

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**L-1/13/ 2010-CERC**

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**STATEMENT OF OBJECTS AND REASONS  
OF  
POWER MARKET REGULATIONS, 2010**

**1. Introduction**

1.1. In due discharge of its statutory responsibility, the Central Commission had floated a Staff Paper on “*Developing a Common Platform for Electricity Trading*” in July, 2006 inviting comments/suggestions from the stakeholders and the interested parties/persons on the viability, structure, management and operational arrangement of Power Exchange. Thereafter, the Commission passed an Order dated 18.1.2007 (in Petition No. 155 / 2006) which contained the ‘*Statement of Reasons*’ for ‘*Development of a common platform for electricity trading*’ towards the establishment and management of the Power Exchange. Subsequently, the Central Commission laid down the ‘*Guidelines for the grant of permission for setting up and operation of Power Exchange*’ vide its Order dated 6.2.2007 (in Petition No. 155/2006).

1.2. Trading in electricity as a licensed activity has been in place since the year 2003. Electricity Traders have played critical role transferring electricity from surplus regions to deficit regions in the country.

- 1.3. It has been over a year that Power Exchanges have commenced operations. They have been playing twin role of helping in price discovery of electricity in the Day Ahead market and price dissemination electronically in the country.
- 1.4. These regulations are being formulated not only as an extension of the work done earlier but also with the objective of developing the market in power (including trading), in accordance with the functions vested in the Central Commission under the Electricity Act, 2003 and National Electricity Policy notified there under. These Regulations deal with the creation of a comprehensive market structure and enabling the transaction, execution and contracting all types of possible products in the electricity markets. The Legislative intent requires that the Central Commission constituted by the Electricity Act 2003 ensures that “electricity” be given the widest scope and be interpreted to extend to all ancillary or subsidiary matters which can fairly and reasonably be comprehended in it. Regulatory Commissions as expert bodies have been created under the Act and empowered to govern all matters related to power sector. As the markets are at a nascent stage, these regulatory measures propose a calibrated approach for introducing electricity derivatives keeping in view the present ground realities of demand – supply gap and the pressing need for controlling the prices of electricity to ensure its reasonableness.
- 1.5. A draft version of these regulations was published under a public notice dated 22<sup>nd</sup> September 2009 for information of all stakeholders including the persons likely to be affected thereby. Thereafter, two seminars were held on 28<sup>th</sup> and 29<sup>th</sup> October 2009 with the purpose of disseminating information about the draft regulations. Subsequently an oral hearing was also organised on 25<sup>th</sup> November 2009. Written and oral suggestions and objections have been received by the Commission from various stakeholders listed in the Annexure attached to this statement of reasons. All the comments have been examined thoroughly and the issue raised by

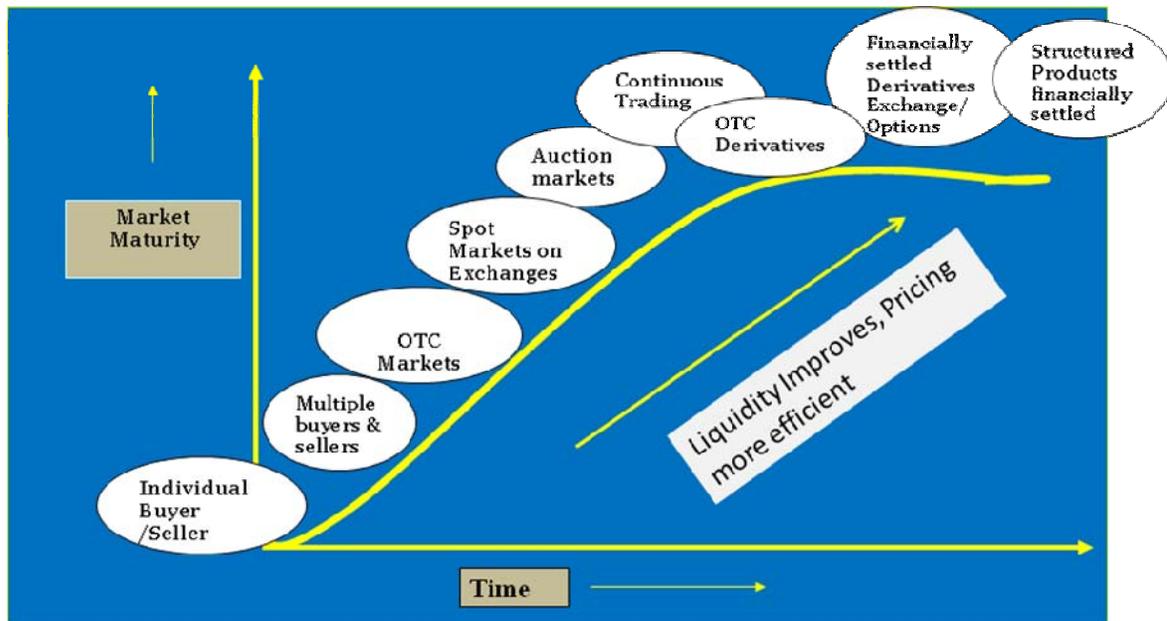
the stakeholders has been deliberated exhaustively. The draft version has been now finalised after taking into consideration suggestions and objections. This Statement of Reasons *inter alia* advert to all significant suggestions and objections in brief form and the decisions taken as against them by the Commission with the rationale behind the decisions. Some other comments of stakeholders on definitions, change in language, typographical mistakes have also been incorporated in the regulations. The regulation reference numbers used in this document are the draft regulation numbers.

## **2. Probable Scenario**

- 2.1. These regulations have been formulated keeping in mind the present scenario and the probable scenario 3-4 years from now in the power markets.
- 2.2. The National Electricity Policy, 2005 envisions that 85 % of power from new capacities shall be contracted through long term PPAs. Such contracts would take care of debt coverage and financing obligations of the power players. It is expected that power players will transact substantial part of the remaining 15% power capacity through market mechanisms. Also it is expected that much more merchant capacity would be available in the next few years as the power sector is beginning to successfully attract equity investors.
- 2.3. The Commission intends to develop a market where power sector participants can efficiently buy and sell power that is not tied up in long term PPAs. The market can also be used for short term balancing needs which arise from time to time in the power sector.
- 2.4. In addition, the Commission would encourage market participants to develop price risk management tools to help power sector participants manage price risk arising from the volatility of prices. This would

necessitate development of derivatives market as derivatives serve the purpose of price risk management, hedging and risk transfer between participants with different risk profiles.

- 2.5. However, we believe that a large, liquid and efficient spot market is essential for the healthy development of derivative markets. For derivative markets to function correctly, it is essential that the price discovery process in the spot market is robust so that the spot market price benchmark be used by the derivative market. Once supply demand deficit reduces considerably, liquidity increases in spot markets, markets mature and deepen, derivatives may be introduced.
- 2.6. It is expected that the role of Power Exchanges would transform with time. From the present main purpose of acting as price signal for investments, it will then have twin role of providing price signal and act as risk transfer platform. The present trend world over is to promote Exchange traded contracts ( in all types of markets ) ,since the robust risk management of Exchanges/ Clearing Corporation takes care of any systemic risk issues. Our intention is also to follow this newly gathered wisdom particularly from risk management perspective. However, OTC traders are expected to continue to play an equally important role of providing structured and financing solution to power players and play the role of buyer / supplier aggregator
- 2.7. In case these presumptions do not turn out as envisaged, mid course correction in the regulation may be needed.



•In matured markets all these types of markets exist  
 •Interplay between markets improves price discovery

2.8. It is generally observed that markets follow the above depicted developmental phases in its process of maturity. A strong and robust coupling between these markets through arbitrage mechanism and minimal entry barrier ensures convergence of prices between different markets. Efficient pricing happens as different market participants price the asset from different perspectives and manipulation of prices is difficult as the integrated market is large in size.

### 3. Envisaged Macro Objectives of Power Market Development in India:

- 3.1. To serve the Interest of Society- Consumer Interest and Supplier Interest
- 3.2. To provide correct price signals and help raise more capital for investment and thereby reduce supply deficit
- 3.3. To optimise asset utilisation through promoting short term trading
- 3.4. To promote competition, efficiency and economy in Power Markets
- 3.5. To create a level playing field between different types of entities
- 3.6. To facilitate market mechanisms whereby the consumers (1 MW and above) are empowered to choose their source of supply from a trader and / or Power Exchange.

- 3.7. To facilitate Electricity traders to compete with local Discoms for supplying power to open access consumer permitted under Section -42 (2) of the Act.
- 3.8. To create a roadmap for future development in power markets in India

#### **4. Legal Issues raised by Stakeholders**

- 4.1. Some stakeholders have raised certain legal issues related to the scope of the regulations, the type of contracts and entities recognised in the regulations. The salient ones are listed below:-

(i) *TPTCL –*

- (a) *In the process of development of power market, only the entities recognized and licensed under the Act can be the participants or players. It is submitted that no new entity (which is not recognised or licensed under the Act) can be given a role or recognition for the development of electricity markets. Such power to create/ recognise new players in the electricity market is not available to the Central Commission. Hence the regulations appear to be re-writing and materially adding to the Act itself.*
- (b) *Traders are recognized as the only category of market makers under the Act. So the development of market if done by putting traders at a disadvantage will be contrary to letter and spirit of the Act.*
- (c) *In the operation of the existing Power Exchanges it is observed that even persons who are neither grid connected entities nor licensees are being allowed to undertake obligations and responsibilities of a trading licensee for carrying out transactions in the Power Exchange.*
- (d) *Registration of Power Exchanges in contrast to licensing u/s 14 of the Electricity Act, 2003 can result in ambiguity regarding the extent of jurisdiction exercised by the Central Commission over the operations and transactions of Power Exchanges, since the exercise of regulatory jurisdiction by the Central Commission is limited under the Act to licensees and other entities specified under the Act e.g. NLDC, RLDC, STU, CTU, etc.*

- (e) *Intervention Power - The powers of the Hon'ble Commission for the fixation of tariff / cap on tariff is extremely limited and coextensive with its power to determine tariff u/s 79(1) (a) and (b) of the Act.*
- (f) *Intervention Power -The sudden increase, decrease or fluctuation in price or volume of electricity are not recognized as valid grounds for any intervention by the Hon'ble Commission in the sale, purchase or trading of electricity. The legal validity of REC and their tradability in Power Exchange has to be examined*
- (g) *The Act does not provide for creation of funds in the nature of Congestion Revenue Fund by subjecting buyers in the congested region to higher market price.*

*(ii) WBSEDCL -*

- (a) *In Sub-paragraph (f) of paragraph-5.7 of National Electricity Policy separate regulations for intra-State trading and inter-State trading has been specifically mentioned. Central Commission can make regulations only for interstate transactions and has no jurisdiction on intra state transactions. That should be categorically mentioned in the scope of regulations.*
- (b) *Imposing of floor and cap on prices of electricity in the market as referred under sub-clause (a) of Clause-(ii) under proposed regulation 50 is beyond the jurisdiction of the Central Commission.*
- (c) *Regarding Clause-(i) of the proposed regulation 52, Central Commission can regulate licensee and generating Company involved in inter-State trading only. Accordingly, such proposed Clause-(i) of Section-52 may be redrafted.*
- (d) *Regarding imposing of floor and cap on prices is beyond the jurisdiction of CERC. WBSEDCL has already filed an appeal in the Appellate Tribunal, we request that till such issue is settled in the Court of Law, CERC may kindly refrain from framing such type of regulations*

