these basic services, specific support services are required to complement reliable and efficient grid operation. These support services which act as “Value-added Services” are known as ‘Ancillary Services’.

Historically, ancillary support services were catered by the State Electricity Boards as such entities were vertically integrated utilities. With the reorganization of SEBs, entry of large number of IPPs, CPPs and Open access consumers, the number of grid connected entities has increased manifold, the Load Dispatcher is now responsible for procuring such services either regulated or through Market based avenues, so as to ensure reliable and secure grid operation. Hence, it has become necessary to identify, compute and pay for such services through a market based mechanism.

PXIL submits clause wise comments / suggestions on the draft regulations.

1. Clause 16.1

“(1) Buy Bid: The Nodal Agency shall communicate to the power exchange(s), the quantum of requirement of TRAS-Up and TRAS-Down on day-ahead basis before commencement of the Day Ahead Market and incremental requirement, if any, over and above the procurement in the Day Ahead Market, on real-time basis, before the commencement of the Real Time Market:

Provided that the quantum of requirement on day-ahead basis shall be communicated after considering the TRAS resources likely to be available on real-time basis.”

Suggestions:

The Regulation proposes NLDC as the ‘Nodal Agency’, the entity responsible for implementation of Ancillary Services is authorised to purchase Tertiary Reserves Ancillary Services (TRAS) and other such Services by way of communication to the Power exchange the quantum of TRAS-Up and TRAS-Down on day-ahead basis and/or on real-time basis.

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PXIL requests the Hon'ble Commission to direct Nodal Agency to purchase TRAS quantum equally from the Power exchanges by communicating requirement of TRAS quantum simultaneously to the Power exchanges. Simultaneous communication of required TRAS quantum allows NLDC to exercise 'choice', would also allow a new market segment to evolve appropriately and most importantly promote competition between Exchanges.

2. Clause 16 (3)

"(3) The capacity offered, as a sell bid in power exchange(s) for providing TRAS-Up or TRAS-Down from a resource in the same time-block, shall be separate and non-overlapping."

Suggestions:

The Regulation proposes that Sell Order placed by an entity for providing TRAS-Up or TRAS-Down from a resource in the same time-block, shall be separate and non-overlapping. It is observed that majority of participants are registered with both the Exchanges, in order to avoid misuse/gaming of the provision, the provision should provide that the entity that is registered for participation in TRAS ensures that the combined total order placed for TRAS-Up or TRAS-Down for the same time-block on separate power exchanges should be within prescribed technical limits.

It is suggested that Clause 16 (3) be modified as under:

"(3) The capacity offered, as a sell bid in power exchange(s) for providing TRAS-Up or TRAS-Down from a resource in the same time-block, shall be separate and non-overlapping.

Further, the entity has to ensure that sum total of quantum from a resource for TRAS-Up or TRAS-Down for the same time block on separate Power exchanges is within prescribed technical limits."

3. Clause 16 and 17

"16 (4) The power exchanges shall collect the bids for TRAS-Up and TRAS-Down and share the same with the Nodal agency for price discovery in terms of Regulation 17 of these regulations

17 (1) The price discovery for TRAS-Up shall be based on the principle of Uniform Market Clearing Price.

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17 (3) The price discovery for TRAS-Down shall be based on the principle of Pay-as-bid.”

Suggestions:

The Regulation proposes that the Power exchange shall collect the bids for TRAS-Up and TRAS-Down and share the same with Nodal agency for price discovery.

Based on the above provisions the following clarification may humbly be provided:

- a) Whether Power Exchange shall not be undertaking price discovery while offering the TRAS contract to participants on its platform.

The clarification may humbly be issued, as under Regulation 10 (i) of CERC (Power Market) Regulations, 2010, one of the objective for a Power exchange is “Ensure fair, neutral, efficient and robust price discovery”.

