



Italy North TSOs consultation on amended Day-Ahead and Intraday Capacity Calculation Methodologies



EFET response – 15 November 2019

The European Federation of Energy Traders (EFET) thanks the Italy North TSOs for the opportunity to provide comments on their amended methodology proposal for capacity calculation in day-ahead and intraday.

Integration of Swiss network constraints in the capacity calculation

We note that one of the important novelties in this proposal and the previous version of the CCM (still pending NRAs approval) is the consideration of constraints on the Swiss network in the calculation of capacity in the region.

As stated at numerous occasions, we regret the exclusion of Switzerland from market coupling projects until an intergovernmental agreement on energy has been signed with the EU, as per article 1.4 and 1.5 of the Capacity Allocation and Congestion Management Guideline (CACM GL). We also deplore the current standstill in the negotiations between Switzerland and the EU. We continue to call for a solution to rapidly integrate the Swiss network and market in European coupling projects.

We very much welcome that the TSOs of the Italy North CCR worked together with the Swiss TSO Swissgrid to develop this methodology. With the hope that a political settlement of the institutional standoff between the EU Switzerland gets resolved soon, it is indeed necessary to work on the practical integration of the Swiss market and grid into European projects. In this CCM proposal, the Italy North TSOs, now together with Swissgrid, propose the integration of Swiss network constraints in the capacity calculation methodology for the rest of the region, but without properly coupling the Swiss market.

We assume that the stand-alone inclusion of the Swiss network in coordinated capacity calculation in the region, even without market coupling, should contribute to an increase of the cross-border capacity made available to the market as well as support system security through a better representation and modelling of the grid. However, there are also potential risks of unduly limiting available cross-zonal capacity at non-Swiss borders of the CCR Italy North region, without benefits for the corresponding markets. The explanatory document does not provide an assessment of the effects of taking into account Swiss constraints in the capacity calculation. A comprehensive assessment should be performed by the TSOs and made public to thoroughly evaluate the expected benefits of this new feature of the CCM proposal.

The CACM Regulation aims to promote effective competition in the generation, trading and supply of electricity. The CCM proposal only partially contributes to achieving this aim. Indeed, efficient capacity allocation through market coupling is needed in order to really have effective competition and well-functioning markets. The above-mentioned assessment of TSOs on the effectiveness of the proposed measure to integrate Swiss constraints in the coordinated capacity calculation for the Italy North region could include a forward-looking analysis of the benefits of also coupling the Swiss market with the others in the region.

This proposal is a step in the right direction provided that no disproportionately adverse effects can be observed on the overall availability of cross-zonal capacity in the region. Still, we urge the TSOs of the region to go one step further and develop solutions to couple the Swiss market with the neighbouring markets.

Other capacity calculation elements

Aside the Swiss question, a number of problems we identified in our comments to the first CCM proposal of the Italy North TSOs still need resolution in this amended proposal, and a number of new ones appeared. You will find below our detailed comments:

1. Generally, the binding proposal by the TSOs does not provide adequate level of detail on the future capacity calculation methodology.
2. The few elements at hand suggest that TSOs will rather rely on status quo. We refer to our general comments with regard to the various missing justifications of the TSOs for deviating from the principles of the CACM GL, and the absence of appropriate transparency.
3. Article 5.1 and 5.2 foresees that the TRM will be set at a fixed value for the first year after the approval (not higher than 2018), and then set it according to an analysis based on unintended load frequency deviations and scenario uncertainties in TTC computations.

