

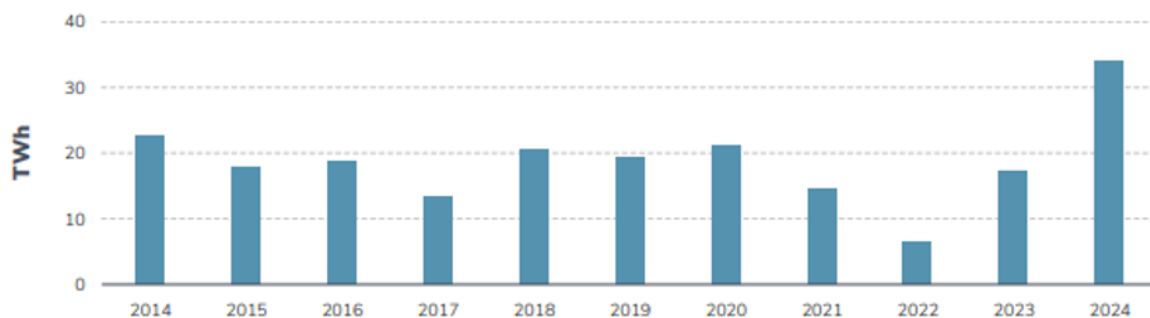
French eastern borders: situation update on 23rd July 2024

1. Look back on the March-June period

Since March 2024, RTE faces unprecedented operational constraints on its network, due to historically high exports towards France's eastern neighbouring bidding zones, accentuated by planned and unplanned outages. To cope with this situation, RTE had to apply exceptional measures on the France-Switzerland border and during the validation phase of the capacity calculation processes of both Core and Italy North regions. These exceptional measures were applied after all conventional (costly and non-costly) remedial actions were used.

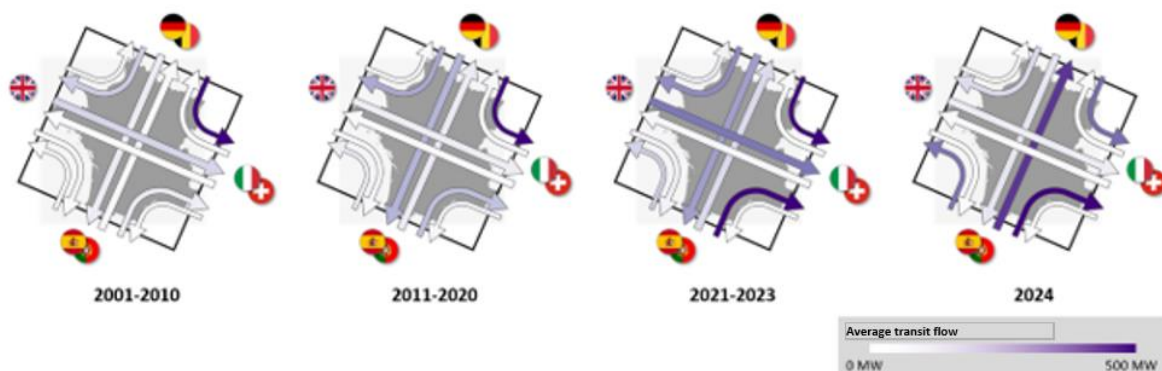
For the record, the 2024 1st semester commercial exports towards France's eastern bidding zones have reached 33,8 TWh, which is a record high when comparing the past ten years during the same period (1st semester):

Commercial exports towards France's eastern bidding zones during the 1st semester of the 10 past years



At the same time, the flow distribution has changed significantly over the past years, leading to massive power flows from both South and South-West of France towards France-Italy border (which was already a pattern in 2021-2023), and from South-West towards the French north-eastern borders, namely Belgium and Germany.

Evolution of transit flows (average values on the concerned periods) through the French power system over the last decades. For 2024 only the 1st semester is considered.



Starting business day 11th of May 2024, RTE lifted these exceptional operational security measures on Core and Italy North capacity calculation processes.

After a thorough analysis, RTE decided to include 19 new relevant Critical Network Elements and their Contingencies (CNECs) as inputs to the Core Capacity Calculation (all subject to the 5% sensitivity criteria). This option, compliant with Core Capacity Calculation regulatory framework, is adopted by RTE since beginning of May 2024. Nevertheless, RTE still includes a very low number of CNECs in the Core Capacity Calculation: less than 150 CNECs per timestamp, whereas the final Core Day Ahead Flow-Based computation includes 11 000 to 13 000 CNECs.

2. Anticipation of the next tense period – August-October 2024

RTE foresees a new tense situation, from 29th of July 2024 until mid-October 2024. The reasons behind are comparable to the previous period, namely the combination of low consumption, abundant and competitive generation coupled to the grid, and high transit flows over the French network, leading to significantly high export situations towards France's eastern bordering bidding zones, in a situation where some planned outages are still required to ensure a well-functioning grid.

For this upcoming period, RTE would like to inform market participants of the different actions which could be applied to ensure system security:

- Usage of all conventional (costly and non-costly) remedial actions to manage grid constraints.
- Addition of CNECs to the Core or Italy North capacity calculations (respecting the 5% sensitivity threshold). The new CNECs will be added to the Core or Italy North capacity calculation before end of July and published via the regular transparency platforms used in the region.
- Activation of the individual validation step (IVAs) on the 19 CNECs added in May 2024. This validation step was deactivated for these CNECs starting 20th of June, to maximize cross-border capacities. In particularly tense situations, IVAs could be applied on these elements. These measures will be activated when the conventional measures (both costly and non-costly remedial actions) will not be sufficient to ensure the French grid operational security.
- For the concerned period, RTE has established a dedicated monitoring of the situation and will adapt its strategy according to the global value of exports on its eastern borders (with Belgium, Germany, Switzerland and Italy). Starting 29th of July and until 8th of September 2024, RTE estimates that occurrences of cross-border limitations will increase when this global value of exports on its eastern borders exceeds 8 GW. However, in some cases, it is possible that some limitations would still be needed and applied below this 8 GW threshold, depending on the flows distribution over the different eastern borders. This value will be updated for the September-October period and communicated on the JAO Message Board beginning of September.
- All these measures should first be applied as close as possible to the constraints, namely closer to the France-Italy border. RTE could also activate all possible limitations on France-Switzerland border. However, if these measures prove not to be sufficient, RTE could also activate Remedial Actions and Individual Validation Adjustments on the France-Germany and France-Belgium borders, to ensure that the cumulated flow on the French eastern borders does not exceed a certain threshold that might put RTE's system at risk.

The flows distribution between France's eastern borders will enable RTE to activate the remedial actions and the validation process on the most efficient borders to manage the grid constraints.

3. Communication

All planned and unplanned outages, as well as specific measures such as Individual Validation Adjustments will be published on the transparency tools related to the regional capacity calculation process. Moreover, in case of important changes in the validation strategy during the tense period, RTE will keep all stakeholders informed via the JAO Message Board.

RTE reminds that all planned and unplanned outages are published on the [ENTSO-E Transparency Platform](#).

RTE will shortly publish an overview of the key trends of the French power system for the first semester 2024.

RTE remains committed to ensure maximal and secure cross-border capacities to the market.