

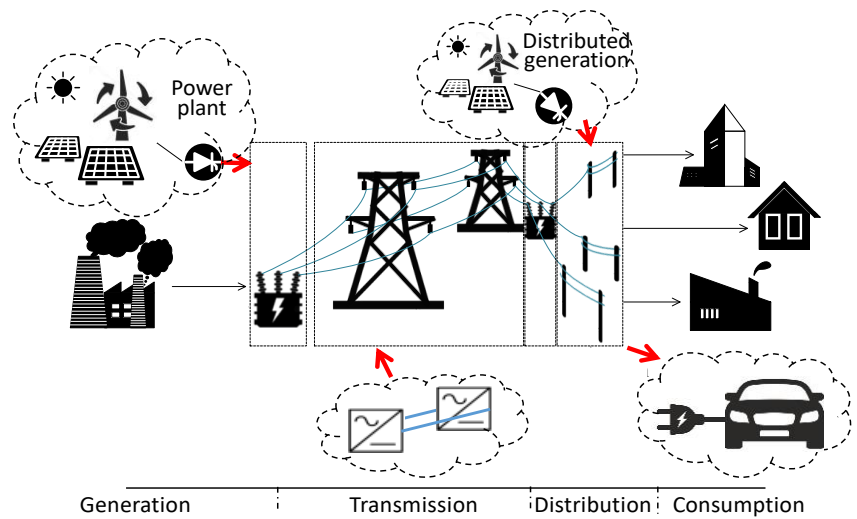


Renewable Energy Research Group-

Power system resilience.

Core Research Areas

- AC short-circuit analysis & calculation
- Adaptability & challenge of AC network protection
- Robust AC network protection
- Adaptive AC network protection
- Protection compatible power electronic control
- DC short-circuit, fault current suppression, transient stability
- Systematic DC Fault-Ride-Through
- DC Protection Coordination & design



Power electronic-oriented tendency

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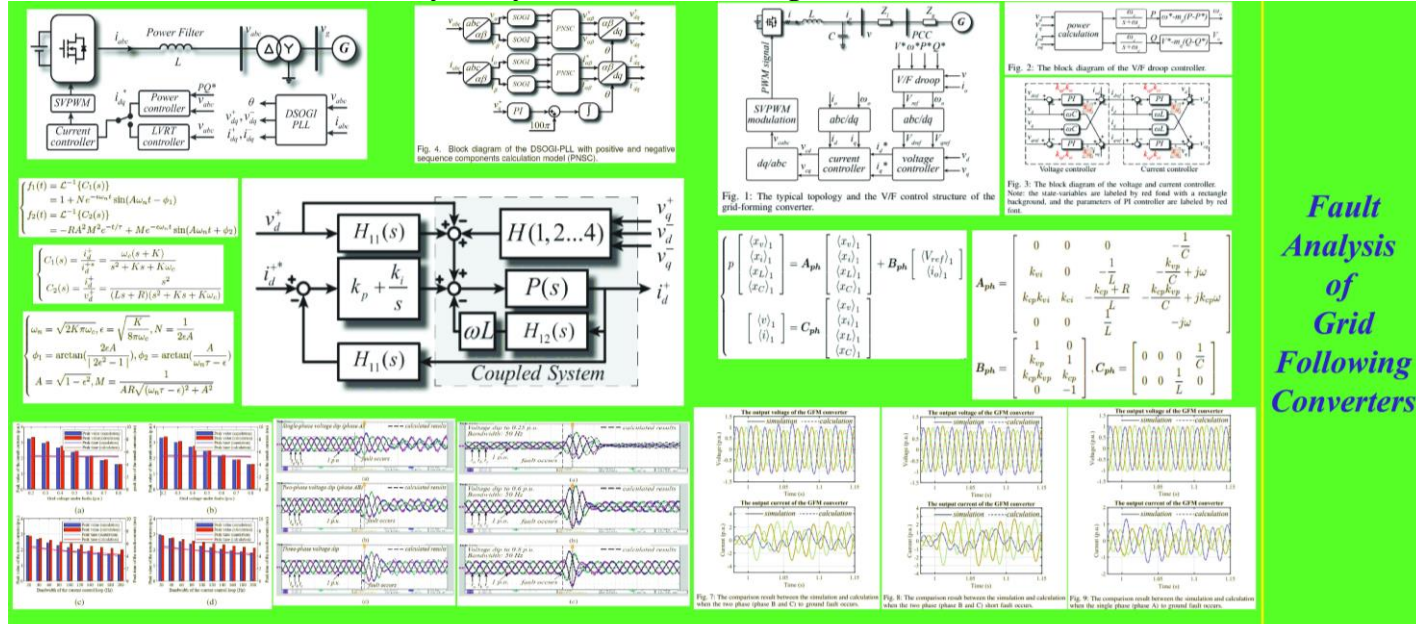
Website: <http://homes.et.aau.dk/zch>

