## SWE Intraday Capacity Calculation external report

This document reports results of the external parallel run from the 22/11/2021 to the 28/11/2021.

FR-ES NTCs

|  | 2:30 |  |  |  | 5:30 |  |  |  | 9:30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ES-FR |  | FR-ES |  | ES-FR |  | FR-ES |  | ES-FR |  | FR-ES |  |
|  | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ |
| 22-11-2021 | 3098 | 3098 | 2913 | 2913 | 3098 | 3098 | 3145 | 3145 | 2497 | 2497 | 2400 | 2400 |
| 23-11-2021 | 2450 | 2590 | 1850 | 2250 | 2636 | 2497 | 2250 | 350 | 2000 | 1650 | 2100 | 1600 |
| 24-11-2021 | 2821 | 2867 | 2682 | 2682 | 2821 | 2867 | 2728 | 850 | 2150 | 2150 | 2300 | 2300 |
| 25-11-2021 | 2590 | 2543 | 2450 | 911 | 2543 | 2636 | 2682 | 2200 | 2100 | 2050 | 1300 | 2150 |
| 26-11-2021 | 2728 | 2728 | 2400 | 1450 | 2867 | 2636 | 2400 | 1100 | 1850 | 1150 | 2200 | 2100 |
| 27-11-2021 | 2867 | 2867 | 2543 | 2543 | 2913 | 2913 | 2682 | 2682 | 2682 | 2450 | 2400 | 2250 |
| 28-11-2021 | 2913 | 2913 | 1900 | 1900 | 2960 | 2960 | 1850 | 1850 | 2682 | 2682 | 1000 | 1000 |

* 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 $\mathrm{D}-2$ values: this case did not happen this week.

|  | 12:30 |  |  |  | 15:30 |  |  |  | 19:30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ES-FR |  | FR-ES |  | ES-FR |  | FR-ES |  | ES-FR |  | FR-ES |  |
|  | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ |
| 22-11-2021 | 2350 | 2350 | 2590 | 2590 | 2543 | 2543 | 2775 | 2775 | 2400 | 2400 | 2350 | 2350 |
| 23-11-2021 | 1900 | 1650 | 2350 | 2050 | 2250 | 1750 | 2590 | 2050 | 2050 | 1400 | 2200 | 1750 |
| 24-11-2021 | 2150 | 2150 | 2250 | 2250 | 2100 | 2000 | 2497 | 2450 | 1950 | 1950 | 2050 | 2050 |
| 25-11-2021 | 2000 | 1900 | 2200 | 2150 | 2050 | 2250 | 2300 | 2400 | 1800 | 1800 | 2000 | 1850 |
| 26-11-2021 | 1650 | 1250 | 2450 | 2250 | 1750 | 1550 | 2400 | 2000 | 2000 | 1550 | 2300 | 350 |
| 27-11-2021 | 2682 | 2543 | 2636 | 2450 | 2590 | 2590 | 2636 | 2636 | 2543 | 2400 | 2100 | 600 |
| 28-11-2021 | 2682 | 2682 | 1650 | 1650 | 2775 | 2775 | 1750 | 1750 | 2682 | 2682 | 1850 | 1850 |

* 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 $\mathrm{D}-2$ values: this case did not happen this week.

FR-ES


## Comments

On FR-ES border, 46 computations failed during this week of external parallel run. 37 failed 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 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ |
| 22-11-2021 | 3735 | 3735 | 3105 | 3105 | 3555 | 3555 | 3015 | 3015 | 4590 | 4590 | 2880 | 2880 |
| 23-11-2021 | 3150 | 3015 | 3735 | 3645 | 3420 | 3060 | 3780 | 3915 | 4185 | 4275 | 3150 | 3465 |
| 24-11-2021 | 4230 | 4005 | 3060 | 2385 | 4320 | 4050 | 2970 | 2880 | 4815 | 4815 | 2790 | 2790 |
| 25-11-2021 | 3960 | 4320 | 3735 | 3645 | 3960 | 4455 | 3735 | 3690 | 4500 | 4815 | 2880 | 2970 |
| 26-11-2021 | 3600 | 3555 | 3780 | 3555 | 3870 | 3690 | 3915 | 3825 | 4275 | 4500 | 3195 | 3240 |
| 27-11-2021 | 3870 | 3870 | 3915 | 3915 | 3735 | 3735 | 4185 | 4185 | 4140 | 3960 | 4140 | 4275 |
| 28-11-2021 | 4230 | 4230 | 4005 | 4005 | 4320 | 4320 | 4140 | 4140 | 3915 | 3915 | 3825 | 3825 |

* 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: this case did not happen this week.

