

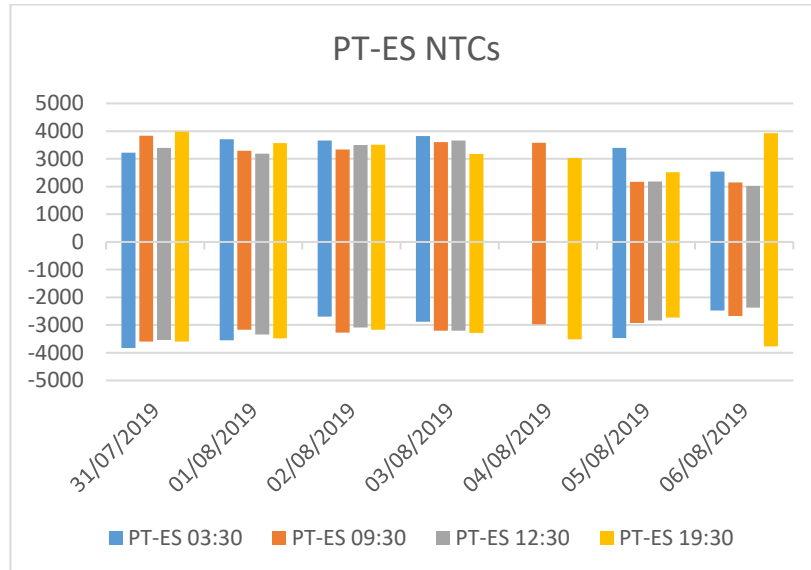
SWE Capacity Calculation report for Stakeholders

The elements in this report are based on ongoing experimentation with continuous tool improvement. The values/limiting elements can still evolve a bit until Go-Live.

This document reports results of the external parallel run from the 31/07/2019 to the 06/08/2019.

PT-ES NTCs

	NTC PT-ES															
	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
06/08/2019	2539	2700	2475	2400	2147	2700	2676	2300	2024	2700	2372	2300	3922	4300	3771	3300
05/08/2019	3396	3400	3465	3300	2171	2700	2930	2300	2178	2700	2835	2300	2512	2700	2724	2300
04/08/2019	N/A	3400	N/A	3100	3577	3400	2970	3100	N/A	3400	N/A	3100	3028	4300	3510	3300
03/08/2019	3821	3400	2880	3100	3602	4300	3199	3300	3656	4300	3209	3300	3181	4300	3285	3300
02/08/2019	3662	3100	2700	3600	3337	4000	3267	3000	3497	4000	3088	3000	3508	4000	3173	3000
01/08/2019	3708	3100	3555	3600	3296	4000	3174	3000	3185	4000	3345	3000	3568	4000	3479	3000
31/07/2019	3227	3100	3825	3600	3835	4000	3600	3000	3395	4000	3542	3000	3985	4000	3600	3000



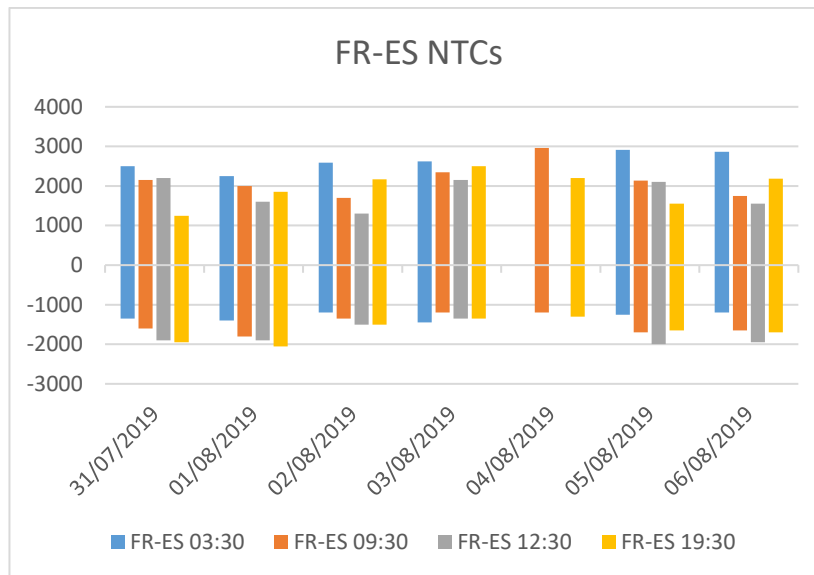
Comments:

