

16-09-2019

To

**Sh. Saroj Kumar Jha, IAS**  
Secretary  
Central Electricity Regulatory Commission  
3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building,  
36 Janpath, New Delhi - 110001

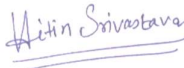
Dear Sir,

**Sub: Comments on 'Draft Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations,2019'**

This is in reference to the public notice issued by CERC on 'Draft Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations,2019' dated 24th July, 2019 pertaining to the Public Notice No. ECO- 14/06/2019-CERC inviting comments from stakeholders on the same.

We welcome the Commission's initiative to come-up with a new regulation on Trading aimed towards reviving the Power Trading Market with appropriate risk-management measures and increased players. Our comments on the said notification are elaborated under Annexure-1 enclosed herewith. Kindly consider our views in consideration of the market interest..

Yours truly,



Nitin S Srivastava  
Lead- Business

#### About EMA

EMA Solutions Pvt. Ltd (EMA), is a technology focused New Delhi based startup firm, recognized by Gol under the flagship 'Startup India Scheme' (No: DPIIT34787), and is the first and only startup firm in India's Energy Analytics Space, aimed at offering new-age Analytical, Big-data & AI, Trading Technology, Robotic Process Automation, Market Advisory and Knowledge solutions to Energy & Power Markets.

Our team has a diverse and suitable collective experience of around 30 years in areas of Power Market Design, Power Trading & Advisory, Generation & Demand Forecasting using AI & Statistical Models, Portfolio Management of Discoms and Generators, Power Plant Management, SLDC Operations and Big Data Analytics & AI, with organisations like NTPC, IEX, Mercados EMI and Blue-Lotus.

## ANNEXURE-I

Reference/ Subject	Views / Comments
<p><b>Clause 2(U) – ‘Trading’</b> shall have the meaning as defined in section 2 (71) of the Electricity Act 2003;</p>	<p>Electricity Act specifies that "<b>Trading</b>" means <b>purchase of electricity for resale thereof</b> and the expression "<b>trade</b>" shall be construed accordingly. Trading License is granted by the Commission to perform this function of Trading. As such, it is to clearly brought out as to what activities fall under the definition of ‘Trading’ and only those activities are to be regulated. Previous discussions in this regard are as below:</p> <p><u>CERC Suo-motu order 56/2003 (Commission’s Decisions on Comments):</u></p> <ul style="list-style-type: none"> <li>• <i>“It is sufficient to observe that the Act does not envisage the role of brokers or match traders in the process of trading of electricity, when it defines the term “trading” as “purchase of electricity for resale thereof”. Therefore, the brokers and match traders are outside the scope of trading licence.”</i></li> <li>• <i>“Prima facie, it appears that a distribution licensee can undertake trading within his area of licence and not beyond.”</i></li> </ul> <p><u>CERC Concept Paper on Eligibility Conditions for grant of Power Trading Licence, 2003:</u></p> <ul style="list-style-type: none"> <li>• <i>“...it is clear that trading would necessarily involve two activities: both the purchase and the resale of electricity by the same person. Or conversely, the single activity of sale or the mere purchase of electricity by a person would not suffice to qualify as trading, since it does not combine both activities by the same person. In other words, trading of electricity implies that the trader buys electricity from one party and sells it to another party for some consideration”</i></li> </ul> <p>Following issues needs to be taken into consideration and clarified by the Commission:</p> <ul style="list-style-type: none"> <li>• As specified in the EA 2003, does Trading only qualifies the sequential transaction of ‘purchase’ followed by ‘resale’ transaction?</li> <li>• Will transactions where ‘<b>Sale</b>’ is concluded first and ‘purchase’ is done later on qualify as ‘trading’ under the Act?</li> <li>• Can the Commission regulate or restrict activities which <b>does not fall under the definition of ‘Trading’</b>?</li> <li>• Does <b>single sided transactions</b> like ‘purchase only’ or ‘sale only’ transactions fall under the definition of ‘Trading’ under the Act? Whether such single sided transactions by Members of <b>Power Exchange</b> qualify as Trading? Will Power Exchange be considered to be performing Trading as the same entity as central counterparty completes both purchase and sale transactions?</li> <li>• Does the Act consider only ‘resale’ under its purview, and omits ‘sale’?, thereby indicating that a transacting entity should necessarily involve in purchase of electricity before sale?</li> <li>• Are Open Position Trades or <b>Financially settled transactions</b> excluded under the definition of ‘Trading’?</li> <li>• Can non-monetary transactions with ‘<b>in-kind</b>’ settlement for exchange of ‘electricity’ be considered ‘Trading’?</li> </ul>

