New Technologies in the Future Grid

A workshop sponsored by the TRIP project
https://www.esat.kuleuven.be/electa/trip-website

To be held in Belgium, November 26, 2014
Timing and Location

- Wednesday 26 November 2014, 10h00 to 17h00
- Iers College, Janseniusstraat 1, Leuven, Belgium

Audience and Format

- Representatives from the transmission, generation, regulatory, and research sectors; 40 attendees in total
- Three sessions; each one 1.5 hours
- 5 minute topic introduction by the host, followed by 15 min talks by invited speakers
- 20 minutes discussion
Agenda

- 10.00-10.30 Welcome and refreshments
- 10.30-12.00 Transmission Technology Scenarios
- 12.30-13.00 Lunch
- 13.00-14.30 Constraints and Opportunities of Tariffs and Regulation
- 14.30-15.00 Break
- 15.00-16.30 Flow Control: A Capability to Allocate and to Finance
- 16.30-17.00 Summary and Panel Discussion
Session 1: Transmission Technology Scenarios

• Topic summary
  o We look at some future visions- TYNDP exists, but we are talking about beyond 2020, where new technology options become feasible.
  o Transmission grids are spatially and economically constrained, despite available technologies. When we need grid capacity to increase at a certain rate, what is likely to get built?
  o How does the availability of different technologies change the infrastructure evolution that we might expect?

• Speaker lineup:
  o Mihai Paun, Networks Development, ENTSO-E
  o Gert Aanhaanen, Strategist, TenneT
  o Keith Bell, ScottishPower Professor, University of Strathclyde
  o Volker Wendt, Director of Public Relations, Europacable
Session 2: Constraints and Opportunities of Tariffs and Regulation

• **Topic summary**
  - We have had incentives for energy: but may also need them for transmission infrastructure. How do regulators view technology options, and take them into account?
  - Are there any “must-have” or “show-stopping” regulatory reforms that will change grid development? How important is the harmonization between different countries?

• **Speaker lineup**
  - Paul Wilzceck, Senior Regulatory Affairs Advisor on Grids and Internal Electricity Market, EWEA
  - Leonardo Meeus, Director of Vlierik Energy Center, Adjunct Professor at Florence School of Regulation
  - Luis Olmos, Researcher Universidad Pontificia Comillas
Session 3: Flow Control: A Capability to Allocate and to Finance

• Topic summary
  o Flow control is a capability useful for power system security, operations, and planning, but it necessarily affects money flow as well as power flow.
  o How much can it be used to counter uncertainty in flows, and to make the most out of investments? And what economic value might this capability have? How should a balance be struck between security and market?

• Speaker lineup
  o Dirk Van Hertem, Assistant Professor, KU Leuven, and Principal Investigator of TRIP project
  o Dirk Aelbrecht, Head of National Control Center, Elia
  o Patrick Luickx, Advisor at CREG
  o Pieter Schavemaker, Principal Consultant, E-Bridge
Wrapup: Expectations and Needs

• **Topic summary**
  - What are the new things we have learned from each other?
  - Within the group, are there expectations for needed policies, or research, in order to enable the next steps of grid development?
  - What are the critical decisions or factors that are needed to assess this?

• **Final discussion**
  - Kick-off by the rapporteur
  - Facilitated panel discussion