

CEER Specialised Training on Renewable Energy and Electricity Market Design

24-25 September 2019

CEER Office, Cours Saint-Michel 30a (5th floor), 1040 Brussels

COURSE PROGRAMME

Renewable electricity generation levels have increased dramatically in Europe over the last decade, particularly in the form of wind and solar power, such that renewables are now a central part of Europe's electricity mix. Renewable power is the cheapest source of electricity in many parts of the world already today, the latest report from the International Renewable Energy Agency (IRENA) shows. Electrification on the basis of cost-competitive renewables is the backbone of the energy transformation and a key low-cost decarbonisation solution in support of the climate goals. The increase in intermittent renewable generation poses major technical and regulatory challenges to Europe's energy regulators in overseeing both energy networks and markets in consumers' interests.

This CEER course provides participants with the latest update on the new legal framework for renewables-based electricity in Europe with the Clean Energy Package and the implications for National Regulatory Authorities (NRAs). It also examines the interaction between the new legislative framework for renewables and the Energy and Environment State Aid Guidelines. The course addresses how electricity network operators should be regulated to effectively manage increased generation intermittency while maintaining security of supply. It explains to participants the variability challenges, the role of priority dispatch, redispatch and balancing and the role of regulators to facilitate demand flexibility and create future-proof market design. The course also discusses the challenges for regulators and DSOs linked to the integration of increasing shares of distributed renewables and all the accompanying phenomena like self-consumption, net-metering and consequences for the design of retail tariffs including network and policy costs. In addition, the concept of "renewable energy communities" in the Clean Energy Package will be explored.

Tuesday, 24 September 2019 10:30-17:30

WELCOME AND INTRODUCTION

10:30-10:45 Opening remarks and round-table introduction of the participants.

Ms Yvonne Finger, BNetzA / Mr Harald Proidl, E-Control, Course Directors

SESSION 1 THE FRAMEWORK FOR RENEWABLES DEVELOPMENT IN EUROPE

10:45-11:30 Overview of the new legislative framework for renewables after the adoption of the Clean Energy Package.



Mr Jan Steinkohl, European Commission, DG ENER

Discussion/ Q&A (15 min)

- 11:30-12:15 Designing market interventions in the context of the new legislative framework for renewables (the Renewable Energy Directive, the Internal Electricity Market Regulation and Directive) and the Energy and Environment State Aid Guidelines.
 - Mr Alejandro Donnay Ferro, European Commission, DG COMP

Discussion/ Q&A (15 min)

12:15-13:15 Lunch break – CEER office

- **13:15-14:00** Overview of the main support schemes in Europe, their design, cost and interaction with wholesale markets. Implementation challenges for NRAs linked to the new legislative framework.
 - Ms Yvonne Finger, Co-Chair of CEER Sustainable Development Work Stream, Course Director

Discussion/Q&A (20 min)

- **14:00-14:45** Group work on the implications for NRAs in the implementation of the Renewable Energy Directive and the Internal Electricity Market Regulation and Directive.
 - Ms Yvonne Finger, BNetzA / Mr Harald Proidl, E-Control, Course Directors

14:45-15:00 Coffee break

SESSION 2 MARKET INTEGRATION OF RENEWABLES

- **15:00-15:45** The variability challenge and how to design energy markets (products, gate closure times, delivery time) to reflect specificities of intermittent generation.
 - Ms Hélène Robaye, Engie

Discussion/Q&A (20 min)

- **15:45-16:30** Renewables in the context of priority dispatch and redispatch schemes.
 - Mr Marco Pasquadibisceglie, ARERA, System Operation Task Force Chair
- **16:30-17:15** Group work on the impact of renewables on wholesale energy markets and market integration.
 - Ms Hélène Robaye, Engie / Mr Marco Pasquadibisceglie, ARERA, System Operation Task Force Chair



17:15-17:30 Wrap up of Day 1.

Ms Yvonne Finger, BNetzA / Mr Harald Proidl, E-Control, Course Directors

17:30-18:30 Reception drinks – For those who wish to join, we will host a small drinks reception at the CEER office – all participants and lecturers welcome!

- END FIRST DAY-

CEER Council of European Energy Regulators

COURSE PROGRAMME

Wednesday, 25 September 2019

09:00-16:15

SESSION 2 MARKET INTEGRATION OF RENEWABLES

09:00-10:00 Balancing and integration of renewables in the electricity market design.

- Balancing renewables in practice.
- Implementation of the Electricity Balancing Guideline, progress and plans for the implementation projects and platforms: TERRE, MARI, PICASSO, IGCC and FCR as part of the market design required for the integration of renewables.
- Mr Alexander Dusolt, ENTSO-E

Discussion/Q&A (15 min)

10:00-10:45 Case study on balancing and integration of renewables in the electricity market design from the Nordic region.

Mr Bernt Anders Hoff, Statnett

Discussion/Q&A (15 min)

10:45-11:00 Coffee break

11:00-12:00 Case study on network and market changes to facilitate increased levels of intermittent renewable generation – Ireland.

Mr Robert O'Rourke, CRU

Discussion/Q&A (15 min)

12:00-13:00 Lunch break - CEER office

- **13:00-14:00** The role of regulators to facilitate demand flexibility and create future-proof market design.
 - The role of regulators to accommodate ancillary services
 - The role of regulators to facilitate demand flexibility (including new products/ closing time on the market reflecting RES characteristics)
 - The role of regulators regarding reserve markets
 - Mr Veli-Pekka Saajo, Energiavirasto

Discussion/Q&A (15 min)

14:00-14:45 The challenges for regulators and DSOs linked to the integration of increasing shares of distributed renewables and all the accompanying phenomena like



(collective) self-consumption, net-metering and consequences for the design of retail tariffs scheme, including network and policy costs.

Mr Bjørnar Araberg Fladen, NVE

Discussion/Q&A (15 min)

- **14:45-15:15** Group work on the challenges for regulators and DSOs linked to the integration of increasing shares of distributed renewables and all the accompanying phenomena like (collective) self-consumption, net-metering and consequences for the design of retail tariffs scheme, including network and policy costs.
 - Mr Bjørnar Araberg Fladen, NVE
- **15:15-16:00** Renewable energy communities: Objectives and challenges linked to the emergence of this new market player in the Clean Energy Package.
 - Mr Jan Steinkohl, European Commission, DG ENER

Discussion/Q&A (15 min)

16:00-16:15 Course wrap-up.

Ms Yvonne Finger, BNetzA / Mr Harald Proidl, E-Control, Course Directors

- END SECOND DAY -