TRF : 2020 Maintenance Schedule

Webinar, 5th of March 2020

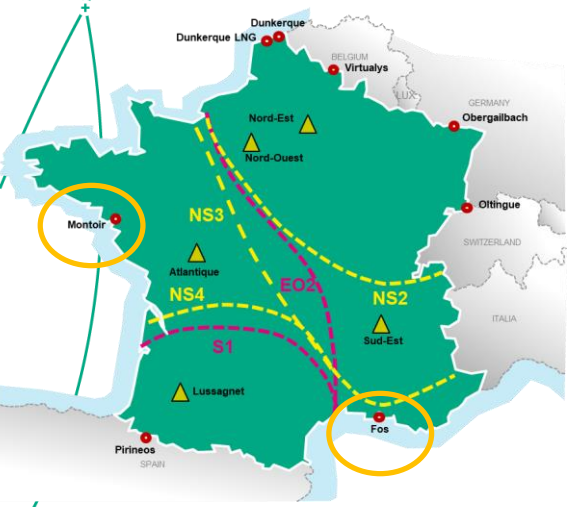
Agenda

- Main changes in 2020
  - Fos and Montoir « upstream »: for more capacity and visibility
- Presentation of the 2020 maintenance schedule
  - The maintenance schedule at a glance, calculation hypothesis
  - Focus on Atlantic PITS (concerned by EO2D superpoint)
  - Focus on Virtualys and Obergailbach PIR (concerned by NS1U superpoint)
- How to use the superpoints on Trans@ctions
  - How to read the superpoints restrictions
  - How to use the transfer between GRTgaz and Teréga
- Summary

Fos and Montoir « upstream »:

what changes?

Summer 2019



Fos and Montoir are downstream of the limits NS2, NS3 and EO2.

Summer 2020

- **Montoir upstream**

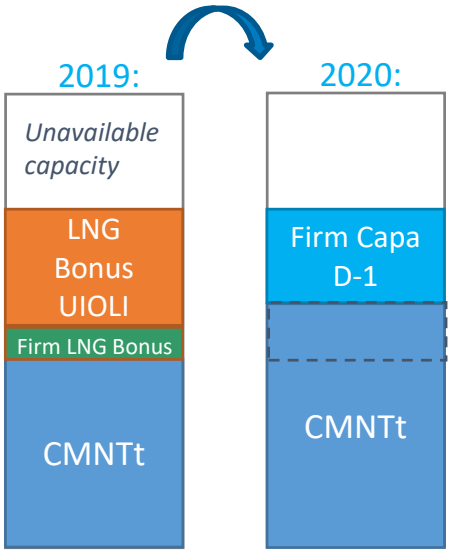
The geometry of the limits is modified
Montoir is upstream from the limits NS2, NS3 and EO2, even for the vigilance system

- **Fos upstream**

The geometry of the limits is not modified. The maintenance is published on EO2D and S1D superpoints instead of NS3D and NS4D

Fos and Montoir « upstream »:

for more firm capacity



Visibility and capacity: additionnal capacity due to LNG is given as firm capacity on day-ahead instead of UIOLI

Visibility and capacity: more firm capacity as soon as the maintenance schedule publication

Capacity: no more restrictions on Montoir due to core network maintenance

- **Montoir upstream**

Simplicity: no more switch

- **Fos upstream**

Quizz n°1!

- **The superpoint EO2D is activated. The exit capacity on Atlantique + Pirineos + Lussagnet is 400 GWh/d without LNG. And a 200 GWh/d LNG flow goes downstream of EO2D. What will be the firm CTE on SPEO2D?**

1) 200 GWh/d
2) 400 GWh/d
3) 600 GWh/d

If the nominations on Fos or Montoir are high (ex: 300 GWh/d), only one part of the flow can go downstream and be given through the CTE

this CTE is split between a GRTgaz CTE SSP EO2D and a Teréga CTE

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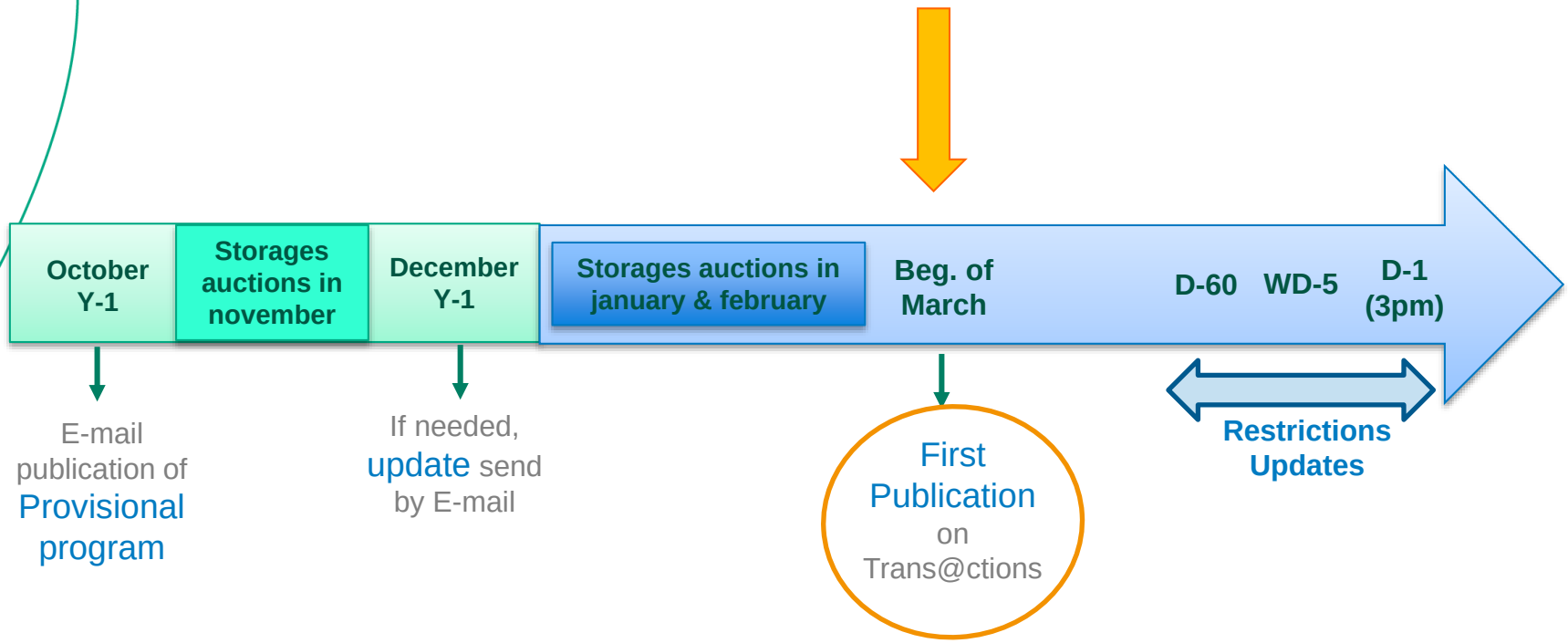
The maintenance program is now on trans@ctions!



