Annex I – Allocation constraints

Q2 2023

Table of Contents

[Introduction 3](#_Toc144282531)

[PSE 4](#_Toc144282532)

[TenneT TSO BV 5](#_Toc144282533)

# Introduction

According to Article 7(3)(b)(i) of the DA CCM, in case the external constraint had a non-zero shadow price in more than 0.1% of hours in a quarter, the concerned Core TSOs have additional obligation to provide to the CCC as an annex in the quarterly report the following information:

* for each DA CC MTU when the external constraint had a non-zero shadow price the loss in economic surplus due to external constraint

This annex contains the required information described above for each concerned Core TSO for which the external constraint had a non-zero shadow price in more than 0.1% of hours in the analysed quarter.

# PSE

Detailed information in attachment



# TenneT TSO BV

In Q3 of 2023 the external constraint was an active constraint during 8 individual MTUs. The below table show an overview of these MTUs including simulated max NP in case the EC were not present. The shadow price corresponds to the value of an additional MW increase of the Dutch NP. Shadow prices for each 8 MTUs remain low and some are close to zero.

|  |  |  |  |
| --- | --- | --- | --- |
| **MTU** | **Production max NP** | **Simulation max NP** | **Shadow price** |
| **2023-05-04 12:00:00** | 6500 | 7208 | 0.0349 |
| **2023-05-04 13:00:00** | 6500 | 7448 | 0.564 |
| **2023-05-04 14:00:00** | 6500 | 7264 | 0.252 |
| **2023-05-13 15:00:00** | 5750 | 6883 | 8.43 |
| **2023-05-18 12:00:00** | 6500 | 7294 | 0.528 |
| **2023-06-03 14:00:00** | 5750 | 6978 | 6.66 |
| **2023-06-07 11:00:00** | 6500 | 6770 | 0.658 |
| **2023-06-07 14:00:00** | 6500 | 7030 | 3.25 |

The assessment to analyse the economic surplus is technically not feasible at the moment. Normally such an assessment would consist of two major steps: (1) recompute the FB domain without the external constraint in the Core CC tool study mode, (2) supply this adjusted FB domain to the Simulation Facility to re-run the respective MTUs. However, using the study mode of the Core CC tool with exactly the same inputs (for a calibration run) of the production run did not generate the same outcome. The main cause for this being a newer version of the Core CC tool which resulted in a slightly different FB parameters in the study mode calibration run compared to the production outcomes of a previous Core CC tool version. Hence, any successive Simulation Facility computations of the economic surplus without an NL external constraint cannot be compared to the production results.

On the contrary, TenneT NL analysed whether operational security risks have been avoided due to the net position limitation of the external constraint in SDAC for some hours in Q2. TenneT NL did not identify such operational security risks and hence deems the limitation of the net position unjustified. As a result, the maximum import constraint has been increased with 250 MW, and the maximum export has been increased with 250 MW likewise.

Please note that before year end TenneT NL will discontinue the external constraint in the Core day-ahead capacity calculation as well as day-ahead market coupling.