



EN • KO 2010

SEVEN MILESTONES OF SLOVAK ENERGY INDUSTRY

SEVEN MILESTONES OF SLOVAK ENERGY INDUSTRY

EN•KO 2010

SEVEN MILESTONES OF SLOVAK
ENERGY INDUSTRY

7th SLOVAK ANNUAL CONGRESS ON POWER
AND ENERGY

held under auspices of Robert Fico,
Prime Minister of the Slovak Republic

June 8 – 9, 2010

Bratislava, Pálffy Palace, Zámocká Street



ERASMUS

MAJOR PARTNERS



PARTNERS



Ústav jaderného výzkumu Řež a.s.



MEDIA PARTNERS



Dear colleagues, EN•KO 2010 participants,

Several days ago the 7th Annual International Congress EN•KO 2010, entitled “SEVEN MILESTONES OF THE SLOVAK ENERGY INDUSTRY”, finished. The main objective, and not only this year’s congress, is to open a debate on what development is for the Slovak and European energy sector sustainable and desirable, in the frame of global energy market.

The new EU energy policy, said today, is based on three main pillars of the development:

- potential of energy savings and management of intelligent energy networks
- intensive use of renewable sources
- development of nuclear energy by building new sources of Generation III plus and research for Generation IV

All these efforts lead to the promotion of the use of low-carbon energy technologies and industries.

We are convinced that our Congress supported discussion on how to develop energy sector, and to find starting points for further sustainable development.

At the end let me thank for your active participation and creation of informal pleasant social atmosphere. We are looking forward to meeting you on the next 8th Annual Congress EN•KO 2011 in Bratislava.

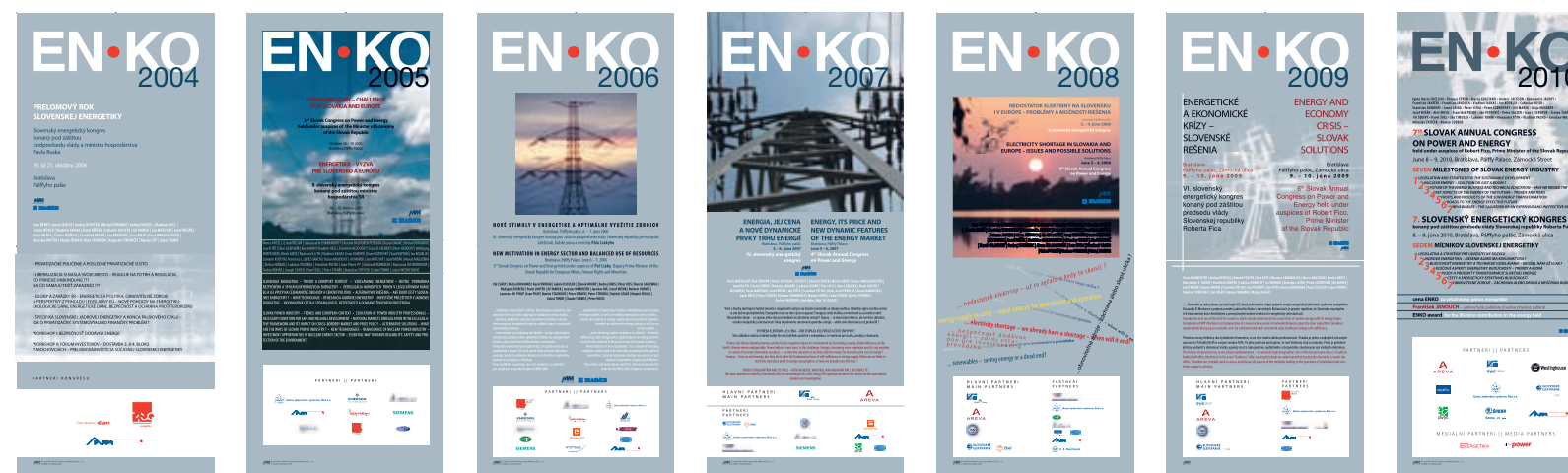
Ľuboš Tomík
EN•KO 2010 Congress Chairman

Jiří Marek
EN•KO 2010 Congress Vice Chairman

registration check-in, delivery of congress materials

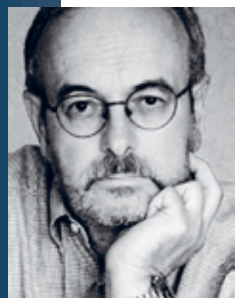
Ľuboš TOMÍK, Jiří MAREK congress chairman and vice-chairman – congress opening

