natran

At the heart of your energies

2025 Maintenance Schedule

14/03/2025

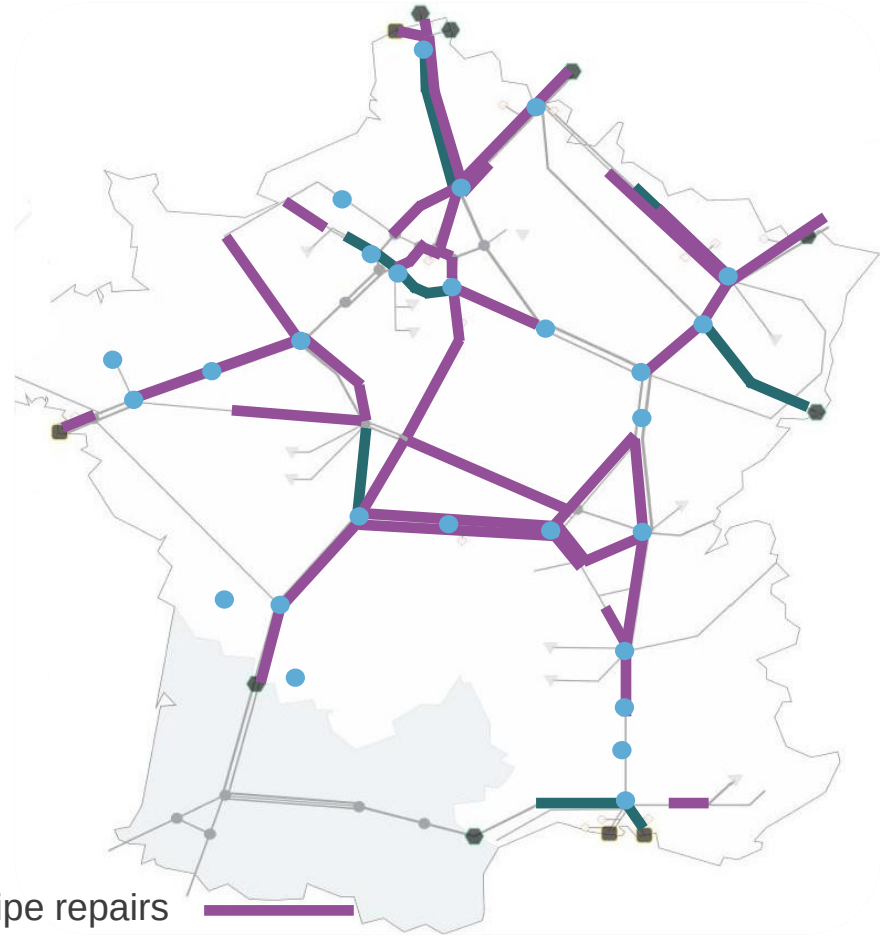
Summary

1. Presentation of the 2025 maintenance schedule
2. Understand recent developments in work impacts
3. Levers to reduce the impact of the maintenance schedule
4. Decoding: A better reading of your available capacity
5. Conclusion and Q&A

Presentation of the 2025 maintenance schedule

01

Work to ensure the security and sustainability of the network



Periodic **inspections** which limit the flow in the pipeline to allow the passage of instrumented pistons → **Identify potential defects**

Pipe repair, over several years, with an impact on flow rate and pressure that varies depending on the nature of the defects to be addressed → **Confirm potential faults** and **repair** them

Regular maintenance and work programs to maintain, repair, adapt and develop the various infrastructures of our network

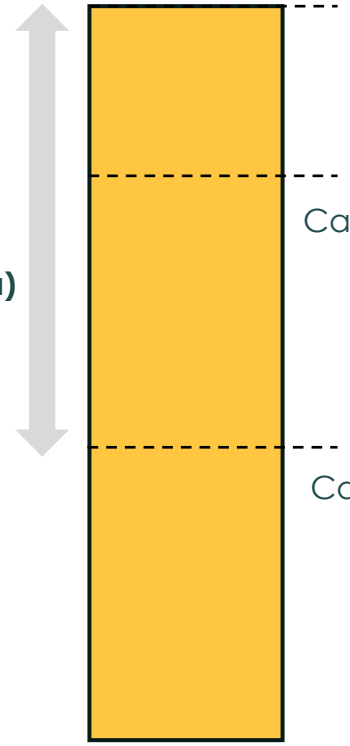
Operations which may **result** in **restrictions** on **the use of subscribed capacities**

