



**CODE OPERATIONNEL DE RESEAU
TRANSMISSION**



**PART B3.1
CONDITIONS OF CAPACITY
AVAILABILITY AT ENTRY/EXIT POINTS
OF GRTGAZ' TRANSMISSION SYSTEM
EXCLUDING MAINTENANCE PERIODS**

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Article 1 Part constitution, amendments and changes

The present part forms integral part of the Contract which is part of the appendices of Sections A B C D1 and D2 of the Contract since applicable to the title of the Contract.

All the Contract stipulations apply mutatis mutandis to the present part.

In accordance with article 2 of the Contract, the Shipper commits himself becoming acquainted with any evolution or update of this posterior part at the date of signature of the Contract, notified by GRTgaz.

1.1 Amendments following legislative and regulatory changes of the legal framework

The stipulations of article "Amendments following legislative and regulatory changes" Section A of the Contract apply mutatis mutandis in the case of new legislative or regulatory provisions from any competent authority that may apply directly or indirectly to this part or a decision of the Energy Regulatory Commission under the article L 134-2 of the energy Code or a final decision of the CoRDIS under the articles L 134-19 to 24 of the energy Code, would come into effect after the Contract signature.

1.2 Other changes

The stipulations of article "Other changes" Section A of the Contract apply mutatis mutandis in the case of GRTgaz should amend the Contract for reasons other than those referred to in sub-clause 1.1 above.

Article 2 Introduction

This document sets out:

- The Network Operational Limits of the GRTgaz network
- The conditions of capacity availability on GRTgaz' main transmission system for each contractual point with interruptible capacity.
- The conditions of capacity availability at the Fos and Montoir Terminal Interface Points.

The terms used in this document are in accordance with the definitions presented in the Appendix A1 of the Transmission Contract.

Article 3 Presentation of the Network operational limits of the GRTgaz Network

In accordance with the provisions of the transmission contract, Firm Capacity means a capacity whose utilisation is guaranteed by GRTgaz under normal network operating conditions, outside the occurrence of

works and force majeure. Normal network operating conditions are fixed according to the Network Operational limits as described in this clause.

3.1 Methodology for identifying the Network Operational Limits

The Network Operational Limits cover for a maximum and minimum utilisation on an array of contractual points potentially leading to the physical congestion on the transmission network infrastructures.

As the infrastructure investments achieved ahead of the Single Market Zone do not cover for all the flow schemes that could be requested by the users of the Network, certain Network Operational Limits remain.

An Operational Limit within the Network is reached in the event of one or several cases of infrastructure congestion occurrences in a given direction, preventing the transmission of gas from an upstream zone – where gas is in surplus – towards a downstream zone, where there is a deficit in gas.

Each Network Operational Limit has an impact on the contractual points upstream and downstream:

- In the upstream direction: the sum of the capacity flows at contractual points on entry (subtracted from the exit flows) must be inferior to a certain level;
- In the downstream direction: the sum of the capacity flows on the contractual points on exit (subtracted from entry flows) must be inferior to a certain level.

In the event of one of the Network Operational Limits being reached, the Nominations may be reduced in accordance with the terms of the Mutualized Restriction mechanism as a last resort mechanism and further to the prior application of the remainder of the mechanisms already in place.

3.2 List of the Network Operational Limits



Map of the North -> South and West -> East limits



Map of the South -> North limits

List of the points upstream and downstream of each limit/constraint identified as part of the TRF functional survey:

