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Ref: RA/BYPL/2018-19/232

Date:15 February 2019

To,
The Secretary
Central Electricity Regulatory Commission,
3rd&4th Floor, Chandralok Building, Janpath
New Delhi - 110001

Subject: BYPL Comments on Discussion Paper on "Market Based Economic Dispatch of Electricity: Re-designing of Day-Ahead Market (DAM) in India"
Ref: Hon'ble CERC public notice dated 31.01.2019

Dear Sir,

We write with reference to the Hon'ble CERC public notice on Discussion Paper on "Market Based Economic Dispatch of Electricity: Re-designing of Day-Ahead Market (DAM) in India"

In view of above, please find enclosed the comments of BYPL as **"Annexure-A"** for kind consideration of the Hon'ble CERC. BYPL can provide in-person briefing if required by the commission.

Thanking you,

For BSES Yamuna Power Limited

You're sincerely,

Gagan B Swain

Head-Regulatory Affairs

Encl: As above

Annexure "A"

BYPL Comments on CERC's discussion paper on Market Based Economic Dispatch of Electricity Re-designing of Day-Ahead Market (DAM).

- We appreciate the fact that the Commission is exploring the possibilities of creating a regulatory framework for further optimising scheduling and despatch of Generating stations, particularly ISGSs, with the overall objective of minimising the production cost of the system.

- Observing the fact that the cheaper power is being remained unscheduled as DISCOMs who don't have contract with the generator cannot schedule it, the Hon'ble Commission has issued this discussion paper having solution to this issue.

- As a DISCOM perspective, we are in principal agreement with the concept adopted by the Commission. However, we have identified few issues pertaining to the proposed MBED mechanism which need clarity and the solutions accordingly:-

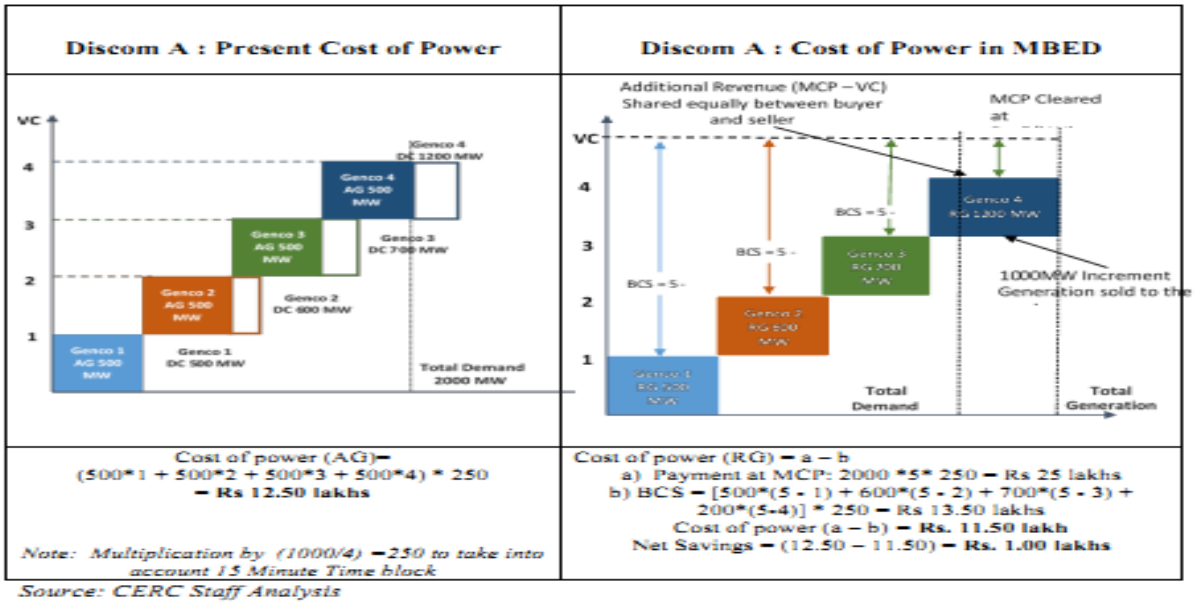
1. **Advance guarantee money for day ahead transactions:**-

CERC proposal:-As per the discussion paper, the 100% power will be scheduled under MBED model.

