

Documentation of the CWE FB MC solution as basis for the formal approval-request (Brussels, 1st August 2014)

Annex 16.19 Preliminary LTA inclusion statistics

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One of the indicators to monitor the FB domain is the LTA: the long term allocated capacity. The LTA is derived yearly from the Long Term available NTC (LT_NTC) following the application of the "capacity split rules" over the different time horizons. This LTA domain is expected to be inside the FB domain. If the LTA is not covered, then by introduction of virtual CBs (as explained in section 4.2.6) the FB domain can be enlarged to include the LTA.

Not until the introduction of TSO CS v1.0 has this automatic LTA inclusion functionality become available. Therefore statistics on LTA inclusion are limited to the period from 12 February 2014 to 31 July 2014.

Number of affected hours

Figure 1 shows the number of hours per day where LTA inclusion virtual branches were added. In 1459 hours out of 3935 hours (= 37.1%) the LTA inclusion algorithm was applied. This implies that for these hours at least one of the 16 LTA "corners" must have been outside of the FB domain. This includes hours for which one of the unlikely corners (e.g. double BE export) was outside the LTA domain.

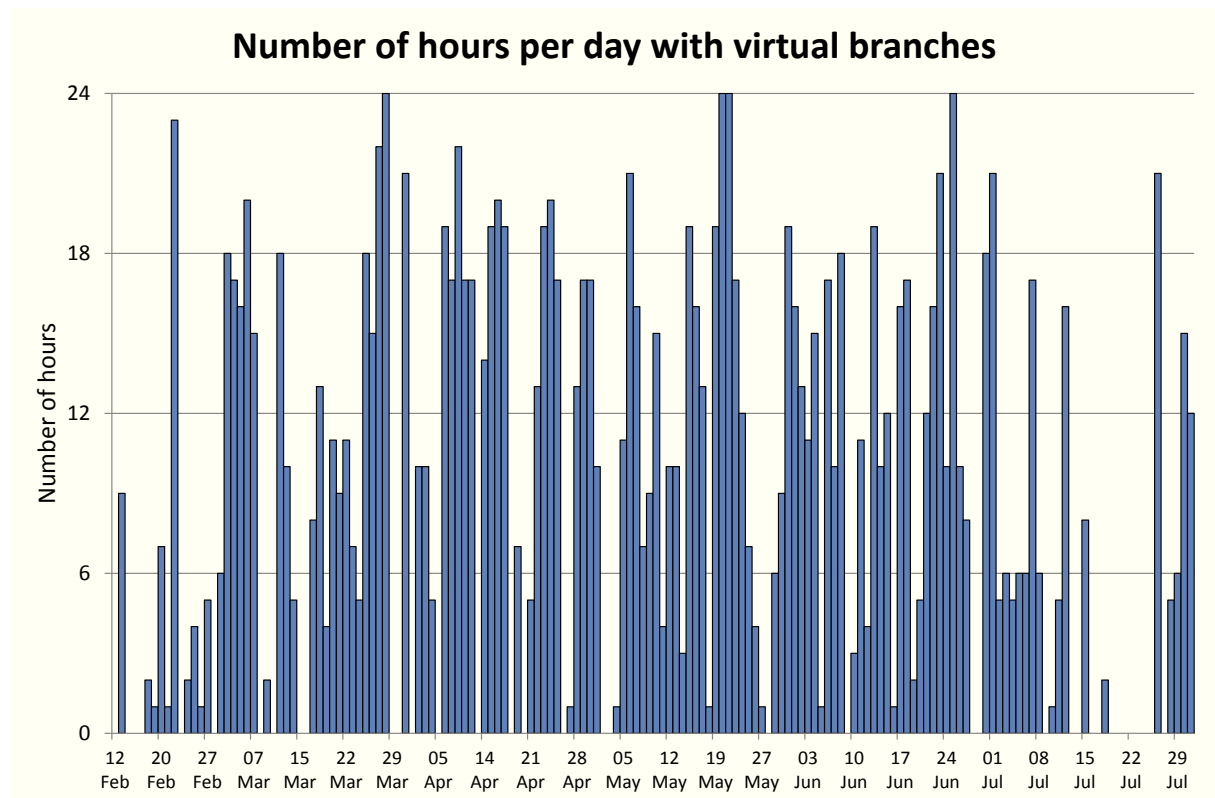


Figure 1 Number of hours per day where virtual CBs were applied to include the LTA

Since the previous indicator does not differentiate between likely and unlikely corners being outside the FB domain, (and in general does not give a view on the actual number of corners concerned and how this number evolves in time) we will next focus on market results being impacted by these virtual branches. If this is the case, the corner that these virtual branches tried to include must have been a likely one: it ends up limiting the market.

This indicator is provided in Figure 2. It turns out that for 7.2% of the time a virtual CB created by the LTA inclusion algorithm is constraining the market (12.6% of the congested hours).

