

Annexure - I

Illustrations on Limit Price Protection (LPP) Mechanism

Trading members are requested to note that the examples provided below for various scenarios are representative and meant for conceptual understanding purpose only. Order prices and LPP parameters given in the examples are not specific to any product or market segment.

Scenario 1:

Limit price order shall be accepted up to the LPP range on the reference price (average trade price or theoretical price), i.e. X% higher/lower than the reference price.

1a. Buy limit order shall be allowed to trade up to X% higher than reference price.

For Example: future contract

Reference Price (Rs.)	100.00
LPP %	3% (i.e. Rs.3)
LPP Range (Rs.)	97.00 – 103.00
Price Band (Rs.)	92.00 – 112.00

Buy orders placed at below mentioned price are accepted as orders are within LPP range.

Order Book:

QTY	BUY PRICE
10	102.00
10	101.00
10	100.00
10	99.00

1b. Sell limit order shall be allowed to trade up to X% lower than reference price.

For Example: option contract

Reference Price (Rs.)	100.00
LPP %	60% (i.e. Rs.60)
LPP Range (Rs.)	40.00 – 160.00
Price Band (Rs.)	5.00 – 175.00

Sell orders placed at below mentioned price are accepted as orders are within LPP range.

Order Book:

QTY	SELL PRICE
10	95.00
10	97.00
10	98.00
10	99.00

Scenario 2:

The LPP range of X% higher/ lower than reference price, shall also be subject to minimum absolute value in rupee terms.

For Example: future contract

Reference Price (Rs.)	49.00
LPP %	3% (i.e. Rs.1.47)
LPP Range (Rs.)	47.53 - 50.47
Minimum absolute value (Rs.)	1.50
Applicable LPP range (Rs.)	47.50 – 50.50
Price Band (Rs.)	46.50 – 51.30

As given in above table, LPP range value is less than minimum absolute value so, minimum absolute value shall be applicable. Now Buy / Sell limit orders placed at different limit prices which are within the applicable LPP range shall be accepted.

Scenario 3:

Limit price orders placed beyond LPP range shall be rejected.

For Example: option contract

Reference Price (Rs.)	100.00
LPP %	60% (i.e. Rs.60)
LPP Range (Rs.)	40.00 – 160.00
Price Band (Rs.)	5.00 – 175.00

a) Buy order placed for quantity 10@164

Above order will get rejected with reason “ORDER PRICE IS BEYOND LPP LIMIT “as order price is beyond LPP range, even though it is within the price bands.

b) Sell order placed for quantity 10@36

Above order will get rejected with reason “ORDER PRICE IS BEYOND LPP LIMIT “as order price is beyond LPP range even though it is within the price bands.

Scenario 4:

During trading hours, if trades are happening in last 30 seconds, then ATP of these trades shall be used as the reference price for the next time slot.

Slot start time	Slot end time
09:15:30	09:16:00

For Example: future contract

In this time slot, 5 trades were executed at 100.50, 100.00, 99.50, 99.00 and 98.50 respectively. So, reference price for the next time slot = 99.50 (ATP of above mentioned 5 trades)

Reference Price (Rs.)	99.50
LPP %	3% (i.e. Rs.2.99)
LPP Range (rounded off as per tick size) (Rs.)	96.55 - 102.45

Now, buy & sell limit orders which are within the LPP range will be accepted in the next time slot.

Scenario 5:

LPP range validation shall be subject to the order price being within the prevailing price bands applicable for that contract.

For Example: Option contract

Reference Price (Rs.)	90.00
LPP %	60% (i.e. Rs.54.00)
LPP Range (Rs.)	36.00 - 144.00
Price Band (Rs.)	5.00 – 120.00

Here computed LPP range is falling outside the price band. Hence, following cases may occur –

- a) Buy Order placed within the LPP range and price band will get accepted.
E.g. Buy order placed at Rs.95.00 will get accepted since this order price is within the LPP range and price band.
- b) Buy Order placed within the LPP range but outside the price band will get rejected.
E.g. Buy order placed at Rs.125.00 will get rejected since this order price is within the LPP range but outside the prevailing price band.

Scenario 6:

LPP range shall be applicable on order modification requests also.

For Example: future contract

Reference Price (Rs.)	100.00
LPP %	3% (i.e. Rs.3)
LPP Range (Rs.)	97.00 – 103.00
Price Band (Rs.)	92.00 – 112.00

Buy orders placed at below mentioned price and accepted as orders are within LPP range.

Existing Order Book:

QTY	BUY PRICE
10	100.00
10	99.00
10	98.00
10	97.00

- a) If the 1st buy order @ 100.00 is modified to any price upto Rs.103.00, then it shall be accepted since it is within the LPP range.

QTY	BUY PRICE
10	101.00

- b) However, if it is modified to a price higher than Rs.103.00, then it shall be rejected since it is beyond the LPP range.

QTY	BUY PRICE
10	106.00

Scenario 7:

For stop loss limit orders, LPP range shall be applicable on the trigger price.

For Example: future contract

Reference Price (Rs.)	95.00
LPP %	3% (i.e. Rs.2.85)
LPP Range (Rs.)	92.15 - 97.85
Price Band (Rs.)	90.0 – 110.00

- a) Buy stop loss limit order accepted:
Current LTP: 95.20. Buy stop loss order placed as follows –

QTY	LIMIT PRICE	TRIGGER PRICE
10	97.50	97.00

LTP has now changed to 97.00 thereby triggering the stop loss order. So, limit order of price 97.50 will get accepted since it is within the applicable LPP range.

- b) Buy stop loss limit order rejected:
Current LTP: 95.20. Buy stop loss order placed as follows –

QTY	LIMIT PRICE	TRIGGER PRICE
10	98.00	97.00

LTP has now changed to 97.00 thereby triggering the stop loss order. But limit order of price 98.00 will get rejected since it is outside the applicable LPP range.

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