Understanding restrictions

Possible range for
CTE: Effective Technical Capacity

(Calculated on D-1 with day's data)

TRf:
Firm restriction rate



CTNf:
Firm Nominal
Technical Capacity

CPRTt:
Probable Technical
Capacity of Maintenance

CMNTt:
Minimum Technical
Capacity of Maintenance

Probable scenario based on intermediate hypotheses → **Probable TRf**

Minimum scenario based on unfavourable hypotheses → **Max TRf**

The maintenance schedule at a glance

PITTM (REC)

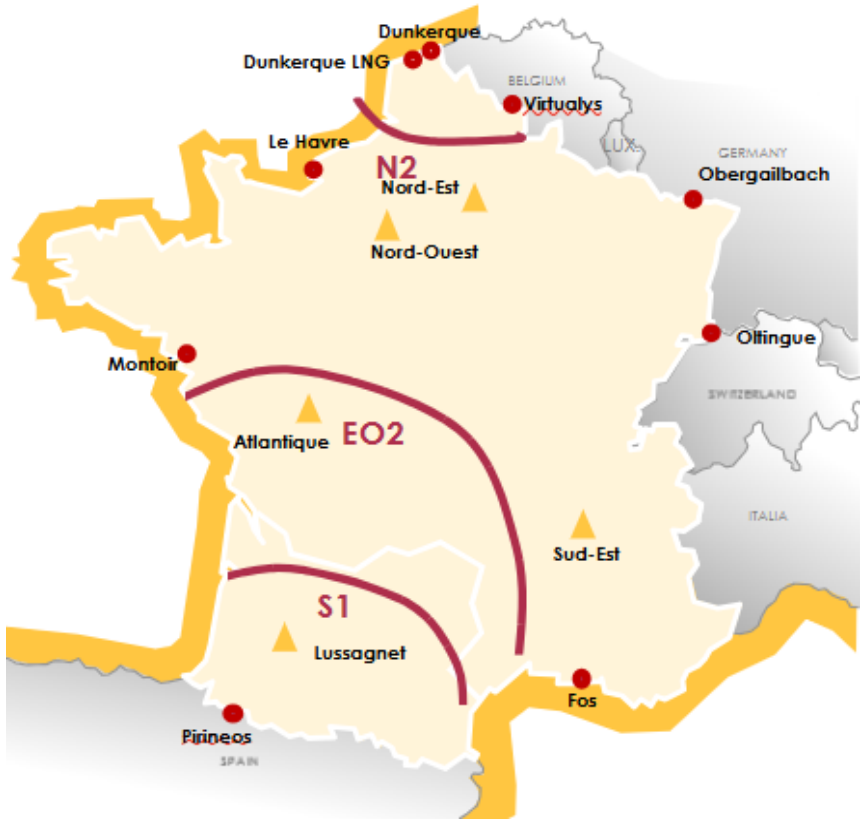
Dunkerque LNG:	22 days (30)
Montoir:	38 days (49)
Fos:	49 days (68)
Le Havre:	2 days (5)

PITS (DEL)

Nord-B:	8 days (7)
Sud-Est:	40 days (64)

SSPEO2D: 124 days (131)

Impacted points (exits):
Atlantique PITS



Days : Number of days with a Maximum Restriction Rate higher than 0% given the current amount of subscriptions.
The values in brackets correspond to the number of days published in October 2024

SPN2U: 12 days (12)

Impacted points (entries):
Dunkerque LNG, Dunkerque, Virtualys

148 days will be with a 0% restriction,
As a reminder, the UIOLI is open on these days