The maintenance schedule at a glance:

improvement compared with October 2019 publication

Entries

Exits

Dunkerque: 5 days
Taisnières B : 15 days (-2)
Virtualys : 16 days (-16)
Obergailbach : 8 days
Oltingue: 33 days (-27)

DK LNG:
2 days

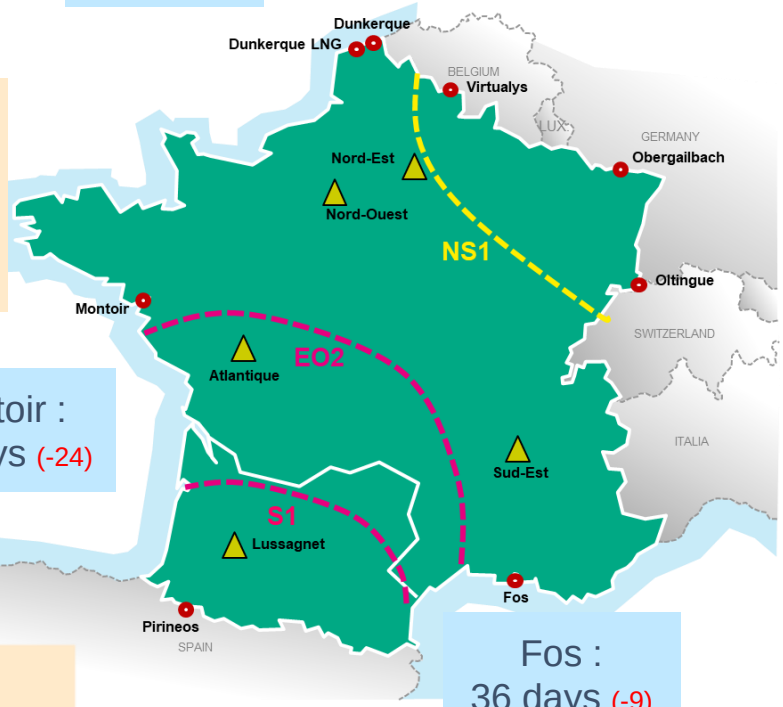
SPNS1U: 40 days (-25)

Impacted points (entries): Virtualys, Obergailbach and Oltingue IP

Oltingue exit = bonus

North-West : 0 days (-12)
North-East : 0 day
North-B: 33 days (-5)
Atlantique: 8 days (-10)
South-East : 5 days (-2)

Oltingue:
31 days (-3)



Montoir :
20 days (-24)

Fos :
36 days (-9)

3 superpoints, including 2 on GRTgaz side

SPEO2D: 75 days (-23)

Impacted points (exits):
SSPEO2D: Atlantique PITS
SSP Teréga: Pirineos and Lussagnet

SP S1D: 63 days (-7)
(same days as EO2D)
SSP Teréga: Pirineos and Lussagnet

Calculation hypothesis

CMNTt

Capacity available during maintenance in the worst case scenario: unfavorable consumption scenarios, and minimum LNG in Fos and Montoir terminals (30 GWh/d for each).

CPRTt

Capacity available during maintenance when the network is reasonably used. It is based on medium consumption and flows scenarios (for LNG: 100 GWh/d at Montoir and 150 GWh/d in Fos). It also takes into account the works' probability.

Restriction rates

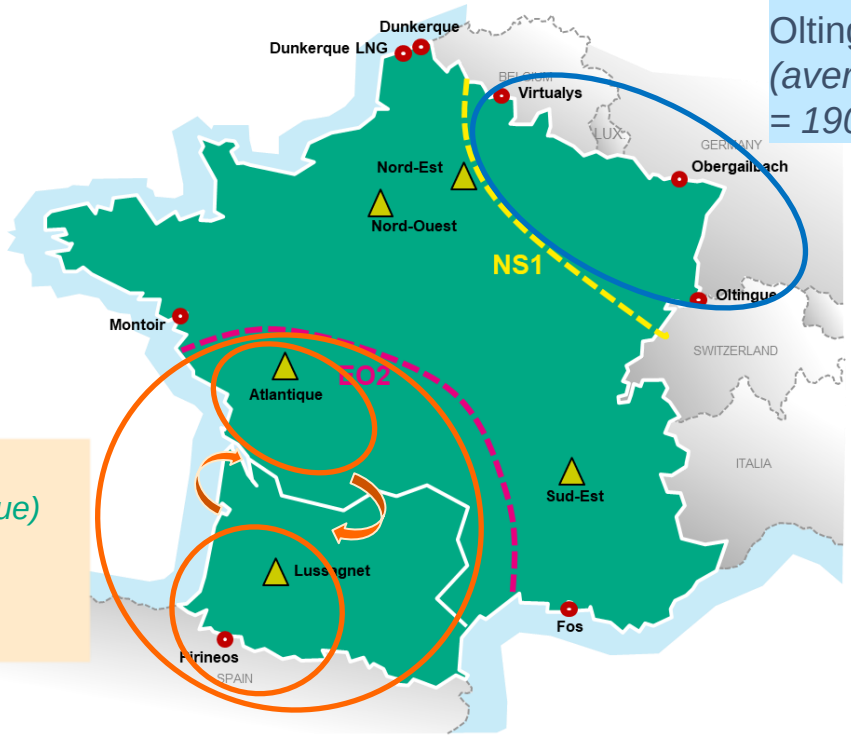
Are calculated based on subscribed capacities.

Zoom on the superpoints – for more flexibility and capacity

- More flexibility between the points
- More capacity thanks to the « bonus »

