Explanatory Note of the Amendment of the Coordinated NTC methodology for SWE CCR

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Contents

1. Introduction

The main reason of the current amendment proposal of the SWE Capacity Calculation Methodology (SWE CCM) is to introduce it in the principles and goals set in Regulation (EC) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) (hereafter referred to as "Electricity Regulation"), namely describing the process to fulfill the minimum capacity requirements according to Article 16 of the Electricity Regulation, taking into account the availability of Costly Remedial Actions.

In the next chapter, we will highlight the main changes that we introduced in each article.

2. Main changes introduced in the methodology approved

    a. Whereas

In the whereas section we introduced the necessary mentions to the different articles of Electricity Regulation that applies to the CCM.

    b. Definitions and interpretation

In this article we introduced new definitions associated to the Electricity Regulation, that are used throughout the present methodology, like ANTC, CNE, CNEC, FMAX, Final and Standard NTC, MACZT, MCCC, PTDF, min Margin and Margin.

    c. Reliability margin methodology

In this article, after we finished the study, that was mentioned in the current methodology, and concluded that the application of the mentioned methodology took us to very high TRM values (values in the order of 800 MW in the Es - Fr border and 1300 MW in the Es – Pt border), we agreed to maintain the TRM values that were being used since the go-live of this methodology. So, we have adapted the text in this topic to the agreement that was established.

    d. Methodologies for operational security limits, contingencies and allocation constraints

In this article, after investigation whether a higher sensitivity threshold than 5% could be taken into account for the critical network elements selection while guarantying security of supply, SWE region agree on increasing the sensitivity threshold at 10% for most of the cases while keeping the possibility to monitor a critical network element with a lower sensitivity to ensure grid security in exceptions of operational security. These exceptions shall be justified to the SWE NRAs in the Quarterly Report.

    e. Methodology for remedial action in capacity calculation

We introduced some simplification in text of this article taking into consideration the new reality that the Electricity Regulation brought to the CCM:

- Divide remedial actions between non-costly remedial actions and costly remedial actions.
- Include redispatching and counter-trading as costly remedial actions.
- Modify point 9 to adapt to Regulation (EC) 2019/943:
    - "may decide, based on regulation, to make" substituted by "makes"

- "It shall also be applied only when economically relevant at Union level" substituted by "If any two available remedial actions deliver equivalent effects, the action with a lower cost shall be prioritized".

- Delete point 10.

Include in point 11: "SWE TSOs will consider applying further remedial actions for this purpose, as provided for in the present Article"

f. Reorder the sequence of articles related with the process

The sequence of articles were changed in line with the order of the capacity calculation process.

With the addition of CEP related articles, after Article 9, in the amendment we follow a chronological order : first the articles regarding capacity calculation for Day-ahead and intraday then the monitoring process, followed by the cross zonal capacity recalculation and validation of the cross zonal capacity; finally the article regarding the publication of data.

- Article 10: Day-ahead capacity calculation
- Article 11: Intraday capacity calculation
- Article 12: Monitoring process
- Article 13: Cross-zonal capacity recalculation using countertrading
- Article 14: Cross-zonal capacity validation methodology
- Article 15: Fallback procedures
- Article 16 Publication of data and Reporting
- Article 17 Publication and Implementation of the CCC methodology

g. Monitoring process (new article)

This new article describes the process associated with the monitoring which will take place in the SWE Region following what is established in the recommendation No 01/2019 of the European Union Agency for the Cooperation of Energy Regulators of 08 August 2019 on the implementation of the minimum margin available for cross-zonal trade pursuant to Article 16(8) of the Electricity Regulation proposes a method to monitor the margin available for cross-zonal trade in accordance with Article 16(9).

In accordance with the article 7 "Methodologies for operational security limits, contingencies and allocation constraints" which specifies that *"The selection of these critical network elements shall be based on a sensitivity analysis in the different network states including but not limited to base case, after contingency and after activation of remedial actions."*

The monitoring process also takes into account the PTDF of the limiting critical network element in the different network states to select the highest value among them. This PTDF selection intends to avoid penalizing the use of topological remedial actions which isolates the limiting critical network element and stops him being influenced by cross-zonal power exchanges after remedial action. Those topological remedial action intends to redirect the flow

to a less limiting critical element in order to maximize the capacity exchange, for instance by opening or closing circuit breaker(s).

h. Cross-zonal capacity recalculation using countertrading (new article)

This new article describes the process to fulfill the minimum capacity requirements according to Article 16(8) of the Electricity Regulation, based on the availability of countertrading as Costly Remedial Action.

When necessary, additional capacity will be added to the calculated capacity (Standard capacity) up to the amount that aims to respect the provision of Article 16(8) of the Electricity Regulation while ensuring the operational security of the electric system.

In order to fit the previous paragraph, SWE TSOs will perform studies with the goal of defining the method of application the countertrading in the "Adjustment Process" and assessing the technical limitation of such countertrading, as well as the total capacity of an interconnection that shall strike a fair balance between respecting the spirit of Article 16(8) of Electricity Regulation while ensuring operational security.

i. Publication of data and reporting (new article)

This new article details the data to be published by SWE TSOs related to the monitoring process, adjustment (recalculation) process and validation process.

The objective of this article is to deliver to the market participants the data related with capacity calculation process in the shortest possible period, always before the day-ahead market gate closure time.

The disclosure of this data will use the standard channels for delivery of information.

j. Publication and Implementation of the CCC methodology

In this article, SWE TSOs inform of the roadmap implementation of the new processes while the live processes had already been deleted.