

INTRADAY FLEXIBILITY CONTRACT



III. DEFINITIONS OF TERMS USED VERSION OF JULY 1ST 2020



The terms below are defined as follows, whether in their singular or plural form. The time reference is French time.



<u>Alert and Safety System:</u> (Electricity Producer only) – System managed by the operator of the French public electricity grid to issue computer alert and safety messages needed to maintain the safety of the electricity system.

<u>Amplitude or A(d):</u> amplitude of the flow rate recorded in MWh (GCV) per Hour, i.e. the difference between minimum hourly consumption and maximum hourly consumption recorded on Day D.



<u>Connection contract:</u> all the agreements between the Customer and GRTgaz relating to the Connection Works, the conditions of natural gas delivery and the determination of the quantities of energy delivered to the Highly Modulated Site.

<u>Connection Facilities:</u> set of facilities used to connect the Highly Modulated Site's installations to the Network. The Connection Facilities are part of the Network and are defined in the Connection Contract.

<u>Consumption Uncertainty:</u> event caused by material factors resulting in an immediate, unforeseeable and unpreventable variation in gas consumption on the Highly Modulated Site beyond the Flexibility Tolerance. This also includes an event that does not meet all the above criteria, which arises from an unforeseeable and unscheduled variation in consumption of another fuel, with which natural gas is used as an additional or substitute feedstock.

<u>Customer Portal</u>: the Customer Portal is the "Trans@ctions" Portal, as defined in the Transmission Contract.



<u>Daily Delivery Capacity</u>: maximum quantity of energy, expressed in MWh (HCV) per Day, which GRTgaz undertakes to deliver each Day to the Highly Modulated Site pursuant to a Transmission Contract.

<u>Daily Modulated Volume V(D):</u> quantification of the modulation in the volume delivered on the Highly Modulated Site over a Day D. The Daily Modulated Volume is the sum of the differences in absolute value, for all Hours H on Day D, between the hourly consumption recorded in MWh and the daily consumption recorded in MWh divided by 24 (twenty-four), then divided by two.

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Where:

- Q(H, D) is the hourly consumption in MWh of the Highly Modulated Site for Hour H on Day D;
- Q(D) is the daily consumption in MWh of the Highly Modulated Site on By D. Q(D) is the sum of hourly consumption Q(H,D) for all hours H on Day D.
- Q(D) is equal to the sum, for all Hours H of Day D, of the hourly consumption Q(H,D).

In the case of a Day lasting 23 (twenty-three) [respectively 25 (twenty-five)] Hours, the Daily Modulated Volume V(D), established above, is defined as the sum for all Hours H on Day D, of the differences in absolute value between the hourly consumption Q(H,D) and the daily consumption Q(D) divided by 23 (twenty-three) [respectively by 25 (twenty-five)], then divided by two.

<u>Day (D):</u> period of 23 (twenty-three), 24 (twenty-four) or 25 (twenty-five) consecutive hours, beginning at 6 (six) a.m. on calendar day D and ending at 6 (six) a.m. the next day.

<u>Day of Operation:</u> a day of operation is defined as a Day when the quantity of energy consumed by the Highly Modulated Site is greater than or equal to the Hourly Delivery Capacity.



<u>Electricity Generator (or Producer):</u> customer whose industrial activity is to generate electricity using natural gas and which is a participant in the electricity system adjustment mechanism as defined in the article L.321-10 of the Code de l'Energie.

External Source: infrastructure external to GRTgaz or any other gas market player which GRTgaz can call on to meet demand for intraday flexibility.



<u>Flexibility Indicators</u>: Indicators, identical for all Highly Modulated Sites in the same Mesh, indicating whether a Notice Period is necessary. This delay enables GRTgaz to take the operational measures required to guarantee the security and continuity of the Network.

GRTgaz communicates two flexibility indicators:

 $Q \rightarrow Q+$, dealing with upward variations in consumption

 $Q \rightarrow Q$ -, dealing with downward variations in consumption

A green Flexibility Indicator indicates that the Customer may propose a new Profile without notice.

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A red Flexibility Indicator indicates that the Customer must respect particular Notice Period, or volumes of modulations, on the current Hour and the 5 (five) Hours to come according to the Partial Flexibility Indicator.

<u>Flexibility Tolerance:</u> energy flow rate expressed in kWh (GCV 25°C) per Hour representing 10% (ten per cent) of the value of the Hourly Delivery Capacity subscribed for by a Shipper for a Day D for the Customer's Highly Modulated Site.



<u>GCV 25°C</u>: a quantity of energy expressed in MWh (GCV) may be converted into a quantity of energy expressed in kWh (GCV 25°C) by multiplying this quantity of energy by 1000 (one thousand) and by dividing the result of this multiplication by 1.0026 (one point zero zero twenty-six), as specified by standard NF ISO 6976.

Any quantity of energy expressed in MWh (GCV) shall be rounded off to 3 (three) decimal places as described below. Any quantity of energy expressed in kWh (GCV 25°C) shall be rounded off to 0 (zero) decimal places according to the following rules.

- a non-significant decimal of 0 (zero), 1 (one), 2 (two), 3 (three) or 4 (four) is rounded down;
- a non-significant decimal of 5 (five), 6 (six), 7 (seven), 8 (eight) or 9 (nine) is rounded up.

In the event of a dispute, the quantity of energy expressed in MWh (GCV) shall decide the matter.



<u>Highly Modulated Site:</u> the Customer's site is said to be highly modulated if it has the following characteristics:

- it is an "end customer" connected to the Network holding a Connection Contract;
- it is a "consumer delivery point" where GRTgaz delivers all or part of the gas under a Transmission Contract;
- on average over the previous year it presented a Daily Modulated Volume above the threshold of 0.8 (zero point eight) GWh per day of operation, i.e. a Day when the quantity of energy consumed by the Highly Modulated site is greater than or equal to the Hourly Delivery Capacity.

