

BUSINESS RULES V

RESERVE PRICE Pt 2 – Multipliers and Seasonal Factors

1. Scope of the Chapter

- 1.1. This chapter applies to all entry and exit points under the scope of the Network Code on CAM.

2. Multipliers

- 2.1. NRAs may decide to apply multipliers or, subject to NRA approval, TSO may propose multipliers serving as factors to calculate reserve prices for non-yearly standard capacity products applied to the proportional yearly reference price, before the application of a seasonal factor, if any.
- 2.2. If multipliers are not applied then the reserve prices for all standard capacity products shall be set proportionately to the yearly reference price.
- 2.3. The issues that NRAs shall take into account when determining reserve prices and the potential application of multipliers are the following:
 - The balance between facilitating short-term gas trading and efficient revenue recovery;
 - The balance between facilitating short-term gas trading and providing long term signals for efficient investment;
 - The need to ensure that discounts applied to interruptible products reflect the probability of interruption;
 - The need to ensure that transport contracts signed with non-standard dates or with durations shorter than a standard annual transport contract shall not result in arbitrarily higher or lower tariffs.
- 2.4. Before NRAs adopt their decision regarding the application of multipliers, NRAs shall consult with NRAs of adjacent Member States and relevant stakeholders. In adopting their decision, NRAs shall take account of the adjacent NRAs' opinions.
- 2.5. In determining multipliers, the absence or presence of congestion needs to be taken into account. Congestion shall be defined as in point 2.2.3.1. of Annex I to Regulation 715/2009.

2.6. When the NRA decides to allow multipliers, the NRA shall take into account whether the TSO has offered additional capacity that has been paid by incentives as defined in Section 2.2 of Annex I of the Gas Regulation

2.7. In determining multipliers, the following ranges apply:

Duration of the short term product	Multiplier range <u>with</u> congestion	Multiplier range <u>without</u> congestion
Quarterly and monthly	0.5 – 1	0.5 – 1.5
Daily and within-day	0 – 1	0 – 1.5

2.8. In the absence of seasonal factors, for quarterly and monthly firm standard capacity products, the reserve prices shall be calculated using the following formula:

$$P_{st} = m_i \times (p_y/365) \times d$$

where:

i represents the short-term product: quarterly or monthly capacity,

P_{st} is price of a short-term product of a duration of 'd' days,

m_i is the multiplier corresponding to the standard product (m_Q or m_m),

p_y is price of yearly product,

d is duration of short-term product in days,

For leap years, $P_{st} = m_i \times (p_y/366) \times d$.

2.9. In the absence of seasonal factors, for daily firm standard capacity products, the reserve prices shall be calculated using the following formula:

$$P_{st} = m_D \times (p_y/365) \times d$$

where:

P_{st} is price of a short-term product of a duration of 'd' days,

d is duration of short-term product in days equal to 1

m_D is the multiplier corresponding to daily products,

p_y is price of yearly product,

For leap years, $P_{st} = m_D \times (p_y/366) \times d$

2.10. In the absence of seasonal factors, for within-day firm standard capacity products, the reserve prices shall be calculated using the following formula:

Option 1: setting of within-day capacity products tariffs based on the proportion of the yearly product with a specific multiplier for within-day products

$$P_{st} = m_{WD} \times (p_y/8760) \times h$$

where:

P_{st} is price of a short-term within-day product of a duration of 'h' hours,

m_{WD} is the multiplier corresponding to within-day products,

p_y is price of yearly product,

h is duration in remaining hours of the gas day,

For leap years, $P_{st} = m_{WD} \times (p_y/8784) \times h$.

Option 2: setting of within-day capacity product tariffs at the same level as the tariff of the daily capacity products

$$P_{st} = m_D \times (p_y/365) \times d$$

where:

P_{st} is price of a short-term product of a duration of 'd' days,

d is duration of short-term product in days equal to 1

m_D is the multiplier corresponding to daily products,

p_y is price of yearly product,

For leap years, $P_{st} = m_D \times (p_y/366) \times d$.

2.11. When determining multipliers, NRAs may apply multipliers different from those within the proposed ranges, if this improves the gas transmission system's efficiency, minimises cross subsidisation and enhances the cost-reflectivity of reserve prices.

3. Seasonal factors

3.1. Seasonal factors may apply to quarterly, monthly, daily and within-day products.

3.2. Seasonal factors shall only apply if they improve the gas transmission system's efficient use and cost reflectivity of reserve prices. Seasonal factors shall be proposed by TSOs to NRAs, if their application meets the aforementioned criteria.

3.3. When seasonal factors are applied, the reserve price for short-term products is calculated using the seasonal factor on top of the designated multiplier.

