
Availability of transmission capacity in the Nordics

Q2/2017

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 (ATC) to the maximum capacity (max NTC) on each border and direction.

Calculation formula

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

max NTC = Maximum net transfer capacity:

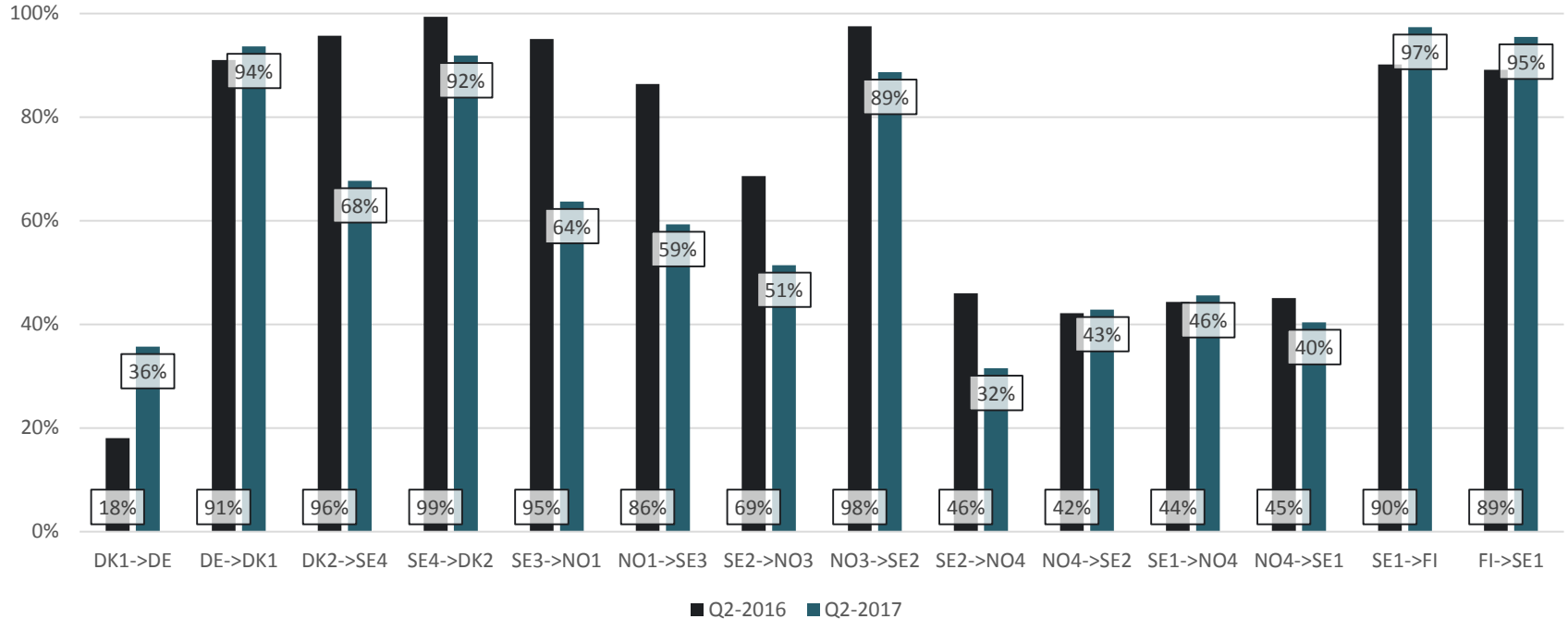
- The capacity that can be given to the market when there are no outages, taking into account system reliability issues, and the power flows are favorable.

ATC= Available transfer capacity :

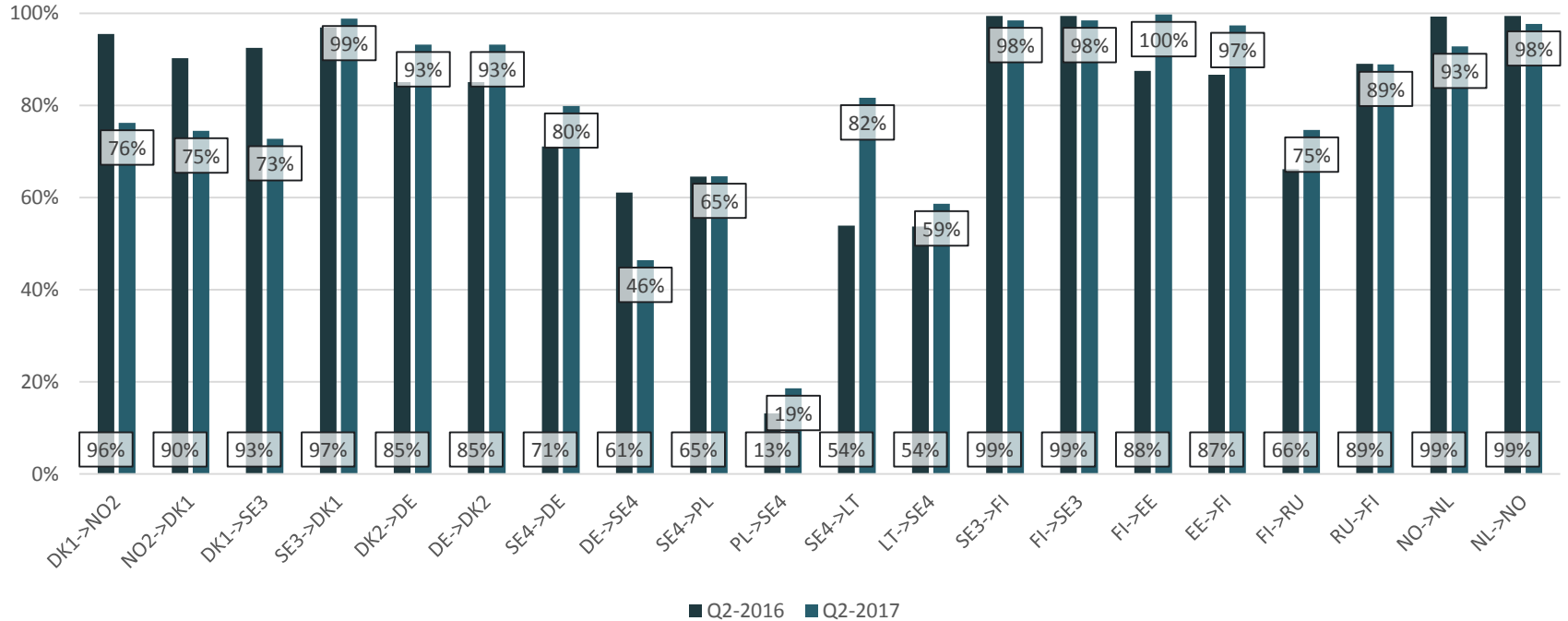
- The capacity given to the day-ahead market in the specific hour, calculated based on the TSOs grid models and taking possible outages into account.

