4th Annual
European Electricity Ancillary Services & Balancing Forum
Ensuring Paralleled Demand and Capacity in a Harmonised European Electricity Market

The Westin Grand Berlin, Germany
11th – 13th September 2013

Interactive Pre-Conference Workshops on 11th September:

Workshop A: Use of Plexos to Assess the Operational Costs Effects of Grid Integration, Ancillary Services and Balancing
Led by:
Dr. Christos Papadopoulos, Regional Manager Europe, Energy Exemplar

Workshop B: Developments in Balance Management in Europe
Led by:
Pieter Schavemaker, Principal Consultant, E-Bridge Consulting B.V.
René Beune, Principal Consultant, E-Bridge Consulting B.V.

Panel Discussions:
A Practical Implementation Issue – From Portugal to Finland
Geographical Challenges – Barriers Towards a Pan-European Market?

Attending this Premier marcus evans Conference will Enable You to:

• Explore the latest developments of the network code on electricity balancing
• Overcome the issues surrounding load frequency control and reserves
• Network amongst industry leaders
• Understand the participation of demand side management in the provision of ancillary services and balancing
• Learn how Europe’s varying market arrangements are creating obstacles for market integration

Learn from Key Practical Case Studies:

• ENTSO-E on the latest development surrounding the network code
• Understand how Vattenfall AB ensure a security of supply
• ACER on how they visualise the future of a pan-European electricity market
• Learn from SSE Power Distribution on how they are utilising demand response in the UK electricity markets
• ELIA on harmonising the various market reserves that exist

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Click Here to Email for More Details
Half-Day Interactive Pre-Conference Workshops

11th September 2013

WORKSHOP A:
USE OF PLEXOS TO ASSESS THE OPERATIONAL COSTS EFFECTS OF GRID INTEGRATION, ANCILLARY SERVICES AND BALANCING

08.30 Registration and Coffee
09.00 Workshop Leader’s Introduction and Opening Remarks
   Dr. Christos Papadopoulos
   Regional Manager Europe
   Energy Exemplar
09.15 Modelling of Ancillary Services Products and Requirements
   • Use of stochastic modelling for renewable integration analysis and forecasting ancillary services requirements and costs
   • Optimisation of ancillary services procurement, integrated with unit commitment and transmission model
   • Spinning and regulation up/down, load-following, replacement, operational, pump, interruptible load
   • Dynamic risks based on load, generation and transmission flows
10.30 Coffee and Networking Break
11.00 Modelling and Analysis of Grid Integration and Balancing Markets
   • Day-ahead and intraday balancing markets
   • Grid and market integration and effects on overall costs
   • Grid congestion forecasting and management
12.30 Closing Remarks from the Workshop Leader
12.50 Lunch

WORKSHOP B:
DEVELOPMENTS IN BALANCE MANAGEMENT IN EUROPE

14.00 Workshop Leader Introduction and Opening Remarks
   Pieter Schavemaker
   Principal Consultant
   E-Bridge Consulting B.V.
   René Beune
   Principal Consultant
   E-Bridge Consulting B.V.

   - History, present and future of balance management in Europe
   - Balance markets and intraday markets
   - ENTSO-E draft Network Code on Electricity Balancing

   Coffee to be Served Midway through the Workshop
17.30 Closing Remarks from the Workshop Leader

About the Masterclass Sponsor:

Energy Exemplar is the developer of class-leading power market simulation and analysis software called PLEXOS for Power Systems® (PLEXOS). With Energy Exemplar’s development and customer support focused on making power market analytics efficient and accurate, PLEXOS has become the most comprehensive and user-friendly power market simulation software in its class. The global PLEXOS client-base includes power generation companies, transmission system operators, market operators, regulators, traders, consultants and analysts who use PLEXOS for power market modelling, price forecasting, investment planning, portfolio optimisation, grid congestion and ancillary services management, renewable integration, and risk management. Energy Exemplar continues to ‘push the envelope’ in being the first-to-market with the latest advances in mathematical programming and power market simulation theory to ensure that PLEXOS remains the most comprehensive, easy-to-use simulation software. For more information please visit www.energyexemplar.com

Market liberalisation along with an increase in renewable energy integration is ever-changing the structure of the European electricity market. Following such change, ancillary services are becoming more and more essential in a challenging market. Energy generators and transmission service operators are now being faced with mounting pressure to develop balancing markets and prepare for grid integration as the market reaches greater levels of interconnection.

