

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:
Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member

No. L-1/257/2020/CERC

Date: March 23, 2021

In the matter of

Central Electricity Regulatory Commission (Power Market) Regulations, 2021

Statement of Reasons

1. Introduction

- 1.1. In exercise of the powers conferred under section 178 of the Electricity Act, 2003 (in short, “the Act”) read with all other relevant provisions of the Act, the Central Electricity Regulatory Commission (hereinafter referred to as “the Commission”) had notified the Central Electricity Regulatory Commission (Power Market) Regulations, 2010 (hereinafter referred to as “the Power Market Regulations, 2010”) on 21.01.2010. There have been two amendments to the Power Market Regulations, 2010 till date, which were notified on 09.04.2014 and 27.12.2019.
- 1.2. During the last decade, a number of developments have taken place in the Indian power sector, including inter alia growth in overall power generation, increasing share of renewable energy sources in total generation, growth in peak demand, and increase in the volume of electricity transacted on the Power Exchanges. There have been various factors driving these changes in the Indian power market in the last decade, such as growth in demand, increasing depth of the Indian power market and growing need for information exchange among market participants as well as to strengthen the mechanism for market surveillance and monitoring.
- 1.3. In this backdrop, the Commission notified the Draft Central Electricity Regulatory Commission (Power Market) Regulations, 2020 (hereinafter referred to as “the

Draft PMR”) vide public notice No. L-1/257/2020/CERC dated 18.07.2020 along with the Explanatory Memorandum seeking comments/ suggestions from the stakeholders. Thereafter, the Commission conducted a public hearing on the Draft PMR on 14.08.2020. List of stakeholders who submitted written comments or/and oral comments during the public hearing is provided in the enclosed Appendix. The detailed comments are available on www.cercind.gov.in.

- 1.4. The Central Electricity Regulatory Commission (Power Market) Regulations, 2021 (hereinafter referred to as “the Power Market Regulations, 2021”) have been finalized after detailed analysis and due consideration of the comments/ suggestions provided by the stakeholders which have been detailed in the succeeding paragraphs. The Power Market Regulations, 2021 shall come into force from a date to be separately notified by the Commission.
- 1.5. The Power Market Regulations, 2010, as amended from time to time, shall stand repealed from the date of coming into force of Central Electricity Regulatory Commission (Power Market) Regulations, 2021.

2. Definitions and Interpretations (Part - I, Regulation 2)

2.1. Definition of Bid (Regulation 2(1)(f))

Commission’s Proposal

2.1.1. Definition of bid as provided in Regulation 2(1)(f) of the Draft PMR is extracted below:

“Bid” means the electronic document by which a member of a Power Exchange submits price and quantity in relation to a contract, for which it seeks to make a transaction;

Comments Received

2.1.2. PXIL has suggested that that the term “Order” be used instead of the term “Bid” in the definition clause in order to avoid confusion, because in the prevalent parlance among the market participants in the power exchanges (“Exchanges”), the term “Order” is used to denote bid placed by a buyer (and the term “Offer” is used to denote bid by a seller).

Analysis and Decision

2.1.3. The Commission has analysed the suggestion made by the stakeholder. The terms ‘bid’ and ‘bid types’ have been defined in Regulation 2(1)(f) and 2(1)(g) respectively of the Power Market Regulations, 2021. Further, the usage of the word ‘bid’ in the context of offer by a Seller or order by a Buyer is prevalent in international practice. The definition of ‘bid’ in the Draft PMR is in consonance with international practice. Therefore, the Commission does not consider it necessary to modify the definition of ‘bid’ as suggested.

2.2. Definition of Cartelization (Regulation 2(1)(i))

Commission’s Proposal

2.2.1. Definition of cartelization as provided in clause 2(1)(i) of the Draft PMR is as under:

“Cartelization” means an act by Market Participants who, by agreement amongst themselves, limit or control or attempt to limit or control generation, distribution, sale, price or trade of electricity;

Comments Received

2.2.2. CEA has commented that the definition of “cartelization” under Regulation 2(1)(i) of the Draft PMR is based on the Competition Act, 2002 with minor modification. Cartelization in the Draft PMR is defined as an act by Market Participants to limit or control generation, distribution, sale, price or trade of electricity, while it is silent about the transmission. CEA has stated that transmission plays a very vital role in power market functioning, wherein one entity or a group of entities in the system may create artificial corridor congestion to manipulate the price of electricity.

Analysis and Decision

2.2.3. The Commission has analysed the comment of the stakeholder and is of the view that transmission is a regulated business and transmission licensees are mandated under the Act to provide non-discriminatory open access to their systems. Moreover, System Operators such as National Load Despatch Centre and Regional Load Despatch Centres carry out the integrated operation of the grid in accordance with the Grid Code specified by this Commission.

Similarly, State Load Despatch Centres carry out the integrated operation of the grid in accordance with State Grid Codes specified by the State Commission. Therefore, instances of cartelization as discussed above are unlikely to take place amongst entities involving transmission licensees.

2.3. Definition of Capacity Contract (Regulation 2(1)(j))

Commission's Proposal

2.3.1. Definition of capacity contract as provided in Regulation 2(1)(j) of the Draft PMR is provided below:

“Capacity Contract” means a contract where the capacity of a generating station is contracted in advance wherein the generating station is obligated to despatch contracted electricity as and when required by such buyer during the tenure of the contract and consideration by way of capacity payment is made by the buyer;

Comments Received

2.3.2. PCKL has commented that this clause is applicable only for term ahead market and charges are payable as per the contract entered for energy despatch. Hence, the word ‘capacity payment’ may be replaced with only ‘payment’.

2.3.3. NLC India has commented that “Capacity Contract” is appearing in Definitions and Interpretation part only and not deliberated anywhere in the Draft. While issuing regulations on this subject, detailed procedure for scheduling and guidelines for determination of Energy Charge Rate may also be included.

Analysis and Decision

2.3.4. It is noted that contracts in the Power Exchange currently are energy-only contracts, where charges are payable as per the energy despatch. Capacity contracts are different from energy only contracts. The capacity can be contracted in advance and paid for separately against assurance of availability, while energy payment can be made based on actual despatch. Therefore, the definition of capacity contracts refers to ‘capacity payments’ in order to

distinguish the same from the energy only contracts. The definition has been retained as proposed in the Draft PMR.

2.4. **Definition of Circular Trading (Regulation 2(1)(k))**

Commission's Proposal

2.4.1. Definition of circular trading as provided in Regulation 2(1)(k) of the Draft PMR is provided below:

“Circular Trading” means and relates to trading and transactions by a member or group of members, wherein on one side, one or more entities of the member or group of members enter buy bids and on the other side, one or more entities of the same member or same group of members enter sell bids or vice versa, by design to manipulate the price of electricity or by design to create an artificial market or to defraud or misuse the system;

Comments Received

2.4.2. CEA has commented that the definition may be relooked, as there may be instances of circular trading with transactions on OTC platform or a combination of OTC platform and Power Exchange.

2.4.3. Some stakeholders have commented that Circular Trading is not always meant to manipulate the market or for fraudulent purpose and legitimate needs for taking buy to sell or sell to buy position across different market segments may arise due to availability of more reliable information about generation/ demand near to the time of delivery.

Analysis and Decision

2.4.4. It is noted that the Power Market Regulations, 2021 introduces OTC Platform, as an electronic platform, only for exchange of information amongst the buyers and sellers of electricity, while the actual finalization of the transaction and financial settlement takes place outside the OTC Platform. Hence, the Commission considers that it may not be possible for the market participants to engage in circular trading with transactions on the OTC Platform or a combination of OTC Platform and Power Exchange.

2.4.5. Further, the definition of circular trading is meant to cover instances where market participants act with an intention to manipulate the price of electricity

or create an artificial market or defraud the system while transacting on the power exchange. However, buy/sell positions taken across different market segments (such as Day Ahead and Real-time Markets) to meet legitimate needs may not be considered under the purview of circular trading.

2.4.6. The definition of circular trading has been retained as proposed in the Draft PMR.

2.5. Definition of Contingency Contract (Regulation 2(1)(p))

Commission's Proposal

2.5.1. Definition of contingency contract as provided in Regulation 2(1)(p) of the Draft PMR is as under:

“Contingency Contract” means a contract wherein Continuous Transactions occur on day (T) after the finalization of day ahead transactions and the delivery of electricity is on the next day (T+1);

Comments Received

2.5.2. Some of the stakeholders have commented that the word ‘continuous’ used in the definition should be deleted because the matching methodology of the contract is to be proposed by Power Exchange, while the present definition of “Contingency Contract” restricts the execution of such contracts by only one kind of price discovery and bidding mechanism, namely, Continuous Transactions.

Analysis and Decision

2.5.3. The Commission has analysed the comments of stakeholders. It is noted that the price discovery in Day Ahead Market and Real-time Market is undertaken through collective transactions. The Commission is of the view that the price discovery for other markets operating during the same periods, viz. Intraday Contracts and Contingency Contracts, shall be done through continuous transactions.

2.5.4. The definition of ‘contingency contract’ has been retained as proposed in the Draft PMR.

2.6. Definition of Continuous Transactions (Regulation 2(1)(q))

Commission's Proposal

2.6.1. Definition of continuous transactions as provided in Regulation 2(1)(q) of the Draft PMR is provided below:

“Continuous Transactions” means a set of transactions executed in the Power Exchange(s), not being Collective Transactions, where the buy bids and the sell bids are matched on a continuous basis with price-time priority;

Comments Received

2.6.2. Some stakeholders have commented that the phrase “not being Collective Transactions” should be removed from the definition of continuous transactions as there are other methodologies used for price discovery which are not in the nature of continuous or collective transactions. Mr. Anoop Singh has commented that in certain instances, collective transactions imply all the transactions and excluding Continuous Transactions may result in some confusion.

Analysis and Decision

2.6.3. It is noted that the definition of continuous transactions seeks to segregate and distinguish such transactions from collective transactions in terms of their manner of price discovery. ‘Collective Transactions’ has been defined in Regulation 2(1)(n) of the Draft PMR and refers to specific types of transactions such as Day ahead Market and Real-time Market and should not be construed to imply all types of transactions on the Power Exchange.

2.6.4. The definition of ‘continuous transactions’ has been retained as proposed in the Draft PMR.

2.7. Definition of Gate Closure (Regulation 2(1)(v))

Commission's Proposal

2.7.1. Definition of gate closure as provided in Regulation 2(1)(v) of the Draft PMR is provided below:

“Gate closure” refers to the time at which the bidding for a specific delivery period closes and no further bidding can take place for the said delivery period;

Comments Received

- 2.7.2. PXIL has commented that the definition of gate closure should be modified to exclude modification of already placed orders.
- 2.7.3. MSEDCL has commented that since the timeline for gate closure for revision of schedule and bidding in case of Inter-State Generating Station (ISGS) in the real time market is the same, it may lead to situations where Discoms may incur losses when energy (of ISGS) sold by the Discoms is not selected in the real time market. Therefore, downward revision during gate closure period for ISGS in real time market should be allowed. Further, MSEDCL has requested that gate closure time of real time market should be reduced from existing 4 blocks to 2 blocks by implementing National Open Access Registry (NOAR) on fast track.

Analysis and Decision

- 2.7.4. The Commission has considered the views of the stakeholders relating to exclusion of modification of already placed bids and find merit in the suggestions. Accordingly, the definition is revised as follows:
“Gate closure” refers to the time at which the bidding for a specific delivery period closes and no further bidding or modification of already placed bids can take place for the said delivery period.
- 2.7.5. As regards revision of schedules of ISGS in real time market after the gate closure, the Commission would like to clarify that any window for revision in schedule can render the contracts in the real time market infructuous thereby vitiating the sanctity of the contracts. The basic objective of gate closure is to bring in certainty and firmness of schedule, a sine qua non for transaction of contracts in the market.

2.8. Definition of Intraday Contract (Regulation 2(1)(ab))

Commission’s Proposal

- 2.8.1. Definition of intraday contract as provided in Regulation 2(1)(ab) of the Draft PMR is as under:
“Intraday Contract” means a contract wherein Continuous Transactions occur on day (T) and delivery of electricity is on the same day (T), such that its delivery period does not overlap with the specified delivery period of the

Real-time Contract transacted in the same bidding session as that of the Intraday Contract;

Comments Received

- 2.8.2. IEX and PXIL have commented that the definition of intra-day contract should be modified to include transactions occurring on day (T-1), in addition to transactions occurring on day (T), with delivery on day (T). Further, it has been suggested that the word ‘continuous’ should be deleted because as per Regulation 5(2)(a) of the Draft PMR, matching methodology of the contract is to be proposed by Power Exchange.

Analysis and Decision

- 2.8.3. The definitions of intra-day contract and contingency contract have been provided separately under clauses 2(1)(ab) and 2(1)(p) respectively of the Draft PMR for clarity regarding the timelines for transactions under these types of contracts. After the finalization of day ahead transactions, the contingency contracts involve transactions occurring on day (T) with delivery of electricity on the next day (T+1) whereas intra-day contracts involve transactions occurring on day (T) with delivery on the same day (T). Accordingly, the suggestion to treat transactions occurring on day (T-1) with delivery on day (T) as intra-day contract is not agreed to.
- 2.8.4. Furthermore, intra-day contracts have been defined as contracts wherein continuous transactions take place on day (T), in order to distinguish these contracts from the collective transactions taking place in the Real-time Market on the same day (T). Accordingly, the word ‘continuous’ needs to be retained in the definition of intra-day contract.
- 2.8.5. The definition of intra-day contract has been retained as proposed in Draft PMR.

2.9. Definition of Market Manipulation (Regulation 2(1)(ah))

Commission’s Proposal

- 2.9.1. Definition of market manipulation as provided in Regulation 2(1)(ah) of the Draft PMR is as under:

“Market Manipulation” means:

- (i) *entering into any transaction by any Market Participant, which:*
 - (1) *gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of any of the contracts on the Power Exchange;*
 - (2) *secures or attempts to secure, by any member of the Power Exchange or client, relatively higher sale price while curtailing supply to other beneficiaries entitled to receive the same power;*
- (ii) *disseminating any information through the media which gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of any of the contracts on the Power Exchange;*

Comments Received

- 2.9.2. Some stakeholders have commented that the definition of Market Manipulation should be broadened to include bilateral transactions occurring outside the Power Exchange and dissemination of information not only through the media but by any means.
- 2.9.3. Adani Power (Mundra) Limited has proposed to delete sub-clause (2) of clause (i) of the definition and stated that if the beneficiary can curtail the power under the contract and buy cheaper power on exchange, then same should also apply to supplier.