Q2/2016 & Q2/2017

AC-interconnectors - quarterly



DC-interconnectors - quarterly



Reasons for reduced* availabilities

* Availability below 75 %

Q2/2016

- NO3-SE2 (Middle Norway-Sweden):
 - Planned outages in Norwegian grid.
- NO4-SE1 (North Norway-Sweden):
 - Planned outages in Norwegian and Swedish grid.
- NO4-SE2 (North Norway-Sweden):
 - Planned outages in Norwegian grid.
- DK1-DE (Western Denmark- Germany)
 - The capacity from West Denmark (DK1) to Germany (DE) was very low in Q3-2016. The reason is the stressed German grid. The German TSO, TenneT is doing a lot of grid enforcements to relieve the stressed grid. This results in the capacity having to be reduced especially in the periods where TenneT is working on the grid.
- FI-RU (Finland Russia)
 - Maintenance at Vyborg HVDC link
- SE4-PL (Sweden-Poland)
 - The reason for reduction of capacity from Sweden (SE4) to Poland (PL) was found in Poland. The reasons for reduction in capacity from Poland (PL) to Sweden (SE4) were found on both sides. The main reason in Sweden for reductions was congestion in the West Coast Corridor.
- SE4-DE (Sweden-Germany)
 - The main reason for reduction of capacity from Sweden (SE4) to Germany (DE-TenneT) was found in Germany. The reasons for reduction in capacity from Germany (DE-TenneT) to Sweden (SE4) were found on both sides. The main reason in Sweden for reductions was congestion in the West Coast Corridor.
- SE4-LT (Sweden-Lithuania)
 - The main reasons for reduction of capacity from Lithuania (LT) to Sweden (SE4) were cable faults and congestion in the West Coast Corridor in Sweden.

Reasons for reduced* availabilities

* Availability below 75 %

Q2/2017

- **DK1-SE3 (Western Denmark-Sweden)**
 - The main reason for reduction of capacity from Denmark (DK1) to Sweden (SE3) was congestion in the West Coast Corridor in Sweden.
 - Planned outages in both the Swedish and Danish grid and a fault Konti-Skan leading to reduced capacity.
- **DK2-SE4 (Eastern Denmark-Sweden)**
 - The main reason for reduction of capacity from Denmark (DK2) to Sweden (SE4) was congestion in the West Coast Corridor in Sweden.
 - Planned outages in Danish grid.
- **NO4-SE1 (North Norway-Sweden):**
 - Planned outages in Norwegian grid.
- **NO4-SE2 (North Norway-Sweden):**
 - Planned outages in Norwegian grid.
- **NO1-SE3 (Southern Norway-Sweden):**
 - Planned outages in Norwegian grid and fault on 420kV cable Sylling-Tegneby.
 - The main reason for reduction of capacity from Sweden (SE3) to Norway (NO1) was congestion in the West Coast Corridor in Sweden.
- **NO3-SE2 (Middle Norway-Sweden):**
 - Planned outages in Norwegian grid.
- **DK1-DE (Western Denmark-Germany)**
 - The capacity is higher than the previous year but the German grid is still stressed. During the quarter the German TSO, TenneT have done a lot of planned work in the grid.
- **SE4-PL (Sweden-Poland)**
 - The reason for reduction of capacity from Sweden (SE4) to Poland (PL) was found in Poland. The reasons for reduction in capacity from Poland (PL) to Sweden (SE4) were found on both sides. The main reason in Sweden for reductions was congestion in the West Coast Corridor.
- **SE4-DE (Sweden-Germany)**
 - The main reason for reduction of capacity from Sweden (SE4) to Germany (DE-TenneT) was found in Germany. The reasons for reduction in capacity from Germany (DE-TenneT) to Sweden (SE4) were found on both sides. The main reason in Sweden for reductions was congestion in the West Coast Corridor.
- **SE4-LT (Sweden-Lithuania)**
 - The main reasons for reduction of capacity from Lithuania (LT) to Sweden (SE4) were cable faults and congestion in the West Coast Corridor in Sweden. The cable was also out of service for maintenance.