



NOVELTIES OF FARCROSS

Project duration: 1st of October 2019 – 30th of September 2023

One of the key objectives of the European Union's energy policies is to create a single European energy market, with harmonised regularisation, trading platforms and transparent, market-based incentives. The first liberalisation directives were adopted in the nineties, although safeguarding of the national grid still remained a national matter. While energy markets are highly regulated with standardised products and transparent trading platforms, balancing markets still differ on a national level.

On 23 November 2017 the European Commission published the Electricity Balancing Regulation (EB Regulation (EU) 2017/2195), setting a basis for harmonised balancing capacity (BC) markets to enhance market integration. Cross-zonal capacity is a scarce resource and has to be allocated in an economically efficient way. EB regulation proposes three approach to allocate cross-zonal capacity on the day ahead time frame, where energy and balancing capacity offers are in direct competition.

The co-optimised capacity allocation represents the most advanced solution using firm day-ahead BC and energy bids to allocate CZC for the balancing capacity market at D-1 for the 24 hours of the next day together, with and at the same time as the allocation of cross zonal capacity to the SDAC. The objective of the co-optimisation function is to maximise **the sum of welfare** of the balancing capacity market and the SDAC.



1. Figure: How to allocate cross-zonal capacity?

FARCROSS ("FAcilitating Regional CROSS-Border Electricity Transmission through Innovation", this initiative is part of the Horizon 2020 programme, Grant Agreement No 864274) promotes a unified and modern coupled electricity market in Europe and utilizes innovative, up-to-date software and hardware solutions to increase cross-border electricity flows that support the transition process to a flow-based regional coupled market. These developments are expected to encourage and optimise the cooperation between the major stakeholders of the energy-chain. The consortium consists of 31 partners, including TSOs, DSOs, market operators, service providers and energy generators.

FARCROSS performs a demonstration (OPTIM-CAP) of a new co-optimised market with a matching algorithm involving 4 countries (Croatia, Slovenia, Hungary, Romania). Market participants have the opportunity to jointly submit BC and energy bids on the day-ahead timeframe, using new cross-product linked bids. HUPX as the IT service provider of the demonstration maintains a safe testing environment for the algorithm runs.

Current status: the demonstration is currently ongoing, evaluation is in progress to fine-tune the optimisation algorithm.

For further information, please visit: https://farcross.eu/

