V0.5 – 27 February 2017

NTSCMF / Sub Group - the use of Interruptible Capacity

Some key terms in relation to interruptible capacity:

Term	Detail
Reserve Prices for Interruptible Capacity	The reserve prices for standard capacity products for interruptible capacity at Interconnection Points (IPs) shall be calculated by multiplying the reserve prices for the respective standard capacity products for firm capacity by the difference between 100% and the level of an ex-ante discount calculated.

Background

Tariff Network Code (TAR NC) Article 12 states that the level of discounts for the standard capacity products for interruptible capacity may be different at interconnection points. Article 16 calculates the probability of interruption.

Summary of Discussion(s)

- The calculation of the probability of interruption is specified in the TAR NC but this is IP specific. For information some of the key extracts of Article 16 are included in the Appendix.
- The question around whether IP's and Non-IP's should be priced differently was raised and there was no reason suggested why they would be any different.
- Modelling should have the ability to treat IP's and Non-IP's separately.
- There could be a number of ways of looking at the pricing such as;
    a) To treat all points the same thereby following the interruptible capacity pricing as per TAR NC. It will be necessary to review the calculations under TAR NC at the sub group and NTSCMF;
    b) To take a different start point, pricing Non IPs at zero, as currently done, then acknowledge that TAR NC mandates a separate treatment at IPs. As this would treat IPs and Non IPs differently, any approach will need to be considered against relevant objectives (discrimination, etc) and Ofgem's GTCR policy letter dated 21 February 2017.
- Changes being implemented as a result of the CAM NC Amendment do not change the treatment or pricing of interruptible capacity. Until such time as TAR NC / Gas Charging Review changes come into effect in 2019, interruptible capacity will continue to be treated as it is now.
- If the "Pro factor" (Probability) of the Article 16 calculation is likely to be zero then the "Adjustment Factor" could be considered irrelevant and spending time determining a methodology for its value at this stage may not be necessary. This can be kept under review however as a required term, whilst it may not be necessary to finalise what it could be at this stage, a proposal could be to set it to a default value of "1" to nullify its impact.
- If the likelihood of interruption is zero, as it may be expected, then this could reduce interruptible capacity
- bookings, especially if priced the same as firm.

Conclusion

It will be necessary to review the historical levels of interruption at each Entry and Exit point to consider the likelihood of interruption across Entry and Exit points.

Ofgem's open letter on TAR NC and GCR (21 February 2017) recommended that interruptible capacity at all Entry Points and off-peak capacity at all Exit points be priced based on the probability of interruption. This will need to correspond to the EU TAR NC calculation (for the purposes of EU compliance) as given in Article 16 for all Entry and Exit points.

Set the Adjustment factor referred to in article 16 calculations to a value of "1".

If there is a reason to differ from this approach then justification for any alternative arrangement should be considered and discussed as and when one is proposed.

Version Control

V0.1	First draft based on sub-group on 19.12.16
V0.2	Updated based on NTSCMF on 11.01.17
V0.3	Updated based on sub-group on 18.01.17
V0.4	Update following discussion at NTSCMF on 01.02.17
V0.5	Update following discussions at Sub group on 23.02.17

Appendix

TAR NC Article 16 states:

1. The reserve prices for standard capacity products for interruptible capacity shall be calculated by multiplying the reserve prices for the respective standard capacity products for firm capacity calculated as set out in Articles 14 or 15, as relevant, by the difference between 100% and the level of an ex-ante discount calculated as set out in paragraphs 2 and 3.

2. An ex-ante discount shall be calculated in accordance with the following formula:

$$Di_{ex\text{-}ante} = Pro \times A \times 100\%$$

Where:

$Di_{ex\text{-}ante}$ is the level of an ex-ante discount;

Pro factor is the probability of interruption which is set or approved in accordance with Article 41(6)(a) of Directive 2009/73/EC pursuant to Article 28, and which refers to the type of standard capacity product for interruptible capacity;

A is the adjustment factor which is set or approved in accordance with Article 41(6)(a) of Directive 2009/73/EC pursuant to Article 28, applied to reflect the estimated economic value of the type of standard capacity product for interruptible capacity, calculated for each, some or all interconnection points, which shall be no less than 1.

3. The Pro factor referred to in paragraph 2 shall be calculated for each, some or all interconnection points per type of standard capacity product for interruptible capacity offered in accordance with the following formula on the basis of forecasted information related to the components of this formula:

$$Pro = \frac{N \times D_{int}}{D} \times \frac{CAP_{av.\ int}}{CAP}$$

Where:

N is the expectation of the number of interruptions over D;

D_{int} is the average duration of the expected interruptions expressed in hours;

D is the total duration of the respective type of standard capacity product for interruptible capacity expressed in hours;

$CAP_{av.\ int}$ is the expected average amount of interrupted capacity for each interruption where such amount is related to the respective type of standard capacity product for interruptible capacity;

CAP is the total amount of interruptible capacity for the respective type of standard capacity product for interruptible capacity.

4. As an alternative to applying ex-ante discounts in accordance with paragraph 1, the national regulatory authority may decide to apply an ex-post discount, whereby network users are compensated after the actual interruptions incurred. Such ex-

post discount may only be used at interconnection points where there was no interruption of capacity due to physical congestion in the preceding gas year.

The ex-post compensation paid for each day on which an interruption occurred shall be equal to three times the reserve price for daily standard capacity products for firm capacity.