

FLEXIBILITY SERVICES

1. General provisions

- 1.1 In addition to the definitions in the *general conditions*, for the purposes of this Appendix 10, except where the context expressly provides otherwise, the following terms shall have the meanings ascribed thereto below.

"combi cumulative tolerance" or "CCT":

means the enlarged *cumulative tolerance (CT)* in accordance with 2.6.

"combi daily margin" or "CDM":

means the enlarged *daily margin (DM)* according to 2.6.

"combi hourly tolerance" or "CHT":

means the enlarged *hourly tolerance (HT)* in accordance with 2.6.

"ENTRY":

means the total amount of *entry gas* in a *portfolio*.

"EXIT":

means the total amount of *exit gas* in a *portfolio*.

"starting value" or "SV":

means the volume in stock of the buffer at the start of the Combiflex service in accordance with 2.10.

2. Combiflex service

- 2.1 Each *year GTS* offers *shippers* six opportunities to contract the Combiflex service. The Combiflex service can be contracted for the following periods: the full year and each separate quarter.

- 2.2 The Combiflex service consists of three elements: Combiflex shortage capacity ($m^3(n;35.17)/hour$), Combiflex excess capacity ($m^3(n;35.17)/hour$) and Combiflex volume ($m^3(n;35.17)$).

- 2.2 For each *hour* the volume in stock of the Combiflex service will be calculated. The Combiflex service is volume neutral.

- 2.4 Two types of Combiflex service may be contracted, characterized as follows:

Combiflex A

Each unit of Combiflex A consists of one $m^3(n;35.17)/hour$ of Combiflex shortage capacity, combined with one $m^3(n;35.17)/hour$ of Combiflex excess capacity combined with 168 $m^3(n;35.17)$ of Combiflex volume.

Combiflex B

Each unit of Combiflex B consists of one $m^3(n;35.17)/hour$ of Combiflex shortage capacity, combined with 1/3 $m^3(n;35.17)/hour$ of Combiflex excess capacity combined with 168 $m^3(n;35.17)$ of Combiflex volume.

2.5 In case both Combiflex A and Combiflex B have been contracted in one **portfolio**, the mix of both services (where relevant as a weighted average) will be applied as one service to that **portfolio**.

2.6 For every unit of contracted Combiflex A, the *hourly tolerance (HT)* shall be enlarged with one $m^3(n;35.17)$ in case of excess as well as in case of shortage. The *cumulative tolerance (CT)* shall be enlarged with one $m^3(n;35.17)$ for the first **hour** of a **gas day**, and one $m^3(n;35.17)$ for every following **hour** up to a maximum of 24 $m^3(n;35.17)$ for the **gas day**. The *daily margin (DM)* shall be enlarged with 24 $m^3(n;35.17)$.

For every unit of contracted Combiflex B, in case of excess the *hourly tolerance (HT)* shall be enlarged with $1/3 m^3(n;35.17)$ and the *cumulative tolerance (CT)* shall be enlarged with $1/3 m^3(n;35.17)$ for the first **hour** of a **gas day**, and $1/3 m^3(n;35.17)$ for every following **hour** up to a maximum of 8 $m^3(n;35.17)$ for the **gas day**. The *daily margin (DM)* shall be enlarged with 8 $m^3(n;35.17)$.

For every unit of contracted Combiflex B, in case of shortage the *hourly tolerance (HT)* shall be enlarged with one $m^3(n;35.17)$ and the *cumulative tolerance (CT)* shall be enlarged with one $m^3(n;35.17)$ for the first **hour** of a **gas day**, and one $m^3(n;35.17)$ for every following **hour** up to a maximum of 24 $m^3(n;35.17)$ for the **gas day**. The *daily margin (DM)* shall be enlarged with 24 $m^3(n;35.17)$.

2.7 The aforementioned under 2.6 only applies in so far as the available Combiflex buffer or volume in stock is sufficient.