Analysis and Decision

- 2.9.4. The Commission has analysed the comments of the stakeholders and is of the view that the definition of Market Manipulation is sufficiently broad to cover all essential aspects related to manipulation of price, supply or demand of power. As regards diversion of power by suppliers to secure higher price for electricity, which is tied up with other beneficiaries, this shall be construed as market manipulation and hence, the Commission is of the view that the same shall not be allowed to take place on the Power Exchange. Further, in order to provide better clarity as well as to cover cases of manipulation in the OTC Market, the Commission has modified the definition as under:

“Market Manipulation” means:

- (i) *entering into any transaction on the Power Exchange by any Market Participant, which:*

- (1) gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of any of the contracts;
- (2) secures or attempts to secure, by any member of the Power Exchange or client, relatively higher sale price while curtailing supply to other beneficiaries entitled to receive the same power;
- (ii) disseminating any information through the media which gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of any of the contracts;

2.10. Definition of Power Exchange (Regulation 2(1)(as))

Commission's Proposal

2.10.1. Definition of Power Exchange as provided in Regulation 2(1)(as) of the Draft PMR is as under:

“Power Exchange” means an electronic platform for the purpose of facilitating transactions in delivery based electricity contracts or transactions in any other contracts as permitted by the Commission;

Comments Received

2.10.2. PXIL has suggested the following alternative definition: *“Power Exchange” means an electronic platform registered with the Commission under these regulations, or the CERC (Power Market) Regulations, 2010, as the case may be.* It is stated that the definition of the term “Power Exchanges” as mentioned in the Draft PMR is restrictive, in so far as it limits the scope, functions and purpose of the Exchanges. In this regard, it is submitted that the roles, responsibilities and functions of the Exchanges have been elaborated in detail through the various provisions of the Draft PMR.

2.10.3. IEX has suggested the definition of Power Exchange as *“Power Exchange” means an electronic platform for the purpose of price discovery and facilitating transactions in delivery based electricity contracts or transactions in any other contracts as permitted by the Commission.*

2.10.4. Mr. Vijay Menghani has commented that the definition is very restrictive and can create legal ambiguity.

Analysis and Decision

2.10.5. The Commission has considered the suggestions provided by the stakeholders. Since the scope and functions of the Power Exchanges have been elaborately dealt in the Power Market Regulations, 2021, the Commission has modified the definition of Power Exchange as under:

“Power Exchange” means an electronic platform registered as a Power Exchange under these regulations”

2.11. Definition of Real-time Contract (Regulation 2(1)(at))

Commission’s Proposal

2.11.1. Definition of Real-time Contract as provided in Regulation 2(1)(at) of the Draft PMR is as under:

“Real-time Contract” means a contract other than Day Ahead Contract or Intraday Contract or Contingency Contract, wherein Collective Transactions occur on day (T) or day (T-1) and delivery of electricity is on day (T) for a specified delivery period;

Comments Received

2.11.2. Mr. Anoop Singh has commented that a closed ended definition of real time contract in terms of time blocks should be provided and that the occurrence of transactions on day (T-1) should be clarified.

Analysis and Decision

2.11.3. The Commission is of the view that the definition is adequately clear. As regards timelines for transactions and delivery of Real-time contracts, provisions are already made in the Grid Code and the Open Access Regulations. Accordingly, the definition provided in the Draft PMR is sufficient and consistent with the manner of defining other type of contracts on the Power Exchange.

2.11.4. Further, the bidding session for the first delivery period of a day for a Real-time contract (00:00 to 00:30 Hours) commences during day T-1 (22:45 to 23:00 Hours) and then continues in a sequential manner. Hence, the definition provides that *“occur on day (T) or day (T-1) and delivery of electricity is on day (T) for a specified delivery period”*.

2.11.5. Accordingly, the definition of ‘Real-time Contract’ has been retained as proposed in the draft PMR.

2.12. Definition of Settlement Guarantee Fund (Regulation 2(1)(ax))

Commission’s Proposal

2.12.1. Definition of Settlement Guarantee Fund as provided in Regulation 2(1)(ax) of the Draft PMR is as under:

“Settlement Guarantee Fund (SGF)” means a fund created and maintained by Power Exchange and used for settlement of defaults of its members or clients of such members as stipulated in the default remedy mechanism of Power Exchange and shall comprise of any sources of funds as may be determined by the Power Exchange with prior approval of the Commission;

Comments Received

2.12.2. IEX has commented that once the regulatory jurisdiction of clearing and settlement functions of the Power Exchange is transferred in accordance with the Payment and Settlement Systems Act, 2007, the SGF shall also be transferred to the Clearing Corporation and the Commission will have no jurisdiction on SGF in that case. The requirement for approval of SGF should be dispensed with to avoid additional administrative procedure.

2.12.3. PCKL has commented that the Draft PMR does not provide clarity regarding creation of SGF for settlement of the claims of its defaulting members or clients. PCKL has requested that the composition of the fund may be specified in the regulations itself.

Analysis and Decision

2.12.4. The Commission has analysed the comments of stakeholders and is of the view that till such time the Power Exchanges carry out clearing and settlement function in terms of clause (1) of Regulation 27 of Power Market Regulations, 2021, the Power Exchanges shall be required to comply with the provisions of Settlement Guarantee Fund.

2.12.5. Further, prudent risk management is the obligation of the Power Exchanges. Accordingly, the size and composition of the SGF shall be the responsibility of the Power Exchange, considering the factors such as turnover, margining

and risk management systems. The composition of SGF as proposed by the Power Exchange shall be implemented with prior approval of the Commission.

2.12.6. The definition of SGF has been retained as proposed in draft PMR.

2.13. Definition of Term Ahead Contracts (Regulation 2(1)(ba))

Commission's Proposal

2.13.1. Definition of Term Ahead Contracts as provided in Regulation 2(1)(ba) of the Draft PMR is as under:

“Term Ahead Contract” means a contract wherein Continuous Transactions occur on day (T) and physical delivery of electricity is on a day more than one day ahead (T + 2 or more);

Comments Received

2.13.2. IEX and PXIL have commented that the word ‘continuous’ should be deleted from the definition of term ahead contracts, as there may be more than one methodology available for the auction and matching of transactions.

2.13.3. CEA has commented that there is no mention of daily and weekly contracts in the Draft PMR, which were a part of the term ahead contracts under the Power Market Regulations, 2010. Also, it has been suggested that the delivery period of long duration future contracts should be explicitly specified in the regulations itself.

Analysis and Decision

2.13.4. The Commission has analysed the views of the stakeholders and is of the view that after removal of restriction on duration of term ahead contracts, the Power Exchanges may introduce term ahead contracts for longer duration by adopting appropriate price discovery/ bidding mechanism. Since the Power Exchanges may not follow the process of continuous transactions in all types of term ahead contracts, the definition of term ahead contract has been modified as under:

“Term Ahead Contract” means a contract (including Green Term Ahead Contract) wherein transactions occur on day (T) and physical delivery of electricity is on a day more than one day ahead (T + 2 or more);

2.13.5. After removal of the restriction on duration, Power Exchanges may introduce contracts of any duration where the physical delivery of electricity occurs more than one day ahead (T+2 or more), subject to the Commission's approval. Accordingly, term ahead contracts may consist of daily, weekly as well as longer duration contracts which conform to the stipulations provided under the relevant provisions of the Power Market Regulations, 2021.

3. Contracts transacted on Power Exchanges (Part – 3, Regulation 5)

3.1. Day Ahead Contracts and Real-time Contracts (Regulation 5(1))

Commission's Proposal

3.1.1. The Commission has provided the following under Clause (1) of Regulation 5 of the Draft PMR:

“Day Ahead Contracts and Real-time Contracts

(a) Price discovery:

- (i) Price Discovery shall be done by Power Exchanges or by Market Coupling Operator, as and when notified by the Commission.*
- (ii) Price discovery mechanism shall adopt the principle of maximisation of economic surplus (sum of buyer surplus and seller surplus), taking into account all bid types.*
- (iii) The bidding mechanism shall be double sided closed bid auction on day ahead basis or on real time basis, as the case may be.*
- (iv) The price discovered for the unconstrained market shall be a uniform market clearing price for all buyers and sellers who are cleared:
Provided that in case of congestion in transmission corridor, market splitting shall be adopted.*

(b) Scheduling and delivery:

- (i) The scheduling and delivery of transactions for Day Ahead Contracts and Real-time Contracts (including the timeline for gate closure, wherever applicable) shall be in coordination with the National Load Despatch Centre and in accordance with relevant provisions of the Open Access Regulations and the Grid Code.*
- (ii) Inter-State transmission charges and losses shall be as per the Open Access Regulations and the Sharing Regulations.”*

Comments Received

- 3.1.2. Tata Power Company Limited has commented that both power exchanges and Market Coupling Operator would engage in price discovery through their respective algorithms and requested clarity regarding the conditions under which each of these entities would operate their price discovery mechanisms.
- 3.1.3. Some stakeholders have suggested for providing clarity on incorporation of “maximisation of economic surplus” in place of “maximisation of social welfare” under sub-clause (ii) of clause (a) of this regulation.
- 3.1.4. With regards to sub-clause (iii) of clause (a) of this regulation, CEA has opined that to prevent either the buyer or seller to buy or sell at the Power Exchange at an exorbitant price similar to what happened in October 2018, a proviso may be added as under:
“Provided that in case of any bid (buy or sell) being more than a certain percentage say (50%) above the average cost of generation (for example Rs. 6 /kWh), then there should be a provision for fixing /capping the price discovery in the market at some specified percentage as may be decided by the Commission say at 130% of the average cost of generation.”
- 3.1.5. CEA has further commented that the Draft PMR stipulates scheduling, delivery and transmission charges and losses for the entities of inter-State only. However, there may be some entities other than regional entities, who may be participating in the Power Exchange. Hence, suitable provisions for entities other than regional entities may also be included in the proposed regulations.
- 3.1.6. POSOCO has commented that in order to provide opportunities to storage (e.g. pumped storage, batteries etc.), there is a need to review the minimum market clearing price on Power Exchanges going below zero.

Analysis and Decision

- 3.1.7. With regard to Regulation 5(1)(a)(i) of the Draft PMR, it is clarified that the price discovery for collective transactions shall continue to be carried out by the Power Exchanges until market coupling is introduced and implemented.
- 3.1.8. In case of collective transactions on Power Exchange, the market clearing price (or area clearing prices, as the case may be) discovered through matching of aggregate buy and sell bids results in the creation of surplus for

the buyers and sellers of electricity, the summation of which is referred to as the economic surplus. This surplus refers to the difference between the bidding price of accepted bids and the clearing price per unit of electricity multiplied by the total volume of electricity of the cleared bids. Accordingly, the Commission is of the view that the term ‘maximisation of economic surplus’ more appropriately represents the objective of price discovery for collective transactions on a Power Exchange.

- 3.1.9. With regard to the suggestion for fixing/ capping the price discovered in the Power Exchange at some specified percentage of the average cost of generation, the Commission is of the view that the power to intervene in case of any abnormality in price or volume of electricity on the Power Exchange is provided under Regulation 51 of the Power Market Regulations, 2021. Hence, it is not considered necessary to insert a separate clause regarding the same.
- 3.1.10. The Commission has considered the views of the stakeholder and accordingly modified Regulations 5(1)(b)(ii), 5(2)(b)(ii) and 5(3)(b)(ii) in order to insert provision relating to transmission charges and losses for intra-State entities. The clause has been modified as follows:
“Inter-State and intra-State transmission charges and losses shall be as per the Open Access Regulations and the Sharing Regulations.”
- 3.1.11. As regards the comments of POSOCO to review the minimum market clearing price going below zero to provide opportunity to storage, the Commission is of view that energy storage is at very nascent stage at present and a view would be taken at the appropriate point of time.

3.2. Term Ahead Contracts (Regulation 5(3))

Commission’s Proposal

- 3.2.1. The Commission has provided the following under Clause (3) of Regulation 5 of the Draft PMR:

“Term Ahead Contracts

(a) ***Price discovery:*** *The bidding mechanism and price discovery mechanism shall be as approved by the Commission based on the proposal of the Power Exchange.*

(b) ***Scheduling and delivery:***

- (i) *The scheduling and delivery of transactions for Term Ahead Contracts shall be in coordination with the system operator and in accordance with relevant provisions of the Grid Code and the Open Access Regulations and the Procedure issued thereunder.*
- (ii) *Inter-State transmission charges and losses shall be as per the Open Access Regulations and the Sharing Regulations.*
- (iii) *Term Ahead Contracts shall be settled only by physical delivery of electricity without netting and shall be binding on the participants executing the transactions.*
- (iv) *No Circular Trading shall be allowed and the rights and liabilities of the parties to the Term Ahead Contract shall not be transferred or rolled over by any other means whatsoever.”*

Comments Received

- 3.2.2. Most of the Stakeholders have welcomed the proposal to enable the Power Exchanges to list forward contracts over 11 days in advance.
- 3.2.3. GRIDCO and MSEDCL have commented that in Regulation 5.3(b)(i) of the Draft PMR, the scheduling and delivery of transactions shall be in accordance with relevant provisions of the Grid Code and the Open Access regulations. But as per the Draft PMR, Term Ahead Contracts may be of any duration. Since as per the current provisions of the Open Access regulations, the market participants can have one month rolling open access under short term open access, thus amendment may be required in the Open Access regulations.
- 3.2.4. CEA has commented that sub-clauses (iii) and (iv) of Regulation 5(3)(b) should be applicable to other types of contracts as well.