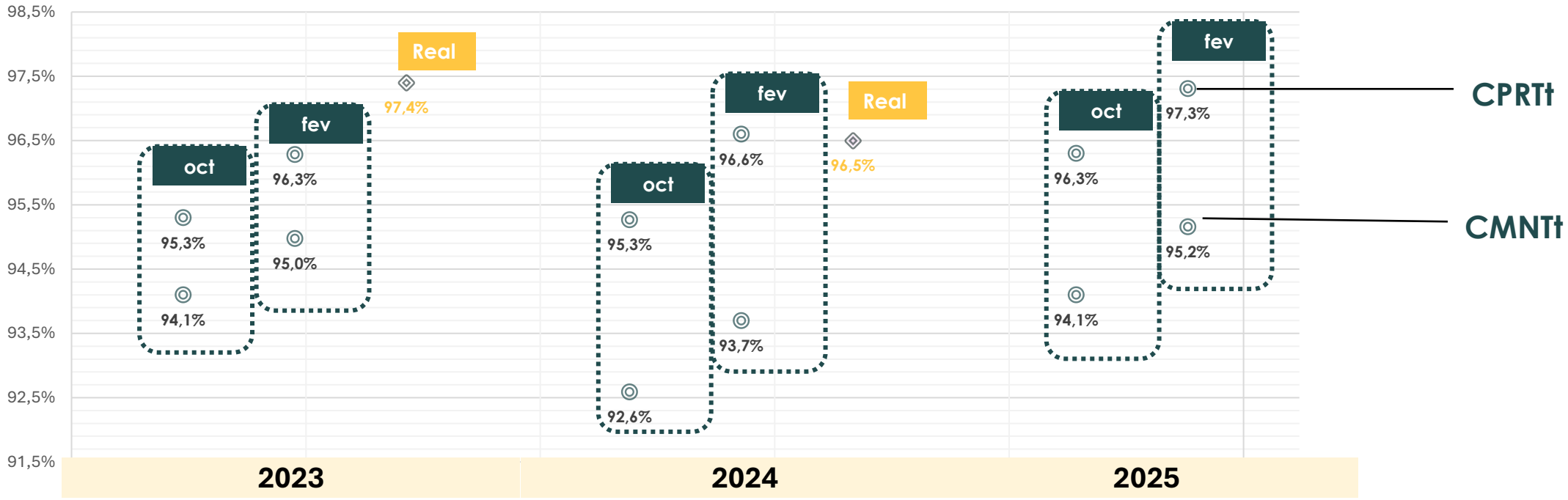
PIR (REC)

Dunkerque:	2 days (55)
Obergailbach:	16 days (9)

PIR (DEL)

Virtualys:	25 days (50)
Oltingue:	51 days (50)

Greater capacity availability in 2025



Subscribed capacity availability – calculated on all TRF entry and exit points, including the impact on Teréga's points

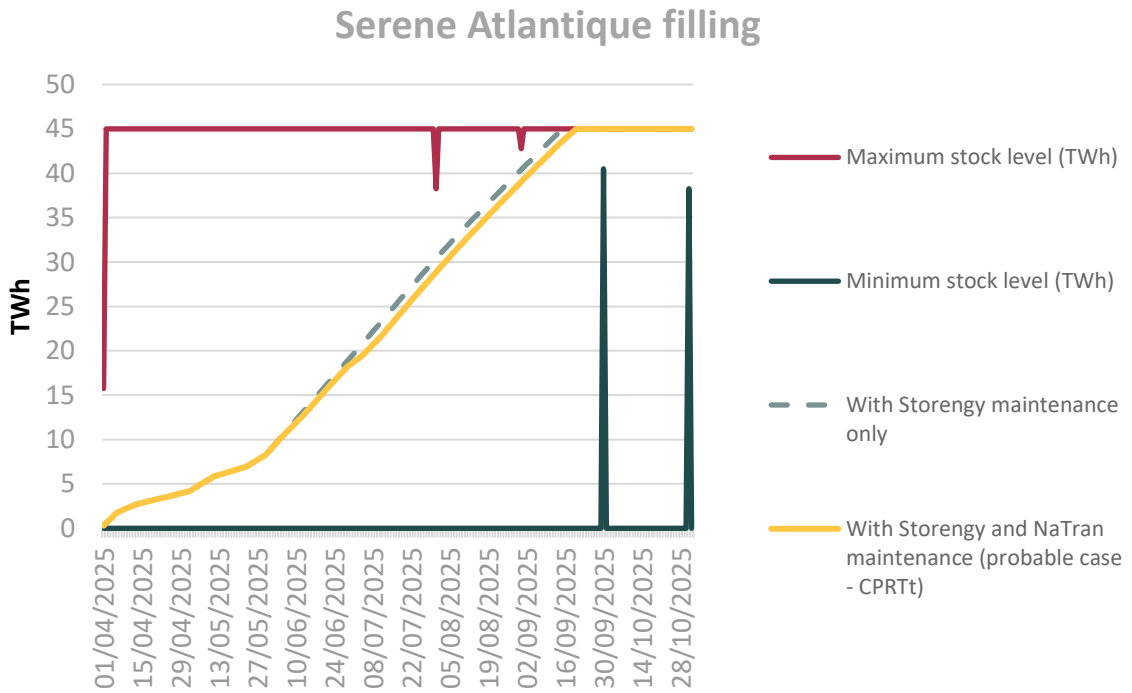
For PITS: hypothesis of subscription of all volumes put up for sale by storage operators