SPNS1U

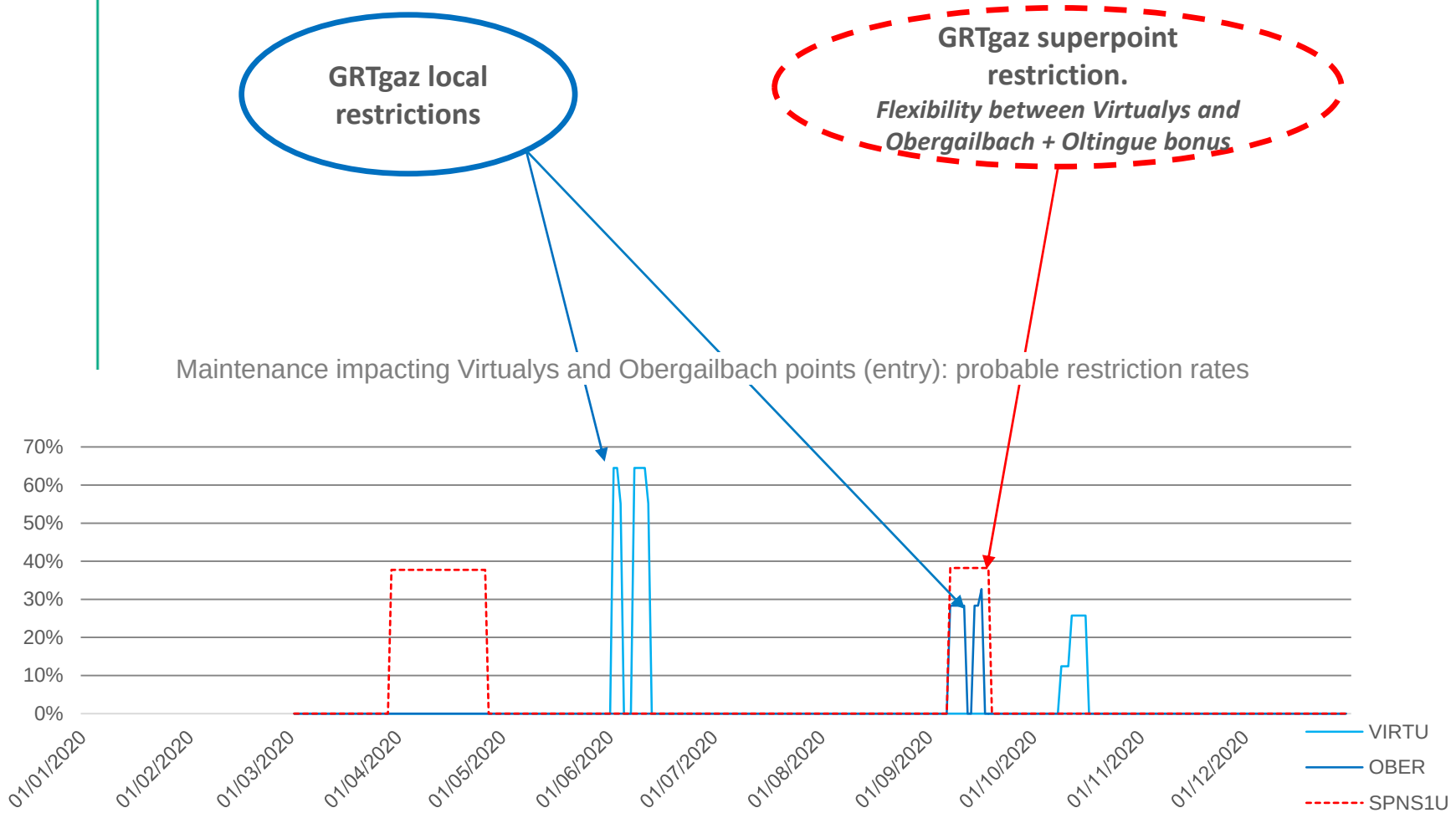
Oltingue exits = bonus
(average flow in summer 2019 = 190 GWh/d)



SPEO2D
= **SSPEO2D** (*Atlantique*)
+ SSP Teréga
Possibility to use the transfer (TREO2)

- 4 points (on GRTgaz network) are concerned by the superpoints in 2020: Atlantic PITS (exit), Virtualys and Obergailbach and Oltingue (entries). *Don't forget to have a look at the superpoints restrictions for these points!*