Analysis and Decision

- 3.2.5. The Commission has analysed the comments of the stakeholders and is of the view that the issue pertains to Open Access Regulations and is beyond the purview of Power Market Regulations.
- 3.2.6. As regards CEA's suggestion to apply provisions of Regulation 5(3)(b)(iii) & (iv) in case of contracts (other than term ahead contract), the Commission is of the view that in other contracts like Day Ahead contract and RTM contract,

scope of circular trading is limited since the price discovery takes place through collective anonymous bids.

4. Contract and Settlement conditions (Part – 3, Regulation 6)

Commission’s Proposal

4.1. The Commission has provided the following under Regulation 6 of the Draft PMR:

- (1) *“Contracts covered under clauses (1) to (3) of Regulation 5 of these regulations cannot be annulled or curtailed except due to constraints in the transmission corridor or any other technical reasons in accordance with the Open Access Regulations and the Grid Code.*
- (2) *Settlement of payments pertaining to the transactions for contracts covered under clauses (1) to (3) of Regulation 5 of these regulations shall be carried out in accordance with the provisions of Regulation 27 of these regulations.”*

Comments Received

4.2. PXIL and NVVNL have commented that Regulation 6(2) of the Draft PMR does not cover the settlement provisions for Renewable Energy Certificates and Energy Savings Certificates and have requested for clarity regarding the settlement provisions for these certificates.

4.3. With regard to Regulation 5(3)(b)(iv) of the Draft PMR, Adani Power, AFRY Consulting, GMR Energy and FICCI have suggested that flexibility should be allowed to generator, in case of forced shut-downs, for supply of electricity from another unit with untied capacity. They have suggested to consider netting off for Term Ahead Contracts for generator and allow purchase from DAM/RTM only under forced outage conditions of plant due to technical limitations.

Analysis and Decision

4.4. The Commission has considered the comments of the stakeholders. The Commission is of the view that the settlement conditions shall also be applicable in case of Renewable Energy Certificates and Energy Savings Certificates. Accordingly, clause (2) of this Regulation has been modified as follows:

“Settlement of payments pertaining to the transactions for contracts covered under clauses (1) to (5) of Regulation 5 of these regulations shall be carried out in accordance with the provisions of Regulation 27 of these regulations.”

4.5. After due analysis of stakeholder comments, the Commission is of the view that flexibility of supply for fulfilling obligation under an existing contract may be provided in the event of forced outage of a generating station or a unit thereof, or any other event as may be notified by the Commission, by entering into any of the contracts covered under clauses (1) to (3) of Regulation 5 of the regulations. Accordingly, clause (3) has been inserted under Regulation 6 as follows:

“In the event of a forced outage of a generating station or unit thereof, or any other event as may be notified by the Commission, wherein the obligation to supply electricity continues under an existing contract, the generating station may fulfil its obligation under the said contract by entering into a contract(s) covered under clause (1) or (2) or (3) of Regulation 5 of these regulations.”

NLDC shall devise a mechanism for implementation of the above provision for contracts covered under clauses (1) to (3) of Regulation 5.

5. Contracts transacted in the OTC Market (Part – 3, Regulation 7)

Commission’s Proposal

5.1. The Commission has provided the following under Regulation 7 of the Draft PMR:

*“(1) **Price discovery:** The price and other terms of contract in the OTC Market shall be determined either through mutual agreement between the buyer and the seller or through competitive bidding process or as determined by the Appropriate Commission.*

*(2) **Delivery procedure:** The application for scheduling of contracts in the OTC Market shall be made in accordance with the:*

(i) Open Access Regulations for:

(a) Advance scheduling;

(b) First-Come-First-Served;

(c) Day-Ahead bilateral transaction;

(d) Bilateral transactions in a contingency.

(ii) Grant of Connectivity Regulations for:

(a) Long-term access;

(b) Medium-term open access.

*(3) **Settlement Conditions:** The settlement of contracts transacted in the OTC Market shall be only by physical delivery of electricity without netting.”*

Comments Received

- 5.2. CEA has commented that the Tariff Policy, 2016 states that all future procurement of power by Distribution Companies shall be done through competitive bidding barring some exceptions mentioned in the Policy. Thus, mutual agreement may be offered as option only to buyers other than Distribution companies.
- 5.3. CUTS, ACC Ltd, Ambuja Cement, TPTCL and APP have suggested to include trading licensee in the chain of transactions. PTC has suggested the following modification to Clause (1) of this regulation:
- “The price and other terms of contract in the OTC Market shall be determined between the buyer and the seller directly or through a Trading Licensee either through mutual agreement or through competitive bidding process or as determined by the Appropriate Commission.”*
- 5.4. Statkraft has commented that the proposed Regulation does not elaborate on type of contracts such as back to back deals and open position deals that can be traded in OTC Market.

Analysis and Decision

- 5.5. Clause (1) of Regulation 7 provides that in the OTC Market, price discovery shall be through mutual agreement or through competitive bidding process or as determined by the Appropriate Commission. Methodology for procurement of power by the distribution companies as required under the Tariff Policy is beyond the purview of these regulations.
- 5.6. The Commission has considered and accepted the views of the stakeholders regarding inclusion of trading licensee in the chain of transaction in the OTC market. Accordingly, the clause has been modified as follows:
- “**Price discovery:** The price and other terms of contract in the OTC Market shall be determined either through mutual agreement between the buyer and the seller directly or through a Trading Licensee or through competitive bidding process or as determined by the Appropriate Commission.”*
- 5.7. It is noted that the Trading Licensees shall be governed by the provisions of Trading Licence Regulations, 2020 with regards to the type of transactions that can be undertaken and the applicability of trading margin.

5.8. It is further clarified that the Power Market Regulations, 2021 shall apply only to contracts that involve physical delivery of electricity. Accordingly, Clause (2) of Regulation 4 and Clause (3) of Regulation 7 have been modified as follows:

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

(1) ...

(2) Contracts in the OTC Market: Delivery based contracts.”

“7. Contracts transacted in the OTC Market

(3) Settlement Conditions: The settlement of contracts transacted in the OTC Market shall be only by physical delivery of electricity.”

6. Objectives of Power Exchange (Part – 4, Regulation 8)

Commission’s Proposal

6.1. The Commission has provided the following under Regulation 8 of the Draft PMR:

“The Power Exchanges shall be established and operated with the following objectives:

(1) To design electricity contracts and facilitate transactions of such contracts;

(2) To facilitate extensive, quick and efficient price discovery and dissemination.”

Comments Received

6.2. IEX has suggested modification to Clause (2) of Regulation 8 as: *“To ensure extensive, quick and efficient price discovery and dissemination.”* It is stated that functions of Power Exchange envisaged since inception have changed from discovery of price to facilitation of price discovery. Such major shift in regime is not supported by any rationale or consultation process with the Power Exchanges and stakeholders. It is further requested to first bring clarity on the objectives of power exchanges post market coupling as there is hardly any objective left with the power exchanges except to collect bids and transfer it to Market Coupling Operator.

6.3. PXIL has suggested that the Power Exchanges ought to be permitted to act as the Market Coupling Operator and continue to carry out the functions of clearing and settlement of transactions. Accordingly, these activities should be specified in the objectives of Power Exchange as well.

Analysis and Decision

6.4. The Commission has analysed the comments of the stakeholders. Accordingly, the Commission has stipulated enabling provisions for market coupling in the Power Market Regulations, 2021. However, the details regarding designation of the market coupling operator, its specific roles and functions shall be finalized at a later stage based on detailed consultation with the stakeholders.

6.5. In order to provide clarity with regards to the objectives of Power Exchange, the Commission has modified Regulation 8 as follows:

“The Power Exchanges shall be established and operated with the following objectives:

(1) To design electricity contracts and facilitate transactions of such contracts;

(2) To ensure fair, neutral, efficient and robust price discovery, till such time the responsibilities are transferred to the Market Coupling Operator in respect of Day Ahead Contracts or Real-time Contracts or any other contracts as notified by the Commission;

(3) To facilitate extensive, quick and efficient price discovery and dissemination.”

7. Eligibility Criteria (Part – 4, Regulation 9)

Commission’s Proposal

7.1. The Commission has provided the following under Regulation 9 of the Draft PMR:

“The applicant for establishing a Power Exchange shall fulfil the following criteria at the time of making application for registration of Power Exchange:

(1) The applicant is a company limited by shares incorporated or deemed to be incorporated under the provisions of the Companies Act, 2013;

(2) The applicant is demutualised;

Explanation: For the purposes of this sub-regulation, the term "demutualised" means that the ownership and management of the applicant is segregated from the trading rights, in terms of these regulations.

(3) The main objects of the applicant company is to establish and operate a Power Exchange.

(4) The applicant has a Net worth of minimum Rs. 50 crores as per the audited special balance sheet as on any date falling within 30 days immediately preceding the date of filing the application for grant of registration.

(5) The Directors of the applicant satisfy the requirements relating to qualifications and are not disqualified for appointment on the Board of Directors as specified in Regulation 18 of these regulations.

(6) The applicant satisfies the requirements relating to the ownership as specified in Regulation 15 and governance structure as specified in Regulation 17 of these regulations.”

Comments Received

- 7.2. Manikaran Power Limited has commented that disallowing the consortium route for making application for registration of a Power Exchange would adversely affect the market, leading to monopoly of already existing Power Exchanges. It is also commented that an applicant may not be able to fulfil the criteria specified in Regulation 9 relating to net worth, governance and ownership structures prior to grant of registration as a Power Exchange.
- 7.3. Some stakeholders have commented that the increase in net worth may act as a barrier for new entrants to enter the market, while NVVN has commented that the proposed increase in the net worth requirements from Rs.25 crores to Rs.50 crores is not enough and that it should be increased to at least 100 crores in line with the growth in volumes in Power Exchanges.
- 7.4. Stakeholders have welcomed the proposal in Clause (2) of Regulation 9 as it allows any existing power trader to establish a Power Exchange but with a demutualized structure. It will ensure that there is no conflict of interest between Power Exchange and the trader.

Analysis and Decision

- 7.5. The Commission has analysed the comments and suggestions of the stakeholders and considers it appropriate to allow only companies limited by shares incorporated or deemed to be incorporated under the provisions of the Companies Act, 2013 to make an application for registration of a Power Exchange. As per the current provisions, a group of companies may set up a SPV as a limited company in accordance with the provisions of the Companies Act, 2013 in order to make an application for registration as a Power Exchange.
- 7.6. The Commission is of the view that the increase in net worth requirement to Rs.50 crores is considered adequate in the context of significant growth in volume and

value of transactions on the Power Exchanges over the past decade. While the volume of transactions has increased from 7.2 BU in 2009-10 to 56.45 BU in 2019-20, the value of transactions has increased from Rs.3,563 crore to Rs.18,303 crore over the same period¹.

8. Grant and renewal of registration to Power Exchanges (Part – 4, Regulation 12)

Commission’s Proposal

8.1. The Commission has provided the following under Regulation 12 of the Draft PMR:

“(1)....

(2) The registration of a Power Exchange shall be for a period of twenty-five (25) years from the date of grant of registration unless such registration is revoked or cancelled earlier.

(3) The Commission may, on an application filed by the Power Exchange, after making such inquiries as may be necessary in this regard and after obtaining such information as it may require, renew registration for a further period of 25 years or for such lesser period as the Commission considers appropriate.

(4) An application for renewal of registration shall be filed by the Power Exchange at least one year before the expiry of the period of registration”

Comments Received

8.2. Some stakeholders have commented that the registration period of 25 years for Power Exchanges is a long duration and may be revised downwards to 10 years, considering that power market dynamics might change radically and get totally restructured in next 10 years.

8.3. PXIL has suggested the following modification to Clause (3) of this regulation:
“The registration of a Power Exchange shall be in force from the date of grant of registration until such registration is revoked or cancelled in accordance with these regulations.”

8.4. Refex Energy has commented that a Power Exchange must be allowed to file application for renewal of licensee 3 years before the expiry of the period, as it will give sufficient time to exchange participants for migration to other exchange or completing other formalities in case of non-renewal of licensee by the Commission.

¹Source: CERC Report on Short-term Power Market in India: 2019-20

Analysis and Decision

- 8.5. The Commission has analysed the comments/ suggestions of the stakeholders and is of the view that the period of registration of 25 years is considered appropriate for Power Exchanges. It is noted that the Commission has the power to revoke or cancel the registration earlier in case of any events requiring the same as stipulated in the Power Market Regulations, 2021. Further, the period of 25 years is consistent with the period of license granted to a trading licensee as per the Trading Licence Regulations, 2020 (which is consistent with the period of licence specified under the Act).
- 8.6. It is noted that Clause (4) of Regulation 12 provides that an application for renewal of registration shall be filed by the Power Exchange at least one year before the expiry of the period of registration. The Commission is of the view that the period of one year is sufficient to allow exchange participants for migration to other exchange in case of non-renewal of licensee by the Commission.

9. Net worth (Part – 4, Regulation 14)

Commission’s Proposal

- 9.1. The Commission has provided the following under Regulation 14 of the Draft PMR:
- “A Power Exchange shall have a minimum Net worth of Rs.50 crores at all times: Provided that the Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations shall meet the minimum Net worth criteria within a period of six months from the date of notification of these regulations and submit an audited special balance sheet to support the compliance of Net worth requirement; Provided further that in case the Net worth of the Power Exchange reduces at any time below Rs. 50 crores, the Commission may allow the Power Exchange to achieve the Net worth within such period as may be considered necessary.”*

Comments Received

- 9.2. Some stakeholders have commented that the Net worth requirement for a Power Exchange may be graded depending on the volumes traded during a financial year, in order to match the liabilities that may arise in case of default of its Members or of any contingency.

- 9.3. Some stakeholders have commented that the increased Net worth requirement of Rs. 50 crores may act as a barrier to entry and in case of hive-off of clearing and settlement function to a separate Clearing Corporation, the proposed Net worth requirement may be reconsidered.
- 9.4. Pranurja Solutions Limited has commented that the requirement of Net Worth and compliance to shareholding pattern should be for operational power exchanges and not applicants, as compliance to these requirements even before the grant of registration will be an effective barrier for a new entrant and discourage competition. PXIL has suggested that the existing Power Exchanges should be permitted to meet the Net worth criteria within a period of three years.
- 9.5. It is also opined by some stakeholders that in case Net worth of a Power Exchange at any time reduces to below Rs.50 crore, for compliance of the net worth, the Commission may define a specific time period to achieve the Net worth, while PXIL has commented that this period may be specified as not less than one year from the date of such reduction in Net worth.

