

CCR Hansa TSOs' announcement on the release of ID capacities

25 January 2019

In the following paper, the CCR Hansa TSOs outline the reasoning for the release of intraday capacities at 18:00.

The TSOs of CCR Hansa understand and support the aim to facilitate as much as possible the implementation of CACM Regulation, but are of the opinion that a sole focus on market facilitation would expose the power systems to serious security risks. When implementing measures to improve European electricity markets, it should not be forgotten that the aim must always be to supply European citizens efficiently, sustainably and securely with electric power. As all CCR Hansa TSOs are either also part of the CCR Core or the CCR Nordic, the TSOs see the need to take the explicit target models of these regions into account. The approach proposed in the CCR Hansa TSOs' capacity calculation methodology foresees a close interaction with the capacity calculations of both, CCR Nordic and CCR Core.

Generally, cross-border trade between different bidding zones always affects at least three different parts of the grid:

1. The AC grid, on the exporting side, sensitive to the trade surrounding the cross-border interconnector;
2. The cross-border interconnector itself;
3. The AC grid, on the importing side, sensitive to the trade surrounding the cross-border interconnector.

This holds true for all cross-border trades, irrespective of the type of interconnector (AC or DC) or the applied capacity calculation methodology (NTC or flow-based). Since CCR Hansa has the unique feature that all bidding zones are currently connected by means of radial lines, the assessment of cross-border capacity for day ahead as well as for intraday can be split into three separate parts. This allows the TSOs to look at the impact of cross-border trade independently on each part of the grid. These three contributions together deliver the limits on cross border flows in CCR Hansa and can be represented as in Figure 1. The flexibility the methodology allows for is to contain both flow-based restrictions as well as CNTC restrictions at the same time.

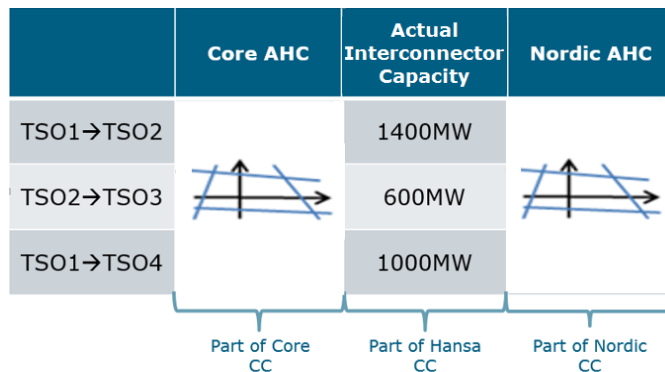


Figure 1: An example of the capacity calculation in CCR Core, CCR Nordic, and CCR Hansa

This entails, that the capacity calculation requires the results from the neighbouring regions as input. However, CCR Hansa is by no means subordinate to any of the neighbouring regions. All three calculations have to be finished in around the same timeframe. In the CCR Core the implementation of a flow based capacity calculation was proposed also for the intraday timeframe. This process needs to be finished before any recalculated capacity can be offered to the intraday market. The reasoning originates from the strong interdependencies of the power flows in the highly meshed AC transmission grid in the continental part adjacent to the Hansa interconnectors, which is taken into account in the capacity calculation of CCR Core.

In order to respect the interdependencies between the CCRs and keep the system in a secure state at all times, the TSOs perform several coordinated system security process steps that strongly interact with each other. The intraday capacity calculation process is one of these steps. To achieve plausible results, it is necessary to work with a common basis (i.e. the common grid mode (CGM) with fixed market results as it is required for an efficient coordinated security analysis. The CGM includes all the scheduled exchanges from the DA market after its gate closure. The process chain and timings followed by German TSOs for the DA scheduling are presented in a simplified manner below. As the figure indicates, the DA matching process is set to 15:30 or, in case of incidents, even later (cf. in figure below). Since the capacities have to be published one hour before gate opening time following Transparency Regulation, there is no possibility for TSOs that are also part of the CCR Core, to open the intraday market in a harmonised way at D-1 15:00 while the matching cycle for DA cross border exchanges is still ongoing.



Figure 2: DA scheduling process chain for German TSOs

In addition, in case of central dispatch systems like the Polish one, to ensure secure operation of the power system, it is of the utmost importance to ensure compliance of the intraday capacity calculation process with the integrated scheduling process (ISP). The ISP is a bid-based security constraint unit commitment and economic dispatch, where balancing, reserve procurement and congestion management are co-optimised within one integrated process. The results of the ISP process are the basis for the intraday capacity calculation process and in order to provide reliable results, the ISP process must include results of the DA market. Consequently, the following steps shall precede the release of intraday capacities:

- Notification of schedules resulting from the forward and day-ahead market trade
- Completion of the ISP with procurement of ancillary services to ensure required volume of reserves

According to the above activities and the time needed to complete these activities (especially for the ISP, which ends at 17:00), it is not possible to open the intraday market at 15:00.

Taking the above into account, the CCR Hansa TSOs decided to offer the left over capacities to the extent possible at 18:00 (with no guarantee that full leftover DA capacities will be provided to the ID market).

Summarized, the CCR Hansa TSOs plan to release capacity for the ID market at the following points in time:

Bidding zone border	Effective GOT as of 01.01.2019	Cross-border capacities published at Effective GOT	Point in time cross-border capacity <= 0 is made available after Effective GOT
DE/LU-DK1	15:00, D-1 CET (*)	0	18:00 CET (**)
DE/LU-DK2	15:00, D-1 CET (*)	0	18:00 CET (**)
SE4-PL	15:00, D-1 CET (*)	0	18:00 CET (**)
NO2-NL	15:00, D-1 CET (*)	0	18:00 CET (**)
Notes	(*) Implementation date will be 30 days after NRAs' approval of the CCR Hansa Capacity Calculation Methodology, except SE4-PL where the implementation will be with the go-live of the intraday (XBID LIP16) (**) At the latest		