BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION,
3RD AND 4TH FLOOR, CHANDERLOK BUILDING,
36, JANPATH, NEW DELHI.

Petition No. ……/RC/2018

IN THE MATTER OF:

Introduction of New Bid (Order) types at Indian Energy Exchange.

AND

IN THE MATTER OF:

Indian Energy Exchange Limited (IEX) **----Petitioner**
Fourth Floor, TDI Centre,
Plot No - 7, Jasola,
New Delhi – 110025

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For Indian Energy Exchange Limited

At New Delhi

Dated: 26th December, 2018

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----Petitioner
Fourth Floor, TDI Centre,
Plot No - 7, Jasola,
New Delhi – 110025

MOST RESPECTFULLY SHOWETH:

1. That, the petitioner, Indian Energy Exchange Limited, by order dated 31.08.2007 in the Petition No. 38/2007 was accorded approval by the Hon'ble Commission to establish and operate a power exchange in India.

2. By this Petition, the Petitioner herein seeks approval of this Hon'ble Commission for introduction of New Bid (order) types at Indian Energy Exchange.

3. Part- 4 of the CERC (Power Market) Regulations, 2010 provides the Principles of Market and Market Design. It details the objectives with which the Power Exchanges in India shall function and stipulates the market design that the Power Exchanges shall adopt in case of day ahead markets.

"10. A Power Exchange shall function with the following objectives:-

(i) Ensure fair, neutral, efficient and robust price discovery

(ii) Provide extensive and quick price dissemination

(iii) Design standardized contracts and work towards increasing liquidity in such contracts.

4. Pursuant to the principles enshrined in the CERC (Power Market) Regulations, 2010, Indian Energy Exchange has formulated its Business Rules wherein all the terms and conditions of the contracts including the trading sessions, matching rules, order types, delivery procedure, etc. have been mentioned. The Business Rules of the Indian Energy Exchange have been duly approved by this Hon'ble Commission.

5. The Hon'ble Commission took an approach of 'principle based regulation' to manage the macro picture with adequate safeguards and left micro management to the participants of the power market. This was done in order to leave enough space for innovation by the markets while complementing the security of the grid and the reliability of the power system.

6. The Hon'ble Commission has recognized the fact that building a market place, of which Power Exchanges are a part, is not a one-time activity. The Commission has highlighted that with the changing needs and continuous dialogue with the stake holders, regulations will have to evolve for an efficient and robust functioning of the Power Markets as whole and Power Exchanges in particular. Furthermore, the Hon'ble Commission also acknowledged that exchange may introduce innovation in the price discovery methodology.

7. Keeping in mind the basic principles and premises on which the CERC (Power Market) Regulations, 2010 were formulated and acknowledging the changing needs of participants of power market, IEX endeavors to infuse innovation and efficiency in the present exchange market design. However, we solemnly understand that any modification in the Power Exchange Market design, which has a material impact on the price discovery and cleared volumes, will need to be approved by the Hon'ble Commission.

8. The need for introduction of new bid (order) types stems from the fact that today the Exchange Market in India has considerably matured. The number of participants in the exchange market has increased significantly over the years. The power market scenario viz. the number of generators, types of generators, load pattern, peaking load pattern, increase in the renewable generation capacity etc. has significantly changed. Our participants have on a number of occasions requested us for introduction of such tools and services to cater to their changing needs. One of the most recurring requests by our clients has been in regard to the introduction of new bid (order) types.

9. In order to cater to the requirements of the clients, IEX conducted detailed research and development for introduction of different types of bid (order) types. Different bid (order) types existing in the International exchanges were also studied and presentations were made on the Introduction of New Bid (order) types at CERC and NLDC on 19th Feb, 2018 and 14th Mar, 2018 respectively. The presentations were followed by discussions and deliberations along with suggestions made on the same. While finalizing this petition on the Introduction of New Bid (order) types IEX has tried to ensure that concerns are addressed and suggestions incorporated. Thereafter, IEX convened a seminar and invited various stake holders while introducing the new bid (order) types conceptualized by IEX and seeking further comments and inputs from the participants. The seminar was held on 22nd June, 2018 which was attended by over 40 participants from across 20 members of the exchange. There a wide-spread consensus

amongst the participants who attended the seminar on the usefulness of the new bid (order) types being introduced. There was an interactive discussion and the participants were enthused about the launch of the new bid (order) types. The list of participants is attached herewith as Annexure-A.

Complex Bids in other International Power Exchanges:

ORDER TYPES	EPEX SPOT	NORD POOL SPOT	N2EX	OMIE	IEX*	IEX-Proposed Bid Types*
Single Bid	Y	Y	Y	Y	Y	
Regular Block	Y	Y	Y	Y	Y	
Linked Block	Y	Y	Y		Y	
Profile Block			Y			P
Flexi Bid		Y	Y			P
Min Quantity Bid						P
MIC				Y		P
Scheduled Stop				Y		P
Load Gradient				Y		P

The table lists the international power exchanges and different bid (order) types available at those power exchanges.

*** Y – Yes/ Existing & P - Proposed**

10. Presently, the members of IEX in the day ahead market are able to submit either Single Bid or Block Bids.

    I. A Single Bid specifies multiple sequences of price and quantity pairs in a portfolio manner. The quantity is assumed to vary linearly between two price pairs.

    II. Whereas a Block Bid specifies one price and one quantity for a combination of continuous 15 minute time blocks. Selection criterion is the average of area clearing price (ACP) for the quoted 15 minute time blocks, of the respective Client's bid area. A block bid is an 'all' or 'none' type wherein they are either selected or rejected in toto. Another variation in block bid available at the exchange for submission of bid is called as 'Parent-Child' Block bid. It is a linked block bid which provides conditional selection. In this type of block bid, the child bids will only be considered for selection post the selection of the parent or the main bid.

11. In the present market scenario, the issue with Single Bid is that it does not cater to the complex constraints of generators and demand pattern of the buyer. If the selected bid quantum is less than the technical minimum requirement of the generator, it leaves the generator in a situation where he is obliged to generate notwithstanding the fact that the quantum which he would generate is less than his technical minimum. Similarly, for buyers, the partial selection of single bids or selection of singe bids in few

time-blocks and rejection in other time-blocks makes it difficult for the buyer to make the arrangement from different sources. Unreliability of the contracted quantum is one of the major flaws associated with single bid (order) type.

12. Similarly, a Block Bid specifies one price and one quantity for a combination of continuous 15 minute time blocks. The rigid feature of the block bid doesn't allow the change in quantum of power across the time blocks. This stands as a major disadvantage for renewable generators, thermal generators with partial LTAs, etc. Also, the issue of paradoxical rejection in case of block bids stands as a major concern. A block bid might get rejected by the system even though it would appear to be a valid bid for selection. This happens in a situation when inclusion of such a block bid might result in the change in MCP at which the bid cannot be accepted. In a nutshell, if the system accepts those bids, the average price of the market changes in such a way that the block bids are no longer justified to be selected.

