Assessment Principles for Dynamic Containment

Introduction

The purpose of this document is to set out the principles NGESO will apply to assess the tenders made by providers to provide the dynamic containment service to the ESO.

Prequalification criteria

Any provider who meets the technical requirements will be assessed using the principles set out in this document.

Assessment principles

Our objective is to maintain the balance of the electricity system in an efficient, economic and coordinated manner and therefore secure our requirement at least cost. So, to assess the tenders we calculate the cap price by which the marginal units will be rejected. We will only accept those tenders that offer value when compared to alternative cost. All units tendered will be selected on the basis that NGESO believe that the total costs of securing and operating the system are lower with than without that unit. We will also apply a no-real time metering cap in accordance with service rules, as set out in the volume limits section.

Buy Order options

The price limit for procuring the Dynamic Containment is informed by the price of the nearest equivalent alternative services to ensure an economic and efficient approach. The assessment will therefore apply the maximum price ESO is willing to pay.

Fee / Pay as Bid

Participants will submit their availability fee (£/MW/h). The awarded contracts will be settled based on pay as bid price.

Volume limits and Overholding

A limit of up to 300 MW is in place on units with no Real Time Metering or Baseline due to operational reasons posed by the absence of this data.

To handle this limit any units that may be economic but would lead to this limit being breached, or would lead to overholding, will be rejected. If there are units remaining in the stack that are economic and would meet the requirement with zero overholding these may then be accepted. There can be some bids accepted that appear lower in the stack due to higher price, as they have higher £/MW/h but they are of lower volume. They can be accepted instead of bigger volume bids if they do not create overholding. An example of this scenario is found in Appendix 1 Scenario 6.

Cluster bids - last resort rank factor

There may be some instances whereby we receive bids that have the same characteristics (same price, volume, aggregation type) whereby we may need to introduce last resort rank factor. Each tender will be randomly assigned a unique number prior assessment should the last resort rank factor be required. Should rank and factor be required in

the assessment process then for full transparency, we shall share with market participants how their bids were ranked. This factor will only be used as last resort.

Assessment Methodology

As such, the assessment methodology will be as follows:

- Rank all orders by price

- Reject orders which are not economic against alternative action(s)

- Accept all economic orders until the sum of units without real time metering or baselines reaches 300MW limit, then reject all units which do not meet these criteria.

- Carry on accepting submissions which satisfy all criteria until the requirement is met

- Whereby we receive bids that have the same characteristics (same price, volume, aggregation type) as the marginal unit, use the last resort rank factor to determine which unit(s) to accept and reject.

- Reject any units that would incur overholding (either against overall requirement or due to them being a unit that would result in their being more than 300MW of units without real time metering or able to submit baselines). If there are units remaining in the stack that are economic and would meet the requirement with zero overholding continue to accept them.

Rejection Codes

All rejected tenders will receive a code which will help market participants determine why they were rejected. Rejection codes that will be used in the assessment process are as follows:

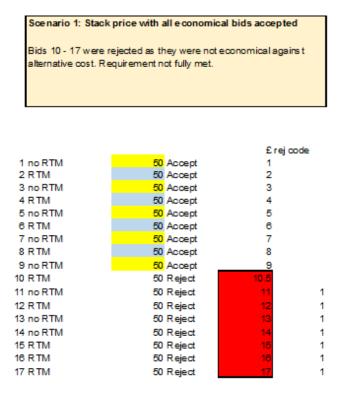| Rejection code	Reason
1	Bid not beneficial against alternative cost
2	Requirement met by more economic offers
3	Requirement met by more economic offers. Applies only to units with no Real Time Metering and Baseline where requirement of 300 MW was met by more economic offers
4	Non-compliant bid
5	Withdrawn

Market information

To give transparency of this service we will publish market information via the https://data.nationalgrideso.com/ancillary-services/dynamic-containment-data.

After the assessment, we will publish the number of providers, tender parameters including prices and whether they were accepted or rejected.

Examples of calculations for creating the supply stack

RTM – real time metering unit
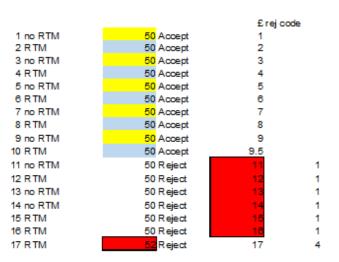
No RTM – no real time metering unit

Scenario 1: Stack price with all economical bids accepted
Bids 10 - 17 were rejected as they were not economical against alternative cost. Requirement not fully met.

Scenario 2: Stack price with a non-compliant bid and all econ bids accepted
Bid 17 was rejected as it either offered more than tested volume, unit volume or allowed 50 MW unit cap. Bids 11-16 rejected as they were not economical against alternative cost. Requirement fully met

Scenario 1

	£		rej code	
1 no RTM	50	Accept	1	
2 RTM	50	Accept	2	
3 no RTM	50	Accept	3	
4 RTM	50	Accept	4	
5 no RTM	50	Accept	5	
6 RTM	50	Accept	6	
7 no RTM	50	Accept	7	
8 RTM	50	Accept	8	
9 no RTM	50	Accept	9	
10 RTM	50	Reject	10.5	
11 no RTM	50	Reject	11	1
12 RTM	50	Reject	12	1
13 no RTM	50	Reject	13	1
14 no RTM	50	Reject	14	1
15 RTM	50	Reject	15	1
16 RTM	50	Reject	16	1
17 RTM	50	Reject	17	1