*(iii) MCX – MCX has raised issues related to*

- (a) *Exclusive jurisdiction of the Central Commission is over 'Electricity' Spot Markets*
- (b) *The Forward Market Commission ( FMC) and its activities are not subject to regulatory domain of Central Commission*

- (c) *There is Overlap / Concurrence of Jurisdiction of Central Commission vis-a-vis Jurisdiction of the FMC. These need to be settled by the Court of Competent jurisdiction*
- (d) *The legal jurisdiction of the Central Commission to regulate forwards / futures is sub-Judice*
- (e) *Objection on definition of forward contracts and derivatives since these are already defined in other Acts. Legality of such contracts might be challenged in the court of law.*

*(iv) IEX- Congestion Revenue Related objections*

- (a) *Whether Hon'ble Commission is legally empowered to decide disbursement of Congestion Revenue; Section 79(1) does not specifically authorize the Hon'ble Commission to decide the method of utilization of Congestion Revenue. The concept of Congestion Revenue is neither defined in Electricity Act, 2003 nor in the National Electricity Policy, 2006.*
- (b) *Whether Hon'ble Commission can direct Power Exchange's to deposit money with NLDC without publication of rule as per section 179 of the Act which provides that every Rule made by the Central Government or by the Authority or Central Commission shall be laid before each house of the Parliament.*
- (c) *An expert group of members deliberating on utilization of Congestion Revenue should have representatives of related and concerned parties i.e. Exchange, on its board.*
- (d) *Congestion Revenue, whether it is a Fee, Tax or Revenue generated by Power Exchange Congestion?*
- (v) *Lanco Electric Utility - Becoming a member on Power Exchange to buy or sell power on behalf of client member is an activity which requires only net worth criteria to be met. Is it not amounting to conflict with EA 2003?*

4.2. The Commission has examined the provisions of the Electricity Act and those of National Electricity Policy and has also examined the legal issues raised here with assistance of legal opinion on the above mentioned matters. The Commission is empowered to make these regulations in accordance with a conjoint reading of Sections 3, 66, 79 and 178 of the Electricity Act, 2003 and the National Electricity Policy. These regulations

provide for regulatory oversight on various market participants ,Power Exchanges and other Exchanges dealing in electricity contracts and transactions, which the Central Commission is competent to undertake under the Electricity Act, 2003 as it is a special Act and is a complete code with respect to all matters concerning electricity, including the development of a market in power.

- 4.3. The regulations have been formulated keeping in view the legal position as emerging on each of these issues and suitable modifications have been made in several provisions of the draft regulations accordingly.

## **5. Scope of the Regulations – Part 2**

- 5.1. The intention has been to make the regulations forward looking and to have long shelf life with mid-course updations as may be required from time to time. This has been attempted by introducing the concept of derivatives contracts, financially settled Exchange traded derivatives and other innovative contracts like Capacity Contracts, Ancillary Services Contracts, Renewable Energy Certificates etc. However, derivatives, ancillary services and capacity contracts would be introduced from a date to be notified when the supply deficit scenarios ebbs and sufficient liquidity gathers in day ahead market.

- 5.2. The scope of the regulations has been defined from three perspectives :-

- (i) Types of Markets
- (ii) Types of Contracts in Short term market
- (iii) Types of Participants

- 5.3. Types of Markets- This has been defined from the market trade platform perspective. It includes Over the Counter (OTC) markets and Exchange traded markets. For regulatory purpose this bifurcation seems suitable as Exchange driven markets need to be more closely regulated than OTC markets. The reason being Exchanges handle a large number of transactions at one place and any disruption in exchange operation has a

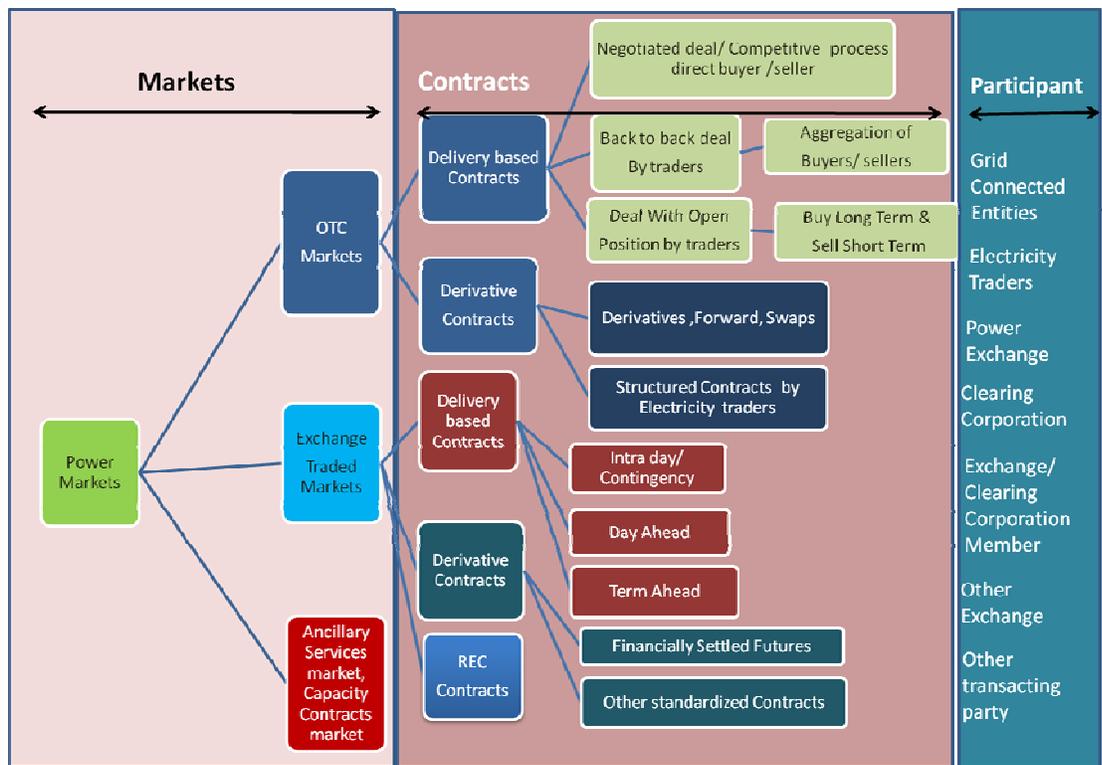
lasting and cascading affect on the overall market. In the Indian context the Exchange traded markets presently are relatively small compared to OTC markets. However these are expected to grow and hence having appropriate structure in place is essential. Also, though the relatively market share of Exchanges is small, in absolute numbers, this is significant enough since the Indian power market is large. Markets can also be looked at from delivery time perspective which then bifurcates into Spot market and Term Ahead market.

5.4. Types of contracts in Short term market – Various types of OTC contracts (back to back deals, deals with open position, aggregation of sellers/ buyers, spot contracts, derivatives), contracts traded on Exchanges (spot, day ahead, term ahead, financial derivatives on Exchanges), capacity contracts, ancillary services market contracts and renewable energy certificate contracts have been defined. Many of these contracts would be developed in due course of time. However at this stage it was felt necessary to recognise them. Long term delivery based OTC contracts are not proposed to be controlled by these regulations. These are mentioned in the market oversight section, only for the purpose of reporting by electricity traders.

5.5. It needs to be appreciated that derivative markets cannot be viewed in isolation as the larger purpose of derivatives is to provide participants of the power sectors with services like price risk management and hedging, the forward price curve to show the demand supply situation in the long term and as a platform for risk transfer between participants of different risk profile. There is strong theoretical and empirical basis to show that activities in the derivative markets impact the spot/delivery market and therefore regulation of derivative market by the sector regulator is essential for successful development of power markets.

5.6. Types of Participants – The various stakeholders in the market include the actual users (all grid connected entities, other transacting party like state govt with free power, etc), the electricity traders, the market facilitators (Such Members of Exchange who are not having trading license) and the electronic trading platforms (Power Exchanges and Other Exchanges). Other Exchanges have also been mentioned as stakeholders as they may in future deal with electricity contracts, including derivative contracts as and when permitted by Commission.

5.7. The market structure along with the contracts and participants is depicted in the diagram below:-



5.8. Regulation 4 - Types of Contracts on which regulations apply

5.8.1. **Comments and suggestions received**

(i) *NPEX- Markets for physical delivery contracts differ vastly from the markets where there is no physical delivery (financial contracts), or other legislation/regulations apply to delivery based contracts (forward contracts). Therefore each market segment needs to have separate set of Regulations.*

(ii) *NTPC –*

- (a) *The present large power deficit in the country means it is a predominantly sellers' market. It is submitted that the introducing forward contracts in power market in India may be premature.*
- (b) *The Central Commission may limit the forward market to month-ahead contracts of durations not exceeding a week as has been ordered in specific order. The derivatives market can start after the forward market has stabilized.*
- (iii) *Lanco Electric Utility –*
  - (a) *Are we geared up for derivative contracts?*
  - (b) *Does our regulation provide for sufficient incentives so that such contracts can be undertaken by licensed electricity traders?*
- (iv) *KSEB- The basic objective of introducing such large number of derivatives in the short market is not explained.*
- (v) *IIT Kanpur - The commission may tread with caution towards development of a financially settled derivatives markets. Given the power shortage scenario in the country, and limited liquidity on PXs, and that the power market is yet to mature.*

5.8.2. **Decision and rationale**

As mentioned earlier in draft regulations, derivatives shall be launched in OTC and Exchanges only at a later date when supply deficit gap ebbs and there is sufficient maturity in the markets.

5.9. Regulation 4 - Types of Contracts on which regulation apply

5.9.1. **Other Comments and suggestions received –**

- (i) *Adani Enterprise- It may be mentioned that bilateral contracts between generators & beneficiaries based on long term PPAs, being also delivery based contracts, should be covered under the scope*
- (ii) *CEA- For the sake of completeness of market structure long term delivery based contracts should also be defined.*
- (iii) *PXIL – Instead of defining various types of contracts only contract areas should be mentioned*

5.9.2. **Decision and rationale**

As already mentioned since long term contracts are not being controlled here, these contracts would only have a reporting requirement at this stage in these regulations.

#### 5.10. Regulation 4 ( v ) - Renewable Energy Certificates ( REC ) contracts trading

##### 5.10.1. **Comments and suggestions received**

- (i) *PTC-Renewable energy certificates (REC) can be traded both on bilateral/ OTC markets and / or on Power Exchanges.*
- (ii) *NVVN – Electricity Traders should be allowed to trade in such contracts , these should be elaborated*

##### 5.10.2. **Decision and rationale**

We are retaining the original provision according to which RECs shall be transacted only on Power Exchanges for the time being in order to ensure ease of operations and to concentrate liquidity during initial development phase of REC mechanism.