BYPL comments:-

- Compare to existing practice, states will be requiring more money as advance guarantee for the settlement of the transactions in power exchanges due to increase in transaction volumes.
- At present the power purchase bills are being settled in a period of 30 to 60 days as per the CERC regulations. DISCOMs are collecting the money from the consumers on monthly basis and the same is being utilized for the payment to the generators as per the contracts.
- Current advance settlement for Exchange based transactions on daily basis will not be possible to continue for cash strapped DISCOMs.
- Further, the MCP based payments in proposed MBED mechanism is higher compared to the procurement cost in present mechanism. This can be identified the example given in the discussion paper (Figure-23) as under:-

Figure 23. Procurement Cost in Present Design and Proposed MBED Design (MCP (Rs. 5/kWh)>Contracted Price (Rs. 4/kWh))



Source: CERC Staff Analysis

- As explained in above figure in the discussion paper, the present cost of power is Rs 12.50 lakhs which is payable after 30-60 days by the DISCOMs/States to the generators. In proposed MBED mechanism, the front end payment has been doubled to Rs 25 lakhs for which the advance guarantee money will be required to be submitted in power exchange. The net savings after the settlement is Rs 1 lakh only.
- **This issue of very high advance money need to be addressed by the commission**.
- **We propose the current practice of settlement in bilateral contracts to be followed in exchange based transactions**.
- I**n this scenario no working capital is available to Gencos.**

2. **50:50 sharing of URS power.**

CERC proposal:- As per the discussion paper, revenue earned through URS power sold in the MBED mechanism is proposed to be shared among the beneficiaries and Gencos on 50:50 basis.

BYPL comments:-

- Presently, DISCOMs, after merit order analysis schedule the power from the contracted generators. DISCOMs have liberty to schedule extra power to sell in power exchanges for earning some revenue as a difference between market MCP and VC of generators to release the FCs.
- In proposed mechanism, DISCOMs will get power from the MBED mechanism. And benefits of URS power of generators sold under MBED mechanism are being shared among the generators and DISCOMs on 50:50 basis, which is currently being fully retained by DISCOMs.
- Keeping in view of the fact that the generators recovering the Fixed cost from the beneficiary DISCOMs and DISCOMs currently earning 100% benefits of sale of power, we request Hon'ble commission to have a relook on the proposed mechanism of URS power benefit sharing and increase the share of cash strapped DISCOMs/ states. **We propose that the benefits sharing will be given 100% to the beneficiary (contracted) DISCOM till the adjustment of fixed cost. Above the recovery of full fixed cost by the DISCOMs, the benefits can be shared on 75:25 between DISCOMs and generators. The shape of DISCOM are passed to the consumers. As consumers own the capacity they need to be shared with 50% of the benefit. Thus it will be finally 50:25:25 between DISCOMs, generators and consumers.**

3. **Clarity on fuel cost data**:-.

CERC proposal:-As per the discussion paper, the power will be scheduled from the national pool to the buyers through the merit order for which the variable charges of generators, as determined by the Appropriate Regulatory Commission will be considered.

BYPL comments:-

a) The present merit order is based on the fuel cost of the past data, with time lag of up to two-three months in billing cycle. This delay, reflects the negative impact on the merit order, as one generator having high fuel cost in previous month don't get scheduled even if the current cost is less than the other generator which has been scheduled based on the less fuel cost of previous month. An Example in this regard is shown below:-

