



TATA POWER-DDL

Tata Power DDL/PMG/CERC/31082018

Dated 31st August' 2018

Mr. Sanoj Kumar Jha
The Secretary,
Central Electricity Regulatory Commission,
4th Floor, Chanderlok Building, 36, Janpath
Delhi – 110033

Subject: Discussion paper on Re-designing Real Time Electricity Markets in India.

Dear Sir,

This has reference to the public notice number No.RA-14026(11)/2/2018-CERC dated 25th July' 2018 issued by Hon'ble CERC on the above captioned matter, wherein, comments and suggestions on the subject matter were invited latest by 31st August, 2018

In line with the above, please find enclosed our comments on the subject matter as an annexure to this letter.

Please let us know in case further clarification/ details are required on the same.

Thanking you,

Yours sincerely,

For Tata Power Delhi Distribution Limited,


Sumit Sachdev
HoD (Power Management Group)

TATA POWER DELHI DISTRIBUTION LIMITED

(A Tata Power and Delhi Government Joint Venture)

Corporate Office : NDPL House Hudson Lines Kingsway Camp Delhi - 110 009

Annexure

Tata Power-DDL Comments/Suggestions on Discussion Paper on 'Re-designing Real Time Electricity Markets in India'

Background: From the (Draft) Discussion Paper on 'Re-designing Real Time Electricity Markets in India it is understood that Present Power Market Design lacks certain flexibilities for ensuring availability of power on real time basis in a cost effective manner which is one of the reasons for volume traded under intra-day market being at a very miniscule level of less than 1%. With the passage of time, and considering the emerging needs of large scale RE integration, the present power Market Design in India needs to be reviewed to ensure more efficiency in real time operations, optimal utilization of resources on a country wide basis and reduction in overall cost of power procurement. Major limitations of the present Intra-day Power Markets have been listed below for reference:

- a. The price discovery methodology of current intraday trade (I.e. continuous trading based on pay as you bid principle) is based on price matching as against the auction based price discovery in which uniform clearing price is worked out for each time block/hour. The current intra-day methodology does not reflect the actual cost of power being traded.
- b. Currently we need at least a gap of 3 clear hours between the trading time and commencement of supply (for example to purchase power during 20:00 to 21:00 hrs the intraday bid needs to be placed latest by 17:00 hours. This means that for 3 hours on an intraday basis, there is virtually no availability of power in short term Market.
- c. Bids in the present intraday market have to be placed for one complete hour. Bids cannot be placed for any specific 15 minute block of any hour.
- d. The above leads to less liquidity and flexibility in the intraday markets.
- e. As per the provision in Tariff Policy, 2016, beneficiaries have an option to offer its un-requisitioned generating capacity to the respective generators at least 24 hours before 00.00 hrs of the day of dispatch. However, the same has failed to exude much response due to uncertainty associated with day Ahead Exchange Rates and non-availability of real time (hourly) markets.
- f. Current intraday Market structure is not capable enough to meet the sudden variation in demand and schedule which has become a reality now due to the ongoing and proposed large scale integration of RE generation. Moreover any contingency in the form of Generation outage would lead to over-drawl from Grid in the absence of a robust hour ahead intra-day market.

- g. As a result of the above and due to non-availability of real-time trading instruments, there is over dependence on DSM / UI by the utilities and excessive reliance on ancillary services for longer durations as they do not have a choice of real time power procurement/sale.

Tata Power-DDL point wise submissions on the subject have been appended below:-

Tata Power-DDL welcomes the Proposed Real-time Market (RTM) design as provided in the subject discussion paper as mentioned below:

RTM Auction Start Time	RTM Auction End Time	RTM Clearing Interval	Communication with RLDC/SLDC and Schedule Preparation	Delivery Period (Delivery on the Same Day, MCP and MCV will be discovered for each 15 minute block)
22:30 Hrs (of the previous day)	23:00 Hrs (of the previous day)	23:00 Hrs – 23:30 Hrs (of the previous day)	23:30 Hrs – 24:00 Hrs	00:00:00 - 01:00:00
23:30 Hrs (of the previous day)	00:00 Hrs (of the delivery day)	00:00 Hrs - 00:30 Hrs	00:30 Hrs – 01:00 Hrs	01:00:00 – 02:00:00
...				
07:30 Hrs	08:00 Hrs	08:00 Hrs - 08:30 Hrs)	08:30 Hrs – 09:00 Hrs	09:00:00 – 10:00:00
...				
21:30Hrs	22:00Hrs	22:00 Hrs – 22:30 Hrs	22:30 Hrs – 23:00 Hrs	23:00:00 – 00:00:00

The above changes in the power market design would bring the following benefits:

- a. The price discovery would be based on double sided closed auctions with uniform market clearing price. The same would result into more transparent and efficient (hourly/block wise) price discovery in power exchange and rates so discovered would be a reflection of real time demand supply situation.
- b. The real time market shall be conducted once in every hour for delivery in four fifteen minute blocks in each hour. Such faster transaction/settlement would give an opportunity to the Discoms to vary their schedules in line with actual operating conditions and meet the real time demand in a more efficient manner rather than depending heavily on DSM/UI and Ancillary services as being done in the present case.

- c. The same would definitely bring more capacity vying for getting dispatched in the open market, thereby resulting into reduction in intraday prices and providing growth to the economy as power would be available at cheaper rates.
- d. Intraday block wise contracts would be financially binding and the same would bring more discipline in the power markets.
- e. As the buyers and sellers would have an option of buy/sell power close to real time, this hourly intraday auction market will help in handling variations of renewable energy generation in the system.

Tata Power-DDL queries/suggestions:

1. The provision of Gate closure being proposed to be introduced needs to be explained in detail from the perspective of State Discoms. Even today for any sale bid being placed on power exchange by a State Discom on a day ahead basis the cut off time is 12:00 hours of the current day and once the Sale or purchase obligation is firmed up by the exchange, there is no provision for revision of such sale or purchase quantum. In other words, any day sale/purchase bid being placed by a State Discoms is already a firm and binding contract with no schedule revision permitted by the seller/buyer. In this context how the provision of Gate closure is going to impact the State Discoms/utilities needs further explanation.
2. A road map needs to be worked out to specify the detailed operating procedures regarding as to how the real time co-ordination between different agencies like RLDC, SLDC, NLDC, Buyers/sellers and Power Exchanges would take place for clearing an approval of real time transactions.
3. Apart from the proposed changes in the Real Time Market Design, a detailed mechanism is also required to be specified wherein, Discoms are allowed to sell their surplus power directly from the Generators bus without sharing any revenue with the generator on account of such sale of surplus power. If such sale is executed, on an advance basis, within a certain predefined time frame, then in such case, PoC transmission charges to the extent of quantum less withdrawn (against its LTA) by the Discoms should also be adjusted in the monthly long term transmission charges bill of such Discom. It will also result into increased liquidity of low cost surplus power in open market.