13. IEX vide its circular dated 11th April, 2017 (circular no. IEX/MO/237/2017) increased the maximum quantity per Block Bid from 50 MW to 100 MW w.e.f. 12th April, 2017. Meetings were conducted on 14th June, 2017 and 25th August, 2017 by Hon'ble Commission with POSOCO and IEX to better understand the issues related to the Block Bid viz. Size of the Block Bid, Duration of the Block Bid, Impact on MCP, MCV and Social Welfare Maximization, Paradoxical rejection of Block Bids,

Impact on small players, etc. Based on the discussion in the meeting the Hon'ble Commission vide the letter dated 6th September, 2017 suggested that POSOCO, in coordination with IEX and CERC, shall examine the potential impact of 100 MW Block Bids. The Hon'ble Commission also suggested that POSOCO may consult any other academician or professional having expertise in power sector/exchanges to assist them in undertaking the study related to Impact of Block Bids. In this regard, we would like to mention that Prof. S.A. Soman & Dr. Rajeev Gajbhiye from IIT- Bombay presented before NLDC on 7th September, 2017 on 'Advanced Bid Structures'. The academicians highlighted paradoxical rejection, volume rigidity, etc. as the major problems associated with the present structure of block bids. The presentation included discussion on:

a) Reasons for Introduction of Block Bids
b) Problems with Block Bids
c) Flexible Structures in Bids

The presentation concluded with the recommendation for introduction of New Flexible Bid Structure as an alternative to present Block Bids. The experts also concluded that this would allow the block bidders to be even more competitive and would reduce the possibility of Paradoxical Rejection.

14. In another presentation made by Prof. S.A. Soman from IIT-Bombay and Dr. Rajeev Gajbhiye on 13th July, 2017 on 'Introduction to Power Exchange', the problems with the existing

block bid such as Paradoxical Rejection of Bids (PRB) and the inflexible nature of the bids were discussed. These experts from the academia have suggested the introduction of Flexi Bids with features of volume flexibility, time flexibility, minimum income criteria for bid clearing, etc. to address the issues related to block bids. All these recommendations made by the power sector experts were put forward to the committee and these inputs were considered while finalizing the report.

15. In a meeting dated 27th September, 2017 for further deliberation on the issue related to Block Bids at the Power Exchange, NLDC in a presentation on **'Discussion of Market Design related to Block Bids'** contemplated the alternatives to the existing Block Bids at the Power Exchanges. Also the questions related to introduction of Flexible Block Bids, specifications of such Flexible Block Bids and their product design was broached.

16. In the report on **'Review of Block Bids at Power Exchanges'**- May 2018 (submitted in compliance to CERC letter dated 6th Sept, 2017), it was recommended to the Hon'ble Commission that new types of bids, 'exotic bids' may be examined to cater to the specific requirements of the different types of participants in the power market. The recommendation made to the Hon'ble Commission by the committee in the abovementioned report is quoted below:

"(g) New types of bids, 'exotic bids' should be examined to cater to specific requirements of the different types of participants in

market. For example, while placing bids, the Hydro generators may give energy on RTC/ defined time blocks, and allow for flexibility in the volume cleared in each time block depending on say, the price (high prices would indicate higher demand to be met & hydro optimization will help).”

17. In light of above mentioned concerns and deliberations, IEX proposed the introduction of new bid (order) types in the day ahead market vide Petition 218/RC/2018. The Hon’ble Commission directed IEX to give wide publicity to the proposed new bid (order) types by uploading the same in its website for inviting comments from all stakeholders and general public on the proposed new bid (order) types while disposing off the petition no. 218/RC/2018. IEX hosted the petition on its website vide notice dated 24th October, 2018 (Annexure B) and consequently received comments in the same from the following entities:
    a. Tata Power Trading Co. Ltd.
    b. GMR Energy Trading Ltd.
    c. Sembcorp
    d. PTC India Ltd.
    e. JITPL
    f. Statkraft
18. The comments received and the response of IEX on the same are attached as annexure (Annexure C).
19. Accordingly, IEX files the petition for the introduction of new (bid) order types in DAM.

The table below lists the new bid (order) types for the day ahead market proposed by IEX. The key benefits to the market participants are also listed in the table.

Serial No.	New Bid types	Bid Type	Key Benefits to Market Participants
A	Minimum Quantity Block Bid	Block Bid	Help reduce cases of paradoxical rejection of bids for sellers and buyers in DAM.
B	Profile Block Bid	Block Bid	Bring flexibility for various generators to model their bidding pattern and also help the Discoms for their demand side management.
C	Minimum Income Condition Bid (MIC)	Single Bid	Provide flexibility for participants to plan for their Max Revenue Realization and would help recovering costs such as start-up cost in addition to variable cost.
D	MIC Bid with **Schedule stops condition**	Single Bid	Prevent an abrupt plant shut down in case MIC order is not accepted.

E	Load Gradient Bid Type	Single Bid	Increase flexibility in the day-ahead market and help the plants to manage technical criteria of ramping.
F	Flexi Bids	Single Bid	With this bid type, Pump based hydro plants can optimise their revenue by using Flexi bid and also add flexibility to the supply bids and help meet the peaking demand.
G	Enhancement in Link Bids	Block Bid	Parent-Child Bid combination's trade value would be considered for allocation with this enhancement.

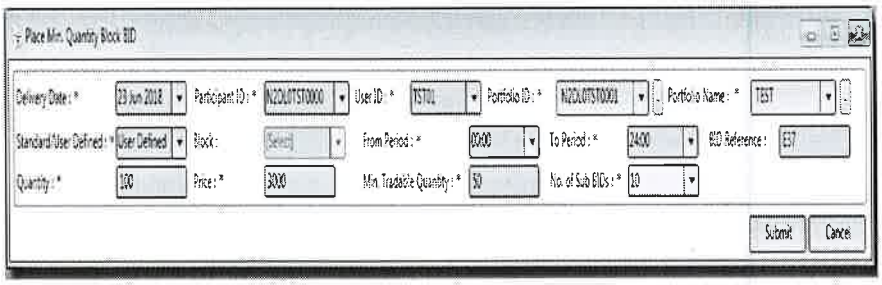
19. Elaborate explanation of the new bid types being proposed is given below:

A. <u>Minimum Quantity Block Bid:</u>

As per prevailing mechanism, the quantity defined in a block bid is either 'All' or 'None' trade. The new order type will provide the facility to define **minimum quantity.** The Balance Quantity will be placed in multiple block bids as a sub set of the entire bid. For matching the system would first consider 'Minimum Quantity' bid in selection criterion. If the 'Minimum Quantity' bid is selected, the system would then consider remaining sub bids for selection.

