

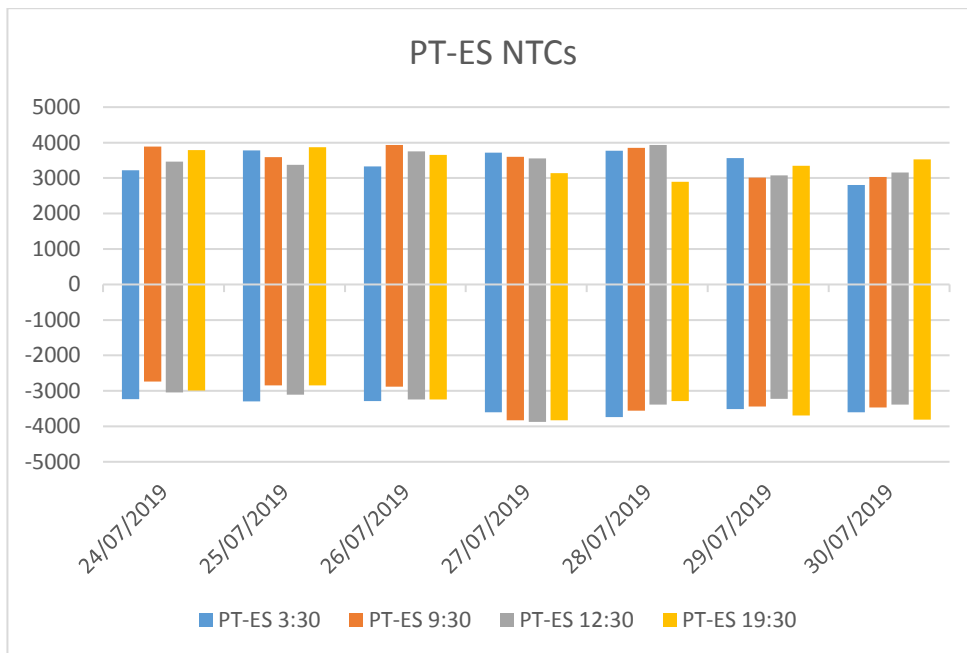
SWE Capacity Calculation report for Stakeholders

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 24/07/2019 to the 30/07/2019.

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
30/07/2019	2803	2800	3600	3100	3035	3600	3465	2750	3153	3600	3383	2750	3527	4000	3809	3200
29/07/2019	3561	2800	3510	3300	3015	3600	3439	2750	3080	3600	3227	2750	3347	3600	3690	2750
28/07/2019	3767	2800	3735	3300	3856	2800	3555	3300	3935	2800	3391	3300	2894	3600	3285	2750
27/07/2019	3713	3100	3600	3600	3597	3600	3825	2750	3551	3600	3870	2750	3139	3600	3825	2750
26/07/2019	3330	2900	3285	2150	3934	3200	2880	3000	3749	3200	3240	3000	3650	3300	3240	3050
25/07/2019	3780	2950	3300	2150	3594	3200	2844	3000	3375	3200	3109	3000	3873	3200	2849	3000
24/07/2019	3223	2950	3237	2150	3887	3300	2734	3000	3467	3300	3046	3000	3788	3300	2988	3000



Comments:

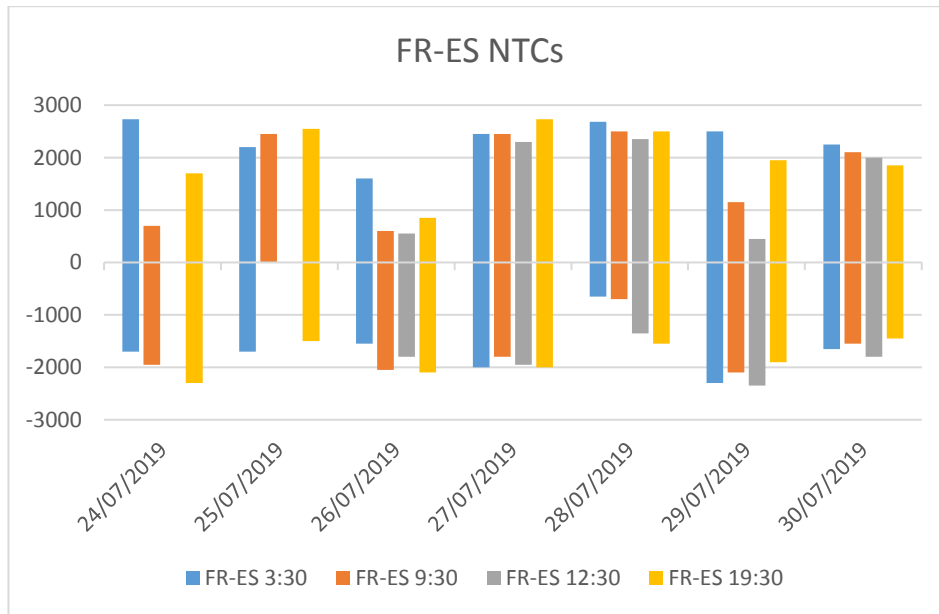
This second week of external parallel run has been the second one with 4 timestamps computed per day. Due to this improvement, we have experienced performance and storage issues that should be tackled shortly.

In general, the results can be considered as good. 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. This 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
30/07/2019	2250	2600	1650	1200	2100	1850	1550	1200	2000	1850	1800	1200	1850	1850	1450	1200
29/07/2019	2500	2350	2300	1450	1150	1250	2100	1000	450	1250	2350	1000	1950	2400	1900	1000
28/07/2019	2683	2700	650	1200	2500	2350	700	1450	2350	2350	1350	1450	2500	1250	1550	1850
27/07/2019	2450	1600	2000	1450	2450	1300	1800	1850	2300	1300	1950	1850	2729	2200	2000	1200
26/07/2019	1600	1600	1550	1200	600	1300	2050	1750	550	1300	1800	1750	850	1300	2100	1750
25/07/2019	2200	2250	1700	1200	2450	1900	N/A	1200	0	1900	0	1200	2550	2600	1500	1200
24/07/2019	2729	2250	1700	1200	700	1900	1950	1200	N/A	1900	N/A	1200	1700	1900	2300	1200



Comments:

This second week of external parallel run has been the second one with 4 timestamps computed per day. Due to this improvement, we have experienced performance and storage issues that should be tackled shortly.

Only three computations failed for the FR-ES border over this second week of External parallel run with generally good results. 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	Frequency	PT-ES most frequent Contingency	Frequency
#1	L-220 kV	ES-ES	39%	N-2 400 kV	45%
#2	L-400 kV Interconnector	ES-PT	19%	N-2 400 kV Interconnector	19%
#3	GLSK limitation	PT	18%	N state	18%
#4	L-220 kV	PT-PT	11%	N-1 400 kV Interconnector	13%
#5	L-220 kV	ES-ES	6%	N-1 400 kV	6%

Limiting elements FR-ES

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

	FR-ES most frequent CNE	Location	Frequency	FR-ES most frequent Contingency	Frequency
#1	L-220 kV Interconnector	ES-FR	16%	N state	45%
#2	L-400 kV	FR-FR	16%	N-1 400 kV Interconnector	15%
#3	L-400 kV	ES-ES	13%	N-1 L-400 kV	13%
#4	L-220 kV Interconnector	ES-FR	9%	N-1 L-220 kV	6%
#5	L-220 kV Interconnector	ES-FR	8%	N-1 Power plant	6%