HISTORY OF THE SEVEN YEARS OF THE SLOVAK ENERGY BRANCH INDUSTRY – welcome address



Ľuboš TOMÍK congress chairman

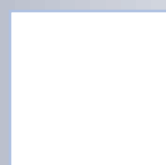
Director of consulting company CESys Ltd. working in the field of energy. After graduating ČVUT, Faculty of Engineering with specialization on nuclear energy he worked in SE, a.s. During establishing of Nuclear Regulatory Authority of the Slovak Republic he worked in the field of probabilistic safety assessment. He gained experience abroad in number of industry and energy companies. During last years he worked as manager in foreign IT companies solving the opening and deregulation of Slovak energy market. During the period of 2002 – 6 he was managing director of CENS (Centre for Nuclear Safety), international company working on the region of Central and Eastern Europe. Regarding the SE, a.s., privatization he is author and co-author of various studies performing energy market scenario modeling, i.e. Feasibility Study on NPP Mochovce 3 and 4 Completion for Ministry of Economy of the Slovak Republic.



Jiří MAREK congress vice-chairman

He is the consultant in the field of power industry and is the Head Executive of JMM Consulting, Ltd. – a company focused on advisory services and organization of professional activities. After graduating from the Czech Technical University, Faculty of Technical and Nuclear Physics, he worked in research; he has been working in the power industry field since 1974 (until 1996 in ČEZ). For the last seventeen years, he was the advisor of the Minister of Industry and Trade, chairman and vice--chairman of the Supervisory Board of ČEZ, a member of supervisory boards in several energy distribution companies and an advisor of Deputy Ministers of Finance. In these positions, he was dealing with the reorganization of state administration in power industry, the development of state energy policy, the establishment of the State Office for Nuclear Safety and with the preparation of the privatization of Czech power industry. He is occupied by publication activities, mainly in the field of nuclear power industry and has wide experience in organizing of international and specialized professional conferences and meetings. His positions are quoted on TV, radio and in economic periodicals.

1 LEGISLATION AND STRATEGY FOR THE SUSTAINABLE DEVELOPMENT



1



2



3



4



5



6



7





František JANÍČEK Vice-Chancellor, Slovak University of Technology, Bratislava

STRATEGY FOR SUSTAINABLE DEVELOPMENT – VISION FOR SLOVAKIA

energy sector development is inevitable for the development of the mankind society \ physical and technical limits are important for the proposal of the future energy mix \ nuclear power future in Slovakia \ how to connect the dissipated sources and the electricity networks ? \ energy intensity and primary energy sources supply \ how to expand the energy literacy to the schools and to the public ?

Prof. Janíček belongs to top specialists in the field of electric power protections where he has been working for more than 25 years, and he has 25 years of scientific and pedagogic praxis. He developed comprehensive methodology of protection systems assessment with regard to reliability and optimum interval of system awareness in fault conditions. He graduated the Faculty of Electrical Engineering at the Slovak University of Technology in Bratislava, where he has got PhD. degree. Within 2000 – 2007 he was the Dean of the Faculty of Electrical Engineering, STU. Since 2007 he is the Vice-Rector for development at STU in Bratislava. As the author and co-author he was dealing with theoretical solutions focused on electrical engineering and industry cooperation projects inland and abroad. Results of his work are applied also in the Czech Republic, Poland, Hungary and Germany. He has developed an advanced concept for subjects orientated to electric power protections, electric stations and elements of electricity supply system, heavy-current elements and systems. Since 2006 he is the chair of committee for technical sciences in Slovak Research and Development Support Agency. He is one of the founders of professional magazine EE, where he is member of the redaction circle. He is the chair of Slovak Chapter of World Energy Council and member of Slovak National Centre for Research and Application of Renewable Energy Sources, as well as a member of scientific councils of multiple universities in Slovakia.



Ján PETROVIČ General Director, Division of Energy, Ministry of Economy of the Slovak Republic, Bratislava

IMPLEMENTATION OF THE ENERGY POLICY INTO THE ENERGY LEGISLATION

New legislation proposals have resulted from the proposal of New Energy Policy of EU; these were namely Strategy Plan for Energy Technologies, Third Liberalization Package for domestic electricity and gas market, and finally Climate-Energy Package. In October 2008 the Government of the Slovak Republic approved the Strategy of Energy Security of the Slovak Republic up to 2030, the main objective of which is to achieve competitive power energy assuring safe, reliable and effective supply of all energy forms for acceptable prices regarding also consumer protection, environment protection, sustainable development, supply security and technical safety. An implementation of provisions and priorities in power energy legislation is one of tools for the achievement of the strategy objectives.