Max price:	£10	
Max volume:	500	
Offered volume:	400	no RTM
	450	RTM
Accepted volume:		
	250	no RTM
	200	RTM
	450	

Scenario 2

	£		rej code	
1 no RTM	50	Accept	1	
2 RTM	50	Accept	2	
3 no RTM	50	Accept	3	
4 RTM	50	Accept	4	
5 no RTM	50	Accept	5	
6 RTM	50	Accept	6	
7 no RTM	50	Accept	7	
8 RTM	50	Accept	8	
9 no RTM	50	Accept	9	
10 RTM	50	Accept	9.5	
11 no RTM	50	Reject	11	1
12 RTM	50	Reject	12	1
13 no RTM	50	Reject	13	1
14 no RTM	50	Reject	14	1
15 RTM	50	Reject	15	1
16 RTM	50	Reject	16	1
17 RTM	52	Reject	17	4

Max price:	£10	
Max volume:	500	
Offered volume:	400	no RTM
	452	RTM
Accepted volume:		
	250	no RTM
	250	RTM
	500	

Scenario 3: Stack price with requirement met by more economical bids
Bids 11- 17 had to be rejected as more economical bids satisfied the requirement. All bids were beneficial against alternative actions.

Scenario 4: Stack price with 300 MW of non-Real time metering met
Bid 10 had to be rejected even though it was in the stack however 300 MW from no RTM was met and no more than that could be accepted. The next bid 11 is more expensive however is accepted as it is RTM unit.

	£		rej	code
1 no RTM	50	Accept	1	
2 RTM	50	Accept	2	
3 no RTM	50	Accept	3	
4 RTM	50	Accept	4	
5 no RTM	50	Accept	5	
6 RTM	50	Accept	6	
7 no RTM	50	Accept	7	
8 RTM	50	Accept	8	
9 no RTM	50	Accept	9	
10 RTM	50	Accept	9.5	
11 no RTM	50	Reject	10	2
12 RTM	50	Reject	10	2
13 no RTM	50	Reject	10	2
14 no RTM	50	Reject	10	2
15 RTM	50	Reject	10	2
16 RTM	50	Reject	10	2
17 RTM	50	Reject	10	2

Max price:	£10
Max volume:	500
Offered volume:	400 no RTM
	450 RTM
Accepted volume:	
	250 no RTM
	250 RTM
	500

	£		rej	code
1 no RTM	50	Accept	1	
2 no RTM	50	Accept	2	
3 no RTM	50	Accept	3	
4 RTM	50	Accept	4	
5 no RTM	50	Accept	5	
6 RTM	50	Accept	6	
7 no RTM	50	Accept	7	
8 RTM	50	Accept	8	
9 no RTM	50	Accept	9	
10 no RTM	50	Reject	9.5	3
11 RTM	50	Accept	10	2
12 RTM	50	Reject	10	2
13 no RTM	50	Reject	10	2
14 no RTM	50	Reject	10	2
15 RTM	50	Reject	10	2
16 RTM	50	Reject	10	2
17 RTM	50	Reject	10	2

Max price:	£10
Max volume:	500
Offered volume:	450 no RTM
	400 RTM
Accepted volume:	
	300 no RTM
	200 RTM
	500

Scenario 5: Stack price with cluster bids
Bid 9 and 10 are identical (no RTM, same price, same volume offered) and there is only space for last 50 MW to fill. We will apply random ranking prior to the assessment and will only be used when needed.

Scenario 6: Stack price with overholding volume
Bid 11 was rejected as accepting it would mean we would have a total of 310 MW of no-RTM
Bid 13 was rejected as accepting it would mean we would have a total of 510 MW of all volume (RTM and no-RTM).
Bid 14 was accepted even though the price was higher than for bid 13 however there is no overholding.

			£	rej code	rand rank
1 no RTM	50	Accept	1		10
2 no RTM	50	Accept	2		12
3 no RTM	50	Accept	3		11
4 RTM	50	Accept	4		3
5 no RTM	50	Accept	5		9
6 RTM	50	Accept	6		2
7 no RTM	50	Accept	7		6
8 RTM	50	Accept	8		17
9 no RTM	50	Reject	9	3	14
10 no RTM	50	Accept	9		1
11 no RTM	50	Accept	9.5		8
12 RTM	50	Reject	10	2	5
13 no RTM	50	Reject	10	2	15
14 no RTM	50	Reject	10	2	13
15 RTM	50	Reject	10	2	16
16 RTM	50	Reject	10	2	4
17 RTM	50	Reject	10	2	7

			£	rej code
1 no RTM	50	Accept	1	
2 no RTM	40	Accept	2	
3 no RTM	40	Accept	3	
4 RTM	40	Accept	4	
5 no RTM	40	Accept	5	
6 RTM	40	Accept	6	
7 no RTM	50	Accept	7	
8 RTM	40	Accept	8	
9 no RTM	30	Accept	9	
10 no RTM	40	Accept	9.1	
11 no RTM	20	Reject	9.2	3
12 RTM	50	Accept	9.3	
13 RTM	50	Reject	9.4	2
14 RTM	40	Accept	9.5	
15 RTM	50		12	1
16 no RTM	50		13	1
17 RTM	50		14	1

Max price:	£10
Max volume:	500
Offered volume:	500 no RTM
	350 RTM
Accepted volume:	
	350 no RTM
	150 RTM
	500

Max price:	£10
Max volume:	500
Offered volume:	360 no RTM
	360 RTM
Accepted volume:	
	290 no RTM
	210 RTM
	500