Details of Variable Cost of NTPC stations supplying power to Delhi											
S.No	***Plant***	***Apr-18***	***May-18***	***Jun-18***	***Jul-18***	***Aug-18***	***Sep-18***	***Oct-18***	***Nov-18***	***Dec-18***	***Jan-19***
		VC/U	**VC/U**	**VC/U**	**VC/U**	**VC/U**	**VC/U**	**VC/U**	**VC/U**	**VC/U**	**VC/U**
1	UNCHAHAR-I	2.5	3.0	3.0	2.8	2.6	3.2	2.8	3.0	3.1	2.8
2	UNCHAHAR-II	2.5	3.0	3.0	2.8	2.6	3.1	2.8	3.0	3.1	2.8
3	UNCHAHAR-III	2.5	3.0	3.0	2.9	2.8	3.1	2.8	3.0	3.0	2.8
4	FARAKKA	2.4	2.2	2.2	3.6	0.5	2.3	2.0	2.4	2.3	3.1
5	KAHALGAON	2.4	2.1	2.1	2.4	2.4	2.3	2.2	2.2	2.3	2.2
6	KAHALGAON II	2.3	2.0	2.0	2.3	2.2	2.2	2.1	2.1	2.2	2.1
7	NCPP	3.2	3.5	3.6	3.9	4.0	3.6	3.7	3.3	3.6	4.7
8	NCPP-II	3.0	3.3	3.4	3.8	3.7	3.4	3.4	3.3	3.5	4.1
9	RIHAND -II	1.3	1.3	1.2	1.3	1.4	1.3	1.4	1.3	1.5	1.3
10	RIHAND -III	1.4	1.3	1.2	1.3	1.4	1.3	1.4	1.3	1.4	1.3
11	SINGRAULI	1.3	1.3	1.4	1.3	1.5	1.4	1.3	1.4	1.4	1.4
	NTPC Total	2.5	2.7	2.8	3.0	2.8	2.7	2.7	2.4	2.5	2.8
	JHAJJAR	3.2	3.4	3.7	3.5	3.3	3.4	3.3	3.6	3.1	3.7

Above is shown the month wise fuel cost details of NTPC stations supplying power to Delhi DISCOMs. As per above, the yellow colour cells shows that in Oct-18, the VC of NCPP was higher than Jhajjar plant of NTPC hence for Nov-18, power from Jhajjar station was scheduled. But once the actual data received for Nov-18 (in Dec-18) from NTPC, the fuel cost for NCPP I & II became less than the MCP of Jhajjar. This defied the merit order dispatch principle.
To get the more accuracy of variable charges, the time gap of fuel cost need to be minimized by the generating companies. Generators can suggest alternative approach, if any, for more accurate economic operation of merit order.

b) The Gas based station had only APM and PMG gas allocation, which was barely adequate for 30% capacity. For the balance capacity, Generator resorted to arranging RLNG, which was much more expensive than domestic gas. To meet the power requirement DISCOMs follows the merit order despatch, however due to shortage of domestic gas generator declared DC on RLNG for balance part which is not fall under the MoD principle. All Gas based plant have long term Gas sale agreement with GAIL having "Take or pay liability and it will be calculated at the end of the calendar year.

We request Hon'ble Commission, while framing the MBED scheduling, take or pay liability to be abolished to avoid the unnecessary burden to end consumer.

4. State Gencos participating in MBED:-.

CERC proposal:-As per the discussion paper, the power will be scheduled from the national pool to the buyers through the merit order for which the variable charges of generators, as determined by the Appropriate Regulatory Commission will be considered.

BYPL comments:-

- Presently, the state gencos, supplying power to the states where they are set up, are not the part of the ISTS transmission system planning. Once the state gencos allowed participating in the MBED mechanism, they will be utilizing the ISTS system which is not panned for them to be utilized. This may cause impact in the grid security.

- Further, presently DISCOMs/ states are only obliged to pay the state transmission charges for the state gencos but after MBED, the charges for ISTS system uses will also be levied on to the DISCOMs/ states.
- **This issue may kindly be addressed by the Hon'ble commission so that no additional payment for CTU is not charged on DISCOMs.**

5. **Treatment of partially cleared bids of generators under MBED mechanism**:-

CERC proposal:-As per the discussion paper, once the proposed MBED mechanism will be fully operational, the DISCOMs will approach the power exchanges with their 100% demand bids and the self-scheduled generators will offer their complete capacities entirely on the exchange along with their price offers.