| Limits | Points upstream of the limit | Points downstream of the limit |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NS1 | Virtualys PIR, Obergailbach PIR, Oltingue PIR | Dunkirk PIR, Dunkerque LNG PITTM, Northeast PITS, Northwest PITS, Southeast PITS, Montoir PITTM, Atlantic PITS, Fos PITTM, Pirineos PIR, Lussagnet PITS |
| NS2 | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Montoir PITTM | Southeast PITS, Atlantic PITS, Fos PITTM, Pirineos PIR, Lussagnet PITS |
| NS3 | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Southeast PITS, Montoir PITTM | Atlantic PITS, Fos PITTM, Pirineos PIR, Lussagnet PITS |
| NS4 | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Southeast PITS, Montoir PITTM, Atlantic PITS | Fos PITTM, Pirineos PIR, Lussagnet PITS |
| S1 | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Southeast PITS, Montoir PITTM, Atlantic PITS, Fos PITTM | Pirineos PIR, Lussagnet PITS |
| EO2 | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Southeast PITS, Fos PITTM, Montoir PITTM | Atlantic PITS, Pirineos PIR, Lussagnet PITS |
| SN1 | Fos PITTM, Pirineos PIR, Lussagnet PITS | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Southeast PITS, Montoir PITTM, Atlantic PITS |
| SN3 | Montoir PITTM, Atlantic PITS, Fos PITTM, Pirineos PIR, Lussagnet PITS | Dunkirk PIR, Dunkerque LNG PITTM, Virtualys PIR, Obergailbach PIR, Oltingue PIR, Northeast PITS, Northwest PITS, Southeast PITS |

The above list is non-exhaustive and may change according to the flow schedules experienced under TRF.

Article 4 Reminder concerning Capacity

4.1 Firm Capacity: Definition

In accordance with the general conditions of the transmission Contract, a Firm capacity is a capacity whose availability is contractually guaranteed by GRTgaz under normal operating conditions, in particular excluding maintenance works or case of force majeure.

4.2 Reverse Capacity: Definition

In accordance with the general conditions of the transmission Contract, a Reverse capacity is a capacity in the opposite direction to the Main Physical Flow at an Entry Point or at a Delivery Point.

4.3 Case of PITS

In the specific case of Transport Storage Interface Points (PITS), allocated capacities are of « Transport Storage Interface Capacity » (CITS) type.

GRTgaz makes its best efforts, as a prudent and reasonable operator, in order to accept nominations at PITS higher than subscribed capacity.

4.3.1 Nord B PITS

Availability of the CITS at the Nord B PITS (DEL) varies over the year depending of the consumptions in the L-gas zone, as described in Appendix 13.

Availability of the CITS at the Nord B PITS (REC) is guaranteed under normal operating conditions

4.3.2 All PITS except Nord B

The CITS of all PITS in the DEL direction, except Nord B, is made of a firm and of an interruptible part. The availability of the firm part is guaranteed under normal operating conditions. The availability of the interruptible part is guaranteed under normal operating conditions and up to the occurrence of congestion. The interruptible part of the CITS and the conditions of availability are described in appendices 14 to 17.

Availability of the CITS in the REC direction is guaranteed under normal operating conditions.

Article 5 Availability of Interruptible Capacity

5.1 Definition

In accordance with the general terms and conditions of the Transmission Contract, an Interruptible Capacity is a capacity whose use is not guaranteed by GRTgaz.

5.2 Availability conditions

The availability of Interruptible Capacity depends of several factors:

- The consumption level, seasonality and considered month,
- The network configuration, especially related to nomination¹ requests of all shippers on a given point or an array of points,
- The maintenance works.

Each interruptible capacity can be divided into a "climate-related" part and a "scheduled" part, respectively associated to the consumption or temperature parameter and to the nomination parameter of all shippers.

This document sets out the relations between the capacity on the considered contractual point and these 2 parameters, excluding periods of maintenance works and under normal Operating Conditions.

This document predicts the availability of interruptible capacities by cross-referencing the weather scenarii experienced over the past few years with a reference supply scenario based on preferential utilisation by the shippers operating on the interconnection points located in the north for network supply purposes.