- **Better availability of firm subscribed capacity** than the first version published in October 2024 **thanks to optimised maintenance**
- **The availability rate is better than in the last two years**

A tool to model the impact of restrictions on the filling of your storage products

On a global scale, it makes it possible to verify that restrictions on injections allow storage to be filled

	With Storengy and NaTran maintenance (probable case - CPRTt)	
	100% date	Days of flexibility
Serene Atlantique	21/09/2025	40
Serene Nord	14/09/2025	47
Sediane Nord	17/09/2025	44
Saline	30/10/2025	1



Assumptions

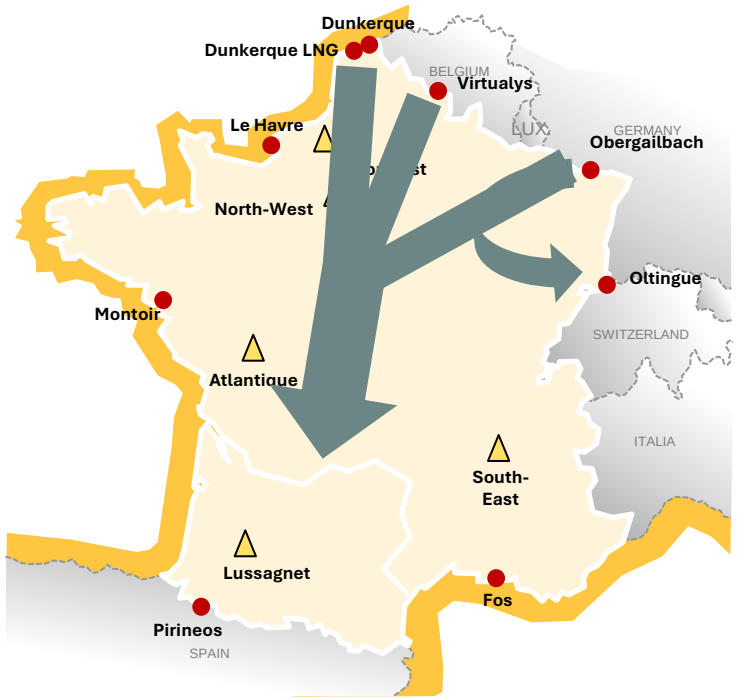
- Stock at 0 on April 1st
- Subscription of all storage volumes marketed by Storengy
- Daily use of all available capacity
- Does not take into account potential network congestion
- Does not take into account superpoint flexibilities

Understand recent developments in work impacts

02

New flow patterns

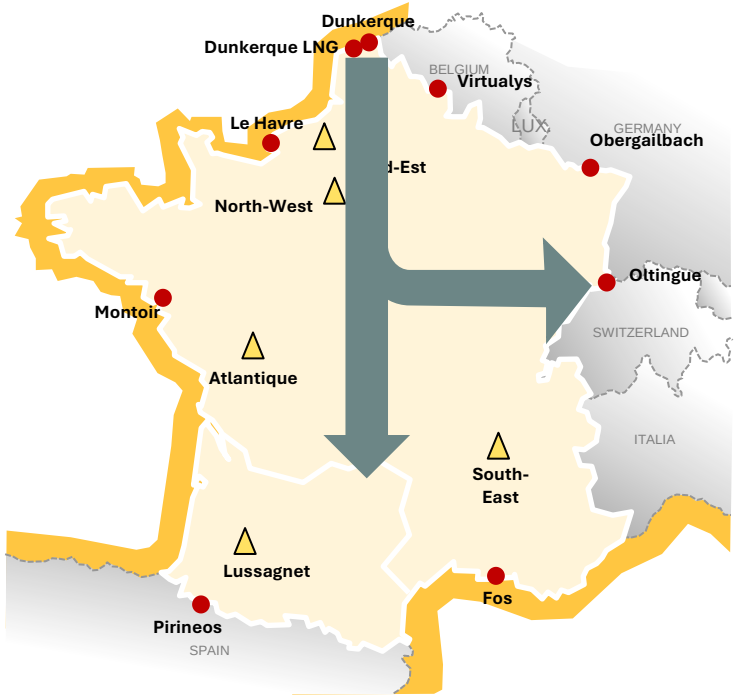
Gas flow configuration before the war in Ukraine