If 'Min Quantity' bid gets rejected then the system would reject its sub bids also. An example is illustrated below:

Minimum Quantity Block Bid: - Bid Entry Window



Description of Min. Quantity Block Bid:

Portfolio ID	From Period	To Period	Price	BID Quantity	Min. Tradable Quantity	No. of Sub BIDs
N2DL0TST0001	0:00	24:00:00	5000	100	50	10

Main Bid	50
Sub Bid-1	5.0
Sub Bid-2	5.0
Sub Bid-3	5.0
Sub Bid-4	5.0
Sub Bid-5	5.0
Sub Bid-6	5.0

Sub Bid-7	5.0
Sub Bid-8	5.0
Sub Bid-9	5.0
Sub Bid-10	5.0

The maximum quantity of a Minimum Quantity Block Bid would be the same as that a normal Block Bid which is 100 MW. The Minimum Tradable Quantity would be parameterized. For example if minimum tradable quantity is 50% of the total bid size and if the total bid size is 100 MW then the minimum tradable quantity has to be at least 50 MW. This parameterization shall be specified by IEX and would be notified to its participants. Also the number of Sub-Bids with each Minimum Quantity Block Bid shall be defined by IEX from time to time.

Benefit:

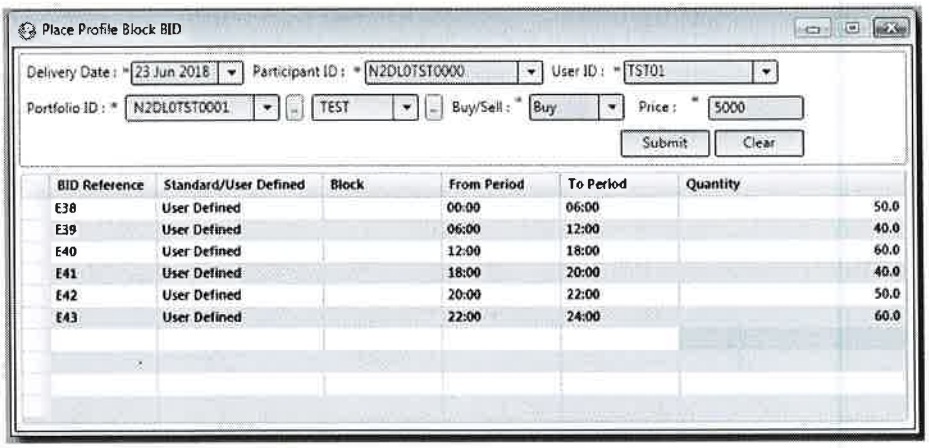
- The introduction of Minimum Quantity Block Bid would optimize the selection of bids and thereby minimize the chances of paradoxical rejection.
- Introduction of such bids would cause convenience to the users while entering bids.

B. Profile Block Bid

Provision to enter same or different quantity for each period would be provided at the time of block bid request. However, price would be same across all block period. Block bid price

would be compared with Weighted Average price instead of Average price for the selection of the block. Weighted Average price would be computed using following formula:

Profile Block Bid: - Bid Entry Window



Profile Block Bid Description:-

Portfolio		Buy/Sell		Price
N2DL0TST0001		Buy		5000
Bid Ref No.	**Standard/User Defined**	**From Period**	**To Period**	**Quantity**
BR1	User Defined	0:00	6:00	50
BR2	User Defined	6:00	12:00	40
BR3	User Defined	12:00	18:00	60

BR4	User Defined	18:00	20:00	40
BR5	User Defined	20:00	22:.00	50
BR6	User Defined	22:00	24:00:00	60

i) Price: - Fixed price for whole segment of the bid; Price is compared with weighted average of the system price for matching.

Weighted Average Price would be computed using following formula:

$\sum$ [Bid Quantity (Buy/Sell)*Clearing Price]/$\sum$[Bid Quantity]

ii) Volume: - It is possible to enter different bid qty. for different segments of Block Bid.

Profile Bid Selected if;

a) {Sell Profile Bid Price<Weighted Avg. Price}
b) {Buy Profile Bid Price>Weighted Avg. Price}

The maximum quantity of a Profile Block Bid would be the same as that of Normal Block Bid. The number of Profile Block bids would be parameterized and notified by IEX from time to time.

Benefit:

- Introduction of Profile Block Bids would facilitate the Variable Renewable Generators (Solar and Wind) bid according to the varying generation profile.

- Thermal Power plants with variable demand from its beneficiaries would be able to bid a varying generation profile at the exchange.
- DISCOMs and OA Consumers would be able to meet their variable loads through Profile Block Bids.

C. Minimum Income Condition Bid (MIC)

It is a new type of single bid which would allow the member to place a bid with a requirement of minimum revenue condition to be fulfilled. This condition establishes that, regardless of the price-volume matched for each single block of the next day, the bid would be taken out of the matching process entirely if the income obtained for the whole day is below a defined threshold, defined with two components: fixed amount (Rs.) and variable amount (Rs./MWh).

Minimum time period for bid selection will be defined by the user at the time of bidding. The introduction of Minimum Income Bid would provide the members with an option to plan for the minimum revenue realization.

Selection Criteria: $\{Income \geq Fixed\ Term + Variable\ Term \times Accepted\ Quantity\}$

Portfolio Id-			Fixed Term	400000		Variable Term	
P/Q							
From Period	To Period	0	3299	3300	3499	3500	20000
0:00	0:15	0	0	0	0	*-50*	*-50*
0:15	0:30	0	0	0	0	*-50*	*-50*
0:30	0:45	0	0	0	0	*-50*	*-50*
0:45	1:00	0	0	0	0	*-50*	*-50*
1:00	1:15	0	0	*-100*	*-100*	*-100*	*-100*
1:15	1:30	0	0	*-100*	*-100*	*-100*	*-100*
1:30	1:45	0	0	*-100*	*-100*	*-100*	*-100*

Illustration 1 -A Sell Profile Bid from Hr. 1 to 7								
Hour	Sell Bid Qty. (M	Fixed Term	Variable Term	System Price	Selected Vol.	Min. MIC required	Actual Income	Selection

	W)						received	
1	50		3500	6000	50			
2	50		3500	4500	50			
3	50	400000	3500	3200	0	1410000	1445000	YES
4	50		3500	3300	0			
5	100		3300	4600	100			
6	100		3300	4600	100			
7	100		3300	3200	0			

Illustration 2 -A Sell Profile Bid from Hr. 1 to 7

Hour	Sell Bid Qty. (MW)	Fixed Term	Variable Term	System Price	Selected Vol.	Min. MIC required	Actual Income received	Selection
1	50		3500	3200	0			
2	50		3500	3200	0			
3	50	400000	3500	3000	0	1585000	1560000	NO
4	50		3500	4600	50			
5	100		3300	4000	100			
6	100		3300	4500	100			
7	100		3300	4800	100			

The Minimum Income Condition (MIC) is derived from two elements viz.; the fixed term and the variable term. The Minimum Income Condition applies a constraint which means that the amount of money collected by the order in all periods must cover its fixed term and its variable term multiplied by the total volume. The Minimum Income Condition constraint is in short defined by: a) fixed term (FT) in Rupees b) variable term (VT) in Rupees per accepted MWh. Minimum Income economic constraint means that the amount of money collected by the order in all periods must cover production costs of the plant, which is defined by a fix term (representing the startup cost of a power plant) and a variable term multiplied by the total assigned energy.

