

# Power oscillation damping control from large offshore wind farms

Zuan Zhang  
University of Warwick

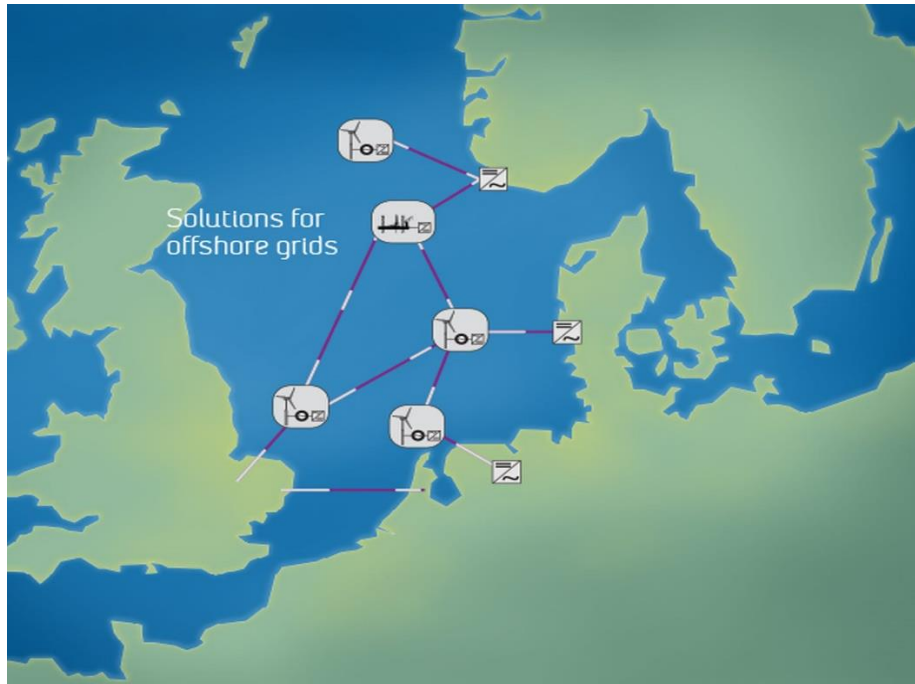


Image from: [www.sintef.no/projectweb/nowitech/innovation/control-of-multi-terminal-hvdc-grid-tr14/](http://www.sintef.no/projectweb/nowitech/innovation/control-of-multi-terminal-hvdc-grid-tr14/)

Offshore wind power is becoming the mainstream of renewable energy and they are increasingly connected to the main onshore grids. Given the future installation levels of offshore wind farms, more and more transmission system operators require the wind farms to provide ancillary services, such as damping the low-frequency electromechanical oscillations in power systems to enhance the system stability and reliability. Otherwise these power oscillations could cause severe problems e.g. regional or large-scale power failure. Therefore, this research project investigates to use large offshore wind farms to provide power oscillation damping control capability to the power network.