This exclusive 4th annual marcus evans forum will offer critical insights into how industry leaders are optimising their performance and ensuring the provision of ancillary services in order to ensure operation of the grid. We will be discussing the importance of demand side management and the challenges surrounding market design within Europe. Focus will be on the latest developments surrounding ACER’s and ENTSO-E’s network goals and code, market integration and balancing solutions with all providing updates and insights into such an evolving market.

Who Should Attend:

Target Audience:
VPs, Directors, Heads, Managers of:
• Ancillary Services
• Balancing
• Energy/Market Management
• Operational Support
• Operations (Systems/Grid)
• Market Affairs/Design/Management/Development
• Cross-Border Trade
• Planning
• Network
• Scheduling
• Dispatch

From:
• Transmission Systems Operators (TSOs)
• Electricity Producers/Generators
• Energy Traders

Business Development Opportunities:
Does your company have services, solutions or technologies that the conference delegates would benefit from knowing about? If so, you can find out more about the exhibiting, networking and branding opportunities available by contacting:

Ola Samuelsson, Marketing Manager, marcus evans London
Tel: +44 (0) 203 002 3276 or Email: OlaS@marcusevansuk.com
Day One

12th September 2013

08.30 Registration and Coffee
09.00 Opening Address from the Chair

A VIEW FROM ENTSO-E

09.10 Opening Address:
Development of and Interaction between Network Codes
- Process of code development
- Interaction with stakeholders
- Dependencies between network codes
Peter Campbell
Advisor
ENTSO-E Secretariat

09.45 Network Code on Electricity Balancing
- Overview of the balancing code
- Stepwise development towards a European balancing market
- The need for cross border exchange of services
- Results case study – cross border exchange of balancing services between the Netherlands and Belgium
Kjell A Barmesn
Convener
ENTSO-E Working Group A5
Head of Strategic System Operations
Statnett

CHALLENGES FOR ANCILLARY SERVICES

10.20 Case Study:
Cross Border Exchange of Balancing Services
- Understanding the differences that exist in operating reserves in a pan-European market
- The need for cross border exchange of services
- Different ways for organising cross-border exchange and sharing of balancing services
- Results case study – cross border exchange of balancing services between the Netherlands and Belgium
Bob Hebb
System Services Development Manager
Elia

10.55 Business Card Exchange
An early opportunity in the conference to meet all other conference attendees by systematically moving around the room. Make use of the opportunity to learn about companies, projects and backgrounds of other attendees and swap business cards in an informal environment.

11.05 Coffee and Networking Break

11.30 Case Study:
SoS – Total Generation Capacity
- Understand how markets are working today to ensure fixed electricity generation
- Minimising real time deviation
- Forecasting accuracy driven by real time analysis
- Diagnose the challenges – renewable energy, government policy and environmental pressure
- Benefit from flexibility in the market place and achieve greater levels of forecasting
- Grasp that balancing tools that adapt intraday markets are in fact becoming better balancing tools
Javier Paradinas
Head of the Markets and Operation
Iberdrola

12.05 Case Study:
System Adequacy – Security of Supply and Ancillary Services through Transmission
- Trade as an integral part in the power market
- Reserving capacity – creating obstacles to efficiency?
- Costs and benefits to security of supply with increased transmission capacity
Mats Nilsson, Ph.D
Economist – Strategic Analysis
Vattenfall AB

