











CWE TSOs communication to market participants on the issue in production leading to application of Default Flow-based Parameters on 09/11/2021 for business day 10/11/2021

1. Scope of the document

The goal of this document is to provide answers to CWE market participants on the issues that happened in production on 09/11/2021 triggering the application of Default Flow-based Parameters for the business day 10/11/2021. The issue was discussed during last CWE Consultative Group meeting on the 17th of November, and it was agreed that CWE TSOs would:

- Clarify the issue that triggered the use of Default flow-based parameters (DFP)
- Evaluate the communication process on 09/11 based on current procedure(s)
- Define measures, including clear communication to the market, to prevent similar situations to occur in the future

2. Root-cause of the issue that triggered DFP

On 9/11/2021 the TSO Common System was unable to send the Cross Zonal Capacities (CZCs) to the CWE Market Operator (MO) which led to the application of the Default Flow-based parameters.

- The TSO Common System was unable to produce output flows from the pre-final and final computation processes.
- The root-cause was an Identifier (ID) overflow issue in the JAVA-code which crippled the file generation process.
- These IDs originate from the calculated Critical Branch Critical Outages (CBCOs).
- Only CWE internal borders were concerned by the issue.

In case CZCs are not available in the TSO Common System at Target Time - being 10:30 - due to technical or calculation issues, a back-up procedure is applied.

Via a dedicated "TSOs Incident Conference Call", the involved parties decide on how to resolve the issue and actions to be taken. In case CZCs cannot be generated in time, this could be to either:

- Perform a computation with automatic DFP triggered within the Common System, or
- Perform a computation with automatic DFP via the Common System Operator backup tool at the final computation (critical deadline for publication)

On 9/11/2021, it was decided to perform a computation with automatic DFP via the Common System Operator back-up tool at final computation. This back-up procedure was applied correctly.

Measures taken to solve the issue

Directly after the issue was identified, a hotfix for the TSO Common System to solve the IDoverflow issue in the JAVA-code was designed. This hotfix was tested and deployed



successfully on 9/11/2021 in the evening. It has worked well, and the Flow-based parameters have been sent by TSO Common System during the 10/11/2021 market coupling session for the business day of 11/11/2021.

3. Operational communication to market participants

Market Participants highlighted during the Consultative Group call that the communication from CWE TSOs side via JAO message board was not acceptable: too late and not sufficient. According to MPs, CWE TSOs should have published the PTDF domains for the delivery day. As agreed, CWE TSOs' would assess the communication process during the incident.

Communication process in general

According to the process, the TSO Common System Pre-Coupling Operator must contact the CWE Market Operator and / or the relevant NEMO as soon as possible in case there is a technical or calculation issue delaying the generation of the CZCs by Target Time.

When DFP is triggered, the Common System Operator must send a message to the JAO REMIT platform. Application of DFP is an operational change possibly impacting the FB DA results and thus the market needs to be informed as soon as possible. Joint procedures also dictate that a message is published on the JAO website. Furthermore, DFPs should be published via the JAO Utility Tool.

Communication process on the 9th of November

On 9/11/2021, the decision was taken to perform a computation with automatic DFP via the Common System Operator back-up tool.

Communication REMIT platform

Normally, an Urgent Market Message (UMM) should be published on the REMIT platform to inform the market that DFP will be applied. On 09/11/2021, communication on DFP via the REMIT platform suffered setbacks. The announcement that DFPs would be applied was sent but due to a human error, did not result in the publication of the UMM on the REMIT platform. Once this error was discovered, the Common System Operator corrected this and published the UMM at 15:30, unfortunately however, in the wrong template.

Communication JAO message board

Separate from the UMM, messages were shared with the market via the JAO message board on 09/11/2021:

- 08:58 → announcement that Early PDTF Publication for BD 10/11/2021 would be delayed.
- 11:30 \rightarrow announcement that DFP would be applied for BD 10/11/2021.
- 13:08 → announcement that the Market Coupling process was delayed and therefore, publication of the final Market Coupling Results as well.

DFP publication in JAO Utility Tool



Normally, DFP should be published to the market via the JAO Utility Tool. However, in this specific incident, DFP could not be published because of an issue with the Common System back-up tool. The publication files needed to be generated manually, which resulted in a delayed publication in the Utility Tool on 12/11/2021.

4. Measures taken

To improve the communication to the market and avoid situations as on 09/11/2021, different amendments in the procedures between relevant parties (TSOs, RSCs, NEMOs, JAO) have been approved and are being implemented. These amendments should guarantee the agreed communication process:

- 1) When DFP application is certain: Publication of an Urgent Market Message on JAO REMIT platform
- 2) When DFP application is certain: Publication of a market message on the JAO website

These publications will be between 11:30 and 12:00 if TSO CS is functional, potentially later if TSO CS is not functional. *DFPs are published via JAO Utility Tool*.

5. Conclusion

The Flow based market coupling process is a complex process with different IT tools. Despite several years of successful operation of the FB market coupling, technical issues in different process steps are possible at any time. Appropriate fallback procedures have been defined by CWE TSOs and approved by NRAs to mitigate possible effects on the day ahead market including an appropriate communication to market parties.

The technical issue leading to the incident on the 9th of November has not been identified previously, however, was meanwhile solved successfully. Amendments to improve communication between relevant internal parties and towards market parties have been included in the operational processes in case DFP are triggered.