Measures to strengthen TRF

Teréga's proposals

PAU ON: 25/05/2023

SUBJECT OF THE NOTE: Prevention and management of South/North TRF congestion - Teréga's proposals

Context

The SN3 limit of the TRF was reached on numerous occasions last winter, necessitating the triggering of mechanisms designed to manage congestion (interruptible cut-off and sales cut-off, locational spread and mutualized restriction).

Two Gas Consultations were held on 16 December and 6 January to discuss with CRE and the market the measures to be taken to better prevent and resolve these congestions.

The SN3 limit restricts transit capacity from the south to the north of France. Underground storage facilities located upstream (to the south) of this limit account for around 70% of the volume of all French storage facilities (in H gas), while 65% of French H gas consumption is located downstream (to the north) of this limit.

If shippers choose to supply consumption mainly from underground storage (full at the start of winter and still very high in mid-January) and from LNG terminals, and to a lesser extent from Norway, then the SN3 limit may be reached. The network is congested.

The major imbalances observed at the start of the day also contributed significantly to stressing the network and making it difficult to operate, thereby generating risks to continuity of supply and transmission.

Commercial and operational measures to improve the operation of the TRF during periods of congestion are possible from next winter; this note presents the adjustments that Teréga considers necessary and effective.

Teréga's proposals

1. The TSOs are reinforcing the requirement for shippers to balance their nominations at the start of the gas day, particularly those who do not deliver to end customers.

In a period of continuous congestion such as the one we saw in December, shippers' expectations, fearing that they will be restricted during the day by the Mutualised Restriction mechanism, generate significant entry nominations upstream of SN3, which creates a long imbalance of several hundred GWh per day. This is difficult for the network to accept.

Several hundred GWh of congestion could have been avoided with balanced nominations.

Shippers are responsible for making reasonable efforts to balance (Article 5.4 of Section 3 of Teréga's transmission contract on shippers' balancing obligations), and the TSO is responsible for taking off and delivering quantities that enable it to manage its network as a prudent and reasonable operator, in accordance with its operational conditions (Appendix 3A of Teréga's transmission contract).

Teréga therefore proposes that the TSOs, in accordance with their prerogatives :

- step up their preventive and anticipatory commercial actions with shippers during periods of congestion when their imbalances create and/or exacerbate congestion;
- where appropriate, schedule (after coordination and after informing the shippers concerned) quantities that differ from the notified quantities, generating imbalances that increase congestions.

Proposed rule :

- possibility for TSOs not to schedule unbalanced nominations in the event of red alert vigilance
- trigger
    - criterion: when the difference between the distance to the Upstream limit and the distance to the Downstream limit is greater than 150 GWh, synonymous with a very large imbalance;
    - timing: the system is triggered after the so-called AVCI measures (Stop Sales and Interruptible Cut-off) have been applied.
- application criteria for shipper nominations: based on quantities delivered to the zone.
    - shippers without customers in portfolio: from 5 GWh of long imbalance with entry nominations upstream of the limit
    - shippers with customers to deliver in their portfolio: depending on the size of their portfolio, from 10 GWh and up to 30 GWh of long imbalance with entry nominations upstream of the limit
- unscheduled (cut-off) quantities: for the shippers concerned, entry nominations are scheduled upstream of the limit, enabling them to return to a balance position

2. Suspension of withdrawal UIOLI on Serene Atlantique (Storengy)

Storengy's UIOLI service on Serene Atlantique is an additional service enabling certain shippers to achieve a significant imbalance, by making withdrawal nominations in excess of their nominal capacity.

This service should therefore be suspended in the event of a red alert, and therefore not offered on D-1 by Storengy during periods of congestion, in the same way as exit capacity at Obergailbach, which is not offered by GRTgaz when the system is under South/North tension.

As a reminder, the UIOLI (known as UBI) at the PITS Lussagnet (as well as at the PITT Pirineos) is cut for the rest of the gas day as soon as a red alert appears.

For optimum efficiency, it would be necessary to cut the Storage UIOLI and not just the UIOLI limited to the PITS (Transport UIOLI).