- We fail to understand why the TRM cannot be properly defined for the first year after approval and would need to be set at a fixed value. The explanatory document foresees, without any justification, that the reliability margin should be set at 500 MW (which should be included in the methodology if the decision is already made). The value of 500 MW is the same in day-ahead and intraday, despite the declining level of uncertainty in intraday as real time approaches. Further, the associated text suggests that this reliability margin would be applied ex-post to the overall TTC. If this is really the intention of North Italy TSOs, we oppose this approach, as the CACM Guideline mandates that reliability margins should apply to the RAM of each Critical Network Element.
 - We disagree with including load frequency deviations or (more generally uncertainty on the net position of a bidding zone) in the setting of reliability margins. Such uncertainty can be modelled through GSKs. The only relevant deviations to be considered should be related with deviations from reference situation or GSK.
4. In article 6.3, the TSOs have taken over the criterion of “critical network elements with a sensitivity to cross-zonal power exchanges equal or higher than 5%” developed by CWE TSOs in the application of flow-based capacity calculation and taken over in the all CCMs. We have concerns with this approach:
- First, the TSOs do not define “critical network elements” as solely interconnectors. We conclude that their monitoring list would also include internal network elements. The possibility to select internal lines or transformers (not tie-lines) as critical network element is questionable as this basically means that a possible congestion on such internal line will be managed by limiting cross-zonal trade. It seems discriminating cross-zonal trade towards trade within a zone. It also means that internal (national) measures within the bidding zone (like redispatch) are not taken into consideration to manage such congestion. Such practice is in conflict Article 16(3) of Regulation No 714/2009 and Article 1.7 of the Guidelines on the management and allocation of available transfer capacity of interconnections between national systems (Annex I of Regulation No 714/2009): “.... TSOs shall not limit interconnection capacity in order to solve congestion inside their own control area, ...”. This article also allows for deviation from that general rule, in some cases, however then this shall be justified. The full text of this article 1.7 is:

“When defining appropriate network areas in and between which congestion management is to apply, TSOs shall be guided by the principles of cost-effectiveness and minimisation of negative impacts on

the internal market in electricity. Specifically, TSOs shall not limit interconnection capacity in order to solve congestion inside their own control area, save for the abovementioned reasons and reasons of operational security. If such a situation occurs, this shall be described and transparently presented by the TSOs to all the system users. Such a situation shall be tolerated only until a long-term solution is found. The methodology and projects for achieving the long-term solution shall be described and transparently presented by the TSOs to all the system users.”

ACER has underlined and clarified these regulations in its Recommendation of 11 November 2016. For example it is written: “As a general principle, limitations on internal network elements’ should not be considered in the cross-zonal capacity calculation methods”.

- Second, the 5% criterion, though currently apparently applied in the CWE flow-based capacity calculation, has never been approved. On the contrary, it was identified as one of the open issues that still need to be resolved. In their Position Paper on CWE Flow-Based Market Coupling of March 2015, the CWE NRAs write the following (in paragraph 9.12 CBCO selection):

“The project has proposed the rule of 5% to identify a critical branch (the 5% criterion means that a CBCO, to be selected, has to have at least one zone-to-zone PTDF which exceeds 5%). It is stated in the Approval Package that this rule was assessed inside the project to be efficient. This has nevertheless not been demonstrated to CWE NRAs. If there is room for improving this CB selection rule, this could lead to a higher global welfare. As a matter of fact, a network element not considered as a CB in the Flow-Based methodology cannot limit cross-border exchanges. If an overload is expected on this line, the relevant TSO(s) may have to activate potentially costly remedial actions such as re-dispatching. Moreover, the current rule does not prevent the fact that constraints with very low PTDF are active and may have huge impact on prices. Therefore, CWE NRAs consider that the project has to demonstrate, at the latest when applying for a capacity calculation methodology in the frame of the CACM Regulation, whether the 5% rule is optimal, or what other rule could lead to such optimality. The Flow-Based methodology would have to be adapted consequently.”

This demonstration of the optimality of the 5% criterion was never provided and is also not provided by the proposed CCM.