2.8 Based on shortage capacity the Combiflex service has a period of use of 168 **hours** (7 consecutive days).

Calculation of the volume in stock

2.9 At the start of the Combiflex service the volume in stock in the buffer is set at a value (*SV*) in such a way that the available send-in time is equal to the available send-out time. For every unit of contracted Combiflex A this implies a starting volume of $1/2 \times 168 m^3(n;35.17)$. For every unit of contracted Combiflex B this implies a starting volume of $3/4 \times 168 m^3(n;35.17)$.

2.10 Hourly imbalance:

In every **hour** Excess (*E*) will be calculated as *ENTRY* in an **hour** minus *EXIT* in the corresponding **hour** (*EXIT* < *ENTRY*).

Subject to 2.12: in case in an **hour** $HT < E$ and if $E \leq CHT$ then the volume in stock shall be increased with an amount equal to $E - HT$, but only to the extent the stock has not reached the contracted Combiflex volume. In case in an **hour** $CHT < E$ then the volume in stock shall be increased with an amount equal to $CHT - HT$, but only to the extent the stock has not reached the contracted Combiflex volume.

In every **hour** Shortage (*S*) will be calculated as *EXIT* in an **hour** minus *ENTRY* in the corresponding **hour** (*ENTRY* < *EXIT*).

Subject to 2.12: in case in an **hour** $HT < S$ and if $S \leq CHT$ then the volume in stock shall be

decreased with an amount equal to $S - HT$, but only to the extent there is sufficient stock in the contracted Combiflex volume. In case in an **hour** $CHT < S$ then the volume shall be decreased with an amount equal to $CHT - HT$, but only to the extent there is sufficient stock in the contracted Combiflex volume.

2.11 Cumulative imbalance:

In every **hour** Cumulative Excess (CE) will be calculated as cumulative *ENTRY* in an **hour** minus cumulative *EXIT* in the corresponding **hour** (cumulative *EXIT* < cumulative *ENTRY*).

Subject to 2.12: in case in an **hour** $CT < CE$ and if $CE \leq CCT$ then the volume in stock shall be increased with an amount equal to $CE - CT$ minus the net result of the volumes stored or withdrawn in the previous **hours** of the **gas day**, but only to the extent the stock has not reached the contracted Combiflex volume. In case in an **hour** $CCT < CE$ then the volume in stock shall be increased with an amount equal to $CCT - CT$ minus the net result of the volumes stored or withdrawn in the previous **hours** of the **gas day**, but only to the extent the stock has not reached the contracted Combiflex volume.

In every **hour** Cumulative Shortage (CS) will be calculated as cumulative *EXIT* in an **hour** minus cumulative *ENTRY* in the corresponding **hour** (cumulative *ENTRY* < cumulative *EXIT*).

Subject to 2.12: in case in an **hour** $CT < CS$ and if $CS \leq CCT$ then the volume in stock shall be decreased with an amount equal to $CS - CT$ minus the net result of the volumes stored or withdrawn in the previous **hours** of the **gas day**, but only to the extent there is sufficient stock in the contracted Combiflex volume. In case in an **hour** $CCT < CS$ then the volume in stock shall be decreased with an amount equal to $CCT - CT$ minus the net result of the volumes stored or withdrawn in the previous **hours** of the **gas day**, but only to the extent there is sufficient stock in the contracted Combiflex volume.

2.12 In case according to both 2.10 and 2.11 a send-in volume is calculated, the largest of the two volumes will prevail. In case according to both 2.10 and 2.11 a send-out volume is calculated, the larger of the two volumes will prevail. In all other cases the volume based on the calculation in 2.10 prevails and will be the buffered volume. B1 is defined as the net result of all send-in and send-out volumes in a **gas day**. So in case the sum of the send-in volumes exceeds the sum of the send-out volumes the sign of B1 is positive and in case the sum of the send-out volumes exceeds the sum of the send-in volumes the sign of B1 is negative.

2.13 Daily imbalance:

At the end of the **gas day** the Daily Excess (DE) will be calculated as the sum of all *ENTRY* during the **gas day** minus the sum of all corresponding *EXIT* (sum *EXIT* < sum *ENTRY*).