Virtualys and Obergailbach PIR

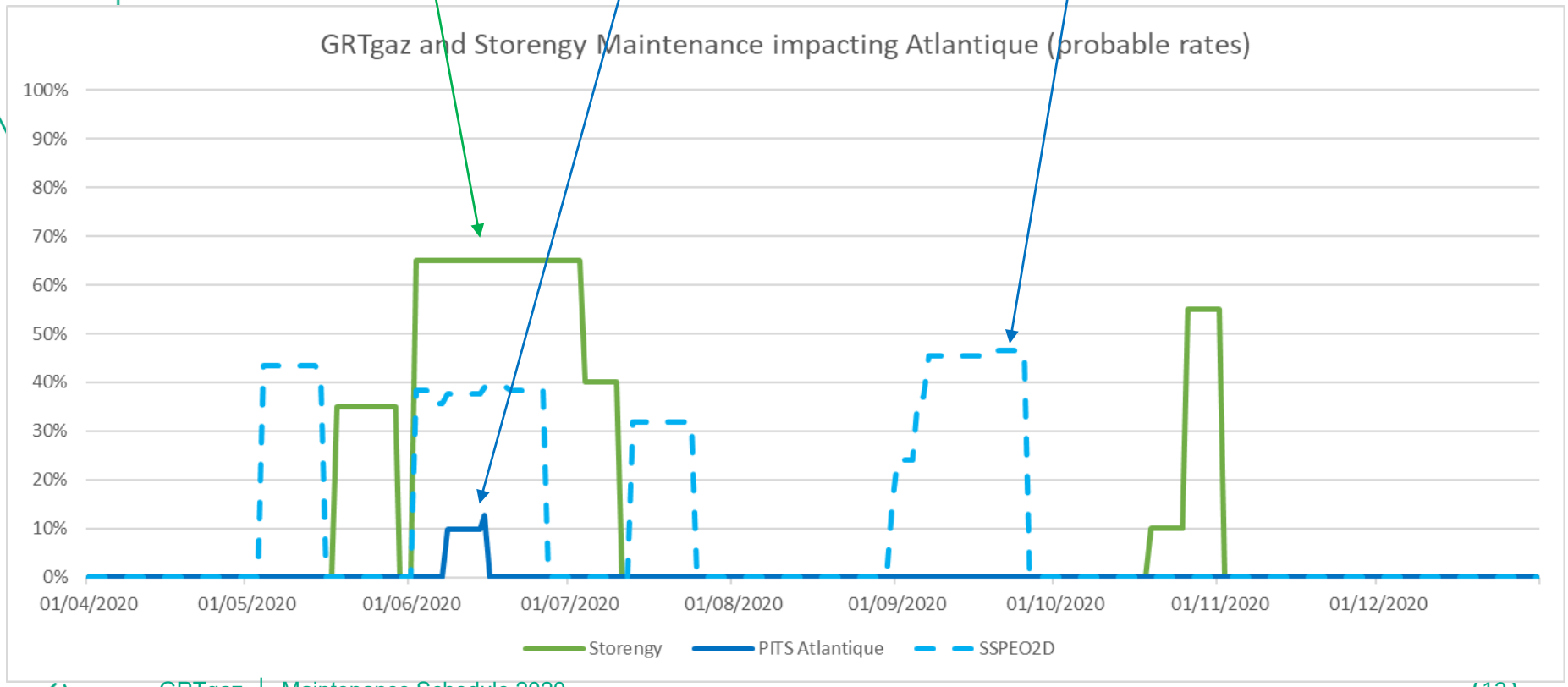


Atlantic PITS

Storengy restrictions

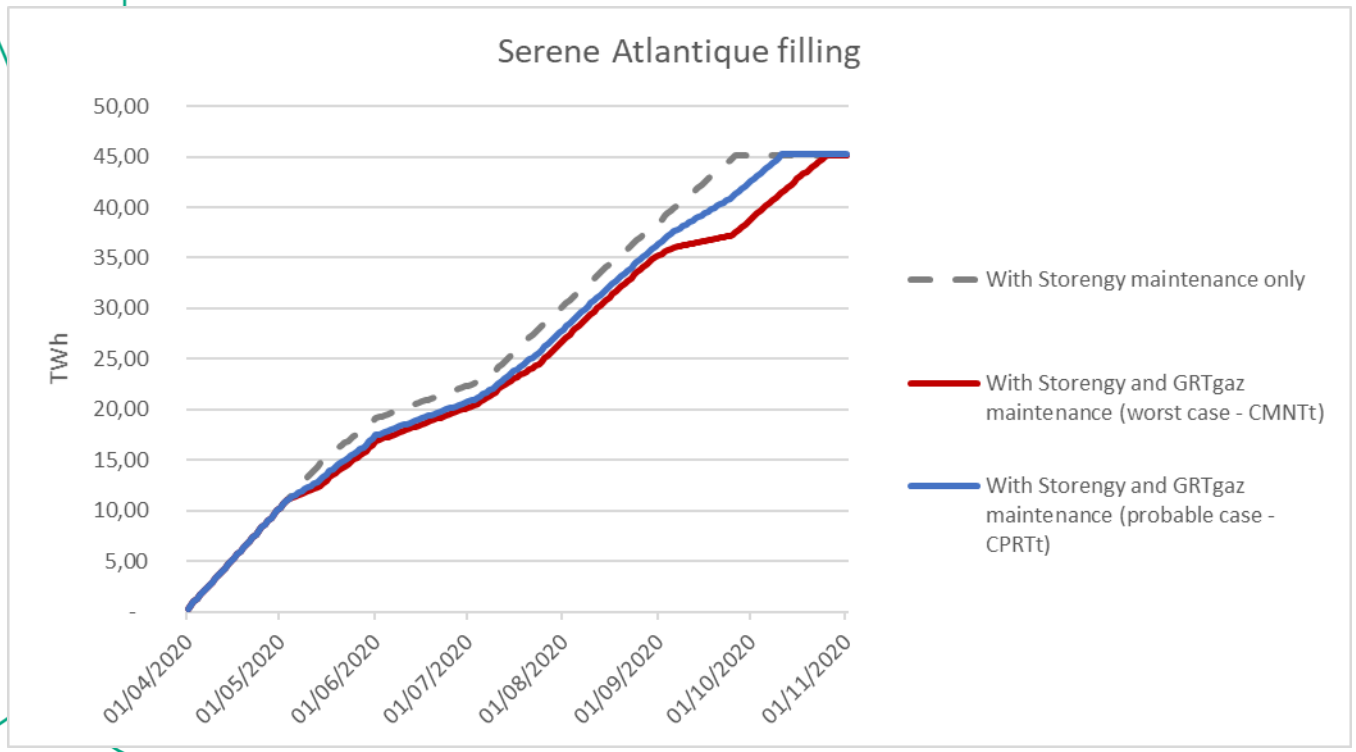
GRTgaz local restrictions

GRTgaz superpoint restrictions.
Possibility to have flexibility with Teréga (transfer)



The Atlantic storage can be filled with this maintenance schedule

	With Storengy maintenance only		With Storengy and GRTgaz maintenance (worst case - CMNTt)		With Storengy and GRTgaz maintenance (probable case - CPRTt)	
	100% date	Days of flexibility	100% date	Days of flexibility	100% date	Days of flexibility
Serene Atlantique	27/09/2020	34	27/10/2020	4	12/10/2020	19
Serene Nord	04/09/2020	57	04/09/2020	57	04/09/2020	57
Sediane Nord	06/08/2020	86	06/08/2020	86	06/08/2020	86
Saline	22/09/2020	39	22/09/2020	39	22/09/2020	39



Sources of flexibility:

- Level of initial stock
- LNG level (in CTE / D-1)
- Transfer from Teréga

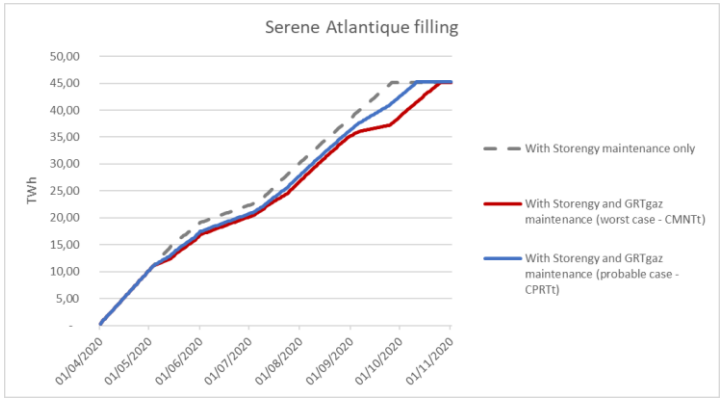
Useful tools

All the useful tools about works are on GRTgaz website:
http://www.grtgaz.com/en/acces-direct/customer/supplier-trader/works

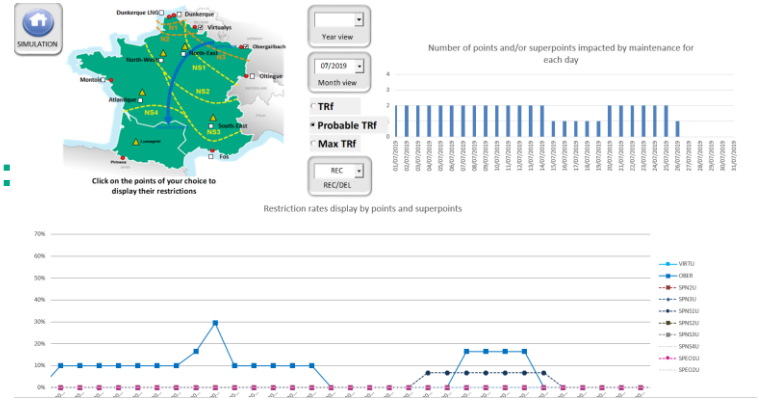
GRTgaz and Storengy common maintenance program:

	Storengy Restrictions [% of rights]		Probable Firm restriction rate as indicated by GRTgaz in its PTC [% of the subscribed capacity]			
					SSPEO2D	
	ATLANTIQUE		Atlantique		Atl	
Date	% Inject.	% Souti.	Injection	Withdrawal	Injection	Withdrawal
29/05/2020	35%	40%	0%	0%	0%	0%
30/05/2020	0%	40%	0%	0%	0%	0%
31/05/2020	0%	40%	0%	0%	0%	0%
01/06/2020	0%	40%	0%	0%	0%	0%
02/06/2020	65%	60%	0%	0%	43%	0%
03/06/2020	65%	60%	0%	0%	43%	0%
04/06/2020	65%	60%	0%	0%	43%	0%
05/06/2020	65%	60%	0%	0%	43%	0%
06/06/2020	65%	60%	0%	0%	43%	0%
07/06/2020	65%	60%	0%	0%	43%	0%
08/06/2020	65%	60%	16%	0%	48%	0%
09/06/2020	65%	60%	16%	0%	48%	0%
10/06/2020	65%	60%	16%	0%	48%	0%

GRTgaz and Storengy simulations about storage filling:



Superpoint simulator:



Quizz n°2!