5. Article 6.6 and 6.7 introduce the concept of “monitored network element” (MNE), which are influenced by the application of cross-border relevant remedial actions but are not significantly influenced by cross-zonal exchanges. This concept of MNE adds another layer of limiting factors to the RAM, with the same sensitivity thresholds as for CNEs. There is no justification for the inclusion of further elements to limit the RAM and we see this as circumventing the provisions of the CACM GL.
 6. Articles 6.10, 6.11, 6.12 and 6.13 allow the TSOs to further limit cross-zonal trade by imposing allocation constraints of various sorts to maintain the transmission system within operational security limits. However, there is no methodology described. This objective cannot be an acceptable criterion. Such issues, if duly justified, can be addressed more efficiently with remedial actions, which would avoid constraining unnecessarily cross-zonal exchanges. We recommend that the TSOs of Italy North region not apply allocation constraints in the capacity calculation within the CCR. This clear statement was made in the CCMs of other CCRs (SWE, SEE).
 7. Article 7 does not provide a harmonised methodology for GSKs. Should TSOs think that local specificities prevent harmonisation of principles and methodologies, these specificities should be clearly explained.
 8. Article 8 deals with the methodology for remedial actions. It is unclear why the methodology does not explicitly mention redispatching and countertrading as RAs. The level of cross-zonal capacity should be maximised in all timeframes, considering both costly and non-costly remedial actions on an equal footing with reduction of cross-zonal capacity. Reduction of cross-zonal capacity should only be considered when economically efficient remedial actions from an overall welfare perspective (including costly RAs) have been exhausted. We recommend adopting the wording used in the CCM for the SWE region to amend article 8: “[the TSOs] shall coordinate, prior to the capacity calculation, the remedial actions that can be shared with each other to maximize the available cross-zonal capacities for the [concerned] border”.
- We welcome the consideration of curative remedial actions, in particular in the face of N-1 contingencies. We recommend that countertrading be considered as curative remedial action in DA and ID capacity calculation.
9. Article 9 covers the validation methodology. The methodology should make sure that the validation process is performed only to correct mistakes. It should not result in additional reductions of the capacities. Article 26 of the CACM Regulation requires a validation process, however in accordance with Articles 27 to 31 of the CACM regulation; this is not ensured by Article 9 of the CCM.

10. Article 10 is supposed to detail the capacity calculation methodology but the article is rather a description of the process that follows the capacity calculation. The binding proposal should describe the capacity calculation methodology in detail. The articles notably fail to provide any of the details requested by article 21.1.b of the CACM Regulation, including:

“(i) a mathematical description of the applied capacity calculation approach with different capacity calculation inputs;

(ii) rules for avoiding undue discrimination between internal and cross-zonal exchanges to ensure compliance with point 1.7 of Annex I to Regulation (EC) No 714/2009;

(iii) rules for taking into account, where appropriate, previously allocated cross-zonal capacity;

(iv) rules on the adjustment of power flows on critical network elements or of cross-zonal capacity due to remedial actions in accordance with Article 25;

(v) for the flow-based approach, a mathematical description of the calculation of power transfer distribution factors and of the calculation of available margins on critical network elements;

(vi) for the coordinated net transmission capacity approach, the rules for calculating cross-zonal capacity, including the rules for efficiently sharing the power flow capabilities of critical network elements among different bidding zone borders;

(vii) where the power flows on critical network elements are influenced by cross-zonal power exchanges in different capacity calculation regions, the rules for sharing the power flow capabilities of critical network elements among different capacity calculation regions in order to accommodate these flows.”

We strongly contest the rationale of calculating a TTC instead of NTCs for each border. Sharing a TTC between Northern borders may unduly limit commercial flows through North Italy, e.g. from Slovenia to France. If North Italy chooses to apply a NTC capacity calculation – as a matter of fact, we have seen no justification so far for applying NTC instead of Flow-Based in this CCR – this means that bilateral cross-zonal exchanges will be calculated independently from other bilateral exchanges. The limitations applying to each border should be regarded independently. We regard a TTC computation as a different approach for capacity calculation and consider therefore that deriving NTCs from a computed TTC would not be compliant with the CACM guideline.

We consider unacceptable that the proposed methodology (and explanatory document) does not provide any detail as of how the TTC (or NTCs) will be calculated based on the selected CNEs, TRMs, and GSKs. Otherwise, TTCs or NTCs could be set arbitrarily, which would be a massive step back with respect to the requirements of the CACM Regulation. We call therefore for a detailed

methodology, including full details on the capacity calculation algorithm that will determine NTCs in the end.

11. We recommend the inclusion of an article on transparency. At least four levels of transparency should be foreseen:

- full transparency on the methodology and creation of a stakeholder forum to discuss implementation conditions and provide feedback to questions by stakeholders
- every release of the algorithm applied by the RSC for capacity calculation should be developed in an open source environment.
- all parameters of the capacity calculation should be transparently set and published.
- the outputs of capacity calculation, in terms of remaining available margin for every CNE, and translation (if any) into NTCs should be published immediately after each capacity calculation.