

### NATIONAL SOLAR ENERGY FEDERATION OF INDIA Regd. No. 362 / IV of 8 May, 2013 भारतीय सौर ऊर्जा महासंघ पंजीकरण नं 362 / IV - 8 मई, 2013

**Ref:** NSEFI/CERC/2023-24/0023

Date 13.10.2023

To,

#### The Secretary,

Central Electricity Regulatory Commission 3rd & 4th Floor, Chanderlok Building, 36, Janpath, New Delhi- 110001.

**Subject:** Comments and suggestions on the Staff Paper "Market Coupling"- reg.

Sir,

Greetings from National Solar Energy Federation of India (NSEFI).

National Solar Energy Federation of India (NSEFI) is a non-profit organization with the objective of advocating for renewable power development. It is an umbrella organization representing Renewable energy companies active along the whole photovoltaic value chain: project developers, manufacturers, engineering companies, financing institutions and other stakeholders. NSEFI was founded in 2013 by solar energy industry leaders with the vision to promote solar energy, NSEFI is a public trust based in New Delhi. Our members have executed Solar as well as Wind power projects across the country, under the State and Central Schemes across India.

At the outset, we are grateful to the Central Electricity Regulatory Commission (CERC) for notifying the Power Market Regulations, and their amendments from time to time to promote competition and to adopt transition to market-based mechanisms. These regulations are founded on the principle that power exchanges play a crucial role in achieving efficient price determination and optimizing economic benefits for transactions in the short-term power market. The diverse range of products available on their digital platform, accessible 24/7 throughout the year, provides market participants with the essential flexibility to establish and adjust their positions, enhancing the overall dynamism and vitality of the sector.

Currently, among the three power exchanges in the country, transactions in the Day-Ahead Market (DAM) and Real-Time Market (RTM) segments are exclusively taking place on a single power exchange. Despite the presence of other exchanges offering comparable or superior technology and lower transaction costs, they struggle to attract participants to their platforms. In many instances, these exchanges only receive either buy or sell orders, preventing the completion of a two-sided auction process, which is not conducive to a healthy market environment. This situation gains particular significance as the most recent exchange managed to capture one-third of the TAM segment within a year of its launch but faced difficulties in competing in the Collective Segments. This underscores a gap in the market design that favours the established exchange.

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Ministry of Power too has taken note of this market design challenge and has written to the Hon'ble Commission in its letter dated 02nd June 2023 to take up Market Coupling implementation expeditiously.

CERC notification No.Eco-14/1/2023-CERC dated 21st August 2023 seeking comments on the Staff Paper on Market Coupling is hence being seen as a good initiative to implement this long pending market reform. We believe that Market Coupling would act as a key milestone in the development of the Indian Power Market that would enable a more robust price discovery in the collective market segments, supporting the One Nation, One Grid, One Price mission of the government.

We further submit our views on all the points mentioned in the staff paper in Annexure-1 below:

With Best Regards



Subrahmanyam Pulipaka Chief Executive Officer National Solar Energy Federation of India

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## भारतीय सौर ऊर्जा महासंघ पंजीकरण नं 362 / IV - 8 मई, 2013

Annexure-1

#### **Comments on Market Coupling**

Subject: Comments on CERC Staff Paper on Market Coupling

The following are the key points in favour of the implementation of market coupling.

- 1) At present, we are dependent on a single power exchange to meet most of our power sale requirements. It's important to note that more RE capacity is set to be added to the generation mix and most of this power will be traded through power exchanges. In such a scenario, relying exclusively on a single exchange to satisfy our power needs may not align well with the evolving market dynamics. As power generators, we firmly advocate for a diverse array of options that would allow us to select power exchanges in accordance with our preferences and the quality of services offered.
- 2) As per the vision document of Ministry of power and our commitment to add 500 GW of Renewable capacity, most of them would be a merchant and will trade through Exchanges in collective segments. Since all the generators will try to bid the lowest price so that their quantity can be cleared, this will lead to a significant price drop which would in turn sends a wrong signal to the market for future investment. Hence, an increase in market depth is necessary to ensure more reasonable price discovery. Coupling would ensure that the Govt can implement a lot of measures envisaged in the Ministry of Power vision document, thus supporting RE integration and the Government of India's RE commitment.
- 3) There is an increasing need in the industry to get access to schedulable RE power and multiple efforts have been made by the Ministry of Power to facilitate the integration of storage technologies that can make this possible. The demand supply and the power price scenario at the exchanges provide necessary signals for developers and technology providers in the storage domain to take longer-term calls on their investments in this domain for the Indian market.
- 4) Monopoly in any market inherently restricts innovation which is not suitable for the market as a whole, whereas competition by its very nature promotes innovation. In the context of the power markets, we feel that competition through market coupling would help in bringing innovative products that will cater to the specific needs of RE players. Competition would inherently compel the multiple exchanges in the country to forge closer relationships with market participants and acquire market share through their innovative contributions to the overall development of the power market.
- 5) Liquidity in one exchange and absence of it in other Exchanges is not due to the superior technology as two exchanges are running with same algorithm in collective segments, instead it is because of the fear of price difference which restricts market participants to participate in other Exchanges and thus a market design which was envisaged for a competitive market ends up in creating a monopoly which is not good for a national interest.

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- 6) Indian Power market is growing at a fast pace and to cater to the needs of the growing demand, lots of market-based instruments is to be launched soon like Capacity market, Market Based Economic Despatch, CFD contracts etc. to increase the depth of the collective segment. Therefore, this is the right time to implement Market coupling so that the Exchange market can evolve during this transformation.
- 7) After the market coupling, Europe regulators has also felt the need of having multiple exchanges in same geography, genesis of having multiple Exchange model was:
  - a. To have the urgency on the operative Exchange to innovate to survive competition.
  - b. Provide ample opportunity for new exchange to enter the market based on product differentiation, service improvement etc.
  - c. Level playing field has been achieved through market coupling, hence concentration in one exchange is not ideal for the market.

India is already running in multiple Exchange model, and the efficacy of such competition can be achieved only when the price reference barrier is lifted through market coupling.

- 8) Market coupling Operator: In our view, Transmission system operator (TSO) is not a commercial body therefore there is no incentive for TSO to innovate and alter the matching algorithm as per the changing market needs. TSO shall be kept out of purview of Market coupling operator. In our view MCO can be:
  - a. Exchanges on rotation basis Exchanges are well equipped of the know-how of matching algorithm and being interested parties will keep innovation and market needs at the forefront for designing the matching engine. It also provides redundancy as we will have three matching engines, so failure of one will not have an impact as other can be asked to do the matching.
  - b. Any other entity, joint venture of Exchanges/TSO can also be explored as market coupling operator.
- 9) Congestion Management- As the Prices of the Power Exchanges will be lowered down due to higher participation and higher clearance of the volume, it is likely that the congestion may increase in the other market segments where the prices are generally higher than the Day Ahead Market and Real Time Markets. Suitable provisions should be kept to make sure that margins are available for the other market mechanisms like GDAM, GTAM etc
- 10) Lower Cost realisation to RE Projects- As the RE capacity especially the Solar capacity is growing at higher pace, there will be higher participation of RE projects in the exchange for

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their excess energy and if it is built on the Merchant Market Mechanism. The higher participation may lead to lower price realisation to RE Project developers. Suitable mechanism should be built to protect the interest of RE project developers as the commercial viability of the project would be at stake if the realised prices are very low.



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