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	<p>Considering that Indian Power Market has gained a decade of active trading experience, with many platforms and transaction types evolved, we should address the above basic aspects so as to remove ambiguity and pave way for a more mature market framework.</p>
<p><b>Clause 2(e)</b> - 'Banking of electricity' shall mean and include exchange of electricity for electricity between two grid connected entities directly on mutually agreed terms;</p> <p><b>Clause 9.23 (Ch-V)</b> - Trading Licensee shall not engage in Banking of electricity</p>	<p>It has been specified in the SoR of CERC (Fixation of Trading Margin) Regulations 2010 on banking that "<i>We also make it clear that in the light of the definition of trading in the Act as "purchase of electricity for re-sale thereof", swapping/banking of electricity would not fall under the purview of the trading of electricity as no re-sale is involved. As such, these transactions are out of the purview of these regulations"</i>.</p> <p>In re-considering and re-emphasizing the above comment, it is requested that the Commission may consider the over a decade of market experience post the above comments were made, and also the way 'settlement' happens in Banking transactions, in deciding the validity and purview of such transactions. The commission may consider the following:</p> <ul style="list-style-type: none"> <li>• If a Trader is an intermediary for a Banking Transaction, he takes the role of 'Broker/Match-Trader' and facilitates <b>Purchase</b> by the Drawing Utility and <b>Sale</b> by the Injecting Utility in the <b>first leg</b>, in consideration for '<b>in-kind</b>' payment/settlement in the form of 'electricity' which is supplied in a different time-period as <b>second leg</b>. Electricity as a commodity has <b>time-value</b> attached to it, as does not have same value if supplied in different time periods.</li> <li>• All electricity banking transactions involve two legs, with varying quantum to compensate for the <b>time value of the commodity</b>. As such the banking transactions have varying on-ward supply and return quantum, and hence cannot be termed as only '<b>exchange</b>', as specified in the definition of Banking.</li> <li>• If return supply is not done, most Banking transactions have <b>financial settlement conditions linked to Power Exchange DAM prices</b> and conclude with 'cash' settlement.</li> </ul> <p>It is requested that the Commission may re-look at the conclusion that Banking Transactions doesn't fall under Trading, considering how these transactions are settled.</p> <p>Also, the Commission may consider the validity of restricting a transaction which it not banned in the Act, or is outside the purview of 'Trading', and hence the licensing conditions.</p>
<p>Clause 24 - Repeal: Save as otherwise provided in these regulations, the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of</p>	<p>The Commission rightly to come out with new regulations for Grant of Power Trading License, considering the dynamic nature of the market and the present market conditions.</p> <p>As the Power Trading Market is a constantly evolving, complex and regulated, it is essential for the Regulator to constantly monitor the market</p>

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<p>trading licence and other related matters) Regulations, 2009 and Central Electricity Regulatory Commission (Fixation of Trading Margin) Regulations, 2010 and all subsequent amendments thereof shall stand repealed from the date of coming into force of these regulations</p>	<p>and evolve facilitative and conducive regulations accordingly to suit the present and future market needs. Considering the complex market design, and varied trading mechanisms like Banking, Brokerage, Hedging, Arbitrage, etc are tried by various players in the present physical market, as well as some possibility of financially settled OTC contracts in the market, it is essential for the Regulator to come-up with a <b>Whitepaper</b> on the present status of Power Trading in India, and also the suggested market design and expected role to be played by Traders as risk takers.</p> <p>It is suggested that a thorough discussion on Power Trading in India is essential, as Traders are a key players for risk management in Electricity Markets across the globe, and play an active role in development of Power Market. Explanatory Memorandum for the draft regulation vaguely discussed the issues, and lacks depth in bringing out the market issues. In India, we see a diminishing trend in number of Traders, and the present market doesn't attract new players. The Commission needs to address this problem, for the benefit of Power Sector, with a thorough review and identification of bottlenecks.</p>
<p><b>Clause 2(d) - 'Back to Back deals'</b> shall have the same meaning as is assigned to it under Power Market Regulations, 2010, as amended from time to time</p>	<p>Back-to-Back deals are not assigned any definition under the head 'Definitions and Interpretation' under Power Market Regulations, 2010. As such, its definition should clearly be spelt out to avoid ambiguity.</p>
<p><b>Clause 2(h) - 'Cross Border Trade of Electricity'</b> means trading of electricity as defined in Central Electricity Regulatory Commission (Cross Border Trade of Electricity) Regulations, 2019, as amended from time to time;</p>	<p>Cross Border transactions cannot necessarily be called 'Trading' unless 'purchase for resale thereof' is fulfilled and an Intermediary (Trading Licensee) is involved. Though this is not the subject of this regulation, the Commission is request to take note of the discrepancy in naming the regulation.</p>
<p><b>Clause 2(h) - 'Inter-State Trading'</b> means purchase of electricity from one State for resale in another State;</p>	<p>It is not necessary that purchase is always made from a 'State' or 'Intra-State' or 'State Embedded' entity by Trader. If a Regional-grid connected Generator is a Seller, then the definition may not contain such a case.</p>
<p><b>Clause 3.3 (Ch-II) - Financial Qualifications-Capital Adequacy and Liquidity Requirements</b></p>	<p>Following are the excerpts from earlier regulatory proceeds on the issue of Capital Adequacy:</p> <p><u>Concept Paper on Eligibility Conditions for Grant of Power Trading License, 2003:</u></p> <ul style="list-style-type: none"> <li>• "...capital must be sufficient enough to protect a power seller and counterparties from the risks of the institution's on- and off-balance sheet risks. <u>Capital standards should be designed to allow a firm to absorb its losses, and in the worst case, to allow a</u></li> </ul>