3.4. When seasonal factors are applied, the arithmetic mean of the products of multipliers and seasonal factors shall over the gas year not be lower than 0.5 and shall not exceed 1.5 unless point 2.11 above applies.

3.5. The methodology to calculate seasonal factors includes the following steps:

- Calculate the system usage for each month of the year. System usage profiling may be based on historic and/or forecasted flow profiles or on historic and/or forecasted booking profiles.
- Sum up the system usage over the year.
- For each month, divide the system usage value by the sum of the year to get the usage rate.
- For each month, multiply the usage rate by 12 (12 months) to get the primary factor.
- For each month, apply the following formula to get the seasonal factor:

$$\text{Initial seasonal factor} = (\text{primary factor})^s$$

The appropriate level of the parameter 's' is to be discussed at national level.

If $s = 1$, seasonal factors are directly proportional to the use of the system. $Sf = \text{usage rate} / \text{average usage}$

If $s > 1$, the dispersion within the seasonal factors increases, to penalize/incentivize more clearly the months that deviate the most from a flat usage.

$0 < s < 1$ could be applied to 'soften' seasonal factors – only for cases where flows changes are extreme between the different periods

- Calculate the average over the year of the initial seasonal factor.

If this number is within the range allowed by the NRA:

$$\text{Initial seasonal factor} = \text{Seasonal factors}$$

Otherwise, apply for each month a correction step to adjust the level in order to meet the cap allowed by the NRA of the average during the year:

$$\text{Correction factor} = \frac{\text{cap allowed by NRA}}{\text{initial average over the year}}$$

$$\text{Seasonal Factor} = \text{Initial Seasonal Factor} \times \text{correction factor}$$

- A rounding step could be applied, optionally.
- In case of zero or very low flows for one month - a minimum value for the seasonal factor will be set at national level

3.6. The methodology for calculating seasonal factors gives a seasonal factor for each month, to be applied to monthly, daily and within-day standard capacity products. For quarterly products, the average of the seasonal factors for the corresponding months shall be applied.

3.7. TSOs can apply the same set of seasonal factors to all IPs, to a group of IPs or a different set of seasonal factors per IP. TSOs will evaluate which approach is more appropriate to promote efficient use of the system. When applying the same seasonal factors to all IPs or to a group of IPs, the methodology would be based on average flow/booking profile of the network or group of points. When applying seasonal factors per IP, the methodology would be based on profiles per IP.

3.8. When seasonal factors are applied, the reserve prices for monthly and quarterly firm standard capacity products shall be calculated using the following formula:

$$P_{st} = (m_i \times sf_i) \times (p_y/365) \times d$$

where:

sf_i is the seasonal factor corresponding to the given quarter or month (sf_Q or sf_M),

For leap years, $P_{st} = (m_i \times sf_i) \times (p_y/366) \times d$.

3.9. When seasonal factors are applied, the reserve prices for daily firm standard capacity products shall be calculated using the following formula:

$$P_{st} = (m_D \times sf_D) \times (p_y/365) \times d$$

where:

sf_D is the seasonal factor corresponding to the period of the year in which the daily product is booked,

d is duration of short-term product in days equal to 1

For leap years, $P_{st} = (m_D \times sf_D) \times (p_y/366) \times d$.

3.10. When seasonal factors are applied, the reserve prices for within-day firm standard capacity products shall be calculated using the following formula:

Option 1: setting of within-day capacity products tariffs based on the proportion of the yearly product with a specific multiplier for within-day products

$$P_{st} = (m_{WD} \times sf_{WD}) \times (p_y/8760) \times h$$

where:

P_{st} is price of a short-term within-day product of a duration of 'h' hours,

m_{WD} is the multiplier corresponding to within-day products,

p_y is price of yearly product,

h is duration in remaining hours of the gas day

For leap years, $P_{st} = (m_{WD} \times sf_{WD}) \times (p_y/8784) \times h$.

Option 2: setting of within-day capacity product tariffs at the same level as the tariff of the daily capacity products

$P_{st} = (m_D \times sf_D) \times (p_y/365) \times d$

where:

P_{st} is price of a short-term product of a duration of 'd' days,

d is duration of short-term product in days equal to 1

m_D is the multiplier corresponding to daily products,

p_y is price of yearly product,

d is duration of short-term product in days equal to 1

For leap years, $P_{st} = (m_D \times sf_D) \times (p_y/366) \times d$.

- 3.11. As a general rule, seasonal factors shall be set at the beginning of the tariff period and shall remain valid for the whole tariff period. However, if it improves the cost reflectivity and the efficient usage of the system, seasonal factors can be adjusted in the course of the tariff period.