### 6. **Approval and Suspension of Contracts - Part 3**

6.1. This section deals with approval and suspension of contracts traded on Exchanges. The approach adopted for approval process requires an Exchange to submit the complete contract specification to the Commission at the time of seeking approval. The Commission would particularly examine the nature of contract, pricing methodology of the contract, trading period risk management adopted, delivery duration of the contracts and penalty for contractual deviation. The other parameter shall also be looked into in the initial approval stage. Once a contract has been approved, changes on minor parameters (other than those specified in the regulation) can be done by the Exchange themselves with intimation to the Commission.

6.2. Contracts already approved by the Commission on the Power Exchange do not require any approval again. Electricity Traders do not need any

approval for introducing any delivery based contracts. They shall need approval for any financially settled derivatives contracts.

### 6.3. Regulation 6 - Approval of Contracts transacted on Exchange

#### 6.3.1. **Rationale**

Some additional flexibility has been provided to the Exchange in contract modification process in respect of minor issues.

As mentioned before, the process for new contract approval for the Exchange includes submission of complete details of the contract for approval. Once contract has been approved changes on certain parameters can be done by the Exchange themselves with intimation to the Commission. This process is being laid down to facilitate Exchanges to respond quickly in a dynamic market environment

### 6.4. Regulation 8 – Suspension of Contracts

#### 6.4.1. **Comments and suggestions received**

- (i) *WBSEDCL- If the Commission is of the opinion that it is necessary or expedient so to do, it may after granting the concerned persons and stakeholders the opportunity of being heard, "by order, provide for, suspension of trading on any contract for the period specified in the order or withdraw any contract.*

#### 6.4.2. **Decision and rationale**

It is clarified that the concerned person would include the Exchange where the contract is transacted, Electricity Traders and / or participants. Hence the clause is retained as it is.

## 7. Principles of Market and Market Design – Part 4

7.1. The Commission recognizes that a market is a social construct. The Commission also recognizes that building a market place is a not a onetime activity. The Regulations will have to evolve with the changing needs and the advent of new financial technologies .Continuous dialogue with all stake holders will be needed.

7.2. In keeping with this, Part – 4 of Power Market Regulation mentions the principles that shall govern OTC and Exchange markets. The approach to

this regulation has been to have “principle based regulation”, manage the macro picture with adequate safeguards and leave micro management to participants. This will provide enough space for innovation by markets.

- 7.3. Having stated that general broad approach, it needs to be recognised that world over Exchange operations are heavily regulated since Exchanges are central agencies where a large number of participants trade. It is of paramount importance that no disruption in operations of Exchange happens due to any operational or risk management issues. As a fallout of the recent financial crisis, regulation of Exchange and OTC market has increased. In fact there is an extensive ongoing debate now to even mandate OTC trades to be regulated to a certain extent and mandate them to use clearing house. The change in the regulatory stance of this Commission, as has been pointed out by certain stakeholders, has to be seen in the light of these developments. The Commissions’ regulatory approach is in line with the present regulatory approach across the world. The challenge and the balancing act for the Commission is to have a balance between regulation and innovation.
- 7.4. In this context, based on stakeholder feedback we have standardised the price discovery methodology and the related process for the day ahead market has been made as a part of these regulations.
- 7.5. For Term Ahead markets, the Exchanges can introduce any new products recognised in these regulations, use innovation in the price discovery methodology and formulate their own risk management framework system based on their perception of risk. Electricity traders can innovate and introduce new type of contracts based on market needs. They do not need to take any approval for delivery based contracts.
- 7.6. The below mentioned concepts are the underlying principles which have inter alia guided the formulation of the Power Market Regulations.

Comments and suggestions received from stakeholders as against each of these regulations are also being dealt with in the following paragraphs.

7.7. Regulation 9 - The Power Exchange shall follow the following practices:-

(a) Ensure fair, neutral, efficient and robust price discovery

This shall provide equal opportunity to all participants in the market.

(b) Provide extensive and quick price dissemination

This shall reduce information asymmetry in the market and improve informed pricing decisions for participants.

(c) Design standardised contracts and work towards increasing liquidity in such contracts.

This is needed as liquidity improvement helps pricing to become more efficient. Liquidity is a measure of ease of entering or exiting into a trade (generally large trade) with minimal impact on the markets price of the traded contract;

7.7.1. **Comments and suggestions received**

(i) *NPEX- Liquidity is more relevant for continuous market and should be deleted.*

7.7.2. **Decision and rationale**

Liquidity is relevant in both continuous markets and auctions .It is an important metric to measure the number of participants, bid - ask spread quotes of participants and the hence the stipulation is retained.

7.8. Regulation 10 - Power Exchange shall also provide price signal for efficiently allocating resources in power sector.

7.8.1. **Comments and suggestions received**

(i) *PTC- This is not a function which could be demanded from Power Exchange. Also Power Exchange is one amongst several platforms for giving price signals in the market.*

(ii) *PXIL – Efficient allocation of resources happen once other policies and regulations are also amenable.*

7.8.2. **Decision and rationale**

This point has been removed from the regulation as all forms of markets and not just Power Exchange provide price signals which could be used for efficient allocation of resources.

7.9. Regulation 11- Principles of transaction in OTC Markets

- (a) OTC market shall provide customized solution to sector participants and bring innovation in the market place.

It is expected that Electricity Traders will innovate and as markets mature introduce in future new types of products in the market like tolling agreement, banking agreement, capacity contracts, and spread contracts as standard back to back type of deals move to Exchanges.

- (b) Contracts to be sold to client should be based on the suitability, appropriateness and full material disclosure.

This is important since actual users may not always be fully aware of the financial implications of contracts when markets move in an unanticipated manner. Creation of standardised master agreements for contracts reduces misinterpretations and misinformation ( Like International Swaps and Derivatives Association (ISDA) kind of master agreements) .This can be introduced over a period of time by the Electricity Traders

7.9.1. **Comments and suggestions received**

- (i) PTC - Complete material information may be replaced by "necessary information.

7.9.2. **Decision and rationale**

For reasons stated above in (b) "full material disclosure" is retained

7.10. Regulation 12- The Market Design should complement security and reliability of power system and under no circumstances should market mechanism compromise grid security.

7.11. The market operators (Exchange / Electricity Traders) and system operators should be in full co ordination to ensure power system reliability management. The generating companies, transmission and distribution

licensees should also fully coordinate with the system operator to maintain reliability.

**7.11.1. Comments and suggestions received**

(i) NTPC –

*Inputs from the RLDCs/ NLDC regarding congested corridors resulting in non-clearing of power market trades may also activate CTU to take up system strengthening on such corridors. The Open Access regulations may also be aligned to the needs of power markets, maybe by providing for some assured transmission capacities for power market trades. This will serve to improve customer confidence in Power Exchanges / Bilateral Markets and increase depth in such markets.*

(ii) Adani Enterprise –

*(a) Much threat to grid security comes from misuse of UI mechanism for the purpose of buying & selling electricity from the grid. So long as the rate of overdrawal and underdrawl from the grid under UI mechanism is equal, there will be a tendency among beneficiaries to use UI mechanism for trading.*

*It is suggested that the rate of reward for underdrawl should be much less compared to the penalty for overdrawl under UI mechanism. Under such situation, misuse of UI mechanism as a parallel trading mechanism will be discouraged and more & more short term electricity trading shall be channelized through bilateral or Power Exchange. This would go a long way in improving the load generation balance of the grid and developing electricity market*

(iii) CEA-

*The Physical market design shall follow the following principles:-*

*(a) In order to secure grid operation, UI mechanism shall not be encouraged as a commercial trading mechanism and the average penal rate for deviating from the schedule (UI rate) shall be kept at level of deterrence.*

*(b) In order to secure balancing power to deficit entities, deviations from contracted capacity in short term contracts, which are essentially balancing contracts, shall be discouraged by imposing suitable penalty*

*on contractual deviations. Short term contracts (especially day ahead and intraday contract) should be firm in nature with no flexibility to revise the schedules. If at all there is a deviation the penalty for contractual deviations should be very high.*

*(c) Not only should a good market design complement power system reliability, it should also ensure optimum utilization of transmission assets. A market design that induces conservative use of transmission assets due to the pervasive fear of overloading of transmission lines in real-time by over-drawal (UI) is not a good market design.*

*(d) Endeavour shall be to find a common optimum market solution in the event of transmission congestion by aggregating the bids and offers of multiple exchanges.*

#### **7.11.2. Decision and rationale**

These concepts are not directly relevant to the present regulations. The Commission would consider these suggestions in due course on appropriate occasions.

7.12. Comments from CEA on market design from scheduling of power perspective:-

#### **7.12.1. Comments and suggestions received**

*The overall physical market design from the scheduling point of view can be summarised as follows:-*

*(a) Long term contracts (Regulated, Case-1, Case-2; two part tariff; penalty trigger below threshold level of capacity availability; flexibility in day to day scheduling and intra day revisions)*

*(b) Medium term contracts (flexibility in day to day scheduling and intra day revisions)*

*(c) Short term monthly contracts (starting on 1st day 00.00 hrs and ending on last day 24.00 hrs of the month); ( Flexibility of scheduling on day-ahead basis only ; penalty for contractual deviation)*

*(d) Short term weekly contracts ( starting on Monday 00.00 hrs and ending on Sunday 24.00 hrs) ( Flexibility of scheduling on day-ahead basis only ; penalty for contractual deviation)*

*(e) Day-ahead collective trades through Power Exchanges (Firm schedules)*

*(f) Day-ahead and intra-day bilateral contracts (Firm schedules)*

#### **7.12.2. Decision and rationale**

These are general market concepts. Some of these are being practised presently. Many of these are related to OTC markets. The Commission is not regulating the contractual aspects in these markets. It is hoped that these principles would be followed by the participants (concepts like penalty for contractual deviations)

### **7.13. Price discovery methodology for Day ahead markets**

#### **7.13.1. Comments and suggestions received**

*(i) IEX - Price discovery methodology has been left open to be decided by the Exchanges although it is the primary responsibility of a market regulator.*

*(ii) Eastern Regional Power Committee -Cut-off price should be discovered through the methodology submitted .This is a detailed paper using principle of social welfare maximisation.*

#### **7.13.2. Decision and rationale**

Price discovery methodology for Day Ahead markets has been added in the regulations to standardise the day Ahead market design. The method prescribed in the regulations uses principles of social welfare maximization. This is a time tested and well accepted method in line with principles of economics.

## **8. Power Exchange – Part 5**

8.1. This section covers all aspects and issues related to Power Exchanges. This section has duly taken into account the earlier guidelines for Power Exchanges published in February 2007. As mentioned earlier Exchanges being central agencies where many participants converge to trade is a critical market infrastructure and needs adequate regulation. Necessary modification and additions have been made based on the experience so

far, issues that have come up before the Commission and the best practices for regulating Exchanges and finally the stakeholder feedback received.

