½+½ Day Workshop: Innovative Approaches for Secure Operation of the Future Electricity Transmission System

Program for day I - March 15, 2016
(Theme: results from ongoing R&D projects)

12:00
Registration, sandwiches

12:30
Welcome
Prof. Jacob Østergaard, head of CEE-DTU

12:40
TSOs’ Future Challenges to Secure Operation
Per Lund, Energinet.dk

13:05
The iTesla R&D project
Stéphane Châtellier & Jean-Marc Jansen, RTE R&D, France

13:40
Break

13:55
The APOGEE R&D project
Jean-Marc Jansen & Antoine Marot, RTE R&D, France

14:30
The SOSPO R&D project
Hjörtur Jóhannsson, CEE-DTU

15:05
Break

15:15
R&D Demonstration in PowerLabDK’s Control Room
- Real time stability and security assessment
- Real time countermeasures
- Informative visualisation

16:05
Break

16:15
Panel Discussions - The Future Outlook
Representatives from TSOs, academia and manufactures

16:55
Closing remarks for day I

17:00...

19:00
Dinner - Networking
Location announced later
Program for day II - March 16, 2016
(Theme: demonstration of real-time assessment, control and visualization)

09:00 Welcome,
Prof. Jacob Østergaard, head of CEE-DTU

09:05 Overview of the R&D demonstration activities
Hjörtur Jóhannsson

09:20 Parallel R&D demonstration tracks: real-time stability & security assessment

- Rotor Angle Stability
  Hjörtur Jóhannsson
  - Demo: Early warning for the 2003 DK-SW blackout
  - Poster presentations

- Voltage Stability
  Angel Perez
  - Method demonstration
  - Poster presentations

- Static N-1 Security
  Jakob Glarbo Møller
  - Method demonstration
  - Poster presentations

- Dynamic Security
  Tilman Weckesser
  - Method demonstration
  - Poster presentations

10:10 Break

10:20 Parallel R&D demonstration tracks: wide-area countermeasures in real-time

- Real-Time Countermeasures Against Voltage Collapse
  Hjörtur Jóhannsson
  - Demo: avoiding the 2003 DK-SW Blackout
  - Poster presentations

- Wide Area Emergency Control
  Andreas Søndergaard Pedersen
  - Demo: re-distribution to avoid OEL activation in critical situations
  - Poster presentations

- WA Prosumption Control
  Martin Wittrock
  - Demo: WA prosumption control to re-establish security
  - Poster presentations

11:10 Break

11:20 Informative Visualization of System State - Demonstration in PowerLabDK
Morten Lind and Xinxin Zhang
- Presentation of visualization concepts
- Demonstration of how insecure system operation appears in a control room
- Demonstration of how emerging instability (emergency) appears in a control room

11:55 Closing remarks for day II, end of workshop

Register at: www.cee.elektro.dtu.dk/Calendar
For further information see: www.sospo.dk