

Conclusions

Based on the study congestion management Zeeland the conclusions for each section can be summed up as follows:

Capacity section:

Based on the market scenarios used, the outcome of the Capacity Study is that technically speaking, the use of congestion management should be possible from around the end of 2021 or early 2022, after the grid investments in the 380 kV Borssele substation have been implemented, which is a precondition for being able to open the 150 kV interconnection between Brabant and Zeeland.

Comments:

- *departure from the deployment of, in particular, conventional production resources in practice, as opposed to the market scenarios used, may lead to different and especially higher loads on the grid, including the associated congestion as reported in this study;*
- *use of congestion management will require the planned grid investments in the Borssele and Rilland substations and the new 380 kV connection between them to be completed on schedule. This is relevant given the substantial growth in new wind and solar power plants expected during this period. A delay in the completion of grid investments will lead to a sharp increase in congestion in Zeeland compared to the congestion as it is reported in this study;*
- *this analysis does not take account of maintenance situations in the grid that are necessary for the completion of the investment projects. During these periods, we anticipate a substantial reduction in the available transmission capacity. The corresponding impact is not included in this study.*

Market analysis:

Based on the results of the Capacity section, the technical operational criteria and the inventory of connected parties on the 150 kV and 380 kV grids, the outcome of the Market Analysis is that in 2021 and 2022, an efficiently operating market-based solution with redispatch bids cannot be sufficiently guaranteed. However, this is mainly the case up until the end of Q3 2021. The occurrence of the expected physical congestion, however, depends on the use of congestion management. Should congestion management not be used, then the physical congestion would also be resolved with redispatch as part of the regular process for resolving transmission problems. The market criteria are therefore not a condition for the assessment as to whether congestion management can be used in the grid section.

However, the outcome of the Market Analysis is that there are sufficient guarantees that we can expect an efficiently operating market-based solution with redispatch bidding to be in place for 2023 and 2024.

Comment:

- *departure from the deployment of, in particular, conventional production resources in practice, as opposed to the market scenarios used, may lead to a different result from the assessment of the available market for congestion management as reported in this study, in many cases putting pressure on a favourable assessment as to whether there are enough potential participants.*

Operations:

Based on the feasibility of the processes from an operational perspective, we can conclude that congestion management is possible with the parties connected to TenneT's 150 kV /380 kV grid as soon as the 150 kV interconnection between Brabant and Zeeland is open and the operation of the grid in Zeeland is run as a pocket company.

Comment:

- *if connections with the Enduris grid need to be involved, then additional measures must be introduced so that TenneT can predict, monitor and control them.*

Final conclusion:

Applicability of congestion management

Based on the partial conclusions reached in the three sections of the study, the final conclusion is that using congestion management in Zeeland in compliance with the Grid Code will be possible from late 2021/early 2022 as soon as the operation of the grid in Zeeland is run as a pocket company.

Strict application of the criteria for the market analysis adversely affects the adoption of congestion management until 2023, but does not carry enough weight in an overall assessment.

The regular process for resolving transmission problems will be used until such a time as congestion management is used. Optimal use will be made of the resources available in the Zeeland and Brabant grids to resolve this congestion, including the available resources of parties connected to the Enduris grid.