
Availability of transmission capacity in the Nordics

Q1/2018

Report description

This report provides aggregated information about available electricity transmission capacities between Nordic bidding zones and neighboring countries.

The figures show the average share of available capacity on the day ahead market (NTC) to the maximum capacity (max NTC) on each border and direction.

The Nordic TSOs have an extensive co-operation with regards to coordinating outages on grid elements that affects the NTC on corridors between the TSOs. The aim is to coordinate several maintenance jobs on the same grid element to minimize the degree to which the jobs affect NTC.

Calculation formula

- Average $(NTC_H / \max NTC_H)$ for $H=1, \dots, n$

max NTC = Maximum net transfer capacity:

- The capacity that can be given to the market when there are no outages taking into account system reliability issues, and the power flows are favorable.
- <https://www.nordpoolspot.com/globalassets/download-center/tso/max-ntc.pdf>

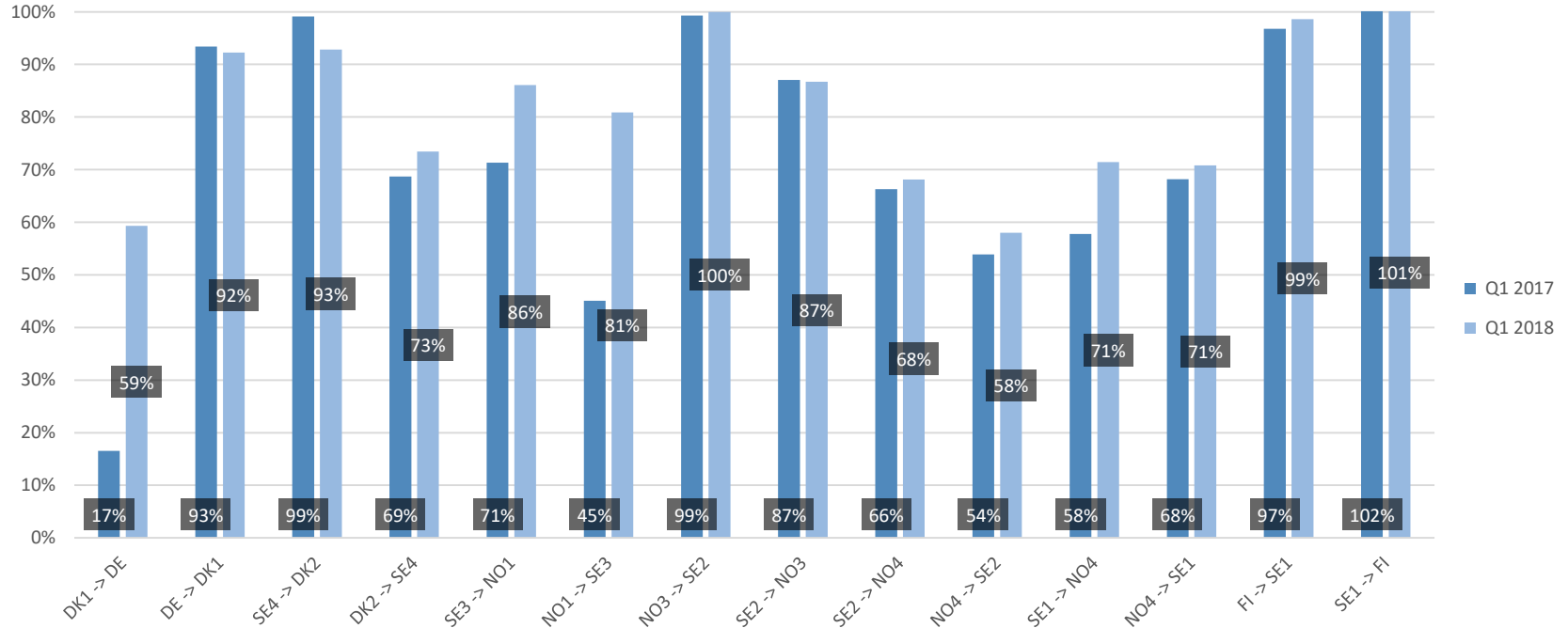
NTC = Net transfer capacity :

- The capacity given to the day-ahead market in the specific hour calculated based on the TSOs grid models and taking outages into account.