- A diversity of supply sources in the North
- A short and direct gas route to supply the Oltingue exit

→ **Northern works that can remain transparent** for shippers

Since 2022



- Dunkerque and Dunkerque LNG become the majority sources of supply in the North
- New supply schemes, less direct and more structures crossed

→ **Northern works involving capacity restrictions**

The strengthening of the multifluid decree in 2021 (AMF)

AMF : A regulatory requirement since 2006 to permanently maintain the network's serviceability and a satisfactory level of safety

	Until June 2021	Since July 2021 *(modified AMF from May 2020)*
Inspection frequency	10, 15 or 20 years	10 years
Nb of km inspected by piston per year on average	800 km/year	1 350 km/year

main network and regional network

- The number of inspections/year may vary from one year to the next due to the recalibration of inspections to comply with the new regulatory deadlines for pipelines
- Since each inspection is followed by pipe repairs, an increase in unavailability, during the pipe repairs phase, is to be expected in the following years

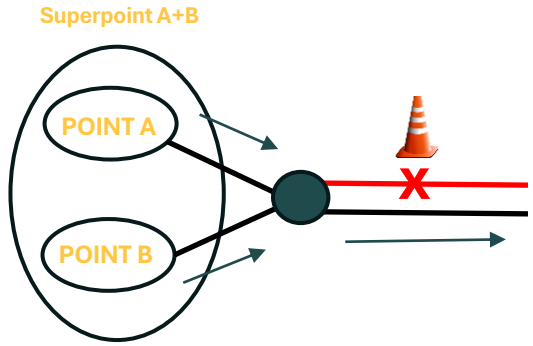
Reducing methane emission on our network

	NaTran commitment (since 2020)	European regulation (July 2024)
Adaptation of compression stations	☑ Treatment of the most emitting stations → 5 stations over 2021-2024 ✕ Total unavailability per station ~ 2 weeks	Treatment of all stations
Releases during work	☑ Pressure reduction, use of gas booster and flaring as a complement → 98% of gas recovered in 2023 ✕ Extension of unavailability (~ 1 to 2 days)	Strict restriction on venting and widespread use of gas boosters
Leak detection and treatment	☑ Prioritized treatment → 90% of leaks repaired within the year ✕ Low impact of works	Repairs under tight deadlines **Research to minimize work impacts**

Levers to reduce the impact of the maintenance schedule

03

Superpoint: Greater flexibility and capacity



Superpoints can increase your flexibility and your capacities in 3 ways in particular

UBI superpoint

Unused capacities are available to all.

BONUS Superpoint

Programming in the opposite direction to the superpoint restriction allows you to nominate more within the same superpoint