Group website: <http://homes.et.aau.dk/zch/group.htm>

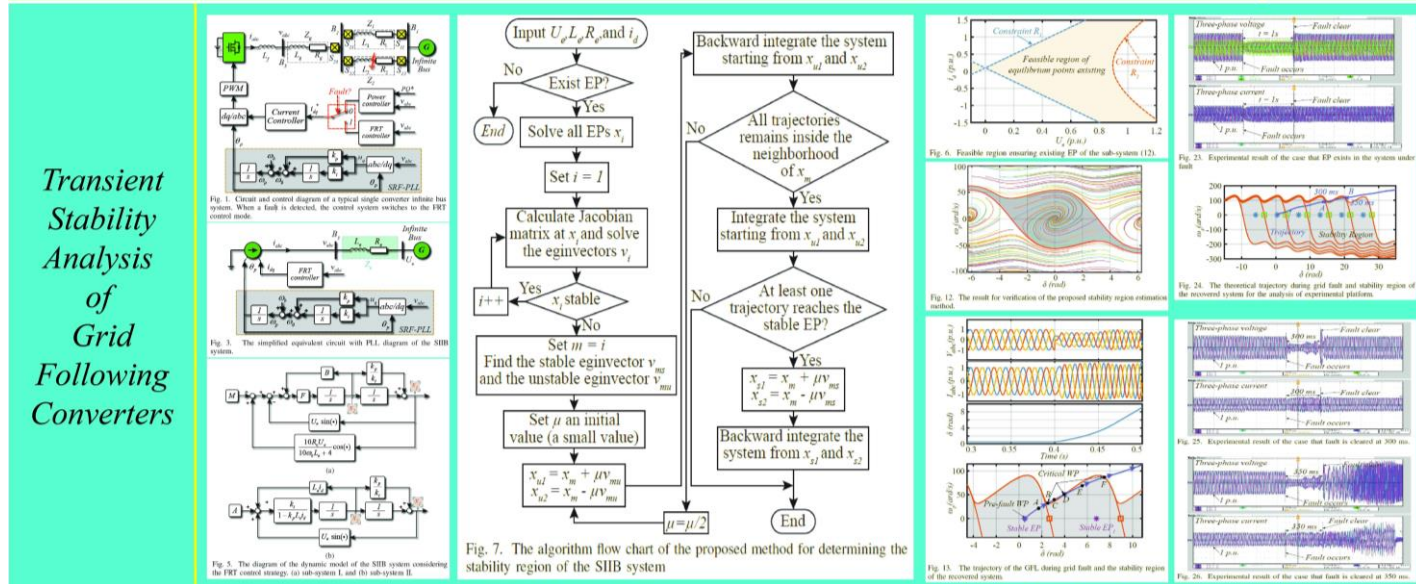
Publications: <http://homes.et.aau.dk/zch/publications.htm>