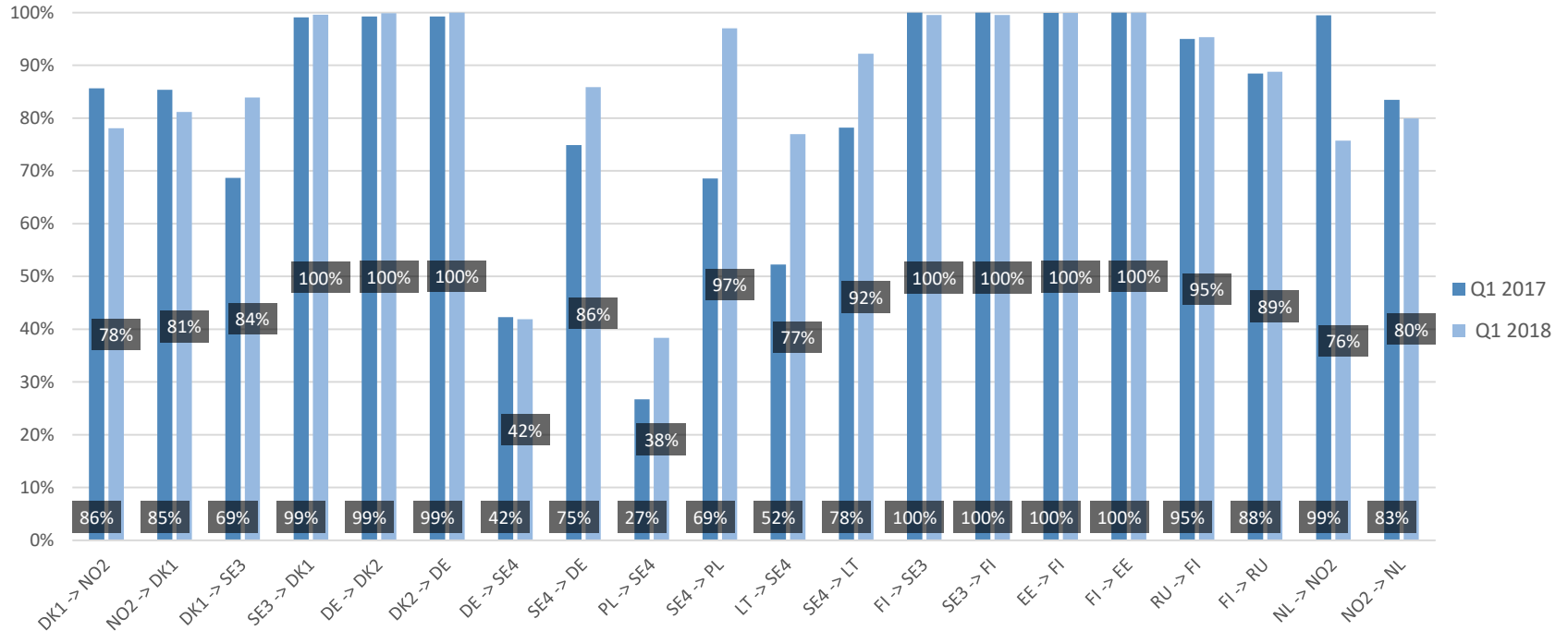
*The term ATC has been changed to NTC for this report

Q1/2017 & Q1/2018

AC-interconnectors - quarterly



DC-interconnectors - quarterly



Reasons for reduced* availabilities

* Availability below 75 %

Q1/2018

AC-interconnectors

- **DK1 -> DE**
 - The capacity has increased substantially compared to Q1 2017. The reason is mainly the countertrade agreement. However this is to a large extent a virtual increase in capacity, since a possible use of it is later countertraded in order to avoid breaches of N-1 security in Germany.
- **DK2 -> SE4**
 - Svenska kraftnät: The reason for reduction of capacity from Denmark (DK2) to Sweden (SE4) was congestion in the West Coast Corridor in Sweden.
 - Energinet: The reason for reducing capacity was single busbar operation in 132 kV station Mörap. Analysis has later shown that there is no longer a need to limit due to this operation. Full capacity released from February 10th 2018.
- **SE2 -> NO4**
 - Svenska kraftnät: Svk has not reduced the capacity
 - Statnett: Main reason for reduction is planned outage of 300 kV Tunnsjødal-Verdal in the Norwegian grid from week 3 to 7.
- **NO4 -> SE2**
 - Svenska kraftnät: Svk has not reduced the capacity
 - Statnett: Main reason for reduction is planned outage of 300 kV Tunnsjødal-Verdal in the Norwegian grid from week 3 to 7.
- **SE1 -> NO4**
 - Svenska kraftnät: Svk has not reduced the capacity
 - Statnett: Main reason for reduction is planned outage of 300 kV Tunnsjødal-Verdal in the Norwegian grid from week 3 to 7.
- **NO4 -> SE1**
 - Svenska kraftnät: Svk has not reduced the capacity
 - Statnett: Main reason for reduction is planned outage of 300 kV Tunnsjødal-Verdal in the Norwegian grid from week 3 to 7.

- **SE1 -> FI**
 - Reason for the NTC exceeding max NTC is the handling of transit flow from Norway via Finland to Sweden.

DC-interconnectors

- **DE -> SE4**
 - No capacity from March 22 because of cable fault. Other reductions because of congestion in the West Coast Corridor in Sweden and reduction set by TenneT.
- **PL -> SE4**
 - The main reason for reduction of capacity from Poland (PL) to Sweden (SE4) was reduction set by PSE. Capacity has also been reduced because of congestion in the West Coast Corridor in Sweden.