D. <u>Schedule Stop Condition:</u>

Minimum Income Bids can be assisted by scheduled Stop Conditions (SSCs). If MIC is not selected then it may lead to abrupt stop of a plant. Schedule Stop Condition (SSC) would prevent the same by selecting few initial bids and hence gradually bringing the plant to shut down.

To avoid the situation of abrupt shutdown, the bidder of an MIC bid has the possibility to define a "scheduled stop". Using a schedule stop will alter the deactivation of the MIC: the deactivation will not imply the automatic rejection of all the single orders but the bid of the unsuccessful seller would be accepted at the Market Clearing Price and the quoted volume for the first time block and the volume would reduce subsequently over the next few time blocks to make the schedule of the generator as zero. In

all the time-blocks the price would be the Market Clearing Price even if it is lower than the price quoted by the seller. SSC would help prevent abrupt shutdown of plant and make the grid more stable.

Benefit:

- Minimum Income Bid Condition would benefit Cold-Start & smooth shut down of a plant who would be able to factor-in their start-up cost.

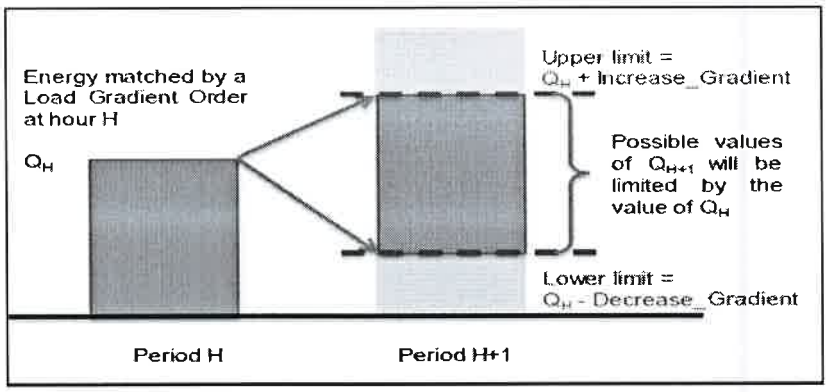
E. Load Gradient Bid Type:

The load gradient bid would limit the variation between the accepted volume of an order at in a period and the accepted volume of the same order in the adjacent periods. Some generation technologies cannot cope with sharp variations of delivered power. With this condition, such generators would be able to specify maximum variations of power (in MW/minute or MW/15 min time-block) so that the matched energy between two consecutive time-blocks can be really supplied. The unit can state different types of ramp rates: start-up, shut-down, ramp-up and ramp-down. The indivisible block defines the gradients to use: up/down gradients over the indivisible block, start/stop gradients below the indivisible block.

A Load Gradient condition defines a maximum variation of the accepted quantity between consecutive periods which is according to the Ramping requirements as per the standards.

Increase Gradient: Maximum increase gradient in MWh.

Decrease Gradient: Maximum decrease gradient in MWh.



Benefit:

- This Bid type would benefit the Ramping requirements of the Power plants and would provide grid stability.

F. Flexi Bids

Flexi Bids would provide an option to users to place the bids wherein members can place Buy/Sell bid with quantity and price without defining the time period. User would be able to place bids with respective quantity and price.

Flexi Bid would have the option of both Contiguous Hours and Single Hour. In Flexi Bid with Contiguous Hour facility, a bidder may quote the quantum and the no. of hours for which he would trade. The no. of hours would be contiguous. Contiguous Hour Flexi bid would have the same price and volume for all the contiguous hours. While selecting the bid, the avg. price of the Hour would be considered for selecting the bid. Maximum no. of contiguous hours would be parameterized by IEX at a later stage.

A bidder may also place Flexi bid for a single hour. If a bidder places Flexi bid for single hour multiple times, it would mean that he might get selected in those many hours for which he has placed bids. These hours may or may not be contiguous in that case.

Multiple single hour flexi bids can be placed for the same portfolio with same or different price and quantity for the same Delivery Date. Flexi Bids can be entered between start time and end time defined for DAM market for the respective Delivery Date in market time table.

i) **Price:** - Fixed price

ii) Volume: - Fixed volume and Possible to enter for one unspecified hour

iii) Matching: - Specific hour is assigned to the bid by algorithm during matching process based on the principle of maximization of the total welfare.

Benefit:

- Flexible Generators like Battery based storage or Pump based hydro can optimise their revenue by using Flexi bid and supply power at time of peaking demand.

G. Enhancement of Linked Bids:

In the present mechanism of Linked Bids the child bid is considered for selection only after the Parent bid is selected. However, in this new bid type (Parent/Child) would be considered for allocation even if it is 'Out of the Money i.e. there is a

negative difference between Average Price and Block Bid price'. This would occur if Bid to which it is linked compensates for the negative difference, making the total value of the linked blocks 'In-the-Money'.

	From Period	To Period	Buy/Sell	Price	BID Quantity	Average Traded Price	Result
Parent Bid	10:00	16:00	Buy	3102	1.5	2500	Included
Child Bid	22:00	24:00:00	Buy	2102	1.5	2300	Excluded

In above table, as per current implementation, Child bid would be excluded as there is a negative difference between Average Traded price and Block Bid price.

However, as per proposed enhancement, in the following example, as total value of linked blocks is 'In-the-Money' (4824) i.e. positive, Parent Child bid combination in the above table would be considered for allocation.

	BID Quantity	No of Hrs	Bid Price	Price Result	In-The-Money	In-The-Money-Value	New Result
Parent Bid	1.5	6	3102	2500	602	5418	**Included**
Child Bid	1.5	2	2102	2300	-198	-594	**Included**
Total						**4824**	

Similarly, in a case if the Parent bid is 'Out-of Money' but when the child bid is included, the positive 'In-the-Money' value of child bid exceeds the negative 'Out-of-Money' making the total bid is 'In-the-Money', the total bids would be accepted.

Benefit:

- This enhancement in the Linked Bids would optimize the bid selection for both buyers and sellers.

PRAYER

1. In the premise the petitioner respectfully submits that this Hon'ble Commission may be pleased to allow IEX to introduce the new bid (order) types.
2. Amend/ modify Business Rules of Indian Energy Exchange Limited as approved by the Hon'ble Commission from time to time.
3. Pass such further order or orders as may be considered necessary in the facts and circumstances of the case.

For Indian Energy Exchange Limited

Authorized Signatory

At: New Delhi

Dated: 26th December, 2018

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION,
3RD AND 4TH FLOOR, CHANDERLOK BUILDING,
36, JANPATH, NEW DELHI.