Analysis and Decision

- 9.6. The Commission considers it essential that the requirements of Net Worth and compliance to shareholding and governance structure for applicants for a power exchange as well as for existing Power Exchanges should be the same, in order to ensure that all the essential requirements are met at the time of granting registration to a Power Exchange. This is also in alignment with the mechanism adopted by the SEBI for grant of recognition to stock exchanges.
- 9.7. After consideration of relevant aspects, the Commission considers the period of six months sufficient for the Power Exchanges, which have been granted registration by the Commission prior to the date of coming into force of these regulations, to meet the minimum Net worth criteria.

10. Ownership structure of Power Exchange (Part – 4, Regulation 15)

Commission's Proposal

- 10.1. The Commission has proposed the following under Regulation 15 of the Draft PMR:

“(1) The shareholding pattern for equity holders in Power Exchange shall be as follows:

(a) Any shareholder other than a member or a client, directly or indirectly, either individually or together with persons acting in concert, shall not acquire or hold more than 25% of shareholding in the Power Exchange.

(b) A member or a client, directly or indirectly, either individually or together with persons acting in concert, shall not acquire or hold more than 5% of shareholding in the Power Exchange.

(c) A Power Exchange can have a maximum of 49% of its total shareholding owned by entities, which are members or clients, directly or indirectly, either individually or together with persons acting in concert.

(2) The Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations, shall within a period not exceeding one year from the date of notification of these regulations, ensure compliance with sub-clauses (a) to (c) of clause (1) of this Regulation.

(3) The Power Exchange shall ensure compliance with the shareholding limits as specified in this Regulation at all times.”

Comments Received

10.2. Some stakeholders have commented that the cap on shareholding of 5% by entities being member or client of Power Exchange prevents sector specific entities to bring in their relevant expertise and experience to the functioning of Power Exchanges. It is stated that the cap of 49% ensures that the ownership of Power Exchange is not influenced by the member of power exchange and, therefore, a further cap of 5% may not be required. Refex Energy has requested that the cap of 5% on shareholding by member or client may be revised to 10%.

10.3. CEA has commented that the collective shareholding of Members and Clients of 49% is very close to the majority mark of 50%+ and, therefore, susceptible to market manipulation. Hence, it should be limited to a lower figure of say 40% or so.

10.4. ICICI Bank has requested that trader members who are original shareholders may be allowed to initially have shareholding up to 25% in the power exchange with a board seat and provide them a longer timeline of 3-5 years to bring down their shareholding to 5%, thereby allowing the member sufficient time to develop the new power exchange.

10.5. Kreate Energy has commented that the Power Exchange shareholding should be limited to not more than 26% for any foreign shareholders.

10.6. PXIL has suggested that the period for compliance specified in Clause (2) of this regulation should be increased from 1 year to 3 years.

Analysis and Decision

10.7. The Commission has analysed the views of the stakeholders with regard to the shareholding limits stipulated for members of Power Exchange and their clients. It is noted that merely providing an overall limit on shareholding by members and clients of 49% would not ensure a sufficiently dispersed ownership structure, which is key to avoiding any potential conflict of interest situations for the management of the Power Exchange. It is considered necessary that Power Exchange should be a fully demutualised and ring-fenced organisation and hence a member or a client may have shareholding in a Power Exchange but limited to only 5% of total shareholding. Further, the stipulation on shareholding limits shall extend to all categories of members and clients for all Power Exchanges and a relaxation for trader members who are also original shareholders cannot be granted.

10.8. The foreign shareholding limits for Power Exchanges are stipulated under the Consolidated FDI Policy of the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India. Hence, foreign shareholding limits for Power Exchanges have not been provided in the Power Market Regulations, 2021.

10.9. As regards the time limit for existing Power Exchanges to meet the shareholding pattern under Power Market Regulations, 2021, the Commission is of the view that the period of 1 year is sufficient.

10.10. There is no change in the corresponding provisions on shareholding pattern as proposed in the Draft PMR.

11. Disclosure of information regarding ownership of the Power Exchange (Part 4, Regulation 16)

Commission's Proposal

11.1. The Commission has provided the following under Regulation 16 of the Draft PMR:

“(1) The Power Exchange shall disclose to the Commission by 30th April each year its category-wise shareholding pattern as on 31st March of that year, or

when there is a significant change in the shareholding or as and when directed by the Commission.

(2)The Power Exchange shall maintain and preserve all the relevant documents and records relating to the issue or transfer of its shares for a period of not less than eight years and make them available to the Commission as and when directed.”

Comments Received

- 11.2. NVVN has suggested that the Power exchanges should also publish on their websites the shareholding pattern as on the close of each financial year.
- 11.3. IEX has commented that as a listed entity, it does not have any control over the shareholding of the indirect entities and it would be impractical to comply with this requirement in respect of indirect holding. Therefore, it is suggested that the onus of ownership has to be with individual member/ clients only. Further, IEX has requested that a format for reporting of shareholding pattern should be prescribed to avoid any gaps in submission of the information. It is also submitted that it would not be practical to comply with the requirement to maintain share transfer records for a listed entity as the same is done online at stock exchange level, without any involvement of the Company.
- 11.4. ICSI has suggested the following modification to clause (1) of this regulation:
“The Power Exchange shall disclose to the Commission by 30th April each year its category-wise shareholding pattern duly certified by a Company Secretary in Practice as on 31st March of that year, or when there is a significant change in the shareholding or as and when directed by the Commission.”

Analysis and Decision

- 11.5. The Commission is of the view that disclosure of shareholding pattern by Power Exchanges is for ensuring compliance with the shareholding pattern prescribed under Regulation 15 of the Power Market Regulations, 2021 and its disclosure on website may not be necessary. Moreover, the shareholding pattern for publicly listed Power Exchanges is available on the website of the stock exchange where the Power Exchange is listed.
- 11.6. With regard to the comments of IEX, the Commission is of the view that the Power Exchanges should put in place appropriate mechanisms to ensure

compliance with the shareholding limits prescribed in Regulation 15 of the Power Market Regulations, 2021 at all times.

- 11.7. As regards certification of shareholding pattern, the Commission is of the view that any officer authorised by the Power Exchange should certify the compliance of shareholding pattern while submitting the disclosure to the Commission. Regulation 16 has been retained as proposed in the Draft PMR.

12. Governance structure of Power Exchange (Part 4, Regulation 17)

Commission's Proposal

- 12.1. The Commission has provided the following under Regulation 17 of the Draft PMR:

- (1) *“The Board of Directors of the Power Exchange shall have the following categories of Directors:-*
 - (a) *Shareholder Director;*
 - (b) *Independent Director; and*
 - (c) *Managing Director.*
- (2) *The number of Independent Directors shall not be less than the number of Shareholder Directors on the Board of the Power Exchange:*
Provided that for this purpose, the Managing Director shall be included in the category of Shareholder Directors.
- (3) *A minimum of two names shall be submitted by the Board of the Power Exchange to the Commission for approval for each vacancy of Independent Directors.*
- (4) *The Power Exchange shall ensure that Independent Directors are selected from diverse fields of work and while deciding to propose name of a particular person as an Independent Director, the Power Exchange shall also take into account the following factors:*
 - (a) *Persons having qualification in the area of law, finance, accounting, economics, management, administration or any other area relevant to the power markets, may be considered;*
 - (b) *At least one person having experience and background in finance or accounts, shall be inducted;*

- (c) *Persons currently holding positions of trust and responsibility in reputed organisations or persons who have retired from such positions, may be considered;*
 - (d) *Persons who are likely to have interested positions in commercial contracts and financial affairs of the Power Exchange, shall be excluded;*
 - (e) *Persons who are directors in the board of the promoter entity of the Power Exchange, shall be excluded;*
 - (f) *Persons who are in any fiduciary relationship with any member of Power Exchange, shall be excluded.*
- (5) *The Managing Director shall be a professional qualified in the fields of power sector or finance or management or information technology and hold sufficient experience.*
- (6) *The Managing Director shall function as the Chief Executive of the Power Exchange and all powers in respect of day-to-day affairs of the Power Exchange shall be vested with him.*
- (7) *The Managing Director or any employee of the Power Exchange shall not be directly or indirectly associated with any member of the Power Exchange or client or participant of the Power Exchange or with a holding or subsidiary company thereof.*
- (8) *The Managing Director shall ensure that the details of individual bids of members of the Power Exchange are not shared with the Board of Directors.*
- (9) *The names of persons to be appointed as Shareholder Directors shall be approved by the Board of Directors of the Power Exchange, followed by shareholders' approval and thereafter shall be submitted to the Commission for information.*
- (10) *The manner of election, appointment, tenure, resignation and vacation of Shareholder Directors shall be governed by the relevant provisions of the Companies Act, 2013.*
- (11) *No member of Power Exchange or their client shall be on the Board of Directors of any Power Exchange.*
- (12) *The Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations, shall within a period not exceeding one year from the date of notification of these regulations, align the governance structure as specified in this Regulation.”*

Comments Received

- 12.2. With regard to Clause (2) of this regulation, some stakeholders have welcomed the provision as it seeks to bring more transparency in the Power Exchanges with independent directors matching with shareholder directors. However, some stakeholders have commented that the requirement for Independent Directors as per the Power Market Regulations, 2010 should be reinstated (which is also in line with the provisions of the Companies Act, 2013), as there already exist, necessary safeguards requiring heterogeneous and demutualized shareholding in the Exchange.
- 12.3. With regard to Clause (3) of this regulation, IEX has suggested that the requirement of approval should be limited for the person to be appointed as independent director of the Board.
- 12.4. CEA has commented that under Clause (9) of this regulation, “approval by the Board of Directors of the Power Exchange” for appointment of Shareholder Directors appears to be restrictive and hence, would need to be done away with.
- 12.5. With respect to Clause (11) of this regulation, some stakeholders have commented that restricting the entry of members in the Board of Directors of any Power Exchange shall deprive the Board and the Company from the domain expertise of the members. They have further commented that Member Shareholder Directors are essential to bring the market side dynamics to the Board. Any new or existing investor may wish to nominate a representative to the Board of the Exchange when they allocate capital as equity investment in the company. It is further stated that as the Management and Operations of a Power Exchange is demutualized and ring fenced, this provision may be amended so as to give representation to the members of the Power Exchange on the Board of the Power Exchange as is existing in the Power Market Regulations, 2010.
- 12.6. ICSI has commented that the composition of Board of Directors is silent about the representation of Women Director on the Board and it is suggested that the provision for appointment of Women Director in the Board be aligned with the Companies Act, 2013 and SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. ICSI has further submitted that the constitution and composition of certain statutory committees i.e. Nomination and Remuneration Committee, Audit Committee etc. are not mentioned in the Draft PMR.

Analysis and Decision

- 12.7. The Commission has considered the views of the stakeholders with regard to governance structure of the Power Exchange. The Commission is of the view that the governance structure of Power Exchanges is required to be strengthened to achieve the objectives of better corporate governance and ensuring greater transparency in the functioning of Power Exchanges. Accordingly, the presence of equal number of Independent Directors on the Board of the Power Exchange is an essential step in achieving the said objectives.
- 12.8. As regards the suggestion that only the name of the person recommended for appointment as Independent Director should be submitted to the Commission, the Commission is of the view that the Board of the Power Exchange identify and propose a minimum of two names to the Commission for each vacancy of Independent Director, as it will ensure evaluation and selection of the suitable individual from amongst the eligible pool of individuals.
- 12.9. As regards the suggestion for representation of the members of the Power Exchange on its Board of Directors, the Commission is of the view that in order to avoid conflict of interest and to strengthen the governance of the Power Exchanges, no member of the Power Exchange or their client shall be represented on the Board of any Power Exchange.
- 12.10. As regards the suggestion for appointment of Women Directors on the Board of the Power Exchange, the Commission is of the view that the Companies Act, 2013 provides for representation of women directors in the board of the company and accordingly, the Power Exchanges are expected to comply with the provisions of the Companies Act, 2013.

13. Bye-laws, rules and business rules of Power Exchange (Part 4, Regulation 19)

Commission's Proposal

- 13.1. The Commission has provided the following under Regulation 19 of the Draft PMR:
- (1) *“The Power Exchange shall function according to its bye-laws, rules and business rules as approved by the Commission, which amongst others, shall cover the following:*
- (a) *Qualifications for membership, exclusion, suspension and expulsion of members of the Power Exchange;*

- (b) *Risk management;*
 - (c) *Price discovery and matching mechanism, including market splitting to handle congestion in transmission corridor, till such time the responsibilities are transferred to the Market Coupling Operator in respect of Day Ahead Contracts or Real-time Contracts or any other contracts as notified by the Commission;*
 - (d) *Reporting of default (delivery of electricity or payment or both) and penalty mechanism;*
 - (e) *Penalty for deviation from contract;*
 - (f) *Transaction fee;*
 - (g) *Trading margin for a Trader Member and service charge for a Facilitator Member;*
 - (h) *Clearing and Settlement procedure;*
 - (i) *Rights and liabilities of its members;*
 - (j) *Timeline for publishing trading and settlement calendar;*
 - (k) *Transaction timelines;*
 - (l) *Procedure from opening of the platform up to its scheduling by Load Despatch Centre;*
 - (m) *Market surveillance and investigation;*
 - (n) *Procedure for handling default;*
 - (o) *Dispute resolution mechanism;*
 - (p) *Maintenance of records and accounts;*
 - (q) *Preparation of annual accounts and audit thereof;*
 - (r) *Mechanism for redressal of grievances;*
 - (s) *Exit scheme;*
 - (t) *Indemnification of Central Transmission Utility, National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres by the Power Exchange.*
- (2) *No amendment to the bye-laws, rules and business rules shall be carried out without prior approval of the Commission:*
- Provided that the Commission may, through a separate order, dispense with the requirement of prior approval for amendment of certain provisions of the bye-laws, rules and business rules;*

Provided further that such amendments shall be required to be approved by the Board of Directors of the Power Exchange.”