Modern Power System Fault, Protection, Control

Short-circuit & Transient Stability Analysis for Grid Following Converter

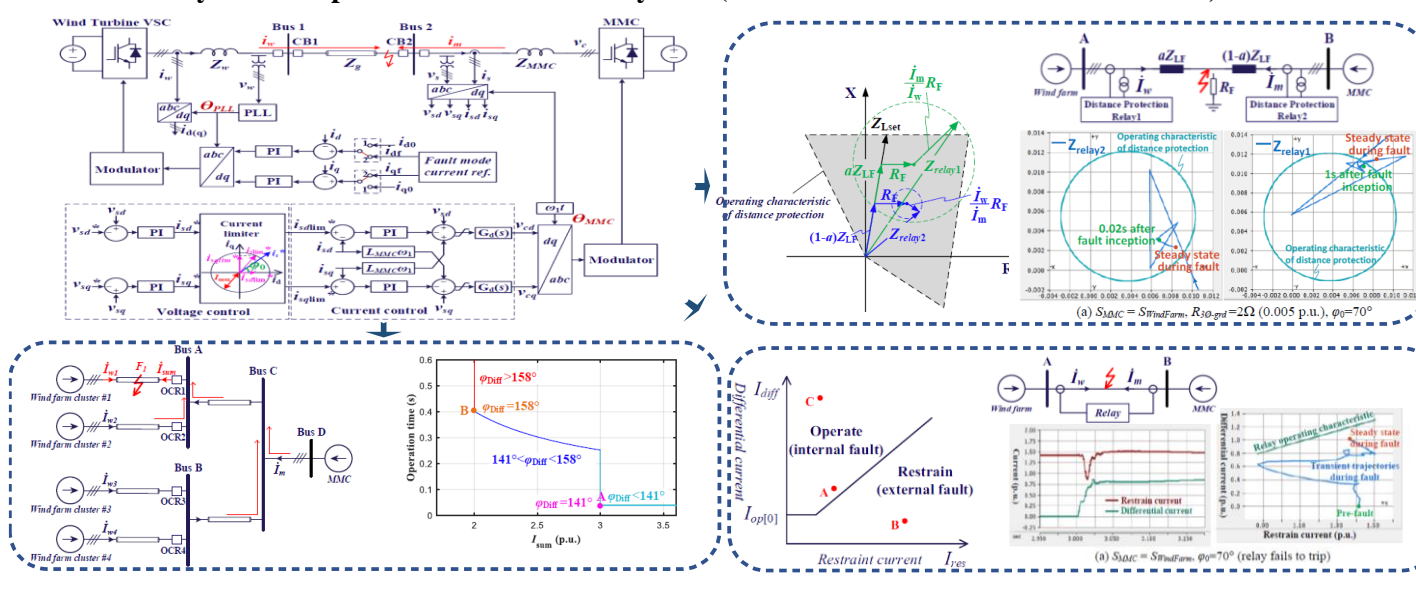