3. Opening of the UIOLI on the PIR Dunkerque

Opening up the UIOLI service to the Dunkirk PIR would enable better participation in Locational Spreads, by offering shippers the possibility of acquiring the necessary entry capacity outside the PRISMA auctions.

TSOs have every interest in favouring responses to Locational Spreads at entry points via pipeline gas in order to preserve storage facilities (even if their current level is not a cause for concern).

The current timing, when the Locational Spreads are triggered at 9am, does not allow shippers to acquire capacity simultaneously in order to renominate in the next cycle in line with their offer selected at the SL.

The opening of the UIOLI in Dunkirk, a point not covered by the CAM network code, would correct this bias.

4. Inter-operator storage swap

The possibility of circulating gas (through a swap) between the storage facilities located downstream of the South/North congestions (Serene Nord, Sediane Nord and Saline) and those located upstream (Serene Atlantique and Lussagnet) would make it possible to minimise calls for Locational Spreads and greatly reduce the occurrence of Mutualised Restrictions, without degrading the performance of the northern storage facilities at peak rate.

The swap could be activated in advance by withdrawing more from upstream at the start of winter, before any congestion appears:

- a mechanism to be activated on D-1 for D (before recourse to the other mechanisms, including interrupting the interruptible and UIOLI);
- a "head start" at the beginning of winter, then reabsorbed after the period of congestion;
- a lead corresponding to overwithdrawing from storage facilities in the south (upstream of SN3) and underwithdrawing in the north (downstream of SN3) during "congestion-free" periods;
- in the event of congestion, a reverse movement with underwithdrawing in the south and overwithdrawing in the north;
- transparent operations for shippers;
- a mechanism that must not jeopardise the realisation of the storage operators' commercial offer ⇒ each storage operator must be able to guarantee its offer, whatever the level of stock moved;
- a mechanism that would intervene "after" the execution of the storage operators' commercial offer ⇒ the storage swap would be interruptible (including intra-day), with customer nominations or optimisation of storage operators' movements remaining a priority.

Storage swap at the PITS Sud-Est: Teréga considers that a storage swap mechanism should also be applied within the PITS Sud-Est when it is called upon in the Locational Spreads: this is because the Manosque storage facility is located upstream of the limits, unlike the other storage facilities on the South-East PITS. As a result, when the PITS Sud-Est is called upon for Locational Spread, its efficiency is only 80% because 20% is withdrawn upstream of the limit.

This phenomenon generates successive Locational Spreads during the day and additional costs.

5. Setting up superpoints at Lussagnet/Atlantique/Pirineos (SN3 limit) and Lussagnet/Pirineos (SN1 limit) with differentiated rates between Pirineos and the storage facilities.

The principles of these superpoints would be as follows:

- Application of different reduction rates between points on the superpoint :
    - Identical reduction rate for storage ;
    - Lower reduction rate for Pirineos.

Shippers' operational capacities are calculated taking these reduction rates into account.

- Retention of the principles of the superpoints currently used on the EO2 & S1 boundaries:
    - at the shipper level (bonus, transfer quantity, communicating vessel) ;
    - to the global level (UIOLI common pot between all the points of the superpoint).

The benefits of these superpoints would be as follows:

- Optimisation of available intraday capacity using Pirineos flexibility:
    - In summer (with few constraints on storage facilities): Pirineos entries may increase if injections into storage facilities increase during the day;
    - In winter (severe constraints on storage facilities): withdrawals from storage facilities may increase if there are changes in nominations on Pirineos (lower entries or higher exits).
- Optimisation of customers' operational capacities with maximum points (Pirineos/Atlantic/Lussagnet => bonus, communicating vessel, transfer quantity).

6. Change in the calculation of Mutualised Storage Restriction rates

By basing the rates on the daily commercial demand rather than on the nominal subscribed capacity: this calculation basis would make it possible to be fairer by taking account of the factors affecting withdrawal rates as a function of the level of gas in storage, and to respect a

degree of fairness in the treatment of restrictions between shippers holding Lussagnet and Atlantique storage capacity.

7. A TRF South/North study

Teréga proposes to launch a new study of the French network. Following the example of the study carried out prior to the creation of the TRF, this new study would aim to optimise the current design of the system in the context of South-to-North flows, which have never really been considered due to the priority given to historical North-to-South flow patterns.