

# SWE Intraday Capacity Calculation

## external report

This document reports results of the external parallel run from the 08/11/2021 to the 14/11/2021.

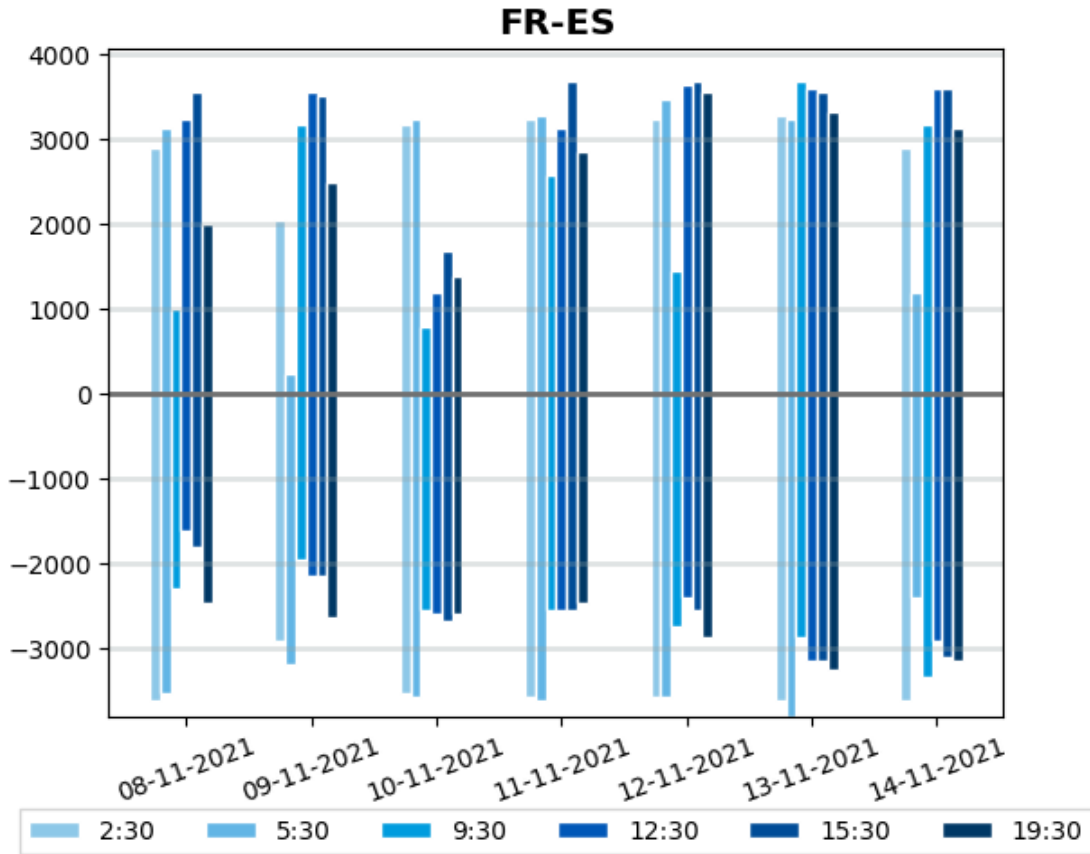
### FR-ES NTCs

	2:30				5:30				9:30			
	ES-FR		FR-ES		ES-FR		FR-ES		ES-FR		FR-ES	
	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run
08-11-2021	3283	3607	3145	2913	3283	3515	3237	3145	2450	2300	2350	1000
09-11-2021	3098	2913	2300	2050	3098	3191	2400	250	1950	1950	3191	3191
10-11-2021	3330	3515	3191	3191	3237	3561	3422	3237	2497	2543	2960	800
11-11-2021	3098	3561	3283	3237	3052	3607	3468	3283	2250	2543	3700	2590
12-11-2021	2400	3561	3330	3237	2590	3561	3468	3468	2590	2728	3653	1450
13-11-2021	3330	3607	3376	3283	3422	3792	3422	3237	2867	2867	3700	3700
14-11-2021	3145	3607	2913	2913	3700	2400	2775	1200	3237	3330	3330	3191

\*Yellow cells represent IT issues for these borders and time stamps during the process. Blue cells represent the IT issues that do not imply replacement by D-2 values. Red cells represent errors when applying the D-2 values: did not come up this week. Fuchsia color represents lack of time to perform calculations and D-2 TTC values are applied: did not come up this week.