Fault Analysis of Grid Following Converters

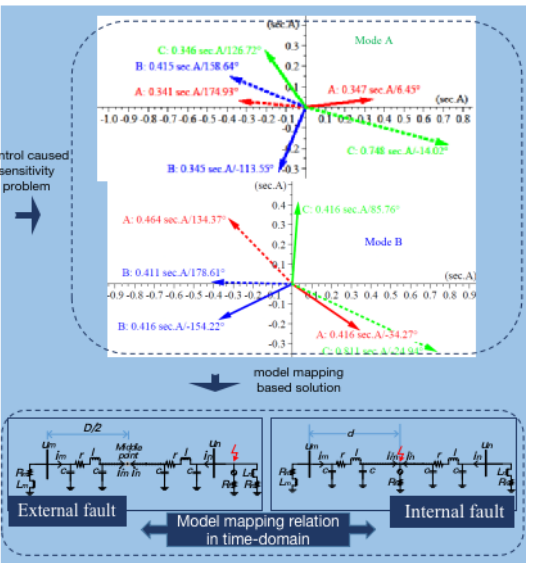
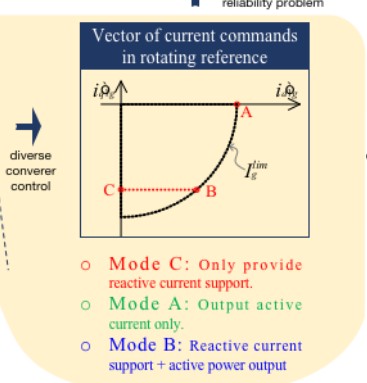
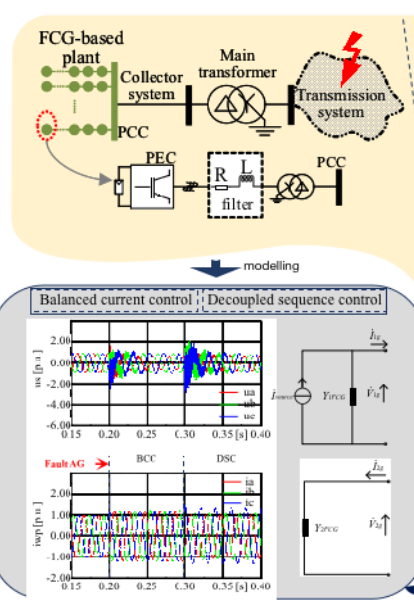
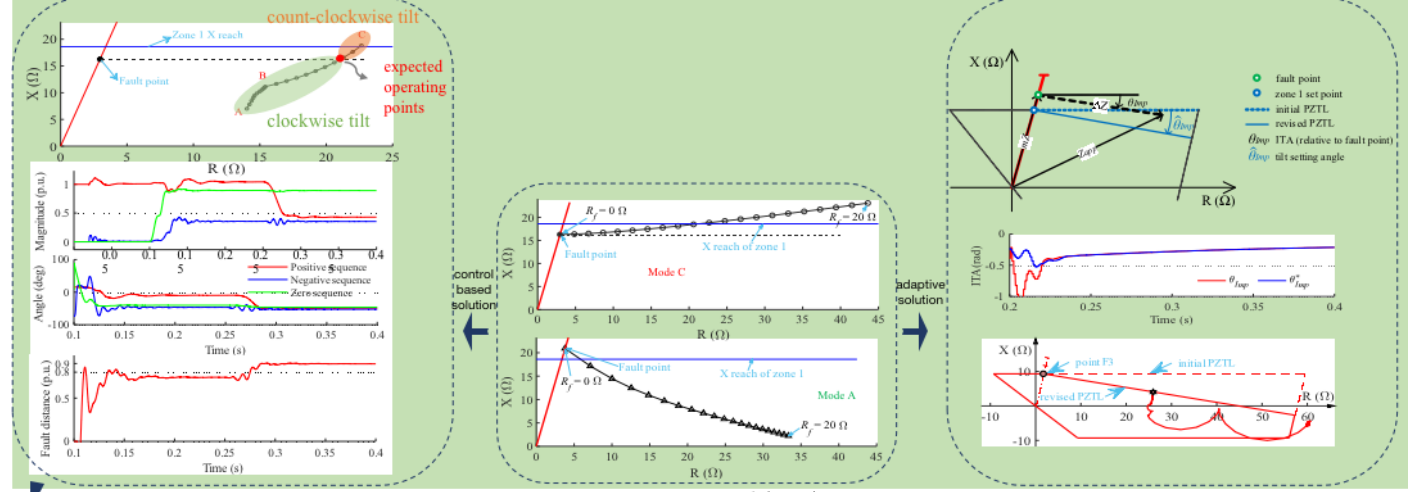


