

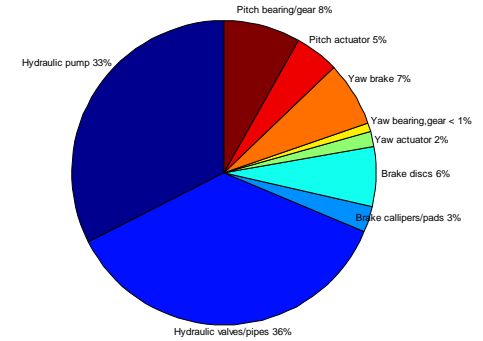
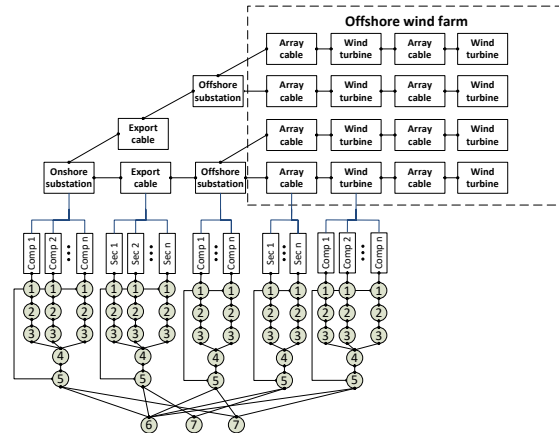
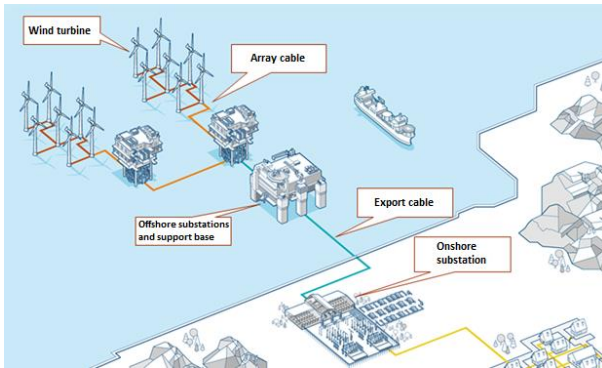
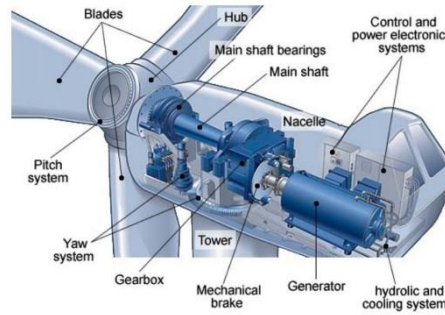
Wind Farm Asset Management



Background

The availability of turbines in a wind farm is a critical parameter in the generation of cost effective energy. The remote location and potential poor weather has a big impact on the financial viability. Poor weather:

- Increases the failure occurrences
- Hampers maintenance access
- Is commonly a time of peak demand.



Contribution of different components to these downtimes

Objectives

Develop models for the availability of the wind turbines accounting for the specialist equipment required and the access restrictions in the event of poor weather.

Integrate the turbine models into a wind farm model to look at the production capability for the whole farm.

Probability of being in different states over the lifetime

