Dynamic Delist Bid Threshold (DDBT) Amendments

NESCOE's proposed changes to how the DDBT is calculated October NEPOOL Markets Committee

Overall Design

- Generally we understand the change to the methodology
- We are concerned that as capacity prices increase or increases significantly, there is a possibility that the DDBT could be set too high
- We remain concerned that a DDBT at or near Net CONE puts consumers at risk
- The risk of the DDBT being set too high or at Net CONE creates the possibility that some bids that should be reviewed for the exercise of market power may not be reviewed
- This could have consumer cost implications
- We are recommending two amendments to ease these concerns

NESCOE Amendments

- Add and Modify the Upper Bound on DDBT. Maximum DDBT can be set too high and demand increases can result in the DDBT being set too high
- 2. *Limit DDBT Maximum Rate of Change*. Significant increases in clearing price can result in subsequent DDBT being set too high due to additional market response in subsequent auctions

ISO-NE identified three design objectives driving their proposed changes

- 1) Identify for review FCA de-list bids that may reflect an exercise of market power
- 2) Limit unnecessary administrative interference in competitive price formation
- 3) Use a transparent and robust calculation methodology

These objectives are in a degree of tension, requiring a balance between (1) and (2) in particular

Source: ISO-NE, NEPOOL Markets Committee, "Forward Capacity Auction Dynamic De-List Bid Threshold," August 11-14, 2020, Slide 4.

Amendment #1: Add and Modify Upper Bound

To better balance design objectives #1 (adequate review) and #2 (administration), NESCOE is proposing to:

- 1. Lower the upper bound from Net CONE to 85% of Net CONE and,
- 2. Add an upper bound set at 125% of the prior auction clearing price

ISO-NE modified its approach to include a lower bound to better balance the design objectives

- Supply curve may be fairly flat to the left of the clearing price
- Using just the calculated DDBT may result in the threshold dropping significantly and, thus increasing the amount of de-list bids that need to be reviewed
- Adding a lower bound, prevents the DDBT from falling as quickly, acknowledging the potential for the supply curve to be relatively flat

ISO-NE believes this reflects a better balance of design objectives #1 (adequate review) and #2 (administration)

Lower bound can result in a higher DDBT reducing the number of de-list bids to review



Note: Demand curve is based upon FCA 14. Supply curve and future demand curves (reflecting 1,000 MW reduction from FCA14) are developed for purposes of explaining the proposal.

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Problem 1: Demand increases may result in the DDBT being set too high

- If the slope of the supply curve to the right of the clearing price is flat, there is the potential for the DDBT to be well above where the market will clear in the next forward capacity auction (FCA)
 - If the slope of the supply curve is very steep to the right of the demand curve this is less of a concern
- NESCOE does not believe this strikes an appropriate balance between design objectives #1 (adequate review) and #2 (administration)

ISO-NE proposal assumes supply curve is relatively steep after the point of clearing in the prior auction



Note: Demand curve is based upon FCA 14. Supply curve and future demand curves (reflecting 1,000 MW increase from FCA14) are developed for purposes of explaining the proposal.

However, a flatter supply curve can result in the DDBT being set too high and results in inadequate review



Note: Demand curve is based upon FCA 14. Supply curve and future demand curves (reflecting 1,000 MW increase from FCA14) are developed for purposes of explaining the proposal.

Adding an upper bound set at 1.25 times the FCA clearing price reduces potential for inadequate review

- Upper and lower bounds are symmetrical above and below the prior FCA clearing price
- Lower bound is reducing the amount of review required assuming a flatter supply curve to the left of the prior clearing
- Upper bound is increasing the amount of review required assuming a flatter supply curve to the right of the prior clearing

Adding an upper bound is a better balance of design objectives #1 (adequate review) and #2 (administration)

Upper bound acknowledges the potential for the supply curve to be flatter to the right of the clearing



FCA 14 Demand FCA 14 Example Supply FCA 15 Example Demand ----- Lower Bound ----- Calculated DDBT ----- Net CONE - - - Final DDBT

Note: Demand curve is based upon FCA 14. Supply curve and future demand curves (reflecting 1,000 MW increase from FCA14) are developed for purposes of explaining the proposal.

Problem 2: DDBT at Net Cone Creates Market Power Risk

- Net CONE is an administrative function with many many inputs
- Choosing a DDBT slightly below Net CONE allows room for error in that calculation
- At higher price levels better to err on the side of more review
 - If under reviewed consumer dollars can never be recovered
 - The threshold is only a review threshold
 - At these higher levels, its likely that fewer reviews would be required
- NESCOE believes this strikes an appropriate balance between design objectives #1 (adequate review) and #2 (administration)

Amendment #1: Modify and create an additional upper bound on DDBT based upon 125% of the prior FCA clearing price III.13.1.2.3.1.A Dynamic De-List Bid Threshold.