5.3 Curtailment Order of Interruptible Capacity

In case of interruption, accordingly to Article 24 of Network Code CAM, Interruptible Capacity of higher maturity prevails over Interruptible Capacity of lower maturity. Thus, interruption order is as follows: daily Interruptible Capacity are interrupted first, then monthly, then quarterly, then yearly.

5.4 Description of information forms

The main features of the contractual points listed below are provided in the attached appendices.

PIR Entry points

- OBERGAILBACH : Forward & backhaul
- DUNKERQUE
- TAISNIERES B : Forward & backhaul
- OLTINGUE : Forward

PIR Exit points

- VIRTUALYS : Forward & backhaul

PITS Exit points

- Injection into PITS Nord B
- Injection into PITS Nord Est
- Injection into PITS Atlantique
- Injection into PITS Sud Est

Other points

- Conversion B to H

PITTM

- MONTOIR
- FOS

Each of the forms provided in the Appendix is divided into 3 sections with the following information:

¹ The "nomination" term here (and for the rest of this document) stands for nomination requests at 2pm D-1.

5.4.1 « Capacity » section

This section summarizes the capacities available each month that includes the firm part, the “climate-related” interruptible part, and the interruptible part depending on nomination requests.

5.4.2 « Conditions of capacity availability » section

This section provides indicative formulas concerning the availability in relation with the temperature or consumption parameter (for the "climate-related" part) and the nomination requests parameter for all shippers (for "the scheduled" part).

The interpretation key for the tables are supplied as follows:

- The available interruptible parts "climate-related" and "scheduled" can be aggregated,
- The interruptible capacities are always between 0 and the maximum interruptible capacity specified in the table for each of the "climate-related" and "scheduled" parts.

The formulae supplied allow for an estimate of the available capacity:

- Gas consumption forecasts on GRTgaz network, in H gas or L gas, are used to determine the “climate-related” parts.
- Total resultant nomination request on a point or an array of points is used to determine the “scheduling-related” parts.

The total resultant nomination request on a contractual point or an array of contractual points correspond with the difference between:

- The Entry nomination requests sum of all shipper on this point,
- The Exit nomination requests sum on this same point.

A shipper can estimate the availability of Interruptible Capacity on a certain point with a hypothesis of total resultant nomination request on other points.

5.4.3 Section « History » section

This section allows comparing the historical achievements of allocations (quantities allocated) over the period 1 January – 31 December for monthly profiles of the available capacities.

Article 6 Capacity at LNG Terminal Interface Points

6.1 PITTM Montoir

The available entry capacity at the Montoir Transmission - LNG Terminal Point depends on the local level consumptions. The maximum additional “climatic” capacity is obtained for an average daily temperature experienced on two occasions over 100 years in the month considered.

On the basis of these relations and taking into account the delivery history over the last two years as all as climatic data, it is also possible to conduct a statistical analysis to determine the minimum capacity available each day at a given level of probability. The curve provided in Appendix 10 thus represents the minimum

capacity available each day using a 50% and 90% probability scenario. The probability level is determined using the consumption parameter.

6.2 PITT M Fos

The entry capacity at the Transmission-LNG Terminal Interface Point depends on the following system parameters:

- **Rhône pipeline transit capacity.** Which depends on the performance of the pipeline's infrastructures.
- **The consumption level in the southeast area.** Which depends on the temperature and operations of certain major industrial customers (for example Combined-Cycle Gas Turbines power plants).
- **Deliveries towards Teréga via the Midi pipeline.** These deliveries depend global balances of the GRTgaz and Teréga balancing zones.
- **The level of injection and/or withdrawal into/from the Manosque storage facility.** This level depends on shipper's nominations on PITS Sud Est.

The Firm Capacity at PITT M of Fos is guaranteed in normal operating conditions of the network.

The curve provided in Appendix 12 presents the entry capacity available each day using a 50% and a 90% probability scenario. The probability level is calculated on the basis of all consumption parameters taken together, including deliveries to Cruzy and Manosque (and not on the basis of each parameter separately).