|  | 12:30 |  |  |  | 15:30 |  |  |  | 19:30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ES-PT |  | PT-ES |  | ES-PT |  | PT-ES |  | ES-PT |  | PT-ES |  |
|  | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ | D-2 | $\begin{gathered} \hline \text { IDCC } \\ \text { 1st } \\ \text { run } \\ \hline \end{gathered}$ |
| 22-11-2021 | 4770 | 4770 | 2970 | 2970 | 4635 | 4635 | 3240 | 3240 | 4725 | 4725 | 2835 | 2835 |
| 23-11-2021 | 4365 | 4770 | 3150 | 3285 | 4455 | 4770 | 2970 | 3105 | 4905 | 4320 | 2700 | 2610 |
| 24-11-2021 | 4320 | 4320 | 2565 | 2565 | 4050 | 4725 | 2970 | 2790 | 4050 | 4050 | 2835 | 2835 |
| 25-11-2021 | 4860 | 5310 | 2655 | 2700 | 4635 | 5085 | 2925 | 2655 | 4545 | 4365 | 3060 | 3060 |
| 26-11-2021 | 4635 | 4860 | 2835 | 2925 | 4500 | 4680 | 3195 | 3105 | 4185 | 3915 | 3240 | 3195 |
| 27-11-2021 | 4500 | 4365 | 3870 | 3780 | 4455 | 4455 | 4095 | 4095 | 3060 | 3285 | 4095 | 3825 |
| 28-11-2021 | 3915 | 3915 | 3150 | 3150 | 4050 | 4050 | 3555 | 3555 | 2835 | 2835 | 3420 | 3420 |

* 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 $\mathrm{D}-2$ values: this case did not happen this week.


## Comments

On PT-ES border, 30 computations failed during this week of external parallel run.
All failed 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 (\%) |
| :---: | :---: | :---: | :---: |
| \#1 | Branch | FR | 38.6 \% |
|  | N-1 Contingency [FR] |  | 38.6 \% |
| \#2 | IT Issue |  | 25.0 \% |
|  | Base Case |  | 25.0 \% |
| \#3 | Tie Line 400 kV | FR-ES | 13.6 \% |
|  | $\mathrm{N}-1$ Contingency [FR-ES] |  | 13.6 \% |
| \#4 | Tie Line 225 kV | FR-ES | 13.6 \% |
|  | N-1 Contingency [FR] |  | 13.6 \% |
| \#5 | Tie Line | FR-ES | 9.1 \% |
|  | Contingency [ES] |  | 2.3 \% |
|  | $\mathrm{N}-1$ Contingency [FR] |  | 6.8 \% |

## Limiting elements ES-FR

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

|  | CNEs and associated Contingencies | CNE Location | Frequency (\%) |
| :---: | :---: | :---: | :---: |
| \#1 | Tie Line | FR-ES | 41.7 \% |
|  | N-1 Contingency 400 kV [ES-FR] |  | 41.7 \% |
| \#2 | Tie Line | FR-ES | 28.6 \% |
|  | Base Case |  | 2.4 \% |
|  | N-1 Contingency [FR] |  | 10.7 \% |
|  | N-1 Contingency 400 kV [ES-FR] |  | 11.9 \% |
|  | N-1 Contingency 400 kV [ES-FR] |  | 3.6 \% |
| \#3 | Branch | FR | 25.0 \% |
|  | N-1 Contingency [FR] |  | 25.0 \% |
| \#4 | Branch | FR | 3.6 \% |
|  | Base Case |  | 3.6 \% |
| \#5 | Branch 220 kV | ES | 1.2 \% |
|  | Base Case |  | 1.2 \% |

## Limiting elements PT-ES

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

|  | CNEs and associated Contingencies | CNE Location | Frequency (\%) |
| :---: | :---: | :---: | :---: |
| \#1 | Tie Line 400 kV | ES-PT | 81.3 \% |
|  | N-2 Contingency 400 kV [PT-ES] |  | 81.3 \% |
| \#2 | GLSK limitation |  | 14.9 \% |
|  | Base Case |  | 14.9 \% |
| \#3 | Tie Line | PT | 3.7 \% |
|  | N-2 Contingency 400 kV [PT-ES] |  | 3.7 \% |

## Limiting elements ES-PT

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

|  | CNEs and associated Contingencies | CNE Location | Frequency (\%) |
| :---: | :---: | :---: | :---: |
| \#1 | Branch | PT | 51.5 \% |
|  | N-2 Contingency 400 kV [ES-PT] |  | 51.5 \% |
| \#2 | Branch | PT | 45.5 \% |
|  | N-2 Contingency 400 kV [ES-PT] |  | 45.5 \% |
| \#3 | Tie Line 400 kV | ES-PT | 3.0 \% |
|  | N-2 Contingency 400 kV [ES-PT] |  | 3.0 \% |

*GLSK limitation row includes GLSK limitations and flow divergences divisions

