

## Principles for the common Nordic outage planning



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## 1 Goal of outage planning

The Nordic TSOs coordinate and plan the activities for operations and maintenance in the Nordic interconnected electric power system in such a way that the impact on the power system and the power market is optimized considering the security of supply and the available transfer capacities to the market.

## 2 Practical accomplishment

The co-ordination and planning of the outages in the Nordic power system is taken care of by a so-called Nordel Outage Team. The members of the team from each of the TSO's share the information and coordinate this with the plans within their own subsystems of the Nordic power system and bilaterally with the partners in the neighboring regions e.g. UCTE, Russia and Estonia.

The coordination and planning mostly concerns the outages of the interconnections between the Nordic subsystems and with the neighboring regions but outages of internal connections in the subsystems are also considered when they affect the cross-border capacities.

The practical accomplishment of the coordination and planning is done taking into account the following guidelines:

- The outage planning takes into consideration relevant conditions for crossborder interconnections, generation, regional distribution and load, time of the year and weather conditions
- Outages for maintenance, reinforcement and/or installation of new grid components for a specific power system element (tie-line, internal line, transformer, substation) shall be coordinated and carried out under the same outage
- Different measures on adjacent power system elements, e.g. a tie-line and adjacent substations, shall be coordinated
- Outages shall be planned, with respect to electrical and occupational safety and health and practical conditions, to be as short as possible and to periods where the negative impact on the power market is minimal
- Outages on the HVDC-interconnectors shall be coordinated so that no more than three (3) are out of operation at the same time
- Information about changes is delivered to the market according to the Data publication agreement between NPS and the TSOs
- The planned outages are included in the weekly prognoses for the trading capacities for the following two weeks published on the home page of Nord Pool

The coordination and planning is done as a yearly procedure and the result is a yearly plan. The group has coordination meetings to make weekly plans. The plans are revised if necessary. The TSO with a revised plan then contacts the other TSOs. The entry plan for a year is normally available in the month of February. The results are published via Urgent Market Messages (UMM's) on the home page of Nord Pool.