

All quiet on the western front? Transmission capacity development in the Nordic electricity market

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Executive summary

Historically, the Nordic electricity market development has been a successful example of establishing a multinational integrated electricity market. For instance, the peer group organization of the Nordic transmission system operators (TSOs) has been able to successfully agree on mutually beneficial transmission capacity expansion projects on several occasions. Recently, however, we find less evidence of a shared Nordic mindset. Has giving power to Brussels and the European Union entities taken away the political will and commitment to the Nordic cooperation? And more importantly, is there an appropriate European level governance to guarantee the transmission capacity expansion that previously was promoted by Nordic entities? In this paper, we will focus precisely on these questions. We aim at evaluating the impact of different institutional requirements for key entities as well as the changing governance structure to highlight how the infrastructure development paths are dependent on these.

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Our work should appeal to practitioners in the industry, regulators and politicians. We describe and evaluate the transmission capacity expansion in the Nordic countries from 2002 to present. We highlight the impact of non-existent stakeholder role and problems occurring with non-binding contracts and light-handed regulation across jurisdictions. Given the impact the infrastructure has on the market and the market players, the inclusion of the relevant stakeholders in the planning process must be seen as beneficial. We have chosen the Nordic electricity market as our example because we have witnessed a visible change in the governance structure over the period under study.

In this paper, we have studied the change in the governance structure in the Nordic electricity market. In particular, we have focused on the cross-border capacity investments before and after the dismantling of the regional entity for the Nordic TSO cooperation. Our observations indicate that an important outlet for local political commitment to the development of the Nordic market may have been lost in the process.

Many regions in Europe are in a similar position as the Nordic countries. The market integration is the target set by the EU, and to achieve the common electricity market, cross-border transmission network investments must be made. The Nordic example shows that not only the plans but the harmonization of TSO instructions and governance are a necessity to find and execute socioeconomic cross-border plans. Without such transboundary instructions and mindset, socioeconomic cross-border network investments may be a mission impossible. Additionally, as long as the development is built on trust between stakeholders, changes in any decision must be well understood by all parties involved.