एनएलसी इंडिया लिमिटेड

(भारत सरकार का 'नवरत्न' उद्यम) 135, ई.वी.आर.पेरियार हाई रोड, कीलपॉक, चेन्नई- 600 010.







('NAVRATNA' Govt. of India Enterprise) 135, EVR Periyar High Road, Kilpauk, Chennai-600 010.

NLC INDIA LIMITED

Amrit Mahotsav वाणिज्य विभाग / COMMERCIAL DEPARTMENT

सी.आई.एन / CIN: L93090TN1956GOI003507

जी.एस.टी.एन / GST No : 33AAACN1121C1ZG

पी.ए.एन / PAN : AAACN1121C

दूरभाष / Phone : 044-28369112

फैक्स / Fax: 044-28360057

वेबसाइट / Website : www.nlcindia.com

ई-मेल / E-mail: ed.commercial@nlcindia.in, commercial@nlcindia.in

Lr.No. NLCIL/Comml/Power Market Pricing/comments/2200-3/ 2022- 153 Date: 04.11.2022

To The Secretary, Central Electricity Regulatory Commission, 3rd & 4th floor, Chanderlok Building, 36, Janpath Marg, NEW DELHI - 110 001.

Sir,

Sub: NLCIL - Power Trading - Staff Paper on Power Market Pricing prepared by CERC - Submission of NLCIL comments - reg.

Ref: Public Notice No. Eco-4/2022-CERC dated 12th Oct 2022 issued by CERC

Pursuant to the communication of Staff Paper on Power Market Pricing prepared by CERC seeking comments of the stakeholders, vide references cited above, NLCIL is hereby submitting its comments.

The comments have also been mailed to secy@cercind.gov.in.

Thanking you,

Yours faithfully, for NLC India Limited

General Manager / Commercial

Encl: As above

NLCIL's comments on CERC Staff Paper on "Power Market Pricing"

For comprehensive discussion on pricing methodology in power exchange markets and options available to deal with high market prices along with fulfilling buyer's requirement during high demand period from available sellers in power exchange; CERC's proposed staff paper is highly welcome. In this regard, NLCIL is submitting its observations on the current market scenario with comments on proposed staff paper as below.

Observations on the current market scenario

1. Market volume for collective transaction in India & Participation of Buyer & Seller:

- Currently Market volume in collective transactions of power exchanges is only around (3-7) % of total transaction of electricity in the country which is highly dependent on demand/ buyer side instead of seller side.
- As collective transactions are almost closer to power delivery period either before one day or before one hour, buyers enter this market to meet their dynamic power demand with consideration of maximum possible rate that they may pay for this.
- As in Day Ahead Market (DAM) & Real Time Market (RTM) prices are getting time block wise and buyer/seller can put their quantity time block wise so it is highly flexible for buyers to meet their Demand-Supply gap without any commitment to any fixed cost.
- Similarly, seller also participating in DAM / RTM based on real time surplus power available with them after considering Long Term/ Medium Term power requirement in the country.

2. Impact of UMCP price discovery method in collective transaction of Power Exchange on Buyers & Sellers:

- As buyer is paying only for the power drawl though power exchange, so major buyers are getting opportunity to reduce their stranded capacity charge by considering both high & low prices in PX during high/low demand periods.
- Also, in collective transaction, buyer is not liable to follow any technical constraints applicable on generators like obligation to take power by considering Ramp Rate & Technical minimum of generators.
- At the same time generator is getting opportunity of high market prices only during exceptional high demand periods else otherwise market prices are hovering around reasonable range only without any guaranteed return on investment to generators having no PPA. Very high market prices period also seems to be for shorter span only.

3. Repercussions of high market prices:

As collective transaction is done block wise with Uniform Market Clearing Price (UMCP) model, generally sellers offer the minimum bid rate as participation price considering dynamic market clearing price averages out the losses incurred in bidding at the rate less than the profitable rate.

y

- Majority of participants in collective transactions are either DISCOMs or generators with PPA who utilises gravity of power exchange to sell their surplus power for optimum utilisation of resources.
- ➤ Generators without PPA normally prefer Term Ahead Markets where price discovery method is already "Pay as Bid" under continuous matching because price will be applicable for a particular time period or for the Day instead of block wise thus to avoid much variation in schedule.
- In case a DISCOM is getting more revenue from collective transaction in a particular period that will be getting utilised to reduce stranded capacity charges for a particular tariff period which in turn will help on reducing their ARR.
- ➤ In case a generator with PPA is getting more revenue as compared to their Variable cost, under Ministry of Power rules regarding Electricity late payment surcharge rules dated 03.06.2022, the sellers are entitled for only 3 paise in the gains and the rest is shared with the beneficiaries in the ratio of 50:50 after adjusting fixed cost and dues.
- In case a generator without PPA is getting more revenue as compared to their total tariff of power sold in exchange then it is being utilised by them to subduing losses when power can't be sold & market risks during lower prices.

4. Bearing of losses by Generator:

- Generator with PPA is doing gain sharing only in case of excess revenue from Energy charge Rate including incidental expenses without passing on losses to beneficiaries.
- Due to dynamic price fluctuation with block wise price discovery in collective transactions, any generator may get schedule variations without considering Ramp rate of the station for which generator is incurring losses by its own also for over injections.
- > The average revenue of the generators is closer to their energy charges considering the dynamic market prices balancing the high and low market prices.

Comments on proposed Staff paper on "Power Market Pricing"

- 1. Currently with Uniform Market Clearing Price (UMCP) model, discovered price in collective transactions of power exchange is already yielding a win-win situation to both buyers & sellers in a transparent way as buyers are paying less than their bid rate where as sellers also are getting higher revenue as compared to their bid rate. In case if price discovered in collective transaction is found to be very high which may burden a buyer, then there are already so many other markets available with continuous matching for discovery of price similar to "Pay as Bid". So, it is suggested that there is no need of introducing "Pay as Bid" in collective transactions.
- 2. Instead of proposed model, cap rate may be decided from Hon 'able commission from time to time based on actual power demand & supply in the country. For further improvement in market volume, if required High Price Day Ahead Market (HP-DAM)



- may be introduced separately as proposed by Ministry of Power. Generators with higher cost of power may get special NOC to participate in this market.
- 3. In a uniform price auction, all accepted bids are paid the price of the marginal offer, while in a pay-as-bid auction, all winning producers are remunerated at their bidding prices, respectively (i.e., P1, P2 and P3). However, sufficient clarity shall be brought with respect to the clearing prices of the buyers and the differential amounts with respect to different remuneration at bidding prices for the sellers. For example, if the price cleared is at Rs. 5 per unit and the sellers are remunerated at varying prices less than Rs.5 per unit & if the buyer pay Rs. 5 per unit for the entire cleared quantum, the clarity with respect to the differential amounts shall be brought in.
- 4. The seller submits bids at participation price in the Uniform clearing price model whereas in pay as bid model some sellers will be forced to bid at the higher bid price considering the margins. This may shift the market towards the higher clearing price making the proposed model unfruitful and provides wider scope for market manipulation by the operators who predict the prices based on supply demand variations and other analysis.
- 5. The proposed model will be of least interest to the generators which will reduce their participation in the collective transactions and there will be wider shift towards Term Ahead Market where the prices are discovered through open auctions and the generators can plan the schedules well ahead without subjecting to frequent dynamic changes as in the case of Day Ahead market and Real time market.