- **Which superpoints can you find in GRTgaz maintenance schedule in 2020 ?**

1) SPNS1U and SPEO2D
2) SPNS1U and SSPNS3D
3) SPNS1U and SSPEO2D
4) SPNS1U, SPEO2D and SPS1D
5) None

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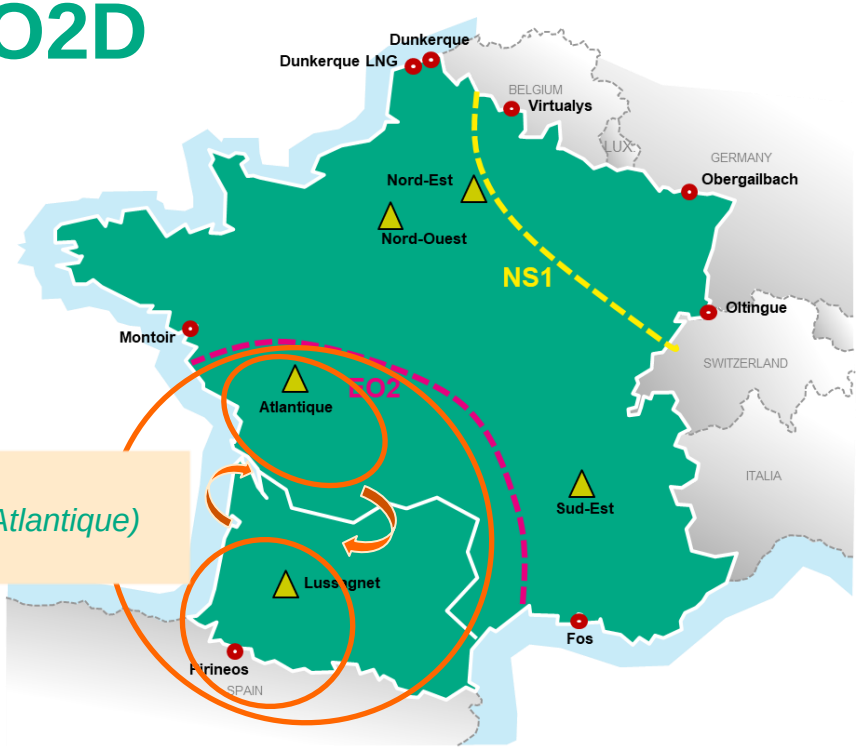
Focus on T@: SSP EO2D

1. How to visualize the restrictions on Atlantique?



SPEO2D
= **SSPEO2D** (*Atlantique*)
+ SSP Teréga

2. How to visualize the UIOLI on SSPEO2D (= mutualized UIOLI between GRTgaz and Teréga)

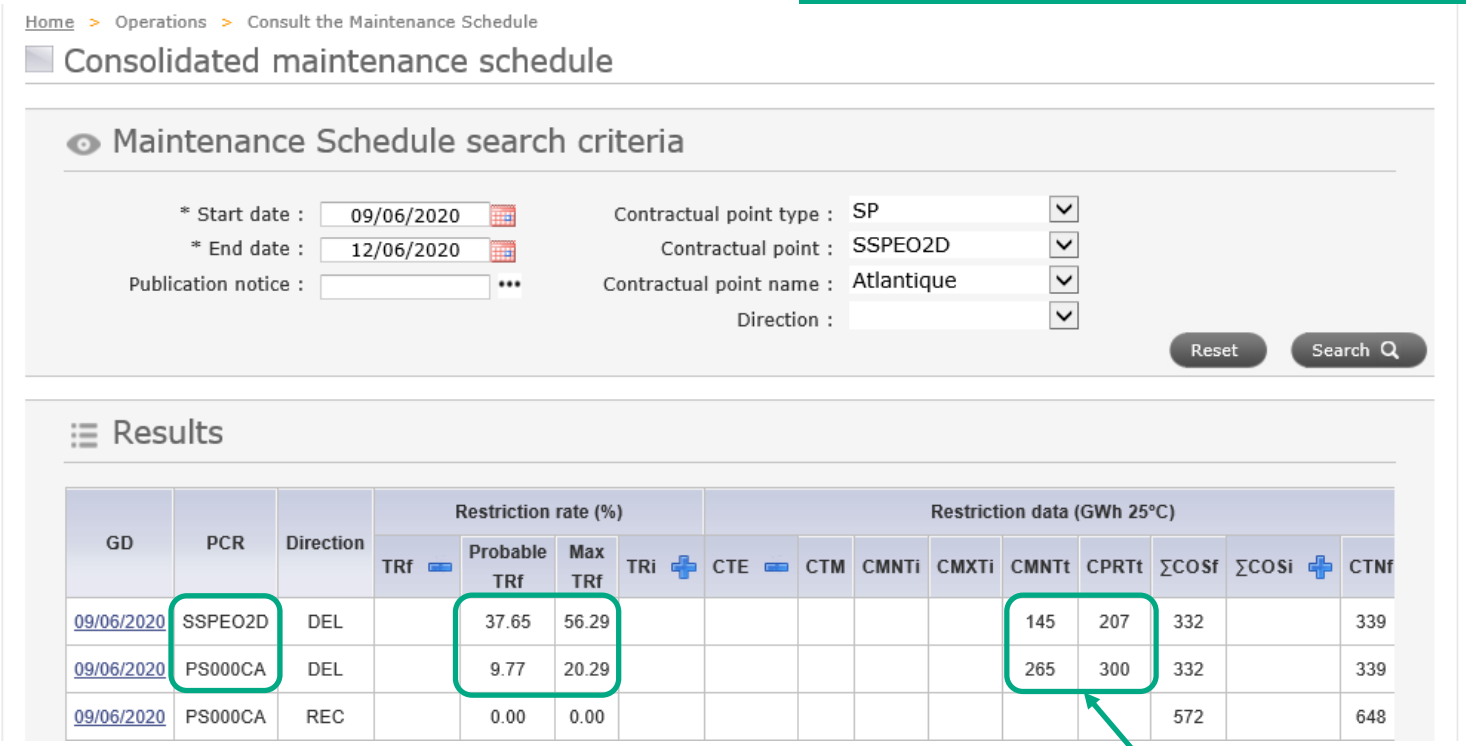
3. How to transfer operational capacity between GRTgaz and Teréga

1. How to visualize the restrictions on Atlantique on T@:

You must take into account the restrictions on:

- PS000CA (Atlantique PITS)
- SSP EO2D

Don't forget to see the Storengy restrictions on SAM!



Home > Operations > Consult the Maintenance Schedule

Consolidated maintenance schedule

Maintenance Schedule search criteria

* Start date : 09/06/2020
* End date : 12/06/2020
Publication notice :

Contractual point type : SP
Contractual point : SSPEO2D
Contractual point name : Atlantique
Direction :

Reset Search

Results

GD	PCR	Direction	Restriction rate (%)				Restriction data (GWh 25°C)								
			TRf	Probable TRf	Max TRf	TRi	CTE	CTM	CMNTi	CMXTi	CMNTt	CPRTt	∑COSf	∑COSi	CTNf
09/06/2020	SSPEO2D	DEL		37.65	56.29						145	207	332		339
09/06/2020	PS000CA	DEL		9.77	20.29						265	300	332		339
09/06/2020	PS000CA	REC		0.00	0.00								572		648

CMNTt and CPRTt already include downstream LNG

Your operational capacity on D day (COE)

This COE already includes downstream LNG

Home > Operations > Consult your Operational Capacities > Operational Capacities Statement

Search for Operational Capacities

The required search criteria are :
- Either a single gas day (high search box)
- Either a contractual point, a direction and a period (low search box)

Gas Day

Contractual Point Type* SP
Contractual Point* SSPEO2D
Direction* DEL
Start date* 28/05/2019
End date* 18/06/2019