## 8.2. Regulation 13 – Approval of Power Exchange for operations

### 8.2.1. **Comments and suggestions received**

- (i) *NPEX & NVVN - Power Exchanges granted In-principle approval by the Commission should be considered registered*
- (ii) *TPTCL – The rules, bye-laws and the business rules therefore should be required to be redrafted and submitted for approval in light of the regulations that are framed by the Commission.*
- (iii) *NPEX - New conditions should not be introduced unless absolutely necessary.*

### 8.2.2. **Decision and rationale**

In view of the fact that Power Exchanges in operation and the one already given in principle approval have undergone approval scrutiny as laid down in the guidelines earlier issued by the Commission. Comment (i) has been accepted and necessary insertions have been made in the final version of the regulations. Comment (ii) has also been accepted as it is correct legal position.

## 8.3. Regulation 14 – Eligibility Criteria for making an application for registration of Power Exchange

### 8.3.1. **Comments and suggestions received**

- (i) *NPEX*
  - (a) *It is suggested that draft regulation 14(ii) may be deleted. As per the Guidelines dated 6.2.2007 issued by the Hon'ble Commission, any applicant including a Consortium, has to get registered as a limited company under the Companies Act, 1956, before permission is granted. A company for Power Exchange may be promoted jointly by different companies and covers the intent of including a Consortium.*
  - (b) *Further, it should be specified that such companies shall be 'limited by shares'.*

- (c) *Stating that main objects of the Company shall be exclusively to set up Power Exchange is confusing. Even with main objects being Power Exchange, the company is entitled to undertake substantially other businesses.*

*There should not be any objection if the Company which has been granted registration for Power Exchange undertakes any other business without violating any norms/ regulations for Power Exchange.*

- (ii) *PXIL- The Main objects of a Power Exchange should definitely require setting up and operating a Power Exchange however, the main objects should also comprehensively cover a gamut of activities that such a Company needs to do. Therefore it is suggested to change the clause 'to be primarily to undertake the business of Power Exchange.' Instead of "be to exclusively set up and operate Power Exchange"*

#### 8.3.2. **Decision and rationale**

Based on stakeholder suggestion it has been provided that registration of Power Exchange shall be granted to a company limited by shares. Also as suggested by stakeholders, Power Exchange would be able to undertake other business related to energy sector and its ancillaries with the approval of the Commission and the accounts for such other business shall be maintained separately.

#### 8.4. Regulation 17 – Prudential Norms for establishment of Power Exchange- Network, Composition of Settlement Guarantee Fund(SGF) , Settlement Guarantee Fund investment and Liquidity Ratio and Current Ratio of Exchange

##### 8.4.1. **Comments and suggestions received**

- (i) *IEX- Network of Exchange reduced to Rs 5 Cr after hiving off of clearing functions is less considering the investment in well tested technology*
- (ii) *PXIL - Requiring the Power Exchanges to keep such a high network may prove to be counter-productive, as the cost of maintaining such high capital base would affect the viability of the Power Exchanges. Minimum Network should be 15 Cr and once clearing is hived off it should be 5 Cr*

- (iii) NPEX-SGF should be left to Exchange as to how it is formed. It is not needed in day ahead markets as there is 100 % payment to be made while executing the transaction in day ahead market.
- (iv) IEX, PXIL – Other source of funds like Additional security deposits ,addition margin, transaction fee can be used and should be left at the discretion of Exchange
- (v) PXIL – Networth should not be linked to turnover but to open position of type of contracts
- (vi) IEX- There is no need of defining minimum SGF amount in the regulation
- (vii) PXIL – As the provision of liquid investment in SGF is sufficient ,liquidity ratios for Exchange are not needed
- (viii) PXIL – Exchange shall maintain minimum 50% of the SGF corpus in the form of liquid investments
- (ix) Lanco Electric Utility –
  - (a) Trader has to have a net worth of Rs 50 crore while Power Exchange with Clearing function is expected to have net worth of Rs 25 crore only,
  - (b) Quantum of electricity transacted at IEX for Financial Year 2009 - 2010 as on today is more than 3,500 MU and PXIL is more than 450 MU. Are the regulations in line with ground reality?
- (x) TPTCL – In case of Category I inter-state licensed traders the minimum networth is Rs.50 Crore. Networth of Rs. 25 crore prescribed in case of Power Exchanges is very low.
- (xi) IIT Kanpur –
  - (a) In line with Credit Information Bureau of India Ltd. (CIBIL), a Clearing Corporation should compile a common database of defaults across all Exchanges. These should be accessible to PXs as well as traders to safeguard their interest in future.
  - (b) Settlement Guarantee Fund for Annual turnover of 100-500 MU could be defined in smaller categories

#### 8.4.2. Decision and rationale

After considering the relevant aspects , we have decided to retain that the minimum networth of Power Exchange shall be maintained at 25 Cr and post hiving off of clearing function it shall be (which is now optional)

at least 5 Cr. These are minimum requirements only and in case it is felt by the promoters that a higher capital is required to build world class infrastructure and commence operations they would be free to raise more capital.

Taking a broad approach that regulations should provide framework and leave the micro management to Power Exchanges and recognising that risk management will be the obligation of Power Exchanges, we have provided that the size of the SGF shall be at the discretion of the Power Exchanges. They may decide it based on the turnover value, open position of trades, risk management methodology and margining system they adopt and finally the risk appetite of the Exchange. This is a specialised area and best handled by risk management professionals. As a regulator we have now defined the time tested default remedy mechanism similar to default mechanism being followed by the National Securities Clearing Corporation. The mechanism balances systemic risk being induced in the market with judicious introduction of new products by Exchange with appropriate risk management and alignment of the risk objectives of Exchange with those of members of the Exchange.

Accordingly, the source of funds for the SGF is also being left to the Exchanges to decide. The SGF would be used to handle any defaults by members on transactions executed. The risk management and margining has already been left to the Exchanges to decide on.

The current ratio and liquidity ratio requirement for Exchange have been removed as Exchanges are mandated to create a SGF and invest 50 % of the corpus SGF in liquid assets and, liquidity concerns in case of default on Exchange can be alleviated.

#### 8.5. Regulation 18 and 19- Shareholding pattern of Power Exchange

Keeping in view the requirements of ringfencing, demutualisation and need of having dispersed ownership of important market platforms, modifications were proposed in the draft regulations in respect of the capital structure and governance structure of Power Exchanges from the earlier issued guidelines.

##### 8.5.1. **Comments and suggestions received**

(i) *Power Trading Corporation, PTC Financial Services, Indian Energy Exchange and National Power Exchange have raised the following objections:*

- (a) *Initial investors are being put to huge disadvantage for its path breaking and high risk initiative. Will lead to distress sale of shares and loss of value for them*
- (b) *Financial investors are not very keen in prevailing investment climate and present investors will get poor valuation if they have to reduce their stake to 5 %.*
- (c) *Market is still in nascent stage and needs anchor strategic investors, and investors from power sector.*
- (d) *There is a need for vision and leadership and sectoral participants commitment is needed to develop the market and a long term view should be taken*
- (e) *SEBI has revised limit to 15% in recognised stock Exchange for shareholding by stock Exchanges, depositories, Clearing Corporations, banking companies, insurance companies and public financial institutions, irrespective of whether they have any trading interest or not.*
- (f) *Change in shareholding pattern within 2 years will be difficult*
- (g) *“Indirectly” should be defined*
- (h) *Only one-fourth of the total number of Directors, irrespective of shareholding of trading members, thereby denying any dominance to the Directors representing trading members in day to day Management.*

(ii) *Power Exchange India Ltd- Capital structure should be aligned with practices followed in financial / Commodity Exchange in India. Having even 25% shareholding is on the higher side and ought to be brought in line with norms in other markets (like stocks and commodities). As a best practice, it may be useful to lower the shareholding by any one non-trading member (whether directly or indirectly) to 15%. Additionally, SEBI has also stipulated that no single owner or group shall own more than 15% in any Stock or Commodity Exchange regulated by them.*

*Adopting a 15% norm will ensure that there is uniformity of regulation across markets*

*(iii) Power Financial Corporation -*

*(a) Non-trading members of Power Exchanges (such as professional clearing members) may be distinguished from trading members and allowed individual shareholding upto 25 % shareholding of the Power Exchange*

*(b) Directly and indirectly should be defined*

*(iv) PTC - The period of 2 years provided to maintain shareholding structure / pattern is too short a period for restructuring. As explained above, such steps may hinder the growth of fledgling Power Market and deter investments. It would, therefore, be advisable to provide a reasonable period of 5 years*

*(v) PTC Financial Services Ltd-*

*(a) Linking indirect holding to members ceiling on shareholding is not justified. PTC was set up under Government of India initiative for development of power market in India and not just for shareholder profit maximisation.*

*(b) Member's voluntary initiatives started as an association and allowed to flourish for growth of market. BSE (Bombay Stock Exchange) after many decades was demutualised.*

*(c) Time is not yet ripe for such contemplation- Demutualisation world over have been designed specific to requirements of Exchange and accordingly provided special dispensation – Financial services Reform Act Australia , an authority in Singapore have given relaxation in ceiling of maximum shareholding under special circumstances.*

*(d) Draft regulations provide adequately for distancing ownership from management*

*(e) Allowing Non Traders to hold upto 25 % would be more harmful*

*(vi) NHPC-*

- (a) Not more than one fourth of the Board of Directors shall represent the trading members brings restriction on share holders to become trading members.*
- (b) Members of a generating Company or a distribution or any trading Company who are share holders of any Power Exchange having more than 5% share holding will be debarred from becoming the member of the Power Exchange. The restriction of percentage shareholding pattern should not be imposed.*
- (vii) IIT Kanpur - The PXs should maintain the shareholding structure/pattern as specified in Regulation 18 within 1 year rather than 2 years.*
- (viii) TPTCL - Two year period is too long merely for divestment in shares by members of existing exchanges. No consequences have been provided in case of failure of existing power exchanges to comply with this clause*

#### **8.5.2. Decision and rationale**

- (i) The Commission has considered the views of all stakeholders. The Commission maintains the view that Power Exchange is market based institution and hence should be a widely held organisation. The commission is also of the view that Power Exchange should be fully demutualised and ringfenced organisation and hence a power sector participant may have equity stake in the Power Exchange (as is an internationally practice) but limited to 5 % of total shareholding.
- (ii) As regards distinction between trading members and clearing members for investment in Power Exchange it is felt that there should be no distinction between the trading and only clearing members because both bear similar risks and therefore require same regulation. Presently there is no separate clearing membership only category recognised in these regulations .Even in case of “clearing members only” it may be justified to limit their influence on the operations for risk management / clearing perspective.
- (iii) Alignment of the shareholding pattern to the new norms - The capital structure will need to be aligned by the existing Power Exchanges with

these regulations. The time period to align to the new capital structure has been increased from two years to three years. This is based on the stakeholder feedback. The Power Exchanges are in operation for over a year now. This gives a total time period of 4 years in all ,from initial investment time to realise value on its investment for investors .However, alignment of governance structure shall be complied with in one year time period.