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Fourth Floor, TDI Centre,
Plot No - 7, Jasola,
New Delhi – 110025

NOTARY PUBLIC
App. By Govt. of India
Regd. No.7717
Area- Delhi
Juris Extd
Whole India
Sriman Narayan Sharma

Affidavit

I, Indranil Chatterjee, Son of R.N. Chatterjee aged about 41 years and having my office at Fourth Floor, TDI Centre, Plot No. 7, Jasola District Centre, New Delhi — 110025 do hereby solemnly state as under.

Indian Energy Exchange Limited

1. I am working as Chief Risk Officer in the Indian Energy Exchange Limited, New Delhi, and I am well conversant with the facts of the case and hence competent and authorized to sign this affidavit.
2. I have gone through the contents of the above Petition and I say that the facts stated therein are based on the records of the Petitioner and believed by the deponent to be true.

DEPONENT

VERIFICATION

I, the deponent above named do hereby verify that the contents of my above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed therefrom.

Verified at New Delhi on 26th day of December 2018.

NOTARY PUBLIC
App. By. Govt. of India
Regd. No.7717
Area- Delhi
Juris Extd Whole India
Sriman Narayan Sharma

ATTESTED
Notary Public
(INDIA)

26 DEC 2018

DEPONENT

ANNEXURE - A

Attendance Sheet **Date 22-Jun-2018**

Training on New Bid Types

S No.	Name	Company	Signature
1	Abhishek Pandey	TPTCL	
2	Abhijyan Gupta	TPTCL	
3	Pradnav Mehta	Torrent Power Ltd.	
4	SANTANU ROY	WBSEDCL	Santanu Roy
5	MONOJIT DUTTA	WBSEDCL	
6	ATIKA SHARMA	Instinct Infra & Power Ltd	
7	Mayuresh Krishnarkar	Statkraft Markets Pvt Ltd.	
8	Tanveer Singh	Statkraft Markets Pvt Ltd	
9	GAURAV SAINI	SAINI POWER	
10	Rakesh Kumar	JSW Power Trading Co. Ltd	
11	Satish Goswami	KISPL	
12	Mrigesh Kumar Shah	CES, Pune	
13	DHRUV DHIMAN	CUSTOMIZED ENERGY	
14	Ranajit Bhattacharya	CESC Ltd	
15	TILAK SENGUPTA	RPG POWER TRADING Co. Ltd	
16	Debashish Naskar	RPG Power Trading Co Ltd	
17	MANAN A. GUPTA	BSES RAJDHANI POWER LTD	
18	KALIRAJ S	BSES YAMUNA POWER LTD	
19	Nisha Kathuria	BSES YAMUNA POWER Ltd	
20	AYAN SEN	TPCL Power Trading Pvt. Ltd.	
21	RAFAT HOSSEN MOLLAH	TPCL Power Trading Pvt. Ltd.	
22	SANDEEP KUMAR	TATA POWER-DDL	Sandeep kv.
23	DEEPAK MISHRA	TATA POWER-DDL	
24	JAIBARDHAN	GLOBAL ENERGY PVT LTD	
25	Manish kumar	GEPL	
26	PAVAN BASAM	NETS	
27	Pratyusha Khandelwal	NETS	
28	Sunil Panwar	KISPL	
29	Aniruddha Shukla	GMRETL	
30	Arjun Nirmani	APPCPL	
31	Pranay Shelke	APPCPL	
32	Akansha Garg	Mittal Processors Pvt Ltd.	
33	Ashish Gupta	Mittal Processors Pvt Ltd	
34	Jaspreet Kataria	GMR Energy Trading Ltd.	
35	Karan Malhotra	PTC India Ltd.	
36	BHASKAR SOREN.	PTC India Ltd.	
37	Shashank Pandey	NTPC Vidyut Vyapar	
38	Mohit Srivastava	Jindal Power Ltd.	
39	Shalabh Tandon	Jindal Power Ltd.	
40	NITESH KOTHARI	SHREE CEMENT LTD.	
41	MOHIT NEBHWANI	SHREE CEMENT LTD	

ANNEXURE - B

IEX/MO/18-19/041 **Dated: 23rd Oct, 2018**

Public Notice

Sub- Introduction of New Bid (Order) Types in its Day Ahead Market segment

Dear All,

1. Indian Energy Exchange Limited has filed the petition (218/RC/2018) (Annexure-A) seeking approval from the Central Electricity Regulatory Commission for Introduction of New Bid (Order) Types in its Day Ahead Market segment on its platform.
2. The hearing of the petition before the Central Electricity Regulatory Commission was held on 11th October, 2018 wherein the Hon'ble Commission directed IEX to give a wider publicity to the proposed New Bid (Order) Types by uploading the same in its website for inviting comments from all stakeholders on the matter. The order of the Hon'ble Commission dated 16th Oct, 2018 is attached. (Annexure-B)
3. Pursuant to the directions of the Hon'ble Commission, IEX is uploading the copy of the petition, along with other annexures, filed before the Commission. Stakeholders are requested to submit the comments on the Introduction of New Bid (order) Types in Day Ahead Market within 30 days from the date of this notice to the designated contact person through email or post.

Indian Energy Exchange Limited

Akhilesh Awasthy

Director (Market Operations)

Contact Person:

Indranil Chatterjee

Chief Risk Officer

Indian Energy Exchange Limited

E-mail: Indranil.chatterjee@iexindia.com

Land Line: (011)-43004063, Mobile: 7290039743

ANNEXURE - C

Comments in Introduction of New (bid) Order Types in Day ahead Market

Bid Types	Organization	Concern Raised	Comments
Minimum Quantity Block Bid	Tata Power Trading Co. Ltd.	In minimum quantity and profile block bids, it is probable that no quantum gets cleared. In such a situation, if generators are scheduling power based on clearing of either of two block bids, will have to make their units shut down from 00 hrs next day. In the said scenario, schedule stop condition may also apply here similar to Minimum Income Condition bid type under single bid category.	Presently, Schedule Stop Condition is for assistance of Minimum Income Bid. SSC will avoid the abrupt shutdown of a plant due to non-selection on the next day. However, we are in agreement with the suggestion that SSC may be applied for Minimum quantity block bid and Profile block bid, which would further help the participants of the exchange. IEX would consider the suggestion raised and work in the development of the same in next phase of development.
	GMR Energy Trading Ltd.	Detailed clarification is needed on the definition and frequency (i.e. the number of times it can be revised in duration) for 'parameterization' factor. The algorithm and logic for parameterization should be explained further.	IEX has kept the option of minimum tradable quantity and number of sub-bids with each Minimum quantity bid open so that the opinion of the stakeholders may be accommodated. However, before the launch of the new bid (order) types, the parameters would be defined accordingly. Later-on whenever the parameter is revised it would be with based on feedback from Members and with due intimation to them.
	Sembcorp	At present number of block bids are restricted to 60. It needs to be clarified upfront that the minimum quantity block bid, with its sub bids, would be considered as a single block bid. Further, a clarification is needed if the number of sub bids will be fixed or vary from time to time as notified by IEX.	Block bids would be limited to 60. A participant would be allowed to bid Minimum Quantity Block bid over and above the 60 Block bids allowed. The limit on the no. of Minimum Quantity Block Bid would be finalized by IEX after consultation with the stakeholders. The limit on no. of sub-bids would be decided by IEX. All these parameters and changes thereon will be notified before these are introduced I the Market.

