ENTSO-E consultation on the Core advanced hybrid coupling implementation (AHC)

Joint response – 23 December 2022

General comments

The European Federation of Energy Traders (EFET) and Market Paries Platform (MPP) welcome the opportunity to provide comments regarding the Core TSOs' proposal for the 2nd amendment of the Day-Ahead Flow-based Capacity Calculation Methodology - Related to Advanced Hybrid Coupling implementation.

AHC (as opposed to Standard Hybrid Coupling – SHC), refers to a new explicit approach to represent the exchanges between Core and non-Core neighboring regions. The AHC approach proposes to extend the Core Flow-Based domain (PTDF matrix) in order to internalize the exchange capacities with non-Core neighboring BZs.

ENTSO-E proposes modifications to the DA Core CCM in order to accommodate the legal requirements for AHC, as required by Article 13(3) of the current document. The roll-out is a legal requirement from the Core CCM and an implementation roadmap is to be released in 2023 for a go-live by 2025.

AHC should theoretically deliver improvements in volume of capacity allocated (thus welfare), but the associated computational cost is high. The TSOs have not performed any quantification, nor are they certain a full roll-out will be technically feasible in Euphemia due to performance limitations.

We agree that, in theory, AHC is a superior representation than the status quo. However, in our view it is clear that Euphemia has limitations and that the finite amount of computational power available should be used for the most efficient and welfare-maximising measures.

As long as AHC and other measures such as 15' MTU are not properly quantified on real market conditions, the TSOs' questions cannot be answered properly. Besides, a partial AHC implementation also raises issues of discriminatory access to capacity and of defining go/no-go criteria for each border.

Detailed comments

Which borders should be prioritized for the implementation of AHC?

A partial, border-based implementation of AHC would raise concerns of level-playing field and equal access to capacity, which is initially mentioned as a core motivation for the implementation of AHC. It is also unclear who would get to decide on the go-live for each border and which KPI would be used to prioritize (performance to welfare ratio? Border size or line type?). Eventually, if AHC is to be deployed, the TSOs must ensure beforehand that it can be done in full and that roll-out is not at risk of being permanently stopped part-way due to unforeseen technical limitations.

From a welfare perspective, it would probably make the most sense to deploy borders impacting CNECs with the highest shadow prices and/or with the highest uncertainty in flow forecast. But this should be quantified first.

The TSOs state that they « *do not intend to conduct a Cost Benefit Analysis (…), as the obligation resulting from the CCM to introduce AHC is independent of economic viability* ». However, given the very high computational cost of AHC, we would still urge the TSOs to assess achievable welfare gains per border under realistic market conditions to determine whether AHC is realistic (cf. question 2). It must also be ensured that the validation process performed by TSOs does not operationally erase the capacity gains achieved with AHC (which would lead to a worse-off trade-off than the status quo).

Currently, 15' MTU has a higher implementation priority, should this be changed?

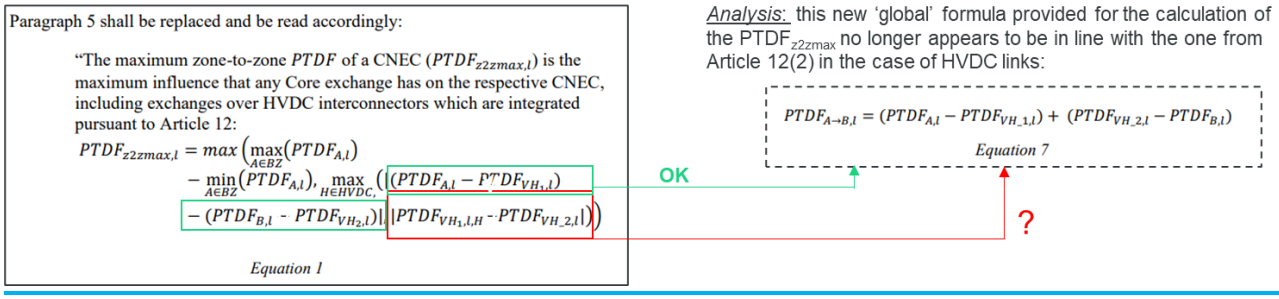
As a general comment we think that the 15' MTU in SDAC should have a lower priority given the high computational challenge, for which solutions are not stable yet and that have a direct impact on market participants IT systems and processes, contrary to the AHC implementation.

Several ongoing design topics will affect Euphemia's performances (AHC, 15' MTUs, possible BZ reconfigurations, …). Given the finite amount of computational power and time available to solve, trade-offs will have to be made, and it is paramount to allocate resources where they are the most efficient and welfare-generating for society.

We thus find the TSOs' question ill-defined. The implications of such measures are complex and far-reaching, yet to our knowledge a view of their impact on Euphemia's performance (in terms of computation time, welfare and duality gap achieved) has not been provided. Without that information, we cannot realistically provide an answer.

Comments on specific TSO amendments

In Article 11, §5: update of the PTDF_z2z formula for internal HVDC links should be explicit and/or aligned for transparency



In Article 13, §3.b: GSK generation for non-Core borders is not clear in which situations GSKs would not ''be available' from non-Core TSOs. Is it only zone and/or process-related or should we expect this also to vary in time. Having time-dependent GSK methodologies could also have significant impacts on the standardization of the PTDF and could go against the goal of creating a better level-playing field.