

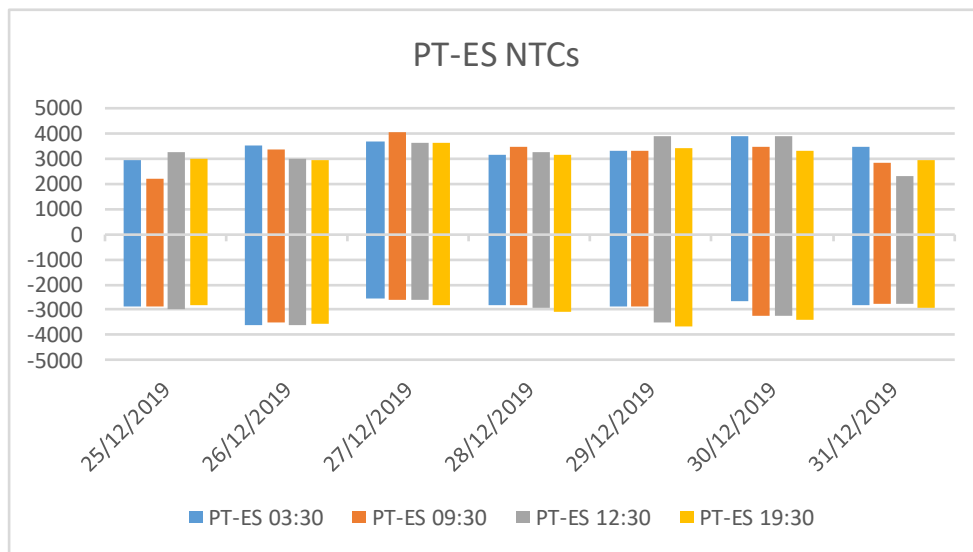
SWE Capacity Calculation report for Stakeholders

The elements in this report are based on ongoing experimentation with continuous tool improvement. The values/limiting elements

This document reports results of the external parallel run from the 25/12/2019 to the 31/12/2019.

ES-PT NTCs

	3:30				9:30				12:30				19:30			
	ES>PT		PT>ES		ES>PT		PT>ES		ES>PT		PT>ES		ES>PT		PT>ES	
	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly
31/12/2019	3466	3000	2790	3200	2852	2300	2759	3600	2309	2300	2752	3600	2970	2300	2922	3600
30/12/2019	3918	3000	2641	3200	3491	2300	3262	3600	3889	2300	3250	3600	3330	2300	3390	3600
29/12/2019	3329	3000	2880	3200	3329	3000	2880	3200	3909	3000	3479	3200	3411	2300	3646	3600
28/12/2019	3172	3000	2790	3200	3461	2300	2835	3600	3269	2300	2912	3600	3153	2300	3104	3600
27/12/2019	3681	2200	2565	3600	4036	2000	2610	4000	3617	2000	2595	4000	3645	2000	2839	4000
26/12/2019	3549	2200	3600	3600	3371	2000	3510	4000	3023	2000	3627	4000	2946	2000	3576	4000
25/12/2019	2939	2200	2880	3600	2211	2200	2880	3600	3283	2200	2970	3600	3014	2000	2790	4000



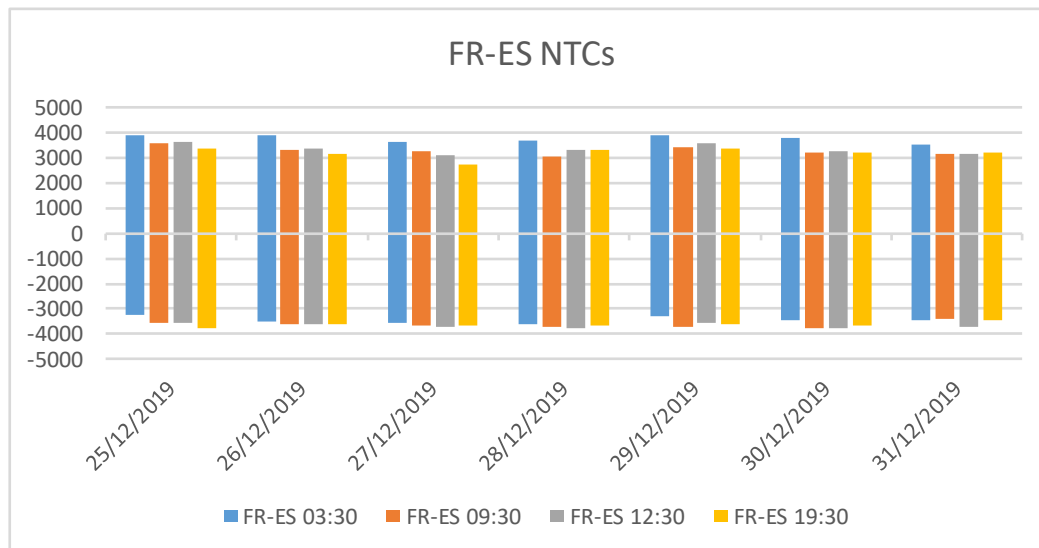
Comments:

Only one computation failed for the PT-ES border over this twenty-fourth week of External parallel run with good results. However, it was replaced by Long term values (marked in red) as fallback procedure (weekly values used as Long term values). Please note that not all the hours have been validated by TSOs at this moment.