	PTC	The same selection mechanism already exists in Parent child type category in Block bid. In a minimum quantity block bid type, selection of total bid quantum is entirely depending on the selection of minimum bid quantity. This may not solve the problem of non-selection of block bid. Rather to place a bid in lesser quantum to avoid paradoxical rejection it is suggested to increase number of blocks in a block bid and also to provide facility of uploading a parent child order type through a single file. As the suggested mechanism is already part of existing system, it is suggested that there is no requirement to introduce a new bid order in the form of Minimum Quantity Block bid as the same bid can be placed in the existing system. If the Minimum quantity is rejected by the system, then whole sub bid will also get rejected. It may be clarified that if any generating station has exhausted its full bid quota i.e. 60 block bids, then in such a scenario whether sub bid will be generated or not, because in that case number of bids w.r.t that generating station is exceeding 60 block bids	We would like to re-iterate that the introduction of Minimum Quantity Block Bid is for facilitating participants to bid Blocks bids while reducing the cases of paradoxical rejection. Providing the facility to upload parent-child order through a single file would be considered for development in the next phase. Presently, there is a cap of 60 block bids for each participant. However, the no. of Minimum Quantity Block bids will be over and above 60 block bids. IEX would, after consultation with the stakeholders, fix a cap on the no. of Minimum Quantity Block bids that would be permitted. Moreover, in a Minimum Quantity Block bid, main bid and sub bids together would be considered as one Minimum Quantity block bid. As discussed above, the limit on no. of Minimum Quantity Block bids would be decided at a later stage.
	JITPL	Bid quantity of MQB should not be restricted at 50% of the total bid size rather bidder should be allowed to choose the value of MBQ. This will further minimize the chances of paradoxical error. Quantum in MQB may be less than the quantum in Sub Bids. Bidder should be allowed to vary the quantum in Sub Bids	Bid size of 50% may be re-considered after considering the comments of stakeholders. However, it is important that some bid minimum percentage be set for Main bid in order to standardize the contracts and therefore currently 50% of the total bid has been considered.

		Selection of Total Bid Quantum is entirely dependent on selection of MQB. This will not solve the issue of non-selection of block bid. Our sincere suggestion is that selection of Sub Bids should be independent and should not rely on MQB. This may lead to a situation when very low volume will get cleared and that may cause financial loss to the bidder. To avoid this, we propose that Bidder should be allowed to choose Minimum Income Bid (MIB) with MBQ.	Selection of Sub-bids cannot be de-linked to the selection of MQB. We would like to mention that intention of Minimum Quantity Block bid is to eliminate paradoxical rejection while at the same time ensure that bidders have a certain minimum quantity selected. However, if we allow selection of sub bids independent of main bids, then the rationale of minimum quantity for selection for a bidder gets failed. Moreover, varying the quantum in the sub-bids would not affect a lot as the volume of sub-bids would not be much. Also, there is need to standardize the contracts and therefore, sub-bids are required to have equal volume. The concern raised by JITPL about selection of very low volume is correct and therefore, we reiterate the importance of Main Bid with at least 50% of the total bid quantum. Minimum selection criterion of main bid would ensure a minimum quantity of 50% of the bid size. Reducing the size of main bid could create situations where a very low volume of a participant is cleared. We would like to clarify that Minimum Income Condition is not required in case of Minimum Quantity Block bid. This is because a block bid is all or none selection bid with a fixed price. Selection of a block bid would automatically ensure that the minimum revenue expected out of the block bid is met.

Enhancement of Linked Bids	Tata Power Trading Co. Ltd.	As we are aware that the existing Parent Child bid is used when bidder (Buy/sell) does not want to get its child bid cleared if MCP does not match with child bid price. Hence, in this regard, it may not be required to introduce enhanced link bid which may clear child bid even if bid price does not match with MCP.	"Enhancement of Linked Bids is an additional feature to the existing Parent Child Bid. However, the existing Parent-Child bid would continue to exist and participants may bid through the same. In case of Enhancement of Linked Bids, if a parent bid was cleared but the child didn't get cleared, the system would re-evaluate whether the benefits gained in selection of the parent bid exceed the loss incurred if the child bid is selected. If the cumulative benefit is positive, then both the parent and child bid would be accepted. The rationale for the same is that a seller/buyer was ready to pay the quoted price, however, as per the price discovery in the market, if the benefit of the parent exceeds the loss of child, he would still be in a overall gain. Individual gain in one part of the bid (either in Parent Bid or in Child bid) is never a concern for a participant as he is not aware about the price which would be discovered. Therefore, a cumulative benefit of the total bid (i.e. combination of Parent and Child Bid) post price discovery vis-a-vis the quoted price would be acceptable for the buyer/seller. It is essential to understand that no additional commitment in terms of money is required from the participant. This enhancement condition will only Re-Adjust the saving of Parent bid to Child Bid or vice-versa while keeping the overall bid (i.e. combination of Parent and Child) profitable. "

	GMR Energy Trading Ltd.	The 'in the money' for selection of parent/child bid should be capped, such that the bidder should be able to limit the difference, it will bear in case, the respective bid type (enhanced linked bid) is implemented.	In case of Enhancement of Linked Bids, if a parent bid was cleared but the child didn't get cleared, the system would re-evaluate whether the benefits gained in selection of the parent bid exceed the loss incurred if the child bid is selected. If the cumulative benefit is positive, then both the parent and child bid would be accepted. It is essential to understand that no additional commitment in terms of money is required from the participant. This enhancement condition will only Re-Adjust the saving of Parent bid to Child Bid or vice-versa while keeping the overall bid (i.e. combination of Parent and Child) profitable. Hence, there is no requirement for a cap as even after accepting the sub-optimal child bid, the buyer/seller would be in a overall gain from the price which he has quoted for the entire set of bid (i.e. Mother and child together). "
Flexi bids	Statkraft	Please clarify that whether the generator will be allowed to define the no. of continuous hours wherein the flexibility can be exercised since it may be possible that the bid get executed in non-continuous hour which is not favorable for such sellers.	We acknowledge the concern raised by Statkraft. Here we would like to state that Flexi Bid would have the option of both Contiguous Hours and Single Hour. In Flexi Bid with Contiguous Hour facility, a bidder may quote the quantum and the no. of hours for which he would trade. The no. of hours would be contiguous. While selecting the bid, the avg. price of the Hour would be considered for selecting the bid. Maximum no. of contiguous hours would be parameterized by IEX at a later stage. A bidder may also place Flexi bid for a single hour. If a bidder places Flexi bid for single hour multiple times, it would mean that he might get selected in that multiple hours for which he has placed bids. These hours may or may not be

