



# **IMPACT ASSESSMENT FOR THE PLANNED OUTAGE OF THE ELIA 380 KV LINES BETWEEN DOEL- MERCATOR**

Brussels, 10/02/2020 09:00

## CONTEXT

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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.

Elia plans the outage of the 380 kV line between the Doel and Mercator substations. The capacity of this outaged line is reduced to 0 MW. The outage is currently planned to start on 24/02/2020 (week 9) and is expected to end on 03/04/2020 (week 14). The most recent information regarding the outage period can be retrieved from the Entso-e Transparency website ([transparency.entsoe.eu](http://transparency.entsoe.eu)).

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.

| Element Name           | EIC              |
|------------------------|------------------|
| Doel - Mercator 380.51 | 22T-BE-IN-LI014Z |

## 1. Methodology

The following results are simulated and published:

1. The new pre-solved Flow-Based domains and CBCOs, corresponding with the most probable grid topology (when writing this document) during the outage period applied to all reference days;

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



## 2. 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.

| #  | 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<br>A description of the main quantitative features of the 7 typical days | <ul style="list-style-type: none"> <li>• Foreseen change: Cover note</li> <li>• Description of the typical days: Dataset 5</li> </ul>                                                                                          |
| 2A | Capacity calculation indicators<br>Dataset <u>historical benchmark</u> <ul style="list-style-type: none"> <li>• 24 PTDF matrixes + RAM for each typical day and for all fixed labels</li> <li>• Min/max Net positions</li> <li>• volume</li> </ul> | This is the dataset that is used as a reference for the change that is subject of the change                                                                                         | <ul style="list-style-type: none"> <li>• PTDF matrixes + RAM: Dataset 1 – Sheet “2A - Historical”</li> <li>• Min/Max NP: Dataset 2 – Sheet “2A - Historical”</li> <li>• Volume: Dataset 3 – Sheet “2A - Historical”</li> </ul> |
| 2C | Capacity calculation indicators<br>Dataset <u>including change</u> <ul style="list-style-type: none"> <li>• 24 PTDF matrixes + RAM for each typical day and for all fixed labels</li> <li>• Min/max Net positions</li> <li>• volume</li> </ul>     | This is the dataset that includes the change that is subject of the impact assessment                                                                                                | <ul style="list-style-type: none"> <li>• PTDF matrixes + RAM: Dataset 1 – Sheet “2C - SPAIC”</li> <li>• Min/Max NP: Dataset 2 – Sheet “2C - SPAIC”</li> <li>• Volume: Dataset 3 – Sheet “2C - SPAIC”</li> </ul>                |