Search

Operational Capacity Statement

Unit kWh 25°C

Contractual Point	Direction	Gas Day	Transmission request	COS	TRf	TRi	COE	Guaranteed COA	Planned COA	Available UIOLI	CU D	CU HD
SSPEO2D	DEL	07/06/2019		9,657,323	56.23 %		4,226,659	4,592,111	4,416,000	0		
PS000CA	DEL	07/06/2019		9,657,323	0.00 %	0.00 %	9,657,323	4,818,388	4,416,000		0	0
PS000CA	REC	07/06/2019		16,296,732	0.00 %	0.00 %	16,296,732	679,031	0		0	0

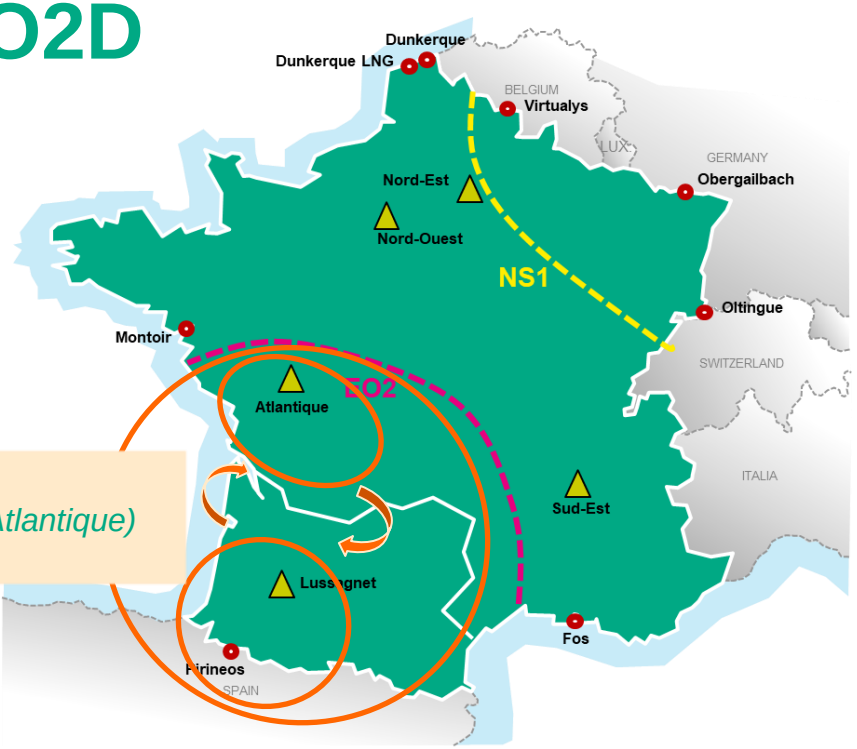
Quizz n°3!

- **Where can I visualize my rights for Atlantique injection?**

1) On SAM and on T@ (COE SSPEO2D and COE PS000CA)
2) On SAM and on T@ (COE PS000CA)
3) On T@ (COE SSPEO2D and COE PS000CA)
4) On Tetra
5) On Smart GRTGaz

Focus on T@: SSP EO2D

1. How to visualize the restrictions on Atlantique?



SPEO2D
= **SSPEO2D** (*Atlantique*)
+ SSP Teréga

2. How to visualize the UIOLI on SSPEO2D (= mutualized UIOLI between GRTgaz and Teréga)

3. How to transfer operational capacity between GRTgaz and Teréga

2. How to visualize the UIOLI on SSPEO2D

- The UIOLI is mutualized between GRTgaz and Teréga, and given to the demand pro-rata on Atlantique, Pirineos and Lussagnet.

- If there are restrictions on Atlantic PITS, there might be less UIOLI on the PITS

Available UIOLI on the cycle 15h-17h

GRTgaz code
kWh 25°C

SSPEO2D - Active

Connection Point	Direction	Available SP UIOLI	Total request SP	Available PCR UIOLI	Total request PCR	UIOLI status	Capacity sales status
PS000CA	Exit	114,211,529	157,232,689	157,232,689	418,479,780	Open	Not marketed by GRTgaz
PS000CA	Entry	Bonus	N/A	0	N/A	Open	Not marketed by GRTgaz

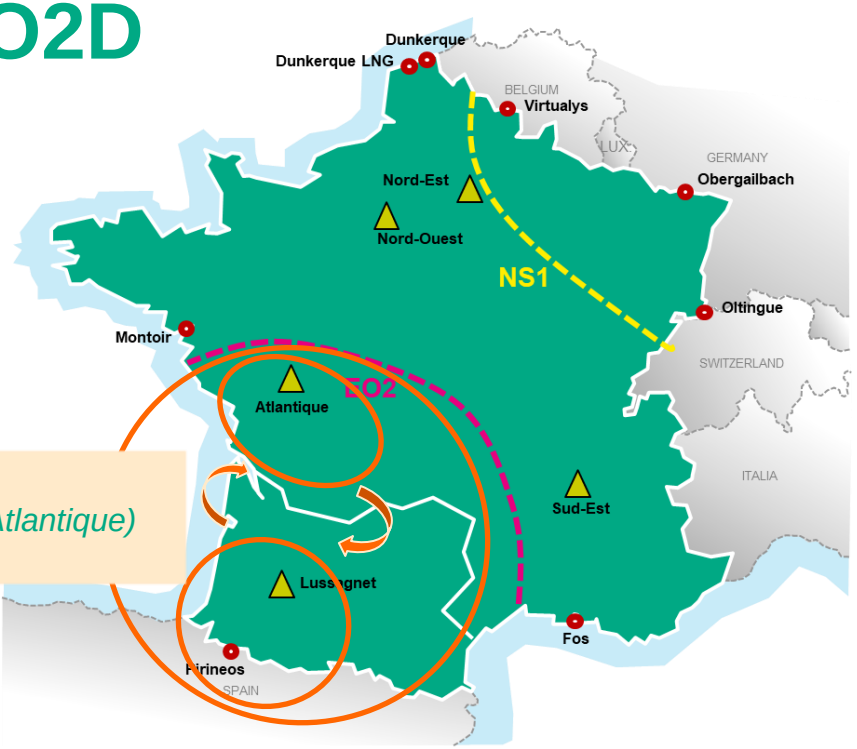
Other points

Connection Point	Direction	Available SP UIOLI	Total request SP	Available PCR UIOLI	Total request PCR	UIOLI status	Capacity sales status
IR0006	Entry	N/A	N/A	61,646,776	119,380,012	Open	Closed
IR0006	Exit	N/A	N/A	-	-	Not eligible	Closed
IR0010	Entry	N/A	N/A	135,469,577	6,063,996	Open	Closed
IR0010	Exit	N/A	N/A	-	-	Not eligible	Open
IR0011	Entry	N/A	N/A	-	-	Not eligible	Open
IR0011	Exit	N/A	N/A	0	N/A	Open	Closed
IR0015	Entry	N/A	N/A	0	N/A	Closed	Open
IR0015	Exit	N/A	N/A	-	-	Not eligible	Open
IR0031	Entry	N/A	N/A	-	-	Not eligible	Closed
IR0031	Exit	N/A	N/A	-	-	Not eligible	Closed

http://www.grtgaz.com/en/acces-direct/customer/supplier-trader/trans64ctions-documentation-shipper.html

