

**APPROVAL BY THE SOUTH WEST EUROPE
REGULATORY AUTHORITIES AGREED AT THE
SOUTH WEST EUROPE ENERGY REGULATORS'
REGIONAL FORUM
ON**

**South West Europe TSOs proposal of common
capacity calculation methodology for the day-ahead
and intraday market timeframe in accordance with
Article 21 of
Commission Regulation (EU) 2015/1222 of 24 July
2015 establishing a guideline on capacity allocation
and congestion management**

24.10.2018

I. Introduction and legal context

This document elaborates an agreement of the South West Europe (SWE) Regulatory Authorities on the SWE transmission system operators' (TSO) proposal of common capacity calculation methodology for the day-ahead and intraday market timeframe in accordance with Article 21 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (CACM Regulation).

This agreement of the SWE Regulatory Authorities shall provide evidence that a decision does not need to be adopted by the Agency for Cooperation of Energy Regulators (ACER) pursuant to Article 9(11) of the CACM Regulation. This agreement is intended to constitute the basis on which SWE Regulatory Authorities will each subsequently make national decisions to approve the **SWE Common Capacity Calculation methodology (CCCM)** proposal pursuant to Article 9(12) of the CACM Regulation.

The CACM Regulation aims to the coordination and harmonization of capacity calculation and allocation in the day-ahead and intraday cross-border markets. This regulation requests a coordinated capacity calculation methodology, at least at regional level, for the day-ahead and intraday market timeframes, to ensure an optimal and reliable capacity available to the market.

Article 20 of CACM Regulation requires that no later than 10 months after the approval of the proposal of a capacity calculation region (Article 15(1)), all TSOs in each capacity calculation region (CCR) shall submit a proposal for a CCCM.

The above mentioned article also requires a flow-based capacity calculation methodology in each CCR, unless the regional TSOs are able to demonstrate that the application of the flow-based approach would not yet be more efficient compared to the coordinated net transfer capacity approach, assuming the same level of operational security in the region.

According to Article 21 of CACM Regulation, the CCCM should define methodologies for the inputs, calculation approach and validation requirements, intraday capacity calculation frequency, giving reasons for the chosen frequency, and fallback procedures.

Methodologies for the inputs will comprehend determination of reliability margins, operational security limits on critical elements, relevant contingencies and allocation constraints that may be applied, determination of generation shift keys and determination of remedial actions that can be considered to allow for the optimal value of capacity. These inputs calculations should be harmonized between CCRs the most possible.

Capacity calculation approach should include a mathematical description of the calculation, rules for determining power flows on critical elements taking into account previously allocated cross-zonal capacity and adjustment after remedial actions. In case the net transfer capacity approach is selected, it should include calculation of available margins in critical network elements and rules for sharing power flow capabilities among different bidding zone borders. In addition, rules to avoid discrimination between internal and cross-zonal exchanges should be included.

Harmonization of the capacity calculation process is required by December 2020. To that end, all TSOs shall submit to all Regulatory Authorities a proposal for a transition towards a CCCM harmonization, 12 months after two CCRs have implemented CCCM.

Detailed request for all these methodologies are included in Articles 22 to 27 of CACM Regulation.

II. The SWE TSOs' Proposal

In line with Article 20 of CACM Regulation, all SWE TSOs launched a public consultation from 15 June to 20 July 2017 on their proposal for a common capacity calculation methodology for the day-ahead and intraday market timeframe.

The CCCM proposal developed by the SWE TSOs, dated 15 September 2017, was received by the last SWE Regulatory Authority on the 15 September 2017. This first proposal was subject to a request for amendment on 14 March 2018 by the SWE Regulatory Authorities according to Article 9(10) of the CACM Regulation.

An amended version was submitted to SWE Regulatory Authorities on 16 May 2018, and has been subject of a second request for amendment on 29 June 2018.

Finally, a second amended version was received on 3 September 2018, fulfilling all the requirements identified by the SWE Regulatory Authorities, and is now subject of approval by the SWE Energy Regulator Forum (ERF).

The SWE TSOs' proposal package dated September 2018 contains four documents:

a) The "All SWE TSOs' proposal of common capacity calculation methodology for the day-ahead and intraday market timeframe in accordance with Article 21 of Commission Regulation (EU) 2015/1222 of 24 July establishing a guideline on capacity allocation and congestion management", for consultation. The CCCM proposal elaborates the methodologies required by Article 21 of CACM Regulation.

b) The "Explanatory note on the coordinated NTC methodology for SWE CCR", for information. The explanatory note incorporates further and more in-depth explanations of the calculation methodologies.

c) The consultation feedback for SWE CCR, for information.

d) A study that justifies why a Coordinated NTC methodology for the SWE CCR may provide the same efficiency as a flow-based approach, for information. The study aims to demonstrate the lack of influence of the two borders, by two ways:

- Looking at eight scenarios, it shows that elements that limit the capacity in one border is not influenced by the exchanges on the other border; and
- The shape of the flow-based domain is near to be rectangular, which means that both borders have no mutual dependency.

III. SWE Regulatory Authorities' position

It is the view of SWE Regulatory Authorities that the amended proposal of common

capacity calculation methodology for the day-ahead and intraday market has been broadly improved in several aspects requested by the Regulatory Authorities, and can now be approved.

In particular, the first amendment introduced improvements on the interaction between CCRs, calculation of reliability margins, limiting parameters, selection process of critical network elements (CNE), frequency of the revision of the CNE list and remedial action list, criteria for selection of costly remedial actions, methodology for the validation process, clarifications on common grid model to be used, a more detailed description of the remedial action optimization process to be used for capacity calculation, frequency of the intraday capacity recalculations, rationale behind interim values for reliability margins and a more elaborated implementation plan.

Significant developments were also introduced in the second amended version, such as commitments to studies that will assess a higher sensitivity threshold for selecting CNE and a lower reliability margin, harmonization of the generation shift keys, methodology to identify costly remedial actions, validation process and timelines for the implementation of the methodology.

IV. Conclusions

SWE Regulatory Authorities welcome the submitted SWE CCCM proposal and the significant improvements adopted by SWE TSOs. SWE Regulatory Authorities have assessed, consulted and closely cooperated and coordinated to reach an agreement about the SWE CCCM proposal, which meets the requirements of CACM Regulation and as such can be approved by SWE Regulatory Authorities.

SWE Regulatory Authorities therefore will issue their national decisions, on the basis of this agreement, before 3 November 2018.

Following national decisions by SWE Regulatory Authorities, SWE TSOs will be required to publish the SWE CCCM on the internet in line with Article 9(14) of CACM Regulation, and must meet the implementation deadlines required by Article 14 of the CCCM proposal.