Comments received

- 13.2. With regard to Regulation 19(1)(t) of the Draft PMR, NTPC has commented that there is no rationale given as to why CTU/NLDC/RLDC be indemnified by power exchange, as the exchange efficiency and reliability depend on CTU/NLDC/RLDC.
- 13.3. PXIL has requested for removal of Regulation 19(1)(g) of the Draft PMR on the ground that Traders and Facilitator Members are independent entities, and if the Exchanges are allowed to frame bye-laws and business rules regulating the trading margin and facilitation service charge, it would lead to unnecessary disputes and conflicts between the Exchange on the one side and traders and facilitators on the other side.
- 13.4. With regard to Regulation 19(2) of the Draft PMR, IEX has suggested for insertion of the following proviso in order to speed up the process of approval of amendments to the bye-laws, rules and business rules:
“Provided that the application for approval for amendments in Bye-laws, rules and business rules shall be disposed of by the Commission within 1 month of filing of such application by Power Exchanges.”

PXIL has suggested for insertion of the following proviso:

“Provided further that no prior approval under this Regulation shall be required for any amendment to the bye-laws, rules and business rules in case such amendment is required to be carried out to comply with any order, direction or regulation passed by the Hon’ble Commission”.

Analysis and Decision

- 13.5. The Commission has analysed the views of the stakeholders. With regard to the indemnification of CTU/NLDC/RLDC by the Power Exchange, the provisions relating to indemnification are provided under clause (4) of Regulation 29 of the Power Market Regulations, 2021. CTU/NLDC/RLDC/SLDC are independent statutory entities discharging specific statutory responsibilities in accordance with the provisions of Electricity Act, 2003 and regulations of the Commission.

Accordingly, these entities need to be indemnified from any consequence arising from discharge of their statutory responsibilities.

- 13.6. With regard to Clause 19(1)(g) of the Draft PMR, it is clarified that Regulation 24 of the Power Market Regulations, 2021 specifies the trading margin to be charged by the trader member and service charge to be charged by the facilitator member. Regulation 19(1)(g) merely requires the Power Exchange to include the same in its Bye-Laws, Rules and Business Rules.
- 13.7. With regard to suggestion of IEX for disposal of the application for approval of Bye-Laws, Rules and Business Rules within a period of one month, it is clarified that no such time limit can be prescribed as various factors need to be considered while according approval. However, the Commission is conscious of its responsibility and efforts will be made to accord approval within shortest possible time. With regard to the suggestion of PXIL that no approval should be necessary where the orders of the Commission are to be implemented, we are of the view that in all cases, the Power Exchange shall approach the Commission for approval except where the requirement of prior approval is dispensed with by the Commission.
- 13.8. Regulation 19 has been retained as proposed in the Draft PMR.

14. Membership in Power Exchange (Part 4, Regulation 21)

Commission's Proposal

- 14.1. The Commission has provided the following under Regulation 21 of the Draft PMR:
 - (1) *“Membership of the Power Exchange shall be of the following three categories:*
 - (a) *Trader Member: Any person who has been granted licence for trading in electricity under Trading Licence Regulations, 2020 and admitted as a member of the Power Exchange shall be called a Trader Member. Trader Member shall trade and clear on its own account or trade and clear on behalf of its client: Provided that a Trader Member or any of its Associates shall not be a Facilitator Member.*
 - (b) *Proprietary Member: Any person who is a distribution licensee or a deemed distribution licensee or a grid connected entity and admitted as a member of the Power Exchange shall be called a Proprietary Member. Proprietary Member shall transact and clear through its own account.*

(c) Facilitator Member: Any person who is neither a Trader Member nor a Proprietary Member and admitted as a member of the Power Exchange for providing one or more of the following services to its clients to facilitate transactions at the Power Exchange shall be called a Facilitator Member:

(i) IT infrastructure for bidding on electronic exchange platform or skilled personnel.

(ii) Facilitation of clearances for delivery of power:

Provided that the Facilitator Member in no case shall provide any credit or financing or working capital facility to its client.”

Comments received

- 14.2. Some stakeholders have commented that functions of trader member and facilitator member should not be made mutually exclusive. As per the current provisions, the trader member cannot provide additional services like IT related services to its clients. It is also commented that as per the definition of Associates, and the restriction that any of the associates shall not be a facilitator member, there could be a possibility that group companies with expertise in the area of IT services may not get opportunities. It is further stated that the net worth requirement and compliance needs of a trading licensee are already in place as per the provisions of Trading Licence Regulations, 2020 and as such, the bid facilitation activities should continue to be allowed to trading licensees in addition to credit services for power exchange participation.
- 14.3. TPTCL has commented that there is no significant contribution made by professional member (facilitator member) and has requested to remove the provision of facilitator member from the regulations.

Analysis and Decision

- 14.4. The Commission has considered the views of the stakeholders. Proviso to Regulation 21(1)(a) of the Draft PMR clearly provides that a trader member or its associates cannot be a facilitator member. The basic distinction between a trader member and facilitator member is that while the trader member is permitted to trade on behalf of its client on the Power Exchange, a facilitator member cannot trade on behalf of its client but only facilitate transactions by its client on the Power Exchange by providing certain specific services. Therefore, the distinction

between the trader member and facilitator member has been maintained by not allowing trader member to discharge the functions of facilitator member and vice versa. As regards the suggestion of TPTCL to dispense with the category of facilitator member, the Commission is of the view that this category is required to facilitate transactions of the clients, who are primarily grid connected entities, by providing certain services. Accordingly, proviso to Regulation 21(1)(b) has been retained as proposed in the Draft PMR.

15. Reporting about Members of the Power Exchange (Part 4, Regulation 22)

Commission's Proposal

15.1. The Commission has provided the following under Clause (4) of Regulation 22 of the Draft PMR:

“(4) A Power Exchange shall stipulate criteria for membership to the Power Exchange including Net worth, minimum base capital, security deposit requirement and liquid asset requirement.”

Comments received

15.2. Some stakeholders have submitted that as there are more than one Power Exchanges in operation, the Commission should fix the criteria for membership for the purpose of uniformity.

Analysis and Decision

15.3. The Commission is of the view that Power Exchanges should have the freedom to frame their byelaws, rules and business rules including the criteria for membership of the exchange and other aspects of day to day operation, keeping in view the provisions of the Act and Power Market Regulations. In any case, byelaws, rules and business rules are subject to the approval of the Commission. Accordingly, Clause (4) of this Regulation has been retained.

16. Power Exchange transaction fee

Commission's Proposal

16.1. The Commission has provided the following under Regulation 23 of the Draft PMR:

“No Power Exchange shall charge transaction fee exceeding such fee as approved by the Commission:

Provided that the Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations shall be required to obtain approval of the transaction fee to be charged by the Power Exchange within a period of three months of the date of notification of these regulations.”

Comments received

- 16.2. Most of the stakeholders have welcomed the provision as a good step to protect the consumers from additional cost burden arising due to the transaction fee. It is commented that given the huge volume of transactions, the Power Exchanges make windfall profits at current fee of 2 paise/unit from both buyer as well as seller. Hence, the same should be rationalised by reducing the transaction fee drastically. It is suggested to specify a mechanism for determining the fee for Power Exchanges, whether it will be cost plus or on any other basis. It is further suggested that a common transaction fee should be derived by the Commission to all exchanges, in case Commission plans to introduce the market coupling mechanism.
- 16.3. Some stakeholders have suggested to provide capping on the various fees charged by Power Exchange like membership fee and client registration fee and that the same should be reduced from the present levels.
- 16.4. On the other hand, some stakeholders have commented that the competition amongst Power Exchanges provides the necessary check and balance regarding transaction fee to be charged by the Power Exchanges from the participants. The amount of transaction fee for every product available on the Power Exchange is a business decision that considers factors like cost of operating the business, competition, viability of available volume, cost of transaction to be borne by buyer and seller of a contract and that the Power Exchanges have not increased transaction fee in over a decade. It is further stated that a limit on the transaction fee charged consequently appears to be a case of over regulation and can constrain product and service innovation, thereby diluting consumer interest, by protecting the incumbents who can afford to charge a low transaction fee, because they have already recovered their investment.

Analysis and Decision

16.5. After due consideration of the views of the stakeholders with regard to the transaction fee to be charged by the Power Exchanges, the Commission is of the view that it is necessary to regulate the transaction fee to protect the interests of the buyers and sellers of electricity on the Exchange. Hence, the Commission has specified a ceiling of 2 paise/kWh on the transaction fee to be charged by the Power Exchanges from either party to the transaction. Further, the Power Exchanges will be required to obtain the Commission's approval of the transaction fee to be charged within the period as specified in the regulations, based on the following factors:

- Type of contract;
- Quantum of transaction;
- Duration of transaction;
- Any other factor(s) as may be proposed by the Power Exchange.

The Commission shall consider and evaluate the proposal of the Power Exchanges based on the above-mentioned factors and approve appropriate levels of transaction fee to be charged from the participants on the Power Exchanges. Accordingly, Regulation 23 of the Draft PMR has been modified as follows:

“23. No Power Exchange shall charge transaction fee exceeding 2 (two) paise/kWh from either party to the transactions covered under Clauses (1) to (3) of Regulation 5 of these regulations:

Provided that transaction fee shall not include the charges for scheduled energy, open access (transmission charge, operating charge and the application fee) and transmission losses:

Provided further that the Power Exchanges shall be required to obtain approval of the Commission for the transaction fee to be charged by the Power Exchanges based on types of contract or quantum of transaction or duration of transaction or such other factor(s) as may be proposed by the Power Exchanges within a period of six months of the date of coming into force of these regulations or six months from the date of registration of the Power Exchange, whichever is later.”

17. Trading margin and service charge (Part 4, Regulation 24)

Commission's Proposal

17.1. The Commission has proposed the following under Regulation 24 of the Draft PMR:

“(1) A Trader Member shall charge trading margin in accordance with the provisions of Trading Licence Regulations, 2020 in respect of all transactions carried out through the Trader Member at the Power Exchange.

(2) A Facilitator Member shall not charge service charge of more than two (2.0) paise/kWh, including service charges for any subordinate service providers, for providing services for the transactions on Power Exchange:

Provided that the service charge shall not include any charges levied by Power Exchange, transmission charges for open access, charges payable to National Load Despatch Centre or Regional Load Despatch Centre or State Load Despatch Centre and statutory taxes.”

Comments received

17.2. With respect to Clause (2) of this regulation, some stakeholders have commented that in a free market, competition should decide the fee structure with many players expected to provide multiple services based on IT platform. Facilitator members are supposed to provide only advisory services and there is no great pricing power for such advisory roles. Hence, the Commission may consider deleting such capping. Further, the rationale and methodology for arriving at the service charge is not provided, as this is a sensitive regulatory provision which impacts investment and returns of new and existing firms.

17.3. Kreate Energy has commented that no lower limit has been specified for the service charge in case of a “Facilitator Member”. Only an upper limit of 2.00 paisa/unit was mentioned.

Analysis and Decision

17.4. The Commission has analysed the views of the stakeholders with regard to the cap on service charge for facilitator members. The Power Market Regulations, 2010 provided that the member service charge for facilitator members shall not be more than 0.75% of the transaction value. In the Draft PMR, the methodology for calculating service charge for facilitator members has been revised in terms of paise/kWh in order to align the service charge with the trading margin charged by trader members. Further, the Commission considers that the service charge cap of

two (2.0) paise/kWh would be sufficient to cover the costs associated with operation and maintenance expenses as well as providing adequate returns to the facilitator members. The Commission has specified the upper ceiling on the service charge to be charged by facilitator members and it is left to the facilitator members to decide service charge within the said ceiling.

18. Approval or Suspension of Contracts by the Commission (Part 4, Regulation 25)

Commission's Proposal

18.1. The Commission has proposed the following under Regulation 25 of the Draft PMR:

(1) *“The Commission may, on its own or on an application made in this behalf, permit any Power Exchange to introduce new contracts as specified in clause (1) of Regulation 4 of these regulations:*

Provided that no permission shall be required for the contracts which are being transacted on a Power Exchange on the date of notification of these regulations;

Provided further that the Power Exchanges may introduce new bid types or modify existing bid types conforming to the types and features of the contracts specified under Regulations 4, 5 and 6 of these regulations, after consultation with stakeholders and National Load Despatch Centre, under intimation to the Commission.

(2) *Any Power Exchange seeking permission to introduce a new contract under clause (1) of this Regulation, shall submit to the Commission complete and detailed contract specifications including the following:*

(i) Type of contract;

(ii) Price discovery and matching methodology proposed;

(iii) Timelines, including commencement of bidding and duration of bidding session till delivery commences;

(iv) Delivery mechanism and delivery duration i.e. whether delivery is for intraday, daily, weekly, monthly, seasonal, yearly or beyond;

(v) Risk management mechanism including margining and final price settlement mechanism;

(2) *The Commission may, after granting the concerned Power Exchange the opportunity of being heard, by order, suspend transactions of any contract for the period specified in the order or withdraw any contract from the Power Exchange.”*

Comments received

- 18.2. Some stakeholders have welcomed the provisions in Clause (1) of this regulation regarding new bid types in day ahead and real-time markets.
- 18.3. Kreate Energy has commented that traders should be invited for providing comments by the Commission before introducing new products on the Power Exchange.
- 18.4. IEX has suggested for insertion of following proviso under Clause (2) of this regulation in order to speed up the process of approval:
*“Provided that the Commission shall within 1 month dispose of application for approval of new contract by Power Exchange.
Provided further that after approval, the modification in the specifications other than the above mentioned parameters can be done by the Exchange itself with intimation to the Commission within seven days of effecting the said modifications.”*
- 18.5. Some stakeholders have suggested that new bid types need to be introduced with the approval of the Commission after due stakeholder consultation or it may be subject to regulatory approval after a limited introduction.