			contiguous in that case.
	Sembcorp	It is proposed that the Flexi bids are cleared for 1 hour (i.e. 4 Blocks).It may be clarified that if the bids will be cleared for 1 hour or for any 4 consecutive blocks (e.g. 2:00 to 3:00 or 2:15 to 3:15). Further, in order to give more flexibility a provision/option to the bidder to specify the number of consecutive blocks (e.g. 5 Consecutive blocks – Clearance will be 2:00 to 3:15, 10 Consecutive – clearance will be4:00 to 6:30) may also be provided.	Flexi bids would be cleared for one hour time period. The hours (4 time blocks) would not be random. Hours for which the bid is cleared would be defined for eg- H-1- 0000-0100, H-2-0100-0200, etc. Although, the bidder will place bid which would be hour agnostic. Only after bid matching he would know the hours for which he is liable to deliver the quoted quantum of electricity.
	PTC	This bid provides flexibility in the time period, however time period is not mentioned which will create difficulty for plants to generate. For example: Let us assume, a seller has placed 50 MW at 5 Rupees/Kwh and it is a lean season for hydro plant. Now if the prices are favorable for generator due to high demand, his bid will get selected for let us say 24 hours. How the plant will run as he would not be having a source of water at lean season. To make it more convenient, duration of generation should be provided while placing the bid like 6 hours so that the plant can run in a desired manner.	Flexi bid will have an option whereby participants would quote the no. of hour blocks for which they are willing to buy/sell power above/below the price quoted. The no. of hours for which the order can be placed would either be Contiguous or be Single Hours at a time. Thereby, the concern raised would be addressed.

	JITPL	Bidders should be allowed to choose if they wish to clear their bid in consecutive hours only. In the proposed scenario, if bidder wishes to sell for 7 hrs and choose this particular bid order, then there may be a situation when there is a gap of 2-3 Hrs in each cleared block. This will result in additional change in schedule. If an additional option is given so as to make sure that Bid will get cleared in consecutive time blocks, big thermal generators will also be able to take advantage of this type of bid order.	We would like to state that Flexi Bid would have the option of both Contiguous Hours and Single Hour. In Flexi Bid with Contiguous Hour facility. A bidder may quote the quantum and the no. of hours for which he would trade. The no. of hours would be contiguous. While selecting the bid, the avg. price of the Hour would be considered for selecting the bid. Maximum no. of contiguous hours would be parameterized by IEX at a later stage. A bidder may also place Flexi bid for a single hour. If a bidder places Flexi bid for single hour multiple times, it would mean that he might get selected in that multiple hours for which he has placed bids. These hours may or may not be contiguous in that case. However, a single hour flexi bid may overlap for the same hour. For e.g. Two 50 MW single hour flexi bid may get cleared for the same hour.
Profile Block Bid	GMR Energy Trading Ltd.	The calculation of the same should be defined, as whether the bids are selected in the system one-by-one until they lie in range to price quoted or the bid is considered as one.	Profile block bids would be considered as one bid and selected on all or none basis which is similar to the selection methodology of Block Bids. Only difference with reference to a block bid is that for a profile block bid the weighted average price would be considered for the selection of the bids.

	PTC	As suggested in the petition, in case of profile bids defining the same price for all time blocks may hinder the peak pricing which actually reflects the demand supply in market. Fixing the price for all time blocks may impact the overall price of the Exchange and might increase the rate of cleared price in Exchange which results into increase in purchase cost of Discoms.	"Profile Block bids would allow Renewable generators, Thermal Generator or buyers to bid varying quantum for different time periods and selection criteria would be all or none wherein weighted average price for the quoted time periods would be considered. This would increase participation of generators and also buyers and thereby help in increasing liquidity as well as price discovery in DAM. Same price for different time blocks still exists in case of Block Bids in the present market. In a Block Bid, a Buyer/Seller quotes the same price throughout the time-blocks, which may even be for the whole day. Quoting the same price for all time blocks is the main feature of a Block Bid. Therefore, we feel that the concern raised regarding the overall price of the exchange doesn't hold its ground. "
	Tata Power Trading Co. Ltd.	In minimum quantity and profile block bids, it is probable that no quantum gets cleared. In such a situation, if generators are scheduling power based on clearing of either of two block bids, will have to make their units shut down from 00 hrs next day. In the said scenario, schedule stop condition may also apply here similar to Minimum Income Condition bid type under single bid category.	Presently, Schedule Stop Condition is for assistance of Minimum Income Bid. SSC will avoid the abrupt shutdown of a plant due to non-selection on the next day. However, we are in agreement with the suggestion that SSC may be applied for Minimum quantity block bid and Profile block bid, which would further help the participants of the exchange. IEX would consider the suggestion raised and work in the development of the same in the next phase of development.
	JITPL	Bidder should be given an option to choose MQB while placing a profile block bid, to minimize risk of paradoxical error, a single MQB for the whole bid or separate MQB for each block period within whole segment of the bid.	We may consider this suggestion and work for the development of the same in the next phase of development.

Minimum Income Condition Bid (MIC)	GMR Energy Trading Ltd.	Such bid types are appreciable and supportive and would be a good if proposed for buying entities also	As of now such bids are being contemplated only for sellers as they seem to be more relevant for generators to cold start a plant.
	PTC	The proposed bid (order) type may benefit only a certain set of customers and may also lead to creating complexities in the system operation at the customer end.	Minimum Income Condition Bid would provide flexibility for the participants to plan for their revenue realization and would help recovering the costs such as start-up cost in addition to variable cost. It is incorrect to say that these would help only a certain type of participant. In fact with increase in liquidity envisaged due to introduction of such bids would help all participants in the market. In case a customer feels such bids are not suitable for their needs they can still rely on the existing bid types which would remain available as before.
Schedule Stop Condition	GMR Energy Trading Ltd.	Calls for more clarification on duration within/for which the ramp down will be scheduled	Schedule Stop Condition is for assistance of Minimum Income Bid. SSC will avoid the abrupt shutdown of a plant due to non-selection on the next day. A generator could choose no. of time blocks it would require to stop its generating station. However, IEX would provide options for which ramp down would be scheduled and a participant may choose such time duration based on its plant requirements.

