

एन टी पी सी लिमिटेड

(भारत सरकार का उद्यम)

(A Govt. of India Enterprise)

केन्द्रीय कार्यालय/Corporate Centre

31st August 2018

To. The Secretary, Central Electricity Regulatory Commission 3rd and 4th Floor, Chanderlok Building, 36, Janpath, New Delhi- 110001

Subject: NTPC's Comments on the Discussion Paper on "Re-Designing Real Time **Electricity Market in India**"

Sir,

Please find enclosed NTPC's Comments on the Discussion Paper on "Re-Designing Real Time Electricity Market in India". These comments are broadly on the principles and concept of the Real-Time Market. The detail comments will be submitted on the Draft Regulations if and when issued.

Thanking you,

Yours Sincerely,

(Atish Bay Roy) GM (Commercial)

As enclosed

NTPC Limited

Comments on the "Discussion Paper on Re-designing Real Time Electricity Market in India"

At the outset, NTPC would like to compliment the staff of Hon'ble Central Electricity Regulatory Commission for this initiative to redesign the Real Time Electricity Market in India.

The present day Contingency market (which is the nearest to RTM today) suffers from poor liquidity and consequent volatility in prices. This is on account of:

- 1) Uncertainty in availability of surplus power- the absence of Gate closure as identified in the paper.
- 2) Absence of a mechanism closer to Real-Time today's market is cleared at best three hours prior to delivery. This results in a long lock-in period for all the bids where no alternatives can be explored for this power.

The large unexpected variability of 'must run' Renewables coupled with the above two reasons has often shown large quantum of very cheap pit-head station power, notably from Singrauli, Rihand, Vindhyachal of NTPC sitting idle (upto 1200- 1500 MW for 12-16 hours in a day), which is a national wastage. This paper by addressing both the above core issues is therefore timely and very much the need of the hour. The redesigned market will not only bring stability in the power markets along with reduction in price volatility, it will also create avenues for utilization of surplus power, sometimes from very cheap stations, for both the generators as well as willing buyers. NTPC wholeheartedly welcomes this initiative of the Hon'ble Central Electricity Regulatory Commission.

NTPC generally agrees with the issues raised in the paper and with the proposed mechanism to redesign the real time market. The details of the mechanism is expected to be dealt with in the Draft Regulations to be issued by Hon'ble CERC in this regard and NTPC will give its detailed comments at that stage.

However at this point, the following issues are being raised for consideration before the Draft Regulations are issued by Hon'ble CERC;

1) Out of the various options discussed for the Real Time market, Option 6 (Pool based on auction for intra-day on hourly basis) has been recommended in the paper. The market duration will be for each hour of the day and the gate closure will be applicable for that hour. In this mechanism the quantum of power which will be offered in the market will be the minimum power in any of the four blocks of the hour. For illustration, if 100 MW power is available to be offered in three 15-minute blocks of the hour and 50 MW is available in one of the blocks, the power that will be offered will be limited to 50 MW only, thus preventing the opportunity to fully utilize the unscheduled power.

Hence, it is submitted that the hourly market should have four 15 minute block markets within that hourly market. However, the Gate Closure will remain applicable for all these four 15-miniute blocks. This will enable better utilization of all the available unscheduled power in the real time market.

- 2) Outage of generating units: With gate closure possibly extending upto 2.5 hours before the actual delivery of the power, the liability on the generators on account of DSM would be very high in case of any unit tripping during this period.
 - a) Though the generators are allowed to participate in the market as a buyer, it will not be able to buy this power in the next hourly market, as the market would have closed.
 - b) To address this issue, the current provision of allowing revision in the schedules under long term contract (other than power exchanges) in 4 time blocks may be continued, in the case of forced outage only, whereby the risks can be limited to some extent.
- 3) Generator as a buyer: The paper has also suggested that generator can also participate in the market as a buyer. For implementing this, required changes like notification of withdrawal charge at the generating station end has to be done, which is not available as of now.
- 4) **DSM Mechanism:** Ideally, DSM should be linked to the cost of balancing power at any instant. As of now, as proposed in the amendments in the DSM Regulations, the DSM rates are proposed to be linked to the price of the DAM. The real time market once implemented is likely to reflect more closely the cost of balancing power at any time block. Hence once the RTM have reasonable liquidity, the price of the deviations can be corresponding to the real time market prices.
- 5) RRAS Mechanism: A possible market based RRAS mechanism could be that all of the un-cleared bids could automatically be available to RLDC for dispatch as Ancillary with the Marginal Cost of such power dispatched in every 5/15 minute block being the Ancillary price for that block.
- 6) It is presumed that with the re-designed real time market in operation, the current intraday/ contingency markets shall be discontinued to avoid any confusion.

- 7) Amendments in the IEGC: As it has been pointed out in the paper, implementation of the revised mechanism will necessitate amendment in the various provisions of the IEGC. It is reiterated that the necessary amendments in the IEGC may be issued along with issuance of the Regulations for implementation of the Real-time electricity market.
- 8) The present provisions allow revision of schedule for Renewable Energy projects every 1 & 1/2 hours. With the introduction of the proposed Gate Closure concept, these provisions may be merged for harmonious scheduling of Renewable Energy projects.
- 9) Transmission margins on key corridors should be made available on RLDC website and may be updated on continuous basis.
- 10) The Gate Closure can be gradually advanced to one hour over time. (instead of one and half hours as proposed)