BYPL comments: - Here, the issue of force scheduling up-to technical minimum due to partial bid clearance needs clarity. The same is being explained with an example hereunder:-

- Let us assume that the 5 generators (A, B, C, D, E) having installed capacity of 800 MW each, are participating in the MBED mechanism and at MCP based settlement, the 5th Generator gets cleared for 100 MW for a buyer who is not a contracted beneficiary to this Generator E. But, to serve the 100 MW power under MBED, the generator has to run up-to its technical minimum of say 400 MW.
- **We understand that the excess of 300 MW power will get scheduled to its contracted beneficiaries who have already arranged the power through MBED**.
- The excess power scheduled due to technical minimum will become unmanageable in terms of utilization and the violations as per DSM regulation (sign reversal and Underdrawal penalties) will increase.
- **The above mentioned issue needs clarity from the Hon'ble commission, hence to deal with these surplus generation in these scenarios.**

6. **Power Disposal in real time market**:-.

CERC proposal: - 100 % power will be traded in MBED mechanism

BYPL comments:-

- Once the MBED gets operational, DISCOMs will be bidding for their demand requirements only in Day ahead market. According to the MCP power will be allocated to the DISCOMs/ states from the national pool of power.
- Lets say One DISCOMs has predicted that 1000 MW power is required for the next day and has arranged the 1000 MW power in day ahead market. But in real time, the power requirement is only 900 MW.
- The surplus available in real time basis need to be disposed in the real time market (RTM) and vice versa.
- Whether DISCOMs will be allowed to sale/purchase the power in RTM or not? The point is not clarified in this discussion paper.
- There is no clarity on the real time mismatch between demand and supply.

7. **Accounting of Losses**:-

CERC proposal:- No discussion on loss accounting in the present discussion paper.

BYPL comments:- The present issue of double accounting of losses for power supply also can be considered for framing the guidelines for MBED model, explained hereunder:-

- At present, the ISGS generators for which the variable charges are determined by the appropriate Regulatory Commission are not allow to participate in the power exchange transactions. State/ DISCOMs, based on the availability and market economy, sell power from these generators to buyers.
- For accounting purpose, the power first get scheduled to the states from the generators and then from the states to buyers in power exchanges. Accordingly, losses also get accounted twice. This double accounting of losses impacts DISCOMs revenue and serves no purpose.
- As, now the generators will also allowed to sale the power directly in power exchanges, it is proposed to sell the power by generators, directly from injection point of generators to the end buyers through power exchanges. This will minimize the double accounting which in turn reduce the commercial losses of the cash strapped DISCOMs.
- Clarity may be given how to deal with the above losses.

8. **Cheaper Plant with-holded by any large Generator for costly plant scheduling and False DC declaration**:-

CERC proposal:-As per the discussion paper, the MCP in each time-block would be the bid value of the last generator/sellers' offer matched to meet the demand offers. The generators will get dispatched based on the merit order based on the variable charges declared in RRAS.

BYPL comments:- Here, the issue of gaming needs to be looked into. The same is being explained hereunder:-

- Say a company having 3 generators A,B and C of VC Rs 1 PU, 2PU and 3PU are participating in MBED. Generator A and B always getting scheduled under MoD but Generator C don't get scheduled most of the time. To get the schedule for Generator C, company may decide to with-hold its cheaper generation which cannot be challenged by the buyers.
- Similarly, the high VC generators which are not being scheduled most of the time in MBED, may decide to declare the false DC which cannot be challenged by the buyers/ beneficiaries.
- **The issue need to be addressed by the commission**, how to deal with this situation.

9. **Impact on Transmission system planning**:-.

CERC proposal:-As per the discussion paper, the power will be scheduled from the national pool to the buyers who may be or may not be the beneficiaries of that generator.

BYPL comments:-

- At present the transmission system planning is presently linked to long term access to target beneficiaries/ region. The proposed MBED mechanism is oriented towards least-cost procurement of power from the electricity market.
- Means the transmission planning is being done on contract basis, system utilization is proposed to be done as per the least cost procurement basis i.e. non-contract basis and again the commercial settlements are being done as per the contract basis.
- **The difference among these 3 pillars of electricity sectors i.e. transmission, generation and distribution need to be realigned based on the proposed MBED model**.

10. **Treatment of Dedicated Transmission Lines**:-.

