

R.V. SHAHI PRESIDENT

23rd August, 2023

To

The Chairman Central Electricity Regulatory Commission New Delhi

Dear Sir,

Summary of proceedings and recommendations of Webinar on

Impact of Market Coupling on Power Markets

Organised by

INDIA ENERGY FORUM on 12th August, 2023

- 1. A webinar on "Impact of Market Coupling on Power Markets" was organized by IEF on 12th August, 2023. The expert panelists present were Dr Pramod Deo, Former Chairperson, CERC, Dr Somit Dasgupta, former Member (E&C), CEA and Shri SK Soonee, former & founder CEO, POSOCO, now Grid-India. The Webinar was addressed by Shri RV Shahi former Secretary Power and President India Energy Forum and Shri Rakesh Nath, Former Member Appellate Tribunal. Over 150 persons participated in the Webinar.
- 2. Shri Rakesh Nath, Vice President, IEF presented a brief background of the subject. Initially, a single power exchange at National level was envisaged. However, CERC after considering suggestions of some stakeholder decided in favour of establishment of more than one power exchange to encourage competition, since one PX would be a monopoly and would tend to be complacent in the long run. Two Power Exchanges, viz., IEX and PXIL were established in the year 2008. Third power exchange has also been established in the year 2022.

- 3. Power Exchange Regulations, 2010 provided that PX shall function with the objectives of ensuring fair, neutral, efficient and robust price discovery, providing extensive and quick price dissemination and design standardized contracts and work towards increasing liquidity of such contracts. It was also decided that registration granted to a PX by CERC shall continue to be in force for a period 25 years to reduce any uncertainty in business operations of the PX.
- 4. Over past decade the energy traded on the PX has increased significantly to over 100 Bus and several new market products have been introduced but the total volume is still about 6.8% of the total generation. However, almost 100% of the energy transactions in Day Ahead Market ("DAM") and Real Time Market ("RTM") take place on one exchange (IEX).
- 5. The Power Market Regulations, 2021 of CERC made an enabling provision for establishment of market coupling and Market Coupling Operator in DAM and RTM with the objectives of discovery of uniform market clearing price, optimal use of transmission infrastructure and maximisation of economic surplus. The market coupling will be made effective from a date to be notified by the CERC. To implement it, a Market Coupling Operator will be designated by the Commission. Though CERC has not designated MCO, the natural choice appeared to be NLDC/Grid India. After the market coupling is made effective, the power exchanges will only be collecting the buy and sell bids and forwarding them to the Market Coupling Operator ("MCO") who will be responsible for discovery of market clearing price. The mechanism for clearing and settlement is yet to be decided.
- 6. In European Union, market coupling has been made effective to couple the power exchanges of different geographical areas. In UK two power exchanges viz., Nord Pool and EPEX Spot are operating independently without any market coupling. In USA and Australia market is operated by Independent System Operators. There is no example of market coupling of power exchanges operating in the same geographical boundary.
- 7. It was proposed to deliberate whether the proposed market coupling would meet the desired objectives of maximization of economic surplus and optimal utilization of transmission infrastructure in the current scenario or it would add to complexity without commensurate advantages? Further, would market coupling result in the power exchanges reduced to bid collection platforms and discourage competition and innovation?
- 8. Shri RV Shahi, President, IEF shared the history of development of PX. He was of the opinion that the market coupling would reduce the role of power exchanges to bid collection agencies and adversely affect innovation. In past the power exchanges have contributed immensely in introducing new market products and educate users to optimally utilize their generation resources and minimise power procurement costs. In fact, full advantage of this important tool of market development has not been possible due to low volume, which is primarily due to lack of supporting actions on facilitating Open Access provision to bring about competition as envisaged in the Electricity Act. This has also been hampered due to absurd levels of Cross Subsidy Surcharge and inadequate implementation of Tariff Policy in regard to managing cross subsidy. The way Marker Coupling has been conceived, one could even suggest that collection of bids could as well be done by the MCO. Is this the way to create market development tools and also create conditions which could border around questioning their relevance?. Two Exchanges were licensed to create competition. A third Exchange has been given licence obviously for further competition. He cautioned against excessive centralisation and also against nominating NLDC/Grid