Analysis and Decision

- 18.6. The Commission has considered the views of the stakeholders with regard to Clause (1) of this Regulation. It is noted that the third proviso to Clause (1) of this Regulation was inserted in order to provide some flexibility to the Power Exchanges to introduce new bid types. The Commission has allowed flexibility to the Power Exchanges to introduce new bid types or modification of existing bid types conforming to the types and features of contracts specified in the regulations, subject to the requirement of consultation with the stakeholders. Further, while the approval of the Commission will not be required in these cases, the Power Exchanges shall be required to submit the details of the consultation process as well as the views of the Power Exchange on the same to the Commission for information. Accordingly, the proviso has been modified as follows:
“Provided further that the Power Exchanges may introduce new bid types or modify existing bid types conforming to the types and features of the contracts specified under Regulations 4, 5 and 6 of these regulations, after consultation with stakeholders and National Load Despatch Centre, under intimation to the

Commission, along with the details of consultation with stakeholders and National Load Despatch Centre and the views of the Power Exchange.”

19. Clearing and Settlement (Part 4, Regulation 27)

Commission’s Proposal

19.1. The Commission has provided the following under Regulation 27 of the Draft PMR:

“The Power Exchange shall enter into an agreement in writing for Clearing and Settlement of any transaction of electricity undertaken on the Power Exchange with an entity established in accordance with the provisions of the Payment and Settlement Systems Act, 2007:

Provided that Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations shall be required to transfer Clearing and Settlement function to an entity established in accordance with the provisions of the Payment and Settlement Systems Act, 2007, within a period of one year from the date of notification of these regulations or such other period as may be approved by the Commission;

Provided further that pending the transfer of Clearing and Settlement function in terms of the proviso above, such Power Exchanges shall comply with the following:

- (i) The Power Exchange shall constitute a SGF Management Committee headed by an Independent Director of the Board and with adequate representation from the members of the Power Exchange. This committee shall be responsible for overseeing the management of Settlement Guarantee Fund.*
- (ii) The Power Exchange shall invest the proceeds of Settlement Guarantee Fund in safe investments and ensure that the principal amount is not at risk. Not less than fifty percent (50%) of the proceeds of Settlement Guarantee Fund shall be kept in safe liquid investments, including but not limited to fixed deposits with Scheduled Public Sector Banks, Treasury Bills and Government Securities.*
- (iii) The Power Exchange shall distribute at least 70% of the return earned on the initial security deposit invested in the financial year to the members of Power Exchange in proportion to initial security deposit of the member and duration for which such deposit was held with the Power Exchange, within 45 days of the last date of the financial year.*

- (iv) *The principles and methods of usage of the Settlement Guarantee Fund shall be clearly communicated to the members and clients through the bye-laws, rules and business rules of the Power Exchange.*
- (v) *Details of investment of the Settlement Guarantee Fund shall be submitted to the Commission on an annual basis along with Annual Report of the Power Exchange.*
- (vi) *Members' risk shall be monitored constantly and margin money shall be collected at appropriate time for efficacy of risk management.*
- (vii) *Members shall pay the margin money on a gross basis across clients to the Power Exchange, without offsetting the margin requirements of their clients in the same market.*
- (viii) *Members shall, wherever applicable, have a prudent risk management and system of timely margin collection from their clients. The margins collected by members from clients shall be in accordance with the bye-laws, rules and business rules of Power Exchange.*
- (ix) *A member or client may be declared a defaulter by the Power Exchange if the member or client:*
 - (a) *is unable to fulfil its Clearing or Settlement obligations towards the Power Exchange or its client; or*
 - (b) *admits or discloses its inability to fulfil or discharge its duties, obligations and liabilities towards the Power Exchange or its client; or*
 - (c) *fails or is unable to pay within the specified time, the damages and the money difference due on a closing-out effected against him under the rules, bye-laws and business rules of the Power Exchange; or*
 - (d) *fails to pay any sum due to the Power Exchange which may be stipulated from time to time; or*
 - (e) *fails to abide by the arbitration award as laid down under the rules, bye-laws and business rules of the Power Exchange; or*
 - (f) *does not abide by conditions as may be laid down by the Power Exchange from time to time.*
- (x) *In the event a member or client is declared a defaulter and the member or client fails to meet the Clearing or Settlement obligations, the Power Exchange shall give precedence to the payment of charges due to system operator and payment of transmission charges from the deposits of the member or the client,*

as the case may be. Thereafter, the Power Exchange may utilise the Settlement Guarantee Fund and other monies to the extent necessary to fulfil the obligations of the defaulting member or client in the following order-

- (a) Liquidation of collaterals: Contributions or deposits, including margins in any form, of the defaulting member or client.*
- (b) Liquidation of security deposit: Membership deposit given by the defaulting member to the Power Exchange.*
- (c) Insurance money: Insurance taken by the Power Exchange of an amount as considered appropriate by the Power Exchange for protection against defaults.*
- (d) Initial contribution by the Power Exchange towards the Settlement Guarantee Fund.*
- (e) Current year's profits of the Power Exchange including fines, penalty collected from members.*
- (f) Retained earnings of the Power Exchange.*
- (g) Contribution towards Settlement Guarantee Fund by all members or clients: All non-defaulting members or client's contribution in proportion of deposits towards Settlement Guarantee Fund.*
- (h) Balance obligations remaining outstanding after above funds will be met by contribution from members or clients in proportion to their contribution to the Settlement Guarantee Fund."*

Comments received

19.2. Some stakeholders such as PTC India, CUTS, ACC and Ambuja Cements have sought clarity regarding the power, roles and functions of clearing and settlement entity under the Payment and Settlement Act, 2007.

19.3. PXIL has suggested for insertion of the following proviso:

"Provided that Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations may continue to carry out Clearing and Settlement function or may choose to hive off the clearing and settlement function to a separate Clearing Corporation at their discretion, subject to prior approval of the Commission."

PXIL has stated that a mandatory transfer of clearing and settlement function to another entity may not be necessary as such transfer may render the infrastructure created by the Power Exchange redundant. PXIL has suggested that the Clearing and settlement function should continue to be regulated by the Commission to avoid overlapping of regulatory jurisdictions and increased operational complexities and transaction cost.

- 19.4. Mr. Vijay Menghani has suggested that as the transfer of payment and settlement is proposed to be transferred to clearing houses now, it will be better to do the same with interoperability (a mechanism that allows market participants to choose any clearing corporation to settle their trades, irrespective of the exchange where they executed their trades), which will save margin money requirement and funds will be optimally utilized.
- 19.5. Soops has commented that special attention will have to be put on the arrangements related to cross-clearing between the different power exchanges, within the framework of the Market Coupling.
- 19.6. With regards to Clause (iii) of the second proviso under this regulation, some stakeholders have commented that the share of return earned on the initial security deposit distributed by the Power Exchange to its members should be increased from the proposed 70% to 90% or 100%. On the other hand, PXIL has commented that the Power Exchange should not be directed to distribute any amount from the interest earned on initial security deposit but rather such interest should be invested back in the Settlement Guarantee Fund to increase the corpus. In case the Commission decides to implement this clause, the percentage should be reduced from 70% to 15%.
- 19.7. PXIL has also suggested that the interest earned on additional margin money (cash margins) taken by Power Exchange, should also be shared with respective members in a similar manner.

Analysis and Decision

- 19.8. After due consideration of the comments of the stakeholders, the Commission is of the view that the clearing and settlement of any transaction of electricity undertaken on the Power Exchange shall be in accordance with the provisions of the Payment and Settlement Systems Act, 2007, as clearing and settlement function falls within the purview of 'payment system' as defined under section

4(1) of the Payment and Settlement Systems Act, 2007. However, a transition period of one year has been provided to the Power Exchanges to shift to the clearing and settlement in accordance with the Payment and Settlement Systems Act, 2007. Accordingly, clause (1) of Regulation 27 is modified as follows:

“The Power Exchange shall carry out the Clearing and Settlement of any transaction of electricity undertaken on the Power Exchange in accordance with the provisions of the Payment and Settlement Systems Act, 2007”

As regards the provisions in the Draft PMR for distribution of a percentage of return earned on the initial security deposit by the Power Exchange among its members, the Commission is of the view that in line with the order dated 9.10.2018 in Petition No. 33/RC/2017, the Power Exchanges should distribute at least 70% of the interest earned among their members. As regards the suggestion to distribute the interest earned on the additional margin money kept by the members with the Power Exchanges, the Power Exchanges are taking the additional margin money as need based security for transactions on the exchange which are transitory in nature for varying durations commensurate with volumes of transactions. Further, there is non-cash option upto 50% in the form of bank guarantee or fixed deposit. Considering all these aspects, the Commission has not included interest on margin money for distribution among its members. Accordingly, the clause has been retained as proposed in the Draft PMR.

20. Information Technology Infrastructure and Trading System of Power Exchange (Part 4, Regulation 28)

Commission’s Proposal

20.1. The Commission proposed the following under Regulation 27 of the Draft PMR:

- (1) *“Power Exchange shall use electronic trading system and telecommunication network;*
- (2) *The bids entered by a member of Power Exchange shall be first checked against availability of funds or collateral in the risk management system before being accepted in the bid book of the Power Exchange;*
- (3) *Automated audit trail of bids, matching of bids and execution of transactions shall be maintained.*
- (4) *The algorithm of the software application for price discovery and market splitting shall be in compliance with the requirement specified in Regulation 5*

as applicable and methodology mentioned in the bye-laws, rules and business rules of Power Exchange. The Power Exchange shall get the algorithm audited before commencement of operations and thereafter, once in every two years and submit the findings of the audit to the Commission. The resources employed shall have competence in audit of algorithms and relevant industry certifications such as CISA (Certified Information Systems Auditor) from ISACA or shall have empanelment with the Standardization Testing and Quality Certification Directorate under the Ministry of Electronics & Information Technology.

- (5) The Commission may audit or appoint an agency to audit the software applications used by the Power Exchanges for price discovery and market splitting on a random basis. The Power Exchanges shall provide to the Commission results of test cases and scenarios given by the Commission.*
- (6) Power Exchange shall also carry out periodic IT system audit for data security, data integrity and operational efficiency for every financial year and submit its reports to the Commission by 30th June following the end of the financial year.*
- (7) Power Exchange shall formulate and implement a cyber security and cyber resilience framework to manage risk to systems, networks and databases from cyber-attacks and threats with the approval of the Board and submit it to the Commission for information. Security audit of the IT systems shall be carried out each year from a CERT-In (Indian Computer Emergency Response Team) empanelled organisation.*
- (8) Power Exchange shall establish and maintain a disaster recovery site and alternate trading facility for business continuity in case of emergency.*
- (9) The Power Exchange shall discharge the responsibility of activities mentioned in Clauses (3) to (5) of this Regulation in respect of Day Ahead Contracts or Real-time Contracts or any other contracts as notified by the Commission until the time the Commission issues notification for transfer of these responsibilities to the Market Coupling Operator.”*

Comments Received

- 20.2. As suggested by some of the stakeholders, Market Coupling Operator should be included in Clause (4) of Regulation 27 of the Draft PMR, and the Market Coupling Operator should get the price discovery algorithm audited before

commencement of operations. The following provision has been suggested to be incorporated:

“The Market Coupler shall get the algorithm audited before commencement of operations and thereafter, once in every two years...”

- 20.3. Mr.P.K.Agarwal has suggested that the Commission should mandate access to source code of the software to the auditor by the Power Exchange for fair audit of the algorithm. Mr.P.K.Agarwal has further commented that cyber security audit clause does not provide any assessment criteria for security implementation and its audit. He has suggested for mandatory implementation of Information Security Management System (ISMS) as per ISO 27001 Standard as the minimum requirement, over and above which Power Exchanges should formulate their cyber security and cyber resilience framework to manage risk to systems, networks and databases from cyber-attacks and threats.
- 20.4. PXIL has requested for extension of the timeline for submission of periodic IT system audit report to the Commission from the current 30th June following the end of the financial year to 30th September, due to time required for internal approvals.
- 20.5. Mr.Vijay Menghani has suggested for publication of Audit findings at least once in three years in public domain.

Analysis and Decision

- 20.6. The Commission has considered the views of the stakeholders. With regard to inclusion of Market Coupling Operator in clause (4) of Regulation 27 of Draft PMR, it is clarified that the provisions with regard to Market Coupling Operator shall be implemented as and when decided by the Commission in accordance with the regulations to be specified separately.
- 20.7. As regards the timeline for submission of IT system audit report, the Commission is of the view that the timeline of 30th June is considered sufficient in order to obtain the necessary internal approvals before submitting to the Commission.
- 20.8. As regards the audit of the cyber security and cyber resilience framework, the same shall be implemented by the Power Exchanges by a CERT-In empanelled organisation which is considered sufficient.
- 20.9. Regulation 27 of the Draft PMR has been retained and re-numbered as Regulation 28 in the Power Market Regulations, 2021.

21. Congestion Amount management (Part 4, Regulation 30)

Commission's Proposal

21.1. The Commission has proposed the following under Regulation 30 of the Draft PMR:

- (1) *“The Power Exchange may be vested with congestion amount arising from the difference in market prices of different regions as a consequence of market splitting.*
- (2) *The congestion amount shall be maintained in a separate account by the Power Exchange which shall be transferred to the Power System Development Fund in the manner as specified in the Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2019, as amended from time to time and any re-enactment thereof, or utilised in any manner as may be decided by the Commission.”*

Comments Received

21.2. BSPHCL has commented that the proposal under this regulation may lead to a situation where the benefits of price difference of market area clearing price will be socialised at the cost of the seller. In the market dynamics, the seller has to bear all other negative impacts of lower clearing price. Hence, the benefits of higher price due to market splitting should also be passed on to the seller.

21.3. Soops has commented that if clearing is outsourced, as contemplated in Regulation 27 of the Draft PMR, the clearing corporation and not the power exchanges should be vested with the congestion charges.

Analysis and Decision

21.4. The Commission has considered the views of the stakeholders. With regard to the suggestion that the benefit of market splitting should be passed on to the Seller, the Commission is of the view that the congestion amount is generated on account of the congestion in the transmission system and not on account of the Seller and, therefore, the congestion amount on account of market splitting is transferred to the Power System Development Fund. With regard to the suggestion to vest the congestion amount in the Clearing Corporation after clearing function is transferred from the Power Exchanges, the Commission is of the view that the

congestion amount will continue to vest in the Power Exchanges till they discharge the clearing and settlement functions.

22. Information Dissemination by Power Exchange (Part 4, Regulation 31)

Commission's Proposal

22.1. The Commission has proposed the following under Regulation 31 of the Draft PMR:

- (1) *“The Power Exchange shall display on its website links to all the relevant websites.*
- (2) *Prices, volumes and historic prices of power traded shall be made available on the website of the Power Exchange and should be in downloadable format.*
- (3) *Maximum, minimum and average of the traded prices for the month and average volume cleared for all type of contracts transacted on the Power Exchange shall be published on its website.*
- (4) *The Power Exchange shall publish on its website, data tables with aggregate demand and supply curves for each type of contract.*
- (5) *The Power Exchange shall provide to the Commission details of all transactions on a monthly basis in the formats (Forms I-XIV) appended to these regulations: Provided that the Commission may, by order, modify or introduce formats from time to time.*
- (6) *The Power Exchange shall submit to the Commission, bids of all participants along with required analysis, as and when directed by the Commission.*
- (7) *The Power Exchange shall organize, on a regular basis, member or client awareness programmes across the country.*
- (8) *Power Exchange shall create and maintain a document on its website providing detailed description of the algorithm used for price discovery for all type of contracts. The description shall include bid types, details of how the algorithm results in maximisation of economic surplus taking into account various bid types and congestion in transmission corridor, which shall be updated with every new version of the price discovery algorithm:
Provided that Power Exchanges which have been granted registration by the Commission prior to the date of notification of these regulations shall publish this document on their website within a period of three months from the date of notification of these regulations.”*

Comments Received

- 22.2. With regard to submission of details of transactions to the Commission as stipulated under Regulation 31(5) of the Draft PMR, CEA has commented that a dedicated Market Monitoring Cell has been established and is in operation in CEA on the directions of the Ministry of Power vide their letter No 25/09/2006 - R&R (Vol-III) dated 25th March, 2019 and, therefore, CERC would need to modify the above clause to include CEA also along with CERC.
- 22.3. Indian Commodity Exchange (ICEX) has suggested that the commodity derivative exchange which offers the electricity futures contract shall be free to use the disseminated price by Power Exchange on its website as reference price for their settlement of the contract as underlying spot/cash market price if they desire so.
- 22.4. Some stakeholders have requested the Commission to mandatorily implement the feature of API (Application Programming Interface) for information, transaction and all activities related to market transactions in order to reduce manual processes and shorten the time required to undertake quick and reliable decision making.
- 22.5. Few stakeholders have commented that information requirement specified in Regulation 31(4) of the Draft PMR should be with regard to Day Ahead Contract and Real-time Contract.
- 22.6. IEX has commented that the requirement of publishing document in terms of Regulation 31(8) of the Draft PMR would result in duplicity since for each type of contract, the details of algorithm used is explained in the Business Rules and same is available on the website of the Power Exchange. Pranurja Solution Limited has stated that if the algorithm of price discovery which is the core intellectual property (IP) of the Power Exchange is made a public document, a significant IP which could be a source of comparative advantage would come to public domain with detrimental effects on the exchange.
- 22.7. POSOCO has suggested for dissemination of following additional information by the Power Exchanges:
- Area wise aggregated supply-demand curves
 - Total Consumer Surplus
 - Total Producer Surplus
 - Total Social Welfare
 - Percentage portfolios using block bids
 - Bid – Ask Spread

- Time block wise / day-wise market concentration using indices like HHI.
- 22.8. Prayas Energy has commented that the information in Forms I-XIV should be uploaded by the Power Exchanges on their websites, as information is not commercially sensitive and deals with past trades. TPTCL has suggested that Power Exchanges should also furnish client-wise details of cleared volume on their website, for all the segments like DAM, RTM, TAM, REC, ESCerts for the information of all market participants which would also serve the intended purpose of launching OTC platform.

Analysis and Decision

- 22.9. As regards the suggestion of CEA to include CEA in Regulation 31(5) of the Draft PMR, the Commission is of the view that the Power Exchanges are required to give information on Forms I to XV which are required for monitoring various aspects of the market by the Commission. The requirements of CEA may be different from the requirements of the Commission. CEA may devise its own formats and seek the information from Power Exchanges independently.
- 22.10. With regard to comments of Indian Commodity Exchange for using the price disseminated by the Power Exchanges as reference price for the purpose of derivatives, it is clarified that no specific provision in this regard has been made in the Power Market Regulations, 2021. Since disseminated price of the Power Exchanges are available in the public domain, Indian Commodity Exchange may have arrangement with the Power Exchanges in this regard.
- 22.11. With regard to implementation of the Application Programming Interface (API), the Commission is of the view that this is an important tool for dissemination of information. Accordingly, the provision has been modified as under:
“Prices, volumes and historic prices of power traded shall be made available on the website of the Power Exchange and should be in downloadable format. In addition, the data shall be made available through Application Programming Interface (API).”
- 22.12. With regard to the suggestion that Regulation 31(4) of the Draft PMR should be with reference to day ahead contract and real time contract, the Commission has agreed with the suggestion and has modified the clause as follows:

“The Power Exchange shall publish on its website, data tables with aggregate demand and supply curves for each type of contract involving collective transactions.”

- 22.13. With regard to comments on Regulation 31(8) of the Draft PMR, it is clarified that the aim of the said provision is dissemination of the price discovery algorithm among market participants and the public at large. Further, the description of price discovery algorithm shall clearly explain the logic used by the algorithm for maximisation of economic surplus in collective transactions, taking into account various bid types and the congestion in transmission corridor. The Commission is of the view that the requirement of this clause is essential and accordingly, has been retained in the Power Market Regulations, 2021.
- 22.14. The Commission has considered the suggestions of POSOCO, Prayas Energy and TPTCL and is of the view that Regulation 31 of the Power Market Regulations, 2021 has adequately addressed on the dissemination of information by power exchanges. The Regulation 31 now covers the dissemination of all the relevant market information to be posted on the website of power exchanges.

23. Market Surveillance by Power Exchange (Part 4, Regulation 32)

Commission’s Proposal

- 23.1. The Commission has proposed the following under Regulation 32 of the Draft PMR:
- (1) *“Power Exchange shall set up a surveillance department which shall carry out day to day monitoring and surveillance of transactions and undertake analysis as mentioned in clause (5) of this Regulation.*
 - (2) *Power Exchanges shall ensure that market surveillance is executed from a physically secure and restricted area by authorised personnel. Information, data security, and audio recording of conversations of such personnel shall be maintained by the Power Exchange for a period of two years and made available to the Commission, if so directed.*
 - (3) *The Power Exchange shall constitute a Market Surveillance Committee (MSC) headed by an Independent Director of the Board and having members from the executive team of the Power Exchange. No member of this committee shall be a member of the Power Exchange.*

- (4) *The surveillance department shall analyse bidding patterns and transactions of participants and submit its analysis and report to the Market Surveillance Committee.*
- (5) *The Market Surveillance Committee shall submit quarterly surveillance report to the Commission within 15 days after the end of every quarter and shall include the following but not limited to:*
- (a) *Transaction pattern of members of Power Exchange over a specific time period;*
 - (b) *Daily, weekly, monthly volatility analysis of prices;*
 - (c) *Price setter analysis of buyer and seller;*
 - (d) *Dominant position by Market Participants;*
 - (e) *Monitoring of Circular Trading;*
 - (f) *Analysis of sudden high transaction volumes of members of Power Exchange;*
 - (g) *Analysis of default by any member of Power Exchange;*
 - (h) *Analysis of transactions to check that the market splitting as approved by the Commission is being followed in case of congestion in transmission corridor;*
 - (i) *Analysis of market concentration in daily transactions; and*
 - (j) *Analysis of marginal buyers and sellers, whose volume was cleared at the margin.”*

Comments Received

- 23.2. With regard to Regulation 32(5) of the Draft PMR, some stakeholders have commented that the analysis of parameters to be covered in the surveillance report is a complex and time-consuming exercise and the timeline of 15 days for submission of the Market Surveillance Committee Report would be very stringent. Therefore, at least 1 month should be provided to submit the report to the Commission.
- 23.3. Mr. Vijay Menghani has commented that the Commission may consider the option of publication of abridged version of the Market Surveillance Committee Report, hiding confidential information, in public domain to increase the public confidence.

Analysis and Decision

23.4. The Commission has considered and accepted the suggestion made by the stakeholders to increase the timeline from 15 days to 30 days for submission of the Market Surveillance Committee Report. Accordingly, the regulation has been modified as under:

“The Market Surveillance Committee shall submit quarterly surveillance report to the Commission within 30 days after the end of every quarter and shall include the following but not limited to: ...”

23.5. As regards the suggestion for publication of abridged version of Market Surveillance Committee Report, the Commission is of the view that the analysis presented by the Power Exchanges in the Market Surveillance Committee Report is for the purpose of regular monitoring and use of the Commission. In the event of intervention by the Commission on account of existence of any of the circumstances stipulated under clause (2) of Regulation 49 or Regulation 51 of the Power Market Regulations, 2021, the record of proceedings and orders of the Commission shall be available in the public domain.

24. Exit Scheme (Part 4, Regulation 34)

Commission’s Proposal

24.1. The Commission has proposed the following under Regulation 32 of the Draft PMR:

“The Power Exchanges shall get their exit scheme in the event of closure of the Power Exchange or revocation of registration of the Power Exchange, approved by the Commission at the time of registration. The exit scheme shall provide the manner in which:

- (1) the running contracts on the Power Exchange shall be closed or the succession plan for all transacted contracts; and*
- (2) any claims pertaining to pending arbitration cases, arbitration awards, liabilities or claims of contingent nature and unresolved investors complaints or grievances lying with the Power Exchange would be settled by the Power Exchange.”*

Comments Received

24.2. CEA has suggested that if only one Power Exchange is running in the country and opts for exit option, it may be allowed to do so only after a certain period, say six

months or a year, to avoid any uncertainty in power market till a substituted mechanism to handle such adverse situation is devised.

24.3. IEX has suggested for insertion of the following proviso:

“Provided that the Exit Scheme of Power Exchanges approved by the Commission prior to the notification of these regulations shall be deemed to be approved under this regulation.”

Analysis and Decision

24.4. The Commission has considered the views of the stakeholders with regards to the minimum period to be specified in the exit scheme in case of closure of single Power Exchange. As per Regulation 34 of the Power Market Regulations, 2021, the exit scheme shall provide for the manner of closure or succession of transacted contracts and settlement of claims and grievances. Only after compliance with the requirements of the exit scheme, a Power Exchange shall be allowed by the Commission for closure of power exchange or revocation of registration.

24.5. As regards the suggestion to insert a proviso for deemed approval of the exit scheme in case of existing Power Exchange, the Commission is of the view that the Power Exchanges shall be required to revisit their exit scheme in the light of the provisions of Power Market Regulations, 2021 and seek fresh approval.

25. Objectives of Market Coupling (Part 5, Regulation 37 to 40)

Commission’s Proposal

25.1. The Commission has proposed the following under Regulations 37 to 40 of the Draft PMR:

“37. Objectives of Market Coupling

- (1) “Discovery of uniform market clearing price for the Day Ahead Market or Real-time Market or any other market as notified by the Commission;*
- (2) Optimal use of transmission infrastructure;*
- (3) Maximisation of economic surplus, after taking into account all bid types and thereby creating simultaneous buyer-seller surplus.”*

38. Designation of Market Coupling Operator

“Subject to provisions of these regulations, the Commission shall designate a Market Coupling Operator who shall be responsible for operation and management of Market Coupling.”

39. Functions of the Market Coupling Operator

(1) The Market Coupling Operator, with the approval of the Commission, shall issue a detailed procedure for implementing Market Coupling including management of congestion in transmission corridor, the timelines for operating process, information sharing mechanism with the Power Exchanges and any other relevant matters.

(2) The algorithm for enabling Market Coupling shall be developed and managed by the Market Coupling Operator and implemented with the approval of the Commission.

(3) Market Coupling Operator shall create and maintain a document on its website providing detailed description of the algorithm used for price discovery. The description shall include bid types, details of how the algorithm results in maximisation of economic surplus taking into account various bid types and congestion in transmission corridor, which shall be updated with every new version of the price discovery algorithm.

(4) The Market Coupling Operator shall use the algorithm to match the collected bids from all the Power Exchanges, after taking into account all bid types, to discover the uniform market clearing price, subject to market splitting.

(5) The Market Coupling Operator shall communicate the results of the auction to the Power Exchanges in a transparent manner.

40. The Power Exchanges shall inform the participating bidders about the results of the auction as communicated by the Market Coupling Operator.”

Comments Received

25.2. Some stakeholders have commented as under:

(a) With the creation of Market Coupling Operator, the price discovery engine would be placed under a neutral body where the price of electricity would be discovered based on the bids from various exchanges, thereby allowing exchanges to concentrate on improving service qualities.

(b) Market Coupling would lead to deepening of markets and market-wide Social Welfare Maximization.

(c) Market Coupling would lead to optimum utilization of transmission capacity as there will be no requirement of Power Exchange-wise allocation.

