

SWE Capacity Calculation report for Stakeholders

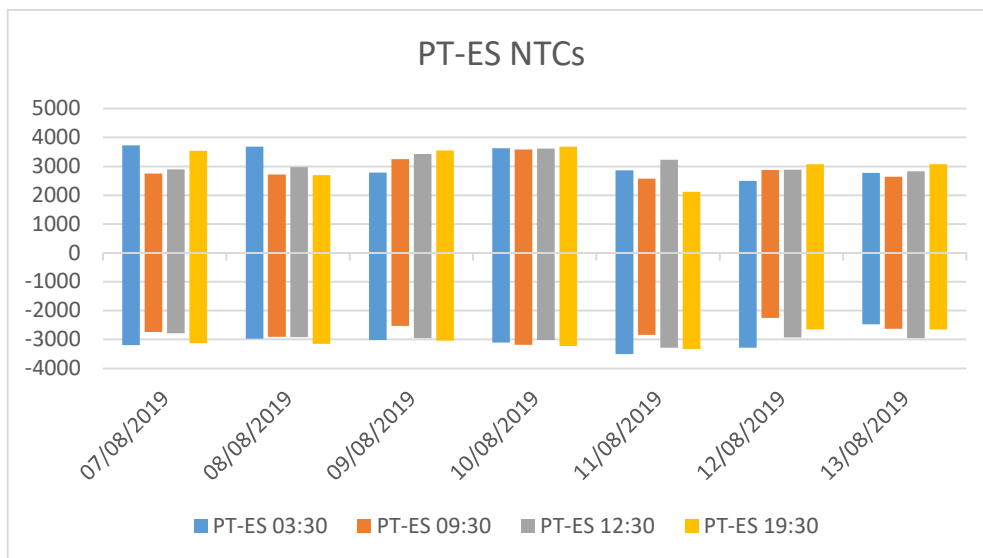
The elements in this report are based on ongoing experimentation with continuous tool improvement. The values/limiting elements can still evolve a bit until Go-Live.

This document reports results of the external parallel run from the 07/08/2019 to the 13/08/2019.

This is the first week with results available for all the timestamps since the beginning of the external parallel run.

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
13/08/2019	2773	2700	2475	2600	2642	3550	2630	2500	2831	3550	2953	2500	3071	3550	2655	2500
12/08/2019	2494	2800	3285	3400	2872	3550	2250	2500	2888	3550	2925	2500	3068	3550	2655	2500
11/08/2019	2866	2800	3510	3300	2573	2800	2835	3300	3232	2800	3285	3300	2125	4250	3330	2700
10/08/2019	3626	2800	3105	3300	3588	4250	3188	2700	3618	4250	3022	2700	3687	4250	3234	2700
09/08/2019	2786	3400	3015	3300	3247	3600	2532	2700	3424	3600	2954	2700	3545	3600	3039	2700
08/08/2019	3683	3400	2970	3300	2723	3600	2907	2700	2972	3600	2922	2700	2700	4300	3150	3300
07/08/2019	3733	3400	3195	3300	2749	3600	2744	2700	2899	3600	2785	2700	3539	4300	3134	3300



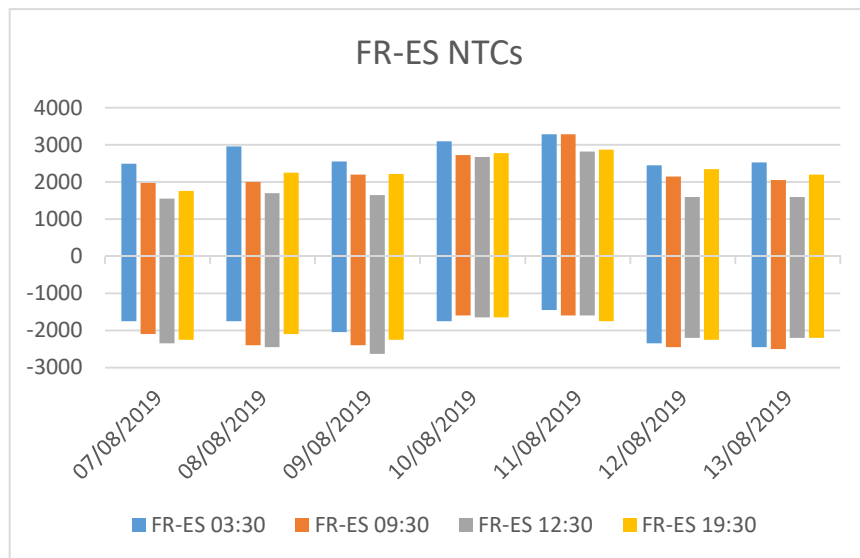
Comments:

No computation failed for the PT-ES border over this fourth 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
13/08/2019	2525	2900	2450	1400	2050	1600	2500	1600	1600	1600	2200	1600	2200	1600	2200	1600
12/08/2019	2450	2900	2350	1400	2150	1600	2450	1600	1600	1600	2200	1600	2350	1600	2250	1600
11/08/2019	3284	2900	1450	1400	3284	2900	1600	1400	2821	2900	1600	1400	2873	1600	1750	1600
10/08/2019	3099	2900	1750	1400	2729	1600	1600	1600	2678	1600	1650	1600	2775	1600	1650	1600
09/08/2019	2550	2800	2050	1100	2200	2100	2400	1300	1650	2100	2636	1300	2221	2100	2250	1300
08/08/2019	2960	2800	1750	1100	2000	2100	2400	1300	1700	2100	2450	1300	2250	2100	2100	1300
07/08/2019	2494	2800	1750	1100	1976	1400	2100	1300	1550	1400	2350	1300	1759	2100	2250	1300



Comments:

No computation failed for the FR-ES border over this fourth 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:

	CNEs and associated Contingencies	Location CNE	Frequency (%)
#1	L-400 kV Interconnector	PT-ES	39%
	N-2 Interconnector 400 kV (ES-PT)		39%
#2	L-220 kV	ES-ES	23%
	N-1 Interconnector 400 kV (ES-PT)		2%
	N-2 220 kV (ES-ES)		21%
#3	GLSK limitation	PT	23%
	N Case		23%
#4	L-400 kV Interconnector	PT-ES	11%
	N-1 Interconnector 400 kV (ES-PT)		4%
	N-2 Interconnector 400 kV (ES-PT)		7%
#5	L-220 kV	PT-PT	2%
	N-1 Interconnector 400 kV (ES-PT)		2%
#5	Phase Shifter Autotransformer 400/150 kV	PT-PT	2%
	N-1 Interconnector 400 kV (ES-PT)		2%

Limiting elements FR-ES

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

	CNEs and associated Contingencies	Location CNE	Frequency (%)
#1	L-400 kV	FR-FR	36%
	N Case		26%
	N-1 Power Plant (ES)		4%
	N-1 220 kV (FR-FR)		2%
	N-1 400 kV (ES-ES)		4%
#2	L-220 kV	ES-ES	18%
	N-1 400 kV (ES-ES)		18%
#3	L-220 kV Interconnector	FR-ES	7%
	N-1 400 kV (FR-FR)		2%
	N-1 Interconnector 400 kV (ES-FR)		5%
#4	L-220 kV	FR-FR	7%
	N-1 400 kV (FR-FR)		7%
#5	L-220 kV Interconnector	FR-ES	7%
	N-1 Interconnector 400 kV (FR-ES)		2%
	N-1 400 kV (FR-FR)		3%
	N-1 Interconnector 400 kV (ES-FR)		2%