



# VÆR MED TIL AT LAVE SPÆNDENDE PROJEKTER MED ENERGINET



## NORDIC POWER SYSTEM IN BALANCE – WHAT ARE THE COSTS TODAY; HOW CAN WE IMPROVE IT?

### SEMESTER:

Bachelor or Master's thesis.

### KEYWORDS:

Security of supply, market design, microeconomic principles, macroeconomic principles, game theory, econometrics.

### BACKGROUND:

The Nordic power system is closely connected, and more and more products are traded across countries. Several of these products are included in the balancing of the Nordic power system. With more and more renewable energy in the system, it will become even more important that the market sends the right price signals to the market players about maintaining their balance. It is therefore important to know the complete costs of balancing and the optimum market structure.

### PROBLEM:

With an increasing amount of renewable energy, it is even more important with the correct price signals to maintain the balance, and it is therefore interesting to investigate the current costs and how it can be improved.

### DESCRIPTION:

With an increasing amount of renewable energy, price signals for balancing play an increasingly important role. Therefore, we would like a review of one or several of the following problems:

1. How are the costs of balancing allocated today and how can this be optimised in future?
2. Costs and incentives to balance through intraday market or passively use balance market for balancing.
3. What is the market structure of the different spare capacities, can this be optimised, and which reserve must fix the price?
4. What are the current costs of balancing the Nordic power system, and how can it be optimised in future?
5. How does the Network Code for Balancing affect the Nordic way of balancing the system?

### CONFIDENTIALITY:

No.

### LANGUAGE:

Danish or English

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