

Ravinder  
Ex Chairman and Member PS, CEA

---

27 August 2023

## Comments on Coupling of Power Exchanges

To

1. Hon'ble Sh IS Jha  
Member Technical
2. H. S. Pruthi  
Secretary CERC

**Reference:** Eco-14/1/2023-CERC

PUBLIC NOTICE on Staff Paper on "Market Coupling": August 21, 2023

Respected Sir

For those who don't know let me inform you that I was Chief Engg CERC from 2003-2008. I was responsible for the architecture of power exchange in India. Prior to that I had worked on and successfully implemented open access in ISTS in 2006. I invented GNA in 2012 and submitted my paper to CERC as Chairman CEA. I was responsible for the staff paper on setting up power exchange as also testing and rule making. The current staff paper on coupling of power exchanges is not in line with the original philosophy .

2. Please refer to the following;

***Quote from CERC order of February 2007:***

*20. The general approach of the Commission is to allow operational freedom to the PX within an overall framework. The regulation would be minimal and restricted to requirements essential for preventing derailment/accidents and collusion. Private entrepreneurship would be allowed to play its role. **The Commission shall keep away from governance of PX**, which would be required to add value and provide quality service to the customers.*

*21. As a logical consequence of the above (voluntary participation, no mandate for one PX, no restriction regarding ownership, and minimal regulation), the Commission would not like to impose any management structure, rules or procedures for PX. We would let the promoters develop these, and submit them for Commission's approval. It is important that the rules and procedures cater to the requirements of PX customers. **As such it is for the PX promoters to have a serious dialogue with their prospective clients, and determine what their pragmatic expectations are.**"*

*(Emphasis added)*

3 It's unfortunate that in contravention to the publicly debated philosophy and agreed unanimously, the staff paper proposes to intrude into the internal functioning of power exchanges in a substantive manner.

4. The heart of the power exchange is the search engine or the hardware plus software. This is proposed to be taken over by the NLDC. The power exchanges would be reduced to glorified agents. It will open a new spectacle of an unruly market. In the name of promoting competition, the agents of failed exchanges will try all possible inducements to poach IEX customers which has 100% share in DAM. IEX will forget R&D on new products and try to protect its customers from constant poaching. NLDC as a search engine operator will emerge as a new power centre. The competition will increase but it will be destructive not constructive. Just like destructive interference of light leading to darkness.

5. Let me tell you the truth about competition. CERC could not have selected one player arbitrarily. Nobody knew how much trade will happen on power exchange. Bilateral trade had started successfully through exclusive open access. Some thought the power exchanges may evolve region-wise. Some thought of merchant plants. Some hoped for the opening of PPAs. Imagine yourself in 2007. There were power shortages. Power exchange was conceived to estimate real shortages and real buying capacity. And to harness power from surplus pockets. (CEA doesn't provide real economic data). Demand without price is just an aspiration. So it was left to the wisdom of the market to decide what to do. There was no compulsion, no promise, no assurance of the regulator to intervene.

6. IEX was the first applicant for setting up a power exchange followed by PXIL (NSE). Both had equal chances. IEX succeeded and PXIL failed miserably is now history. Market started driving investment and the government became relaxed. In five years 1,00,000 MW new capacity was added and by 2014 power shortages were wiped out. Even though the PX traded volume was barely 5%, the power exchanges had served their main purpose of attracting investment as far as India was concerned.

7. The Discoms remained glued to PPAs as a hedge. Power Exchange had volatility and low liquidity initially. The transmission congestion lasted till 2012. Absolute volume increased due to participation of Discoms, free hydro power owners and some consumer open access. As time revealed, power exchanges became a balancing platform as UI rates became punitive and frequency band was narrowed down to make the grid resilient to absorb RE variations. In the final analysis the fittest power exchange survived. The laggards perished.

8. The reference to Europe is not relevant, and misleading. We are already coupled like Europe. Each state and each region is coupled. We have one market. The Indian market is divided into bidding areas. There is a uniform clearing price if there is no congestion. If there is transmission constraint the power flow downstream of congestion point is restricted and separation of prices takes place.

9. The staff paper actually wants price coupling. What else can it ask? The whole of India along with Nepal, Bhutan and Bangladesh are already coupled into one transmission grid.

10. By virtue of our tradition, we have always trusted long term PPAs and therefore in the foreseeable future our day ahead power exchange will be used by Discoms mainly for Load balancing only.

11. Those who are venturing into power exchange should have done realistic assessment as was cautioned by the commission in 2007.

12. So far generators have also preferred PPAs because non-recourse financing is easier and cheaper. Long term coal linkage requires long term PPA.

13. Most of the power remains tied in long term PPAs, which are very valuable for Discoms and generators alike. They were not disturbed during liberalisation and the Indian market remained stable. Electricity market is a voluntary mechanism catering to less than ten (10) percent volume. There is no mandatory pool. The European model is to forcefully bring all supplies to market. We succeeded in creating a successful voluntary market with our prudent and cautious approach. The European model is not relevant in the Indian context. We have multiple prices, in fact each PPA has a unique price not subject to exchange price discovery. Integrating the prices at different power exchanges will not change overall price diversity here. It will be a worthless exercise.

#### **14. CONCLUSION**

1. The staff paper gives a regressive and anarchic proposal.
2. European reference was uncalled for.
3. The staff paper doesn't recognise the fact that we are not a mandatory pool but a voluntary diverse market.
4. Everyone has to set up a power exchange at its own risk and peril.
5. CERC is not obliged to create poaching opportunities for the failed exchanges.

Regards



(Ravinder)