Please keep in mind that today only one voltage angle is monitored during the computation. Multiple voltage angle monitoring should be tackled before Go-Live.

FR-ES NTCs

	3:30				9:30				12:30				19:30			
	ES>FR		FR>ES		ES>FR		FR>ES		ES>FR		FR>ES		ES>FR		FR>ES	
	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly	D-2	Weekly
31/12/2019	3515	3400	3469	3000	3145	2650	3423	3400	3145	2650	3700	3400	3191	2650	3469	3400
30/12/2019	3793	3400	3469	3000	3191	2650	3788	3400	3284	2650	3776	3400	3238	2650	3650	3400
29/12/2019	3885	3400	3284	3000	3423	3400	3700	3000	3561	3400	3561	3000	3376	2650	3611	3400
28/12/2019	3700	3400	3608	3000	3053	2650	3700	3400	3330	2650	3775	3400	3330	2650	3672	3400
27/12/2019	3654	3700	3561	3300	3284	2600	3643	3600	3099	2600	3692	3600	2729	2600	3653	3600
26/12/2019	3885	3700	3515	3300	3330	2600	3608	3600	3376	2600	3608	3600	3145	2600	3608	3600
25/12/2019	3885	3700	3238	3300	3608	3700	3561	3300	3654	3700	3561	3300	3376	2600	3746	3600



Comments:

No computation failed for the FR-ES over this twenty-fourth week of External parallel run with good results.

For the moment, the voltage is monitored in the computation but cannot limit the capacity. During External parallel run voltage will be monitored through the local validation of results by TSOs even if it is a common task.

Limiting elements PT-ES

Please find below the 2 limiting elements appearing more often over the period for PT->ES direction:

Critical Network Elements and Contingencies PT->ES		Location CNE	Frequency
# 1 L-400 kV Interconnector		ES-PT	96,43
	N-2 Interconnector 400 kV		96,43
# 2 Computation Failed			3,57
	Long Term Value		3,57

Find below the 4 limiting elements appearing over the period for ES->PT direction:

Critical Network Elements and Contingencies ES->PT		Location CNE	Frequency
# 1 Angle difference		PT	64,29
	N-2 Interconnector 400 kV		64,29
# 2 GLSK limitation		PT	25,00
	Base Case		25,00
# 3 L-400 kV		PT	7,14
	N-2 Interconnector 400 kV		7,14
# 4 Loadflow divergence			3,57
	N-2 Interconnector 400 kV		3,57

Limiting elements FR-ES

Find below the 6 limiting elements appearing more often over the period for FR->ES direction:

Critical Network Elements and Contingencies FR->ES		Location CNE	Frequency
# 1	L-400 kV Interconnector	FR-ES	21,43
	N-1 Interconnector 400 kV		14,29
	N-1 Nuclear Power Plant (ES)		7,14
# 1	L-220 kV Interconnector	FR-ES	21,43
	N-1 Interconnector 400 kV		10,71
	N-1 400 kV (FR)		7,14
	N-1 Interconnector 400 kV		3,57
# 1	L-220 kV	FR	21,43
	N-1 Interconnector 400 kV		10,71
	N-1 400 kV (FR)		10,71
# 2	L-220 kV Interconnector	FR-ES	10,71
	N-1 400 kV (FR)		7,14
	N-1 Interconnector 400 kV		3,57
# 3	L-400 kV	ES	7,14
	N-1 400 kV (ES)		7,14
# 3	L-400 kV	FR	7,14
	N-1 Interconnector 400 kV		7,14

Find below the 4 limiting elements appearing more often over the period for ES->FR direction:

Critical Network Elements and Contingencies ES ->FR		Location CNE	Frequency
# 1	L-220 kV Interconnector	FR-ES	57,14
	N-1 400 kV (FR)		32,14
	N-1 Interconnector 400 kV		25,00
# 2	L-220 kV Interconnector	FR-ES	32,14
	N-1 Interconnector 400 kV		14,29
	N-1 400 kV (FR)		14,29
	N state		3,57
# 3	L-400 kV	FR	7,14
	N-1 Interconnector 400 kV (FR-ES)		3,57
	N-1 Interconnector 220 kV (FR-ES)		3,57
# 4	Loadflow divergence		3,57
	N-1 Nuclear Power Plant (ES)		3,57