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	<p><u>firm to wind down its business without loss to customers, counterparties and without disrupting the orderly functioning of power markets.”</u></p> <ul style="list-style-type: none"> <li>• <u>“distinction needs to be made between power trading in an exchange and trading outside exchange.....one needs to contemplate the future market scenario, such as, development of power exchange in Indian power market and its impact on the financial requirement of an electricity trader.”</u></li> <li>• <u>Back-to-Back agreements</u> and their credit and default risks considered for Capital Adequacy</li> </ul> <p><u>SoR of CERC Procedure, Terms &amp; Conditions for grant of Trading Licence and other related matters (First Amendment) Regulations, 2010:</u></p> <ul style="list-style-type: none"> <li>• <u>We are of the view that the net-worth of trading licensees should be linked to the open position of portfolio rather than the trade turnover since the outstanding open position is the true measure of portfolio risk. The net-worth is a capital adequacy requirement to cover any default by the clients of the trading licensee. However since the open position is difficult to monitor in the absence of real time IT connectivity with all trading licensees, the net-worth has been linked to the turnover of trading licensees.</u></li> <li>• <u>The increase in trade turnover does not necessarily increase the risk for the trader, as turnover increase can be achieved by rolling over the portfolio several times in a year. However, the credit risk would increase if the transaction is carried out for a larger number of clients.</u></li> <li>• <u>It is expected that small members of power exchange would be able to take advantage of the newly created category and join the mainstream by becoming trading licensees. This category of licensees are expected to act as new marketing channel, accommodate the marginal players in the market and to further penetrate the market</u></li> </ul> <p>In Power Trading transactions, three risks are primarily involved. They are, <b>Price Risk</b>, <b>Credit Risk</b>, and <b>Operational Risk</b>. Capital Adequacy requirements, in the form of Net-worth are specified so as to cover defaults, and mitigate systemic risk. The methodology described in Section 2.1 of the Explanatory Memorandum is not a credible measure considering the financial or international electricity markets, as Open Position is the right metric to determine the Credit Risk. Given that we have over a decade of Power Trading market, and liquid Power Exchanges, it is suggested that the Commission may adopt advanced methods to arrive at Net-worth computation, as also stated in the SoR of 2010 regulations, and abandon the short-cut method adopted in 2010 considering the level of market maturity and information at that time. Given the present IT advancements, it is an easily achievable task to monitor Open Positions. The Commission may take steps in this regard.</p>