Transient Stability Analysis of Grid Following Converters

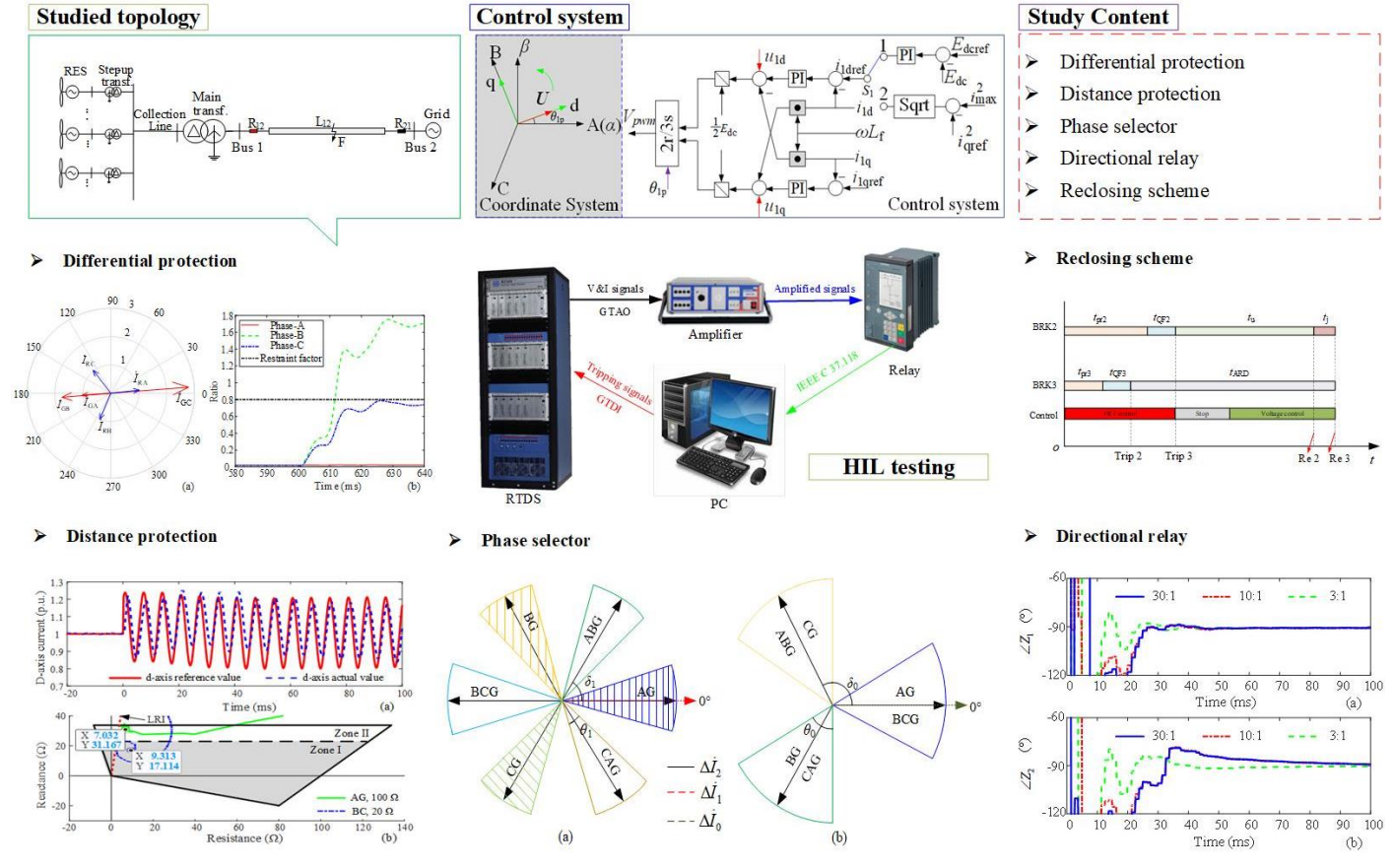
Protective analysis in full power electronic based system (wind turbine + offshore HVDC station)



Modelling, Analysis, Protection/Control Design for Lines Connected to Converter Sources (Content-1)



Modelling, Analysis, Protection/Control Design for Lines Connected to Converter Sources (Content-2)