For existing sites, GRTgaz assesses this criterion on the basis of the history of consumption for the previous year (last 12 [twelve] months).

For newly connected sites, this criterion will be assessed from the Daily Modulated Volume on the Days of Operation declared by the site, then on the basis of a quarterly record (last 3 [three] months), with retrospective effect over the previous period once the criterion is met.

Hour (H): period of 60 (sixty) consecutive minutes beginning and ending on the hour.

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<u>Hourly Delivery Capacity:</u> maximum quantity of energy, expressed in MWh (GCV) per Hour, that GRTgaz undertakes to deliver every Hour to the Highly Modulated Site under a Transmission Contract.



<u>Information System or IS:</u> information system made available to the Customer by GRTgaz, consisting of a Customer interface and/or data exchanges via APIs.



<u>Maximum Hourly Flow Rate:</u> maximum quantity of energy, expressed in MWh (GCV) per Hour, that can be offtaken by the Highly Modulated Site in one Hour at the interface between its facilities and the Connection Facilities. The Maximum Hourly Flow Rate is defined in the Connection Contract.

<u>Maximum Technical Hourly Flow Rate</u>: declaration by the Customer on D of the maximum quantity of energy, expressed in MWh (GCV) per Hour, that can potentially be offtaken on D by the Highly Modulated Site in one Hour, at the interface between its facilities and the Connection Facilities.

<u>Mesh:</u> GRTgaz's Main Network (a set of structures interconnecting the interconnection points with neighbouring transmission systems, underground storage facilities and LNG terminals and to which the Regional Networks and certain end customers and distribution systems are connected) is divided into 8 (eight) meshes (hereinafter referred to as a "Mesh" in the singular), each representing a perimeter for pooling internal intra-day flexibility (or linepack).

These 8 Meshes are as follows:

- Bretagne
- Guyenne
- Lorraine
- Lyonnais
- Nord
- Ile de France
- Provence
- Sologne

They are determined by taking into account the characteristics of the Network, the Network's current requests for transmission and the proximity of External Sources of intraday flexibility. The Mesh to which a Customer's Highly Modulated Site belongs is the Mesh where the connection point of the Highly Modulated Site to GRTgaz's main Network is located.

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Figure 1: representation of the 8 (eight) Meshes defined for GRTgaz's Main Network

<u>Minimum Hourly Flow Rate:</u> minimum quantity of energy, expressed in MWh (GCV) per Hour, that must be offtaken by the Highly Modulated Site in one Hour at the interface between its facilities and the Connection Facilities. The Minimum Hourly Flow Rate is defined in the Connection Contract.

<u>Minimum Technical Hourly Flow Rate</u>: declaration by the Customer on D of the minimum quantity of energy, expressed in MWh (GCV) per Hour, that can potentially be offtaken on D by the Highly Modulated Site in one Hour at the interface between its facilities and the Connection Facilities.

Month (M): period beginning at 6 (six) a.m. on the first day of a given calendar month and ending at 6 (six) a.m. on the first day of the next calendar month.



<u>Network:</u> set of structures, facilities and systems operated by GRTgaz or under its responsibility, made up in particular of pipelines, compressor stations, metering and measurement facilities, pressure reduction equipment, block-valve equipment, transmission systems, computer systems, etc. by means of which GRTgaz provides connection and delivery services under a Connection Contract, natural gas transmission services under a Transmission Contract and intraday flexibility services under this Contract. The Network is governed by the legal arrangements of the Transmission Authorisation.

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Non-time-limited Adjustment: (Electricity Producer only) – adjustment in which the time of deactivation is not specified at the time of activation when the adjustment is notified by the operator of the French public electricity grid.

<u>Notice Period:</u> minimum period between the time when the Customer notifies GRTgaz of the modified Profile for the Highly Modulated Site relating to a quantity greater than or equal to the Flexibility Tolerance and the start of its actual implementation by the Customer.



<u>Partial Flexibility Indicators</u>: Indicators, identical for all Highly Modulated Sites of the same Mesh, indicating the necessary Notice Period and also a maximum upward variation in the acceptable consumption program for the gas network over the current Hour and the 5 (five) Hours to come.

A green Partial Flexibility Indicator indicates that the Customer may propose a new Profile without prior notice, only if the envisaged upward variation in consumption over the current Hour and the 5 (five) Hours to come is less than or equal to an additional quantity defined in the Operational Terms and Conditions of the Intraday Flexibility Contract.

A red Partial Flexibility Indicator, or the absence of a Partial Flexibility Indicator, indicates that the Customer must respect, when sending a Profile, a standard Notice period for the current Hour and the 5 (five) Hours to come.

<u>Profile:</u> quantity of energy, expressed in kWh (HCV 25°C) for each Hour H on a Day D for a Highly Modulated Site.

<u>Prudent and Reasonable Operator:</u> person acting in good faith with the intention of executing its contractual obligations and who, in order to do this, applies the skills, application, prudence and foresight which are reasonably and usually applied by a competent and experienced professional acting in accordance with the laws and regulations in similar circumstances and conditions.



Shipper: Party entering into contract with GRTgaz under a Transmission Contract.

<u>System Services:</u> (Electricity Generator only) - Services developed from basic contributions primarily originating from electricity generating units, which are needed to transmit the energy from the electricity generating units to the consumption points whilst maintaining the operating safety of the electricity system.

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<u>Transmission Authorisation:</u> legal arrangements governing the Network.

<u>Transmission Contract:</u> contract between GRTgaz and a Shipper under which GRTgaz provides a natural gas transmission service, in particular for delivery to the Customer's Highly Modulated Site.