Only four computations failed for the PT-ES border over this third week of External parallel run with generally good results. 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

	NTC FR-ES															
	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
06/08/2019	2868	2800	1200	1100	1750	1400	1650	1300	1550	1400	1950	1300	2188	1400	1700	1300
05/08/2019	2914	2800	1250	1100	2136	1400	1700	1300	2100	1400	2000	1300	1550	1400	1650	1300
04/08/2019	N/A	2800	N/A	1100	2960	2800	1200	1100	N/A	2800	N/A	1100	2200	2100	1300	1300
03/08/2019	2623	2800	1450	1100	2350	2100	1200	1300	2150	2100	1350	1300	2500	2100	1350	1300
02/08/2019	2590	2700	1200	1200	1700	1700	1350	1200	1300	1700	1500	1200	2166	1800	1500	1200
01/08/2019	2250	2700	1400	1200	2000	1800	1800	1200	1600	1750	1900	1200	1850	1800	2050	1200
31/07/2019	2500	2600	1350	1200	2150	1850	1600	1200	2200	1850	1900	1200	1250	2200	1950	1200



Comments:

Only four computations failed for the FR-ES border over this third week of External parallel run with generally good results. Please note that not all the hours have been validated by TSOs at this moment.

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 5 limiting elements appearing more often over the period:

	PT-ES most frequent CNE	Location CNE	Limiting Contingency (Location)	Frequency (%)
#1	L-400 kV Interconnector	PT-ES		27%
			N-2 400 kV Interconnector (PT-ES)	25%
			N-2 220 kV (ES-ES)	2%
#2	L-220 kV	ES-ES		23%
			N-2 400 kV (ES-ES)	23%
#3	L-220 kV Interconnector	PT-ES		14%
			N-2 400 kV Interconnector (PT-ES)	13%
			N-1 400 kV Interconnector (PT-ES)	2%
#4	L-220 kV	PT-PT		11%
			N-2 400 kV Interconnector (PT-ES)	11%
#5	GLSK limitation	PT		9%
			N case	9%

Limiting elements FR-ES

Please find below the 5 limiting elements appearing more often over the period:

	FR-ES most frequent CNE	Location CNE	Limiting Contingency (Location)	Frequency (%)
#1	L-220 kV Interconnector	ES-FR		29%
			N-1 Power Plant (ES)	16%
			N-1 400 kV Interconnector (ES-FR)	11%
			N-1 220 kV (FR-FR)	2%
#2	L-400 kV	FR-FR		27%
			N-1 Power Plant (ES)	18%
			N-1 220 kV (FR-FR)	5%
			N-1 220 kV (FR-FR)	4%
#3	L-220 kV Interconnector	ES-FR		16%
			N-1 400 kV Interconnector (ES-FR)	11%
			N-1 Power Plant (ES)	4%
			N-1 400 kV (FR-FR)	2%
#4	Computation Failed			7%
#5	L-220 kV	ES-ES		4%
			N-1 400 kV (ES-ES)	4%
#5	L-220 kV	ES-ES		4%
			N-1 400 kV (ES-ES)	4%
#5	L-220 kV	FR-FR		4%
			N-1 400 kV (FR-FR)	2%
			N-1220 kV (FR-FR)	2%
#5	L-220 kV	FR-FR		4%
			N-1 Power Plant (ES)	2%
			N-1 220 kV (FR-FR)	2%