- India as MCO and digressing them from their main task of grid operation and control and load dispatch.
- 9. Shri Somit Dasgupta opined that with market coupling the power exchanges will be reduced to a post office and will lose all incentives to introduce new market products. Market Coupling was originally envisaged to implement the Market Based Economic Dispatch ("MBED"). He felt that the purpose of MBED was already being met by the Security Constrained Economic Dispatch ("SCED"). He pointed out the difficulties in implementation of MBED. He felt that the market related problems should be addressed first to expand power market.
- 10. Shri SK Soonee presented a new perspective of layered coupling of power exchanges with SCED which will result in increased market volume, robust price discovery, lead to better RE integration and less RE curtailment. Settlement between the PX and SCED can be administered by the MCO. Market Coupling and pan India SCED would the most logical step. It will reduce the hitting of price cap frequently. He added that coupling cannot harm the economic surplus and at worst it will be neutral. Financial derivatives, coupling DSM to market and cross border coupling in future will need market coupling. He advocated that Grid India NLDC should be the MCO as it has the experience of SCED. He made an elaborate presentation giving the advantages of his proposal.
- 11. Dr Pramod Deo stated that the two panelists have given diverse opinions of market coupling. Mr Soonee's presentation gives an altogether different perspective than what was envisaged by the CERC when power exchanges were given 'license' to start business. The preamble to EA,03 talks about competition and choice. Privatization is not explicitly mentioned. Under the UPA regime in the year 2005 the word elimination of cross-subsidy was replaced reducing it to 20 or 30 per cent. Due to competitive populist politics – free power to agriculture and need to subsidize a large population of domestic users – industry and commerce continue to carry unbearable burden of this cross-subsidy. Exchanges provided an option of buying electricity to state discoms to fulfill political dictates of the State Governments when traders started declining selling power on credit. Capturing a large share of this 'small market' by IEX was due to the efforts of its members to bundle the demand of small industrial consumers to provide economical power by "open access". Howsoever laudable the intent of the Central Government, in a federal structure, State Governments wishes cannot be overlooked. Hence, in any proposed reform- no doubt desirable - States must have freedom to manage their resources. He, therefore, felt that a group of experts both from the States and the Centre should examine the feasibility of market coupling, what shape it will take and its timeline for implementation.
- 12. This was followed by a QA/interactive session in which the industry experts and others expressed their opinions some of the experts who participated in the interactive session were Mr. Anil Razdan, former Power Secretary, Mr. Ghanshyam Prasad, Chairperson, CEA, Mr. Ravinder, former Chairperson, CEA, Mr. VS Verma, former Member, CERC, Mr. Rajesh Mediratta, MD & CEO- Indian Gas Exchange, Mr. SC Saxena, ED, NLDC, Mr. Shantanu Dixit, Founding Member Prayas and Mr. Amey Kulkarni. While most of them were apprehensive whether this initiative would serve the intended purpose, some of them felt that it was not the right time to go ahead, that size of volume needed to increase and that we needed to further examine and evaluate.

Conclusion & Recommendations

- 13. It was noted that unlike EU where market coupling of power exchanges in different geographical areas has been executed, the Indian power market is voluntary and the power exchanges are operating in the same geographical area. The general consensus was that the proposed market coupling for DAM and RTM will not serve the desired purpose of maximization of economic surplus and optimum utilization of transmission system as almost entire transactions in these market segments is taking place at one exchange. It may only result in even distribution of the business of bid collection in DAM and RTM amongst all the power exchanges which is not the stated objective of market coupling. On implementation of market coupling the power exchanges will be reduced to bid collection platforms and will not have any incentive for innovation and competition. Market Coupling may only be required once the system is ready to implement MBED. For other market products such as derivatives, market coupling may not be essential. Mr. Soonee presented a new perspective of coupling of power exchanges and SCED which required a detailed examination.
- 14. It is recommended that CERC may constitute an expert committee comprising industry experts, academicians, CEA, Grid-India, SLDC and representatives of Discoms, generating companies and consumer representatives, who are users of PX to examine the pros and cons of market coupling, timing of implementation and proposed structure and give its recommendations. The Committee may also examine the international experience of market coupling. It was felt that CERC may conduct market surveillance from time to time and make the report public for ensuring transparency.

With Regards,

R.V. SHAHI President

India Energy Forum