Extra capacity

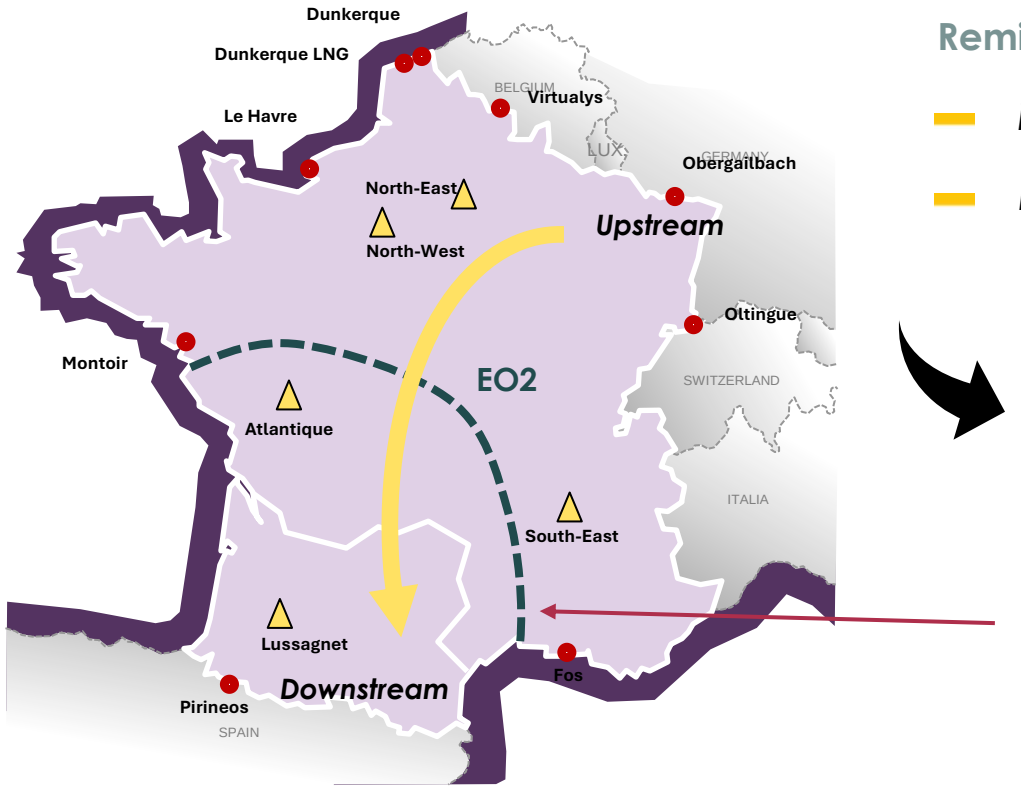
Capacity Transfer

This feature gives you flexibility between NaTran's and Teréga's sub-superpoints.

Find all the information you need here:
https://www.natrangroupe.com/sites/default/files/su/superpoints-octobre2024.pdf

2025 : Evolution of TRF works management

A more flexible TRF mechanism, in the hands of the TSOs, to reduce restrictions: the adaptable Small Works threshold



Reminder of the principle of Small Works threshold:

- *if impact of maintenance ≤ Small Works threshold →* ***No capacity restrictions***
- ***If congestion*** *→ treatment via the congestion management mechanisms*

New in 2025 : Threshold at 120 GWh/d on SPEO2D instead of 30 GWh/d

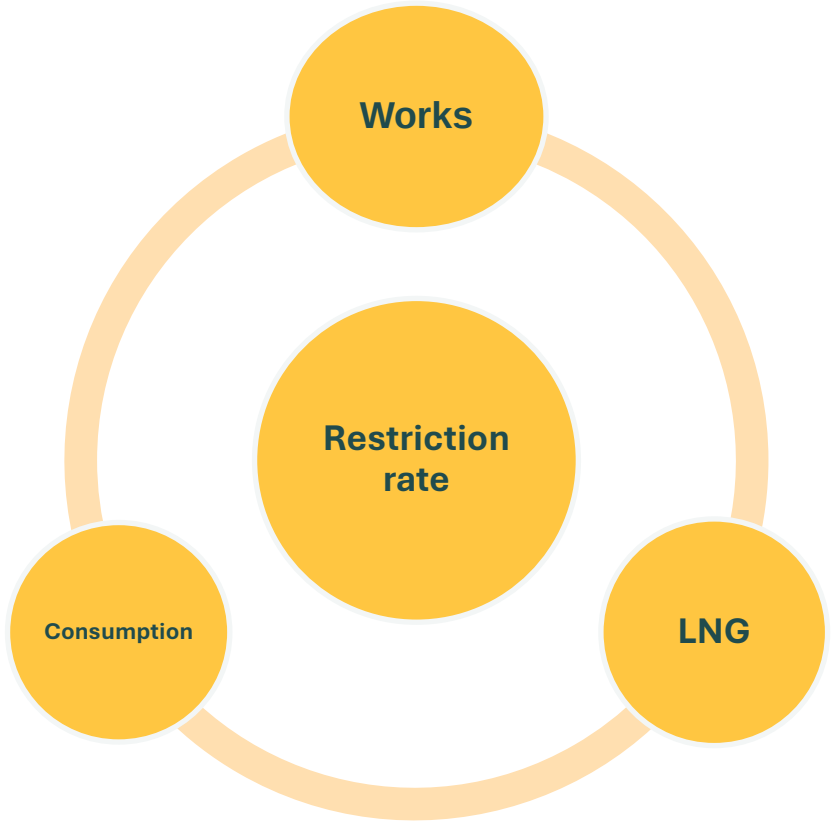
85 days : Number of restriction days « avoided » thanks to the mesure