8.5.3. In view of the reasons given in the above paragraphs, the shareholding pattern in the final version of the regulations is as briefly described below:-

- (i) Any shareholder (in case of a corporate this is including its subsidiaries and cross holding in other companies and associate companies) other than member of the Power Exchange can have a maximum of 25% shareholding in the Power Exchange. (Earlier in guidelines it was required that 51 % of the equity share capital of the PX should be held by the public other than the shareholder having trading rights in the Exchange).
- (ii) A member of the Power Exchange can have maximum of 5 % shareholding in the Power Exchange. (Earlier there was no limit on individual member's shareholding in the Power Exchange).
- (iii) In total, a Power Exchange can have a maximum of 49 % of its total shareholding owned by entities (in case of a corporate this is including its subsidiaries and cross holding in other companies) which are members of the Power Exchange.
- (iv) One- third of Board of Directors, with at least 2 directors shall be Independent directors. This will be from a panel of eminent professionals / academics constituted by the Power Exchange and approved by CERC. Earlier there was no such stipulation. However Power Exchanges have appointed independent director as a best practice.
- (v) Maximum one-fourth board of directors can be representative of member of Power Exchange. (This is same as earlier guidelines).

8.6. Regulation 20- Grant of Registration of Power Exchange and its duration

8.6.1. **Comments and suggestions received**

- (i) *IEX – Registration should be for perpetuity with power to revoke in case of discrepancy or if the Exchange is not acting in public interest. This aspect has a far reaching implication on the valuation of Exchange.*
- (ii) *PXIL - Clause 4 of SCRA deals with Recognition of Stock Exchanges and the conditions that an Exchange needs to fulfil for grant of recognition. Clause 5 of SCRA states that if the Central Government is satisfied that the recognition of Exchange is not in the interest of the trade or in the public interest then the recognition can be withdrawn.*

8.6.2. **Decision and rationale**

After considering stakeholder feedback, the Commission has decided that the registration granted to a Power Exchange shall continue to be in force for a period of twenty five (25) years from the date of commencement of operations, unless if such registration has been revoked earlier. The registration shall be considered for renewal for a period of another 25 years and an application for renewal can be made 5 years before expiry of registration. This should reduce any uncertainty in business operations of the Power Exchange.

8.7. Regulation 21 – Ownership and Governance structure of Power Exchange and Staffing of Power Exchange

8.7.1. **Comments and suggestions received**

- (i) *NPEX-*
  - (a) *The staffing of PX is very restrictive and should be deleted.*
  - (b) *A 'for profit' start-up enterprise in a marginal market segment is a challenge from staffing point of view. On one hand, PX will require experienced personnel with specialized knowledge to develop the market. On the other hand, being a lean service organization, it will offer very limited opportunities for career growth and development for its employees. As such, short-term assignments and lateral entry/exit from/to a pool of experienced persons of the promoters (both non-*

*trading and trading category) will address this problem and contribute significantly to market development.*

- (c) Technology under which a Power Exchange shall operate and should operate fully ensures complete protection and level playing field to all players and there is no question of any person whether related party or not, getting any preference whatsoever or influencing operation of PX in any manner*
- (d) In case of RLDCs and NLDC, Government of India has decided for setting up a wholly owned subsidiary of POWERGRID responsible for the independent System Operation of RLDCs and NLDC to ensure ring-fencing and functional autonomy. It is understood that a transition time of five years has been considered before it will be hived off as an independent entity.*
- (e) It is next to impossible to implement that advisors/ consultants will not be advising utilities in addition to Power Exchanges. The clause should be deleted.*
- (f) The Directors (except MD) should be non-executive, so that the Board of Directors will be insulated from day to day functioning of the PX.*
- (g) In summary we submit that independent company structure, the technology employed, uniform rules and absence of subjectivity, audit trail and market surveillance, code of conduct, filing of declarations etc. along with competitive market forces will ensure that the MD or CEO or other staff cannot show bias to their parent organisation or be influenced by the parent organisation and there is enough in-built safeguard.*
- (h) Ringfencing can be achieved by having two separate groups – one those dealing with price sensitive information and other handling business development, customer training, policy , regulatory matters, general administration finance& accounts*
- (i) PX can adopt ISO 27001 internal process and procedures can be adopted and submit comprehensive information security and privacy policy*

*(ii) PTC -*

- (a) Board Members should not have any say in the day-to-day operations*

*of PX*

- (b) CEO should not be a board member and should be made responsible for day-to-day operations*
  - (c) Managing Director should be made responsible for Marketing / Finance*
  - (d) If MD and CEO are the same person, he should not be part of the board*
- (iii) PXIL – As the number of eligible advisors in the power sector being limited, it may be useful to distinguish between consultants or advisors working with the Power Exchanges where they may have access to have specific price / member sensitive information as compared to other consultants or advisors etc.*
- (iv) TPTCL - Matching mechanism, rights and liabilities of trading members, default and penalty mechanism, dispute resolution, congestion management etc which will directly influence the operation of the market has been left at the complete discretion of the power exchanges in an uncanalized and unguided manner.*

#### **8.7.2. Decision and rationale**

We appreciate that it may be practically difficult to find professional experts who would deal with Power Exchange but do not deal with any other matters in the power sector. This will have a negative effect on the quality of talent available to Power Exchange and hamper capacity building of Power Exchanges. At the same time, conflict of interest has to be avoided. Therefore restrictions as proposed in the draft regulations are being retained in respect of employees of the Power Exchanges. To address the need of having access to professional advice we have now provided that any consultant or advisor can be engaged as long as they do not handle price sensitive information which can be used to benefit the members or clients of Power Exchange and there is no conflict of interest between the assignments undertaken by the consultant in the Power Exchange and in other companies served by the consultant or advisor. However, in order to ensure ring fencing between day to day operation and participation in transacting, the provision with respect to MD/ CEO/ director in charge of day to day operation/ employee is retained as earlier.

8.8. Regulation 22 – Annual Registration Charge for Power Exchange based on Turnover of transaction.

8.8.1. **Comments and suggestions received**

- (i) IEX, PXIL - Registration charge is very high for the Exchanges in the context that business is still a loss making business*
- (ii) PXIL - Annual registration fee should be of Rs. 5 Lacs at maximum*
- (iii) PXIL - Fee should be linked to turnover of trades on the Exchange like SEBI practice for Stock Exchanges*
- (iv) NHPC- Registration charges for Power Exchange should be based on the volume of electricity traded per annum on similar lines as in case of trading licenses*

8.8.2. **Decision and rationale**

In the final regulations, turnover based registration charge for Power Exchange has been adopted. The registration charge increases with increase in turnover of the Power Exchange as the revenue of the exchanges also increases. This is an accepted practice for Stock Exchanges in India. The change has been incorporated based on stakeholder feedback.

8.9. Regulation 23 – Market Splitting methodology publication in its Bye Laws / Rules by Power Exchange

8.9.1. **Comments and suggestions received**

- (i) NVVN - The congestion methodology should be given in details and made known to the members participating in the Exchange.*
- (ii) IEX - Price discovery methodology has been left open to be decided by the Exchanges although it is the primary responsibility of a market regulator.*
- (iii) Mr. Ehsan Sharief, Individual Capacity - Market splitting methodology should be approved by the Commission*
- (iv) TPTCL- There is no provision under the Act allowing differential pricing for congestion.*

8.9.2. **Decision and rationale**

We recognise the fact that market splitting is a complicated process and markets participants need to clearly understand the mechanism. For

sake of transparency, the Power Exchanges should elucidate the methodology with examples and scenarios for comprehension of members and market participants and include it in the byelaws / rules. This has been provided in final Regulations accordingly.

#### 8.10. Regulation 24 - Management of Power Exchange, Qualification of senior management and Management Committees

##### 8.10.1. **Rationale**

Power Exchanges have been directed to form a Risk Management Committee, a Market Surveillance Committee and a Settlement Guarantee Fund Committee. This has to be complied within one year of notification of the regulations. Risk committee headed by an independent director shall oversee the complete risk management function of the Power Exchange. It shall furnish reports to the Commission on a half yearly basis along with board meeting minutes / observations on the subject. Similarly, market surveillance committee headed by an independent director shall oversee transaction and surveillance and submit a quarterly report to the Commission. The SGF committee shall have adequate representation from members of Power Exchange.

#### 8.11. Regulation 25- Membership in Power Exchange, Networth of members in Power Exchange

##### 8.11.1. **Comments and suggestions received**

- (i) *NPEX - The given definition is applicable only for a joint stock company. The members can have a variety of other constitutions e.g. an SEB, Government or a Government department, partnership firm, sole proprietary firm, an individual etc. Therefore prudential norms shall have to be defined differently.*
- (ii) *PXIL - Irrespective of the networth position of the member, the risk on the transaction is completely covered through margins hence networth of members need not be defined.*
- (iii) *Reliance Infrastructure –*
  - (a) *Additional membership Criteria should be similar for Electricity Traders and members of Power Exchange ,*

*(b) Membership in Power Exchange should be non-discriminatory for all existing as well as prospective members- to avoid setting up of any entry barrier for new players*

**8.11.2. Decision and rationale**

In view of the provisions of the Electricity Act, the Commission has come to a considered view that members, who are not Electricity Traders, should only provide transaction facilitation services to their clients. They should not be permitted to provide any credit, financing or working capital related services to their clients. This is so because trading activity ( trading is defined in the act as purchase for resale thereof) and thereby any risk taking activity relatable to trading under Electricity Act 2003 can only be undertaken by licensed Electricity Traders for whom CERC prescribes prudential norms through its regulations The prudential norms for trading licensee is stipulated in Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading license and other related matters) Regulations, 2009. This decision is in line with the order dated 24th December 2009 of the Commission in petition No 117/ 2009.

Subject to above, the provisions of the Act and regulations made thereunder, the Power Exchange should have powers to propose in their rules and byelaws any membership criteria for them including prudential norms. Accordingly, the networth criterion for membership to power exchange has been removed.

**8.12. Regulation- 26 - Member Service Charge in Power Exchange**

**8.12.1. Comments and suggestions received**

- (i) TPTCL – Proposed upper limit for members is too high compared to what is proposed for traders considering the fact that market price on Exchange has gone up to Rs 18/ KWh, it works out to be 13.5 paise much more than 4 paise cap for traders.*
- (ii) PTC – Members provide infrastructure, advisory services and finance the transaction of client. Working Capital requirement and credit risks are higher on Power Exchange as compared to direct bilateral transactions*
- (iii) PTC-*

- (a) *Commission of 0.75% is grossly inadequate considering the services provided by the members. There should be no cap at all and if at all there is a cap it should be at least 3 %*
- (b) *Trading licensees are bound by regulations to furnish price-sensitive information on monthly basis to CERC but members are not under compulsion to provide business sensitive information to another trader while the transactions are being clinched as they may end up losing business. The Central Commission may therefore, devise necessary mechanism for full disclosure of the margins charged by a service provider in the chain, rather than fixing cap on 'member service charges*
- (iv) *PXIL – There should not be any cap defined .If it has to be defined it should be same as in the bilateral markets.*

#### 8.12.2. **Decision and rationale**

Ceiling on Member Service Charge for providing facilitation services to their clients has been introduced at 0.75 % of transaction value. It needs to be clarified that it does not include any charges levied by Power Exchange, transmission (open access) charges, other charges payable to NLDC/ RLDC/ SLDC, statutory taxes etc. Ceiling on service charges is considered necessary to prevent the malpractices of Power Exchange members' charging high margin to infrequent and less informed clients. This charge shall be for the entire chain of subordinate service providers in between the member and the client. It is expected that the Member Service Charge will be decided by competitive market forces and the figures provided in the regulation are only the upper limit. Ceiling on service charge is in vogue even in stock exchanges. The Commission has also imposed similar ceiling on licensed traders in the form of cap on trading margin. In view of the above, this regulation is retained. Electricity Traders who are members of Power Exchange shall be governed by CERC (Fixation of Trading margin) regulations.