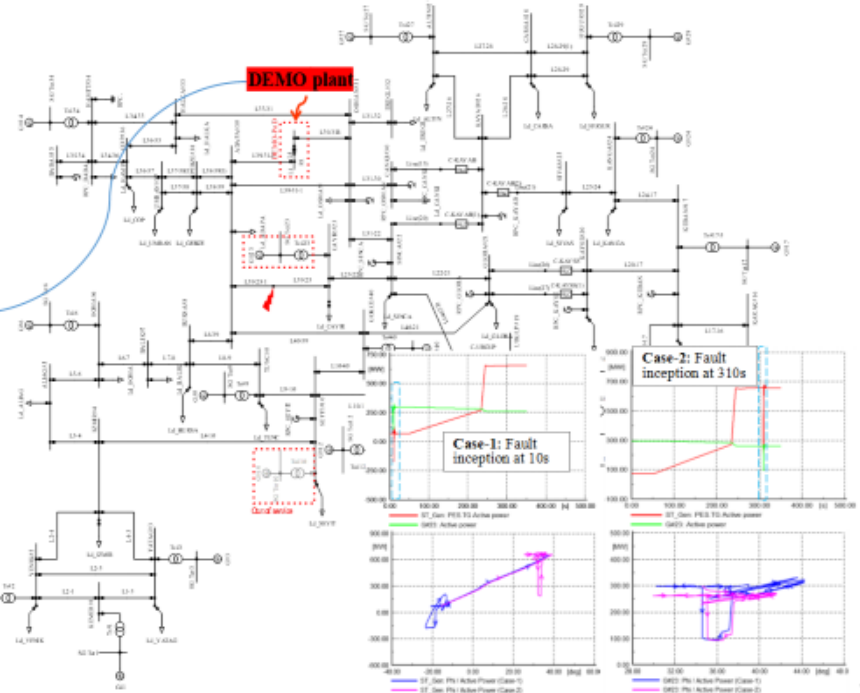
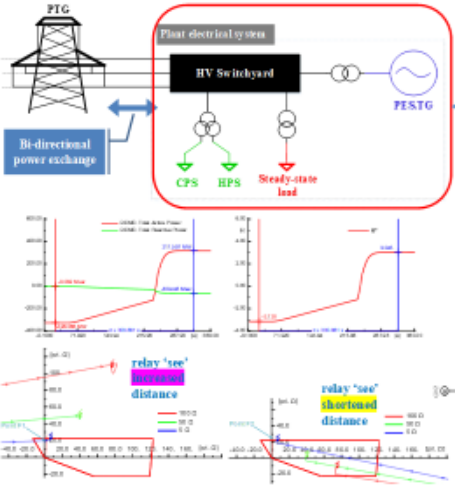


Fusion Plant Electrical System Analysis and Interaction with Grid

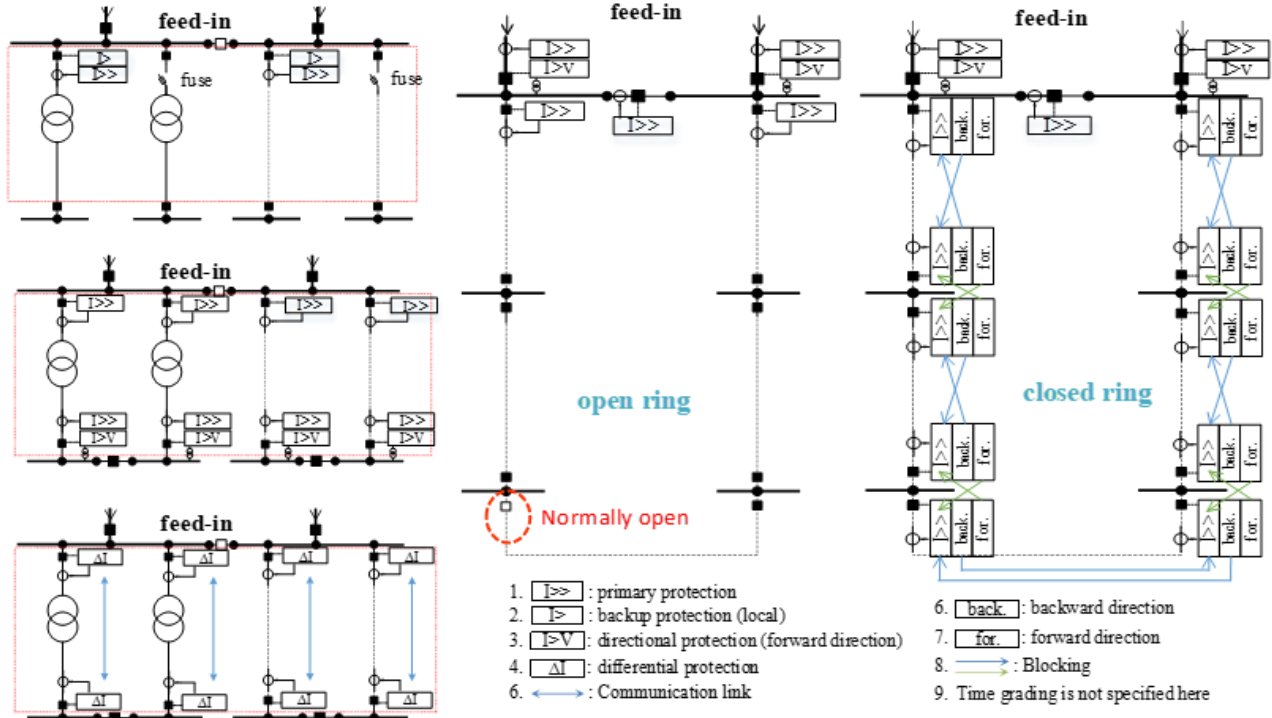
Analysis of Power Transient in Fusion Power Plant