Decoding: A better reading of your available capacity

04

3 parameters that can change the restriction rate

Zoom on the EO2D superpoint impacting the Atlantic, Lussagnet injections and the Pirineos exit



Decoding

- ***Why does this parameter play a role in the calculation of the restriction rate ?***
- ***What are the assumptions taken into account in the maintenance schedule ?***
- ***How can the restriction rate change depending on the conditions of the day ?***

Some prerequisites :

- The influence of the 3 parameters is expressed in relation **to the restriction rates** of subscrided capacities:
  - Maximum restriction rate → **Max TRf** calculated from the CMNTt
  - Probable restriction rate → **Probable TRf** calculated from the CPRTt
- **Convention** :
  - **Bonus** on the restriction rate (+) → **Release** of the restriction
  - **Penalty** on the restriction rate (-) → **Strengthening** of the restriction
- Disclaimer : the data and graphics are provided for illustrative purposes and are based on specific cases, without generalizable value.

The effect of consumption on capacity availability

Reminder of the principle :

$$\textit{Available exit capacity downstream of the limits} = \textit{Max transit capacity} - \textit{Downstream consumption}$$

For the same work impact, the available capacity will be more constrained in mid-season

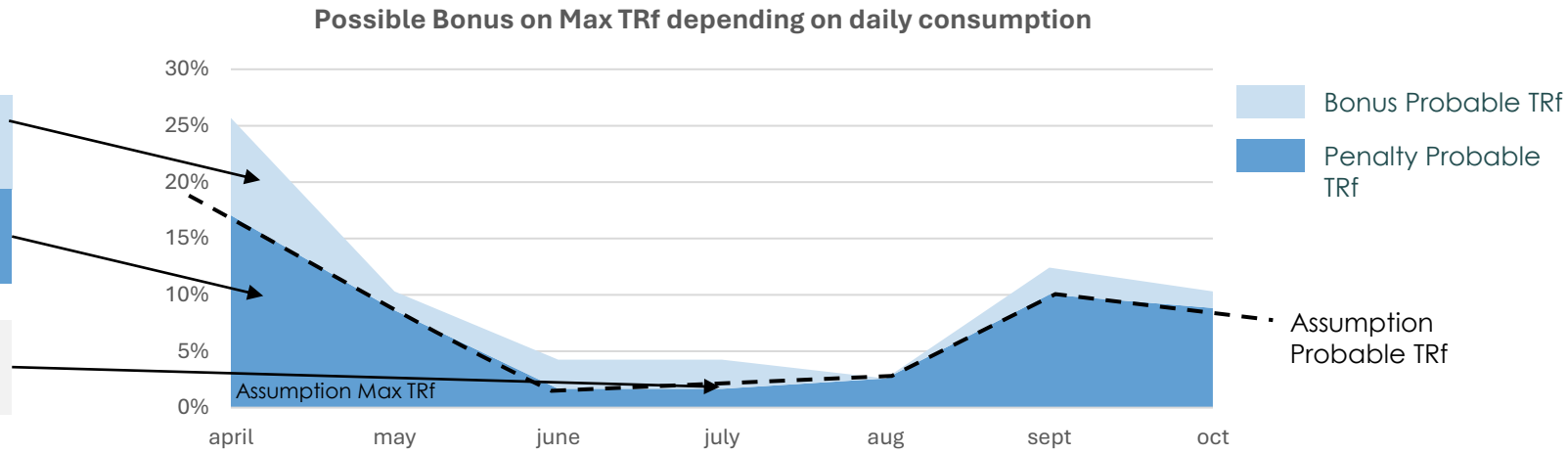
Maintenance schedule, what assumptions ?