	12:30				15:30				19:30			
	ES-FR		FR-ES		ES-FR		FR-ES		ES-FR		FR-ES	
	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run
08-11-2021	1600	1600	3237	3237	1800	1800	3561	3561	1850	2450	3330	2000
09-11-2021	1750	2150	3607	3561	2000	2150	3653	3515	2682	2636	3237	2497
10-11-2021	2450	2590	3515	1200	2543	2682	3515	1700	2497	2590	3052	1400
11-11-2021	2775	2543	3700	3145	2821	2543	3700	3700	2450	2450	3468	2867
12-11-2021	2400	2400	3653	3653	2543	2543	3700	3700	2867	2867	3561	3561
13-11-2021	2636	3145	3607	3607	2682	3145	3653	3561	2867	3237	3376	3330
14-11-2021	2913	2913	3653	3607	2867	3098	3653	3607	2867	3145	3283	3145

\*Yellow cells represent IT issues for these borders and time stamps during the process. Blue cells represent the IT issues that do not imply replacement by D-2 values. Red cells represent errors when applying the D-2 values: did not come up this week. Fuchsia color represents lack of time to perform calculations and D-2 TTC values are applied: did not come up this week.



#### Comments

On FR-ES border, 20 computations failed during this week of external parallel run.  
14 computations were replaced by D-2 values as fallback procedure.

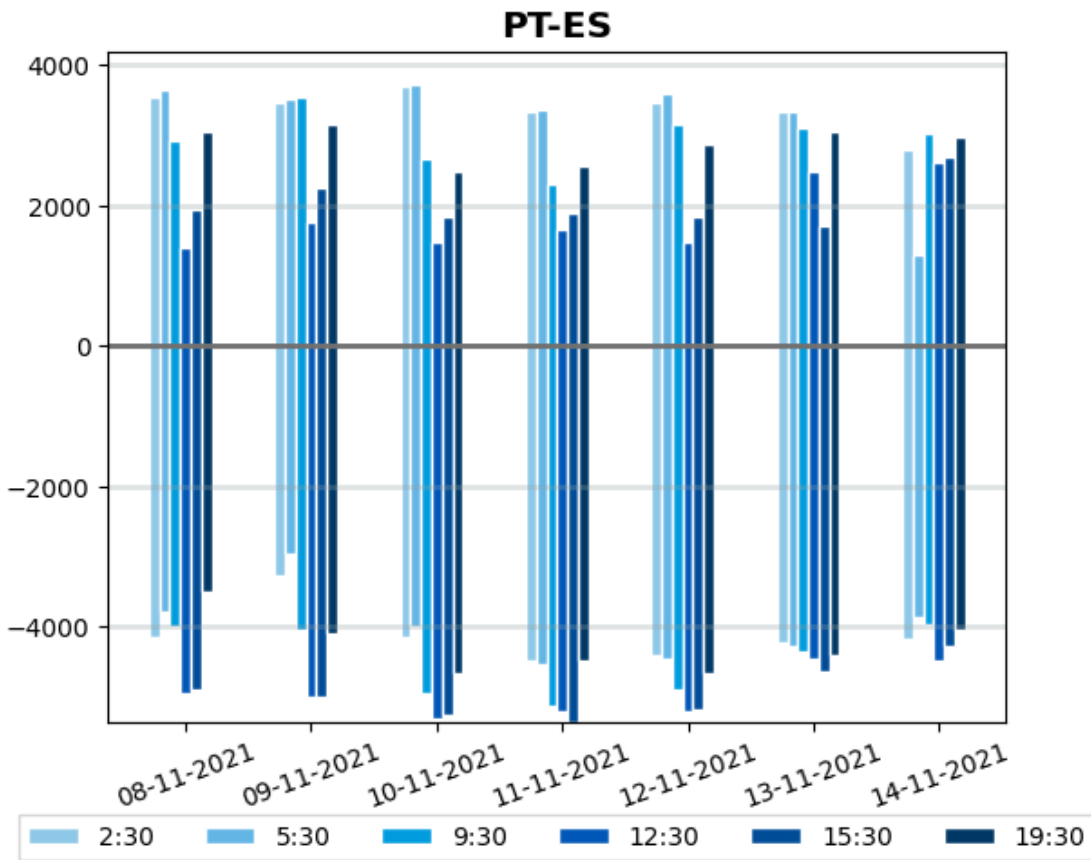
#### PT-ES NTCs

	2:30				5:30				9:30			
	ES-PT		PT-ES		ES-PT		PT-ES		ES-PT		PT-ES	
	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run
08-11-2021	4455	4140	3195	3555	4275	3780	3150	3645	4320	4005	3150	2925
09-11-2021	3375	3285	3465	3465	3060	2970	3420	3510	4050	4050	3555	3555
10-11-2021	4005	4140	3240	3690	3510	4005	4100	3735	4545	4950	3015	2655
11-11-2021	4095	4500	3510	3330	3690	4545	3555	3375	4950	5130	2790	2295
12-11-2021	3915	4410	2925	3465	3825	4455	2925	3600	4725	4905	2790	3150
13-11-2021	4320	4230	3870	3330	4455	4275	3870	3330	4365	4365	3105	3105
14-11-2021	4050	4185	3465	2790	3780	3870	3555	1305	3915	3960	2745	3015

\*Yellow cells represent IT issues for these borders and time stamps during the process.  
Blue cells represent the IT issues that do not imply replacement by D-2 values. Red cells represent errors when applying the D-2 values: did not come up this week. Fuchsia color represents lack of time to perform calculations and D-2 TTC values are applied: did not come up this week.