	PTC	As mentioned in the petition in the "Schedule Stop Condition" Single bid will make the grid more stable but nothing is mentioned about the time block. Hence timelines may be clearly mentioned or a right to be given to members for selecting the ramp down and up rate in the system so that better management of asset can be ascertained. This order is directly connected to MIC. In case generators intend to use MIC order type they are forced to use this order also as selection of MIC might led to ramping issues for generators. Considering the same it is to be noted that choice of bid is an essential element however, it is equally important that the various products offered at the exchange are designed in such a way that they do not result in overlaps, conflicts, complexities and confusion. Due to selection of both the order it might led to complexity for generators. In view of the same it is suggested that the market condition at present is not conducive for introduction of the above product.	Time blocks for which the SSC will be according to the Ramp down requirement of a seller subject to a maximum limit as notified by the exchange. It is to mention here that opting SSC bid is voluntary which is at the discretion of the participant. However, using SSC would in a way benefit a generator to avoid abrupt change in schedule. Here, we would also like to mention that all the existing bid (order) types would remain available.
	JITPL	We understand that SSC can only be used with MIC bid type only. However, considering the nature of Block Bid, including Profile Block Bid and MQB, bidder should have an option to choose SSC with such bid orders also. This will avoid abrupt stop of plant in case Profile/MQB does not get cleared.	As explained above we would consider this suggestion in the next phase of development.

Load Gradient Bid type	JITPL	We understand that this particular bid order type doesn't check the economics, but technicality only. There should be an option to assure minimum income in this bid type	As of now we have not proposed MIC bid in conjunction with the Load gradient bid.
Other Comments	Tata Power Trading Co. Ltd.	It is submitted that all the existing bid types (Single and Block bids) should continue in its current structure, even if IEX proposal to introduce new bid types is approved by CERC.	IEX would like to clarify that all the existing bid (order) types i.e. Single Bid, Block Bid & Block Bid (with Mother child combination) would continue to exist. There would be no change in the extant bid (order) types. All the new introductions are for facilitating the participants of IEX and are over and above the existing ones.
		Priority of bid clearing on IEX currently follows the sequence of bid price, time of bid and quantity of bid. As IEX has proposed to introduce new single and new block bid types, it is not clear what will be the priority of different types of proposed new single/block bids.	There would be no change in the priority of block bid clearing. It would continue as per the current methodology of price-volume- time priority sequence.
		It is also suggested that all the possible combination of proposed single and block bids be permitted subject to a condition that total bid quantum during any 15 min time block does not exceed the NOC quantum.	IEX confirms that no bid exceeds the NoC quantum and suitable checks in the system are already in place to ensure the same.
	Statkraft	The order upload facility with suitable file format is also required to minimize the time for submitting the orders with accuracy with the launch of these order types.	IEX would consider development for providing facility for suitable file format upload.
		We feel that few order types are also required for increasing the participation of Industrial consumers in Day Ahead Market.	Out of the scope of the present petition. Suggestion may be considered.

	GMR Energy Trading Ltd.	In order to implement such a major change and to have further practice in our existing system, they have requested IEX to allow sufficient time in the tune of 6 months for smooth changeover.	Sufficient time and training would be provided by IEX to the stakeholders before the introduction of new bid (order) types in DAM.
		With the introduction of various new order type, in depth clarifications are required on how the aggregate demand and supply curve would be plotted and the criteria on the priority of various types of bid while clearing the volume over day ahead market segment.	There is no change is the matching software even after including these bids. The priority condition of Bid Price, Volume and Time would continue to be followed. The details of the same are available in the Business Rules of IEX.
		The time priority of various bid type should be clearly explained	Time priority becomes relevant only for similarly placed block bids. In case of two block bids only one can be selected selection criteria would be volume and if volume is also same than the block bid which was received earlier would be considered.
		Clarification on congestion management after the introduction of new order type	No change in methodology for congestion management. Present methodology of Market Splitting would be followed in case of congestion in the transmission system.
		Suggest IEX to provide bid matching examples in each proposed options on order types on how buy/ sell bids are handled in the algorithm designed. This will benefit market participants to understand better to derive purchase/sale patterns.	No change in the methodology for bid matching. Details of the same, along with detailed examples, are provided by IEX in its Business Rules.

	Sembcorp	An additional bid type may also be introduced to take care of requirement of clearing certain quantity in the non-peak period for project which have varying quantum already tied up in other contracts. The new bid type needed (hybrid of profile bid and revenue bid) wherein the plant would give the inputs for MUs to be cleared at varying prices (discovered by the system) so as to maintain overall X revenues for the trading day (to ensure overall realization is higher than energy cost). So the system can use the combination of minimum required quantum bid and total available quantum to optimize the revenue while ensuring the minimum revenue requirement (so can discover prices below the energy cost for few blocks and higher for other costs so as to maintain overall positive revenues for the plant).	Profile Block Bid could come as an aid. However, we will look for more options to cater to the requirement put forward by you.
		The present limit of 60 block bids is limiting the options for generators and hence the same may be increased to at least 100.	Out of the scope of the present petition, however, comment would be considered.
	PTC	The Power Exchange is an electronic clearing platform for Buy and Sell with the objectives to: i. Ensure fair, neutral, efficient and robust price discovery ii. Provide extensive and quick price dissemination iii. Design standardized contracts and work towards increasing liquidity in such contracts Any product which is for the maximization of gain for either buyer or seller may defeat the basic objective of neutrality and being non-partisan for either buyer or seller.	IEX endeavors to innovate and come up with power market products which would facilitate its participants while bidding on its platform. Power Market has been evolving ever since its inception and recently has changed its characteristic faster than ever. In this light, IEX felt the need of introducing new bid (order) types in DAM in order to cater the changing requirements of the market. The sole purpose of introducing these products is to facilitate participants in DAM. The increased participation coming out of ease in bidding will improve the liquidity and increase the depth of DAM. Eventually,

			consumer at large would be benefitted by a better price discovery in the market.
		The proposed new bid (order) types may create further complexities and may make it difficult for the clients to execute. It is suggested that a more detailed analysis including the calculation methodology for each bid (order) type may be shared by IEX to the stakeholders. Comparison of existing bid (order) type viz-a-viz new proposed bid (order) type may also be made as we understand; there is some flexibility already available in the existing system.	New bids (order) types are to facilitate the participants in placing their bid and help them bid according to their generation/ demand pattern. These Bids are being provided for benefit the participants while bidding in DAM. Such bids are also available in various international exchanges. No change is the calculation methodology after the introduction of new bid (order) types. No comparison as requested is required. The extant bid (order) types would continue to remain. The new bid (order) types would be an addition to the existing ones.
		As per the present regulations, there are clearly defined roles of system operator and Power Exchange. With this proposal, there may be an over-lapping of roles of these entities.	No such role over-lapping would take place. The concern is unwarranted.
		The new proposed bid (order) types has been created with an objective of providing flexibility to a certain set of customers, however the similar flexibilities are already available in the existing system such as Intra-Day Market. Instead of establishing a new bid (order) type, there may be some modifications and strengthening of the Intra-Day	Flexibility provided by the products is for the participants in DAM. Intra-day market serves a completely different role and provides contingency requirements for the participants. With a wide consultation with the stakeholders, efforts are being made to strengthen and increase liquidity in TAM.

		Market.	
		Like for single bid and block bid facility which is available in the present system, an upload facility may be provided wherein a bulk upload of bids is possible from the member's end to enable the members to utilize the existing approved bid (order) types more optimally.	Out of the scope of the present petition. However, the point may be considered.