(b) The Dynamic De-List Bid Threshold shall not be higher than the lower of 85% of the Net CONE value and 125 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A. for the upcoming Forward Capacity Auction, and shall not be lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A (except where the Net CONE value for the upcoming Forward Capacity Auction is lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A). If the Dynamic De-List Bid Threshold is constrained by any either of the limitations described in this subsection (b), the ISO shall so indicate in its publication of the Dynamic De-List Bid Threshold to the ISO's website.

Amendment #2: Limit the Amount of Change in the DDBT

NESCOE is proposing to limit the maximum rate of change in the DDBT from auction to auction based upon 30% of Net CONE

Problem: Significant increases in clearing prices may result in DDBT being set too high

- When there is no/little change in demand, the clearing price effectively sets the DDBT under the assumption that the supply curve will be similar in the next auction
- In cases where there is a significant price increase from the prior auction (e.g., large retirement de-list bid, demand increase), assuming that the supply curve will be unchanged in subsequent auctions is not correct
 - Additional market response will occur in the subsequent auction(s) which could result in clearing well below the prior auction price
- NESCOE does not believe this strikes an appropriate balance between design objectives #1 (adequate review) and #2 (administration)

Supply shift and demand increase results in a significant change in clearing price (\$4.35/kW-mo increase) from FCA14 to FCA15



Note: Final DDBT is set based upon the proposal in Amendment #1 to limit the DDBT based upon an upper bound. Calculated DDBT in this example is \$4.04/kW-mo.

In response to the price increase additional supply enters the market in the FCA16 (assume no change in demand from FCA15)



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Limiting the maximum increase in the DDBT from auction to auction reduces the potential for inadequate review

- While much information is provided ahead of the auction around conditions (e.g., increases in demand, retirements) that could require more supply in the prompt auction
- Assumption that a high price would not result in additional market response in subsequent auctions if the need persists is not necessarily correct
- Additional supply entering the market could shift the supply curve to the right and result in clearing outcomes well below the prior auction clearing price

Limiting the DDBT increase from auction to auction is a better balance of design objectives #1 (adequate review) and #2 (administration)

Limit on the amount of DDBT increase should focus on more extreme cases

- Setting the increase in DDBT from auction to auction at 30% of Net CONE limits the DDBT, but only in more extreme cases
 - When Net CONE is \$8.19/kW-mo, the maximum increase in the DDBT would be \$2.46/kW-mo from auction to auction
- Starting with the FCA 14 DDBT of \$2.50/kW-mo, the DDBT would approach Net CONE within two auctions if clearing prices remained high
 - FCA15 Upper Bound = \$4.96/kW-mo (61% of Net CONE)
 - FCA16 Upper Bound = \$7.41/kW-mo (91% of Net CONE)
 - FCA17 Upper Bound = \$8.19/kW-mo (100% of Net CONE)

Setting a maximum increase in DDBT reduces potential for inadequate review



Note: DDBT from FCA15 is set based upon the proposal in Amendment #1 to limit the DDBT based upon an upper bound.

Amendment #2: If Amendment #1 Fails

III.13.1.2.3.1.A Dynamic De-List Bid Threshold.

(b) The Dynamic De-List Bid Threshold shall not be higher than the lower of the Net CONE value and prior Forward Capacity Auction's Dynamic De-List Bid Threshold plus 30% of Net CONE for the upcoming Forward Capacity Auction, and shall not be lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A (except where the Net CONE value for the upcoming Forward Capacity Auction is lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A). If the Dynamic De-List Bid Threshold is constrained by any either of the limitations described in this subsection (b), the ISO shall so indicate in its publication of the Dynamic De-List Bid Threshold to the ISO's website.

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Amendment #2: If Amendment #1 Passes

III.13.1.2.3.1.A Dynamic De-List Bid Threshold.

(b) The Dynamic De-List Bid Threshold shall not be higher than the lower of 85% of the Net CONE value or 125 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A., or the prior Forward Capacity Auction's Dynamic De-List Bid Threshold plus 30% of Net CONE for the upcoming Forward Capacity Auction, and shall not be lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A (except where the Net CONE value for the upcoming Forward Capacity Auction is lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A). If the Dynamic De-List Bid Threshold is constrained by any either of the limitations described in this subsection (b), the ISO shall so indicate in its publication of the Dynamic De-List Bid Threshold to the ISO's website.

. . . .

Two proposed amendments reflect a better balance between design objectives #1 (adequate review) and #2 (administration)

- 1. *Add and Modify the Upper Bound on DDBT*. Maximum DDBT can be set too high and demand increases can result in the DDBT being set too high
- 2. *Limit DDBT Maximum Rate of Change*. Significant increases in clearing price can result in subsequent DDBT being set too high due to additional market response in subsequent auctions

Acronyms

- FCA Forward Capacity Auction
- DDBT Dynamic De-list Bid Threshold
- CONE Cost of New Entry