- A cold consumption scenario for Max TRf
- A median consumption scenario for Probable TRf

If daily consumption < median consumption scenario → Bonus

If daily consumption > median consumption scenario → Penalty

Low impact of consumption on the restriction rate in June, July and August



For illustration : EO2D, Montoir = 200 GWh/d

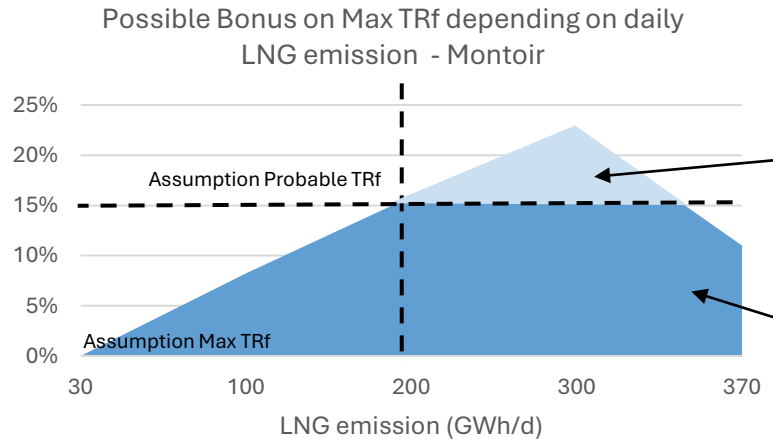
The impact of LNG on capacity availability

Reminder of the principle :

- Physically, Fos and Montoir are located astride the limit → LNG emissions (= gas entry downstream of the limit) help ease the restriction
- The impact of LNG on available capacity may be different depending on the type of work

Maintenance schedule, what assumptions ?

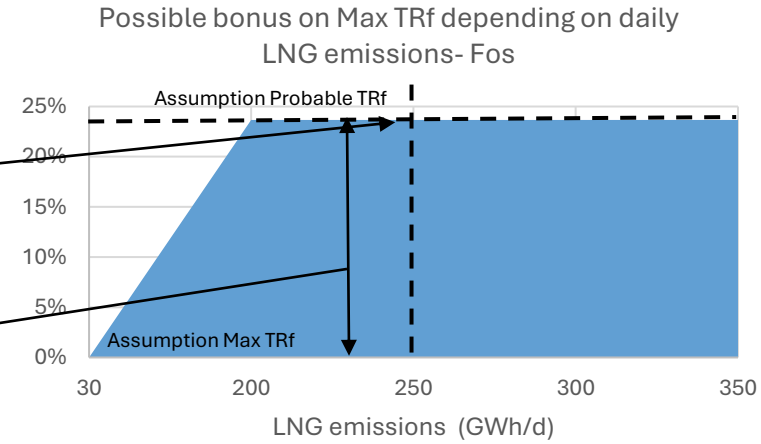
- 250 GWh/d in Fos and 200 GWh/d in Montoir for Probable TRf, within the limits of available emission capacities at the terminals (depending on maintenance)
- 30 GWh/d in Fos and Montoir for Max TRf, within the limits of available emission capacities at the terminals (depending on maintenance)



if LNG Montoir > 200 GWh/d, Bonus on Probable TRf is max 7%

If LNG Fos> 250 GWh/d, No Fos Bonus on Probable TRf

Max TRf < effective TRf < Probable TRf



For illustration : EO2D, low consumption scenario (in summer)

The impact of the works on the availability of capacity

Reminder of the principle :

Maintenance reduces the maximum transit capacity of the network

Maintenance schedule, what assumptions ?

Major impact retained under nominal conditions (reasonable scenario)

Note

- The impact of the work varies significantly depending on the nature of the work.
- The impact on the limit may result from the accumulation of several simultaneous works.
- The work impact may increase and may constitute a penalty on the restriction rate up to D-5.
- The work impact may evolve until the completion date and may constitute a bonus on the restriction rate.

Conclusion

05

Conclusion

Less restrictive 2025 maintenance schedule

Regulatory constraints & new flows

Sources of flexibility: superpoints, Small Works threshold

A better understanding of capacity availability

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