### 8.13. Regulation 27 – Risk Management in Power Exchange

#### 8.13.1. **Comments and suggestions received**

- (i) PTC-Netting of margin requirement in same contract has not been allowed whereas netting of margin requirement in different contracts for a client has been allowed. This will lead to more capital requirement of a member and may lead to liquidity problem.*
- (ii) PXIL - In the current market, only physical delivery is allowed and inter-tradability among product categories is not possible. Hence buy and sell trade margins cannot be netted against each other since sell bids are not certain to be cleared in view of the current liquidity in Exchanges.*
- (iii) NPEX- Power Exchanges should have the freedom to determine the scheme for various margins*
- (iv) India Bulls Power Trading - The mechanism for arriving at the margin calculation/ margins to be collected from the member is not defined or explained.*

#### 8.13.2. **Decision with rationale**

As discussed in foregoing paragraphs, Risk Management has been now left to the Power Exchanges. They can use any suitable risk management techniques and tools to assess the risk and margin accordingly. This leaves sufficient space for Power Exchanges to innovate and adopt risk management principles based on its risk appetite. However the Default Remedy Mechanism to be used by power exchange has been stipulated to ensure that they do not induce any systemic risk in the market. After considering the comments and suggestions received, the provision on Netting of margins has been removed from the final version of the regulations. Power Exchanges can decide their margining mechanism based on best practices of the industry.

#### 8.14. Regulation 28 – Power Exchange to hive off Clearing and Settlement function

##### 8.14.1. **Comments and suggestions received**

- (a) IEX – It is premature to hive off clearing and settlement into a separate company as there is insufficient volumes and liquidity on the Exchange. This will lead to increased cost of operations.*

- (b) *IEX – Clearing Corporation should be introduced once derivatives are introduced*
- (c) *NPEX – Clearing Corporation should be optional for physical day ahead Exchange*
- (d) *NPEX – There are limited number of participants and the volume of trade on individual PX shall not be large in near future*
- (e) *PTC -It is a good concept however there should be minimal number of clearing houses to bring economies of scale and provide advantage of margining and easier monitoring of transactions.*
- (f) *NHPC – Clearing Corporation is a welcome step.*
- (g) *NVVN - A detailed procedure is needed in respect of functioning of Clearing Corporation in clearing bilateral trades*
- (h) *KSEB – The need for a Clearing Corporation and its working are not clearly explained in the regulation. (i) IIT Kanpur - Single Clearing house would allow ease of monitoring, tracking and disincentivising defaults. A single clearing house would facilitate, for margin requirements, netting of positions of same client in different PXs.*
- (j) *TPTCL- Clearing Corporation should also be allowed to settle and clear OTC contracts for a prescribed fee*

#### 8.14.2. **Decision and rationale**

After considering the suggestions and comments received, creation of Clearing Corporation has been made voluntary and left to the discretion of the Power Exchange. However, Clearing Corporation would be mandatory for dealing in derivatives, once permitted by Commission. This is felt necessary in view of the higher risks involved and need of special risk management thereof.

### 8.15. Regulation 29 – Default Remedy Mechanism in Power Exchange and Clearing Corporation

#### 8.15.1. **Comments and suggestions received**

- (i) *IEX, PXI, NPEX (All Exchanges) have a strong objection to their networth being used for making good default of members.*

- (ii) IEX- In India SEBI has made provision of assigning retained earnings of Exchange / Clearing Corporation to meet the remaining default amount, that too, after all moneys of the Member, with the Exchange are applied to meet the liability of the defaulter, including money recoverable out of sale of his membership rights. (Ref section 12.8 of chapter "Settlement Guarantee Fund" of Model Bye-Laws of SEBI)
- (iii) PXIL- The Power Exchange's / Clearing Corporation's network is the call of last resort as any measure which may affect the continued sustenance of the Exchange/Clearing Corporation Clearing Corporation can have an immense negative effect on the entire market and may even result in complete market failure. the ultimate risk of any default is managed by calling on the following in descending order of priority
- (i) Margins of the defaulting member
  - (ii) Members Deposit(s)
  - (iii) Members Network
  - (iv) Settlement Guarantee Fund
  - (v) A levy or loss sharing on all the non-defaulting Members
  - (vi) Last resort - Power Exchange's / Clearing Corporation's Network.
- (iv) Lanco Electric Utility –The Risk being taken by Exchanges is negligible as compared to the risk taken by traders.
- (v) India Bulls Power Trading -Events which are to be considered as default by a member of Power Exchange/ Power Exchange should be defined
- (vi) Mr. Ehsan Sharief- Individual – When the SGF is exhausted due to default by one member, what would be the remedy in case of another default.
- (vii) TPTCL- Necessary contractual documents have to be put in place by the Hon'ble Commission to work out the inter-party relationship between the member, the power exchange and the clearing corporation to work out the procedure for settlement of funds and also to enforce the default mechanism.

### 8.15.2. **Decision and rationale**

The event of default has been defined as suggested in stakeholder comments. Default remedy mechanism has been looked at from two opposing point of views. One, to ensure that Power Exchange or Clearing Corporation introduce risk management methods on new products judiciously especially longer tenure products where the risk is much higher than day ahead markets and align their risk management objectives with that of the members of the Power Exchange . Second, utilising the net worth of the Power Exchange to make good the default of its members should not create any systemic risk and lead to market failure. Commission has decided to provide the default remedy framework for the same along with regular reporting requirements. The new default mechanism adopted in final regulations is a time tested mechanism on similar lines as used by National Securities Clearing Corporation Ltd in the Indian Stock markets.

## 8.16. Regulation 30 – IT Infrastructure and Trading Systems

### 8.16.1. **Comments and suggestions received**

- (i) *IEX- There is no discussion on standardization of technology in the regulation*
- (ii) *PTC- Power Exchange need to be compensated for creating additional infrastructure like disaster recovery and alternative trading site by allowing them to charge appropriate fee.*

### 8.16.2. **Decision and rationale**

The price discovery methodology submitted for approval in the bye laws by Power Exchanges needs to be tested for its veracity in software application used by the Power Exchanges. Hence it has been provided that the Commission may audit or appoint an agency to audit the Software application used by the Power Exchange for price discovery and market splitting on a random basis. The Power Exchanges shall produce the test results of test cases and scenarios provided by the Commission.

### 8.16.3. **Decision and rationale**

Disaster recovery site is a basic requirement for Power Exchange infrastructure since its operations are critical and time dependant in nature .It is expected that contingency plans like disaster recovery are a part of the initial business plan itself of the Exchange. The Power Exchange is free to use any type of internal funds they feel appropriate to create such infrastructure.

8.17.Regulation 31 - Physical settlement - Contractual Deviation , Maximum Bid quantity declaration from members of Power Exchange

8.17.1. **Comments and suggestions received**

- (i) *CEA – Penalty for Contractual Deviation is a must and needed to bring sanctity of contracts in the market*
- (ii) *Reliance Infrastructure , PTC, PXIL, Reliance Energy Trading – Penalty should not be stipulated as any contractual deviation risk can be priced in the contract itself .It shall vary based on the counterparty and will be priced.*
- (iii) *IEX – Any specific number should not be given and the penalty value should be floating with market price. In case the market volatility is high the penalty shall be high and vice versa.*
- (iv) *TPTCL -Can regulator charge a penalty? It is contrary to the principle of restitution propounded u/s 73 of Indian Contract Act, 1872 as the basis for imposition of damages. Damages / penalty for breach of contract can be imposed only to the extent of loss suffered by the aggrieved party.*
- (v) *TPTCL- Penalty for Contractual deviation is a matter of contract between the buyer and the seller and subjecting traders to penalty, while imposing a cap on trading margin is not appropriate*
- (vi) *TPTCL - Even if penalty for Contractual deviation applicable , it has to be prospective in application to future contracts*
- (vii) *TPTCL - For long term PPAs already executed by traders without any penal provisions, the PSAs will be executed in future and thus being the 2<sup>nd</sup> leg of the contract should also be exempted from penalty*
- (viii) *TPTCL- Flexibility in practice is needed, 20% to 30% deviation is considered normal and is preferred by both buyers and sellers*

- (ix) *IIT Kanpur - Regulations should introduce a mechanism for monitoring 'contractual deviations' through PXs, traders and NLDC/RLDC/SLDC through an appropriate committee to be appointed by the CERC.*
- (x) *WBSETCL- Maximum Bid quantity declaration is difficult to monitor the actual physical requirements vis a vis the traded quantity.*
- (xi) *Reliance Infrastructure – Maximum Bid quantity declaration should allow for buy bids exceeding maximum deficit (i.e. maximum consumer load minus minimum generation.) or sale bid exceeding maximum surplus (i.e. maximum consumer load minus estimated consumer load).*
- (xii) *Reliance Energy Trading – Maximum Bid quantity is only relevant for distribution licensee and hence it should be left to the prudence of SERC.*
- (xiii) *Lanco Electric Utility- Bilateral contracts or Term Ahead contracts through PX -Can we have standardized contracts for Delivery based market and financially settled markets?*
- (xiv) *KSEB- “Members declaration of MW quantum in a buy bid shall not exceed the maximum deficit.” This is totally against the basic objective of short term trading. Almost all the SERC's direct the Distribution utilities to follow schedules strictly on merit order principles.*
- (xv) *India Bulls Power Trading - Minimum compensation for the contractual deviation @20% of the contracted price is very low.*
- (xvi) *IIT, Kanpur - Regulations should introduce a mechanism for monitoring 'contractual deviations' through PXs, traders and NLDC/RLDC/SLDC.*
- (xvii) *Eastern Regional Power Committee – A detailed process using grid frequency, KVS, power factor has been suggested to decide compensation for contractual deviations.*
- (xviii) *Mr. Eshan Sharief- In case of deviation ,the terms of the contracts should prevail*

#### 8.17.2. **Decision and rationale**

For competitive market to develop freely, the players should have flexibility to develop their own strategy to hedge their risk, based on their risk taking potential. Hence, the proposed regulation with respect to Contractual Deviation is being removed. This would mean that in OTC markets contractual deviation can be decided by the participants

themselves. For Power Exchanges the clause shall be a part of contract specification and the penalty mechanism can be defined by the Exchange to create sufficient deterrent not to deviate from contracts and provide adequate compensation to the affected party. However, it is expected that short term contracts (being demand supply balancing contracts) shall be firm in nature and there shall be high penalty for any contractual deviation.

In view of the comments received, proposed regulation governing the maximum bid quantity declaration from members of Power Exchange is also being removed as it may be difficult to monitor the same practically.

