



EUI / RSCAS

Florence School of Regulation

**FSR Summer School
on
Regulation of Energy Utilities**

**TRAINING COURSE FOR
ENERGY REGULATORY INSTITUTIONS
& ENERGY COMPANIES**

General Programme

Florence, June 27th-July 1st 2011

Version 1.0

1. Course presentation

1.1 The Florence School of Regulation (FSR) in brief

The Florence School of Regulation (FSR) is a partnership between the European University Institute (EUI) / Robert Schuman Centre for Advanced Studies (RSCAS) and the Council of the European Energy Regulators (CEER), and it works closely with the European Commission.

The School aims at providing general introductory and specialist advanced training for staff of regulatory institutions and for officials in the utilities on regulatory policies, methods and procedures, at providing a forum for policy decision makers, regulators, business managers and researchers from different sectors and different countries to discuss regulatory concepts, practices and policies, disseminate best practices, anticipate new challenges and requirements, develop a common 'regulatory language' or 'regulatory culture' and norms of accountability and democratic legitimacy.

To know more about our activities please visit our web-site on <http://fsr.eui.eu>.

1.2 Objective of the course

The FSR Summer School on Regulation of Energy Utilities is designed to develop a sound knowledge of regulatory principles for professional regulators and staff of energy companies and for those who work in close cooperation with regulators or regulatory decisions, but also for those who may decide to become professional regulators.

The course builds on a consolidated experience: the basic course has been run by the FSR since 2004 and this is the third edition of this summer format. The course starts from basic introductory material but it also aims at covering the major subjects of energy regulation in depth.

The course also provides an opportunity to establish contacts between participants and with the instructors, most of whom are academics or members of regulatory bodies or energy companies.

1.3 Course governance

General supervision of the course from the FSR lies with Jean-Michel Glachant (Director FSR and Loyola de Palacio Chair of Energy and Regulation) and Stefano Bartolini (Director Robert Schuman Centre for Advanced Studies - RSCAS).

The Course Director is Carlos Batlle (IIT-Comillas).

The Programme Coordinator is Ernesto Bonafé (FSR - RSCAS).

1.4 Choice of location

The course is hosted in the premises of the European University Institute. The EUI provides an ideal environment for training activities. In fact, the Institute has very

beautiful and completely up-to-date equipped facilities and a very large library, both already used for its post-doctoral courses.



Badia Fiesolana's Cloister - EUI

The Schuman Centre provides a substantial support to the organisation of the course on a regular basis and a permanent reference point for regulators and companies, instructors and participants at a European level.

1.5 The course structure

The course will have the duration of 5 working days between June 27th and July 1st, 2011. There will be a morning and an afternoon session, most of them consisting in a presentation focused on the main principles of a particular key issue of energy utilities regulation followed in most cases by a real case example analysis (in which participants will be asked to work in groups in some occasions).

1.6 Registration

In principle everybody can apply to the Summer Course, but staff of energy regulatory institutions and sponsoring energy companies will of course get priority. We also try to restrict the number of participants from the same country or organization to increase the diversity of the group.

The application deadline is **Friday May 13th, 2011**. We will not consider applications after this deadline. You can only apply by filling the on-line application form <http://www.rscas.org/fsrform.asp>

The course fee is EUR 2800 and includes lunches at the EUI canteen, coffee breaks and one social dinner, but excludes accommodation. The penalty for cancelling the application is the full fee. By applying you therefore commit to pay the full fee, if you get selected.

2. Programme

The current programme highlights the topics that will be presented during the residential week in Florence, and a draft list of speakers.

The language of the course is English. It is assumed that each regulatory institution and company sending participants to the course will verify internally that their level of English is adequate to follow the course properly.

2.1 Monday, June 27th

Day 1	
8:30-9:00	Registration and welcome
9:00-10:30	Theory and principles of regulation. Models of regulation Pippo Ranci (FSR)
10:30-11:00	Coffee break
11:00-12:30	Restructuring of the energy power industry. Basic policies and features in Europe and in other contexts Jacques de Jong (Clingendael Institute, The Netherlands)
12:30-14:00	Lunch
14:00-15:30	Traditional regulation of energy utilities. Regulation of monopolistic activities. Approaches to price control Rudi Hakvoort (Delft University, The Netherlands)
15:30-16:00	Coffee break
16:00-17:30	Case example on regulation of electricity distribution (quality of service) Rudi Hakvoort (Delft University, The Netherlands)
17:45-18:30	Welcome cocktail <i>nella loggia della Badia Fiesolana</i>

2.2 Tuesday, June 28th

Day 2	
9:00-10:30	Regulation of competitive activities Alberto Pototschnig (ACER)
10:30-11:00	Coffee break
11:00-12:30	Wholesale market and power exchanges Alberto Pototschnig
12:30-14:00	Lunch
14:00-15:30	Price Coupling of Regions-PCR Jean-François Conil-Lacoste (EuroPEX)
15:30-16:00	Coffee break
16:00-17:30	The electricity transmission and distribution networks Goran Majstrović (Energy Institute Hrvoje Pozar, Croatia)

2.3 Wednesday, June 29th

Day 3	
9:00-10:30	Gas networks. Transmission, distribution, storage & LNG terminals Sergio Ascari (Senior Consultant, REF)
10:30-11:00	Coffee break
11:00-12:30	Case example on gas networks: the US gas system Jeff Makhholm (NERA)
12:30-14:00	Lunch
14:00-15:30	Gas markets Carlos Lapuerta (The Brattle Group)
15:30-16:00	Coffee break
16:00-17:30	Case example on gas markets Carlos Lapuerta
	Official dinner in Fiesole

2.4 Thursday, June 30th

Day 4	
9:00-10:30	RES support mechanisms analysis Carlos Batlle & Luiz Augusto Barroso (PSR inc.)
10:30-11:00	Coffee break
11:00-12:30	Environmental issues & renewable support mechanisms in energy systems Peter Sweatman (Climate Strategy)
12:30-14:00	Lunch
14:00-15:30	Retail energy markets Carlos Batlle
15:30-16:00	Coffee break
16:00-17:30	Case example on retail energy markets: US models Mark C. Christie (Virginia State Corporation Commission)

2.5 Friday, July 1st

Day 5	
9:00-10:30	Case example on energy markets: The UK market Stephen Thomas (University of Greenwich, UK)
10:30-11:00	Coffee break
11:00-12:30	Case example on energy markets: Market monitoring in US markets Mark C. Christie
12:30-14:00	Lunch
14:00-15:30	Case example on energy markets: The Brazilian electricity market Luiz Augusto Barroso
15:30-16:00	Closure

3. Speakers' short curricula

Pippo Ranci is professor of Economic Policy at the Università Cattolica in Milan and former director of the Florence School of Regulation at the European University Institute in Florence. He has been president of the Italian regulatory authority for electricity and gas (1996 – 2003), a co-founder and vice-president of the Council of European Energy Regulators (2000-2003), and often a consultant to the Italian government (1972-1993). His research interests are in regulation, industrial and energy policy. He has advised the “Sessa” project on energy (in the “Scientific Support to Policies” series) promoted by the European Commission and including about 30 European Universities plus a number of industrial stakeholders. He has also worked on nonprofit organisations, setting up the Italian partner in the Johns Hopkins Comparative Nonprofit Sector Project (1989-1994). He graduated at the Università Cattolica (Milano, 1961), followed advanced courses at Oxford (1964) and holds an MA from the University of Michigan (1965).

Jacques de Jong joined in 2003 CIEP as a senior fellow, after a distinguished career in government energy policy making. Since 1971 he has been working for the Dutch ministry of Economic Affairs, where he was involved in oil and international energy policy issues. In 1981 he was appointed as deputy director for electricity, with responsibility for nuclear energy and coal. He held several international positions as (vice-) chairman in EU- and OECD fora. During the 1990's he was account manager for the energy utility sector and heavily involved in the liberalisation process. In 1998 he was appointed as the first director of the Office for Energy Regulation (DTE). He was also co-founder of the Council of European Energy Regulators (CEER) and heavily involved in the Florence and Madrid Fora. Next to his career at CIEP, he will remain advisor for the Dutch government on energy policy issues. (Current) Projects. European gas and electricity markets and energy regulation, History of Dutch energy policies, the energy-environment-foreign policy equation, Training in energy issues.

Rudi Hakvoort holds a M.Sc. degree in Applied Physics (Delft University of Technology, The Netherlands), and a Ph.D. degree in Applied Physics (Delft University of Technology, The Netherlands). Mr. Hakvoort has in-depth knowledge and experience in the area of energy network regulation and market functioning. As an associate professor at the faculty Technology, Policy and Management of the Delft University of Technology, he currently studies the design and organisation of liberalised energy markets. From 1998 to 2005, Mr. Hakvoort directed the Market and Infrastructure department of the Dutch Office for Energy Regulation where he was responsible for network quality and capacity development, interconnection, congestion management, market design, and market surveillance, as well as for the decision about the NorNed-cable, the 700 MW DC link between the Netherlands and Norway. From 2000 to 2004, he served as Chairman of the Working Group on Congestion Management, a project of the Council of European Energy Regulators.

Alberto Pototschnig is a Partner and Deputy Chairman of Mercados Energy Markets International, an international consultancy company specialising in the energy sector, as well as an Adviser to the Director of the Florence School of Regulation. Alberto is an economist and econometrician by training with extensive experience in energy policy, regulation and market design issues, with a focus on European markets. After seven years in the consultancy business with London Economics, Alberto joined the Italian Energy Regulatory Authority in 1997. As the Director of electricity regulation, he was responsible for the design and implementation of technical and economic regulation for the electricity sector. In 2000 he was appointed CEO of the Italian Electricity Market Operator, and later joined the Italian Transmission System Operator (TSO). He joined Mercados EMI in 2006.

Goran Majstrovic is Head of Transmission and Distribution Department in Energy Institute Hrvoje Pozar, Zagreb, Croatia where he is working since 1998. His Institute was officially nominated support of Croatian Energy Regulatory Council for four years (2001–2004). Field of his interest is transmission system planning and analysis as well as electricity market design. He's been actively participating in many international projects, mainly in South East Europe. As an author or co-author he published 86 studies and more than 80 papers. He received his PhD in 2007 at Faculty of Electrical Engineering, University of Split where he received status of Scientific Associate in 2009.

Jean-François Conil-Lacoste is Powernext's CEO since its creation in July 2001. On September 2008, he was also named CEO of the newly Paris-based European power spot exchange EPEX Spot SE, resulting from the merger of Powernext and Germany's EEX spot markets. Moreover, Powernext launched a spot and futures gas organised market in November 2008. Additionally, Mr. Conil-Lacoste

is Vice-Chairman of the Board of Belpex, the Belgian Power Exchange since 2005. He is Europex's Chairman since 2009 and a member of CESR's Consultative Working Group (Committee of European Securities Regulators) from 2004 until 2009.

Mr. Conil-Lacoste graduated from ESSEC in 1976; he worked ten years at Louis-Dreyfus in Paris and Buenos-Aires as a commodity trader; in 1986, he joined stockbroker Ferri SA to manage their financial futures as well as fixed income and alternative asset management departments. In 1997, he was named CEO of Euronext Ltd and deputy head of Euronext group derivatives in London..

Sergio Ascari, born in 1958, graduated in Economics at the University of Pavia in 1982; M.Sc. (Econ.), University of York, 1985. From 1982 until 1994 he was research assistant, research director and lecturer in Energy and Environmental Economics at the Institute of Energy Economics at Bocconi University, Milan and at the University of Pavia. Between 1997 and 2006 he worked at Italian Regulatory Authority for Electricity where he was in charge of Gas Tariffs, Environmental Affairs and later of International Co-operation. He has worked extensively for the promotion and harmonisation of energy Regulation, notably in Czech Republic, Lithuania, Turkey, Ukraine. From 2007 to 2009 he was Gas Expert in the Regulatory Section of the Energy Community Secretariat in Vienna. Since January 2009 he is a Senior Consultant with REF (*Ricerche per l'economia e la finanza*), Milan, Italy and deals with several national and international research and assistance projects, mainly in the gas sector.

Jeff Makhholm specializes in the economics of regulated infrastructure industries in the energy (electricity, gas, and petroleum products), transportation (pipelines, railroads, and airports), water, and telecommunications sectors. He has directed projects on competition, pricing, financing, privatization, and industrial development for many utilities and other infrastructure businesses in the US and more than 20 other countries. In the US, Dr. Makhholm has directed cases regarding tariffs, cost of capital, regulation, planning, competition, and restructuring for regulated businesses in many state and federal regulatory jurisdictions. Beyond the US, he has assisted regulated industries, governments, and the World Bank with regulatory laws, proposed financing plans, and the pre-privatization restructuring of regulated businesses. Dr. Makhholm has provided expert testimony and reports on over 150 occasions for electricity companies, gas distributors, gas and oil pipeline companies, or regulatory bodies involved in administrative, civil, and international arbitration cases concerning competition and market power, tariff design, financing, and cost of capital. He participated in key hearings before the Federal Energy Regulatory Commission, which led to US gas and electricity industry restructuring. He has also testified on market and regulatory issues before the Supreme Court in Victoria, Australia and before the High Court and Parliament in New Zealand.

In addition, Dr. Makhholm participated in key gas industry reforms in Europe, where he directed three major restructuring projects. In Central and South America, he worked to reform and structure efficient and competitive gas industries. On behalf of the World Bank, Dr. Makhholm led the first group of Western economists to China to study and recommend reforms to that country's extensive gas industry. He has also been heavily involved in the restructuring, pricing, and privatization of the gas and pipeline industries in New Zealand, Australia, Russia, and a number of Asian countries.

Carlos Lapuerta analyzes regulatory reform in the electricity, natural gas, and telecommunications industry and is an expert on financial valuation in these industries. He has worked for the European Commission and the governments of several countries advising on the liberalization of the electricity, natural gas, or telecommunications industries, including the development of tariffs, policies towards entry and infrastructure expansion, and auctions. He has presented analyses of market power to government authorities in connection with mergers in the electricity, natural gas, and telecommunications industries. Mr. Lapuerta has estimated the value of businesses, contracts, and physical assets in these and other industries, and has provided expert testimony on valuation issues before courts and international arbitration tribunals.

Luiz Augusto Barroso has a BSc and Math and received in 2006 the PhD degree in Operations Research with focus on energy economics. He is a technical director at PSR, a global electricity and gas consultancy and research company in Brazil, where he has been providing consulting services and research on power systems economics, energy planning, policy, operation and supply adequacy through energy auctions. He has participated directly in the conceptual design and critical analysis of the Brazilian power sector model, including proposal of improvements on the regulatory framework and market conditions. He has been a lecturer on these subjects in Latin America, Europe and US/Canada. He is the author of about 60 papers in refereed journals and conference proceedings. He

has been an annual visiting professor of the Institute for Research in Technology (IIT) of the Comillas Pontifical University since 2007. He is an IEEE Senior Member, is the Brazilian representative at Cigre's C5 study committee and a member of the Council of Regulated Industries of Rio de Janeiro.

Peter Sweatman is the founder and Chief Executive of Climate Strategy & Partners, a strategic consultant in Clean Energy, Clean Technology, Energy Efficiency and Climate Change. For 5 years directly prior to this Peter was Managing Director responsible for Iberia and Latin America for Climate Change Capital, one of the world's leading specialist fund manager and advisors in the low carbon economy. Peter holds a Masters degree in Engineering and Management Studies from Cambridge University. In 1991, he joined JPMorgan in Corporate Finance where he spent 9 years responsible for client business in debt capital markets for Iberia and Latin America from London and then New York. In 2000, Peter became a social entrepreneur joining with other ex-bankers to found and run three NGOs: Charity Technology Trust (www.ctt.org), New Philanthropy Capital and Catalyst Climate Change Trust.

Mark C. Christie, born August 8, 1953, in Bluefield, West Virginia and raised in Welch, W. Va., Judge Christie was educated at Wake Forest University and the Georgetown University Law Center. He was elected to the State Corporation Commission by the General Assembly in 2004 and was re-elected to a second six-year term in 2010. In 2007, he was elected and served as president of the Organization of PJM States (OPSI), comprised of 13 states and the District of Columbia, which are in the PJM region. He served as president of the Mid-Atlantic Conference of Regulatory Commissioners (MACRUC) from 2009-10. He is on the adjunct faculties at the University of Virginia School of Law and at Virginia Commonwealth University. From 1997-2003, he was a member of the Virginia Board of Education serving as its president from 2002-2003, and was chief legal counsel and director of policy for the Governor of Virginia from 1996-98. Prior to government service, he was in the private practice of law. A former officer in the U.S. Marine Corps, he is married to Anita Barnhart, a teacher in Hanover County public schools.

Stephen Thomas is Professor of Energy Studies in the International Business and Economics Department of the University of Greenwich (UK). He is a researcher in energy policy with more than 30 years of experience. His work is international in scope and the main areas of research are on economics and policy towards nuclear power; liberalisation and privatisation of the electricity and gas industries; and trade policy on network energy industries.

In recent years, his research has included: an evaluation of the economics of nuclear power; an assessment of the impact of the marketisation of essential services on low-income consumers; an assessment of the European Commission's Directives aimed at opening the electricity sector in Europe to competition; an assessment of the South African government's attempts to develop a new design of nuclear power plant; a review of the corporate policies of the major European energy utilities; and a review of methods of funding nuclear power decommissioning liabilities.

Carlos Batlle (Ph.D.) Carlos Batlle is Associate Research Professor in the Institute for Research in Technology (IIT) of the Comillas Pontifical University in Madrid and currently Visiting Scholar at the Center for Energy and Environmental Policy Research (CEEPR) at the Massachusetts Institute of Technology (MIT). He has headed more than 20 research projects and has taken part in many others. He has worked and lectured extensively on operation, planning and risk management of electric generation and networks, and particularly on regulatory issues concerning electric power systems, with special focus on market design and regulation for wholesale and retail electricity markets. In this latter topic he has been a consultant for governments, international institutions, industrial associations, and utilities in more than 15 countries, with special focus on Latin American power systems. He has published more than 20 papers in national and international journals and conference proceedings. He is professor on Electric Power Systems Regulation and Electricity markets at the University Master's degree in the Electric Power Industry (Erasmus Mundus) of the Comillas and member of the Training Program for European Energy Regulators at the Florence School of Regulation within the European University in Florence.

**For info about the programme
please contact:**

**Ernesto Bonafé
FSR Coordinator**

**RSCAS - EUI
Tel: +390554685782
e-mail: Ernesto.Bonafe@eui.eu**

**For info about accommodation and
logistics please contact:**

FSR Conference Unit

**RSCAS - EUI
Tel: +39 055 4685 709/789/790
e-mail: fsr.conferences@eui.eu**