	12:30				15:30				19:30			
	ES-PT		PT-ES		ES-PT		PT-ES		ES-PT		PT-ES	
	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run	D-2	IDCC 1st run
08-11-2021	4950	4950	1395	1395	4905	4905	1935	1935	3375	3510	3150	3060
09-11-2021	4905	4995	1800	1755	4950	4995	1980	2250	4320	4095	3060	3150
10-11-2021	4815	5310	1485	1485	4590	5265	1980	1845	4995	4680	2610	2475
11-11-2021	5220	5220	1575	1665	5130	5355	1980	1890	4140	4500	2925	2565
12-11-2021	5220	5220	1485	1485	5175	5175	1845	1845	4680	4680	2880	2880
13-11-2021	4410	4455	2565	2475	4455	4635	2880	1710	4095	4410	3465	3060
14-11-2021	4410	4500	1755	2610	4275	4275	1710	2700	3960	4050	3465	2970

\*Yellow cells represent IT issues for these borders and time stamps during the process. Blue cells represent the IT issues that do not imply replacement by D-2 values. Red cells represent errors when applying the D-2 values: did not come up this week. Fuchsia color represents lack of time to perform calculations and D-2 TTC values are applied: did not come up this week.



#### Comments

On PT-ES border, 18 computations failed during this week of external parallel run. 16 computations were replaced by D-2 values as fallback procedure.

## Limiting elements FR-ES

Please find below the top limiting elements appearing more often over the period:

	CNEs and associated Contingencies	CNE Location	Frequency (%)
<b>#1</b>	<b>IT Issue</b>		<b>41.4 %</b>
	Base Case		41.4 %
<b>#2</b>	<b>Tie Line 400 kV</b>	<b>FR-ES</b>	<b>27.6 %</b>
	Contingency [ES]		24.1 %
	Contingency [ES]		3.4 %
<b>#3</b>	<b>Branch</b>	<b>FR</b>	<b>20.7 %</b>
	N-1 Contingency 400 kV [FR-ES]		20.7 %
<b>#4</b>	<b>Branch</b>	<b>ES</b>	<b>6.9 %</b>
	Base Case		6.9 %
<b>#5</b>	<b>Branch</b>	<b>FR</b>	<b>3.4 %</b>
	N-1 Contingency [FR]		3.4 %

## Limiting elements ES-FR

Please find below the top limiting elements appearing more often over the period:

	CNEs and associated Contingencies	CNE Location	Frequency (%)
<b>#1</b>	<b>Tie Line</b>	<b>FR-ES</b>	<b>54.3 %</b>
	N-1 Contingency 400 kV [FR-ES]		48.6 %
	Contingency 400 kV [ES]		2.9 %
	N-1 Contingency 400 kV [ES]		2.9 %
<b>#2</b>	<b>Tie Line</b>	<b>FR-ES</b>	<b>20.0 %</b>
	N-1 Contingency [FR]		14.3 %
	Contingency 220 kV [ES]		2.9 %
	N-1 Contingency 400 kV [FR-ES]		2.9 %
<b>#3</b>	<b>Branch</b>	<b>FR</b>	<b>8.6 %</b>
	N-1 Contingency [FR]		8.6 %
<b>#4</b>	<b>Branch</b>	<b>ES</b>	<b>8.6 %</b>
	N-2 Contingency 400 kV [ES]		8.6 %
<b>#5</b>	<b>IT Issue</b>		<b>5.7 %</b>
	Base Case		5.7 %

## Limiting elements PT-ES

Please find below the top limiting elements appearing more often over the period:

	CNEs and associated Contingencies	CNE Location	Frequency (%)
<b>#1</b>	<b>Angle Limitation</b>	<b>PT</b>	<b>58.5 %</b>
	N-2 Contingency 400 kV [PT-ES]		58.5 %
<b>#2</b>	<b>GLSK limitation</b>		<b>25.2 %</b>
	Base Case		25.2 %
<b>#3</b>	<b>Tie Line 400 kV</b>	<b>ES-PT</b>	<b>16.3 %</b>
	N-2 Contingency 400 kV [PT-ES]		16.3 %

\*GLSK limitation row includes GLSK limitations and flow divergences divisions

## Limiting elements ES-PT

Please find below the top limiting elements appearing more often over the period:

	CNEs and associated Contingencies	CNE Location	Frequency (%)
<b>#1</b>	<b>Angle Limitation</b>	<b>PT</b>	<b>51.6 %</b>
	N-2 Contingency 400 kV [ES-PT]		51.6 %
<b>#2</b>	<b>Tie Line 400 kV</b>	<b>ES-PT</b>	<b>36.9 %</b>
	N-2 Contingency 400 kV [ES-PT]		34.4 %
	N-1 Contingency 400 kV [ES-PT]		2.5 %
<b>#3</b>	<b>GLSK limitation</b>		<b>8.2 %</b>
	Base Case		8.2 %

\*GLSK limitation row includes GLSK limitations and flow divergences divisions