Focus on T@: SSP EO2D

1. How to visualize the restrictions on Atlantique?

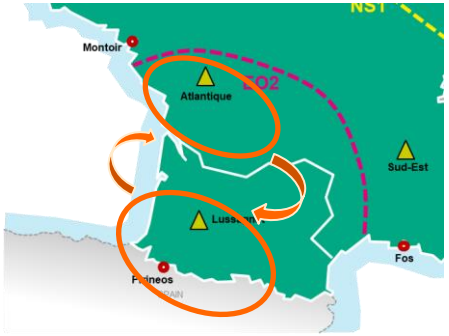


SPEO2D
= **SSPEO2D** (*Atlantique*)
+ SSP Teréga

2. How to visualize the UIOLI on SSPEO2D (= mutualized UIOLI between GRTgaz and Teréga)

3. How to transfer operational capacity between GRTgaz and Teréga

Transfer exemple



A shipper has subscribed 50 GWh/d on Atlantique and 30 GWh/d on Pirineos. The SP EO2D is activated with a 25% restriction rate. And there is maintenance impacting directly Atlantique PITS.

-> He can transfer some unused capacity on Atlantique to flow more gas through Pirineos.

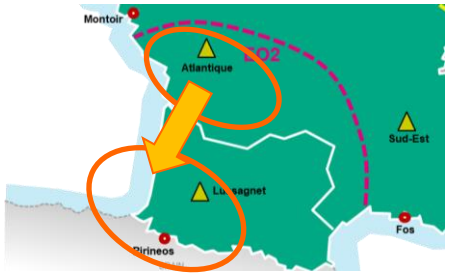
Transfer max = COE on SSPEO2D + Atlantic withdrawals

EO2 aval	SSPEO2D (GRTgaz)	SSP Teréga	
	Atlantique	Lussagnet	Pirineos
COS point	50	0	30
Σ COS ssp	50	30	
COE point	25 (TRf = 50%)	0	30
COE ssp	37,5 (TRf = 25%)	22,5 (TRf = 25%)	
Transfer	-7,5	0	
COE ssp résultante	30	22,5+7,5 = 30	
Possible nominations	25	0	30

3. How to transfer capacity from GRTgaz to Teréga

- If you do not wish to use all your rights on the SSPEO2D, you can transfer some operationnal capacity from GRTgaz to Teréga by nominating on « TREO2 DEL » on t@.

(Useful in particular if there are more restrictions on Atlantic point)



- You see the result in your « confirmation notice » 2 hours later on TREO2 DEL:

Transfer max = COE on SSPEO2D + Atlantic withdrawals

Daily quantity - 7 June 2019
Quantity Statement

Operational Capacities
PCR Code : GRTgaz Unit : kWh 25°C

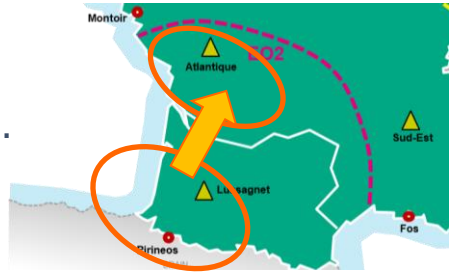
GRTgaz Hide the details

Contractual Point			Daily quantity					Update date
Category	Code	Label	Direction	Requested	Scheduled	In exchange*	Variation	
Entry point	PS000CA	Atlantique	Del	-2,600,000	-2,600,000		=	08/06/2019 03:35:32
Entry point	PS000CA	Atlantique	Rec	0	0		=	08/06/2019 02:19:24
COE transfer point	TREO2	Transfert EO2	Del	-1,770,833	-1,770,833		=	08/06/2019 02:01:14

- Then, your rights on Teréga side are increased in the same nomination cycle.

--> You can exit more on Pirineos or Lussagnet.

3. How to transfer capacity from Teréga to GRTgaz



- It is the same system; you have to nominate on Teréga side.

(Useful in particular if there are more restrictions on Teréga points: on S1D, Lussagnet or Pirineos)

- You directly see the result in your GRTgaz confirmation notice on TREO2 REC:

Daily quantity - 7 June 2019
Quantity Statement

Operational Capacities
PCR Code : GRTgaz Unit : kWh 25°C

GRTgaz Hide the details

Contractual Point			Daily quantity					Update date
Category	Code	Label	Direction	Requested	Scheduled	In exchange*	Variation	
COE transfer point	TREO2	Transfert EO2	Del	0	0		=	09/06/2019 03:01:10
COE transfer point	TREO2	Transfert EO2	Rec	325,828	325,828		=	09/06/2019 03:06:00

- Then, your rights on GRTgaz side are increased in the same nomination cycle.

--> You can exit more on Atlantique.

Quizz n°4!

The injection period is going well, I wish to slow down my injections on Atlantique storage and benefit from favorable spreads towards Spain. How can I transfer operationnal capacity from GRTgaz to Teréga?

1) Nominate on T@ on TREO2 DEL

2) Nominate on T@ on TREO2 REC

3) Nominate on Tetra

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Summary

- A good availability of capacities
- The storages should not be empty on the 1st of April
- The LNG perspectives are favorable

No identified tension to fill the storages

Fos and Montoir « upstream »

