CEER Training on Network Incentive Regulation and Benchmarking

12-13 September 2017

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

COURSE PROGRAMME

Energy networks play a key role in transporting energy between energy producers and consumers, typically as a monopoly activity in an area, with their costs comprising a significant portion of consumers' bills. As a result, energy network revenues and tariffs are set by European energy regulators to help ensure value for money and security of supply. There is also a focus on incentivising a high quality network service.

In addition, there are now significant developments impacting on the network businesses. This includes increased levels of wind and solar generation, more integrated European wholesale markets, a move to increased demand-side flexibility and progress towards Smart Networks. Distribution System Operators are at the front-end of such changes, facilitated in many cases by the roll-out of Smart Meters.

Energy regulators must carefully evaluate the costs of regulated companies to determine a fair return on capital while ensuring that customers do not pay more than necessary. This allowed revenue (whose calculation methodology is determined nationally) is then recovered via network tariffs, themselves carefully designed to reflect the costs of serving network users. One of the regulatory tools that energy regulators can use to compare and determine the efficiency of their network design and in setting allowed revenues is benchmarking.

Energy regulators need expertise in setting allowed network revenues - including an appropriate return on investments/capital - and carrying out benchmarking. This tailored-made 2-day CEER training programme will help deliver energy regulators this expertise. The programme will cover the fundamental principles of setting allowed network revenues in electricity and gas. This will include the principles of network incentive regulation and specific relevant examples from countries across Europe. The programme will also focus on the benchmarking methodologies and practices of the electricity and gas networks in the context of the network tariff regulation.

Tuesday, 12 September 2017
10:30-17:45

WELCOME AND INTRODUCTION

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

- **Mr Alexander Lüdtke-Handjery, BNetzA**

SESSION 1 FUNDAMENTAL PRINCIPLES OF NETWORK REVENUE REVIEW

A set of fundamental principles informs the work of energy NRAs in tariff-setting: system reliability, cost efficiency, non-discrimination, transparency, stability and predictability. These principles inform the key building-blocks for NRAs in setting allowed network revenues - including appropriate operational costs, investment levels and return on capital - and in designing the associated network tariffs, as discussed in this Session. Gas and electricity networks face distinct sets of needs and challenges which must be taken into account when setting allowed network revenues. Meanwhile there are similarities and differences between regulating transmission and distribution networks (TSOs vs. DSOs).

10:45-11:45 Fundamental principles of setting allowed network revenues in electricity and gas.

a) Key principles of economic regulation.
b) Relationship between revenues, tariffs, building blocks of regulation.
c) Similarities and differences in setting allowed network revenues in gas and electricity.
d) Similarities and differences in setting allowed network revenues for TSOs and DSOs.

- **Mr Leonardo Meeus, FSR and Vlerick Business School**

Q&A

11:45-12:45 Some practical approaches in setting allowed network revenues (calculation of key parameters of RAB, WACC, optimization of CAPEX, auditing of OPEX, etc.). Practical exercise.

- **Mr Tom Maes, CREG**

Q&A

12:45-13:45 Lunch Break – CEER Office

SESSION 2 NETWORK INCENTIVE REGULATION – PRINCIPLES AND PRACTICES

Traditionally, cost-plus and rate-of-return models were widely used for tariff regulation purposes as the means for regulated companies to recover allowed revenues. However, these models were considered to lack incentives for regulated companies to minimise costs and, conversely, could lead to 'gold-plating' and inefficient investment choices. This led to the emergence of incentive-based regulatory approaches, including price controls, with penalty and reward tools linked to attempts to improve network performance. More recently, market trends (renewables, demand response, smart networks) are influencing the development of an output-based model, while the 3rd Package provisions and the electricity and gas target models provide the frame for our market design. With different roles and operational challenges, distribution networks are frequently the object of innovations in regulatory oversight.

13:45-14:45 Principles of incentive regulation.

a) New challenges call for new regulation – smart networks, demand-side response, intermittent generation sources (renewables, distributed generation).
b) Incentivise network utilities to deliver improvements (on cost efficiency, service levels, investments and research/development/demonstration, etc.).
c) Similarities and differences in providing incentives for gas and electricity networks.
d) Similarities and differences in providing incentives for transmission and distribution networks.

- **Mr Mike Huggins, Frontier Economics**

Q&A

14:45-15:30 Group work: How incentives work in practice.

Discussion in small groups to apply learning from issues addressed during the previous session.

- **Mr Mike Huggins, Frontier Economics**

Q&A

15:30-15:45 Coffee break

15:45-17:30 National case studies in applying incentive tools.

a) Approach at AEEGSI regarding incentive regulation for innovation in electricity distribution networks with smart grids.
b) Approach at CRE regarding development of interconnector capacities at the transmission level.

- **Mr Samuele Larzeni, AEEGSI**
- **Mr Antoine Dereuddre, CRE**

Q&A

17:30-17:45 Wrap up of Day 1

- **Mr Alexander Lüdtke-Handjery, BNetzA**

17:45-18:45 Reception Drinks – all participants and lecturers are welcome to join.

- END FIRST DAY -

Wednesday, 13 September 2017
09:00-17:00

SESSION 3 INTERNATIONAL AND EUROPEAN BENCHMARKING PRACTICES

Benchmarking is a tool that can be applied by regulators for different purposes within network tariff regulation and incentive regulation. Benchmarking allows regulators to take into account differences in companies' efficiencies when setting company's specific productivity factors. Benchmarking can be carried out for both electricity and gas networks at transmission and distribution levels. This session aims at exchanging experiences and lessons learnt on different benchmarking exercises, covering international and national benchmarking for gas and electricity at transmission and distribution levels. It aims to provide participants with new input for their NRA benchmarking tasks. Scientific approaches and different methodologies will be presented together with national and international practical examples.

09:00-09:30 Rationale for determining efficiency of networks and the link between incentive regulation and benchmarking.

- **Mr Srini Parthasarathy, Oxera**

Q&A

09:30-10:45 Introduction to benchmarking approaches and overview of UK benchmarking practice.

a) A general framework for benchmarking analysis.
b) Benchmarking UK electricity distribution networks – the RIIO-ED1 case study.
   - Context and overview of models
   - Totex models
   - Disaggregated models
   - Regional Wage Adjustment
   - Smart Grid benefits
c) Conclusion.

- **Mr Matthew Roberts, Frontier Economics**

Q&A

10:45-11:00 Coffee break

11:00-12:00 Definitions, types and methods of benchmarking, using the example of the German electricity and gas DSO benchmarking exercise.

- **Mr Stefan Albrecht, BNetzA**

Q&A

12:00-13:00 Benchmarking practices in Europe – CEER pan-European gas TSO benchmarking study.

- **Mr Michiel Odijk, ACM**

Q&A

13:00-14:00 Lunch Break

14:00-14:45 Benchmarking practices in Europe - Case study of Finland on electricity DSO benchmarking.

- **Mr Matti Ilonen, EV**

Q&A

14:45-15:30 Benchmarking practices in Europe - Case study of the German gas TSO benchmarking.

- **Mr Urs Trinkner, Swiss Economics**

Q&A

15:30-15:45 Coffee break

15:45-16:45 Transnational cooperation in benchmarking, using the example of electricity TSOs – the CEER pan-European electricity TSO benchmarking project.

- **Mr Alexander Lüdtke-Handjery, BNetzA**

Q&A

16:45-17:00 Wrap-up of Day 2

- **Mr Alexander Lüdtke-Handjery, BNetzA**

- END SECOND DAY -