12.40 Increased Wind Integration Impacts on Power Systems’ Adequacy and Balancing – A Case Study
- Importance of detailed modelling of dynamic characteristics of balancing plant in systems with increasing renewable
- Assessing the value of the available balancing mechanisms and related technologies with PLEXOS
- The importance of grid integration and congestion management
- A case study for Italy
Dr. Christos Papadopoulos
Regional Manager Europe
Energy Exemplar

13.20 Lunch
14.20 Coffee and Networking Break

14.50 Case Study:
Present and Future of Ancillary Services in MIBEL
- Advantages and disadvantages of the current design
- New proposals for harmonisation within Europe
- Expected goals
Rafael González Hombrados
Head of Scheduling and Market Coordination
Endesa

15.25 Case Study:
A Practical Implementation Issue – From Portugal to Finland
- How wide should TSOs coordinate, should there be limitations on the reach of balancing services?
- Do you build regional ancillary services that join to create an expansive cross border grid? Or do you define a pilot region that develops a framework and the opportunity for precedent setting?
- Determining the best methods to achieve a pan-European ancillary and balancing market
- How can we benefit from existing initiatives and pilot projects?
Carlo Degli Esposti
Project Manager Dispatch Coordination & Development – Operational Development
E.ON Global Commodities SE

16.00 Coffee and Networking Break

16.30 Case Study:
Ancillary Services in a modern system with renewable generation
- Security of Supply with regard to limited transmission capacity and a large share of renewable generation
- Challenges in forecasting accuracy
- Benefits of demand side management and smart grid solutions in a small and islanded system
Irís Baldursdóttir
Head of System Operation and Market
Landsnet

DEMAND SIDE MANAGEMENT – THE SLEEPING GIANT

17.05 Case Study:
Demand Response in the UK Balancing Market
- The economic and reliability potential
- The provision of a more robust system
- Keeping the power system operational whilst not producing extra power and/or building/using extra power stations
- Measure demand response in meeting grid reliability demands
Stewart Reid
Future Networks Manager
SSE Power Distribution

PANEL DISCUSSION

17.40 Geographical Challenges – Barriers Towards a Pan-European Market?
- To what extent is geographical location becoming a hindrance to market harmonisation?
- Energy islands – do these exist?
- Learning from the successes of projects such as the BAUT, bringing in GB to continental markets
- Addressing the need for interconnectors for greater ancillary services
- Landlocked countries – 360° of opportunity?
Panel will be joined by speakers of the day

18.15 Closing Remarks from Chair and End of Day One

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marcus evans INVITES YOU TO JOIN US FOR A TRADITIONAL BERLIN NETWORKING EVENT
Day Two
13th September 2013

08.30 Registration and Coffee
09.00 Opening Address from the Chair

BALANCING – MORE THAN PROTECTING SYSTEM FREQUENCY
09.10 Opening Address: How Do You Value and Price Balancing Services?
- Analyse how fluctuations in renewable generation will govern balancing costs
- Understand the true value of integrating balancing markets
- Allocating cross-border capacity for exchange of energy and reserve
- Ensuring a universal cross-border balancing price model
- Evaluating balancing technologies: responsive demand, energy storage, flexible generation and cross border transmission

Professor Goran Strbac
Professor of Electrical Energy Systems
Imperial College, London

09.45 Grid Control Cooperation – Cross-Border Exchange of Balancing Energy in the CEE region. Practical Experience from a Business and IT Perspective
The presentation will focus on the practical example of successful cross-border cooperation on the exchange of balancing energy in Central Europe, especially from the perspective of the Czech transmission system. The presentation includes:
- Information about the project Grid Control Cooperation (GCC)
- The principles of secondary balancing energy exchange
- The economic benefits to the transmission system operator impact on market participants
- The future and potential of the project

The specific example of the possibility of cross-border exchange of primary reserve will be also mentioned in the presentation. The presenter will focus on the impacts to the national settlement rules, including possible solutions.