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	<p>Also, in SoR 2010 it is stated by the Commission that a lower category is created for Members of Power Exchange to become Licensed Traders. With evolution of Power Exchange market as a major segment, it is necessary to have level playing field and uniformity in market participation. There cannot be a separate segment for OTC market players and Power Exchange Members in transacting or facilitating in transacting in a regulated commodity. Also, it is to be noted that Licensed Traders are not primarily ‘financing’ entities (NBFCs), and their specialization is in trade facilitation and risk-taking, bringing in liquidity. As such, it is suggested to bring uniformity among all trade-facilitating entities in Power Market, and bring Professional Members under the ambit of Trading License. Category V could be created to accommodate all Professional Members, providing low Net-worth and high volume limits.</p>									
	System Operator not to engage in trading and associated activities									
<p><b>Chapter-IV</b> – Trading Margin, requirement for imposition  <b>Clause 7 (Ch-IV)</b> - Applicability of Trading Margin  <b>Clause 8 (Ch-IV)</b> - Trading Margin</p>	<ul style="list-style-type: none"> <li>• <u>The Electricity Act 2003</u> specifies functions of Central Commission as “j) to fix the trading margin in the inter-State trading of electricity, <b>if considered, necessary.</b>” It is a pre-requisite for the Commission to establish the necessity of imposing Trading Margin, and the same needs to be fulfilled with a thorough study of the present market, risks and future market conditions.</li> <li>• It is to be seen that Trading Margin was introduced in 2006 in an environment where Back-to-Back transactions by Traders was prevalent in those market conditions. Back-to-back transactions are <b>Brokerage</b> transactions, which involve facilitative services. In the present dynamic market, and the evolving needs of market players, it is to be seen from the services and role played by an intermediary, and hence the fee/margin chargeable be commensurate.</li> </ul> <table border="1" data-bbox="651 1266 1451 1728"> <thead> <tr> <th data-bbox="651 1266 816 1297">Intermediary</th> <th data-bbox="816 1266 1130 1297">Services Provided</th> <th data-bbox="1130 1266 1451 1297">Fee/Margin</th> </tr> </thead> <tbody> <tr> <td data-bbox="651 1297 816 1524">Broker</td> <td data-bbox="816 1297 1130 1524">Trade Facilitation services like online trading portal, operational support, trade credit, market/trading advisory services</td> <td data-bbox="1130 1297 1451 1524">Limited, sometimes through regulation, or through Industry body rules, and is minimal compared to trade value. (eg. Stock Brokers, PX Members, Back-to-back OTC Trade Facilitators)</td> </tr> <tr> <td data-bbox="651 1524 816 1728">Trader</td> <td data-bbox="816 1524 1130 1728">Takes price risk, by purchasing the commodity and taking ownership, and provides market liquidity. Takes the role of buyer as well as seller, and assumes off-take risk.</td> <td data-bbox="1130 1524 1451 1728">No fee/margin charged, and profit/loss depends on the realisation from onward sale price in the market.</td> </tr> </tbody> </table> <p>All developed economies have liquid Power Exchange and OTC markets with risk-taking entities (Traders) providing market liquidity with no regulated margining system. Clearing Houses settle all the OTC trades, and risk is managed through effective market based settlement system (mark-to-market).</p>	Intermediary	Services Provided	Fee/Margin	Broker	Trade Facilitation services like online trading portal, operational support, trade credit, market/trading advisory services	Limited, sometimes through regulation, or through Industry body rules, and is minimal compared to trade value. (eg. Stock Brokers, PX Members, Back-to-back OTC Trade Facilitators)	Trader	Takes price risk, by purchasing the commodity and taking ownership, and provides market liquidity. Takes the role of buyer as well as seller, and assumes off-take risk.	No fee/margin charged, and profit/loss depends on the realisation from onward sale price in the market.
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	<ul style="list-style-type: none"> <li>Indian Power Market is still in a nascent stage, as far as OTC market is concerned, with limited liquidity and intermediaries, and risk management. Enforcing trading margin does not promote innovation in market intermediaries, and does not promote risk-taking. It is prudent to segregate back-to-back transactions from <b>Open Position Trades</b>, and <b>only restrict trading margin for back-to-back /brokerage trades</b>. Risk-taking and liquidity enhancing trades involving Open Position, to be accommodated through Clearing House, with no margin limitation and hence pave way for a liquid OTC and Short Term market In this stressed market situation, taking que from developed electricity markets.</li> <li>Trading Fee/Margin, charged on Rs/kWh basis, is a prerogative for trade facilitation and risk taking by Trading Licensees. Providing trading related advisory services by non-trading licensees and non-PX members, and sometimes coupled with financing service, without being a trading licensee/PX Member and hence charging a fee on Rs/kWh traded is not outrightly banned in the present Trading License regulations. Such unregulated activities may create a parallel business to take advantage of market players outside regulatory regime, and burdening the consumers. Explicit provisions may be included in the regulations to restrict such unregulated activities.</li> </ul>
<p><b>Clause 11 (Ch-V)</b> Submission of Information</p>	<p>Considering that we have over a decade of power market experience in India, it is apt for the Regulator to start monitoring Open Positions of Traders, else such trades if left for the market to settle for themselves will lead to systemic risk and market collapse. It is a fact that Open Position based trades have been going on in Indian Power Market, appropriate monitoring is the first step for developing a structured and well regulated OTC market.</p>