- (d) Market Coupling would pave the way for implementation of Market Based Economic Dispatch and market based ancillary services.
- (e) Market Coupling would provide a single and robust price benchmark for launching Derivative Contracts and pave the way for integration of power markets from neighboring countries.
- 25.3. PTC has proposed that other products in Power Exchanges, where uniform price discovery takes place, such as Renewable Energy Certificates (REC) and Energy Saving Certificates (ESCerts), may be included under Market Coupling Operator.
- 25.4. Manikaran Power Limited has commented that merging of bids typically occurs across various countries and regions where distribution of power across borders is very complex due to different types of production, varying demand, and bottlenecks on cross-border cables. Therefore, coupling was done across Power Exchanges in different geographies i.e., different regions were coupled. However, the Commission has proposed to couple the bids of different Power Exchanges in India (i.e., coupling within region). The Indian power market is already integrated where the transaction volume in Power Exchanges is only 4% and one exchange already has a share of 99% in DAM and RTM. As majority of DAM and RTM transactions happen through a single Power Exchange, maximization of economic surplus is already taking place in the current scenario.
- 25.5. IEX has commented that market coupling will stifle competition amongst the power exchanges as they may not have any incentive to develop new products. This will also diminish the value proposition of Power Exchanges built over time. Once Market Coupling Operator comes into play, and with Clearing & Settlement functions transferred to Clearing Corporation, Power Exchanges will lose all the institutional capacity with reference to their key offerings i.e. Price Discovery and Financial Settlement and become mere bid aggregators, and hence won't be able to command any respectable fee.
- 25.6. Some stakeholders have commented that adequate transmission corridor is available as there has only been 0.4% congestion in transmission corridor during FY 2020. Further, pro-rata allocation of transmission corridor does not leave any further scope for optimization in the surplus capacity scenario.
- 25.7. Some stakeholders have sought more clarity on the procedure for appointment, the qualification criteria, the charges that will be levied and the timeline involved for setting up the Market Coupling Operator.

- 25.8. PXIL has commented that the Commission may designate one or more Market Coupling Operator(s) from amongst the Power Exchanges. Provided that in the event more than one Power Exchange is found to be eligible to be designated as a Market Coupling Operator, the Commission should require such Power Exchanges to operate as the Market Coupling Operator on rotation basis on such terms and conditions it may deem fit.

Analysis and Decision

- 25.9. The Commission has considered and analysed the views/ suggestions/ comments of the stakeholders in detail. The Commission is of the view that the Market Coupling Operator would be introduced at an appropriate time. The Commission has accordingly decided that the provisions with regard to market coupling and Market Coupling Operator shall come into effect as and when decided by the Commission in accordance with the regulations to be specified separately. Accordingly, Regulations 39 and 40 of the Draft PMR have been deleted and Regulation 39 has been inserted as under:

“The provisions with regard to market coupling and Market Coupling Operator in these regulations shall come into effect as and when decided by the Commission in accordance with the regulations to be specified separately.”

26. OTC Platform (Part 6, Regulation 41)

Commission’s Proposal

- 26.1. The Commission has proposed the following under Regulation 41 of the Draft PMR:

“OTC Platform shall operate after obtaining registration under these regulations.”

Comments Received

- 26.2. Some stakeholders have commented that the introduction of OTC Platform will address the challenge of information asymmetry and help the smaller market participants.
- 26.3. Some stakeholders have also commented that OTC platforms will impact liquidity in the existing market as it will fragment the market and lead to inefficient price discovery. The proposed OTC market will get volume from short term market’s

share, thereby reducing share of traders and power exchanges. The reduced share means reduced volume which will lead to low liquidity for Power Exchanges.

Analysis and Decision

- 26.4. OTC Platform was proposed in the Draft PMR with the intention of facilitating direct interaction between buyers and sellers of electricity in the OTC Market and to reduce the existing level of information asymmetry in the OTC Market. The Commission is of the view that the OTC Platform would provide useful and relevant market information to potential buyers and sellers of electricity to facilitate taking buy/sell decision in OTC market.
- 26.5. The provisions as proposed in the Draft PMR have been retained.

27. Objectives of OTC Platforms (Part 6, Regulation 41)

Commission's Proposal

- 27.1. The Commission has provided the following under Regulation 42 of the Draft PMR:

“The objectives of the OTC Platform shall be:

- (1) To provide an electronic platform with the information of potential buyers and sellers of electricity;*
- (2) To maintain a repository of data related to buyers and sellers and provide such historical data to Market Participants;*
- (3) To provide such services as advanced data analysis tools to Market Participants.”*

Comments Received

- 27.2. Some Stakeholders have requested for clarity on the types of data of potential buyers and sellers to be available in the OTC Platform.
- 27.3. RE Connect has requested to add (1) counterparty discovery; (2) negotiations; and (3) execution of contract via a digital platform under the core objectives of the OTC Platform.
- 27.4. Tata Power Company Limited has commented that disclosure of prices from bilateral contracts would go against the confidentiality of contracts. Besides, prices in a standalone manner might provide misleading signal as a contract is an agreement between two parties on various terms and conditions, including price.

Analysis and Decision

- 27.5. As stated above, along with the price of electricity, such platforms will provide detailed information on the buyers and sellers including information such as quantity, fuel, location, etc. which may help the counterparty in making their buy/sell decision.
- 27.6. The Commission has analysed the comments of the stakeholders. OTC platform shall provide such information to the buyers and sellers of electricity in OTC market as it is necessary for such buyers and sellers to take informed buy/sell decisions. Under no circumstances, OTC platform shall be involved in the actual transactions between buyers and sellers. Accordingly, Regulation 41 has been retained as proposed in the Draft PMR.

28. Eligibility Criteria for registration of OTC Platform (Part 6, Regulation 44)

Commission's Proposal

- 28.1. The Commission has proposed the following under Regulation 44 of the Draft PMR:
- (1) *“The eligibility criteria for registration of OTC Platform shall be as follows:*
- (a) *Any company incorporated under the Companies Act, 2013;*
- (b) *The minimum Net worth of the applicant shall be Rs.50 lakhs as on any date falling within 30 days immediately preceding the date of filing the application for grant of registration.*
- (2) *A Power Exchange or Trading Licensee or any of their Associates or grid connected entities shall not be permitted to set up, operate, or have any shareholding in an OTC Platform.”*

Comments Received

- 28.2. Prayas Energy and RE Connect have suggested to increase the Net worth requirement for setting up of OTC platform in order to discourage non-serious players.
- 28.3. PTC has commented that with safeguards of demutualization, a Power Exchange or Trading Licensee or any of their Associates or grid connected entities may be permitted to set up, operate, or have any shareholding in the OTC Platform.
- 28.4. Some stakeholders have commented that taking into consideration the expertise, knowledge about the market and information database possessed by trading

licensees, they should be allowed to participate or operate the OTC platform in some way or the other.

- 28.5. PXIL has commented that there is no conflict of interest for Power Exchanges to register and operate as an OTC platform, as the Power Exchanges do not take any position in trades and transactions in the power market.

Analysis and Decision

- 28.6. The Commission after due consideration of the views of the stakeholders has increased the net worth requirement of OTC Platform to Rs.1 crore in order to discourage any non-serious players from setting up an OTC Platform. Accordingly, Regulation 43(1)(b) has been modified as under:

“(b) The minimum Net worth of the applicant shall be Rs.1 crore as on any date falling within 30 days immediately preceding the date of filing the application for grant of registration.”

- 28.7. With regard to the suggestion to permit trading licensees, Power Exchanges or grid connected entities to set up or operate or have shareholdings in the OTC platform, the Commission is of the view that ownership or shareholding of OTC Platforms by Trading Licensees or Power Exchange or any of their associates may lead to conflict of interest. Accordingly, Commission has retained Regulation 44(2) of the Draft PMR which is re-numbered as Regulation 43(2) in the Power Market Regulations, 2021.

29. Obligations of the OTC Platforms (Part 6, Regulation 46)

Commission’s Proposal

- 29.1. The Commission has provided the following under Regulation 47 of the Draft PMR:

- 1) *“The OTC Platform shall not engage in the negotiation, execution, clearance or settlement of the contracts.*
- 2) *The OTC Platform shall maintain neutrality without influencing the decision making of the Market Participants in any manner.”*

Comments Received

- 29.2. IEX has requested clarity as to how such OTC platform can charge from its participants and if there is any cap on such charges.

- 29.3. Soops has commented that reporting obligations to the Commission should be added in the regulations.
- 29.4. Prayas Energy has requested clarity on the status of DEEP Portal and whether it would need to register as an OTC Platform.

Analysis and Decision

- 29.5. With regard to the suggestion of the stakeholders to include reporting obligations by OTC Platforms, the Commission is of the view that since no transaction shall take place on OTC platform, reporting obligation to the Commission has not been specified in the Power Market Regulations, 2021. With regard to the fee to be charged by OTC Platform for the services rendered, the Commission is of the view that the fee should be decided by the OTC Platform based on the specifics of the services offered to its customers.
- 29.6. DEEP E-bidding Portal has been set up by the Ministry of Power to allow short term procurement of power (more than one day and up to one year) by Discoms on a reverse auction basis. On the other hand, OTC Platforms have been introduced to facilitate direct interaction between the buyers and sellers of electricity in the OTC Market, while the actual finalization of transaction and clearing and settlement would take place outside the platform. Hence, DEEP Portal is different from the OTC Platform.

30. Objectives of market oversight (Part 7, Regulation 48)

Commission's Proposal

- 30.1. The Commission has proposed the following under Regulation 49 of the Draft PMR:

“Objectives of Market Oversight

- (a) *To detect and prevent market manipulation, insider trading, cartelization and abuse of dominant position by any Market Participant;*
- (b) *To ensure that Market Participants have confidence in the integrity and fairness of power markets;*
- (c) *To ensure that the prices are discovered in a transparent and competitive manner.”*

Comments Received

- 30.2. Brookings Institution India Center has commented that the structure, roles & responsibilities to carry out market monitoring and market surveillance as brought out in the Draft PMR is a welcome measure.
- 30.3. Some stakeholders have commented that market oversight should be stringent but flexible. While it is required to prevent gaming in the market, market manipulation, cartelization or insider trading, it should not be a deterrent for market development by unnecessarily putting many compliances, stringent operational rules and complex requirements from the market players. A regular interaction with all stakeholders in a time bound manner has also been suggested.
- 30.4. FICCI has commented that to ensure neutrality and to enable the deployment of specific skill sets necessary for monitoring markets and competition and generate analytical reports, it may be examined if such tasks can be entrusted to an independent entity which will function at arm's length from the Commission but provide the required inputs as will be necessary. The Commission would then be in a position to review the adequacy of rules and regulations as well as codes and industry agreements for ensuring competitive outcomes. Broadly, such market oversight should be independent of sector bias as well as market participants. International practices generally propose setting up of an Independent Market Monitor reporting to Energy Regulatory Commission.

Analysis and Decision

- 30.5. The Commission has analysed the comments of the stakeholders with regard to market oversight and is of the view that there is a requirement for strengthening the process of market oversight in order to protect the interest of the market participants. Accordingly, a framework for market oversight has been provided in the Power Market Regulations, 2021 to collect and analyse data relating to the market participants in a structured manner and to take remedial measures.

31. Intervention by the Commission (Part 7, Regulation 50)

Commission's Proposal

- 31.1. The Commission has proposed the following under Regulation 51 of the Draft PMR:

"51. Intervention by the Commission

On receipt of any information or report under clause (2) of Regulation 50 of these regulations, the Commission may, after giving such opportunity to the concerned Market Participant, to make a representation in connection with the report and after considering representation, if made, by order:

- (a) require the concerned Market Participant to take such action in respect of any matter arising out of the report as the Commission may deem fit; or*
- (b) impose penalty in accordance with the provisions of the Act; or*
- (c) debar the concerned Market Participant from participating in any of the contracts mentioned in Regulation 4 of these regulations for a period as may be specified by the Commission; or*
- (d) direct the Power Exchange to cancel membership of a member; or*
- (e) suspend or cancel the registration of the Power Exchange under these regulations.”*

Comments Received

- 31.2. Some stakeholders have commented that the applicable penalty as per the aforesaid provision of the Draft PMR is not a sufficient deterrent against market abuse/ gaming. The Commission has been requested to specifically insert appropriate provisions in the regulations in this regard.
- 31.3. CEA has suggested for insertion of “OTC Platforms” in Clause 51(e).

Analysis and Decision

- 31.4. The Commission has considered the views of the stakeholders. It is noted that the powers of the Commission to impose penalty for contravention of any provisions of the Act or rules or regulations made thereunder is derived from the relevant provisions of the Act. Accordingly, Clause (b) of this Regulation provides that the Commission may impose penalty in accordance with the provisions of the Act.
- 31.5. Further, the Commission has considered the suggestion of the stakeholder with regard to insertion of provision for suspension or cancelation of registration of the OTC Platform. Accordingly, Clause (f) has been added under Regulation 50 as under:
“(f) suspend or cancel the registration of the OTC Platform under these regulations.”

**Sd/-
(Arun Goyal)
Member**

**Sd/-
(I.S.Jha)
Member**

**Sd/-
(P.K.Pujari)
Chairperson**

Appendix

Stakeholders who submitted written or/and oral comments

1	Amazon Web Services	36	Instinct Infra& Power ltd
2	Siemens Limited	37	Bihar State Power Holding Company Ltd
3	Ayana Renewable Power Pvt Ltd	38	Pranurja Solutions
4	Adani Power (Mundra) Limited	39	Tata Power
5	NTPC	40	RPG Power Trading Company Ltd
6	AFRY Consulting	41	Alliance for an Energy Efficient Economy
7	Central Electricity Authority (CEA)	42	Mr. PK Agarwal
8	ICICI Bank	43	Indian Energy Regulatory Services
9	Torrent Power	44	CLP India
10	Indian Commodity Exchange	45	Dr. Ashley C. Brown
11	PCKL	46	Brookings India
12	NVVN	47	Institute of Company Secretaries of India
13	Refex Energy	48	Radiance Renewables
14	NLC India	49	Tata Power Trading Company Ltd
15	CIRC	50	EMA Solutions
16	Research Triangle Institute	51	Mr. HL Bajaj
17	Kreate Energy	52	Statkraft
18	GRIDCO Limited	53	Mr. Vijay Menghani
19	GMR Energy	54	FICCI
20	PTC India	55	POSOCO
21	PXIL	56	Prayas Energy Group
22	Dhariwal Infrastructure	57	Mr.Akhilesh Awasthy
23	RE Connect	58	Mr.Sourav Roy
24	IEX		
25	Soops		
26	Hero Future		
27	Shell Energy India		
28	Saini Power		
29	ACC		
30	Ambuja Cements		
31	MSEDCL		
32	50 Hertz		
33	Mr. Shiva Suman		
34	Prof. Anoop Singh		
35	Mr. Rakesh Nath		