CWE TSOs consultation on capacity calculation for the intraday timeframe

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EFET response – 15 March 2017

The European Federation of Energy Traders (EFET)\(^1\) thanks the CWE TSOs for the opportunity to provide its views on their proposal for an evolution of the intraday capacity calculation methodology in the region. Over past years EFET has warned the CWE flow-based Project Parties of the inevitable impact of day-ahead flow-based market coupling on the availability of capacities in intraday and on the need to recalculate the available capacities after the day-ahead market results - before the opening of intraday markets – to avoid capacity reductions in intraday.

Experience from post CWE flow-based market coupling (FBMC) go-live over the past five months has confirmed that the market coupling algorithm finds an optimal solution in a “corner” of the flow-based capacity domain for more than 20% of the time (or more generally on the edges of the flow-based domain). As a consequence, cross-border exchanges during the intraday timeframe are limited – in all directions – by constraints calculated from assumptions in D-2, whereas D-1 market results are already available and additional capacity is likely to be available in many more directions than the reduced domain would suggest.

Hence, market participants stress the urgent need for an improved capacity calculation methodology in intraday that would allow taking full account of all available capacities after day-ahead market coupling clearing. The methodology approved in the course of 2016 for a release of cross-border intraday capacity by the TSOs after day-ahead market coupling clearing was a welcomed first step. However, we consider that the capacity release methodology of 2016 is insufficient and disappointing considering the repeated requests of the regulators and market participants to implement a full recalculation of cross-border intraday capacities\(^2\).

\(^1\) The European Federation of Energy Traders (EFET) promotes competition, transparency and open access in the European energy sector. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and a competitive economy. We currently represent more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org.

Therefore, we welcome the CWE TSOs’ proposal on a fully-fledge flow-based capacity calculation methodology in intraday. However, the short timing of this consultation – two weeks only – makes it particularly difficult for trade associations like ours to assemble the input of our members and establish a constructive consensus position. We urge the TSOs to avoid such practices in the future, and call on national regulators to consult stakeholders again before taking a final decision on the matter, with sufficient time for all to properly assess the proposal of the TSOs.

Question 1: Challenges and benefits of the implementation of Flow Based intraday capacity calculation

The methodology document is based on very scarce evidence of five days of experimentation so far. More specifically, the Remedial Action Optimisation experimentation needs further testing to allow market participants and regulators to get a clear view on the benefits and drawbacks of flow-based capacity calculation in intraday in general, and the methodology proposed by the CWE TSOs in particular.

We are particularly concerned by the statement of the TSOs that more available capacities for all directions cannot be guaranteed with the new process compared to the ATC release system in place since 2016. The results presented in Table 2 of the consultation document are worrying if the five days of experimentation can be judged as representative.

We fear that the limitations included by the TSOs in the flow-based algorithm for intraday do not properly take into account the improvements in the quality and reliability of information in D-1 compared to what was considered in D-2 for day-ahead coupling. In particular, it is unclear whether the TSOs have decreased their Flow Reliability Margins (FRMs) as real time gets nearer.

Questions 2 to 9: Capacity calculation and allocation

Due to the limited time given to respond to the consultation, EFET reserves its fully detailed response to these questions for follow-up consultations by regulators and expert forum discussions.

However, we already note that there seems to be far too many opportunities for the CWE TSOs to intervene in the algorithm and actually reduce the capacities manually, e.g.:

- 3.1.1: Process for selecting DE/AT Generation Shift Key
- 3.1.5: Final Adjustment Value affects the capacity of individual lines
- 3.1.7: Flow Reliability Margin affects the capacity of individual lines
- 3.1.8: External Constraints are indeed (additional) external constraints (not stemming from the grid model itself)
- 3.2.6: introduction of new restrictions or strengthening of existing ones in the course of the validation process
- 3.4: in the course of the re-assessment of the intraday ATCs, TSOs evaluate if the available capacities are really "correct" and may amend the results of the algorithm
Flow-based capacity calculation is a process that mathematically optimizes the calculation of available cross-border capacities. If the CWE TSOs are allowed to repeatedly change input, introduce and modify restriction, and amend the results of the calculation process, there is little meaning of establishing such a complex calculation process. Besides, it will be impossible for market participants (or regulators) to determine how the available capacities have been calculated. The inability for market participants to reproduce the models used by TSOs leads to inefficient bidding strategies, resulting in welfare losses.

Concerning the use of remedial actions in general, we have learnt from experience in the day-ahead flow-based market coupling that without transparency on the side of the TSOs on the actions themselves and how they translate in the calculation, the result will be inaccurate predictions and inefficient bidding from the market participants’ side. This being said, the transparent use of redispatch as a remedial action should not be considered only to avoid MCP inclusion: congestion rents collected by the TSOs in the allocation of capacity should serve to finance, amongst others, redispatch measures; considering redispatch systematically as a last resort solution shows the unwillingness of TSOs to properly assess the effective costs and benefits of the various remedial actions at their disposal, and systematically favour non-costly remedial actions, whatever their effect on the market.

Question 10: Experimentation process

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Question 11: Parallel run

There should be an even more thorough parallel run than what was performed before the go-live of day-ahead flow-based market coupling, based on a stable methodology (especially inputs, outputs, RA optimization and re-assessment of ATCs). The parallel run ought to be long enough to provide reliable data to help market participants understand the functioning of the algorithm. Full data transparency on the various elements of the algorithm, its inputs, manual interventions and remedial actions should accompany the parallel run from the start to speed up market participants’ understanding of the whole mechanism.

Question 15: Criteria for go-live

The go-live of day-ahead flow-based market coupling was a bitter experience for market participants: TSOs failed to provide sufficient transparency on the functioning of the algorithm, its inputs and the use of remedial actions, supposedly because of time constraints. Their reluctance to publish this information for a year and a half after go-live (in some areas this information is still not available), and their negligence to providing the necessary updates to ensure that market participants can make use of the information that was provided to them, makes us very wary about the conditions for the go-live of flow-based capacity calculation in intraday. The succinctness of
Chapter 5 of the consultation document on transparency (one line!) makes us fear the worst.

Hence, above all else, the key criteria that EFET will require before go-live is full data transparency on the model of our multiple requests to the CWE TSOs for day-ahead flow-based coupling. In addition, the information provided by the TSOs should include details of the manual adjustment made and remedial actions taken by the TSOs, and their effects. Also, not only the final ATC values should be published, but also the results of the intraday flow-based domain. Market participants need to be able to fully predict the results of the calculation process. EFET will not tolerate similar setbacks as the ones experienced with transparency for day-ahead flow-based market coupling.