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## STAFF PAPER ON POWER MARKET PRICING

Having been closely associated with the development of ISTS open access, design and architecture of power exchange, TBCB in transmission, PoC tariff, drafting new IEGC and innovating GNA, kindly permit me to comment on the above Staff Paper.

## **Comments**

- 1. There is a critical difference between our market and European markets referred to in the Staff Paper. More than 90% of our electricity supply is tied up in long term PPAS. Each PPA has a unique regulated or bid out price. Open market volume is distributed in MTOA, STOA, DAM, Contingency and Real Time categories. Ancillary products are separate. Our market is called a **diversified market**. It doesn't have a **uniform clearing price** (UCP) as was proposed by CERC in its MBED draft. The European markets mentioned in the Staff Paper are centralised and have a UCP. We have UCP only on 3-4% volume on the day ahead PX. It's not correct to compare our situation with the West. Our PPA prices are rock stable. There is no volatility even in MTOA.
- 2. The Ukraine crisis was unexpected. The market UCP is being cleared at gas prices. As a result nuclear and RE power is also being cleared at five times higher. This is a failure of the MBED design which CERC was earlier trying to advocate.
- 3. Our price rise is not due to Ukraine. Our demand was already forecast by CEA. Due to COVID, there was a slump in the market as well GDP. **V-shaped** recovery had been forecast and it happened this year. Coal India and imported coal based plants were lax. Hence the price volatility in the short term market. By and large, the consumers remained protected, thanks to the concept of preserving the PPAs as conceived in the 2007 Staff Paper on market design. It's available at <a href="https://cercind.gov.in/13042007/signature.pdf">https://cercind.gov.in/13042007/signature.pdf</a> in 2007 Archives at CERC website.
- 4. Overall price cap of ₹ 12/- is a sensible thing for PX and STOA.
- 5. The idea of **pay as bid** has been discussed in the 2007 Staff Paper. It was observed the suppliers slowly creep near the UCP. Not a good idea for **DAM**. However, it works with **RTM** as in the UK.

- 6. TECHNOLOGY-WISE PRICE CAPS IN DAM: This was also discussed in the 2007 Staff Paper but discarded due to practical reasons:
  - a. Merchant IPPS are reeling under losses, let's not kill them with a price cap.
  - b. Free Hydro: HP argues that it's revenue is used for building roads and social welfare schemes.
  - c. Merchant RE: It has solar, wind, hybrid, ESS, green H2 power. Things are in the nascent stage and we should not send a negative signal.
- 7. Finally, I want to say that we should give up laxity in replacing old 100-200 MW thermal coal series with supercritical thermal plants. It will save coal and reduce emissions. There will be the life line to ramp up and down to save the grid when RE fluctuates. We can't afford BESS but we can install pump storage hydro on a mission mode including off stream pumped hydro.
- 8. I request that this is a supply side issue and not demand side management. Our per capita demand in one fourth of Europe.

Regards
(Ravinder)
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