4. Clause 19: Payment for TRAS

“ 19 (1) TRAS-Up Provider shall receive MCP-Energy-Up, as discovered in the Day Ahead Market or the Real Time Market, as the case may be, for the quantum of energy instructed to be despatched by the Nodal Agency.

(2) TRAS-Up Provider shall receive commitment charges at the rate of ten percent of the MCP-Energy-Up-DAM or the MCP-Energy-Up-RTM, as the case may be, subject to the ceiling of 20 paise/kWh for the quantum of TRAS-Up cleared in the Day Ahead Market or the Real Time Market as the case may be, but not instructed to be despatched by the Nodal Agency.

(3) The TRAS-Down Provider shall pay back to the Deviation and Ancillary Service Pool Account at the rate of their Energy-Down bid in the Day Ahead Market or the Real Time Market, as the case may be, for the capacity instructed to be despatched by the Nodal Agency.”

Suggestions:

The Regulation proposes that services provider by TRAS-Up and TRAS-Down provider shall be settled by the Deviation and Ancillary Services Pool Account, in the absence of

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Settlement of TRAS Contract by Power exchange, PXIL request the Hon'ble Commission to clarify,

- i. Whether Power exchange are eligible to claim transaction fee for offering its Exchange platform for transacting in TRAS Contracts.
- ii. Whether the Power exchange has to recover the transaction fee directly from entities or the same would be paid from Deviation and Ancillary Services Pool Account. The mechanism / procedure to claim Exchange transaction fee from the referred pool account
- iii. Whether the Nodal Agency would provide time block wise demand information for creating the AD-AS curves against the TRAS Offers received from Generators for each time block?
- iv. Whether such demand information would be provided for DAM and RTM separately?
- v. The Offers from TRAS suppliers should not be linked to DAM or RTM as the Ancillary Services Contract are separate Contracts, hence the same should operate independently

The above clarification from Hon'ble Commission would enable Exchange to devise appropriate mechanism for claiming and receiving Exchange transaction fee in TRAS.

5. Clause 21: Accounting and Settlement of SRAS and TRAS

" 21

(2) Accounting of TRAS shall be done by the Regional Power Committee on a weekly basis, based on interface meter data and schedules.

(7) Settlement of payment liabilities in respect of the AS providers shall be done directly by the Nodal Agency on a weekly basis based on the accounts prepared by the Regional Power Committee."

Suggestions:

The Regulation proposes that settlement shall be done by Nodal Agency based on accounts prepared by the Regional Power Committee.

Regulation 7 of CERC (Power Market) Regulations, 2010 prescribes contract specification parameters to be submitted by Power Exchange while seeking approval from Hon'ble Commission for its introduction. Regulation 7 (2) (iv) prescribes the

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Exchange to specify the Risk management mechanism including margining mechanism and final price settlement mechanism

“7. (1) An Exchange seeking permission under Regulation 6 shall submit to the Commission the complete and detailed contract specifications.

(2) The Commission may, prior to granting such authorisation to Exchanges as specified in Regulation 6, examine the following and such other parameters of such contracts as considered appropriate having particular regard to the following :-

(i) Type of contract (day ahead, term ahead etc.);

(ii) Price Discovery methodology and matching rules proposed;

(iii) Transaction period - When transaction shall commence and for what tenure transaction session shall continue before delivery commences; (

(iv) Risk Management mechanism

(a) Margining mechanism

(b) Final Price Settlement mechanism”

Further, since the Nodal Agency would be undertaking price discovery under Regulation 16 (4) and settlement of TRAS would be done by the Deviation and Ancillary Services Pool Account, the Hon’ble Commission is requested to humbly clarify

- i. Whether any margins are to be collected by Power Exchanges from entities participating in TRAS when Price discovery is undertaken by Nodal Agency
- ii. To whom should such margins be disbursed

The above clarification from Hon’ble Commission would enable Exchange to devise appropriate risk management mechanism while operating the TRAS Contract.

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