Jan Konrad
International Services Director
Unicorn Systems

10.25 Coffee and Networking Break

10.55 Case Study: Pilot Projects: RTE and National Grid – France – England Interconnector (BALIT)
- The drive for market integration, integrated balancing systems and operational security
- Learn the lessons achieved from these projects prior to widespread harmonisation of the grid
- Profit from hearing the challenges and solutions required for market integration
- Capitalise on residual capacity availability for balancing purposes
- Hear on a small, but major step in the drive for a super grid
- Examine how the BALIT project reflect the aims of network codes and is precedent setting

Jo Faulkner
Balancing Services Manager
National Grid

11.30 Future Market Design for a Reliable Electricity System
- Brief recap of future challenges for electricity systems
- The value of flexibility – UK and California study results
- New market models

Melle Kruisdijk
Director Market Development
Wärtsiö Power Plants

12.10 Case Study: Pump Storage in the Ancillary Markets
- Renewable expansion and the need for storage
- Pump storage as an economic option for balancing
- Valuation and commercialisation strategies for pump storage in day ahead, intraday and ancillary service markets
- Virtual pump storage

Ralph Baumann
Head of Origination and Environmental Markets
Trading Alpiq AG

12.45 Lunch
13.45 Coffee and Networking Break

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14.15 Case Study: Cross Border Balancing – Progression to an Unbounded European Electricity Market
- Understanding the drive for frequency restoration reserves
- Developing harmonisation of pricing methods for balancing and ancillary services
- TSO-TSO – balancing optimisation across borders for mutual benefits
- Ensuring cost reflective prices
- Evaluating the conditions where market harmonisation has not occurred or has been successful
- Appreciating the importance of pilot schemes as the test beds for wider cross border balancing market

Sebastian Ziegler
Market and Process Development
50Hertz Transmission GmbH

14.50 A View from the Regulators
A Regulators View of the Draft Network Code from ENTSO-E
- Progress – security of supply, the integration of low carbon generation and the drive for a single, competitive market
- Assessing the diversity of market design throughout Europe
- Addressing the barriers to progression

Nadia Horstmann
Head of Section International Coordination Energy
Bundesnetzagentur (BNetzA) Federal Network Agency

15.25 ACER’s Vision of a Pan-European Balancing Market
- Target model for integrated balancing market
- How to achieve efficiency and transparency
- What are the expected benefits for consumers?
- Future challenges

Martin Povh
Framework Guidelines and Network Code Officer
ACER

16.00 Coffee and Networking Break

16.30 Case Study: Renewables – Fuelling Balancing and Challenging Ancillary Services
Twenties – The Drive for Major Wind Power Grid Integration
- Understand how wind power can contribute to developing ancillary services following the rapid growth of renewable energy
- Gain insights into developments being made towards wind power integration into the transmission grid
- Learn how offshore wind power can affect balancing and what can be done to overcome this
- Grasp how to create a transmission grid that is more flexible and versatile
- Assess how transferable the results of the Twenties project will be within a wider European market

Jose Luis Mata
Head of Regulation and Studies; Project Coordinator
REE Red Electrica de Espana; TWENTIES Project

17.05 Case Study: Power Hub – A Commercial Aggregator for Distributed Flexibility
- Introduction to Power Hub, a full-scale virtual power plant solution
- How to exploit power flexibility from demand and embedded generation
- Delivering ancillary services from a virtual power plant
- Commercial perspectives of Power Hub
- Lessons learned and status of the market integration in Denmark and the United Kingdom

Thomas Kudela
Energy System Architect, Innovation – Strategy
DONG Energy

17.40 Benchmarking Market Design in Constantly Evolving Environment
- Preparing for heightened levels of cross border balancing
- Promoting a more liquid market place that drives frequency consistency
- Addressing the call for more ancillary services in line with escalating levels of wind and solar grid integration
- Grasping the need for balancing to protect operational integrity

Panel will be joined by speakers of the day

18.15 Closing Remarks from Chair and End of Conference