

Impact Assessment for the OUTAGE of the MASTAING AVELGEM tie-LINE

Paris, 02/03/2022

Context

In the CWE Consultative Group, accordingly to the market message on 11/11/2019 it was agreed that TSOs would perform a Light Standard Procedure for Assessing the Impact of Changes (Light SPAIC) for grid outages with a duration exceeding 6 weeks.

A Light SPAIC analysis consists of a comparison of flow-based domains for 7 typical “reference” days, selected by the relevant TSO(s) in the period between 12 and 8 weeks preceding the outage, in order to estimate the impact of a change in grid topology.

Introduction

RTE and Elia plan the outage of the 400kV tie-line Mastaing-Avelgem with the aim of increasing the thermal limits of this line. The new thermal limits will be provided later in a dedicated communication on JAO before the commissioning. The capacity of this line will be reduced to 0 MW during the outage which is currently planned to start on 21/03/2022 and is expected to end on 17/06/2022.

This document provides some background to the results of the performed Light SPAIC analysis.

In line with the CWE Light SPAIC methodology, the analysis made here gives the relevant Flow-Based parameters of the historical FB domain and the domain obtained by updating the historical grid with the planned outage.

METHODOLOGY BEHIND THE SPAIC

The new Flow-Based domains and CNECs, corresponding with the most probable grid topology during the outage period applied to all reference days are simulated and presolved elements, min/max NP & volumes are extracted.

The data of the simulation results is joined to this document.

Published datasets

The table below summarizes the standard outputs of a SPAIC analysis that were agreed upon, including a reference to the joined datasets indicating where the corresponding information can be found.

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| # | Expected output | Description | Dataset |
| 1 | Description change and features of the typical days | A qualitative description of the foreseen change, period and expected high-level impact resulting from this.  A description of the main quantitative features of the 7 typical days | Foreseen change: Cover Note  Description of the typical days: Dataset 5 |
| 2A | Capacity calculation indicators  Dataset *historical*   * + PTDF matrices + RAM for each typical day   + Min/max Net positions   + Volume | This is the dataset that is used as a reference | * PTDF matrices + RAM: Dataset 1 – Sheet “Historical - 2A” * Min/Max NP: Dataset 2 – Sheet “Historical - 2A” * Volume: Dataset 3 – Sheet “Historical - 2A” |
| 2C | Capacity calculation indicators  Dataset *including change*   * + PTDF matrices + RAM for each typical day   + Min/max Net positions   + Volume | This is the dataset that is updated, including all methodological changes that are known at the time of the study | * PTDF matrices + RAM: Dataset 1 – Sheet “SPAIC - 2C” * Min/Max NP: Dataset 2 – Sheet “SPAIC - 2C” * Volume: Dataset 3 – Sheet “SPAIC - 2C” |