Impact of power Transient on power transmission grid

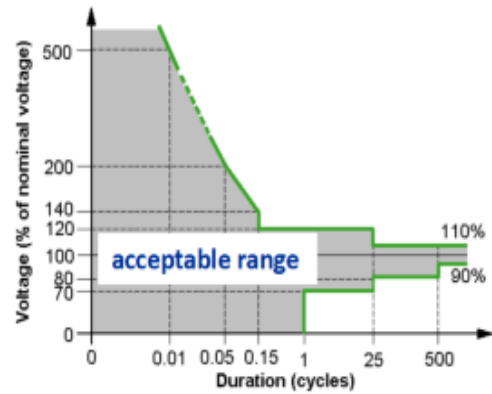
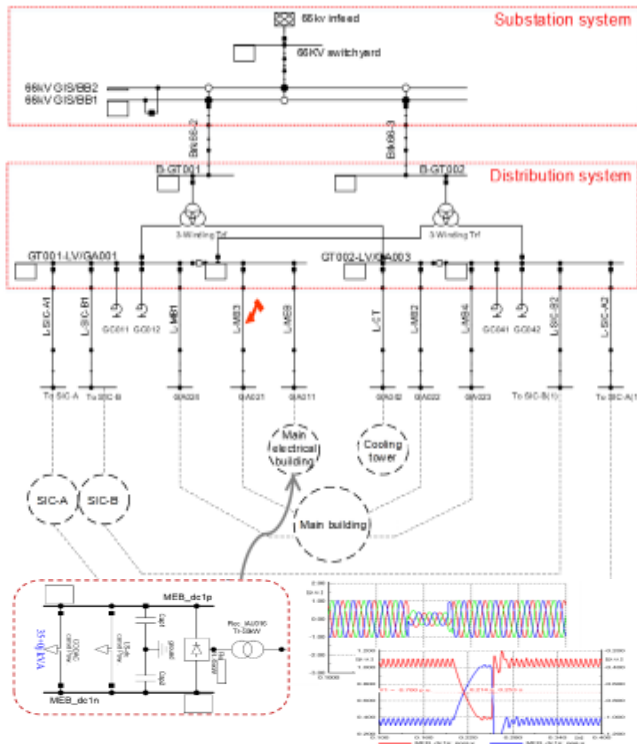
- Network Protection
- Power angle stability



Fault Analysis and Protection Consideration in Fusion Power Plant Electrical System



Monitoring Power Quality and Effect on Control System of Fusion Power Plant



Multi-terminal MMC-HVDC grid Fault, Protection, Control

Short-circuit analysis, Protection coordination/design, DC fault-ride-through control