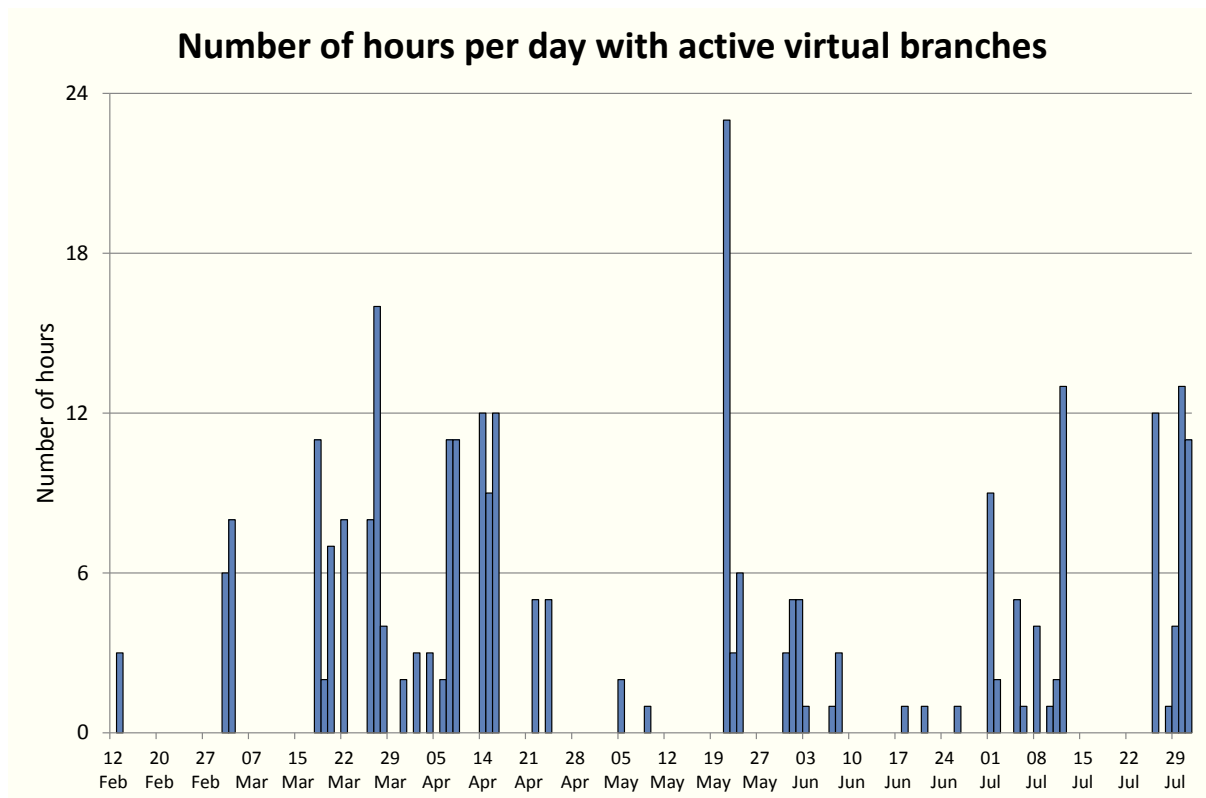


Figure 2 Number of hours per day where virtual CBs that include the LTA ended up constraining the market

Expectations related to capacities available in DA

This frequency of “virtual CBs” was not expected initially because on some borders the LTA is only a portion of the LT_NTC (the rest being capacity “reserved”¹ for DA market coupling). Except in a situation of so-called “red” or “black” flag, the LT_NTC should be lower or equal to the Daily NTC. Consequently, it was anticipated, following an “NTC approach”, that the LTA would usually fall well within the FB domain, except in the event of “red” or “black” flags or possibly with respect to unlikely corners.

As a result of the “capacity split rules”, today on some borders the LT_NTCs are split between the different time frames, including DA, which means that there is a guaranteed² minimum level of DA capacity

¹ Please note that the term “reserved” refers eventually to an indicative level of capacities per time frame, and not to actual firmness.

² Once again, this guarantee is indicative and not firm.

available, even though the eventual level of capacities available for DA is only determined in D-1, at 10h30. This is important for the proper functioning of the smaller markets (predominantly Belgium). This guaranteed minimum level of DA capacity, together with the portion of the LTA freed up as a result of the UIOSI mechanism makes up the capacity available for the market coupling.

In Flow Based however, thanks to a different, more accurate taking into account of the physical constraints of the grid in D-2, the approximation embedded in the splitting rules might be challenged and sometimes overcome at the moment of the actual capacity calculation stage in D-2. While it is shown above that, on some borders, the expected capacity for DA might not be there (case of a virtual CB limiting the market). However in the majority of cases the FB model provides much more capacity than what was actually "guaranteed".

TSOs are fully aware of the market need for some amount of daily available capacities and are putting their best effort in delivering as much as possible, especially thanks to the continuous improvement of their processes in terms of coordination and inputs quality (on Grid Model for instance).