In case $CDM < DE$
then the volume in stock will be increased with an amount
 $B2 = CDM - B1 - DM$ ($B2 > 0$),
but only to the extent the stock has not reached the contracted Combiflex volume.

In case $DE \leq CDM$ and
➤ if $DM < DE - B1$

then the volume in stock will be changed with an amount $B2 = DE - B1 - DM$
(i.e. increased, $B2 > 0$)

- if $-DM \leq DE - B1 \leq DM$
then the volume in stock will not be changed, $B2 = 0$
 - if $DE - B1 < -DM$
then the volume in stock will be changed with an amount $B2 = DE - B1 + DM$
(i.e. decreased, $B2 < 0$)
- but only to the extent there is sufficient stock in the contracted Combiflex volume.

At the end of the **gas day** the Daily Shortage (DS) will be calculated as the sum of all *EXIT* during the **gas day** minus the sum of all *ENTRY* during the **gas day** (sum *ENTRY* < sum *EXIT*).

In case $CDM < DS$
then the volume in stock will be decreased with an amount
 $B2 = -(CDM + B1 - DM)$,
but only to the extent the stock has not reached the contracted Combiflex volume.

In case $DS \leq CDM$ and

- if $DM < DS + B1$
then the volume in stock will be changed with an amount $B2 = -(DS + B1 - DM)$
(i.e. decreased, $B2 < 0$)
- if $-DM \leq DS + B1 \leq DM$
then the volume in stock will not be changed, $B2 = 0$
- if $DS + B1 < -DM$
then the volume in stock will be changed with an amount $B2 = -(DS + B1 + DM)$
(i.e. increased, $B2 > 0$)

but only to the extent there is sufficient stock in the contracted Combiflex volume.

The change of buffer (B) is the sum of B1 and B2.

2.14 End of **gas day** stock in buffer:

To enhance the volume-neutrality of the Combiflex service the daily imbalance will be used to correct the actual volume in stock in the direction of the *starting value* as follows:

Suppose MBP is the momentary buffer position on a **gas day** including the change of buffer (B). A positive buffer position ($MBP - SV > 0$) means more gas in the buffer compared to the *starting value*. A negative buffer position ($MBP - SV < 0$) means less gas in the buffer compared to the *starting value*.

In case of a positive buffer position and only to the extent there is sufficient stock in the contracted Combiflex volume:

if $0 < DS + B \leq DM$ then the stock in the buffer will be changed with an amount $B3 \leq 0$
(i.e. decreased),

where B3 will be the maximum of $-((CDM - DM) + B)$, $-(DS + B)$, $SV - MBP$;

if $-DM \leq DE - B < 0$ then the stock in the buffer will be changed with an amount $B3 \leq 0$, where B3 will be the maximum of $DE - B$ and $SV - MBP$.

In case of a negative buffer position and only to the extent there is sufficient stock in the

contracted Combiflex volume:

if $0 < DE - B \leq DM$ then the stock in the buffer will be increased with an amount $B3 \geq 0$ (i.e. increased),

where $B3$ will be the minimum of $(CDM - DM) - B$, $DE - B$, $SV - MBP$;

if $-DM \leq DS + B < 0$ then the stock in the buffer will be changed with an amount $B3 \geq 0$, where $B3$ will be the minimum of $-(DS + B)$ and $SV - MBP$.

The total change of buffer will be the sum of B and $B3$

- 2.15 Shortage settlement and excess settlement after the application of Combiflex will take place according to the basic balancing regime.
- 2.16 At the end of each **gas day** the volume in stock of the buffer is calculated as described above. This volume in stock is used as the starting volume in stock for the next **gas day**.
- 2.17 At the end of each month the volume in stock of the buffer will be reset to the *starting value* as described under 2.9. A shortage or excess value with respect to SV will be settled at the monthly average of the neutral **gas** price for that **gas month** as referred to in Article 5.8 of the *general conditions* with a surcharge of 15% in case of a shortage and of 10% in case of an excess.