CERC proposal:-As per the discussion paper, the power will be scheduled from the national pool to the buyers who may be or may not be the beneficiaries of that generator.

BYPL comments: - At present for contracted power, the charges for dedicated transmission lines are being borne by the beneficiaries. Now as the generators are allowed to bid in exchanges, the treatment of dedicated transmission lines need to be checked. In case of Delhi, an example of dedicated transmission line is given below:-

- Delhi DISCOMs are having contract of 75% of power from 980 MW Dadri –II plant. The power is being evacuated through 400 kV D/C Dadri-Loni Road transmission line own by NTPC.
- This 400 kV transmission line is a dedicated transmission line executed by the NTPC for evacuation of power for NCTPS Stage II Dadri Station till the Loni Road Sub-station of Delhi Transco Ltd. This transmission line is not part of any meshed network of ISTS
- Once the Dadri generator allowed to bid under MBED model, the power will be flowed to the other states which may not be the beneficiaries of the Dadri plant. Due to this, the dedicated 400 kV D/C Dadri-Loni Road transmission line may no longer required to be used as a dedicated transmission line for Delhi.
- **This issue need to be addressed by the commission.**

11. Benefits to Non-LTA buyers over LTA buyers:-

CERC proposal:-As per the discussion paper, the daily demand will be met through the daily availability through the power exchange route.

BYPL comments:-

- With the numbers of measures taken for relieving the congestion in transmission network, the transmission constraints rarely occurs in the ISTS network. With the sufficient transmission system has been built in the country to manage the load requirement of the states.
- Although, as proposed by the commission, the 100 % daily power need will be met through the power exchange route, the liability towards payment of transmission charges on long term basis is still on the states/ DISCOMs having the long term contracts. States/ DISCOMs having more LTA will pay more charges to the CTU under POC regime and then will again pay under power exchange settlement mechanism.
- On the other hand, the state/ DISCOMs/ generators having less LTA, even has used the same transmission network, will pay the less charges to the CTU under POC regime and will pay, only for the quantum traded under power exchange settlement mechanism.
- **This issue need to be addressed by the commission**

12. Daily IEX charges (STU & CTU) need relook:-

CERC proposal:-As per the discussion paper, the 100% power will be scheduled under MBED model.

BYPL comments:-

- At present the power procurement by States has slightly moved from long term to shorter term contracts. As per the CERC analysis in this discussion paper, 87% long term transactions dominate the share of total electricity transaction in the country. Remaining power is being procured through Bilateral transactions with other DISCOMs and power exchanges.
- States pay monthly transmission charges under long term basis as per POC mechanism. For partial short term transactions, states pay the Short term Open access charges to the nodal agency and power exchanges.

- In case of Delhi, the present rates of STU charges are Rs 258.73/Mwh and CTU charges (drawal) are Rs 135.6/MWh.
- **Keeping in mind the huge increase in power exchange transactions, the CTU and STU charges need a relook for which the Open access regulation need to be revisited by the Hon'ble commission.**

13. Trading margin for Power exchanges:-

CERC proposal:-As per the discussion paper, the 100% power will be scheduled under MBED model.

BYPL comments:-

- Presently the importance is being given to the LTA based transactions over power exchanges as LTA based transactions are being executed on the planned transmission network. Power exchange based transactions are considered for meeting the day ahead residual demand. But moving forward towards MBED model, LTA based planning may no longer be required.
- Moving towards 100% market based transactions will increase the volume in power exchanges to manifolds. Present exchange trading margin of 2 paisa per unit need to be relooked.
- **We propose the trading margin charges to be charge on percentage basis instead of per unit basis i.e. 0.1% of transaction amount or alternatively some capping on the power exchange trading margin amount can be considered.**

14. Participation of RE generation under MBED:-

CERC proposal:-Participation of RE generators in the proposed mechanism is not clear.

BYPL comments:-

- If RE generation comes under the ambit of this MBED mechanism then the Costly RE generation having single part tariff will not get scheduled.
- Further, If RE power comes under the ambit of MBED, then variation in RE generation need to be settled under DSM for exchange based transactions.
- **This issue needs clarity from the commission.**