

EstLink2 Newsletter

elearning
GENERATING OPPORTUNITIES



Issue 4 / December 2013

EstLink 2 – new transmission link between Estonia and Finland will further integrate the Baltic electricity market with the Nordic market and increase the security of supply of electricity in the Baltic Sea region by increasing the total transmission capacity between Estonia and Finland to 1,000 megawatts.

GENERAL INFORMATION

- **Owners:** Elering AS and Fingrid Oyj
- **Budget:** ca 320 M€
 - o Owners investments: ca 220 M€
 - o EU grant: max 100 M€
- **Capacity:** 650 MW
- **Rated voltage:** 450 kV
- **Technique:** HVDC, Monopolar LCC with an insulated return
- **Total length:** ~ 170 km
- **Submarine cable:** ~145 km
- **Overhead line in Finland:** ~14 km
- **Underground cable in Estonia:** ~12 km
- **Commissioning:** in the beginning of 2014



Submarine cable installation in November 2012 in Finland

NEWS CORNER



Püssi converter station



Anttila converter station

System testing period has been successfully completed

The civil works and installations of different project parts were completed in summer 2013.

Sub-system testing and fine tuning of all systems was completed in October 2013 and the first energization of the whole HVDC interconnection was performed.

EstLink 2 was ready for system testing period (FIN to EST and vice versa) and the first energy was transmitted through the link on October 22, 2013.

The system tests were started first with low loads from 30 MW up to 330 MW and continued with higher loads up to nominal power of 650 MW.

The purpose of system testing was to verify the functionality and performance of the link and its correspondence to the agreed parameters.

Until February 2014, the link is running in trial operation and is available for the electricity market most of the time.

KEY MILESTONES IN 2014

- Successful completion of trial operation period
- Hand over and start of commercial use of EstLink 2
- Start of verification period after the six months burn-in time period

MAIN ACHIEVEMENTS

- Completion of HVDC cable manufacturing and installation of marine and land cables by Nexans
- Completion of civil works and installations at Püssi and Anttila converter stations by Siemens
- Completion of overhead line construction works in Finland by ETDE
- Completion of AC substations both in Estonia and Finland by Siemens and Empower
- Completion of system testing period and start of trial operation period by Siemens

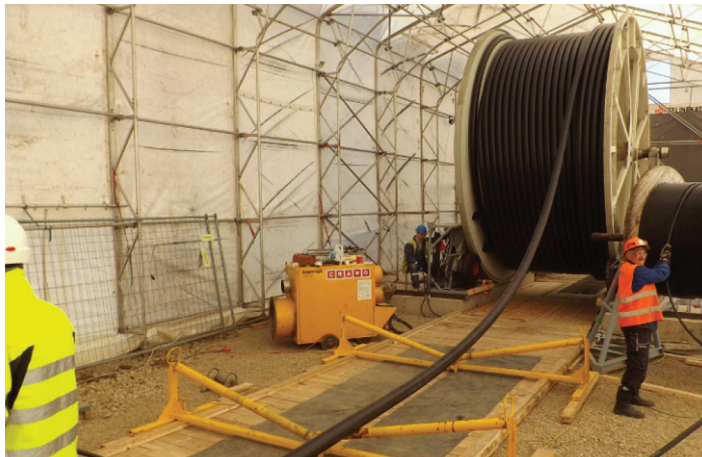


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Land cable route preparation works in the Nordic climate were not an easy task



Land cable installation in winter conditions posed some extra challenges



Anttila AC substation was extended from T junction to one of Fingrid's key substations



Püssi AC substation was renovated and extended for EstLink 2



Transition from submarine cable to overhead line in Finland is made in Nikuviken station



Valve towers are the heart of converter stations



One phase three winding converter transformers are used in EstLink 2 project



Mr. Mega Watt from EstLink 2 animation

MORE INFORMATION

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