

NTSCMF / Sub Group - the use of Multipliers

Some key terms in relation to multipliers:

Term	Detail
Multiplier	Multiplier is the factor applied to the respective proportion (runtime) of the reference price in order to calculate the reserve price for non-yearly standard capacity product. A multiplier less than 1 will mean a reduction to the reference price and a multiplier greater than 1 will mean an increase from the reference price.
Seasonal Factors	Means the factor reflecting the variation of demand with the year which may be applied in combination with the relevant multiplier.

Background

The current LRMC, or Virtual Point, Model is designed based on a Long Run Marginal Cost model that is linked to cost of investment. The Transportation Model currently used produces the reserve prices and does not incorporate any multipliers within the Model. The overall charging framework applies relevant discounts to the reserve prices which are produced from the Transportation Model, to calculate the applicable Entry auction reserve prices and the Exit Off-peak prices. Currently multipliers range between 0 (zero) and 0.66 (resulting in a 33% discount) for Entry, and for Exit off peak there is a multiplier of 0 (zero). Where a multiplier of zero is used a zero reserve price is produced.

Under the current charging framework no Seasonal Factors are in place, the existing multipliers (discounts) apply all year round.

Under the EU Tariffs Code (TAR NC) the requirements of multipliers (Article 13) is for IPs only, however this will be an area to review about whether to apply single GB method for multipliers or to have separate treatment as permitted under TAR NC. The TAR NC does not provide for having zero multipliers. The level of multipliers shall fall within the following ranges:

- (a) for quarterly standard capacity products and for monthly standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 1.5;
- (b) for daily standard capacity products and for within-day standard capacity products, the level of the respective multiplier shall be no less than 1 and no more than 3. In duly justified cases, the level of the respective multipliers may be less than 1, but higher than 0, or higher than 3.

Under all potential Reference Price Methodologies the reference price is produced which may include additional elements (e.g. revenue based adjustment). The multiplier is a value applied to the reference price to produce the reserve price. Under TAR NC, specifically for Storage, a specific discount is available that is applied after the multiplier to produce a Storage specific Reserve Price.

Summary of Discussion(s)

- Multipliers can be perceived in different ways by different users and in what it means for them and can be used in a charging framework for a number of reasons (e.g. could be used

as an incentive to book Long Term capacity which allows better planning/forecasting, could be used to aid revenue reconciliation, or could be a way of reflecting potential scarcity of capacity and the risk waiting until the day to book). Cost reflectivity is also a consideration as is how multipliers link with the Reference Price Methodology; There needs to be an agreement on a structure that works for all parties in the industry;

- Multipliers set at a high level may force the purchase of long term capacity, even though there may be limited intention of using it every day. Depending on behavioural responsiveness to price changes, multipliers (which can be greater than or less than 1) may have an impact on planning and forecasting.
- ~~If used to incentivise behaviours, where there is gas that could go to multiple parts of the NTS, this will be part of the discussion.~~
- If multipliers are used to aid revenue recovery then through the reserve prices a locational signal is maintained as opposed to if it were through a unit, non-geographic charge.
- It may be beneficial to consider Entry and Exit separately and how they are applied to points or groups of points, if feasible to do so;
- Currently for modelling purposes the multipliers have all been set to 1 for all reserve prices generated for all periods.
- In relation to the use and application of seasonal factors there is currently none in place and all multipliers are across the year. In discussions thus far, there has been no compelling reason to incorporate seasonal factors however it is recognised this can be kept under review.

Conclusion

- It was agreed at the November 2016 NTSCMF sub group that initially a simple approach should be followed where possible and for modelling multipliers the end to end model will be set to a value of 1 for all different auction types as a starting point. This does not endorse a value of 1 as the multiplier for GB, simply facilitating a means to begin the modelling and then consider the impacts of adjusting;
- Within any complete model Users will have the flexibility to vary the multiplier(s) applied which may help inform their responses to any UNC Modification on the Charging Framework.
- There are other issues that are linked to Multipliers that will need to be considered (e.g. impact of scaling rather than revenue adjustment in the Reference Price Methodology, revenue recovery, and behavioural impacts). Where appropriate these will be considered separately and should there be a need to review this summary, this will be updated to reflect the latest positions.
- In relation to seasonal factors these are not currently proposed to be introduced however this will be kept under review should there be a compelling reason to introduce.

Version Control

V1.0	Agreed at Sub-group on 19.12.16
V1.1	Update made following Sub-group on 18.01.17
V1.2	Update following discussion at NTSCMF on 01.02.17
V1.3	Update agreed following discussion at Sub Group on 23.02.17
V1.4	<u>Update following discussion at sub group on 27.03.17</u>