Documentation of the CWE FB MC solution as basis for the formal approval-request (Brussels, 9th May 2014)

Annex 16.6 Information regarding LTA inclusion

LTA inclusion check and domain adjustment

The "LTA coverage" method consists in enlarging the FB domain so as to cover long term allocated capacities when they are not fully encompassed by the former. This coverage is performed automatically as a final step of the capacity calculation process (just before adjustment to LT nominations), in case some parts of the FB domain are exceeded by LT allocated capacities (which means that the realization of some long term rights would result in overloads on some flow based critical branches, that is a so called "LTA check failure"). This step results in the creation of "virtual flow based parameters", in the sense that they are not directly related to a physical element of the grid, as illustrated in the sketch below:



In theory, such artifacts are not to be used: indeed the FB domain gives the reference in terms of security of supply, and CWE TSOs have at hand a wide variety of remedial actions, that can be considered at capacity calculation stage (that is, embedded in the critical branches definition) in order to enlarge the dimensions of the domain.

In practice, however, resorting to the "LTA coverage algorithm" can be necessary in case the FB model does not allow TSOs to reproduce exactly some complex operating conditions. This is typically the case when TSOs are considering so called complex remedial actions (as a matter of fact, a combination of remedial actions which are applied to cover very specific situations of the grid, and that cannot be modeled within the linear FB model) when they define cross-border capacities. Long term rights are safe and firm at the moment of capacity calculation, and therefore need to be covered by the day-ahead capacity domain: which is why CWE TSOs have designed and implemented an algorithm that ensures the coverage of the previously exceeding "LTA corner", but in the same time minimizing the distortion of the initial FB domain. So, LTAs do not overcommit the grid.

This algorithm has been implemented in the new version of the FB system used by TSOs since February 12th. Its usage is the object of careful analysis and will be monitored by CWE regulators.