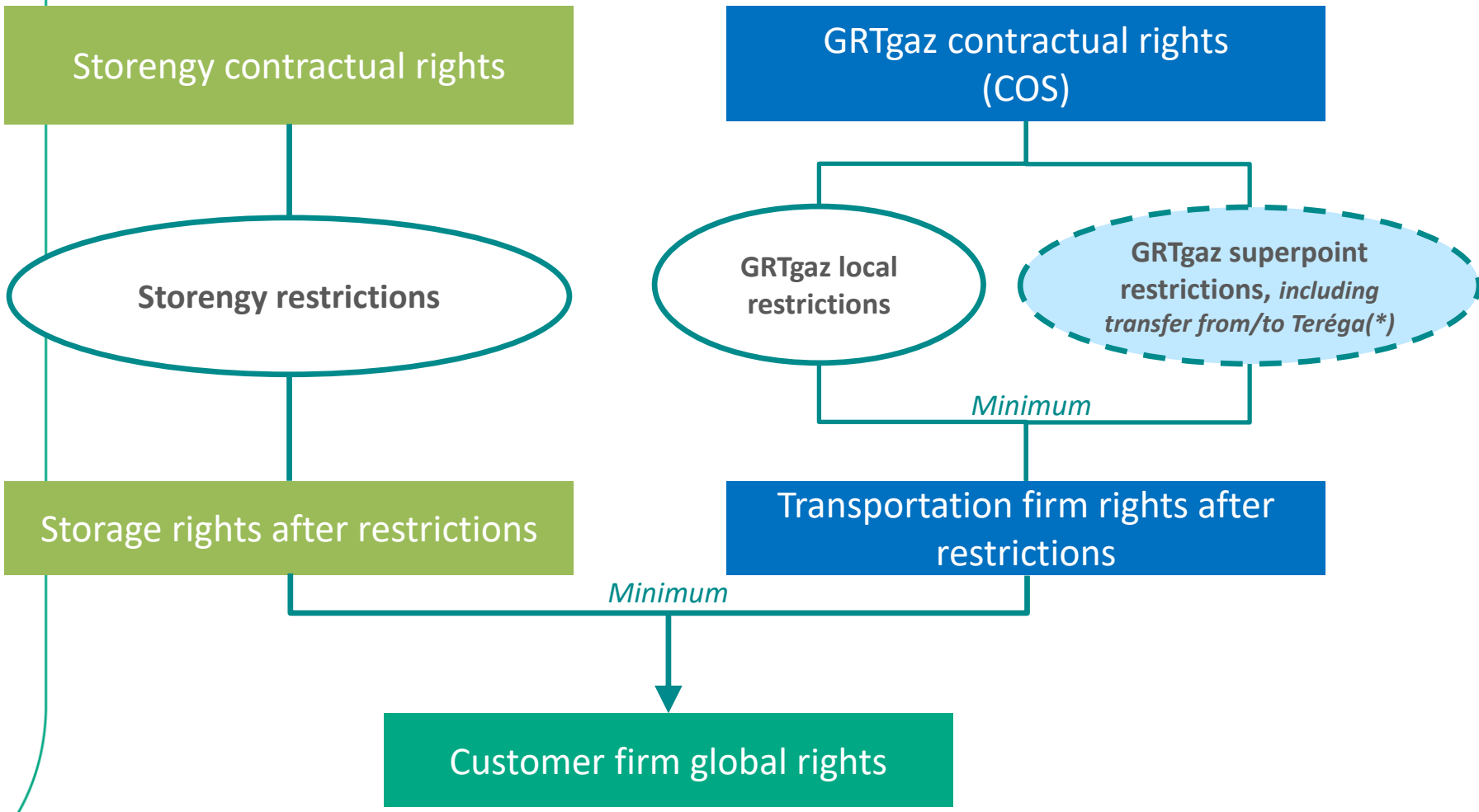
- For more capacity and visibility
- The downstream LNG at Montoir or Fos is given through the available firm capacity (CMNTt / CPRTt / CTE) on EO2D

- NS1U, restricting , Virtualys and Obergailbach PIR
- EO2D, restricting Atlantique PITS.
- Think about nominating on TREO2 DEL to have flexibility between GRTgaz and Teréga!

2 superpoints activated on GRTgaz network

Thank you for your attention!

Zoom on Storages: 3 kinds of restrictions

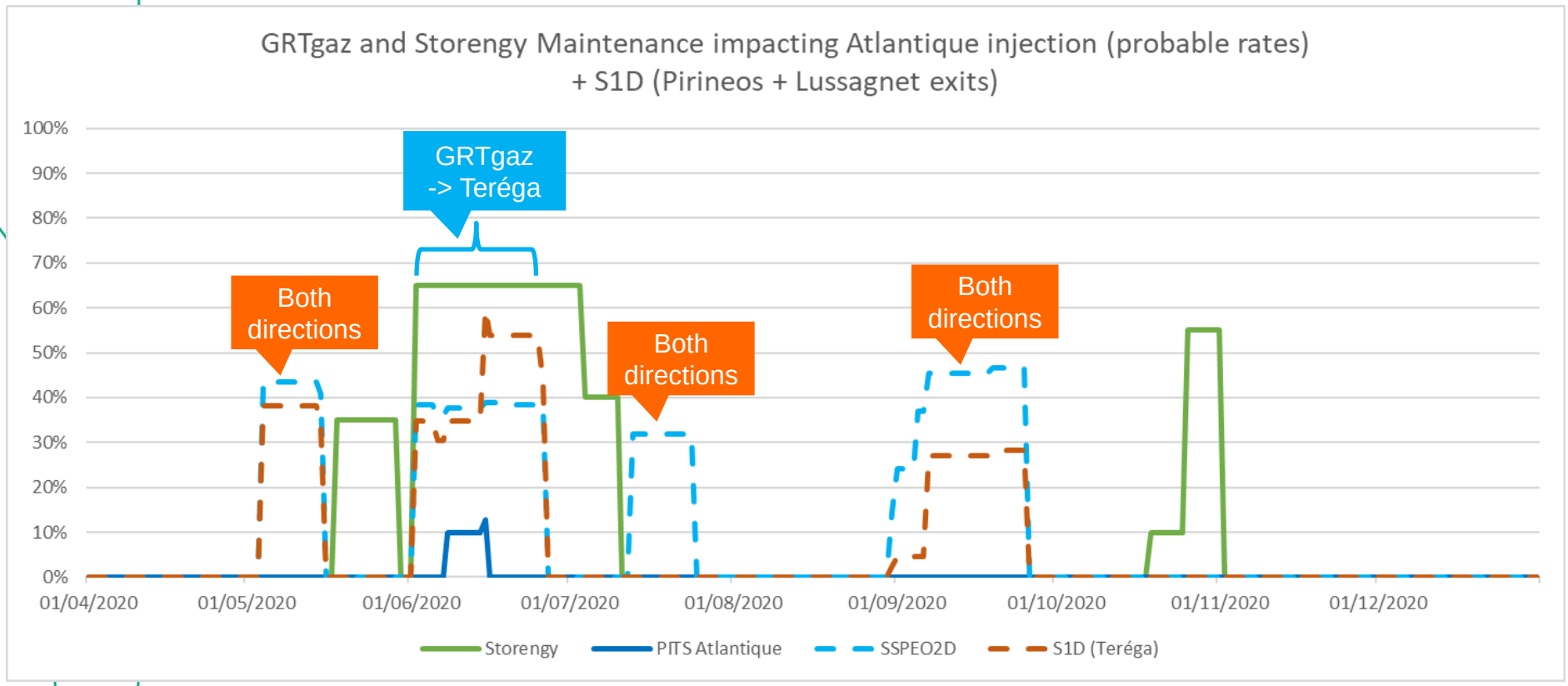


(*) for GRTgaz and Teréga common superpoints

Zoom on Storages: excel file Storengy - GRTgaz

À mettre à jour

	Storengy Restrictions [% of rights]		Probable Firm restriction rate as indicated by GRTgaz in its PTC [% of the subscribed capacity]			
					SSPEO2D	
	ATLANTIQUE		Atlantique		Atl	
Date	% Inject.	% Souti.	Injection	Withdrawal	Injection	Withdrawal
29/05/2020	35%	40%	0%	0%	0%	0%
30/05/2020	0%	40%	0%	0%	0%	0%
31/05/2020	0%	40%	0%	0%	0%	0%
01/06/2020	0%	40%	0%	0%	0%	0%
02/06/2020	65%	60%	0%	0%	43%	0%
03/06/2020	65%	60%	0%	0%	43%	0%
04/06/2020	65%	60%	0%	0%	43%	0%
05/06/2020	65%	60%	0%	0%	43%	0%
06/06/2020	65%	60%	0%	0%	43%	0%
07/06/2020	65%	60%	0%	0%	43%	0%
08/06/2020	65%	60%	16%	0%	48%	0%
09/06/2020	65%	60%	16%	0%	48%	0%
10/06/2020	65%	60%	16%	0%	48%	0%

Atlantic PITS: zoom on transfer opportunities

- Examples of how you could use the transfer: