

WFER IV

WORLD FORUM ON ENERGY REGULATION

ATHENS • GREECE

OCTOBER 18-21, 2009

www.worldforumIV.info

Under the patronage of

H.E. the President of the Hellenic Republic
Mr Carolos Papoulias

The European Commissioner for Energy
Mr Andris Piebalgs



MONDAY 19 OCTOBER

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MONDAY 19 OCTOBER

PLENARY SESSION 1

TRACK A

Security and reliability of supply
through competitive
energy markets



FREDERICK BUTLER

President, National Association of Regulatory Utility Commissioners (NARUC), USA

Commissioner Frederick F. Butler was elected President of the National Association of Regulatory Utility Commissioners in November 2008. He was first appointed to the New Jersey BPU in 1999. He has served on several NARUC committees, including his chairmanship of the Ad Hoc Committee on Climate Change, and the International Relations and Water committees. As International Relations Committee Chair, President Butler was NARUC's representative on the Presidium of the Eastern European and Eurasian Regulatory Association (ERRA) and has consulted with energy ministries and regulatory bodies in Africa, Asia, and the Western Hemisphere as well as Europe.

He currently serves on the advisory board of the Michigan State University Institute of Public Utilities, the New Mexico State University Center for Public Utilities' Advisory Council and the advisory council to the University of Florida's Public Utilities Research Center.

Has received a Bachelor's degree in Modern Languages and Political Science from Villanova University, and earned a Master's degree in International Relations from the Johns Hopkins University School of Advanced International Studies.

ABSTRACT SUMMARY

Security and reliability of supply through competitive energy markets

Energy markets around the world are facing unprecedented opportunities and challenges: The global financial crisis has put a spotlight on the importance of well-functioning integrated markets and the ongoing debate regarding competitive/liberalized and vertically integrated systems. Financing for infrastructure improvement has been impacted by this crisis, both in developing and developed countries. As countries look to meet their own energy needs, many are also looking at their place in regional/integrated markets. Regulators play a critical role in the establishment of modern energy markets, requiring that they balance public interests (security and reliability of supply, climate change, affordability) with market design and performance goals.



ANDRIS PIEBALGS

European Union Commissioner for Energy

Mr Piebalgs took up the post of Energy Commissioner in November 2004. Since EU enlargement on 1st May 2004, when the Commissioners of the new Member States came into the European Commission, Mr Piebalgs was heading the Cabinet of Latvian Commissioner Mrs. Sandra Kalniete. Before joining the European Commission, Mr Piebalgs worked for almost a decade in diplomacy. He started his diplomatic career in 1995 when he became the ambassador of Latvia in Estonia. During five years – between 1998 and 2003 – Mr Piebalgs was the Ambassador of Latvia to the European Union, later Undersecretary of State for EU affairs at the Ministry of Foreign Affairs of Latvia.

Six years of his career were spent being active in Latvian politics. From 1990 to 1993 he was Minister of Education. In 1993 and 1994 he chaired the Budget and finance committee of the Parliament of Latvia (Saeima). In 1994, he became Finance minister of Latvia and held this post for two years.

Mr Piebalgs was born in Valmiera (Latvia) on 17th September 1957, and in 1980 obtained a degree in Physics from University of Latvia. During the eight years after his university studies he worked as a teacher, later Headmaster of the 1st Secondary School of Valmiera. His career in the education system continued when he started to work as Director of the Department in the Ministry of Education of Latvia. Mr Piebalgs is married and has three children.

ABSTRACT SUMMARY

A reflection on the state of European energy policy

Over the past years, the electricity and gas markets in the European Union have undergone considerable change. Liberalisation has freed the sector from its monopolistic straitjacket

and has supported innovation and market integration across Europe. The sector has also been set on the road to sustainable development with fixed targets for renewable energy and a long-term perspective for emission trading. Recently, security of supply has moved to the centre of the European debate and has triggered various initiatives in terms of new infrastructure and the improvement of the legal framework for crisis management and prevention. Many of these developments have been initiated or coordinated by the European Commission. To continue to ensure a competitive, sustainable and secure energy supply, the EU already now has to start developing a long-term strategy up to 2050.



PLUTARCHOS SAKELLARIS

Vice President, European Investment Bank (EIB)

Mr. Sakellaris is Vice President of the European Investment Bank (EIB). Prior to joining the EIB, Mr. Sakellaris held the positions of Chairman of the Council of Economic Advisers at the Hellenic Ministry of Economy and Finance and Professor in the Department of Economics of Athens University. He was the Greek representative at the Economic and Financial Committee of the European Union and acted as Deputy at the Eurogroup and ECOFIN Councils, as well as Alternate Governor for Greece at the World Bank. Mr. Sakellaris also served on the Board of Directors of the National Bank of Greece, the Hellenic Public Debt Management Agency, and the Institute for Economic and Industrial Research (IOBE). He taught for eleven years in the Department of Economics at the University of Maryland, USA and has also taught at the University of Ioannina (Greece), Central European University (Budapest), University of Munich and Yale University. Mr. Sakellaris completed his undergraduate studies at Brandeis University, U.S.A. (B.A. 1986) and his doctoral studies at Yale University, U.S.A. (Ph.D. 1992). He was born in Thessaloniki, Greece in 1964. He is married and has three children.

ABSTRACT SUMMARY

The European investment bank perspective on energy security and reliability challenges



DIDIER HOUSSIN

Director, Energy Markets and Security,
International Energy Agency (IEA)

Didier Houssin was appointed Director of the Office of Oil Markets and Emergency Preparedness at IEA in July, 2007. In September 2008, the Office was expanded and renamed to the Directorate of Energy Markets and Security. Since 2004, Mr. Houssin, was Managing Director of BRGM, the French Geological Survey where he had extensive management responsibilities over the 850-strong group. Prior to joining BRGM, Mr. Houssin was the former Director of Energy and Mineral Resources in the French Ministry of Economy between 1997 and 2004. In this capacity, he was the French delegate for numerous IEA activities, notably as Chairman of the Standing Group on Emergency Questions (SEQ). Also, from 1987 to 1990, he was seconded for three years to Total, where he dealt in particular with European energy matters. He also held several positions in the French Ministry of Industry dealing with financial and European affairs. Mr. Houssin graduated from the Ecole Nationale d'Administration and has a Masters in International Law. He also has Degrees in Philosophy from Université de Paris 1 - La Sorbonne and in Political Science from the Institut d'Etudes Politiques de Paris.

ABSTRACT SUMMARY

Addressing the dual challenges of climate change
and energy security - the IEA perspective

Energy security and climate change are the key challenges for the energy sector for the medium and longer term. The gas and electricity industry has a heavy investment cycle

ahead. If we want to meet the most ambitious climate change goals, we'll need to virtually de-carbonise the power generation mix. This at a time of great uncertainty in global markets following the financial crisis and the economic downturn. In the short term, the financial crisis is already having an impact in electricity sector investments, and thus can compound to those challenges. What we do today will have a great impact on the timing, adequacy, location and environmental footprint of those investments. The IEA's scenario analysis and technology outlook for 2030 (WEO 2008) and 2050 (ETP 2008) identifies the contribution of key technologies to address these challenges.



BRUNO LESCŒUR

Senior Executive Vice-President, EDF Group, France

Bruno Lescœur was born in 1953 and graduated in Engineering (Ecole Polytechnique, Paris), in Economics (Ecole Nationale de la Statistique et de l'Administration Economique) and in Political Science (Institut d'Etudes Politiques, Paris). He started his career at EDF in 1978 as an economist in the General Economic Studies department, responsible of the pricing policy. In 1990 in London, he negotiated and established EDF's position in the new organisation of the UK electricity supply industry. He was appointed Deputy Chief Financial Officer in 1993 in charge of treasury, financing and M&A. At the end of 1998, he became Chairman and CEO of London Electricity plc. Between 2002 and 2005, he was Director of EDF Generation and Trading, and dealt with the launch of the new nuclear reactor EPR in Flamanville. Then he was appointed Member of the EDF's Executive Committee, in charge of Industrial and Public Affairs. He negotiated among other things, the Joint-venture between EDF and Constellation for developing new nuclear power stations in the US. Since May 2008 he oversees EDF Group's Gas businesses. Bruno Lescœur has got the "National Order of Merit" Distinction. He's married and has three children.

ABSTRACT SUMMARY

Energy security and the global energy agenda.

Insights from the WEC assessment of energy policies and practices

The energy sector now has to integrate three global challenges: energy security, the environment and the social dimension. Energy policies have to be adapted to this new agenda. The World Energy Council has launched an Assessment of Energy Policies and Practices, the aim of which is to identify and share best practices on integrated energy policies. This Assessment reviews energy policies in terms of institutions, economic performance and energy security, environmental and social situations. The aim of the presentation is to provide an outlook of this WEC study with a focus on energy security and energy markets.

MONDAY 19 OCTOBER

PLENARY SESSION 2

TRACK B

Regulators' role
for a market response
to the reduction of CO₂ emissions



JOSEPH KELLIHER

Executive Vice President, Federal Regulatory Affairs for FPL Group,
former Chairman, FERC, USA

Joseph T. Kelliher is Executive Vice President – Federal Regulatory Affairs for FPL Group, Inc. In this role, he is responsible for managing federal regulatory matters for FPL Group and its principal subsidiaries, NextEra Energy Resources and Florida Power & Light Company. Mr. Kelliher served as Chairman of the Federal Energy Regulatory Commission (FERC) from 2005 to 2009. Among the highlights of his chairmanship was efficient implementation of the Energy Policy Act of 2005, the largest expansion in FERC regulatory authority since the 1930s. Mr. Kelliher has spent his entire professional career working on energy policy matters, serving in a variety of roles in both the public and private sectors. These include senior policy advisor to the Secretary of Energy, and majority counsel to the House Commerce Committee, as well as positions with private corporations, trade associations, and law firms. Mr. Kelliher earned a bachelor of science degree from Georgetown University, School of Foreign Service, and a juris doctor degree, magna cum laude, from The American University Washington College of Law.

ABSTRACT SUMMARY

Regulators' role for a market response to the reduction of CO₂ emissions

The panel will examine the role of regulators in responding to national and international commitments to reduce carbon emissions. There is a need for regulatory policy that balances sound energy and environmental policy. Such a balanced approach can secure significant carbon emissions while also assuring security of energy supplies at a reasonable cost. The panel will discuss the integration of environmental goals into energy policy; the elements of sound climate change policy; barriers to successful implementation carbon abatement options; the portfolio of policy options that can reduce carbon emissions at a reasonable cost; the economics of climate change policy; the role of industry in curbing climate change; and the relationship between climate change policy and competition policy.



MEGLENA KUNEVA

European Union Consumer Commissioner

Academic Background:

- M.A. in law from the University "St. Kliment Ohridski", Sofia, Bulgaria
- Post-graduate Programme in Georgetown University, Washington DC, US
- Specialisations in international relations and environment law in Oxford Center, London, UK and the Hague, Netherlands

Political career:

- 2007 – European Commissioner for Consumer Protection
- 2002-2006 – Minister for European Affairs and Chief Negotiator for Bulgaria's joining the EU
- 2002-2003 – Special Representative of the Republic of Bulgaria, Convention on the Future of EU
- 2001-2002 – Deputy Minister of Foreign Affairs and Chief Negotiator
- 2001 – Elected Member of the 39th and 40th National Assembly of the Republic of Bulgaria

Distinctions:

- 2008 received the "European of the year" award by newspaper "European Voice" and was elected "European Commissioner of the year" by "European Agenda"
- Order of Legion d'Honneur of France
- Order pro Merito Melitensi of Malta

ABSTRACT SUMMARY

The consumer dimension – key to the success of energy policy

Energy policy in all its different facets can ultimately only be successful if it attaches appropriate importance to the consumer dimension. This is true particularly where one does not

only have to consider the implications for consumers but where the consumers need to play a proactive role in the implementation. The creation of competitive markets and a shift to more sustainable consumption are the two prime examples for areas that require an active involvement of consumers but obviously also a framework enabling and encouraging it. How citizens consume energy at present and in the future will shape to a large extent regulatory policy in relation to CO₂ emissions. In its integrated approach to fighting climate change, the European Commission has actively engaged in informing Europeans about the issues and about the need to act. At the same time, it is necessary for European consumers to have access to information for sustainable consumption and to products that will help to reduce greenhouse gas emissions.



LARS JOSEFSSON

President and CEO of Vattenfall and President of Eurelectric

Lars G. Josefsson has been President and CEO of Vattenfall AB since August 2000. Mr Josefsson graduated in 1973 with a degree in technical physics from Chalmers Institute of Technology and entered his professional career in 1974 at Ericsson, where he held a number of executive appointments. In 1993, Lars G. Josefsson was appointed President of Schrack Telecom AG in Vienna and in 1997 President of Celsius AB.

Lars G. Josefsson is President of the Union of the Electricity Industry (Eurelectric), member of the supervisory board of the South African energy company Eskom Holdings Ltd, partner of Robert Bosch Industrietreuhand and member of the Supervisory Council of Robert Bosch GmbH as well as member of the UN Secretary-General's Advisory Group on Energy and Climate Change and Chairman of the German-Swedish Chamber of Commerce. Mr Josefsson is the holder of several patents in the field of radar technology.

ABSTRACT SUMMARY

Wise regulation can support market forces driving in the right direction

Our energy supply and our climate have come into conflict. We must resolve this: a challenge that is both massive and global. We must act now and stay focused for decades to come. We are in the very beginning of a combination of a green and an industrial revolution. Business is already beyond the point of no return. There is no real conflict between sound business decisions and a low-carbon future. There is a steering problem and unwise or unstable policies may add risks but the brave new world will be full of real opportunities. Wise regulation is needed to steer and support markets do develop in the right direction. The core issue is how investments are made. Electricity supply is a big part of the problem but also a centrepiece when it comes to the solution.



FINN DEHLBÆK

Deputy Director, Danish Energy Regulatory Authority (DERA)

Born 19 December 1955. Graduate in economics 1981. Since September 2005, Director of the Danish Energy Regulatory Authority. Before that, Finn Dehlbæk had a long career in the Danish Central Administration. Between 2001-2005, he was chief of the Secretariat of the Danish Minister of Economic and Business Affairs. From 1994-2001, he served as head of division in the Ministry of Economic Affairs.

ABSTRACT SUMMARY

The regulators' role in integrating non-market related environmental goals in energy markets

Around the world, there is an increasing focus on the creation of global economic sustainable development. Thus, a vast number of national environmental goals aim to create an environmental sustainable development. More specifically, there are many initiatives which

attempt to reduce emissions of greenhouse gases and to increase production of sustainable energy. These specific targets are probably best achieved by using market-oriented instruments such as the EU ETS and subsidies. However, in order to fully cope with the environmental challenge, it seems imperative that the entire energy market supports sustainable development. Energy regulators' main task is to secure consumers reasonable energy prices. However, energy regulators can also play a crucial role in the creation of a sustainable development by e.g. improving the economic incentives to use new energy efficiency technologies such as smart meters and smart grids. Furthermore, improved consumer awareness of energy prices and "green energy" and a higher security of energy supply through increased competition and a better utilisation of transmission lines will contribute.



WALT PATTERSON

Associate Fellow in the Energy, Environment and Development Programme at Chatham House in London and Visiting Fellow at the University of Sussex, UK

Walt Patterson is Associate Fellow in the Energy, Environment and Development Programme at Chatham House in London, UK, and a Visiting Fellow at the University of Sussex.

He is author of *Keeping The Lights On: Towards Sustainable Electricity* (Chatham House/Earthscan 2007), his thirteenth book, and hundreds of other publications, on nuclear power, coal technology, renewable energy, energy systems, energy policy and electricity.

His current project for CH and the Sussex Energy Group is called 'Managing Energy: for climate and security'.

Walt Patterson On Energy, is an online archive of his writing since 1970.

ABSTRACT SUMMARY

Managing energy wrong: and what regulators can do about it

Energy use is a process in technology. Fuels and electricity are useless without technology. Energy policy should focus not on commodity fuels and electricity but on user-technology and infrastructure, especially buildings. Key energy business should be based not on short-term batch transactions but on long-term investments, to improve performance and reduce waste. Regulators should take the lead, educate governments and companies, and change the ground-rules, to make energy business sustainable.

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CONCURRENT SESSIONS

TRACK A - SESSION 1

Market conditions
in developed countries
that attract infrastructure investments



ALESSANDRO ORTIS

President, Regulatory Authority for Electricity and Gas (AEEG), Italy

Alessandro Ortis has been President of the Italian Regulatory Authority for Electricity and Gas since December 2003. He is also Vice President of CEER and President of MEDREG.

He has a degree in nuclear engineering from "Politecnico di Milano" University and is a graduate of "Bocconi" University's Business School.

He has held top management positions within state-owned companies and in the private sector.

He served as Vice President of ENEL, President of EURELECTRIC, Chairman of the IEA's Group of Experts for electricity.

More recently, he served as Director General for Energy at the Italian Ministry for Productive Activities.

ABSTRACT SUMMARY

Market conditions in developed countries that attract infrastructure investment

Infrastructure investments are not only a vital element to contribute to sustainable development and to promote energy system adequacy and security; they are also crucial for responding to the challenges of competitiveness, efficiency, affordability and innovation of energy sector services, for the benefit of consumers. Furthermore, infrastructure investments in the energy sector play a role in terms of contribution to the recovery of the economy in the present international crisis and are necessary to allow the markets to work when the present critical situation is overcome. In liberalised markets, where essential facilities are regulated, regulators play a central role in providing the right incentives and rules to promote investments through different methodologies. Independent regulators and clear, reliable, transparent regulatory and legislative frameworks shall provide the necessary stability of rules and flexibility of approaches needed to support investors' confidence and priorities.

Investments in cross-border interconnections, internal grids, gas storage and LNG chains are key pillars for secure and reliable supply, efficient competition, impact on prices, allowing also the development of market liquidity. The complexity of international and regional investment projects calls also for harmonisation of rules, coordination of multiple stakeholders, collaboration, coordination, cooperation among regulators, facilitating, where possible, innovation, market approaches and market integration.



EDVALDO ALVES DE SANTANA

Director, Brazilian Electricity Regulatory Agency (ANEEL)

Economist and Engineer.

Doctorate in production engineering.

Worked at Eletrosul from 1975 to 1992.

Full Professor at the Federal University of Santa Catarina, where he has lectured since 1982.

Currently Director of ANEEL, for which he was previously superintendent for more than 5 years.

ABSTRACT SUMMARY

Power supply assurance changes in the wholesale markets

- General Characteristics of the Electricity Industry
- Basic Premises of the Power Sector Restructuring
- Fundamental Assumptions
- How Transmission should be treated
- Typical cases of some Designs
- Commercialization via bilateral contracts
- Conditions for a good model
- Markets and stimulus for expansion
- Main regulatory issues



GRAEME STEELE

Chairman of the Board, ENTSO-E

Graeme Steele has over 20 years experience in the energy industry with National Grid in the UK. Currently, he manages a team in National Grid's transmission business which is responsible for National Grid's interface with EU energy policy development and the operation of the GB/France electricity interconnector.

Graeme is the Chairman of the Board of ENTSO-E, the new European Network of Transmission System Operators for Electricity which the EU TSOs established in July 2009 ahead of the full implementation of the 3rd European Union Energy Package. He sits on the board of Gas Infrastructure Europe (GIE) and is a Vice President of Gas Transmission Europe (GTE).

Prior to his current role, Graeme held a variety of positions in National Grid's commercial and regulatory departments, and was National Grid's Regulation Manager in the 2000 Transmission Price Control Review. He also led National Grid's telecoms infrastructure business in its start up phase.

ABSTRACT SUMMARY

Infrastructure development in the European Union

As recently pointed out by European policy-makers, ensuring development of transmission grid infrastructure is of great importance for Europe to meet its competitiveness and environmental objectives. Legislation such as the 3rd energy package and the directive on promotion of the use of energy from renewable sources, as well as initiatives such as the 2nd Strategic Energy Review and the Green Paper towards a Secure, Sustainable and Competitive European Energy Network all highlight the pressing need for infrastructure development. More recently the possibility of a European "Supergrid" has been discussed. This presentation will explain the steps which have been taken to enable TSOs to deliver the infrastructure necessary to meet the needs of stakeholders, and highlight the obstacles to further progress in the development of well-functioning, sustainable and secure energy markets.



GARRY BROWN

Chairman, New York Public Service Commission, USA

Garry Brown is Chairman of the NYS Public Service Commission.

He has nearly 30 years of experience in the energy and electricity sectors.

Mr. Brown sits on the NARUC board and is chair of NARUC's Committee on Electricity. He serves on the NARUC-FERC Smart Grid Collaborative and the Advisory Council to the Board of Directors of EPRI.

Mr. Brown chairs the NYS Board on Electric Generation Siting and the Environment.

He sits on the NYS Energy Planning Board, the board of the NYS Energy Research and Development Authority, the NYS Environmental Board, and the Regional Greenhouse Gas Initiative board.

ABSTRACT SUMMARY

The war of rules and certainty

What is the more important consideration when attracting capital for investment in infrastructure – correct market rules or regulatory certainty? Fifteen years ago this question would not even have been asked. Today it is made relevant by the fact that New York's electric utility industry has for almost a decade included both rate-regulated monopoly transmission and distribution utilities and competitive-generation companies selling output into a competitive wholesale market or to other entities. Economically-sound market rules are an absolute necessity and it is sometimes necessary to modify such rules to better fit reality. Invariably, such changes lead to winners and losers and can create regulatory uncertainty. By contrast, regulatory certainty is a major reason why New York's monopoly transmission and distribution utilities were able to maintain access to the markets during the turbulent financial conditions in late 2008. Thus, an important consideration when modifying existing mar-

ket rules is the tradeoff between the benefits to the system of the change versus the extent to which it may be viewed by potential investors as indicative of a regulatory environment in which investment recovery rules are not constant.



STRATER CROWFOOT

CEO and Executive Director, Indian Oil and Gas, Canada

As CEO and Executive Director of Indian Oil and Gas Canada (IOGC), Strater Crowfoot exemplifies strong leadership and integrity, balancing both government and business interests to serve First Nations people. With over seven years at the helm, Mr. Crowfoot is bringing IOGC into the future based on sound management and pragmatism.

Mr. Crowfoot previously worked extensively with the National Energy Board of Canada and also chaired the Indian Taxation Advisory Board. He twice served as Head Chief of Siksika Nation. (Blackfoot)

Mr. Crowfoot holds a Master of Business Administration degree. He and his wife, Ellen, an Akwesasne Mohawk, have six children and three grandchildren.

ABSTRACT SUMMARY

Indian oil and gas Canada:

Facilitating industry investment and development on first Nation Lands

Among the Aboriginal peoples of Canada, First Nations are unique in that many have full rights to subsurface minerals under their lands. As part of the legal relationship between First Nations and the Canadian government, their oil and gas resources are managed on their behalf by Indian Oil and Gas Canada (IOGC), a federal government agency.

IOGC manages and regulates the oil and gas resources for over 300 First Nation lands, known as Indian reserves. First Nations are involved in the oil and gas development on their lands, co-approving all agreements and participating in negotiations.

Modern regulations that keep pace with both First Nation and industry needs are a crucial part of ensuring private sector investment. Having robust regimes and industry involvement are key elements of the Canadian government's Federal Framework for Aboriginal Economic Development, which recognizes the need to replace outdated regulations that impede investment and economic development.



ALEX PAPALEXOPOULOS

President and Founder, ECCO International, USA

Dr. Alex D. Papalexopoulos received the Electrical and Mechanical Engineering Diploma from the National Technical University of Athens, Greece and the M.S. and Ph.D. degrees in Electrical Engineering from the Georgia Institute of Technology, Atlanta Georgia. He is currently president and founder of ECCO International, a specialized Energy Consulting Company, that provides consulting and software services on electricity market design and system operations within and outside the U.S. to a wide range of clients such as Regulators, Governments, Utilities, and TSOs/ISOs. He has made substantial contributions in the areas of grid optimization and pricing, energy market design, and implementation of system applications. He has published numerous scientific papers and he is the 1992 recipient of PG&E's Wall of Fame Award, and the 1996 recipient of IEEE's PES Prize Paper Award. Dr. Papalexopoulos is a Fellow of IEEE.

ABSTRACT SUMMARY

**Competitive market models and infrastructure investments:
Lessons learned and a road map for the future**

The power industry is currently facing unprecedented challenges including sustainable development, security of supply, and climate change. As a result, it is undergoing fundamen-

tal changes that will shape the energy landscape for many years to come. An essential element in this transformation is the scope and nature of infrastructure investments that are required to support renewable resources, conservation plans, demand response, innovation and competitiveness in the energy sector. The competitive electric industry model now operating in many developed countries has shown that electric companies can operate more efficiently than before, but it has not delivered significantly greater benefits to consumers than the old model with respect to investments in infrastructure. The new competitive market models have yet to prove their ability to attract capital for long-term payback investments, or for investments that the industry might have to make in order to meet national security, fuel security or environmental requirements, without fixes that reintroduce elements of the old-style regulation. Policy makers should address these issues in order to bring about greater benefits to consumers. In this presentation, we'll examine the various operational market models and the incentives they provide to attract investment. We'll also analyze the factors, challenges and obstacles they face and offer a road map for the future.



PAVEL SHPILEVOY

Advisor to the Chairman, Federal Grid Company, Russia

Adviser to the Chairman Federal Grid Company.

Since 2007 he has been an active participant and one of the ideologists of infrastructure regulation reform, the Project Manager of new regulation system implementation in Electricity Distribution & Transmission Companies.

In 2006-2007 he worked as a vice-president in the private Infrastructure Investment Fund.

ABSTRACT SUMMARY

The progress in the regulatory reform in the Russian energy infrastructure sector

The Russian economy structural changes which took place in the nineties led to infrastructural lag. Electricity distribution capacity shortage in developing regions and cities became a real obstacle for their development. Grid operators became unable to provide reliably consumer energy supply and non-discriminatory access to the grids for new consumers. At the end of 2007 the Government set a guideline for involvement and effective usage of private capital in electric grids. The budget support was strictly limited. A goal to provide an adequate regulatory regime arose before the regulator. It was necessary to change cardinally an approach to the tariff formation in grids to attract investors to the sector and to provide an effective application of capital for consumer benefit. During 2008 new rules of the game were set up and realized a legal framework. As a basis, they adopted the British regulatory model and implemented the experience of East European colleagues. In 9 regions, this regulatory model has been in use since 2009. Nowadays the tariffs are set up for 3-year periods and adjusted according to macroeconomic and other uncontrollable factors. The regulatory asset basis and return on investment capital are determined according to market principles after consulting with experts from the investment community. Efficiency motivation to reduce operational costs are set up and detailed. The first results of the new regulatory system, the problems which companies faced and also further plans to provide a regulatory regime in energy infrastructure corresponding to the best international practice will be reviewed in the report.

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CONCURRENT SESSIONS

TRACK B - SESSION 2
Efficiency of CO₂ emission
reduction mechanisms



JOHN GULLIVER

Senior Partner, Pierce Atwood, USA

John Gulliver is a Senior Partner at Pierce Atwood, head of its International Practice Group and for ten years head of the Energy Group. He specializes in regulatory reform; regulatory organizations; energy sector restructuring; project development, finance and privatization; power pools and markets; cross-border trading; nuclear issues; and greenhouse gas issues and renewable resources. Mr. Gulliver has worked with regulators, government ministries, non-governmental institutions and private companies in many countries in Europe, Latin America, Africa, Mid-East and Asia, as well as the United States, on a broad range of energy sector matters. Mr. Gulliver is listed in The Best Lawyers in America and Law & Politics' New England Super Lawyers, and has achieved the highest professional rating from the Martindale-Hubbell Law Digest. He is a graduate of Yale University and Yale Law School.

ABSTRACT SUMMARY

Efficiency of CO₂ emission reduction mechanisms

This session brings together distinguished panelists to address market-based solutions for greenhouse gas reduction and the role of regulators in facilitating these goals. Panelists will comment on existing and emerging national, regional and global solutions, including the European Union ETS program; Australia's trading allowance legislation; potential U.S. national legislation; and related global developments. Panelists will comment on cap and trade efficiency verses other proposed systems, such as a carbon tax; the role of regulators in achieving national GHG reduction targets; integration of investments in renewable technologies with overall power networks; pricing and risk allocation with respect to renewable and intermittent resources; and the regulatory framework required to enable large scale introduction of non-carbon and low carbon emitting technologies. Panelists include regulators and other industry experts who are recognized global leaders in the intersection of climate change and energy regulation. This promises to be a highly topical, informative and lively session.



JOHN TAMBLYN

Chairman, Australian Energy Market Commission (AEMC)

Commissioner Tamblin was appointed inaugural AEMC Chairman in June 2005. His background in the regulation of public utility services includes the positions of Chairman of the Essential Services Commission (Victoria) and Regulator-General (Victoria). Prior to his appointment as Regulator-General, John held senior positions in the Australian Competition & Consumer Commission (ACCC), including adviser to the ACCC on structural reform and public utility regulation and First Assistant Commissioner responsible for fair trading and consumer protection. He was employed by the International Monetary Fund as adviser to the Government of Seychelles (1986-87). Prior to that appointment he held positions in the Commonwealth Treasury and Department of Finance. He holds a PhD in economics (UCLA); MSc (UCLA); MEc (ANU); BCom, Hon. (Melb).

ABSTRACT SUMMARY

The role of energy market design in promoting efficient emissions reductions

The presentation will discuss how the design of energy markets themselves can support or hinder the process of delivering emissions reductions at an efficient cost to society. It will draw on recent work completed by the Australian Energy Market Commission (AEMC) examining the need for change to market rules and regulation to accommodate an Emissions Trading Scheme ("ETS") and a "20% by 2020" renewable energy target. The overall efficiency of outcomes from market-based policy instruments, such as an ETS, can be compromised if related product markets do not operate efficiently. Where the product market is wholesale electricity or gas this is particularly significant because of the carbon-intensity of the

activity, and the role of policy and regulation in governing how these markets operate. The AEMC's analysis identified a number of potential stress points resulting from the integration into energy markets of an ETS and a 20% renewables target. Specifically, how transmission investment to connect remote generation is planned, priced and funded; the extent to which generators are faced with congestion-related transmission costs when they make investment decisions; and the extent to which regulated retail prices can be adjusted quickly to reflect carbon-related cost shocks. These insights are likely to have wider relevance to other electricity markets.



RICHARD MORGAN

Commissioner, Washington DC Public Service Commission, USA

Richard E. (Rick) Morgan began a second four-year term on the District of Columbia Public Service Commission in July 2007. Mr. Morgan serves as leader of the Task Force on Climate Policy of the National Association of Regulatory Utility Commissioners (NARUC). He is a member of NARUC's Energy Resources and Environment Committee, its Smart Grid Collaborative, and he serves on the Association's Board of Directors. Mr. Morgan currently serves as co-chair of the Electricity Committee of the Mid-Atlantic Conference of Regulatory Utility Commissioners (MACRUC) and has previously chaired the steering committee of the Mid-Atlantic Distributed Resources Initiative (MADRI). Before joining the PSC as a commissioner, he spent 12 years with the U.S. Environmental Protection Agency, where he focused on climate policy and emissions trading. Previously, Mr. Morgan spent five years on the staff of the Public Service Commission, where he helped to develop Commission policies on energy conservation and resource planning. During his more than 35 years in the field of energy policy and utilities, Mr. Morgan has authored numerous publications on electric power. He holds a Master of Public Policy degree from the University of Maryland and a B.A. in economics from Antioch College.

ABSTRACT SUMMARY

The role of utility regulators in U.S. climate policy

The prospect of a national climate policy poses both challenges and opportunities for U.S. utility regulators in the fifty States and the District of Columbia. Working through NARUC's Task Force on Climate Policy, State regulators have taken the initiative to educate ourselves about climate challenges and influence the development of a Federal climate policy. We have had considerable success in convincing members of Congress of the need to price carbon in a manner that minimizes adverse impacts on end-use consumers and regulated energy industries. Assuming that Congress adopts a cap and trade approach, NARUC advocates that any free emissions allowances for the electric sector be provided to regulated local distribution companies on behalf of consumers. NARUC supports Federal climate legislation that is economy-wide, limits price volatility, and includes incentives for the development of new technologies. Further, there is a growing recognition by State regulators that pricing carbon alone may not achieve affordable emissions reductions and that aggressive State programs will be needed in order to take advantage of cost-effective opportunities from clean energy resources such as energy efficiency.



RICHARD COWART

Director and Principal, The Regulatory Assistance Project (RAP),
former Chair, Vermont Public Service Board, USA

Richard Cowart is the Director of European Programs for the Regulatory Assistance Project, a nonprofit institute that has advised governments in more than 16 nations and 40 US states on energy and environmental policy. RAP is now working closely with the European Climate Foundation.

Richard served as Commissioner and Chair of the Vermont Public Service Board (PSB) for thirteen years. He was elected President of the New England Conference of Public Utility Commissioners, Chair of the NARUC Committee on Energy Resources and the Environment and Chair of the National Council on Competition and the Electric Industry. Recently, his work has focused on GHG reduction strategies for the power and natural gas sectors as an advisor to the cap-and-trade designers in California, the Northeastern US, and the US Congress.

Before his appointment to the Vermont PSB, Mr. Cowart was Assistant Professor and Director of the Program in Planning and Law at the University of California, Berkeley. He received his B.A. from Davidson College, and the J.D. and Master of City Planning degree with honors from the University of California, Berkeley.

ABSTRACT SUMMARY

Carbon caps and the power sector:

Why carbon revenues are more important than carbon prices

This presentation addresses the critical role of programmatic energy efficiency, renewable electricity standards, and related public policies as the essential “foundation stones” for a successful cap-and-trade regime, especially in liberalized wholesale power markets. Extensive modeling done for California’s GHG program and for the 10-state Regional Greenhouse Gas Initiative (RGGI) in the US Northeast, reveals that a carbon tax or cap-and-trade scheme relying on price alone is more expensive and less likely to succeed than a portfolio-based policy menu plus a carbon price signal. In addition, how governments spend carbon revenue is more important than the carbon price itself in financing the transition to a low-carbon power sector. The RGGI states are devoting as much as 75% of carbon auction revenues to targeted energy efficiency investments, which is lowering power costs, carbon credit costs, and consumer costs for the GHG program. These are important lessons for the US Congress, and for EU Member States as they implement carbon allowance auctions within the ETS.



JOS DELBEKE

Deputy Director General, DG Environment, European Commission

Born 1954, Belgium. Deputy Director-General of the European Commission’s DG Environment since 2008. He was very involved in negotiations on the package on climate change and energy in the EU Council and Parliament. Mr Delbeke has also been a key player in developing Europe’s International Climate Change strategy, its legislation on cars and fuels, the European Emissions Trading Scheme and legislation on air quality and emissions from big industrial installations. He joined the European Commission in 1986 and was very active on market-based instruments, cost-benefit analysis, and the new chemicals legislation REACH. For several years, he was the European Commission’s chief negotiator at the UNFCCC Conference of the Parties.

He holds a PhD in economics and has lectured at the University of Louvain in Belgium. In 1985, he worked temporarily for the International Monetary Fund in Washington.

ABSTRACT SUMMARY**The EU climate and energy package – Focus on the EU ETS**

The effort to reach the European Union's targets in the fight against climate change was shared out between sectors and Member States in the EU's Climate and Energy Package of 2008. The package contains a number of cross-sectoral targets and instruments as well as technology and product specific policies. The cornerstone is the improved and extended EU Emissions Trading System, which the EU would like to see grow –via a transatlantic carbon market– into an OECD-wide market by 2015. Due to the flexibility of this instrument, which allows it to act as a stabiliser over economic cycles, and the need for harmonised action at EU level to ensure a level playing field in the internal market, emissions trading is seen as the most appropriate instrument for industrial sectors, while taxation is more appropriate for the non-ETS sectors, where the onus is on the Member States to take action.

**ALBERTO POTOTSCHNIG**

Partner and Deputy Chairman, Mercados Energy Markets International SA

Alberto Pototschnig is a Partner and Deputy Chairman of Mercados – Energy Markets International, an international consulting firm focusing on the energy sector. From July 2007 to December 2008, he served as CEO of the Company. Mr Pototschnig is an economist and econometrician by training with twenty years of experience in the field of economic regulation, utility sector reform and market design, acquired in a variety of high level positions. He joined Mercados EMI in January 2006 from the Italian Transmission System Operator, where he had worked since 2000. Between 2000 and 2003 he was seconded to serve as CEO of the newly established Italian Electricity Market Operator, GME.

Between 1997 and 2000, Mr Pototschnig served with the Italian Electricity and Gas Regulatory Authority, initially as Director of Electricity Tariffs and later as Director of Electricity Regulation.

Mr. Pototschnig currently also acts as Advisor to the Director of the Florence School of Regulation, a joint initiative of the CEER – Council of European Energy Regulators and of the Robert Schuman Centre for Advanced Studies of the European University Institute in Florence.

ABSTRACT SUMMARY**The interrelationship amongst the three EU environmental policy objectives, their impact on competition within the power sector and security of supply**

The presentation will look at the relationship between the 2020 EU environmental objectives for renewable energy penetration, energy efficiency and limitation of greenhouse gas emissions (GHG). In particular, it will show how reaching the renewable penetration target and the energy efficiency target will significantly contribute to the achievement of the 20% GHG emission reduction target, to the extent that the EU Emission Trading Scheme (ETS) may end up playing only a marginal role (depending on the instruments used to promote renewables). Moreover, with reference to the power sector, it will analyse the way in which the renewable promotion instruments and the ETS may impact on the generation mix in the different EU Member States. Finally, the benefits which could be obtained from the “statistical transfer” opportunities provided by the new EU Renewables Directive and the implications for external energy dependence, and therefore the security of energy supply, in different Member States will be assessed.

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CONCURRENT SESSIONS

TRACK C - SESSION 3

Universal service
in a climate of increasing energy costs
and environmental constraints



HEINZ HILBRECHT

Director, DG Energy, European Commission

Heinz Hilbrecht is an economist and has over the last thirty years had numerous functions in the European Commission's energy and transport policy services in Brussels.

His current function is Director for "Security of Supply and Energy Markets". His directorate developed the Commission's Strategic Energy Reviews of January 2007 and November 2008 outlining a common approach for the energy policies of the European Union.

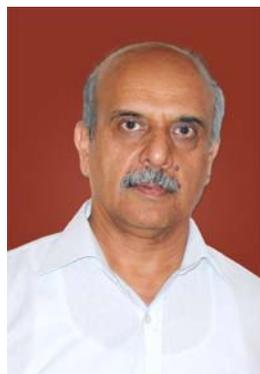
His service has been responsible for the recently adopted "Third Energy Package", that is the regulatory framework for the internal gas and electricity markets of the EU.

Recent work also includes a green paper for the development of trans-European energy infrastructures, a revision of the oil stocks directive, and a proposal for a new EU regulation on gas security of supply.

ABSTRACT SUMMARY

Universal service in a climate of increasing energy costs and environmental constraints

Ensuring clear rules, governing and, where necessary, clearly separating the monopolistic (network) elements and the competitive elements of the market allows externalities – including both environmental and social objectives – to be addressed in the most efficient way. This clearly captures the issue of affordability of energy. However, difficult tradeoffs are often necessary in the real world. This poses a number of important questions addressed in this panel: When is it appropriate to consider distributional impacts of market outcomes and when is this properly left to social policy? How should market interventions be constructed in a second best world? How can industry standards and codes be best adapted to wider policy goals? These are the questions that regulators must grapple with every day.



PRAMOD DEO

Chairman, Central Electricity Regulatory Commission (CERC), India

Pramod Deo, presently the Chairman of Central Electricity Regulatory Commission, is the longest serving (7 years) electricity regulator in India.

Rich in academics with post-graduate degree in Physics, Ph.D in Infrastructure Economics and post-doctoral research in Energy Policy and Economics, Dr. Deo has to his credit three books co-authored, on energy planning, energy management and regulatory practice.

Dr. Deo has 28 years of experience in the energy sector at both policy and project management levels.

Dr. Deo has worked with international institutions like UNEP Centre, Denmark and Asian Institute of Technology, Bangkok.

ABSTRACT SUMMARY

Provision of affordable electricity to all – Indian perspective

Currently 44% of the population or nearly 500 million people in India do not have access to electricity. Even those who have access to electricity face brownouts due to significant energy and peaking shortages. The Central Government aims to provide "Electricity to All" by 2012. To achieve this political goal an ambitious capacity addition plan has been prepared by the Centre in consultation with the States. The regulatory challenge in the Indian federal system is how to orchestrate the actions of more than 25 state regulatory commissions and state governments to attract private sector investment. The role of the latter is crucial because almost all state power utilities are government owned. The key to affordable electricity to all is replacing the command and control model by a multi buyer – multi seller one based on open access.



CATHERINE WADDAMS

Director of ESRC and Professor in Norwich Business School
at University of East Anglia, UK

Catherine Waddams (formerly Price) is Director of the interdisciplinary ESRC Centre for Competition Policy and Professor in Norwich Business School at the University of East Anglia, UK. Her research has focused on the energy sector and she has published extensively on the effects of privatisation, regulation and market opening, particularly their distributional impacts, both in the UK and overseas.

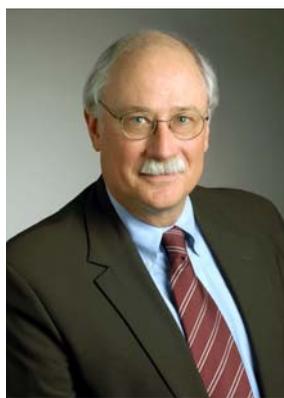
Her current research centres on the role of consumers in newly opened markets, examining what motivates consumers to switch supplier and assessing how effectively they capture the potential benefits.

Catherine is a part-time member of the UK Competition Commission

ABSTRACT SUMMARY

Competition and fairness in retail energy markets: Regulatory trade-off in the UK

The UK was one of the first countries to introduce effective retail energy choice, and around half of households have switched provider. Consequently some consumers have benefited from the available choices more than others, and the regulator is concerned that 'vulnerable' consumers are gaining less from the competitive markets than others. To remedy this perceived inequity, the regulator is introducing non-discrimination license conditions which will ensure a level playing field for consumers, but will also hamper competition. This presentation discusses the regulator's dilemma, which is exacerbated in an era of rising prices to reflect higher fuel and environmental costs. In this case the regulator has chosen to impose 'fairer' prices even though this will result in higher prices for all consumers, including the vulnerable consumers for whom the regulator has specific responsibilities. We can derive some characteristics of the regulator's preference for fairness over low prices in this context.



RONALD BINZ

Chairman, Colorado Public Utilities Commission, USA

Ronald Binz was appointed as Chairman of the Colorado Public Utilities Commission by Governor Bill Ritter in January 2007.

He has worked in public utility regulation for thirty years, as a regulator, consulting economist and consumer advocate. He has testified before the U.S. Congress sixteen times on energy and telecommunications legislation.

Mr. Binz serves on the NARUC Energy and Resources Committee and the International Affairs Committee.

He is the Vice President of the Western Conference of Public Service Commissioners.

He holds a B.A. in Philosophy from St. Louis University and an M.A. in Mathematics from the University of Colorado.

ABSTRACT SUMMARY

Balancing affordability and environmental values in energy rates: the Colorado experience

Chairman Binz will describe how the Colorado Public Utilities Commission attempts to control costs by using a competitive bidding regime for the acquisition of new resources. He will describe how the Colorado PUC acts to satisfy Colorado's Renewable Portfolio Standard of 20% by 2020 while keeping rate impacts below the rate increase cap of 2%. Finally, Chairman Binz will describe programs and rate structures targeted to low-income customers in Colorado.



ROBERT ICHORD

Chief, Energy and Infrastructure Bureau for Europe and Eurasia,
US Agency for International Development

Dr. Robert F. Ichord, Jr. is Chief of Energy and Infrastructure in the Bureau for Europe and Eurasia, US Agency for International Development. He plays a leading role in US Government policy and program development with respect to electric power restructuring and regulatory reform in Europe and Eurasia and issues related to energy security, supply diversification, nuclear safety and global climate change. He is the US Government Representative to the Athens Energy Community. Dr. Ichord was previously Chief of Energy and Natural Resources in the Asia, Near East and Europe Bureau. He holds a B.A. from Denison University in International Relations (1969); a M.A.L.D. in International Development from the Fletcher School of Law and Diplomacy at Tufts University (1971); and a Ph.D. in Political Science from the University of Hawaii (1975), where he was awarded a fellowship from the East-West Center Technology and Development Institute.

ABSTRACT SUMMARY

Social protection and electricity sector reform

Government policies on social protection for vulnerable and low income groups have important implications for electricity distribution and the overall reform of the energy sector. In the current financial environment, governments are especially constrained in their ability to fund social protection and low income energy assistance programs. Yet increases in energy costs and financing requirements for system modernization and efficiency improvement are creating increased pressures to rationalize residential tariffs to cover fully the costs of services to these customer groups. This presentation examines the roles and perspectives of governments, regulators, utilities and donors on this issue, examines several cases in Southeast Europe and Black Sea region, discusses best practices and lessons learned, and presents a proposed agenda to deal with this critical political, economic, and social issue.



MARIA TERESA COSTA CAMPI

President, ARIAE and President, National Energy Commission (CNE),
Spain

Maria Teresa Costa Campi (Madrid 1951), received her B.S. and Ph.D. Economics (Cum Laude) from the University of Barcelona. She began her teaching career as Assistant Professor with the Department of Economic Structure. In 1987, she became Department Chair in Applied Economics (Spanish Economics) with the School of Economics at the University of Barcelona. She divided her time between teaching responsibilities and consultancy to prestigious international institutions such as the Organization for Economic Cooperation and Development (OECD), the European Commission and the Development Inter-American Bank (IDB). Among the various positions she has held during her extensive professional trajectory, some especially noteworthy posts have been Secretary of Industry and Energy with the Government of Catalonia and Vice President of the Catalan Energy Institute (ICAEN). Since June 2005, she has been working as President of the Spanish Energy Regulatory Commission (CNE) and President of the Iberoamerican Regulatory Energy Association (ARIAE).

ABSTRACT SUMMARY

Regulatory experiences across Iberoamerica

Energy supply is considered an essential service for the community, being a relevant input for the economic activity in general, which affects productive sectors costs and, consequently, price formation and inflation. Although electricity is crucial for the social and economic development of all countries, the universal service concept is still a goal to achieve for many of them in which accessibility, affordability and sustainability raise a regulatory challenge.

In a new climate of increasing energy costs and environmental constrain, citizens are calling on regulators to play a role in promoting a proper expansion of networks and cost-reflected energy prices while protecting customers rights and combating climate change. Different regulatory experiences across "Iberoamerica" and, in particular, how ARIAE energy regulators face this challenge will be addressed in this presentation.

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CONCURRENT SESSIONS

TRACK A - SESSION 4
Gas market regulation:
the role of LNG



DENNIS PANTIN

Professor at the University of West Indies in St. Augustine, Trinidad and Tobago

Dennis Pantin is Professor of Economics, UWI. St. Augustine and also Coordinator of the Sustainable Economic Development Unit (SEDU) based within this Department and is its immediate past Head of Department.

Professor Pantin also has served as the Chairman of the Regulated Industries Commission (RIC) of Trinidad and Tobago and the Organisation of Caribbean Utility Regulators (OCCUR). He has been consultant to a range of regional and international organizations including UNDP, UNCTAD, DFID, USAID, OAS; the Environment Management Authority of Trinidad and Tobago, the Private Sector organization of Jamaica (PSO)), Ministry of Land and the Environment (Jamaica) and the CARICOM Secretariat.

ABSTRACT SUMMARY

Gas market regulation: the role of LNG

Security and reliability of LNG supply needs to be addressed from the perspective of both producing and consuming countries. The common trend being investors at producing and consuming ends (many times the same actors). There are four dimensions of LNG security which need to be addressed within this overall framework.

First, is physical security of supply beginning with the adequacy of gas reserves over the lifetime of the LNG facilities.

Second, are derivative issues of safety systems in the collection, liquefaction, storage, marine transport and finally regasification and distribution. (An accident in any one LNG plant can have a similar impact as Three Mile island had on the nuclear energy industry).

Third, is the question of the financial requirements for supply security including the costs throughout the production chain.

Finally, there is the concern with economic - as opposed to financial security- in terms of the relative returns and economic rents which accrue to the producer countries – including from netback pricing and spot trading - and the issue of equity ownership along the value chain as a dimension of security of supply.



FRANCISCO DE LA FLOR

President, GLE, Director of Regulation, ENAGAS, SA

Francisco de la Flor has been working in the natural gas business since the mid eighties. He has worked in several companies holding various positions and having responsibilities for commercial, technical, procurement, international and planning issues. He is currently Director of Regulation in Enagas since 2002.

At the same time, he is a Professor for University postgraduates at the Global Development Learning Network, belonging to the World Bank, and lecturer in many other training courses and fora.

He holds university degrees in Chemical Engineering and in Economics Sciences and Business Management.

He has completed a Business Administration Executive Program at the IESE Business School and followed doctorate studies in Economics.

ABSTRACT SUMMARY

The role of LNG: Reliability & security of supply

With the changing regulatory environment in the area of LNG, it is necessary to demonstrate the increasing importance of LNG in the European energy framework, highlighting the important role of LNG in enhancing security and diversification of supply for Europe. For this purpose, the expertise of LNG terminal operators to inform and shape the business framework in a way which facilitates the development of the LNG market is crucial. Different existing business models should be taken into account and compatibility should prevail over

a “one-size-fits-all” approach. Moreover, in order to promote investments in LNG, it is vital that business incentives exist and that these reflect the level of the risk attached to the LNG investment. It is also important to ensure that LNG business specificities are taken into account in any future EU regulatory development and will promote increased recognition for LNG infrastructure activities at European level.



WILSON CROOK

Manager Global Gas Regulatory & Legislative Issues,
ExxonMobil Gas & Power Marketing Company

Wilson W. (“Dub”) Crook was named Manager for Global Gas Regulatory & Legislative Issues for the ExxonMobil Gas & Power Marketing Company in December, 1999. In his position, he is responsible for coordinating all of ExxonMobil’s regulatory and legislative activities in natural gas worldwide.

Mr. Crook joined Mobil Corporation in 1977. In August, 1994 he was named Director of Natural Gas for Latin America. Prior to that, Mr. Crook served as Vice President in Mobil Power. He also headed Mobil’s long-term gas sales program in the northeast United States. In addition, he has had extensive service in the international coal market focusing on sales throughout the Pacific Rim. Previously, Mr. Crook served as Senior Exploration Mineralogist for Mobil’s minerals division.

Mr. Crook holds both a Bachelor of Science degree from Southern Methodist University and a Master of Science degree from the University of Michigan in the field of mineralogy. He has authored over 100 professional papers in the subjects of mineralogy, geology, archeology, Soviet manned space exploration, and natural science.

ABSTRACT SUMMARY

Global regulatory trends enhancing security of supply

We are in an unprecedented period of change in the global gas industry. Almost 60 countries either have implemented, or are in the process of implementing some form of new gas legislation. And the activity is not confined to developing nations but ranges from mature to emerging markets. In general, there is an increasing legislative focus on ensuring Security of Supply, especially with regard to implementing new legislation which helps to promote interconnectivity and cross-border trade. Many of these pieces of legislation, such as the Hackberry Decision in the U.S. and Article 22 (now 35) in the EU Gas Directives, have specifically focused on promoting new LNG infrastructure. The legislative initiatives underway around the world today are enhancing cross-border trade thus facilitating a more global gas market. With more cross-border trade, either as pipeline gas or as LNG, comes increasing liquidity. The trend of reducing unit costs, especially in the LNG industry, is leading to supply basins being able to extend their reach into new markets, leading to greater gas-on-gas competition. This supply-side competition is offset somewhat by the ability of some new gas supplies to access multiple markets, creating increasing competition for gas supplies in all major consuming regions.



COLETTE LEWINER

Vice President and Global Leader of the Energy,
Utilities and Chemicals Global Sector Unit, Capgemini

University degrees:

1964 Entered Ecole Normale Supérieure (one of the leading French higher Education school).

1973 Ph.D thesis in Solid State Physics

University career from 1968 to 1979: Associate professor at Paris University.

Industrial Experience:

1979-1992: EDF (Research and Development, Director of the Fuel Procurement Department,

Executive Vice President Business Development and Sales - as the first woman in such position).
1992-1998: Chairman and CEO of SGN Eurisys, an Engineering and Industrial Services group focused on nuclear, subsidiary of Areva
1998-present: Vice President and Global Leader of the Energy, Utilities and Chemicals Global Sector Unit at Capgemini.

ABSTRACT SUMMARY

Incentives for the increased utilization and development of LNG infrastructures

Due to its declining domestic production, Europe is increasingly depending on natural gas imports and its pipeline imports face many uncertainties. Europe will need new LNG infrastructure to improve security of supply. A regulation incentivizing operators to invest in these infrastructures is thus needed. A Working Group entrusted by the French Energy regulator- CRE- was launched early 2008. I chaired this Group. The Working Group dealt with two main regulatory issues*:

- Long term visibility on the regulated assets tariffs
- Third Party Access exemption

This Group worked during the first half of 2008 (before the crisis) when LNG supply and demand was tense. With the present economic crisis the situation has changed.

However after the crisis, the market could face tensions again and without appropriate investments, the "wake-up" will be difficult.



RAÚL YUNTA HUETE

Gas Director, National Energy Commission (CNE), Spain

Mr. Raúl Yunta has a six year degree in Industrial Engineering by the Polytechnic University of Madrid, with an area of expertise in Automatic Regulation and Electronic. He also has completed three years of doctoral studies and numerous courses in power and management. Furthermore, he has a PDG degree in the IESE business school of the Navarra University.

Since 2003, he is the Gas Director at the Spanish National Energy Commission (CNE). He is also a member of the ERGEG Gas Working Group, Chair of its South Gas Regional Initiative and Vice-Chairman of the MEDREG AH Gas Group.

Before, he worked as a Deputy Director in the Electricity Division of the Spanish Regulator. He previously worked in the Spanish Electrical Transmission System Operator for eleven years, in operation and planning. Formerly, he developed research activities in the Instituto de Investigación Tecnológica of the Comillas Pontifical University.

He currently participates as a professor of different masters and degrees in diverse Universities and Institutions.

ABSTRACT SUMMARY

LNG: role and regulation in Europe

LNG is playing an increasing role in the natural gas market, supplying a significant part of the growing gas demand and filling the gap, in many countries, between declining indigenous production and their internal consumption. LNG provides the market with valuable properties: it is a source of diversification and as a consequence, improves the level of security of supply; it also promotes competition, facilitating the entry of new players, who have the opportunity to buy gas from a wide range of LNG suppliers, therefore increasing the diversification of sources. European Regulators (ERGEG) are actively involved in LNG issues in order to remove barriers preventing a competitive European gas market. With this aim, ERGEG has developed Guidelines of Good Third Party Access to LNG terminals, which establish common rules to guarantee transparent, non-discriminatory and appropriately homogeneous TPA to LNG regasification facilities. According to the Spanish experience, transparent and non-discriminatory access to LNG infrastructures (regulated TPA in our case) jointly, with available capacity make it possible for new players to participate, thus clearly improving the level of competition and the security of supply in our gas system.



HIROSHI HASHIMOTO

Natural Gas Analyst, International Energy Agency (IEA)

Hiroshi Hashimoto has been a natural gas analyst at the International Energy Agency (IEA) since May 2006.

Prior to his current assignment, Hiroshi worked for Tokyo Gas in Japan for 20 years, assuming positions in LNG procurement (strategy, project development, and contracting), business development (infrastructure development), the New York Representative Office (liaison and research), and the Sodegaura LNG receiving terminal (LNG receiving operation management).

Hiroshi was a member of the Japanese government delegation to the International Maritime Organization (IMO) in 1994-1996, representing Japan's gas industry in the negotiations of a multi-national convention.

ABSTRACT SUMMARY

The role of LNG in diversification

Diversification of sources is fundamental to long-term energy security, and especially important for gas which is:

- more difficult to store;
- often used as a backup to other energy sources while less often backed up;
- difficult to be replaced by alternative gas unless infrastructure is in place.

Diversification has been often achieved when a country's gas demand has been growing. The larger gas consumption is, the larger the requirement of diversification.

LNG has been often touted as an effective way to diversify supply sources, as one LNG terminal can receive LNG carriers from multiple sources, while a pipeline usually has only one source. Another advantage of LNG is that a receiving terminal is relatively easy to build within only one legal jurisdiction, whereas (long distance) pipelines can take years of planning and by crossing multiple borders also needs multiple permits before construction.

ROSS MCCRACKEN

Editor, Platts Energy Economist, UK

Ross McCracken joined Platts in 1999, managing the crude oil desk for Europe and Africa. He oversaw the introduction of new price assessments for the Mediterranean region and has been involved in the development of Platts price assessment methodology. He worked on upstream publications before moving to Platts Energy Economist in 2005. Ross is a member of the International Association for Energy Economics and contributes to their newsletters. He graduated with an MSC from the London School of Economics in 1994.

ABSTRACT SUMMARY

LNG spot trading and the implications for regulation

The global gas balance has changed, creating a buyers' market. Growth in spot LNG trading will provide competition for pipeline suppliers and offers the opportunity to move away from oil-linked gas prices to gas-to-gas competition. However, a lack of access to national markets and vested interests will hinder the process.

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CONCURRENT SESSIONS

TRACK B - SESSION 5

The integration
of energy efficiency investments
and demand-side management
in competitive markets



DAVID COEN

First Vice-President, National Association of Regulatory Utility Commissioners (NARUC), USA

First-Vice President Coen was appointed to the Vermont Public Service Board in June 1995 and subsequently reappointed for two successive terms.

He is an active NARUC member, as demonstrated through his participation on the Board of Directors, the Executive Committee and his service as a Vice Chairman of the Consumer Affairs Committee and Chairman of the National Regulatory Research Institute's Board of Directors.

Prior to joining the PSB, First Vice-President Coen served as President and CEO of Fishman's Department Stores.

He has held a wide variety of community leadership positions, including serving on and/or chairing the boards of directors of the Vermont Business Roundtable, the Porter Medical Center, and the Snelling Center for Government.

ABSTRACT SUMMARY

The integration of energy efficiency investments and the promotion of demand side management in competitive markets

It is only in the last two decades that utilities and utility commissions have begun to shift their focus from the supply side, with an emphasis on ensuring sufficient generation and transmission resources, to examining cost-effective demand-side measures (DSM). In response, energy efficiency and other demand-side programs sprang up, and we re-examined rate designs to see how price signals could reduce and reshape load. Importantly, we also developed protocols for measuring and verifying DSM savings so that utilities and system operators can take these savings into account in their planning efforts. DSM is now a generally accepted policy tool, but we can always improve our efforts. Our next steps are to ensure the most cost-effective delivery of efficiency programs, take down barriers to implementation and create innovative methods of demand-side reductions.



DIAN GRUENEICH

Commissioner, California Public Utilities Commission, USA

Commissioner Grueneich is a nationally recognized expert in energy and environmental issues. As the lead Commissioner on transmission issues at the California Public Utilities Commission, she has overseen the permitting of several significant transmission lines to deliver renewable energy to California load centers.

Commissioner Grueneich also serves as lead Commissioner on energy efficiency, overseeing energy efficiency programs delivered by the California investor-owned utilities. In 2008, she developed the California Long-Term Energy Efficiency Strategic Plan and received the Champion of Energy Efficiency Award by the American Council for an Energy-Efficient Economy for career-long leadership in the energy efficiency and utility regulation.

ABSTRACT SUMMARY

The future of energy efficiency and evaluation in California

Treating energy efficiency (EE) and other demand-side management (DSM) tools as supply-side equivalents within competitive markets requires rigorous evaluation, measurement and verification (EM&V) to ensure the savings delivered are real and can be relied upon by resource planners concerned with system reliability and the achievement of environmental goals, such as greenhouse gas reduction. Over the past decade, California has managed the United States' largest EM&V program, committing over \$100 million USD over 2006-2008 to evaluate the impact of utility investments in EE. California's experience to date with EM&V may offer foresight in considering potential challenges facing the integration of EE investments and DSM tools in competitive markets. As a recognised global leader in energy and demand reduction, California is striving for an EM&V model which embodies a reason-

able balance of accuracy and precision, and is scalable as the scope of EE program influences expand and jurisdictions new to EE look to initiate effective programs from the ground up.



CARLO CREA

Secretary General, Regulatory Authority for Electricity and Gas (AEEG), Italy

Carlo Crea is the Secretary General of the Italian Regulatory Authority for Electricity and Gas (AEEG).

He has a first class degree in Law and attended postgraduate courses in Civil and commercial law (1984), Advanced School of Public Administration (1989), International Cooperation, S.S.P.A. (1995) and Marketing Strategies, SDA Bocconi (2000).

Before AEEG, he was Head of International Affairs in GRTN (Italian independent electricity system operator); before that, he held management positions within EDISON S.p.A. (Director of European Institutional Relations and later on, Assistant to CEO), and within the Italian Ministry of Industry and Trade (Legal Adviser, Oil Division, and Executive for Foreign Affairs Division of General Directorate of Energy Sources).

ABSTRACT SUMMARY

Market liberalisation, end-use energy efficiency and regulation: the experience with tradable energy efficiency in Italy

Market liberalisation in European Union (EU) Countries led to new formal regulatory structures at the same time as concerns about energy security and climate change were growing. Market failures and other barriers to energy efficiency result in some cost-effective opportunities for end-use energy efficiency improvement not occurring within a free market. This causes economic inefficiency and results in higher energy costs, increased carbon emissions and greater risks to energy security. Intervention to address these issues in competitive energy supply markets is therefore justified, but should be transparent and equitable between different actors in the market. Energy efficiency obligations on energy companies coupled with a tradable white certificates market can achieve these goals. The presentation will outline the experience of such a policy package in Italy, focusing on the distinctive feature of the Italian scheme since its introduction in 2001 (e.g. policy target, key role of the market component of the scheme, strong additionality rule, wide sector coverage, regulated cost-recovery mechanism and non-compliance regime), on its outcomes since its inception in 2005 as well as on some key regulatory issues.



MAHER CHEBBO

Vice President, Utilities, Communications and Services Industries, SAP AG, Germany

Dr Maher Chebbo is Vice President of Utilities & Communication Industries for EMEA at SAP AG. Maher joined SAP 13 years ago where he co-founded its Corporate Venturing Unit.

Maher is member of the ETP "SmartGrids" Council, Chair of Demand and metering, contributor to ETP Wind, co-Chair of the ICT Consultation group for Energy Efficiency, member of the GB of REEEP and Board of ARMINES.

Before joining SAP, Maher led, at Cap Gemini, the Power and Communication industries for 6 years. Maher co-founded a Renewable Energy German startup. He holds an Engineering and PhD degrees in Energy from Mines de Paris.

ABSTRACT SUMMARY

Building another face of Europe 2020 with user centric smart grids

The greatest change for the electricity of the future with Smartgrids will be the paradigm shift focusing on end-customers who are empowered to consume smart and produce power

in a liberalised competitive European Market. It is expected by 2020 to reach energy efficiency targets following the implementation of technologies, processes and services driven towards the end-customer. For instance, 80% of Europe might change from traditional meters to smart meters enabling demand-side programs along the complete value chain from power production to supply. Energy efficiency driven programs in the European competitive market will be presented in a scalable approach providing step by step improvement of the customer behavior due to demand response programs. Vision, R&D and deployment programs currently planned in Europe until 2020 will be illustrated as well as the costs/benefits estimation. The presentation will be concluded by a list of top recommendations.



DAVID CROSSLEY

Managing Director, Energy Futures, Australia

David Crossley has 35 years experience in the energy sector, both in Australia and internationally, providing advice on sustainable energy policy and programs to governments, regulators, energy companies, industry associations and NGOs.

In 1996, David established his consultancy company Energy Futures Australia to provide consultancy services on sustainable energy policy and programs. Since then he has completed more than 50 projects and nearly 100 publications for a broad range of clients.

David's previous experience includes periods as:

- a university researcher pioneering social science research on energy policy and consumer energy conservation behaviour;
- a director of government energy planning;
- the senior executive responsible for demand side management and energy efficiency in a major electricity utility;
- an adviser responsible for planning and establishing a new government agency with a mandate to reduce greenhouse gas emissions.

ABSTRACT SUMMARY

Energy efficiency certificate trading in Australia

The world's first implemented energy efficiency certificate trading scheme commenced in January 2003 in the State of New South Wales in Australia. Consequently, there is now a considerable body of experience gained from the New South Wales scheme. More recently, other State Governments in Australia have implemented similar schemes, incorporating a range of variations. This presentation will briefly review each of these schemes and the learnings gained in Australia about the effectiveness of the energy efficiency certificate trading mechanism. The presentation will also briefly consider the issues involved in integrating energy efficiency certificate trading into broader emissions trading schemes. Note: Energy efficiency certificates are also known as "white certificates" and "white tags".



HARRY DHAUL

Founder and Director General,
Independent Power Producers Association (IPPAI), India

Harry Dhaul is the Founder and Director General of The Independent Power Producers Association of India (IPPAI), and has over 25 years experience in the power and infrastructure sectors. In 1994, shortly after the Government of India opened power generation to private players, Harry Dhaul recognised a requirement for a neutral forum for discussion and examination of policy and regulatory issues, to facilitate the growth and development of the power and infrastructure sectors through private sector participation.

Harry Dhaul has been an advisor to the Ministry of Power, the Planning Commission and other Regulatory bodies, and has participated in ministerial delegations for attracting investment in the Indian power sector. He was on the Planning Commission consultative committee for the 8th and 9th five year plan of the Central Electricity Authority. His opinion has been sought by leading news publications including BBC, CNN, Far Eastern Review, Wall Street Journal, The Economist, CNBC, NDTV, New York Times, Fortune Magazine, Business Standard, Economic Times, Bloomberg, India Today and many others.

ABSTRACT SUMMARY

Challenges of changing the mindsets of supply side utilities to demand side concepts in developing countries

Energy efficiency and demand-side management (DSM) are a challenge in developing countries. DSM can only be a focus once there is sufficient energy and until then motivational levels for implementing DSM are low. One of the challenges is that utilities have supply side mindsets and it is difficult for them to give due importance to DSM projects.

Financing of DSM projects, although currently a challenge in developing countries, needs to be a central focus. One potential framework can be the setting of domestic energy efficiency standards and trading of energy efficiency certificates as a domestic policy in a market as large as India.

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CONCURRENT SESSIONS

TRACK D - SESSION 6

Best practices for regulators



SMUNDA MOKOENA

CEO, National Energy Regulator of South Africa (NERSA),
former Chairperson of AFUR

Mr Mokoena, holds a BSc degree in Electrical Engineering (University of Natal, SA) and an MBA degree (De Montfort University, Leicester, UK). He held various positions in the Department of Minerals and Energy (DME), SA, as Chief Director responsible for health and safety on mines, Chief Director responsible for electricity, gas and coal as energy carriers as well as Deputy Director-General (DDG) of Energy. Whilst at the DME, Mr Mokoena served on the Boards of Directors of government companies (CEF and NECSA) and chaired the Electricity Distribution Industry Restructuring Committee. In November 2001, he was transferred to the Presidency as Deputy Director General to assist the Executive Head of the NEPAD Secretariat on NEPAD policies and programmes. In May 2004, he took over as the CEO of the National Electricity Regulator (NER). He played a leading role in the establishment of the National Energy Regulator (NERSA), on 1 October 2005. Mr Mokoena is the former Chairperson and is still an executive member of the African Forum for Utility Regulators (AFUR). He is also the executive member of the Regional Electricity Regulators Association (RERA) in the Southern African Development Community (SADC).

ABSTRACT SUMMARY

Best practices for regulators

Best practices for regulators have been well documented and adopted by regulators. However, as the regulated industries and the policies governing those entities develop regulatory practices have to be adapted to remain relevant.

The practices of regulators have to comply with certain universally-accepted principles. Five areas of regulator practices will be addressed in this session:

- Key elements of the regulatory process
- Transparency and the appeals mechanisms
- Scope and methods to assess the impact of regulatory decisions
- Regulation as an interactive process between regulators and stakeholders
- Regulatory benchmarking



ALISTAIR BUCHANAN

Chief Executive, Office of Gas and Electricity Markets (Ofgem), UK

Alistair Buchanan has been Chief Executive of Ofgem since 2003. He is also a member of the Business Energy Forum and the UK Energy Research Partnership (UKERP) and previously a Non Executive Director for the state-owned company Scottish Water. He was appointed CBE (Commander of the British Empire) in December 2008.

He began his career as a Chartered Accountant at KPMG and is a Fellow of the Institute of Chartered Accountants. Since then, his working career has been in the financial sector, but closely aligned to energy and utilities. An award winning analyst at Smith New Court (now Merrill Lynch) he was one of the central analysts to the privatisations of the electricity industry in the early 1990s. From 1995 to 2000, Alistair had a break from UK utilities, and was firstly Head of Research at BZW, and then moved to New York to run the American Utilities research team for Salomon Smith Barney. He returned to London with DLJ, where he was head of European Utilities, as he was at ABN Amro.

ABSTRACT SUMMARY

Best practice: reviewing the price controls after 20 years!

Ofgem is currently reviewing whether the RPI-X control formula is fit for purpose. It has been in use for twenty years and delivered improved network quality at lower prices. With the focus now firmly on renewables and carbon targets Ofgem consider it best practice to review the framework ... to last for the next twenty years.



JUAN JOSE ALBA RIOS

Director, Regulatory Affairs, Endesa

He joined Endesa in July 1997. He is currently in charge of regulatory affairs of Endesa for Spain and Portugal, where he is involved in all aspects of the business: design of the wholesale market, remuneration of distribution, tariffs and grid access charges, capacity payments, CO₂ allocations, etc., as well as European legislation.

Between 2000 and October 2004 he was the managing director of the European trading unit of Endesa, and was in charge of the Joint Venture with Morgan Stanley to develop this activity. Before 2000, he was in charge of regulatory affairs of the generation business at Endesa. Between 1986 and 1997 he was a researcher at the Instituto de Investigación Tecnológica (IIT), where he worked on regulation, modelling electricity markets and application of computer techniques to power systems and equipments.

Juan J. Alba is chairman of the WG Wholesale Markets and Trading in Eurelectric, as well as member of the board of directors of EFET (the European Federation of Energy Traders), and co-chairman of its WG on financial regulation. He has been a member of the Supervisory Boards of Powernext and Gielda Energii S.A. (Polish Power Exchange). He has a PhD in electrical engineering from Universidad Pontificia Comillas in Madrid.

ABSTRACT SUMMARY

Regulatory processes and stakeholder involvement in Europe and Latin America: The experience of Endesa

This talk will focus on two areas:

- a) Some examples of good and bad practice of regulation, taken from the experiences of Endesa in Spain and Latin America, focusing specially on the participation of stakeholders in the regulatory process, the interactions between competition law and regulation and the development of a healthy debate climate involving regulators, regulated companies and other stakeholders.
- b) The recently approved new European electricity and gas Directives aim at fostering the integration of the European energy markets. Some of the most important new elements are the creation of a coordination agency for the European regulators, ACER; association of European electricity and gas TSOs, and the introduction of a new process for the development of Europe-wide network codes and other energy market-related regulations and guidelines. The involvement of stakeholders in such a complex and multi-national process is key for the success of these changes. The talk will describe the first steps in stakeholder interaction in this new framework and will formulate some recommendations.



JULIA WELLER

Partner, Pierce Atwood LLP, USA

Julia Weller is a lawyer with the firm of Pierce Atwood LLC in Washington, D.C. and has worked in the field of energy regulation for 25 years. Ms. Weller's experience encompasses both the U.S. and countries in transition from state-ownership to private participation. In the energy sectors of South East Europe, the Commonwealth of Independent States and elsewhere, Ms. Weller has advised energy regulators on strengthening the role of the regulator, restructuring of the energy sector, design of electricity markets, privatization and the reform of regulatory frameworks to attract private investment.

ABSTRACT SUMMARY

Benchmarking energy regulators performance in an evolving environment

Regulators play a key role in ensuring successful transitions in energy policy - from centralized control of state-owned entities to competitive energy markets, from cost-based regulation to incentive and price cap regulation. Past benchmarking studies of regulatory competence have focused on key criteria such as independence, tariff making authority, minimum set of functions, accountability, and transparency. These criteria will be reviewed in the context of current developments, including the paradigm shift from fossil fuel to carbon-neutral energy generation and other regulatory challenges.



KONSTANTIN PETROV

Senior Consultant, KEMA Consulting

Dr. Konstantin Petrov has degrees in Electrical Engineering and Economics. In 1997, he completed his PhD at the Institute for Energy Economics of Cologne University.

Dr. Petrov joined KEMA Consulting in 1998. He has been involved in a number of projects related to technical and economic aspects of restructuring and regulation in Europe, Asia, Africa, and Central America (particularly in Germany, Belgium, Luxembourg, the Netherlands, Belarus, Bulgaria, Slovenia, South Korea, Thailand, Singapore, Tunisia, and several locations in Central America).

His major expertise is concentrated in the area of pricing and price regulation, market design, and market analysis and modelling.

Dr. Petrov is a member of the International Association of Energy Economists (IAEE) and chairs a working group on regulatory issues CIGRE (Study Committee 5).

ABSTRACT SUMMARY

Scope and methods to assess regulatory decisions

Conducting an assessment of the impacts of regulatory decisions should be an integral part of regulatory policy. This is not only necessary for transparency reasons but also because it will ensure the quality of the decision making process and overall policy development. The assessment of regulatory decision may cover a broad range of topics including impacts on competition, costs and benefits, environmental impacts, security of supply considerations, analysis of the anticipated risks etc. The tasks may vary depending on the specific circumstances. The presentation explains the scope and the methods used to assess the impact of regulatory decisions.



CAROLIN GEGINAT

Economist, Global Indicators and Analysis Group (GIADB), World Bank

Carolin Geginat, an economist, has been with the World Bank since 2003 and joined the Doing Business team in October 2006 to develop the new "Getting Electricity" indicator. She is the main author of the report on the new Doing Business indicator "Getting Electricity". Ms. Geginat holds a master's degree in economics from the University of Cologne and a post-graduate degree from the Institute of World Economics in Kiel. Before joining the Doing Business team, she worked on issues of debt and fiscal sustainability in low-income countries.

ABSTRACT SUMMARY

Doing business project of the World Bank – Piloting a new indicator on "Getting electricity"

Infrastructure services such as roads, water, electricity and telecommunications matter to private businesses. Where access and quality are poor, they can slow a company's growth. Managers responding to the World Bank's Enterprise Survey in 89 economies consider electricity the second biggest constraint to their business (after access to finance). Those in South Asia and Sub-Saharan Africa consider it the biggest constraint.

The Doing Business research project at the World Bank has 6 years of experience in providing objective measures of business regulations and their enforcement across 183 countries. Doing Business has developed a pilot indicator on the process a private business must go through to obtain an electricity connection. The indicator measures the procedures, time and cost associated with obtaining a new electricity connection for a small-to-medium sized company.

Data has been collected for distribution utilities in the main business cities of 140 countries. Consistent and objective data on connection services can both inform utilities, regulators and governments seeking to strengthen sector performance, and serve as input for research on links to economic outcomes.

TUESDAY 20 OCTOBER

KEYNOTE SESSION 1

TRACK A

Gas markets
developments and prospects



WALTER BOLTZ

Chairman, Austrian Energy Regulator, E-Control

Born in Vienna in 1953

He received a Degree in technical physics at the Vienna University of Technology.

He worked for several years in different positions with the EDP department of an Austrian banking group. For ten years, he's been head of the Austrian branch of an international consulting group dedicated especially to management and technology consulting. Prior to this, he's also been a Consultant for a major Austrian commercial bank in Central and Eastern Europe with a focus on the reorganisation of utilities, a Member of the executive board of a major German consultancy, as well as a Member of the executive board of Pricewaterhouse Coopers Management Consulting in charge of the "Energy and Utilities" section. In this position he intensively concerned himself with the liberalisation of the energy markets in Austria and Western Europe.

Since March 2001, he is Chairman of E-Control Ltd.

Different functions in international organisations as CEER Security of Supply Working Group Chair, CEER Single Energy Market Working Group Chair, CEER/ERGEG Gas Working Group Chair, CEER/ERGEG Vice President and AIB President.

ABSTRACT SUMMARY

Gas markets developments and prospects

A key prerequisite for an integrated European gas market is that those markets should be adequately connected, and that those interconnections are efficiently used. The resulting increase in cross-border trade will help moderate market power and, as markets become more competitive, consumers will benefit from competitive prices and services. The magnitude of congestion rents on the gas markets suggests that investment in cross-border capacity needs to be increased in order to achieve full market integration. Further market integration would require more focus on capacity allocation, the offering of services that facilitate efficient gas trade and guaranteeing that network tariffs (cost-plus or market-based) provide incentives for cross-border investments, in particular. Equally important is the implementation of non-discriminatory and transparent balancing rules that are aligned across national borders. The volumes traded at the gas hubs rose in the last years. For the time being, the physical volumes delivered at most of the hubs are still relatively low compared to the total consumption in their markets. If the EU is to continue to have a secure gas supply, major investments in pipelines, LNG and storage are needed over the next two decades.



CHARLES BOWEN

Executive Director, International Association of Oil & Gas Producers (OGP)

Charles Bowen joined OGP as Executive Director in February, 2005.

He came to the Association following a 30-year, international career with Total, where he held a wide range of senior managerial and technical positions. Just before joining OGP he was Total's Corporate Manager Environment, based in the company's Paris headquarters. There, he was responsible for coordinating environment policy and objectives for Total's world-wide operations.

Prior to that role Charles Bowen's career had been in the upstream division, and he has considerable knowledge of the Middle East, having worked for Total in the United Arab Emirates and Kuwait, where he set up and managed a new affiliate. He also has experience of the North Sea. He spent eight years in Aberdeen and, as Divisional Manager, was responsible for field operations, petroleum engineering, reservoir management and liaison with partners and government for the Alwyn North Field. He then took over corporate safety for the UK subsidiary, after the Piper Alpha disaster, before returning to Paris as upstream Vice President HSE.

ABSTRACT SUMMARY**European gas production potential – Conventional and Unconventional**

Global gas markets are expected to grow. Global gas resources - both conventional and unconventional - are estimated to be significant. Only about one quarter of the world's conventional gas resources are assumed to have been used up. Increased production of LNG is expected to supplement pipeline gas further and to make the gas market more global and more liquid. The potential of unconventional gas attracts more and more attention. The most prominent examples of unconventional gas are Arctic gas, tight gas, shale gas and coal-bed methane. Before the important remaining potential of gas can be fully tapped, however, a number of challenges need to be overcome. The presentation will provide an overview of the potential as well as the challenges.

**SIMON BLAKEY**

Senior Director, CERA

Simon Blakey is a leading authority on European energy. He founded the European natural gas and power research practices at CERA (Cambridge Energy Research Associates).

In 20 years of consulting assignments in the European energy business he has covered a broad range of strategic issues, mostly in the arena of natural gas.

Recently, he was the principal author of the CERA study *Securing the Future: Making Russian-European Gas Interdependence Work*.

He chairs CERA's *European Policy Forum*.

Before joining CERA, Mr. Blakey was Special Assistant to the Executive Director at the International Energy Agency in Paris.

He holds an MA from Cambridge University.

ABSTRACT SUMMARY**The growth of global trade in natural gas: redefining the competitive playing field**

In the past three years the LNG business has grown dramatically, forging economic linkages between formerly isolated regional markets. Market developments in one part of the world –such as the recent dramatic development of shale gas in North America– have knock-on effects for customers and for competition in any and every region where LNG has access to markets. This fundamental re-shaping of the world's gas market is set to continue. It has important consequences for the strategic orientation of energy businesses, for the regulatory approach to investment approvals, and for competition policy examination of relevant geographical markets.

**JACQUES DE JONG**

Senior Fellow, Clingendael International Energy Programme
and former Director, Office of Energy Regulation, Netherlands

Jacques de Jong has a long experience in government energy policy making. Born in The Hague in 1947 and after completing the international economics in Erasmus University Rotterdam, he joined the foreign economic relations department of the ministry of economic affairs in 1971. In 1980 Mr. de Jong became Deputy Director for Electricity, responsible for nuclear energy policies and coal. In that period, 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. He was instrumental in drafting Dutch policy on energy liberalisation and the Electricity and Gas Acts. In 1998 he was appointed director of the new Dutch Office for Energy Regulation, DTe. He was also active in European affairs, as a co-founder of the CEER (Council of European Energy Regulators) and as a co-chairman of its electricity working group, heavily involved in the Florence and Madrid Fora. Since January 2003, Mr. de Jong is continuing in non-executive functions and is as a Senior Fellow associated with the CIEP, the Clingendael International

Energy Program, in addition to a continuing advisory role to the Dutch government on energy policy issues. Since then, he has published a number of papers etc.

ABSTRACT SUMMARY

Regulating EU gas supply security in a global market

The presentation will discuss the necessary gas infrastructure developments in order to enhance external and internal EU gas supply security. These developments will demand major investments in extending cross-border gas infrastructures within the EU market and on the way towards that market. There is some doubt about the effectiveness of the EU's present regulatory arrangements and procedures (for instance compared to developments in the US market) and remedies to overcome these will be discussed.



SERGEI KOMLEV

**Head of Contract Structure and Price Formation Directorate,
Gazprom Export, Russia**

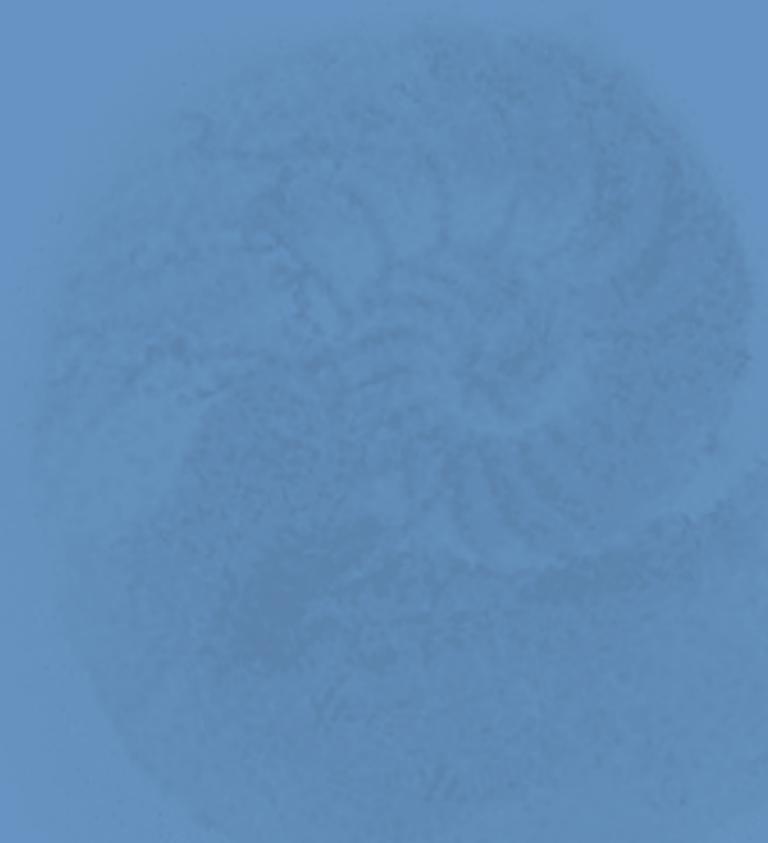
Sergei Komlev is Head of Directorate in Gazprom Export, trade arm of Russia's major gas company Gazprom. Mr. Komlev is in charge of contract structuring and corporate price policy formation. In his previous experience in the consulting and equity research business, he worked on a variety of energy assignments encompassing natural gas, electricity, oil, and financing matters both in the Russian market and internationally. Mr. Komlev has a PhD from the Institute of World Economy and International Relations in Moscow. Prior to joining Gazprom Export, he worked as director of the Moscow office of international energy consultant Pace Global Energy Services. Formerly, he was an Area Expert with the Economist Intelligence Unit and a Senior Analyst with the brokerage company United Financial Group.

TUESDAY 20 OCTOBER

PLENARY SESSION 3

TRACK C

Competitiveness and affordability





JOHN MOGG, LORD

President CEER, Chairman, Office of Gas and Electricity Markets, UK

Lord Mogg was appointed for a second five year term as the non-executive Chairman of Ofgem (the energy regulator for Great Britain) in October 2008. In the same year he was also elected for a second term as Chairman of the European Regulators Group for Electricity and Gas (ERGEG), and as the President of the Council of European Energy Regulators (CEER). From 1990 to 2003 he worked in the EU Commission initially for three years as Director General, Industry and thereafter for nearly a decade as Director General, Internal Market and Financial Services. His other positions include the Chairmanship of the Governors of the University of Brighton, England. Before 1990 Lord Mogg held a number of positions in the British Civil Service including the Deputy Head, European Secretariat in the Cabinet Office; and Principal Private Secretary to three Secretaries of State. He held other senior posts in the Department of Trade and Industry having spent 8 years in the private sector after graduating from the University of Birmingham.

Lord Mogg was knighted in 2004 and was awarded a peerage in 2008.

ABSTRACT SUMMARY

Competitiveness and affordability

A growing trend of fluctuating energy prices and the prospect of changing energy sources imply significant consequences and challenges for customers. This requires that consumer rights and interests are carefully monitored by regulators and governments alike. In addition, an international commitment to combat climate change and to promote a more efficient use of our limited energy resources will likely revolutionise the face of electricity and gas markets and demand a collective effort from all sides. Reconciling these issues whilst ensuring customers are treated fairly and have access to reasonable prices and services will be a major task in the years ahead. This plenary session aims to launch a consideration of how regulators can contribute to improving overall market competitiveness and the affordability of electricity and gas for consumers, keeping in mind the impact of the above issues both on markets and consumption patterns.



SERGEY NOVIKOV

Head Federal Tariff Service, Russia

Born on February 20, 1962.

In 1985, he graduated from the Moscow Physics and Technology Institute, in 1997 from the Institute of Top Administrators at the Academy of National Economy under the Government of the Russian Federation. He got Ph.D (engineering sciences) in 1988.

Since 2004, he is **Head of Federal Tariff Service**. Prior to this, he's been **First Deputy of Plenipotentiary Representative** of the President of the Russian Federation in the Volga Federal District, **Deputy Minister of Fuel and Energy**, **Chairman of the State Reserves Committee** of the Russian Federation, **Advisor to Minister**, Deputy Minister of Fuel and Energy of the Russian Federation, **Vice-Chairman for Finance and Economy** of East Siberian Oil and Gas OJSC (Vostsibneftgaz), Moscow, **Head of Corporate Finance Department** at Yukos Oil Company OJSC, Moscow, **Economist, managing economist, chief specialist** at intrabank processing center servicing Yukos Oil Company, Department of Customer Care at Promradtechbank Joint Stock Bank, Moscow, **Engineer, senior engineer, managing engineer** at Polus Scientific and Research Institute under the Ministry of Electronic Industry, Moscow.

ABSTRACT SUMMARY

Effectively regulated competitive markets leads to energy affordability

Competitiveness and Affordability lie at the core of energy security, thus these issues rise on the global energy agenda:

- diversification of energy supply and demand;
- transparency and predictability of energy markets including regulatory framework;
- seeking a new optimal balance between "invisible hand of market" and regulation.

The basic nature of challenges which all of us face have very much in common but dealing with them we should always take into account specific features of every particular situation and every country. In the case of Russia, we deal with two-levels (federal-regional) energy market which is regulated by public authorities in partnership with relevant self-governing bodies, sharing responsibility and powers in regulation area, a great number of market participants and progressing energy sector reform.

All the above items require creating flexible and long-term sustainable international cooperation aiming at better understanding of what each of our countries is doing or planning to achieve, exchanging best practices and experience, ensuring consistency or compatibility of national and supranational regulatory frameworks.



BJARNE PEDERSEN

Director of Operations, Consumers International

Bjarne Pedersen is the Director of Operations of Consumers International (CI) where he is responsible for managing the day-to-day operations of CI policy, media, campaigns and fundraising work as well as deputising for the CI DG as needed.

Academic qualifications include a MSc in Human Nutrition, as well as a Masters in International Environment Policy.

Recently, Bjarne Pedersen has been Head of CI delegations to the Commission on Sustainable Development, and the WHO World Health Assembly as well as being appointed by the UN to be the NGO representative to the Marrakech process.

Bjarne Pedersen has been working in the consumer movement for more than 10 years.

ABSTRACT SUMMARY

Energy – sustainable and fair access from a consumer point of view

The world consumer movement has long recognised that energy is of fundamental importance to public welfare and the well-being of consumers worldwide. The satisfaction of basic needs is one of the basic rights of consumers. Consumers International advocates for an integrated approach to providing consumers with access to energy in a sustainable and fair manner:

Access – development of network services and ensuring continuity

Sustainability – promotion of sustainable alternatives and energy efficiency

Choice and flexibility – development of off-grid systems; choice of payment methods

Fairness – equitable distribution of supply, fair price formulae

Customer care and support – protection through consumer contracts

Mediation and redress – complaint and dispute resolution systems

Special assistance – targeted help for poor consumers

Governance and consumer influence – representation and regulation



MARK GRENNING

Chief Advisor Energy, Rio Tinto
and Deputy Chair Energy Users Association, Australia

Rio Tinto is a large diversified mining and mineral processing company with operations concentrated in OECD countries. Mark provides internal advice on energy and climate strategy at a Rio Tinto corporate level and specific advice on energy supply arrangements for major operations on Australia: country-region, Europe and North America as well as new projects in developing countries. He is Deputy Chairman of the Energy Users Association of Australia and, since 2001, the major user representative on the Reliability Panel which sets the reliability standards for the Australian National Electricity Market.

ABSTRACT SUMMARY**The ugly, the bad and the good –
an alternative view on electricity liberalisation from a large industrial user**

The move to so-called competitive electricity markets over the last 15-20 years has not delivered on its promises, particularly regarding supply chain investment. How can these electricity markets now deliver the huge investment required over the next 15-20 years to achieve the long term policy objectives of security, affordability and decarbonisation?

Governments are struggling to give integrated energy and climate policy certainty to markets. Retail and wholesale price setting mechanisms require reform. Policy and price uncertainty has meant that large industrial users are deserting developed countries and the long term offtake agreements, required to maintain high load factors of existing, and finance new, base load capacity, are not happening. There are grand visions of new technology renewables, smart grids, smart meters, CCS, nuclear, etc. but who will pay for them? The options are users and Governments. What is the role of Government and regulators in these grand visions? Can regulators deliver on the required reform? Will Governments have to step in and will they be willing to? If so how?

Governments want to insulate residential consumers from the full impact of increased peak load demand coincident with higher renewables requirements. What will be the impact on base load large industrial users facing global market competition?

**JACQUELINE MINOR**

Director for Consumer Policy, DG Health & Consumers,
European Commission

A lawyer by training, Jacqueline Minor began her career in the European Institutions at the Court of Justice in 1984.

She moved to the Commission three years later to work on the recognition of diplomas and later enjoyed a second spell at the Court working as referendaire to the British judge.

Returning to the Commission in 1992, she spent 16 years in the Directorate-General responsible for the internal market, heading, successively, the units responsible for the regulated professions, policy co-ordination and resources.

A director since 2003, she has been responsible for the knowledge economy (including intellectual and industrial property regulation) and for horizontal policy development, participating for example on the Commission's Single Market Review in 2007.

On 1 April 2008, Jacqueline Minor became the Director for Consumer Policy.

ABSTRACT SUMMARY**Competition, consumers and affordable prices in liberalised energy markets**

Competition in energy markets is capable of delivering benefits in terms of prices and services for household consumers. Regulation has a role to play in making sure that consumers are able to participate actively in the market and exercise choice. Equally, it is imperative that regulators ensure that the results of competition among providers reach consumers.

Given that energy is an indispensable resource for the everyday life of citizens, it is a legitimate policy objective that competition not negatively affect consumer welfare and that energy prices remain affordable, in particular for disadvantaged social groups.

TUESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK A - SESSION 7

Incentives
for infrastructure investments
in developing countries



ISTVAN DOBOZI

Lead Energy Economist, World Bank

Istvan Dobozi is Lead Energy Economist at the World Bank, Energy Sector Management Assistance Program (ESMAP), in Washington. He joined the World Bank in 1992. Currently, he manages the Bank's energy portfolio and policy dialogue in Kazakhstan, Bulgaria, Slovakia and Hungary. At ESMAP, he is thematic leader for energy security and energy sector vulnerability assessments covering all regions of the world. Before joining the World Bank, he taught at Arizona State University, Colorado School of Mines, University of Denver and Hofstra University. He started his professional career in Hungary teaching at the University of Economics. He has Ph.D in Economics. He was Deputy Director of the Institute for World Economy of the Hungarian Academy of Sciences between 1986 and 1988. He has authored or co-authored 20 books including "Energy and Economic Reform in the Former Soviet Union" (McMillan Press) and published more than 100 articles in leading energy, natural resource and economic journals across the world. He is on the international editorial board of Resources Policy (USA) and Minerals and Energy (Sweden).

ABSTRACT SUMMARY

Incentives for infrastructure investments in developing countries

Widespread poverty in developing countries cannot be reduced significantly unless investments in energy infrastructure are made in such a way as to stimulate economic growth. Financing energy infrastructure is at the center of enhancing development and meeting the Millennium Development Goals. However, many developing countries have suffered a chronic lack of utility sector investment for decades. Now the unfolding global financial/economic crisis (fiscal space shrinking and private financing drying up or becoming more onerous) may disproportionately curtail infrastructure spending with a drastic knock-on effect for medium term growth. The crisis has thrown into sharper relief long-term regulatory impediments to closing energy infrastructure gaps in developing countries. The case for substantive regulatory reform has never been stronger. What reforms and incentives are needed to sustain or stimulate critical energy investment in the midst of a deep-seated crisis?



STEPHEN NYANTE ADU

Executive Secretary, Public Utilities Regulatory Commission (PURC)

Mr. Stephen Nyante Adu - Member and Executive Secretary. Mr. Adu holds an MBA in Finance.

He worked with 3i Plc in the UK as a Treasury Accountant for more than seven years before returning to his native country, Ghana, as part of the pioneering management team to set up the first equipment Leasing Company in Ghana.

He was the Acting General Manager and Financial Controller of Ghana Leasing Company Limited and worked briefly with Price Waterhouse as an Associate Consultant. Mr. Adu has been the Executive Secretary of the Commission since its inception in 1997. He served for two terms on the Executive Committee of the African Forum for Utility Regulators (AFUR)

ABSTRACT SUMMARY

Incentives for infrastructure development in a new regulatory environment - The Ghana experience

- a) Ghana suffered chronic lack of utility sector investment up to early 1990s when reform initiatives ushered in the Regulator, the PURC, in 1997.
- b) Expected investment did not materialize.
- c) PURC launched Transitional Plan to increase tariffs and improve service. Success of TP depended on obligations being met by all stakeholders in sinc. Outcome of TP; unsuccessful because while tariffs crept up, government investments promises not realised and quality of service did not improve.
- d) IPP prospects and challenges: Tariff remained reasonably high at average of 10 cents/kWh, IPPs could not compete with major generator(VRA) with cheap hydro.

- e) VRA also controlled transmission with no open access.
- f) 2006/7 energy crisis brought further IPP interest to plug generation gap. This time Government started moves to unbundle sector. Political stability also supported IPP interest.
- g) Further positive outlook: Push from PURC encouraged government to put about 50% of \$750m sovereign bond issue into infrastructure investment.
- h) IPP interest further supported by WAPP to interconnect and undertake cross border trading.
- i) Above incentives boosting infrastructure investment.



JASON CZYZ

Attorney and Manager, International Programs,
Troutman Sanders, USA

Jason Czyz is an Attorney and Consultant based in Washington, D.C. Mr. Czyz advises clients on international transactions, project finance and development, mergers & acquisitions, and commodity trading. In addition, Mr. Czyz advises on utility regulation and works with regulators and government officials in developing countries on encouraging investment in regulated industries, consumer issues/protection, and a variety of other issues related to energy and international business. Mr. Czyz serves on the International Program Committee of the WFER IV and as Vice-Chairman of the International Committee of the U.S. Energy Bar Association.

ABSTRACT SUMMARY

Regulators and infrastructure investors: A quest for harmony

Regulators perform a challenging function: balancing the need to provide for a sufficient rate of return in order to attract and retain investment while confronting consumer demands for energy at affordable prices. Some of the issues to be discussed in this presentation will be regulatory and country risk, domestic versus non-domestic investors, and some of the keys to attracting legitimate investment. The presentation will briefly discuss some of the current trends in energy infrastructure investment and how regulatory policies may influence investment decisions. The presentation will also discuss some of the hurdles regulators face in taking on a proactive approach to encouraging investment.



MARIA VAGLIASINDI

Lead Economist in the Energy Anchor of the World Bank

Maria is currently Lead Economist in the Energy Anchor of the World Bank. Before joining the Bank, Maria was Lead Economist for the Energy Business Group at the EBRD, leading policy dialogue initiatives on regulatory reforms in the power and telecom sectors. Previously, she was Lecturer in Economics at the University of Edinburgh. Maria holds an M.Phil. in Economics from the University of Oxford and a Ph.D. in Economics from the University of Warwick. She has been involved in several research and policy projects on infrastructure regulation and she is author of several publications in this area.

ABSTRACT SUMMARY

Revisiting standard policy recommendations for the market structure in the power sector: Evidence from developing countries

This presentation will share preliminary results of a Bank's research and policy project, sponsored by ESMAP and PPIAF, based on case studies and more systematic empirical analysis on about 20 developing countries on the links between alternative forms of powermarket structure and performance - including not only access and quality but also investment in generation and transmission. The analytical framework on which this project is based is expected to provide policy makers and regulators some guidance on the best suitable market structure to fit country characteristics (power size, income per capita, regulatory capac-

ity etc.) In addition, the project will shed new light on the regulatory instruments need to tackle the most relevant policy issues associated to each of the powermarket structures.



GÁBOR SZÖRÉNYI

Chair, Energy Regulators Regional Association (ERRA)

Gábor Szörényi graduated in 1971 from the Technical University of Budapest and started his business career at the Hungarian Power Companies (MVM). He spent 23 years there engaging in coordination of R&D, energy system planning, power plant investments, preparation of new market structure and privatisation, energy conservation, PR and related issues. In 1979, he received a doctorate degree from the Technical University of Budapest and in 1999 the degree of Master of Business Administration from the British Brunel University. Between 1992 and 1994 he was President of the Board of Directors at the Vértés Power Plant. In August 1994, Mr. Szörényi started to work as Deputy Director for the Hungarian Energy Office, the energy regulatory authority; which is an independent state agency regulating electricity, gas and district-heating sectors. Since 2002 he has been carrying on with his work as Director. He is responsible for electricity, gas and district-heating licensing, monitoring, market structure, operational model and consumer protection activities of HEO. He has long experience in international cooperation. Since April 2008 he has been Chairman of ERRA (Energy Regulators Regional Association). He is member of various CEER and ERGEG working groups.

ABSTRACT SUMMARY

Impact of the financial and economic crisis on the energy infrastructure development in ERRA countries

The presentation introduces some of the common position of ERRA members regarding market structure, market model, regulation and financial circumstances. The impact of the financial and economic crisis and of the new position of financial institutions on energy (especially infrastructure) investment will be shown. Those frequently-used incentive mechanisms which assist infrastructure development will be listed.



FRANCISCO XAVIER SALAZAR DIEZ DE SOLLANO

Chairman, Energy Regulatory Commission, Mexico and Vice President, ARIAE

Francisco Xavier Salazar Diez de Sollano was appointed Chairman of the Energy Regulatory Commission in December 2005. Francisco holds a Masters in Economics with an specialization in Public Finance, as well as a Diploma on Global Market Economics, both from the London School of Economics & Political Science. His major is on Chemical Engineering from the Universidad Autónoma de San Luis Potosí. Francisco has been Congressman for the district 06 of the state of San Luis Potosí twice. During this time, he chaired the Energy Committee and was member of the Budget Committee and the Boards of Public Economics and Economic Development. Francisco is a lecturer of Public Finance at the Universidad Autónoma de San Luis Potosí, and has taught courses on Monetary Theory and Credit for the major of International Business at the Universidad Champagnat. He is currently member of the Energy Editorial Board of the Reforma newspaper and a member of the Consulting Board of the "GLOBE International & G8+5 Legislators & Business Leaders 2012 Climate Change Dialogue", 2006. In 2006 he received recognition from the magazine Expansión as one of the "30 promising persons in their 30's".

ABSTRACT SUMMARY**Incentives for infrastructure investments: the Mexican case**

A clear, stable and predictable regulatory framework is the first and basic condition for infrastructure development in any country. As the Mexican case shows, such a regulatory framework promotes investments in areas where little or nothing was done prior to its existence. However, in order to maximise its potential, the regulatory framework will have to adapt to the specific conditions of each country or change in accordance with the evolution of the industry or technology. Also, where there is a need to go beyond merely developing infrastructure and pursue other objectives such as promotion of clean energy sources or reduction of greenhouse gases, there is a chance that the pure regulatory framework will need to be complemented with some other policies such as energy or environmental policy. Again, Mexico is a good example of these two cases.

TUESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK B - SESSION 8

Massive deployment
of renewable energy sources,
market efficiency,
system security and reliability



ASTA SIHVONEN-PUNKKA

Director General, Energy Market Authority (EMVI), Finland

Ms Asta Sihvonen-Punkka is the Director General of Energy Market Authority, which is the Finnish electricity and gas market regulator and also the emissions trading authority. She is also the Vice-President of CEER and Vice-Chairman of ERGEG. Additionally, she chairs the Electricity Working Group of CEER and ERGEG.

ABSTRACT SUMMARY

Massive deployment of renewable energy sources, market efficiency, system security and reliability

The ambitious targets set on reducing CO₂ emissions and increasing the share of renewables in energy supplies place new and challenging requirements on the energy industry and regulators. The technical, operational, market and regulatory aspects related to the integration of renewable and especially wind power at a large scale need to be properly addressed to ensure market efficiency, system security and reliability. The specific issues include both domestic and cross-border network investments, grid connection and access codes to facilitate large-scale integration of wind, balancing arrangements and the development of well-functioning electricity markets through market coupling and creating intraday markets.



TERRY BOSTON

President and CEO, PJM Interconnection, USA

Terry Boston is president and CEO of PJM Interconnection. Prior to joining PJM, Mr. Boston was the executive vice president of the Tennessee Valley Authority's Power System Operations. He joined TVA as a power supply engineer in 1972 and was named head of the Power Supply Group in 1980. Over the next 16 years, he directed three TVA divisions in succession: Transmission, Regional Operations and Electric System Reliability. He was named senior manager of Pricing in 1996 to prepare TVA for deregulation. Boston is vice chair of NERC's Transmission forum. He also served three years as chairman of the Southeastern Electric Reliability Council (SERC) board of directors and executive committee. He is vice president of CIGRE, the International Council on Large Electric Systems, and vice president of CERTS (the Consortium for Electric Reliability Technology Solutions).

Mr. Boston holds a bachelors of Sc. in engineering from Tennessee Technological University and a Masters of Sc. in engineering administration from the University of Tennessee, both magna cum laude. He was chosen Tennessee Technological University's Engineer of Distinction in 1997 and named to the University of Tennessee at Chattanooga College of Engineering Board in 1999.

ABSTRACT SUMMARY

Integrating renewable energy in North America's largest grid

As a regional transmission organization, PJM is able to leverage its size and scale for the efficient dispatch of intermittent renewable energy over the 13-state region it serves. Through its robust planning process, PJM facilitates new generation of alternative resources, including 44,000 MW of wind proposed by 2015, and the transmission expansion necessary to bring those resources to load centers. At the same time, PJM pursues innovative solutions to support national energy priorities, including hybrid electric vehicles and battery storage. PJM remains at the forefront of meeting reliability standards, including working on the development of phasor measurement units.



CHRISTOPHER JONES

Director of Renewables, DG Energy, European Commission

Mr. Jones has a law degree from the University of Reading (1983), as well as a Diploma of Higher European Studies (Law), from the College of Europe, Bruges (1984).

Since November 2008, he is Director for New and renewable sources of energy, energy efficiency and innovation at Directorate-General for Energy and Transport, European Commission to the European Union.

Prior to that, he had remarkable professional positions, as:

- Deputy Head of Commissioner for Energy's Cabinet
- Acting Head of Unit C3 "Coal and Oil"
- Head of Unit C2 "Gas and Electricity"
- Acting Head of Unit A2 "Internal Market, Public Service, Competition & Application of Community Law
- Personal Assistant to the Director-General for Competition
- Member of the Cabinet of Sir Leon Brittan, Commissioner for Competition policy

ABSTRACT SUMMARY

Renewable energy and Europe's new energy policy: The new steps

- The scale of the challenge: a complete rethinking on energy efficiency and electricity supply;
- The 20% obligation by 2020: just a beginning?
- 20% by 2020: challenging, yes. But a legal and moral obligation, not an option;
- Energy efficiency and giving incentives to energy utilities: the next challenge;
- Utility regulation and the cost of a smart grid.



CLAES HEDENSTRÖM

President, Renewable Energy Certificate System International, Sweden

Master of Science in Engineering Physics and degree in Human Ecology Experiences from energy efficiency projects and sales activities in Sweden, Germany, Hungary and Czech Republic.

Responsible for Green Portfolio Management and Trading during 2001-2004 at Vattenfall in Stockholm. The group Green Portfolio Management is responsible for the portfolio management and market access for various green products like green labels, green certificates and Swedish electricity certificates. Since 2004 working with regulatory affairs at Vattenfall Trading Services

Participant in working groups in the Swedish Energy bransch organisation for Elcert and the development of the disclosure system in Sweden

Chairman of the Swedish RECS team since year 2000

President of the RECS International since June 2004



CHRISTINE LINS

Secretary General, European Renewable Energy Council (EREC)

Christine Lins, Secretary General of EREC (European Renewable Energy Council) since April 2001, graduated from the University of Linz, Austria (international economics and applied languages with a specialization in marketing).

She has more than 12 years of working experience in the field of renewable energy sources. Key tasks of Ms Lins at EREC include policy advice for renewable energy sources and energy efficiency, the running of the associations, the management of international projects as well as the organization of international events.

Before moving to Brussels in 2001 she held the post of Project Manager at O.Ö.

Energiesparverband (regional energy agency promoting energy efficiency and renewable energy sources) for international projects.

ABSTRACT SUMMARY

RES market development in Europe - 40 % renewable energy electricity by 2020

Today, the world is challenged to use and produce energy in an efficient and sustainable way to ensure both security of supply, environmental protection and competitiveness for the benefit of all. In this context, Europe's Heads of States agreed to a binding 20% share of renewable energy by 2020. Together with the agreed 20% energy efficiency targets as well as the 20% greenhouse gases reduction target, this forms a sound basis for a sustainable European energy policy focusing on both demand and supply sides.

Depending on the development of the total electricity consumption, renewable energy will be able to contribute between 33 and 40 % of total electricity production in 2020. The presentation will focus on current trends related to renewable electricity development & provide a future outlook.

EREC has produced a Renewable Energy Technology Roadmap which can be downloaded from www.erec.org



BINU PARTHAN

Deputy Director General, Renewable Energy and Energy Efficiency Partnership (REEEP)

Parthan is the Deputy Director General of Renewable Energy and Energy Efficiency Partnership (REEEP) – a public-private partnership facilitating markets for renewable energy and energy efficiency. Parthan holds masters degrees in Industrial Engineering as well as Renewable Energy and is working towards a doctorate on low carbon energy technology innovation.

Parthan is responsible for the REEEP global work programme of 130 projects in low carbon energy implemented in over 40 countries. His professional experience covers 12 countries including developing countries in Asia and Africa. Parthan has also authored or co-authored 6 books and 22 publications apart from 45 professional reports.

ABSTRACT SUMMARY

Renewable energy regulation in developing countries: A key factor in the transition to a low carbon energy system

Renewable energy, energy efficiency and other low-carbon energy technologies offer developing countries options to transition to a low-carbon economy. Such a transition is inevitable if the world is to avoid dangerous levels of climate change. Low-carbon energy regulation has the potential to play a catalytic role in this transition process. However, limited human and institutional capacity, governance issues and the relatively early stage of regulatory framework development in the regulatory space in developing countries severely constrains the impact of the energy regulator. The presentation will look at the key lessons from renewable energy regulation in developing countries and examine some of the challenges and plans to address them. It will also outline REEEP's experience from supporting energy regulators in Africa, Asia and Latin America.

TUESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK C - SESSION 9

Regulatory issues of importance
to residential and small customers



ROBERT HAMMOND

Director of Regulation, Consumer Focus, UK

Robert Hammond heads up the Regulated Industries Directorate at Consumer Focus, the newly formed consumer body in Great Britain that brings together the policy activities of energywatch, Postwatch and the National Consumer Council. He has many years experience of handling consumers' energy complaints and has led numerous campaigns on miss-selling, debt management and prevention, bad billing and the reform of the supplier transfer process. His current team is responsible for actively lobbying for an improved competitive energy market, fairer pricing and a greater transparency of information so consumers can make informed choices about their energy provider.

ABSTRACT SUMMARY

Regulatory issues of importance to residential and small customers

Whether in a developing or established market, the playing field between energy providers and consumers is never level. For many, energy is as much a necessity of life as food or water and yet they face spiralling charges which seem incomprehensible to justify. The impact of all of this is felt by all consumers, but even more so by those on low incomes or in so-called "fuel poverty" and those living in rural areas. Governments and regulators face dilemmas in creating and regulating a framework that will encourage investment and development in the network and allow for retail prices at a level that is fair and affordable to consumers. Ideally, energy markets should be characterised by transparency, choice, value and quality of service and consumers should be well-informed, active and empowered, with strong rights that are enforceable in the event of service failure. This session will explore the realities of this to consumers in different energy markets, the progress made in some towards greater consumer empowerment and the roles that different market participants have to play.



FRANK B. SEBOWA

CEO, Electricity Regulatory Authority (ERA), Uganda

Eng. Dr. Frank B. Sebbowa is the Chief Executive Officer (CEO) of the Electricity Regulatory Authority (ERA) supervising all the Heads of Departments as well as other technical officers.

A Mechanical engineer by training, Dr Sebbowa spent the earlier part of his career as a university senior lecturer before joining the private sector as CEO at a large manufacturing enterprise in Uganda.

It is from industry that he joined the electricity regulator back in 2001.

ABSTRACT SUMMARY

Support of vulnerable and rural customers - fuel poverty

In many parts of the developing world and especially Africa, the traditional source of fuel is the now dwindling fuel wood and to a smaller extent agricultural waste. The development of other renewable sources of energy is mainly in experimental or pilot stage and at best slow in implementation due to heavy upfront start up costs, especially for the vulnerable and rural poor.

How Energy Regulators Can Support Rural Consumers?

Vulnerable and Rural communities can be connected to national grids if innovative schemes which bring down the upfront costs can be put in place. In Uganda the Rural Electrification Agency builds or extends such rural schemes at government cost and the vulnerable and rural poor are given an opportunity to access energy without paying the capital costs. The Electricity Regulator ensures that this government contribution is not part of the utilities asset bases for ROI calculations. Energy Regulators can also apply light-handed regulation schemes serving the vulnerable.



PATRICIA DE SUZZONI

Advisor to the Chair of the French Energy Regulatory Commission (CRE), France

Patricia de Suzzoni is the Chair of CEER (Council of European Energy Regulators) and ERGEG (European Regulators' Group for Electricity and Gas's) Customer Working Group and an Advisor to the Chair of the French energy regulatory authority CRE (Commission de Régulation de l'Énergie).

She was head of CRE's directorate for 5 years, being in charge of monitoring wholesale and retail markets for both electricity and gas and managed the public service funding for the promotion of electricity from renewable sources. She also chaired, at national level, the stakeholders' working groups for the electricity retail market and consumer affairs.

She previously worked in the telecoms industry, in Europe and abroad, for 20 years. She holds two MScs, one from Ecole Polytechnique and one from Telecom ParisTech, as well as a Master of International Business from Paris-Dauphine University.

Her priorities within CEER/ERGEG are customer empowerment and the design and monitoring of well-functioning retail markets, including the introduction of smart metering.

ABSTRACT SUMMARY

The role of regulators in empowering residential and small customers in the European liberalised market

European regulators' role is to achieve the efficient functioning of Europe's energy markets in the customers' interests so that market opening delivers choice, value and quality. The proper functioning of competitive energy markets and the rights of energy customers are closely linked. A well-functioning market needs well-informed, active, and empowered customers so that customers can force suppliers to deliver quality service at the best price by being able to move to another supplier. In order to empower customers, European regulators advise EU and national policy makers on how to strengthen consumers' rights in the legislation; oversee the coherent implementation of this legislation; establish best regulatory practices on how to translate legal provisions into operational modalities; and monitor and report on the state of play of key elements of the markets to assess whether or not retail markets deliver value for customers and enable the European Commission and Member States to consider appropriate action.

European regulators also promote concrete measures for markets to function in the energy customers' interests. First, customers must be informed through easily accessible means about suppliers and DSOs; about contractual elements including prices to get the better deal; and about their actual consumption frequently enough to be able to manage their consumption. Second, choosing among the widest possible variety of offers implies that the supplier switching process be easy, fast and free. Third, if the expected quality of service is not met, complaints must be handled in a way that results in improved quality of service.



JOHN MERRICK

Partner, MJSWM Barristers, Canada

One of Atlantic Canada's most prominent counsel, John has provided legal representation on a wide range of high-profile matters including serving as Counsel to the Commissioner of the Public Inquiry into the Westray Mine Disaster and as Consumer Advocate in electric power rate applications.

In addition to his practice, he teaches at Dalhousie Law School and has participated as organizer and faculty in a number of professional education programs. He is a fellow of the American College of Trial Lawyers, is listed in the LEXPERT Directory of the 500 Leading Lawyers in Canada and is recognized by LEXPERT as a most frequently recommended lawyer in Construction Law, Commercial Insurance Litigation and Corporate Commercial Litigation. He is also listed in Best Lawyers in Canada.

ABSTRACT SUMMARY**Affordable power to the people**

Energy is not just a commodity. In many situations it is an essential similar to food and shelter. With the cost of energy to consumers experiencing sharp and substantial increases and fluctuations there are increasing calls to both legislators and regulators to provide relief to low or fixed income ratepayers.

This presentation will address the questions of the extent to which regulators have, or should have, the jurisdiction and responsibility to provide rates that address the circumstances of those suffering from "energy poverty", whether low income consumers are a classification that should get distinct treatment and what options regulators may have.

The presentation will also share some recent experiences of Canadian courts and regulators in facing these issues.

**NICKOLAS STAVROPOULOS**

Executive Vice President, US Gas Distribution for National Grid, USA

Nick Stavropoulos is Executive Vice President, US Gas Distribution for National Grid, one of the prime investor-owned utilities in the world and the second largest in the United States. Mr. Stavropoulos leads National Grid's US Gas Distribution Business and is responsible for ensuring safe and reliable natural gas delivery service to 3.5 million customers. Nick is also responsible for bringing to life National Grid's commitment to safeguard our environment, reduce its carbon footprint and to make a positive contribution to climate change.

Prior to joining National Grid, Mr. Stavropoulos held executive level positions at several US energy distribution companies.

Mr. Stavropoulos is on the Board of Directors of the American Gas Association, where he also serves as Second Vice Chairman. He is also a Trustee of Bentley University, and a non executive director of The Greater Boston Chamber of Commerce, The United Way of Massachusetts, Enterprise Bank Corporation and Dynamics Research Corporation.

Mr. Stavropoulos graduated from Bentley University in 1979 and earned his MBA from Babson College in 1987.

ABSTRACT SUMMARY**Competitiveness and affordability in a rapidly changing world**

With the backdrop economic uncertainty continuing for the foreseeable future in the US and the UK, how will regulators, utility companies and energy users come together to satisfy a seemingly "Perfect Storm" of conflicting challenges? Affordability of natural gas and electricity services will be pressured as utility companies are faced with the prospect increasing capital investments to replace aging infrastructure and to achieve Governmental objectives of significant reductions in carbon by 2050.

We are facing these challenges in the US (in multiple regulatory jurisdictions) and in the UK, and tried to balance these competing interests. This paper will explore strategies to address these needs including a discussion of the prospects of a massive investment in energy efficiency.

**CARLOS EDUARDO COLOM BICKFORD**

President, Energy Regulatory Authority, Guatemala and Vice-President, ARIAE

Carlos Colom has a Mechanical Engineering degree from Universidad del Valle de Guatemala and a Masters degree in Project Management from Northwestern University in Evanston, Illinois.

2007- To date: President of the Comisión Nacional de Energía Eléctrica – CNEE, Guatemala (Electricity Sector Regulator).

2004-2007: General Manager and Secretary of the Board of Directors (2005-2007) and

Coordinator of the Hydroelectric Promotion Office (2004) to the Instituto Nacional de Electrificación – INDE, Guatemala.

2003-2004: Project Engineer to the The Walsh Group, Chicago, IL

2000-2002: Senior Engineer of the Hydroelectric Project Division to Fabrigas, S.A., Guatemala

2001: Professor of the Engineer Faculty at Del Valle University, Guatemala

He is currently the President of ACERCA, the Central American Regulators Association and Vice-President of ARIAE, the Iberoamerican Regulators Association.

ABSTRACT SUMMARY

The role of the regulator in setting electricity tariffs

Electricity is an essential service that has an inelastic demand, and as small consumers are faced with a supplier that has the characteristics of a natural monopoly, with no capability of changing supplier, the role of the regulator in setting the electricity tariffs that the distribution companies can charge is vital to the social and economic development of the people, and of the country as a whole.

This presentation will cover the most important areas of an electricity tariff setting process in Guatemala, and most important, the lessons learned from practical experience during numerous tariff setting processes, using a method of simulating an efficient electricity distribution company in the country.



SUBHASH KULKARNI

Member, Maharashtra Electricity Regulatory Commission, India

Key Assignments:

Joined the Civil services of India in 1972. Worked for over 30 years in the Federal and State Government organisation, in the field of infrastructure ranging from power, telecommunication to railways.

- Director, Nuclear Power Corporation of India Limited.
- Financial Adviser (Finance & Budget), Indian Railways.
- Director, Maharashtra State Electricity Board.
- Professor Financial Management & Computer Applications, Staff College, Baroda.
- Head of Accounts of Videsh Sanchar Nigam Ltd., (Overseas Communication Services).
- Member, Maharashtra Electricity Regulatory Commission.

Among important decisions delivered by the Commission, are Regulating Load Shedding, Tariff for Small Hydro Projects (less than 25 MW), Renewable Purchase Specifications, Regulations for Redressal of Consumer Grievances, Multi-Year Tariff Orders for retail sale.

ABSTRACT SUMMARY

Key issues faced by regulators in developing countries - India

In this presentation, I will focus on the issues faced by residential and small consumers in developing countries like India and the consequent dilemma faced by the Regulators in such situations.

The issues faced by residential and small consumers can be organised in the following manner:

- (a) Basic infrastructure – electrification in rural areas, and difficulties in applying for electricity connection
- (b) Quality of supply – assured hours of supply, voltage, reliability of supply, etc.
- (c) Tariff issues in the context of affordability considering present and targeted level of cross-subsidies
- (d) Billing related issues – simplicity of bill, rationalisation of tariff components, ease of bill payment, grievance redressal mechanism, etc.
- (e) Introduction of competition in order to reduce tariffs and improve service quality

TUESDAY 20 OCTOBER

KEYNOTE SESSION 2

TRACK A

Linking load to market mechanisms:
smart grids, advanced metering,
real-time pricing



JORGE VASCONCELOS

Chairman, New Energy Solutions (NEWES) and former CEER President

Chairman of NEWES, New Energy Solutions, a company acting in the field of renewable energy in Europe. Consultant to several international organizations (European Commission, World Bank) and national authorities. Member of the Advisory Board of the Harvard Environmental Economics Program. Invited Professor at the Technical University of Lisbon (MIT-Portugal Programme).

First chairman of the Portuguese Energy Regulatory Authority (ERSE - July 1996 to December 2006). Co-founder and first chairman of the Council of European Energy Regulators (CEER – March 2000 to December 2005). First chairman of the European Regulators' Group for Electricity and Gas (ERGEG – October 2003 to December 2005). Co-founder of the Ibero-American Association of Energy Regulatory Authorities (ARIAE). Founder and member of the Executive Committee of the Florence School of Regulation. Prior to the regulatory experience, he worked with the EURELECTRIC in Brussels, for AEG in Frankfurt and at several universities in Portugal, Germany and Italy. Member of the World Energy Council, the World Forum on Energy Regulation, the City of Lisbon Energy Agency, etc. Author and editor of several books and articles. He graduated in power systems from Porto University and got a Dr.-Ing. degree from the University of Erlangen-Nuremberg.

ABSTRACT SUMMARY

Linking load to market mechanisms: smart grids, advanced metering, real-time pricing

In the old world of vertically-integrated, monopolistic, top-down electricity systems, energy consumers were treated as a passive "load" to be served by centralised power plants. Industry restructuring has challenged this view through the introduction of customer choice and unbundling (in some cases, also creation of cross-border markets). However, consumers' empowerment cannot be fully achieved without technological restructuring, i.e., the massive introduction of new information and communication technologies. The deployment of these technologies is crucial not only to enable consumers to master their appliances and to participate (directly or via aggregators) in electricity markets, improving market efficiency; it is also indispensable to meet energy and climate change goals such as the efficient introduction of large-scale generation based on renewable energy sources.

Smart meters and other "smart" devices are already available at affordable prices. In order to maximise the benefits resulting from the introduction of "smart systems" it is necessary to adapt regulation to the new energy landscape: removing barriers from the past (e.g. flat network tariffs, load profiling, all types of "socialisation" resulting from the absence of individual, accurate measurements) and to provide new incentives (e.g. time-of-use network tariffs).



CLAES RYTOFT

Vice President Technology, ABB

After a Master exam in Electrical Engineering from Lund University, Sweden, in 1978 he spent a few years in marketing, engineering and product management. The last 25 years he has spent in R&D and different global technology management positions in ABB.

His current position is CTO for the Power System Division in ABB as well as member of ABB's core technology team which governs ABB's annual R&D spending of 1.2 BUSD. The Power Systems division's offerings include solutions for Power Generation as well as for Substations, Network Management and HVDC & FACTS.

ABSTRACT SUMMARY

When grids get smart

Smartgrids has as many interpretations as the number of people you talk to! With a slight risk of adding to the confusion, I will talk about ABB's definition of smartgrids as a product and system supplier. In our view, smartgrids means all features of the future electricity grids needed to cope with the following four main topics:

– Integration of renewables

- Reliability
- Energy efficiency
- Demand response

The intermittent nature of many renewable energy sources leads to major challenges when it comes to balancing load and demand in an efficient way. The technologies needed are to a large extent available although they have so far mainly been applied in the transmission networks. A potential technological breakthrough in electrical storage technology, however, has the possibility to turn things upside down.



RONNIE BELMANS

Professor, K.U. Leuven, and Chairman,
Board of Directors, ELIA, Belgium

Ronnie Belmans received the M.S. degree in electrical engineering in 1979 and the Ph.D. degree in 1984, both from the K.U. Leuven, Belgium, the Special Doctorate in 1989 and the Habilitation in 1993, both from the RWTH, Aachen, Germany.

Currently, he is a full professor with the K.U. Leuven, teaching electric power and energy systems. His research interests include techno-economic aspects of power systems, power quality and distributed generation.

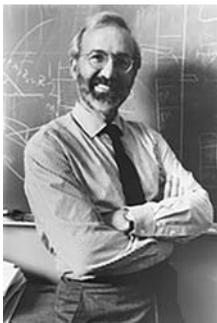
He is also guest professor at Imperial College of Science, Medicine and Technology, London-UK. Since June 2002, he is chairman of the board of directors of ELIA, the Belgian transmission grid operator.

ABSTRACT SUMMARY

Smartgrids: bringing load and generation together in a market environment

Load in the electricity system has generally been considered as being inflexible: whenever a user wanted to switch on a certain demand, the system had to be ready to supply it at a, most of the time, fixed price. Given the market environment on the one hand and the laws of physics that electric energy is hard to store on the other, the need for flexible load that can react to price signals becomes critical. Peak load comes at a higher cost than base load, a fact that has to be reflected in the price. At the same time, generation is becoming less controllable (e.g. variable renewable energy sources like wind and PV, heat-controlled small CHP devices), stressing the need for flexible tariff systems. Balancing variable generation and load requires an impact of the load. This may be done by controlling elements of the load (refrigerators, washing machines, etc.) or introducing storage elements like batteries. Storage can also be offered by electric and plug-in hybrid vehicles, which will form an increasing part of the demand. Heat pumps combined with heat storage may further introduce flexibility.

All these elements need a lot of intelligence in the grid, which will also be addressed.



MICHAEL CARAMANIS

Professor, Boston University, USA
and former Chairman, Energy Regulatory Authority, Greece

Michael Caramanis (BS Stanford U., MS and PhD Harvard U.) is Boston University Professor of Mechanical and Systems Engineering. He served at the Greek National Energy council (1976-79) the MIT Energy Laboratory (1979-82) and from February 2005 to 2009 was chair of the Greek Regulatory Authority for Energy. He has directed several research projects sponsored by NSF, EPRI, NYSERDA and the Industry, authored many journal articles and is co-author of *Spot Pricing of Electricity*, Kluwer, 1988. He researches complex stochastic production systems and decision support in real-time electric power markets. He currently focuses on the Cyber-Physical-Energy-System/Smart Grid that (i) is open to developers and users to

render it capable of supporting real-time market at the wholesale and retail levels, and (ii) enables load and distributed resource management to mitigate T&D and Ancillary Services congestion and realize synergies among market-ready sustainable energy technologies including wind generation, distributed storage, roof-top PV and Hybrid Electric Vehicles.

ABSTRACT SUMMARY

Requisite market extensions to capture synergies between intermittent renewable generation and distributed storage

We view the Smartgrid as a Cyber-Physical-Energy-System (CPES) encompassing hardware, automation, IT, and control software embodied in generators, T&D, metering and consumption appliances. Efficient development and utilisation of the above CPES requires (i) open access to CPES developers and users, and (ii) the creation of advanced close to real-time power markets transcending today's wholesale market cost signals, to include retail-level/distribution-network cost signals such as distribution network losses, distribution congestion, transformer temperature and distribution level voltage control. We will present (i) a brief overview of the potential benefits of managing distributed load and other resources (e.g., storage, roof top PV, electric vehicle battery charging) in response to both centralised generation and transportation system congestion as well as distribution network congestion price signals, and (ii) the main "smart regulation" issues that are requisite for the sustainable "smartgrid" we are all working towards.



JOHN TAMBLYN

Chairman, Australian Energy Market Commission (AEMC)

Commissioner Tamblin was appointed inaugural AEMC Chairman in June 2005. His background in the regulation of public utility services includes the positions of Chairman of the Essential Services Commission (Victoria) and Regulator-General (Victoria). Prior to his appointment as Regulator-General, John held senior positions in the Australian Competition & Consumer Commission (ACCC), including adviser to the ACCC on structural reform and public utility regulation and First Assistant Commissioner responsible for fair trading and consumer protection. He was employed by the International Monetary Fund as adviser to the Government of Seychelles (1986-87). Prior to that appointment he held positions in the Commonwealth Treasury and Department of Finance. He holds a PhD in economics (UCLA); MSc (UCLA); MEd (ANU); BCom, Hon. (Melb).

ABSTRACT SUMMARY

Reducing regulatory and technological barriers to demand side participation

This presentation discusses regulatory and market design measures to reduce or eliminate barriers to the efficient participation of load in electricity wholesale markets. It also refers to technological barriers to effective demand side participation and to the scope for smart grid and metering technologies to address them. Flexible demand response in peak periods is a potentially lower cost alternative to maintaining costly network and generation reserve capacity. Network business can be incentivised to realise these opportunities through the incentives provided by a standard price cap form of price control, supported by other complementary regulatory incentive and obligations. The Australian "energy only" market also permits load to obtain exposure to real time prices at relatively low transaction costs. Large users actively manage their energy costs this way, either through direct market participation or through their retail contract. The ISO also contracts for demand side response to manage capacity shortfalls in peak periods.

TUESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK A - SESSION 10

Regional market integration:
the regulatory cross border gap



MARIO MONTI

Professor, President of Bocconi University, Italy,
former EU Commissioner for Competition

Mario Monti is President of Bocconi University, honorary president of Bruegel, member of the Reflection Group "Europe 2020-2030" set up by the European Council and chaired by Felipe Gonzalez.

He is an International Advisor to Goldman Sachs and member of the International Advisory Board of the Coca Cola Company.

Mr Monti was European Commissioner for the Internal Market and then for Competition. He was, as well, member of the Attali Committee on French Economic Growth created by President Sarkozy.

He's also been the European Union coordinator for the electricity interconnection between France and Spain.

ABSTRACT SUMMARY

Regional market integration: the regulatory cross border gap

Regional market integration is key both for the regions concerned and to make the European single market a reality. Regional integration requires adequate interconnection infrastructures and a coherent institutional and regulatory framework. This session will first assess regional markets at a glance. It will then discuss the crucial role of TSOs in regional electricity markets, as well as of power exchanges and traders. Special attention will be given to risks affecting the reliability of regional and inter-regional bulk power systems. The various regulatory challenges for regional market integration will be discussed in depth.



DANIEL DOBBENI

CEO and President, Executive Committee, ELIA, Belgium

Daniel Dobbeni is Chief Executive Officer and President of the Executive Committee of Elia System Operator s.a., the Belgian Transmission System Operator. He is also Chairman of the Belgian Power Exchange Belpex. He serves as President of Synergrid, the Belgian association of Transmission and Distribution System Operators for gas and electricity and was recently elected President of ENTSO-E (European Network of Transmission System Operators for Electricity) that has become the single TSO association in Europe representing 42 TSO companies from 34 countries. Author of several publications, he has participated in several work groups and conferences in Europe and North America. During his career, he worked actively in several commissions for the Electric Power Research Institute, the American Society of Mechanical Engineers as well as the EU R&D Esprit programs.

ABSTRACT SUMMARY

Regional initiatives: a pragmatic and progressive process supporting market integration

Generation and network infrastructure are long-lived facilities, which means that during their lifetime they propagate the economic conditions, technologies, policies and regulations that were in place at the time the investment decision was taken. In this context, the European Union and its Member States have put in place ambitious energy policies aiming to achieve for the whole of Europe a low-carbon and low-energy society that is secure, competitive and sustainable. As a matter of fact, removing legislative, regulation, trade and competition barriers and taking into account these new policies cannot be achieved overnight especially given the major differences observed between national electricity markets. Reducing this complexity is the major reason behind the seven regional initiatives. Transmission system operators are key players in this process given their role as market facilitators and operator of their national power system. Concrete results were delivered by TSOs, together with Power exchanges and Traders, in several regional markets and further integration is on the way. Further TSO work will be focused on pursuing these improvements and taking into account new challenges induced by the increasing share of renewable energy sources.



PHILIPPE DE LADOUCKETTE

Chairman, Energy Regulatory Commission (CRE), France

Philippe de Ladoucette was appointed Chairman of CRE, the French energy regulator, in April 2006. He is a member of the CEER (Council of European Energy Regulators) and chairs the International Strategy Group. Prior to his appointment to CRE, he served as CEO of the French national coal industry, Charbonnage de France, from 1996-2006. At the same period, 1996-2000, he was also CEO of SNET, an electricity generator subsidiary of Charbonnage, where his major task was to supervise the privatisation process of the company (the first utility to be privatised in France). His previous posts include technical advisor to the French Minister of Industry, Chief of Staff to the Minister of Trade and Small Businesses, and special advisor to the government on industrial issues concerning the Channel Tunnel project. Philippe de Ladoucette began his career in the French government administration after graduating from the Ecole Nationale des Ponts et Chaussées in 1974 with a Ph.D in Economics, Sociology and Urban Development. He went on to hold successive posts in several government departments.

ABSTRACT SUMMARY

Towards a single European energy market

The creation of a single European energy market is a major challenge against the background of profound technical and legal differences in individual national markets. In order to make this political objective a reality, ERGEG launched in 2006 the Regional Initiatives with seven electricity and three gas regions. The concept is simple but effective; each region identifies the most serious market distortions to trading energy within the region. And with the cooperation of the key stakeholders, each region has to find a solution. The main task is to remove trade and competition barriers while ensuring that approaches in each regional energy market are compatible with the development of the single market. The Regional Initiatives have already delivered concrete improvements in the integration of European electricity and gas markets. In parallel, they help to identify the most significant problems and, therefore, the issues that need to be resolved through legislative changes. Thus, they are playing a key role in addressing and overcoming regulatory gaps.



NADJIB OTMANE

Chairman, Regulatory Commission for Electricity and Gas (CREG),
Algeria

Nadjib Otmane was appointed as chairman of the Commission for Electricity and Gas Regulation in January 2005.

Mr Otmane began his career in 1975 as an engineer with Sonelgaz, the electricity and gas utility and held several positions during almost 30 years of service with this company. Most recently, he served as director for regulation affairs and was appointed, in 2000, as member of the working group in charge of proposing to the government a new legal and institutional framework.

Prior to this, as head of the economic studies department, he was responsible for the planning policy of the company and led the studies on the macro-economic environment, demand, investments master plans as well as pricing issues.

Mr Otmane graduated in electrical engineering from "Ecole Supérieure d'Electricité" of Paris and holds a degree in physics from the University of Algiers.

ABSTRACT SUMMARY

The Algerian electricity sector modernisation: towards an integration within the EU internal electricity market?

Algeria initiated, in 2002, a reform to modernise its electricity sector. It has also committed, with Morocco and Tunisia, to a process of regional partnership aiming, with the support of the European Commission, to promote the progressive integration of electricity markets in

the three countries and facilitate later on their integration into the European Union Internal Electricity Market. Based on favourable factors made by the technical and cultural similarities of the Maghreb systems and a long practical operation of the interconnections, the approach aims at harmonising the regulatory frameworks, strengthening the standards on networks security, developing trading activities between partners and training sector stakeholders.



JEAN-PIERRE HANSEN

Vice Chairman and CEO, Electrabel, Belgium

Born 25 April 1948 in Athus, Belgium

J.P.Hansen has a Master's in Electromechanical Engineering, a Degree in Economics, a Certificate in Political Science and a PhD in Engineering.

Currently, he is Member of the Management Committee of the GDF SUEZ group, Chairman of the Energy Policy and Market Risk Committees, CEO of Electrabel, Chairman of the Board of Directors of Fluxys S.A. (gas network operator), Director of AGBAR, Barcelona (since 2004) and Compagnie Nationale a Portefeuille, Brussels (since 2008). Prior to that, he's been Board Member, National Bank of Belgium (2002-2005), Vice-President of the Federation of Belgian Enterprises (2002-2008), Board Member, University of Liege (since 2004), Board Member, French Institute of International Relations (since 2007).

Jean-Pierre Hansen is also a Professor at the Catholic University of Louvain (since 1996), (Micro-Economics) Professor at the Ecole Polytechnique, Paris (since 1999), (Energy Policy). He's got the distinctions of Officer in the Order of Leopold, Officer in the Order of Leopold II, Chevalier de la Legion d'Honneur, Doctor Honoris Causa at the Catholic University of Leuven.

ABSTRACT SUMMARY

Why is there a regulatory cross border gap?

First principles of physics tell us that electricity is difficult to transport and that it can not be stored; this makes it difficult to trade. Different organizations in Member States increase transactions costs and further complicate the situation. Successful cross border trade therefore requires carefully designed institutions capable of overcoming both physical and organisational bottle necks.

European legislation did not create this specialized regulatory framework. It is not clear that the third package can go beyond a purely formal improvement of the situation and the application of competition law, is by construction almost useless in that respect. In this context, the success of (comparatively quite elementary) realizations like the trilateral market coupling is more a welcome surprise than an expected event in the slowly moving internal market process.



RUPA DEVI SINGH

Managing Director and CEO, Power Exchange India Ltd

Ms. Rupa Devi Singh, MD & CEO of Power Exchange India Ltd. has been associated with the concept of a Power exchange in India from its inception in 2004 when she led an assignment for detailing the feasibility of setting up a day ahead power exchange in the country. A postgraduate in Law, Ms. Singh is an infrastructure and structured finance specialist and over the last ten years has participated in a number of path breaking initiatives in a broad range of Infrastructure sectors. Prior to this she was Director (Power Practice) with CRISIL Infrastructure Advisory. She began her career in 1978 with the State Bank of India (SBI) the country's largest commercial bank. While at CRISIL, Rupa has worked closely with the Government and Government-owned entities as well as multilateral organizations in the areas of shaping public policy and has led a number of path breaking initiatives in the Indian

Power Sector. Earlier at SBI Capital Markets Ltd., she has handled various assignments leading to reform, restructuring and privatization of public sector enterprises. She takes a keen interest in policy advocacy and is a frequent speaker at Infrastructure events in India and abroad.

ABSTRACT SUMMARY

The role of power exchanges in developing a competitive power market: Case - India

India has committed itself to creating a competitive power market by undertaking a series of reform initiatives, starting with an umbrella legislation, enabling policy framework as well as progressive regulatory guidance and support. The development of competitive markets is largely dependent not only upon de-regulation but also upon the creation of efficient marketplaces as the critical and necessary sector infrastructure. Establishment of a power exchange in India is one such initiative that completes the value chain in India's move towards deregulated, efficient and vibrant power markets.

While communicating on the above, the speaker would like to emphasise:

- the role of power exchanges in creating competitive and efficient markets;
- the need for development of market structures and bid design in line with local realities;
- the path being followed by PXIL in leading the development of the power market in India.

TUESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK B - SESSION 11

Deployment
of non-carbon or low-carbon
emitting technologies and carbon
capture and storage



BRANKO TERZIC

Regulatory Policy Leader, Energy & Resources, Deloitte Services LP and Chairman of United Nations ECE Ad Hoc Group of Experts on Cleaner Electricity Production

Regulatory Policy Leader, Energy & Resources, Deloitte Services LP and Chairman of United Nations ECE Ad Hoc Group of Experts on Cleaner Electricity Production.

Member, U.S. National Petroleum Council, advisor North American Energy Standards Board, Energy Efficiency Forum, Bordeaux Energy Colloquium.

Former: Commissioner Federal Energy Regulatory Commission; Commissioner Wisconsin Public Service Commission, Chairman Wisconsin Racing Board; and Chairman, CEO Yankee Energy System, Inc. Professional Engineer, Fellow (FRSA), B.S. Engineering and Doctor of Science (D.Sc.) in Engineering "honoris causa" from the University of Wisconsin-Milwaukee and inducted Energy Efficiency Forum Hall of Fame 2009.

ABSTRACT SUMMARY

Deployment of non-carbon or low-carbon emitting technologies and carbon capture and storage

Most energy scenarios assume that viable low and/or non-carbon emitting technologies and CCS will be available to meet 1) the gap expected between energy demand and supply in the next two decades while 2) meeting global greenhouse gas targets. However, within the UN ECE member countries, current and near future proposed investment and expenditures in research, development and pilot projects may not be adequate to meet the required time-frame. Earlier engineering reports indicate that a minimum of twelve \$1 Billion pilot projects need to be under construction now in the EU alone to evaluate various CCS options. The panel will discuss the status of key projects, national and international research programs and the impact of current and pending legislation and regulatory decisions on program and project progress in the various UN ECE countries.



PAUL CENTOLELLA

Commissioner, Ohio Public Utilities Commission, USA

Paul A. Centolella was appointed to the PUCO by Gov. Ted Strickland in 2007. Here, he brings a broad range of experience in public utilities and energy law and economics. From 1992 to 2007, Commissioner Centolella was a Senior Economist in the Energy Solutions Group of Science Applications International Corporation (SAIC). Prior to working at SAIC, Commissioner Centolella served as the Senior Energy Policy Advisor and a Senior Utility Attorney for the Office of the Ohio Consumers' Counsel (OCC) from 1982 to 1992. He also has worked for the Ohio State Legal Services Association and practiced law in California and Washington. Commissioner Centolella currently serves as the Secretary of the Organization of PJM States and a member of the FERC – NARUC Smart Grid Collaborative, the FERC – NARUC Demand Response Collaborative, NARUC's Climate Change Task Force, and the NARUC Energy Resources and Environment Committee.

Commissioner Centolella earned a bachelor's degree with honors in economics from Oberlin College and his J.D. from the University of Michigan Law School. He has completed post-graduate and executive education programs through the Harvard Business School and the Institute for Strategic Management. Commissioner Centolella is a member of the Ohio State Bar Association, the California Bar Association, the Washington State Bar Association, the American Economic Association, and the International Association for Energy Economics.

ABSTRACT SUMMARY

Low carbon technologies: a smart energy path

Power systems are entering a period in which fundamental changes are needed to accommodate a growing demand for the energy services that electricity provides, coinciding with

making sharp reductions in greenhouse gas emissions. In the near term, such changes should include shifting:

- From centralised dispatch of resources to accommodating transactional control – providing prices to distributed devices and mass market consumers;
- From closed utility systems to open standards that integrate demand response, distributed generation, storage and electric vehicles; and
- From radial distribution systems to networked intelligence.

These changes can enhance competition policies and incentives for innovation. The resulting system will be smarter and more efficient, providing the time needed for the industry to develop lower cost, low-carbon generation technologies, including next generation renewables and fossil-fuel generation with lower cost carbon capture and storage.



PAUL SOTKIEWICZ

Senior Economist, PJM Interconnection, USA

Paul M. Sotkiewicz, Ph.D. Senior Economist in the Market Services Division at the PJM Interconnection, provides analysis and advice with respect to PJM's market design and market performance.

Currently Dr. Sotkiewicz is leading initiatives to reform scarcity pricing and compensation for demand resources in PJM's energy market. Dr. Sotkiewicz also led the team that developed the recent whitepaper examining the potential effects of climate change policy on PJM's energy market.

Prior to joining PJM, Dr. Sotkiewicz served as the director of PURC, University of Florida, as an economist in the Office of Economic Policy and later on the Chief Economic Advisor's staff at the FERC, as an Instructor in the department of Economics at the University of Minnesota. Dr. Sotkiewicz received a master of arts (1995) and doctoral degree (2003) in economics from the University of Minnesota, and a bachelor of arts in history and economics (1991) from the University of Florida.

ABSTRACT SUMMARY

Potential effects of proposed climate change policies on PJM's energy market

The effects of potential climate change policy outcomes, modeled as different prices on carbon dioxide (CO₂) emissions, on wholesale market prices, generation dispatch, energy expenditures, and emissions for PJM's Energy Market for the year 2013. At forecast fuel prices for 2013, generation dispatch would remain largely unaffected in PJM for CO₂ prices up to \$35-\$40/ton resulting in minimal emissions reductions, and regardless of natural gas prices 75-80 percent of the CO₂ price, expressed in dollars per short ton, is transmitted to increases in average wholesale energy prices. Sensitivity analyses regarding the effects of different amounts of energy efficiency, modeled as reductions in total energy consumption, and wind generation deployment mitigates the wholesale energy price and expenditure impacts of climate change policies, and results in larger emissions reductions that would be observed with only generation re-dispatch as an emissions mitigation option.



ANDREAS BIERMANN

Principal Policy Manager, EBRD

Andreas joined the EBRD in August 2008 as the Principal Policy Manager in the Energy Efficiency and Climate Change Team. He is responsible for policy dialogue with the EBRD countries of operation, and is currently managing regulatory and legal support assignments focusing on energy efficiency and renewables legislation in Kazakhstan and Bulgaria.

Before this, Andreas worked for the International Energy Agency in the Country Studies Division.

He is the author of the first IEA Energy Policy Review of the European Union's Energy Policies, published in September 2008.

ABSTRACT SUMMARY

EBRD experience in supporting regulatory change for an improved investment framework

Through its operations in the UN ECE region, EBRD is investing to reduce energy intensity and carbon emissions, and to increase the contribution from renewable energy sources to decarbonise energy supply and increase local security. EBRD is also working closely with governments in the region to improve investment frameworks, and to transfer knowledge and skills, in order to enable private investors to enter the energy markets. The presentation will discuss the EBRD's experience and the role of regulatory agencies and governments in enabling sustainable energy investment to increase security of supply and mitigate climate change.



NICOLAS LYBEROPOULOS

Associate Director, Projects and Development, UNIDO-ICHET, Turkey

Dr. Lyberopoulos is a Mechanical Engineer, actively involved in the field of energy and the environment for more than 20 years.

In his current position at UNIDO-ICHET he is Director of Projects, responsible for setting suitable frameworks for supporting H₂ energy demonstration projects in developing countries and then following the realization of such projects.

These range from a "Hydrogen island" project on a Turkish island to setting up a fleet of H₂ fuelled three-wheelers in India.

Before joining ICHET, he initiated and headed a section at the Greek Centre for Renewable Energy Sources related to the integration of Renewable and Hydrogen energy technologies.

ABSTRACT SUMMARY

Financing hydrogen energy technologies in the developing world

Developing countries are faced with the option to follow the existing coal to oil to natural gas energy path, or to "leap frog" straight to renewable energy sources, complemented by hydrogen technologies. India, China, South Africa and Brazil have identified the R&D and demonstration steps that will lead to the gradual introduction of hydrogen energy technologies. Besides national programmes, there exist a number of international frameworks supporting hydrogen and fuel cells development and demonstration including the GEF and UNIDO. The UNIDO-International Centre for Hydrogen Energy Technologies was established in 2004 with the mission of financially and technically supporting viable implementations of hydrogen energy technologies in developing countries. To achieve its mission, UNIDO-ICHET uses the following instruments:

- Pilot projects and Pre-feasibility studies
- Demonstration projects – Several projects with prototypes for public display
- Applied R&D – at ICHET's FC technologies and analytical laboratories
- Education, training activities
- Consulting, Networking, provision of technical expertise

TUESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK D - SESSION 12

Training



ERIN SKOOTSKY

Director of International Programs, NARUC, USA

Erin Hammel Skootsky is the Director of International Programs at the U.S. National Association of Regulatory Utility Commissioners (NARUC). Ms. Skootsky develops NARUC's international programs and manages several cooperative agreements with the U.S. Agency for International Development, Department of Energy, and U.S. Trade and Development Agency as well as initiatives with other organizations. She also creates training programs for U.S. and international regulators and works with NARUC's Subcommittee on Education & Research. Ms. Skootsky has extensive experience managing projects in Central/Eastern Europe, Africa, and Asia. She served as lead organizer for World Forum on Energy Regulation III, October 2006, Washington, DC. Ms. Skootsky has a Bachelor of Arts Degree in Russian Studies from Occidental College and graduated Phi Beta Kappa.

ABSTRACT SUMMARY

Training

There is no such thing as too much training. Whether energy regulatory agencies are recently established or facing sector reform, there is a continual need for technical training at the commissioner and staff level. Formal, structured training augments the best practice transfers from conferences, meetings, and similar activities. Many international regulatory associations as well as a variety of university-based, non-profit, and for-profit institutions offer classroom, online, and/or mixed mode training courses. Select universities and organizations also offer certifications or degree programs in regulation or related fields. Expert training instructors and providers will discuss the evolution of regulatory training needs, including training philosophies, evaluation processes, funding, and sustainability.



ANTON EBERHARD

Professor, University of Cape Town, South Africa

Anton Eberhard is a Professor at the University of Cape Town where he directs the Management Programme in Infrastructure Reform and Regulation at the Graduate School of Business. His research and teaching focuses on the restructuring and regulation of the electricity and water sectors, investment challenges, and linkages to sustainable development. He has worked in the energy sector for more than 25 years and was the founding Director of the Energy and Development Research Centre. He is a Foundation Member of the Academy of Science of South Africa and serves on a number of Councils and Boards. He is also a former Board Member of the National Electricity Regulator of South Africa. Prof Eberhard has more than 100 peer reviewed publications to his credit and has undertaken numerous assignments (both locally and abroad) for governments, utilities, regulatory authorities, and donor and multi-lateral agencies.

ABSTRACT SUMMARY

Lessons from the African electricity regulator peer review and learning network

The Management Programme in Infrastructure Reform and Regulation at the University of Cape Town's Graduate School of Business has extended its regulatory training and capacity building activities by launching a new initiative. A Peer Review and Learning Network has been established comprising the heads of the electricity regulatory agencies from Ghana, Kenya, Namibia, Tanzania, Uganda and Zambia. The network members undertake in-depth peer reviews of each others regulatory agencies through country visits and interviewing the relevant Ministers, Board or Commission members, regulatory management and staff, managers from regulated utilities, consumer groups, journalists, parliamentarians, investors, analysts, etc. Both regulatory governance (ie. the legal design, institutional arrangements, and processes of regulatory decision-making) and regulatory substance (i.e. the content of regulation: tariff-setting methodologies, supply and service quality and market entry) are evaluated. This presentation reviews the lessons from these peer reviews in terms of the learning process and also the credibility, legitimacy, transparency, quality and robustness of

regulatory decisions and their impact in terms of incentivising more efficient and financially viable utilities which are able to attract new investment while providing competitively priced and reliable electricity services.



PIPPO RANCI

Professor at the Università Cattolica of Milan,
former President of the Italian Regulatory Authority,
co-founder of CEER

Pippo Ranci was the first president of the Italian Regulatory Authority for electricity and gas (1996-2003) and co-founder and vice-president of the CEER.

Then he set up and directed the Florence School of Regulation at the European University Institute (EUI) in Florence (2004-2008). In 2008-09, he has remained as an advisor to the Robert Schuman Centre at the EUI.

He is now a retired economist, still teaching at the Università Cattolica, Milano, where he had lectured, mainly in Economic Policy, from 1973 to 1996.

In 1971, he co-founded the Istituto per la Ricerca Sociale, Milano, a private cooperative research institute, where he was president until 1981 and then a part-time researcher until 1996.

ABSTRACT SUMMARY

Key skills, knowledge, and tools for regulators in developed and developing countries

A regulator's activity is based on a combination of technical, legal and economic skills: three professions are involved.

Each person has one background only, in general. It is a task of the regulatory institution to provide training, both in courses and on the job, that enables the staff to understand the three cultures and communicate across disciplinary borders.

Moreover, a regulator must produce decisions which are understood by the general public: these must look convincing or at least respectable to companies, consumers and politicians. Decisions must be appreciated by journalists and opinion makers. This requires an effort in education and persuasion, and the ability to communicate: in a way this is the fourth profession involved.

The basic challenge is to show that free market and good regulation provide a better outcome than alternative settings on both grounds of efficiency and equity. Although providing an improvement in general, liberalisation and regulation may worsen the position of some subjects and categories: goals should be set clearly and a transition path designed pragmatically. Although the regulatory institution is non-political, the skill required in keeping the ideals steady and work out practical, acceptable solutions, is highly political. And this is the fifth professional skill required.



MARK JAMISON

Director, Public Utility Research Center, University of Florida, USA

Dr. Mark Jamison is Director of the Public Utility Research Center at the University of Florida. He also serves as the Director of Telecommunications Studies. He also co-directs the PURC/World Bank International Training Program on Utility Regulation and Strategy. Dr. Jamison is a research associate with the UF Center for Public Policy Research and with Cambridge Leadership Associates. He received a PhD in economics from the University of Florida, where since 1996 is a Senior Lecturer in the Department of Economics. He was as well an Associate Director, Business and Economic Studies, Center for International Business Education and Research, 1997 to 2004.

Developed grant applications and organized center under direction of center director. Developed collaborations with London Business School and others.

2004 - Present: Associate, Cambridge Leadership Associates, Cambridge, MA. Provide con-

sulting and training on adaptive leadership, emphasizing the development of personal leadership skills and creating an adaptive organization that operates efficiently and effectively in a changing environment.

ABSTRACT SUMMARY

Utility regulation today: A nexus of technical, political, and leadership skills

Now more than ever regulation is more than performing the technical work of rate setting, market monitoring, investment and financial analysis, legal operation, and quality oversight that have been the bread and butter of regulatory work for so many years. While these remain at the core of regulatory work and must be performed well for the sectors to perform efficiently and for the regulator to receive the authority it needs from stakeholders to be able to do its work, in today's world of constant change in energy, telecommunications, and water sectors there is a premium on regulators having the political and leadership skills that are necessary for ensuring that the regulatory organization is strong and part of a policy-production-participation system that is adaptive to new realities. The technical work of regulation tells us what is and what can be done given the technical and financial constraints under which operators and regulators must perform. The political work tells us what should be, that is to say the values and aspirations of the country. The regulator is not the political player or the politician, but the regulator plays critical roles of convenor, fact provider, and trouble maker to assist the political process to confront its most difficult issues. The leadership work tells us how we will get things done, including the engagement in the dialogues for adaptive work and organizational leadership for implementing policy decisions.



KRISZTINA KASZA

Programme Director, Energy Regulators Regional Association (ERRA)

Krisztina Kasza has been the Head of Secretariat of ERRA since 2001. She was an active participant of the establishment of the association and has been a contributor to the development of ERRA.

She works closely with the ERRA Chairman and the Presidium, oversees the activities of the standing committees and the training programmes of the association.

She holds a Bachelor of Business Administration (College of Foreign Trade, Budapest) and a Master of Science (University of Pecs) degree.

Previously, she worked for the Budapest Commodity Exchange as Marketing Manager. Prior to this job, she was employed by the U.S. Embassy in Budapest.

ABSTRACT SUMMARY

ERRA's experience with regulatory training

In the geographical region covered by ERRA, there are no designated courses offered for energy or any other network regulators. As our association evolved and members faced staffing issues (recruitment of qualified staff, staff changes, etc.) it became clear that there was a strong need for formal, structured training programmes to augment the best practices transfer exercised in ERRA meetings and other activities of the association. The guiding principles for the development of our in-house training courses have been the following: the courses should focus on applied, hands-on experience of practicing regulators; consideration of members' needs when developing new training modules; courses available both in classroom and e-learning format; strong cooperation with researchers and academia; and dual-language arrangements (English-Russian).

**MATTHEW SADINSKY**

CEO of PREP Intl and Chairman of System Operations Success Intl,
USA

Matthew Sadinsky, CEO of PREP Intl (Prequalified Ready Employees for Power and Chairman, System Operations Success Intl has thirty years change and organization development experience leading vibrant learning organizations.

Matt held HR/Ethics Officer roles at GridSouth, Vivendi-Universal's Games and Alcatel Alsthom's NA battery divisions and was OD architect at: Magellan Labs, PERGO and served with Bob Kiley and David Gunn's leadership team that rid the NYC subways of graffiti. Matt's career began with Continental Can Company after graduating Cornell University.

SOS Intl specializes in compliance consulting and training services related to NERC Reliability Standards and is a NERC approved continuing education provider. Formed in 2002, SOS Intl has provided consulting and training to over 7000 professionals and teams across 1000 global energy organizations.

PREP Intl was formed in 2008 to "Prepare Tomorrow's Energy Professionals" through placement, talent and career development.

ABSTRACT SUMMARY

How will energy technology & SMART grids transform the future of regulation?

Building cultures of compliance for effective oversight takes more than sheriff school?

These are crucial times in hot, flat and crowded global energy sectors. Connecting the dots on Enron, ArthurAnderson, Lehman, AIG and the financial collapse of 2009 emboldens cries for more regulation, transparency and accountability. As Energy Technology (ET) creates new markets for sustainable energy policies and takes on resource scarcity, energy poverty and global warming; societies demand more comprehensive oversight. As SMART City initiatives promise game changing architectures, regulators need strategies to keep pace and lead change in much the same way old-time sheriffs helped citizens feel safe amidst turmoil. Energy organisations and their regulators worldwide struggle to define "Cultures of Compliance" while bridging generational divides. We are all in the same turbulent soup transforming classical organisations built for control and reliability to more nimble teams blending gen Z and native cultures with retiring boomers and new paradigms. "Sheriffs" inside and outside our agencies, governments and organisations have never been needed more. As SMART cities prove the value of networks for load management and reliability, the need for experienced, level-headed, even-handed, critical-thinking, tech-savvy, competent and comprehensive oversight is paramount. Making tomorrow's "sheriffs" ready is a key part of this transition, requiring critical reassessment of their compensation, the state of training, simulation and their career paths.

WEDNESDAY 20 OCTOBER

KEYNOTE SESSION 3

TRACK D

Energy and financial markets
interdependency issues



PETER STYLES

Chairman, Electricity Committee, European Federation of Energy Traders

Peter Styles' most notable area of expertise and experience is in the energy sector. He follows in a consulting capacity European electricity markets, especially the development of wholesale power market design, EU legislation and resulting national regulation. He offers consulting services to clients through a division of his company: www.stratosenergy.com. Peter is particularly well known since 1996 in the field of EU energy liberalisation. Since February 2000 Peter has been a Board Member of the European Federation of Energy Traders (EFET: www.efet.org) and Chairman of the Electricity Committee of EFET. He in addition became a founding Board member of an associated energy traders' group in Germany, EFET Deutschland, in September 2001. His career in the 1980s and 1990s encompassed project work in upstream oil and gas, power plant development, the management of a gas pipeline business and the establishment of the first and largest pan-European energy trading business.

ABSTRACT SUMMARY

Energy and financial markets interdependency issues

The wholesale tier of liberalised power and gas markets in many developed countries has advanced in recent years – indeed traded volumes and liquidity have generally been rising across all energy commodity markets, indicating that buyers and sellers are confident to trade and judge risks as being manageable. This advance would not have occurred if wholesale traded markets were characterised by significant incidences of market failure or a perception of a high risk of failure. More recently the economies of many nations, which engaged in liberalisation, have entered a period of crisis, in the wake of global financial and monetary turmoil. Energy demand is down and customer and supplier credit at a premium. Many are calling for tougher regulation in financial markets. The calls find their echoes among energy consumers, aggrieved by unpredictable and apparently irrational prices. In this session, we will discuss whether new regulatory initiatives, envisaged for example by Congress and the Commodity Futures Trading Commission (CFTC) in the United States and in the de Larosière report to the European Commission, should home in on credit markets, debt instruments and financial institutions (the apparent sources of current contagion), or whether they should reach further into the realms of proprietary trading in energy commodity derivatives. I personally will suggest that, even through this recessionary period, national energy regulators must retain their central focus, by pushing through unbundling and transmission access reforms and promoting regional or continental market harmonisation. Wholesale power and gas traders too must concentrate on their normal commercial tasks – navigating in the process the perilous waters of price volatility, liquidity and counterparty risks and of policy and regulatory uncertainties.



JOHANNES KINDLER

Vice President, Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway (BNetzA), Germany

After studying law and holding different positions as adviser and assistant head of division at federal level, Johannes Kindler headed the office of the Minister of State to the Federal Chancellor between 1987 and 1991.

From 1991 to 1995 he was head of division for industrial and energy policy, the Treuhand privatisation agency, small and medium-sized enterprises and regional economic policy at the Federal Chancellery.

Between 1995 and 2007 he was head of the department for industrial, energy and telecommunications policy, innovation, foreign trade and financial markets. In this position, he worked as industrial adviser to Chancellors Gerhard Schröder and Angela Merkel.

Since February 2007, Johannes Kindler has been Vice President of the Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway.

He was elected Vice-Chairman of the European Regulators' Group for Electricity and Gas (ERGEG) in November 2007.

ABSTRACT SUMMARY**Regulatory capture in the context of intensified public energy policy**

- Energy trading is of increasing importance. Trading volumes in gas and electricity rapidly increase.
- An appropriate supervision of energy trading should be in place which takes into account financial and physical energy trading.
- Current financial market regulation only partly covers energy trading.
- A tailor-made supervision regime is necessary to ensure market integrity in the energy markets. Cooperation between the competent authorities is important.
- Developments of other markets (e.g. oil, coal, carbon emissions) and interdependencies with those also have to be considered.
- No Sarbanes-Oxley for energy trading, but what needs to be done, must be done.

**PHILIP MOELLER**

Commissioner, Federal Energy Regulatory Commission (FERC), USA

Commissioner Philip D. Moeller was nominated by President Bush, and sworn into office on July 24, 2006, by Chief Justice of the United States John Roberts, for a term expiring June 30, 2010. From 1997 through 2000, Mr. Moeller served as an energy policy advisor to U.S. Senator Slade Gorton (R-Washington) where he worked on electricity policy, electric system reliability, hydropower, energy efficiency, nuclear waste, energy and water appropriations and other energy legislation. Prior to joining Senator Gorton's staff, he served as the Staff Coordinator for the Washington State Senate Committee on Energy, Utilities and Telecommunications, where he was responsible for a wide range of policy areas that included energy, telecommunications, conservation, water, and nuclear waste. Before becoming a Commissioner, Mr. Moeller headed the Washington, D.C., office of Alliant Energy Corporation. Prior to Alliant Energy, Mr. Moeller worked in the Washington office of Calpine Corporation. Mr. Moeller was born in Chicago, and grew up on a ranch near Spokane, Washington.

He received a B.A. in Political Science from Stanford University.

ABSTRACT SUMMARY**An American perspective on regulatory incentives and the need for new infrastructure**

Like other nations, the United States continues to build and improve its infrastructure for delivering natural gas and electricity. Those industries are highly regulated in the country-region United States, at both the federal and state levels. Thus, the decisions made by those who regulate natural gas and electricity can greatly impact the rate at which needed infrastructure is developed. American regulators have largely arrived at the conclusion that a balance between market-based pricing and cost-plus pricing will best optimize the level of energy infrastructure in the nation. A short-term financial crisis does not change this conclusion, especially given that investors in American infrastructure need confidence over long-term horizons.

**CARLO COMPORTI**

Secretary General, Committee of European Securities Regulators (CESR)

Carlo Comporti has been CESR's Secretary General since January 2008.

Prior to this, Mr Comporti was the Deputy to the Secretary General of CESR and Director for Markets and Intermediaries in the CESR Secretariat. He joined the CONSOB in 1994, firstly in the Intermediaries Enforcement Division and subsequently in the International Relations Office. He has been a member of expert groups in the field of securities regulation at the EU Council, Commission, OECD, and rapporteur of the FESCO Expert Group on Investor Protection and then the CESR MiFID Expert Group. Carlo Comporti spent six months at the ECB working on a joint project with CESR in securities clearing and settlement, and one year

at the European Commission as a national expert working on the revision of the Investment Services Directive.

He graduated from the University of Siena with a Degree in Economics and Banking and holds a Doctorate in Banking and Securities Law. He is a visiting professor of Commercial Law at the University of Siena and he has published numerous publications in the fields of securities and company law.



CARLOS LAPUERTA

Principal, The Brattle Group, UK

Mr. Lapuerta directs the London office of The Brattle Group, an international consultancy specialising in the economic and financial analysis of the energy industry. He has advised gas and power companies, regulators and governments on the economic and financial issues concerning regulation and the development of competition in European energy markets. Clients have included the European Commission and the governments or energy regulators of Austria, Belgium, Greece, Ireland, Italy, the Netherlands and the United Kingdom, as well as the Council of European Energy Regulators and the European Federation of Energy Traders. Mr. Lapuerta has degrees in law and economics from Harvard University.

ABSTRACT SUMMARY

The financial crisis and the regulation of energy markets

The financial crisis has reduced demand for natural gas and electricity throughout Europe while simultaneously raising the need for new infrastructure that can transport these products, to mitigate the emergence of local and regional imbalances. An emerging Spanish gas surplus gives higher value and urgency to the expansion of the Spanish-French gas pipeline and to regassification capacity elsewhere in Europe. Generally, infrastructure investment can still reduce total energy costs in difficult economic times.

The financial crisis has simultaneously complicated the regulators' tasks of estimating reasonable returns for regulated infrastructure. In the presentation, I will discuss two logical solutions: a) depart from traditional techniques for estimating the cost of capital, b) reduce the amount of infrastructure subject to the regulator's estimates of the cost of capital, either by using innovative tendering techniques to finance new infrastructure or by facilitating the construction of new infrastructure under exemptions from regulated third-party access requirements.

WEDNESDAY 20 OCTOBER

PLENARY SESSION 4

TRACK D

The role of regulators in policy
making with regard
to the public interest



GAËTAN CARON

Chair and CEO, National Energy Board, Canada

Gaétan Caron was designated Chair and CEO of the National Energy Board of Canada (Board) on 20 September 2007. Prior to assuming that role, Gaétan Caron was Vice-Chair of the Board, having been appointed on 1 January 2005. In 2003, he was appointed member of the Board.

Gaétan joined the staff of the Board in 1979. He has assumed a number of responsibilities at the Board, including those of Chief Engineer and Director, Financial Regulation. From 1994 to 2003, he held the position of Chief Operating Officer, being accountable to the Chair for the Board's overall capability and readiness to meet strategic and operational needs.

Gaétan obtained his Bachelor of Applied Science degree in Rural Engineering from Laval University in 1979 and his Master of Business Administration degree from the University of Ottawa in 1987. He is a member of the Québec Order of Engineers and of the Association of Professional Executives of the Public Service of Canada. He serves as Past Chair of the Canadian Association of Members of Public Utilities Tribunals (CAMPUT). He has been a member of the Board of Directors of the Calgary United Way from 2002 to 2009.

ABSTRACT SUMMARY

The role of regulators in policy making with regard to the public interest

It is broadly understood that regulators must have a degree of independence relative to policy and political systems for the goals of regulation to be achieved. This independence, however, is not absolute. For instance, regulators must obtain financial resources for their operations, and need to be held accountable in some fashion for the results they are expected to produce. What is the optimal degree of independence for effective regulation? To the extent that this independence is not absolute, what is the appropriate relationship between policy-making and independent regulatory decision-making? Current models to address this matter refer to a range of possibilities, from regulators informing policy, through seeking to influence policy and, in some cases, sometimes embodied in enabling legislation, the authority to advise on potential policy actions or make recommendations. For the integrity of the system to be maintained, both policy makers and regulators must acquire an in-depth understanding of their respective roles and their interdependency.



VYACHESLAV SINYUGIN

Deputy Minister of Energy, Russia

It has already past more than one year since a new electric power industry structure and a control system were established. The vertically-integrated monopoly RAO UES was replaced by a number of generating, grid and trading companies. The Ministry of energy of the Russian Federation has been functioning in its new capacity since May 2008 the: now it is a Federal Governmental body and is liable for forming of the policy in the sphere of electric power industry. Principal directions of the Ministry's activity are following: settlement of issues concerning the current electric power industry operation (inspection readiness to the autumn and winter period, coordination activities of the Federal and regional authorities to administrate the electric power industry, supervision over management of state assets of enterprises of the electric power industry), as well as issues of perspective planning (compiling of long-term projects of the electric power industry, control for their execution, including investment program of state and private companies. The transitional wholesale and retail markets of electricity and electric power are functioning in Russia since autumn 2006. A step-by-step liberalization of the prices for electricity is realize. Priority issues of the Ministry include following areas: optimization of energy market, particularly, initiation of a long-term electricity power market, formation of a targeted wholesale market of electricity, as well as the functioning of the transmission grid system (passage to the tariffs according to the RAB method) improvement, control for the execution of approved investment programs by generating and grid companies.



STEPHEN LITTLECHILD

Emeritus Professor, University of Birmingham and Fellow,
University of Cambridge, UK

Stephen Littlechild is a Fellow at the Judge Business School, Cambridge University, and Emeritus Professor (previously Professor of Commerce 1975-1989) at the University of Birmingham. Member of the Monopolies and Mergers Commission (1983-1988) and Director General of Electricity Supply (head of the Office of Electricity Regulation) 1989-1998. Since 1999 he has been an international consultant on privatisation, regulation and competition, especially in the electricity and telecommunications sectors. He is an economic adviser to Ofgem and the Civil Aviation Authority price control panel, and a Commissioner at the Postal Services Commission (Postcomm).

ABSTRACT SUMMARY

Regulation, negotiated settlements and the public interest

Is it inevitable and in the public interest that monopoly networks should continue to be regulated as at present? Such regulation has limitations as well as advantages. In some countries, negotiated settlements between utilities and users including customer groups provide greater flexibility and innovation and better representation of consumer interests. There is scope to apply such alternative institutional arrangements more widely.



ORJIAKOR ISIOGU

Chairman, Michigan Public Service Commission, USA

Orjiakor N. Isiogu was appointed to serve as Chairman of the Michigan Public Service Commission by Governor Jennifer M. Granholm on September 9, 2007. His term ends July 2, 2013.

Mr. Isiogu most recently served as the Director of the Telecommunications Division of the Michigan Public Service Commission since 2003. Prior to this, Mr. Isiogu was an Assistant Attorney General in the Special Litigation Division of the Michigan Attorney General's office, where Mr. Isiogu worked under three Attorneys General and served on the Litigation Advisory Board.

Mr. Isiogu is a member of the Michigan Highway Reciprocity Board, the Michigan Relay Center Advisory Board, the Emergency Telephone Services Committee, the Renewable Fuels Commission, and the Climate Action Council. In addition, he is a member of the Smart Grid Collaborative effort between FERC and NARUC.

Mr. Isiogu earned his law degree from Wayne State University Law School in Detroit, Michigan, and holds an undergraduate degree in political science from Wayne State University.

ABSTRACT SUMMARY

The value of an independent and impartial regulator

Background: Government regulation of private enterprise "affected with a public interest" dates to 1670. Experience has taught that to be effective, regulation must be conducted in a fair and unbiased manner by independent and impartial regulators.

Elements of Unbiased Regulation: The regulator must endeavor to balance the interest of the public and the regulated utility. The regulator must be bound by the law and observant of the property rights of the regulated entity. Due process includes notice and an opportunity to be heard by all interested parties. Hearings must be transparent and open to all for public scrutiny. Regulators should be knowledgeable in the technical, economic, financial, and legal aspects of regulation. The regulator must approach each case with an open mind and have no personal interest in the outcome of the proceeding.

Conclusion: To be fair and impartial, a regulator should strive to be autonomous, knowledgeable, highly ethical, free of conflicts of interest, observant of the rights of all interested persons, and bound by the law.



HEINZ HILBRECHT

Director, DG Energy, European Commission

Heinz Hilbrecht is an economist and has over the last thirty years had numerous functions in the European Commission's energy and transport policy services in Brussels.

His current function is Director for "Security of Supply and Energy Markets". His directorate developed the Commission's Strategic Energy Reviews of January 2007 and November 2008 outlining a common approach for the energy policies of the European Union.

His service has been responsible for the recently adopted "Third Energy Package", that is the regulatory framework for the internal gas and electricity markets of the EU.

Recent work also includes a green paper for the development of trans-European energy infrastructures, a revision of the oil stocks directive, and a proposal for a new EU regulation on gas security of supply.

ABSTRACT SUMMARY

Independence and powers of regulators: Legal and institutional requirements

One of the key issues in the so-called 3rd legislative package on the European Union's (EU) internal energy market (approved on 25th June 2009), is the enhanced powers and independence of regulators. These new rules give EU regulators a clear mandate to cooperate at European level, in close cooperation with the Agency for the Cooperation of Energy Regulators and the European Commission. The new rules also strengthen the market regulation powers of regulators and enable them to perform their duties, as they are given the powers to investigate, to request all necessary information and to impose dissuasive sanctions. There is a link between the duties of regulators and the type of unbundling chosen by a Member State. Because demonstrable independence of regulators is a key principle of good governance and a fundamental condition for market confidence, the 3rd package also contains new provisions in that perspective. Under the new scheme, the regulators must be legally distinct and functionally independent of any other public or private entity, and its staff and any member of its decision-making body must act independently of any market interest and neither seek nor take instruction from any government or other public or private entity. With these new rules on the regulators, and also the rules on the Agency and the European Network of Transmission System Operators (ENTSO), the European Union has a unique set of tools aimed at enhancing cross-border trade and establishing competitive, secure and environmentally sustainable internal electricity and gas markets within the European Union, and effective market opening for all consumers and suppliers.



PANTELIS CAPROS

Professor of Energy Economics, National Technical University of Athens and former Chairman, Energy Regulatory Authority, Greece

Prof. P. Capros is a Professor of Energy Economics and Operation Research at the Department of Electrical and Computer Engineering of National Technical University of Athens.

He was the Chairman of the Regulatory Authority for Energy in Greece (2000 - 2004).

He's been as well a Member of the Board of Directors of the Greek Public Corporation for 5 years.

He has widely published and conducted research programmes in the areas of Energy Modelling, Macroeconomics, Operations Research and Mathematical Programming.

He has also built and used a variety of large-scale mathematical models and has more than 20 years professional experience of consultancy in the domain of energy and economic policy.

ABSTRACT SUMMARY

Regulatory capture in the context of intensified public energy policy

Regulatory capture is readily seen when the energy regulator acts in favour of the dominant energy company or shelves issues related to competition.

Energy policy is currently intensifying, driven by the climate action objectives. The energy market is entering into a period of increasing state intervention. The portion of the energy

market under competition, free from public influence, will be shrinking continuously. As most of these policies are subject to national jurisdiction, “national champions” will be favoured, challenging regulatory independence. It is likely that situations of capture will emerge, since regulators, appointed domestically, will be under direct or indirect pressure to defend national policies. In this context, the perspective of supra-national regulation is justified along with further market integration.

WEDNESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK A - SESSION 13

Quality of electricity supply
and its regulation



KARSTEIN BREKKE

Senior Engineer, Walter Resources and Energy Directorate (NVE), Norway

Mr. Karstein Brekke received his M.Sc. degree in Electric Power Engineering from the Norwegian University of Science and Technology (NTNU) in 1999.

Currently, he works as a Senior Engineer with the Norwegian Water Resources and Energy Directorate (NVE).

He has the main responsibility for the quality of electricity supply regulation, including generating and follow-up of research activities and international standardisation.

Before he joined the regulation, he worked as a consultant mainly for the electricity industry. Currently, he is also the Chairperson of the Electricity Quality of Supply Task Force in the Council of European Energy Regulators together with Mr. Jorge Esteves, Portugal.

ABSTRACT SUMMARY

Quality of electricity supply and its regulation

Quality of electricity supply is an important issue in the electricity transmission and distribution sector, as well as for customers and manufacturers. Information on the existing levels and policies in various countries has been collected frequently by some organisations like the Council of European Energy Regulators (CEER), which recently published its 4th Benchmarking Report on Quality of Electricity Supply. In order to ensure that quality is not compromised at the expense of company cost reduction measures, regulators include quality factors in their regulatory framework, both minimum requirements and financial incentives, aiming to strike a balance between cost efficiency and quality of supply. The socio-economic optimum for continuity of supply may vary across the power system, while voltage quality needs to be within certain limits in order to ensure satisfactory functioning of electrical equipment, both in urban and rural areas. Monitoring continuity of supply and voltage quality requires different tools, and monitoring systems exist in various countries.

ALFREDO DAMMERT

Chairman Regulatory Authority for Energy and Mining Investments (OSINERGMIN), Peru and Coordinator of the Master Program in Regulation, Catholic University of Peru



Industrial Engineer graduated from the Universidad Nacional de Ingeniería (University of Engineering of Perú) with a Master of Science in Chemical Engineering from the University of Texas at Austin; a Certificate in Economics from the Università di Bologna, Italy, and Ph D. in Economics from the University of Texas at Austin. Besides being professor in universities in Peru and the United States, he held executive positions in several institutions such as the Industrial Development Bank of Peru; MINPECO and CENTROMIN PERU. He has held several positions at the World Bank in Washington. At present, he is Chairman of the Regulatory Authority for Energy and Mining Investments in Peru – OSINERGMIN and Coordinator of the Master Program in Regulation at Universidad Católica del Perú (Catholic University of Perú).

Mr. Dammert has written several books including "A world Copper Market" (U. Texas Press), Economía Minera (U. del Pacifico); Regulación y Supervisión del Sector Eléctrico (Regulation and Supervision of the Power Sector – Fondo Editorial Universidad Católica); The World Financial Crisis (forthcoming) as well as literary publications.

ABSTRACT SUMMARY

Peruvian model for quality supervision of the power sector

One function of the Peruvian Energy Regulatory Authority (OSINERGMIN) is to supervise quality of the power sector. OSINERGMIN's model for quality supervision is unique in Latin America because it is based on specific processes for each activity (technical quality, commercial quality, public lighting and safety). Each supervision process includes:

- Desirable quality levels;
- Quantitative targets;
- Assignment of responsibilities for the entities supervised and the regulator;
- Measurement of quality levels through sampling techniques and other methods;
- Scale of fines based on avoided costs as a means to incentivate compliance with quality standards; and
- Periodic evaluation and retrofitness.



LUCA LO SCHIAVO

Assistant to the Director General, Italian Regulatory Authority for Electricity and Gas (AEEG), Italy

Luca Lo Schiavo obtained a degree in 1986 in Industrial Engineering at the Technical University of Milan, Italy (Politecnico di Milano). He is currently assistant to the Director general of the Italian Regulatory Authority for Electricity and Gas (AEEG); for eleven years (1997-2008) he acted as Deputy Director of the Quality and Consumers' Affairs Department within AEEG. He has been a member of the CEER Task force "Electricity quality of supply" and is co-author of the book "Service Quality Regulation in Electricity Distribution and retail" (Springer, 2007). In the past, he was deputy director of "Cento progetti al servizio dei cittadini", an award programme on service quality for public services led by the Department of Public Administration within the Italian Prime Minister Office (1994-1997) and management consultant (1986-1994).

ABSTRACT SUMMARY

Regulation and incentives for improving continuity and quality of supply

The interest of European Energy Regulators in service quality regulation is rapidly growing. As reported in the periodic CEER Benchmarking Report on Electricity Quality of Supply, the most effective tool for improving quality seems to be incentive regulation for continuity of supply. Among the several cases, the Italian experience will be presented: over three regulatory periods, the Italian regulator (AEEG) progressively enlarged the scope of incentive regulation, arriving to include even short interruptions (from 2008) as well as continuity of the transmission service. Extra costs for customers are largely compensated by the reduction of customer outage costs (measured through a wide survey).

New frontiers for service quality regulation are the regulation of commercial quality and call center performance in liberalised markets and individual quality contracts to be offered to sensible industrial users. In recent years, CEER worked in cooperation with Cenelec to modify the voltage quality EU standard (EN 50160), that is a fundamental basis for further regulatory developments.



NIKOS HATZIARGYRIOU

Professor, National Technical University of Athens

Professor Nikos Hatziargyriou is executive Vice-chair of PPC and deputy CEO, responsible for the Transmission and Distribution Divisions, island DNO and the Center of Testing, Research and Prototyping. He is also Vice-chair of PPC Renewables. Since 1984, he is with the Power Division of the School of Electrical and Computer Engineering of NTUA, where he is full professor, since 1995. He is member of CIGRE, Convener of SCC6, Fellow Member of IEEE, Chair of the Power System Dynamic Performance Committee, and member of the Advisory Council of the Technology Platform on Future Power Systems (SmartGrids). He has participated in more than 60 R&DD Projects, in many as scientific coordinator, he is author of two books and more than 250 scientific publications.

ABSTRACT SUMMARY**Service quality in electricity distribution:
Improvement expected by effective regulation and smart grid applications**

Service quality issues are recognised as an inextricable part of electricity distribution regulation, so that social welfare is maximised as regards long-term cost reduction and desirable quality level. The new distribution management code set in public consultation in Greece, provides for measures on commercial and technical quality, and establishes financial incentives based on minimum quality standards, premium quality contracts and general performance standards.

At the same time, smartgrids are expected to play a major role in security of energy supply, reduction of greenhouse gas emissions, and quality of service, as affected by networks operation. This contribution challenges what we understand today as regulated service quality, and smartgrid applications are expected to give new opportunities for service quality improvement, due to new capabilities for technical control and information exchange.

**PAUL VLAHOS**

Board Member, Ontario Energy Board, Canada

Paul Vlahos has 20 years experience in energy regulation. He is currently a Board Member at the Ontario Energy Board, Canada. He has served as Board Member, Vice Chair and Interim Chair of the Ontario Energy Board prior to its reconstitution in 2003. Mr. Vlahos held senior positions at a large Ontario energy company and the most senior staff position at the Ontario Telephone Commission. Mr. Vlahos taught economics at the University of New Brunswick, Canada. He holds a Master's degree in economics.

Mr. Vlahos served as Chair of the Canadian Association of Members of Public Utility Tribunals (CAMPUT). He co-chaired the first World Conference on Energy Regulation (Montreal 2000).

Mr. Vlahos was born and raised in Greece. He has been living in Canada since 1967.

ABSTRACT SUMMARY**Service quality regulation in electricity distribution - the Ontario experience**

Whether under a cost-of-service or performance-based regime, service quality is an integral part of rate regulation. The regulator must therefore adopt standards which he/she can apply with confidence in addressing problematic situations. Competitive markets lead to price/quality offerings that are "optimum". In a monopoly, the regulator must emulate the results of competitive markets. Analysing customers' willingness-to-pay and utility costs leads to the "right" standard. Unlike commercial aspects of service quality, determining and adopting system reliability standards is not an easy or quick endeavour, as Ontario's experience suggests. But Ontario is committed to instituting the "right" standard.

**YUBO SHI**

Vice Chairman, China's State Electricity Regulatory Commission

Senior Engineer. Graduated from the North China Electric Power University with the Major in Power Generation and Power System. 1986-1988, Assistant Engineer and Engineer, the Planning Department of the Ministry of Water Conservancy and Electric Power. 1988-1993, Deputy Director and Director, the Comprehensive Planning Department of the Ministry of Energy. 1993-1995, Director, and Deputy Director General of the Planning Department, the Ministry of Electric Power. 1995-1998, Deputy Director General of the Planning Department, the Ministry of Electric Power; Director General of the Planning and Financing Department, State Power Corporation. 1998-2002, Deputy Director General and Director General of the Electric Power Department, the State Economic and Trade Commission. In 2002, appointed by the Central Government as Vice Chairman (Vice Minister) of the State Electricity Regulatory Commission.

ABSTRACT SUMMARY**China's secure electricity development and reliability regulation****I. China's power sector has largely achieved its objectives on development with safety**

In recent years, we have overcome the negative implications for electricity safety that have arisen from rapid growth in installed capacity, growing expansion of power grids and a pronounced rise in the complexity of power systems. The country's electricity industry has maintained a desirable situation of production safety on the whole.

II. China's power system has obtained steady improvement in reliability

In China, The purpose of research on electricity reliability aimed to improve the entire power system's overall social and economic benefits, to accurately assess the sufficiency and safety of generation, In the case of reliability management, the adoption of various managerial and technological methods has resulted in a dramatic improvement in the reliability performance of power equipment and systems.

WEDNESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK C - SESSION 14

Regulatory issues affecting
energy intensive customers



HANS GRÜNFELD

President, IFIEC-Europe and Managing Director, VEMW

Since June 2007, Hans Grünfeld has been president of IFIEC-Europe, the European association of industrial energy consumers. He is also managing director of VEMW, a Dutch association of non-domestic energy and water consumers, representing companies and organisations from industry, the financial, health care, educational and other sectors in the Netherlands.

Having served VEMW since 1999, Hans Grünfeld has extensive experience with the liberalisation and integration of the European gas and electricity markets.

Before joining VEMW, Hans Grünfeld worked for McKinsey & Company (researcher) and Rand Europe (policy analyst).

Hans Grünfeld received a Ph.D. from Delft University of Technology and holds an MSc in International Relations from the London School of Economics and Political Science and a Masters in Political Science from the University of Amsterdam.

ABSTRACT SUMMARY

Regulatory issues affecting energy intensive customers

Energy intensive customers are companies and other organisations for which costs related to energy use are critical for their operational performance. Sharing a focus on optimising costs, industrial facilities, railroad operators, and many other companies require a cost effective and secure energy supply. In this session, experts from North America, Europe and Africa discuss how regulators can help to further competitiveness and a high level of supply security and quality. Dealing with the regulatory tasks of promoting competition, regulating (grid) monopolies, and, above all, guaranteeing a secure supply situation, consumer representatives and regulators will respond to questions such as: how to assure system adequacy; how to regulate monopoly revenues without compromising quality; and how to remove obstacles for competition and prevent anti-competitive behaviour. Drawing from extensive experience across three continents, this session will explore the potential as well as the limits of markets and the subsequent role for regulators.



NIKOLAY MINKOV

Chairman, Infrastructure, Energy & Utilities Committee Confederation of Employers and Industrialists in Bulgaria
Board member and ex-chairman, BG FIEC

Nikolay Minkov is a managing partner of Uconomics, a centre of competence in infrastructure, energy and utilities and a board member of Ellatzite Med, a copper mining company in Bulgaria.

For the last 10 years, he has worked on several projects concentrated on enterprise energy management, demand-side clustering, utility company re-engineering and energy market liberalisation with companies and institutions like Amylum Bulgaria (a member of Tate & Lyle), Cumerio (now Aurubis), Assarel Medet, Heidelberg Bulgaria (later Titan) Cement, Booz Allen Hamilton, E.ON Energie, MEE, SEWRC, etc.

Nikolay Minkov has an Electrical Engineering degree from Moscow Power Engineering Institute, Moscow, Russia.

ABSTRACT SUMMARY

Industrial stakeholders in regional energy markets: How heavyweights to face-out heavy happiness?

In this presentation we will focus on the imperative role industrial energy intensive consumers must play towards development of regional regulatory authorities, energy market and associated interests. Main theses are summarized as follow:

- Who inspired the market liberalization and why they are so lazy today?
- We need to pick up the enterprise energy manager on the corp. board.

- Shall we lobby for industrial consumers' commissioner at regulatory body?
- Industrial stakeholders and tied traders, supply contracts and market rules.
- Why regional market needs regional federation of industrial energy consumers?
- SEE role in enlargement and strengthening of the European FIEC.



NICHOLAS MORRIS

Director, IPA Energy & Water Economics

Nicholas Morris is a Director of IPA Energy + Water Economics.

Previously he was co-founder and CEO of London Economics, and Deputy Director of the UK Institute for Fiscal Studies. In the last ten years, he has advised governments and companies on energy sector development in SE Asia, China and Australia. He has worked on energy sector policy and regulation since the 1970's, and advised the UK electricity industry during the privatisation process. He led the advisory team for the 2003 'Parer' Review of Australian Energy Policy and has participated in numerous due diligence teams for major energy assets. Recently, he advised the Malaysian Energy Commission in a review of Power Purchase Agreements and was International Gas Market Specialist in a review of China's gas industry. He has worked on regulatory and energy market issues in Malaysia, Singapore, Vietnam, Thailand, Philippines and Korea including participating in a recent Asian Development Bank review of energy sector regulation. He is International Adviser to the China Securities Investor Protection Fund and a regular lecturer at the China Executive Leadership Academy in Pudong, Shanghai.

ABSTRACT SUMMARY

Structuring electricity supply contracts for high voltage customers

Efficient and sustainable energy markets require appropriate allocation of risks, and suitable mechanisms for cost-reflective electricity tariffs. Investors in generation capacity need to be confident of returns which will satisfy the needs of lenders and investors, while high voltage customers require the lowest possible tariff but also need to be confident of continued security of supply. This is true whether the electricity is supplied through a power pool, or by a vertically integrated utility, or by a single buyer with power purchase agreements. In markets where pricing signals are constrained there is therefore a requirement to develop bespoke tariff offerings for the largest industrial customers as the first step in a move away from a regulated regime into a liberalised market arrangement. Drawing on experience in several countries, including Greece, Nicholas Morris will discuss methodologies for structuring suitable contracts including comments on capacity charges; charges for reactive power; seasonal time of use tariffs; and risk sharing mechanisms.



PHILIP MOELLER

Commissioner, Federal Energy Regulatory Commission (FERC), USA

Commissioner Philip D. Moeller was nominated by President Bush, and sworn into office on July 24, 2006, by Chief Justice of the United States John Roberts, for a term expiring June 30, 2010. From 1997 through 2000, Mr. Moeller served as an energy policy advisor to U.S. Senator Slade Gorton (R-Washington) where he worked on electricity policy, electric system reliability, hydropower, energy efficiency, nuclear waste, energy and water appropriations and other energy legislation. Prior to joining Senator Gorton's staff, he served as the Staff Coordinator for the Washington State Senate Committee on Energy, Utilities and Telecommunications, where he was responsible for a wide range of policy areas that included energy, telecommunications, conservation, water, and nuclear waste. Before becoming a Commissioner, Mr. Moeller headed the Washington, D.C., office of Alliant Energy Corporation. Prior to Alliant Energy, Mr. Moeller worked in the Washington office of Calpine Corporation. Mr. Moeller was born in Chicago, and grew up on a ranch near Spokane, Washington.

He received a B.A. in Political Science from Stanford University.

ABSTRACT SUMMARY

Ensuring adequate energy supplies at reasonable rates

Of the numerous jurisdictions which regulate retail and wholesale prices in the electricity and natural gas industries in the United States, many set rates using a "just and reasonable" standard, where a cost incurred can be recovered in rates if the managerial decision to incur the cost was "prudent". This standard balances the need to build adequate infrastructure against the need to minimize the cost of that infrastructure. In this way, investors in utility infrastructure are generally assured that regulators will balance the need to attract adequate investment against the need of consumers to minimize the rate impact of that investment. Regulatory problems are thus resolved starting with this basic framework.



ROD CROMPTON

Regulator, National Energy Regulator of South Africa (NERSA)

Dr Crompton was appointed the Regulator primarily responsible for petroleum pipelines at the National Energy Regulator of South Africa (NERSA) in October 2005. NERSA also regulates the electricity and gas industries.

Prior to his appointment at NERSA, he was a senior manager at the national Department of Minerals and Energy. His responsibilities there included energy planning, petroleum products regulation, renewable energy and energy efficiency.

He has advised Ministers of Minerals and Energy on several major policy interventions and pieces of legislation.

In all, he has a working association with the chemical and energy industries spanning 27 years.

ABSTRACT SUMMARY

Security of supply for large electricity users in South Africa

Security of supply for large electricity users in South Africa has been affected by the national utility's historical capacity forecasts, price regulation and Government's policy objectives. The advantages of plentiful supply and low tariffs have been replaced by supply constraints, rising tariffs and funding challenges for additional capacity. The search for an appropriate model for electricity delivery is underway.



BENOIT GRATTON

Director, Energy Procurement, Cascades Inc., Canada

Benoit Gratton is director of energy procurement for Cascades. In his role, Benoit directs electricity, natural gas and oil procurement strategies. He oversees energy contracts for Cascades' nearly 100 locations throughout Canada, United States and Europe.

Prior to joining Cascades 7 years ago, Benoit worked for 12 years in energy management, energy efficiency and procurement. He is passionate about energy and spends a lot of effort in reducing costs and emissions.

In March 2008, Benoit was elected as Chairman of the Industrial Gas Users Association in Canada. This role gave him a better understanding of regulation mechanisms in Canada as well as in several other jurisdictions.

Benoit holds a Mechanical Engineering Degree from Ecole Polytechnique de Montréal (1991) and an MBA from Montreal's HEC business school (1999).

ABSTRACT SUMMARY

Areas of improvement in regulation as seen by industrial consumers

1. Many interveners, many observers and a very lengthy process set the rules in several juris-

dictions. Industry generally has a quicker negotiated approach which is goal-oriented. **Simplification** of the process is highly desirable.

2. **Communications** of energy boards and utility commissions could improve with internet, international standards and rules for lobbying.

3. Industrial load is usually the backbone of network expansion, generating wealth for an entire community. To remain competitive in the long run, industry needs **flexibility in rates** (obligations and duration).

4. **Cost recovery of representation:** Regulator's role is to protect the public interest. Industry, through associations, is often the only interveners to be able to give the regulators the other side of the coin. Who should pay for this?

5. **Recognition of past performance in efficiency and emissions reduction.** Industry is asked to pay a large part in today's programs even though it has been active for several years in that respect for environmental and economic reasons.

WEDNESDAY 20 OCTOBER

CONCURRENT SESSIONS

TRACK D - SESSION 15

Cooperation among regulators
and regional associations



SLAVTCHO NEYKOV

Director, Energy Community Secretariat

Education –Lawyer (Sofia University “Kliment Ohridski”– 1979-1984); International Economic Relations (Sofia, 1989-1991); MA in European Integration (University of Limerick, Ireland – 1993-1994)

Professional career outside the energy sector– state prosecutor; legal advisor

Uninterrupted experience in the energy sector (1) – since 1992 (Ministry of Energy and Energy Resources of Bulgaria – Head of Legal Department, Head of European Integration department, Secretary-General of the Ministry; State Energy Regulatory Commission of Bulgaria – Commissioner; the Energy Charter Secretariat, Brussels)

(1) Details are available upon request. The description does not reflect the sequence of holding the positions.

ABSTRACT SUMMARY

Cooperation among regulators and regional associations

Serious regulation that aims at meeting market demand and stakeholders’ needs strongly relies on intensive involvement of market participants in the regulatory decision and rule setting process. Where the number of stakeholders increases, associations become important partners for regulators to streamline and balance the positions of market participants. The integration of national markets leads to new challenges of cooperation across borders and on a regional level.

The Session will discuss the instruments and best practice experiences of cooperation among regulators and regional associations. The panelists –experts from regulatory authorities, associations and academic training centres across the world– will give an insightful view of their practical knowledge and explain how cooperation among regulators and regional associations operates in practice. The discussions will draw a picture of the instruments of cooperation, the efficient framework for setting up and cases of application and explain the benefits but also the challenges of well-designed cooperation.



PETER GURNHAM

Chair, Canadian Association of Members of Public Utility Tribunals (CAMPUT) and Chair, Nova Scotia Utility and Review Board, Canada

Peter was appointed as a Member of the Nova Scotia Utility and Review Board on June 5, 2003 and as Chair on October 23, 2004.

A graduate of Dalhousie Law School, prior to his appointment to the Board he practiced law with a regional Atlantic Canada law firm, where he specialized in administrative and regulatory law.

Currently he is Chair of the Canadian Association of Members of Public Utility Tribunals (CAMPUT).

He is a frequent speaker at conferences and seminars and for the last 5 years has been a lecturer at the Energy Regulation Course sponsored by CAMPUT and Queens University.

He is active in many community organizations and is a recipient of the Commemorative Medal for the 125th Anniversary of the Canadian Confederation in recognition of service to community.

ABSTRACT SUMMARY

Cooperation means efficient regulation

This presentation will outline Canada’s experience, in the North American context, regarding the instruments and best practices aimed at facilitating cooperation among regulators and with our regional association, the Canadian Association of Members of Public Utility Tribunals (CAMPUT).

Canada’s federal system of provinces and a national government provides good opportunities for cooperation. Among the topics discussed will be tools CAMPUT uses to share best practices among its member boards; Canada’s use of bilateral agreements between regula-

tors aimed at streamlining regulation; cooperation among CAMPUT, industry and regulators on the issue of carbon pricing; cooperation with NARUC in the United States on several issues and a new initiative by the Government of Canada to streamline regulation.



TED KURY

Director of Energy Studies, Public Utility Research Center (PURC),
University of Florida

Ted Kury is the Director of Energy Studies at the Public Utility Research Center at the University of Florida.

He is responsible for promoting research and outreach activities in energy regulation and policy. He develops research strategies on emerging issues and best practices and serves as an expert resource for regulatory professionals, policymakers, and service providers in Florida and around the world.

Prior to joining the PURC, he was a senior analyst with The Energy Authority and the senior economist with SVBK Consulting Group.

He holds B.A. and M.A. degrees in Economics from the State University of New York at Buffalo.

ABSTRACT SUMMARY

Capacity building through regulatory networking

Since 1990, at least 19 regulatory associations have been formed around the world. The motivation for forming these associations varies. The members of the networks may be linked physically, be interested in consistent policies, or be seeking external seed money to build resources. These networks may provide data for benchmarking, create handbooks of best-practice, address regional policy issues, take advantage of economies of scale to building staff capacity or undertake technical studies. The establishment of these networks can be an onerous process, but addressing several key questions may help to shape the focus of the network and speed the attainment of institutional goals.



JEAN-MICHEL GLACHANT

Director, Florence School of Regulation, Italy

Jean-Michel Glachant was born in 1950 and obtained his Master's degree and PhD in economics at University La Sorbonne in France. He left La Sorbonne for University Paris Sud in Fall 2000 where he took the direction of the department of economics and founded the research team "Groupe Réseaux Jean Monnet" and in 2005 the European Erasmus Mundus Courses EMIN (Economics and management of network industries). Since October 2008, He is Director of The Florence School of Regulation and holds the Loyola de Palacio Chair on European Energy Policy, The Robert Schuman Centre of Advanced Studies in the European University Institute (Florence Italy). He has been an advisor to DG TREN, DG COMP & DG RESEARCH at the European Commission and of the French Energy Regulatory Commission (CRE). He is or has been coordinator or scientific advisor for several European research projects (SESSA, CESSA, Reliance, EU-DEEP, RefGov). He is research partner of the CEEPR at MIT (USA), of the EPRG at Cambridge University, of EEI at the University of Leuven.

ABSTRACT SUMMARY

The international energy regulation network (IERN): progress and future role

IERN is re-launching its database and website of worldwide energy regulatory authorities for the WFER in Athens to be able to facilitate cooperation among regulators and regional associations. In Athens, the new website will be presented, including a user-friendly mapping of regulators according to the scope and depth of their regulatory tasks and an overview of the main professional training courses that are being frequented by regulators. The new IERN platform offers all regulators to enter its web-based network with a simple

online survey platform. From one WFER conference to the following, three years later, regulators can use IERN as a facility available for all types of potential WFER initiatives.



JOSEPH ASSI BÉNIÉ

Chair of AFUR and Director of ANARE, Ivory Coast

April 2009: President of AFUR (African Forum for Utility Regulation)

2006: President of the Energy Committee of AFUR

2004: Member of the Executive Committee of AFUR

July 2002: Vice President of the Board Adzopé

1996-2002: Member of DG Competition

October 2001: Director General of ANARE

June 2000: Head of Cabinet of the Minister for Trade

February 2000: Technical Advisor to the Secretary General of the Government

1995: Diploma in Public Law (CAMES), University Lecturer at the Faculty of Law of Abidjan and Bouake

1994-1999: Technical Advisor to the Minister for Culture

ABSTRACT SUMMARY

Cooperation between regulators and regional associations

Communication describes the different patterns of potential collaboration between African energy regulators and puts particular emphasis on cooperation between national regulators and regional or continental associations of energy sector regulators.

This cooperation includes two forms.

The first is that of collaboration between national regulators and a supranational authority of regulation. This is the case of the Regional Regulatory Authority of Electricity sector of ECOWAS (ARREC).

The second form regards cooperation between national regulators grouped within regional or continental associations in order to promote regulation in Africa. Example: AFUR, RERA, etc.

In general, this cooperation seeks to meet conditions for better regulation, particularly through information sharing, capacity-building and the harmonisation and practices of regulation.



PETER PLUG

Director, Office of Energy Regulation (Energiekamer), Netherlands

Peter Plug (1969) is Director of the Office of Energy Regulation, and, since March 1st, 2009, is also acting Director of the Office of Transport Regulation of the Netherlands Competition Authority (NMa). He has been employed with the NMa since December 2003. In his first two years, he was the acting Director of the Office of Energy Regulation, and has been the Director since November 1st, 2005.

Prior to his tenure at the Office of Energy Regulation, Mr. Plug worked for Dutch management consultancy firm Berenschot as a consultant and manager Privatization and the Free Market, working on complex research and advisory projects in which private and public interests meet each other.

Mr. Plug holds a master's degree in public administration, cum laude (Leiden University), and has studied political science at Maxwell School of Citizenship and Public Affairs, and also Public Affairs at Syracuse University. Many of his publications concern the subjects of the free-market system, privatization, and relations between politicians and officials.

ABSTRACT SUMMARY**Regulatory mode decision-making**

The liberalisation and integration of energy markets was primarily focused on improving efficiency. In the last years, the focus has shifted to include security of supply and more recently also sustainability of the energy supply chain. In order to achieve a higher level of decision effectiveness, democratic legitimacy and transparency in the European gas and electricity market integration process a more structured approach for regulatory mode decision-making is required. Best practices are derived from European gas and electricity cases and recommendations for future regulatory decision-making are made.

**VIVEK SHARMA**

Head Energy Practice,
CRISIL Risk and Infrastructure Solutions Ltd, India

Mr. Sharma is the Practice Head of the Energy Reform Group of CRISIL Risk and Infrastructure Solutions. Mr. Sharma is the leading regulatory expert in the energy sector and assisted a number of regulators in South Asia and African countries in developing regulatory frameworks in the areas of un-bundling of utilities, performance based contracting, MYT structure, open access and trading of power. From 2001-04, Mr. Sharma has assisted the South Asian Forum for Infrastructure Regulation (SAFIR) in organising various themed training programs, workshops and strategy in South Asian Region. In his role at SAFIR, Mr. Sharma has edited books on Legal and Regulatory Aspects in the infrastructure sector and on Multi Year Tariffs. Currently, He is managing the secretariat service of East Asia Pacific Infrastructure Regulatory Forum (EAPIRF), which is an association of more than 50 regulators from the EAP region.

ABSTRACT SUMMARY**Experience sharing of impact of regional associations
(in South Asia and East Asia Pacific region) on infrastructure performance**

The role of the regulators is fast becoming complex and challenging. However, most of the regulators in developing countries are at the nascent stage and lack capacity and knowledge to handle complexities of infrastructure development. It is thus imperative to develop capacity and knowledge base of the regulators and their staff, so that they can play a larger role in developing infrastructure. Regional regulatory forums are playing this important role of developing capacity of regulators by bringing regulators from different countries into a common platform, where they can exchange their learning and experience. Through its training programmes, workshops, twinning programme and on-line knowledge sharing platforms these forums are involved in building capacity and knowledge base of the regulators from fundamentals of regulation to addressing complex issues. The session would address the gaps in the Regulatory Community in the South Asia and East Asia Pacific Region and how associations like SAFIR & EAPIRF has/had impacted infrastructure performance through knowledge/experience sharing among the Regulatory staff in the Region.

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WFER IV Secretariat, c/o RAE
132, Pireos Str.,
118 54 Athens, Greece
Tel: +30 210 3727402/424
Fax: +30 210 3727482
Email: worldforumIV@rae.gr

Website:

www.worldforumiv.info

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