## 8.18. Regulation 32- Congestion Amount Management

### 8.18.1. **Comments and suggestions received**

- (i) *IEX has submitted a detailed document raising its concerns on Congestion fund utilisation proposed by the Commission. It is a self contained separate document.*
- (ii) *IEX -Congestion Revenue Utilization should be on quid pro quo principle*
- (iii) *IEX- Whether congestion charge is a fee, tax or revenue? Does the Commission have powers to direct its usage?*
- (iv) *IEX has objection on transfer of funds to NLDC as it is a technical body.*
- (v) *IEX, PXIL, PTC - Expert group suggested to direct its utilisation should have representation from Power Exchange and distribution company representation. The corpus is generated from Power Exchanges and they have the right to influence its usage.*
- (vi) *APTRANSCO - Congestion Revenue Fund shall be refunded to the respective beneficiaries in every month or quarterly basis on the pro-rata power allocation*
- (vii) *APTRANSCO -Congestion Revenue Fund utilization for construction of new transmission lines and for providing Series Reactors etc., may not be rational as CTU and respective STU are in a position to do so.*
- (viii) *MSEDCL –*
  - (a) *Account could be transferred to NLDC once they are declared functional as an Independent System Operator.*

- (b) *Regional Power Committee representative to be included in the expert group*
- (ix) *PXIL -The following clauses to be included*
  - (a) *To develop a fund to manage the settlement of claims as has been referred to in Clause 40*
  - (b) *To undertake capacity building measures and training of participants – PTC, PXIL*
  - (c) *To develop an information dissemination mechanism for the participants on the Exchange*
- (x) *NPEX - Power Exchanges should be allowed to meet any financial liability (settlement difference) arising from mismatches in the final/ implemented schedules approved by LDCs, by any of the methods including:*
  - (a) *Socializing amongst all participants (with or without recourse to SGF)*
  - (b) *Part utilization of congestion revenue*
- (xi) *PTC- Fund can also be utilized for capacity building of stakeholders towards commercial orientation, load forecasting, key information*

#### 8.18.2. **Decision and rationale**

Congestion revenue is an amount arising from a regulatory mechanism created from splitting the market. Hence, the Commission has powers to levy the same. Being a regulatory charge it must be used for the purposes having broad nexus to the measures for congestion avoidance. The indicated use of the fund created by this amount was provided in the draft regulation itself. The said uses would be permissible and the Commission would permit use of amount so collected for those purposes. In view of the legal position emerging from provisions of the Act, Commission has decided to keep the process of approval to proposals for utilisation of congestion amount within the regulations and therefore has omitted the proposal of Committee for suggesting new purposes.

After considering the suggestions received from stakeholders, the following two types of usage has been added to congestion fund utilisation

1. To undertake capacity building measures and training of participants of Power Exchange.
2. To develop an information dissemination mechanism for the participants on the Power Exchange.

As explained above, the constitution of a technical expert group is being omitted from the final version of the regulations. The CTU, NLDC or Power Exchange can directly approach the Commission with proposal for utilisation of the congestion revenue fund.

#### 8.19. Regulation 34 – Merger or Closure of Power Exchange

##### 8.19.1. **Comments and suggestions Received**

- (i) *NPEX – The concept is anti competitive. It is purely a commercial decision to be taken by the shareholders of Power Exchange*
- (ii) *PXIL – There are situations where an Exchange creates its niche and can remain viable NCDEX has less than 20 % of total commodity Exchange volume but is a benchmark for agricultural commodities.*
- (iii) *PXIL, NPEX- It should be 20 % of specific product traded on the Exchange not overall market volume .There are niche Exchanges which become a benchmark in their category.*
- (iv) *NPEX- Investors in Power Exchange have taken a long term view and are expected to work towards development of markets. It discourages such entrepreneurship and market development*
- (v) *NPEX- The size of the electricity trading market is not large and is not expected to grow substantially in near future. There are a large number of traders and participation in Power Exchange is voluntary, which limits the market share and viability of each Power Exchange.*
- (vi) *KSEB – The concept is anti competitive*
- (vii) *Lanco Electric Utility –*

- (a) *Will it not act as entry barrier for a new entrant? The risk perception will change drastically and investment decision may get changed in most cases.*
- (b) *Will it not give undue advantage to existing Power Exchanges specially the one having more than 90% market share?*
- (viii) *IIT Kanpur - The presence of multiple Power Exchanges (PXs) at the early phase of development of power market in the country comes at a loss of liquidity and hence efficiency in price determination. Presence of multiple Power Exchanges defeats the purpose of socially welfare maximizing outcome due to sacrificed liquidity and very limited opportunities for arbitrage to ensure interdependence of price discovery across Power Exchanges.*
- (ix) *Mr. Eshan Sharief- As the power exchanges are in a naïve stage, this clause may be relaxed for a couple of years.*
- (x) *TPTCL-*
- (a) *This clause is an impediment on the right of a power exchange to carry on business*
- (b) *The clause also does not provide about the manner of calculation of total market volume and market share of exchanges. Further, even in the event of such merger or close of operation of smaller exchanges, the rights of shareholders and of the existing members / contracts have to be worked out in detail.*

#### 8.19.2. **Decision and rationale**

The rationale behind this provision in the regulations is to concentrate liquidity in Power Exchanges for improved pricing of standardised contracts. Numerous spot prices with low volume will provide confusing signals and not serve the intended purpose of Power Exchange providing investment signals. It shall also complicate corridor allocation process adopted by NLDC and have a negative impact on social welfare maximisation. Sufficient care has been taken to ensure that a situation where monopoly of a single Power Exchange occur does not happen by allowing two Exchanges to always co exist . Hence, any Power Exchange with a market share less than 20 % for a continuous period of 2 (two) years after a period of two years of commencement of operations

shall need to close or merge with an existing Power Exchange. As such it is vital for this regulation to be retained in the final version of the regulations.

For the sake of clarity, it has been provided that market share calculation methodology shall be based on the cumulative transaction volume in Million units of all exchanges in operations.

After considering the matter further, for the running long dated contracts the Power Exchange have been asked to work out a succession plan of these contracts as per Regulation 35

#### 8.20. Regulation 35 – Exit scheme for Power Exchange

##### 8.20.1. **Comments and suggestions received**

*(i) Reliance Infrastructure - Existing Exchange should get their exit schemes approved by Commission within a period of six months*

##### 8.20.2. **Decision with rationale**

Power Exchanges are being required to create an exit scheme detailing the process of winding up of business and the transfer mechanism of running long dated contracts executed on the Exchange. This is also being promoted by Financial Securities Authority (FSA), the UK financial regulator through the concept of a “Living Will for banks”.

After considering the comment, a time period of one year has been provided in the final version of the regulations for Power Exchanges to adhere to this provision.

#### 8.21. Regulation 54 - Information Dissemination by Power Exchange

##### 8.21.1. **Rationale**

Power Exchanges are mandatorily being required to provide information using website links for demand supply, weather, fuel, generators information for informed pricing decisions for participants. This is to emphasis the role of Power Exchanges in price and information dissemination to reduce information asymmetry in markets.

## 9. Clearing Corporation -Part 6

- 9.1. Part - 6 introduces the concept of Clearing Corporation. Separating the clearing function from the price discovery function is a good practice as they are two distinct functions. Presently both are being performed by the Power Exchange (they are acting as self clearing Exchanges). Internationally Clearing Corporations are independent, well capitalised institutions and clear high volume of trade for Exchanges as well as OTC markets. For instance Nordpool Clearing ASA is a separate Clearing Corporation which clears trades for Nordpool spot and derivative markets, the LCH -London Clearing House clears trades for various stock and commodity Exchanges and OTC trades, similarly DTCC - Depository Trust and Clearing Corporation of US has similar business model. OTC trades can also be cleared by the clearing house.
- 9.2. Presently in our markets if a Electricity trader executes trades, lets us say on two Exchanges and one trade in OTC, he needs to pay margins / collaterals individually to all the 3 (three) institutions thereby increasing his overall capital requirement. The risk arising due to these positions remain compartmentalised in different institutions. When Clearing Corporation would clear trades of the same party on Exchange and OTC market, the Clearing Corporation would have complete information about position and risk of the party. Hence, it can provide cross margin advantages (buy position in one platform and sell on the other on similar contracts effectively reduces risk and this is recognised by Clearing Corporation and advantage is given to the parties) based on position thereby bringing more efficient use of capital for the Electricity trader. The economy of scale reduces the transaction cost as well. Thus provision for creation of Clearing Corporation is a necessary instrument.

9.3. Regulation 28 – Hiving off of Clearing Corporation

9.3.1. **Comments and suggestions received**

*The comments of the stakeholders on this issue have been enumerated in Para8.14.1*

9.3.2. **Decision and rationale**

Creation of Clearing Corporation is a best practice internationally and has become even more critical after the 2008 financial crisis world over.

There is a strong push by regulators to force even OTC traders to use Clearing Corporation. In the Indian context the Power Exchanges have a very conservative risk management policy. They charge 100 % margin for any trade (they are free to margin lesser and use a clearing house). Clearing Corporation will become more relevant when margining is not 100 % by Exchanges and derivatives are traded. Power Exchange or any other organisation which are interested in clearing OTC business can establish a Clearing Corporation as they shall be able to attract bilateral trade business and help smaller Electricity Traders to increase their turnover. It is being left to the market to judge any business opportunity and to act accordingly. Therefore, such creation of Clearing Corporation is being made voluntary and left to the discretion of Power Exchanges or any other organisation interested in clearing business. However it is mandatory for derivatives market .If it is formed it can also clear OTC trades as has been proposed in the regulations. Clearing Corporations will need approval from the Commission to commence operations

- 9.4. In case Power Exchange hives off its clearing function, the Settlement Guarantee Fund shall move from Power Exchange to the Clearing Corporation. Clearing Corporations will be separate legal corporate entities regulated by the Commission with appropriate capital adequacy norms.
- 9.5. Since the Clearing Corporation may clear OTC trades also, it shall benefit Electricity Traders as they can also use the services of the Clearing Corporation thereby reducing their capital adequacy requirement.
- 9.6. Regulation 48 - Credit Rating of Clearing Corporation
  - 9.6.1. **Comments and suggestions received**
    - (i) *Reliance Infrastructure - Clearing Corporation to get such credit rating within a stipulated time, preferably six months.*
  - 9.6.2. **Decision and rationale**

It has been provided that Credit rating of Clearing Corporation shall need to be done through Securities Exchange Board of India (SEBI) accredited credit rating agency within 6 month of its incorporation and inform the Commission

## **10. Market Oversight & Surveillance Part -7**

10.1. Market oversight is required to maintain the market integrity and credibility and to ensure that the market is fair and efficient. The oversight function becomes even more important when the market is in nascent stage of development and the market is neither large and nor fully competitive. At such a stage the regulator's monitoring is crucial as checks and balances through competitive forces is not sufficiently built in. In the initial stage as presently is, the Commission is monitoring prices through Market Monitoring Cell. Over a period of time as market size increases monitoring aspect will become as important as prices. Prices in this scenario can be expected to be taken care of by competitive forces. In these regulations various new reports have been introduced to monitor risk for both Exchanges and Electricity Traders. For Exchanges, with commencement of Term Ahead markets risk management has become crucial. Reporting of open position of participants, overall market open position reports have been introduced for Exchanges. For Electricity Traders their composite portfolio risk summary report has been introduced. This shall help the Commission to quantify the overall open position in the market and the risk emanating out of these positions.

10.2. The Commission's oversight will be on the market as well as on the market participants. Markets may be adversely affected due to abuse by a participant. It may also be affected by the collective participant behaviour. Hence, monitoring both markets as well as its participants is necessary. Over a period of time the Commission would adopt the principle of "risk based regulation" wherein transaction which induces higher systemic risk will be monitored more rigorously than others.

10.3. The Commission shall have an oversight on the overall functioning of the market through monitoring of prices, volatility, volumes of trades etc.

10.4. Regulation 49 - Commission shall have an oversight on market participants behaviour through checks on manipulative or attempted manipulative trading activity, trading that is misleading or deceptive, or is likely to mislead or deceive; market abuse or gaming etc

10.5. Commission can intervene in markets when prices or volatility rises unreasonably ,or sudden high trading volume is reported

10.6. Regulation 50 - The interventions methods can be appropriate price caps for necessary duration, halting trading for a cooling period in case of increased volatility , increasing margins on contracts ,imposing client / market position limit, suspend contracts from trading etc. The exact band of such interventions shall be based on the market conditions existing at that time.

10.6.1. **Comments and suggestions received**

(i) *NVVN- The provisions covered in clause (d) of the Regulation 7 of the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading license and other related matters) Regulations, 2009 may also be considered while finalizing this regulation so as to avoid any future ambiguity.*

(ii) *WBSEDCL - CERC should mention specifically the limit in rate of changes in the prices of electricity beyond which the question of abnormality will arise. Similarly specific parameters and their limiting values required for intervention to be mentioned by CERC in case of sub-clause (b) &(c) .In addition to this, the other terms and conditions should also be mentioned. If accepted, the proposed changes may please be again published before finalization in Order to capture the stakeholders view.*

10.6.2. **Decision and rationale**

For the sake of clarity, a new provision has been added to provide that these regulations are in addition to other regulations made by the Commission and not in derogation thereof.

The limits on prices or volatility when the Commission shall intervene cannot be judged beforehand since these are dynamic market parameters and have to be judged at that point in time. Also presently there is little historic exchange data available to carry out exhaustive analysis and fix such bands. Commission will take such measures in the interest of orderly development of market after due analysis and following the due process.

10.7. Regulation 55 ( v) – Market Surveillance by Power Exchange -Analysis of bidding by participants

10.7.1. **Comments and suggestions received**

(i) *PXIL*

(a) *Exchanges cannot analyze bidding strategies of participants. Participants possess various other data and evaluate their bidding strategies on various parameters which would not be known to Exchanges.*

(b) *At the most, Exchanges can monitor the bids that have come to the Exchange and do an analysis of parameters, positions, etc. post the bids entering the Exchange*

10.7.2. **Decision and rationale**

It is felt that Exchanges may not be in opposition to analyse the bidding strategies of individual participants since that requires company specific information or cost of generation of the plants, hence bidding strategies has been replaced in the regulations with Bidding pattern. Bidding patterns analysis is a historical analysis and is carried out for the market as a whole and hence can be handled by the Exchanges competently. Hence market surveillance committee shall analyse bidding pattern and transaction and not bidding strategies of participant. The committee should also check if the result of market splitting methodology is being followed in line with the declared principles.

## 10.8. Regulation 56 ( vi) – Reporting of participant bid data to Commission

### 10.8.1. **Comments and suggestions received**

- (i) *PXIL -*
  - (a) *One month would be a very short period to disseminate information related bid of participants. Since these are raw data it would be useful for the Commission, if the said data is processed and meaningful reports emanate out of it.*
  - (b) *The confidentiality of bids of Power Exchange is paramount and Power Exchanges should also be indemnified from providing bid details.*
  - (c) *It has been suggested that instead of asking for raw data each month, it is requested that Exchanges do analysis and provide reports on a quarterly basis and provide the same to the Commission.*
- (ii) *NPEX –*
  - (a) *Power Exchange has the prime obligation of ensuring confidentiality of participants' bidding information. In such an event, PX should be indemnified against any claim by the member on account of loss of confidentiality.*
  - (b) *PX is not normally required to access the bid level information. Proposed regulation is in conflict with this obligation of PX. It is therefore, suggested that PX should be required to access & analyze bid level details only when required specifically by the Commission.*
- (iii) *IIT Kanpur- Commercial interest can be safeguarded if 'individual bids' can be disclosed after a week or so of the 'delivery of power'/ 'expiry of contract'.*

### 10.8.2. **Decision and rationale**

In view of the objections and suggestions received, it has been decided that bids of the participants shall be called only on need basis. In addition it would be monitored whether the Market Splitting methodology approved by the Commission is actually being followed.

10.9. Regulation 56 – Trade Reporting Requirement- Various forms of reports for Exchange participants and electricity traders have been introduced to monitor prices and risk.

10.9.1. **Comments and suggestions received**

- (i) *PTC-The traders have been asked to provide open position report, tenure of trades and risk summary report etc. This information is of business sensitive nature and may lead to loss of business.*
- (ii) *TPTCL- Do long term trades also need to be reported?*
- (iii) *NVVN- All Electricity Traders are required to submit information to the Commission. NWN is complying with this requirement without failure. It would not be possible to comply to the above requirement of the draft Regulations as the same is not consistent with the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading license and other related matters) Regulations, 2009.*
- (iv) *IIT Kanpur – The proposed regulations should mandate reporting of instances of defaults with scale (in quantity and value terms) and conditions thereof for PXs to CERC.*

10.9.2. **Decision and rationale**

The reporting of trades is for risk monitoring purposes. Reporting requirements are being enhanced throughout the world on open positions for Exchanges as well as OTC markets. These requirements are over and above the ones stipulated in CERC (Procedure, Terms and Conditions for grant of trading licence and other related matters) (Second Amendment) Regulations, 2009. Any default by member needs to be reported to the Commission which is a part of the reporting requirement. This has also been suggested by stakeholders.

10.10. Further, Exchanges need to undertake analysis of transactions through the surveillance department and submit that to the Commission on a quarterly basis

10.11. Electricity traders need to report all trades including long term, medium term and short term trades. This will help to understand the overall open positions in the market and thereby the overall the risk present in the system as mentioned earlier. This will also provide insights to the Commission on pricing of long term contracts being executed in the OTC market.

10.12. Bilateral deals (directly between buyers and sellers) of very large size in short term market have an effect on market, both on price and well as risk. These also need to be reported.

10.13. Regulation 57- Whistle blowing policy has been introduced. Market participants being closest to the market get access to information regarding practices that require to be curbed. Their access is even more and faster than what comes to the knowledge of the regulator. Whistle blowing shall promote reporting of any such abnormalities. To protect such acts of courage, punitive action is prescribed against the affected party in case s/he attempts to harm the whistle blower.

10.13.1. **Comments and suggestions received**

(i) *PTC- In case it is found that this was done with a malafide intention and the information provided was false, incorrect, and could not be factually supported, then there should be a provision for strong penal action.*

10.13.2. **Decision and rationale**

The regulation has been retained since proving *mens rea* (intention) is a requisite for criminal actions but not civil actions contemplated in the subject regulations.

10.14. Regulation 58 - Insider trading policy has been introduced so that price sensitive information is not used for profiteering by any party.

10.14.1. **Comments and suggestions received**

(i) *NPEX-Information related to generator outages, plant maintenance etc. is required to be made available on the website of concerned RLDC/RPC as per draft regulation 54 and PX has to provide only a link*

*to such websites. As such, there is no need of publishing this information on the website of PX.*

10.14.2. **Decision and rationale**

The comments and suggestions have been well taken and accordingly suitable provision has been made in the final version of the regulations.

**11. Conclusion**

These regulations have been notified with the objective of developing the market in power (including trading), in accordance with the functions vested in the Central Electricity Regulatory Commission under the Electricity Act, 2003 and National Electricity Policy notified thereunder.

Sd/-	Sd/-	Sd/-	Sd/-
<b>(V.S. Verma)</b>	<b>(S. Jayaraman)</b>	<b>(Rakesh Nath)</b>	<b>(Dr. Pramod Deo)</b>
<b>Member</b>	<b>Member</b>	<b>Member (EO)</b>	<b>Chairperson</b>

New Delhi

Dated 28th January 2010

## 12. Annexure

Public Hearing on “Draft Central Electricity Regulatory Commission (Power Market) Regulations, 2009” held on 25th November, 2009 from 1030 hrs. to 1300 hrs at CERC , New Delhi .

### List of Stakeholders who sent Written Submission and made Oral Submissions

Sl. No.	Name of the Organisation	Written Comments Received	Oral Submission
<b>I</b>	<b>POWER EXCHANGES</b>		
1.	Indian Energy Exchange Limited ( IEX)	Yes	Yes
2.	Power Exchange of India Limited ( PXIL)	Yes	Yes
3.	National Power Exchange Limited ( NPEX)	Yes	Yes
<b>II</b>	<b>TRADERS</b>		
4.	Reliance Energy Trading Limited	Yes	Yes
5.	Tata Power Trading Company Limited ( TPTCL)	Yes	Yes
6.	PTC India Limited, New Delhi ( PTC)	Yes	Yes
7.	Indiabulls Power Trading Limited	Yes	Yes
8.	Adani Enterprises Limited	Yes	-
9.	NTPC Vidyut Vyapar Nigam Limited ( NVVN)	Yes	-
10.	Lanco Electric Utility Ltd.	-	Yes
<b>III</b>	<b>STATUTORY ORGANISATIONS</b>		
11.	Eastern Regional Power Committee, Kolkata	Yes	-
12.	Central Electricity Authority ( CEA)	Yes	-
13.	Kerala State Electricity Board ( KSEB)	Yes	-
<b>IV</b>	<b>TRANSCOs</b>		
14.	West Bengal State Electricity Transmission Co. Ltd. ( WBSETCL)	Yes	-
<b>V</b>	<b>DISCOMs / PURCHASERS</b>		
15.	West Bengal State Distribution Co. Ltd. 9(WBSDCL)	Yes	-
16.	Andhra Pradesh Power Coordination Committee (APTRANSCO)	Yes	-
17.	Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)	Yes	-
<b>VI</b>	<b>GENCOS</b>		

18.	NTPC Ltd.	Yes	-
19.	Reliance Infrastructure Limited	Yes	-
20.	National Hydro Power Corporation Limited ( NHPC)	Yes	-
<b>Sl. No.</b>	<b>Name of the Organization</b>	<b>Written Comments Received</b>	<b>Oral Submission</b>
<b>VII</b>	<b>OTHERS</b>		
21.	PTC India Financial Services Ltd. (PFS )	Yes	Yes
22.	Individual - Sh. Ehsan Sharief - Hyderabad	Yes	-
23.	Indian Institute of Technology, Kanpur (IITK)	Yes	-
24.	Power Finance Corporation Limited ( PFC)	Yes	-
25.	Multi Commodity Exchange ( MCX)	Yes	-

Two seminars were conducted where presentation were made on the Draft Power Market Regulations and its content. These were organised on 28 th and 29 th October 2009 in Mumbai and New Delhi respectively.