After graduating the Technical University of Košice, Faculty of Mining, he started his professional career in the mining company Baňa Dolina, a.s., in Veľký Krtíš. Since 1995 he has been working at the Ministry of Economy of the Slovak Republic in several positions; during this period he was a member of the Board of company Želba, a.s., Spišská Nová Ves and member of Supervisory Boards of companies Východoslovenské energetické závody, š.p., Košice, Transpetrol, a.s., Bratislava and Zvolenská teplárenská, a.s., Zvolen. In 2004 he became the director of Energy Policy Section and since November 2007 he is undertaking the function of Department Energy General Director. In this position Mr. Petrovič is responsible for the creation of the state energy and raw materials policy, energy and mining legislation, international relations (EC, EU, IEA, ECT, CEI). He is further responsible for the state administration performance designated by law as power industry (including nuclear), renewables, energy efficiency, gas industry, heat power sector, oil industry (including biofuel), and mining and treatment of ore and non-ore mineral raw materials and fuel.



Aleš MUSIL Head of Unit, European Competition Network, DG Competition, European Commission, Brussels

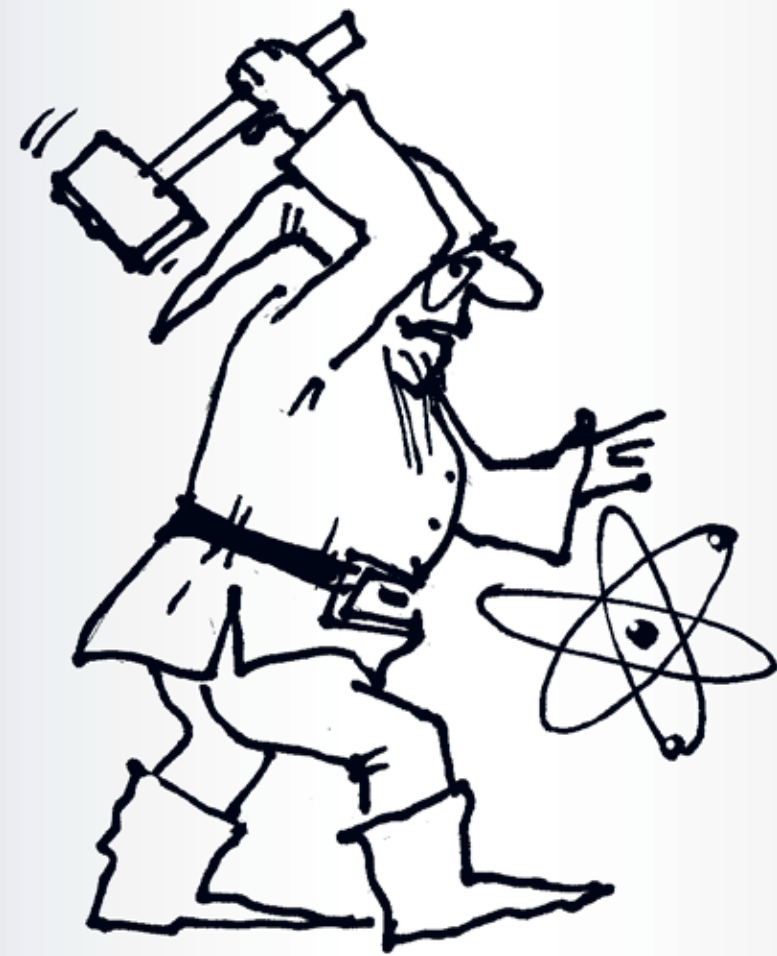
MUTUAL RELATIONSHIP OF THE ENERGY SUPPLY SECURITY AND THE ECONOMY COMPETITION – CREATION OF THE COMPETITIVE ENVIRONMENT TAILORED TO THE CONSUMERS

energy supply security, liberalization in energy markets and competition – three sides of the same coin \ the role of the EU to create conditions necessary for an efficient and competitive energy markets

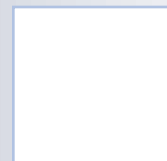
Aleš Musil has graduated in law at the Law Faculty of Charles University in Prague. Subsequently he has graduated in EU law at the College of Europe in Bruges, Belgium. In the years 2004 – 6 he was the advisor to the Minister of Industry and Trade of the Czech Republic. He has been active in the field of competition law since 1996 when he became the Director of the Legislative Department of the Office for Protection of Competition in Brno. At 2008 he became the Head of Unit responsible for the European Competition Network at the DG Competition of the European Commission in Brussels.

moderator's summary, facilitated discussion, coffee break

2 NUCLEAR ENERGY – SOLUTION OR JUST A BOOM ? – PART 1



1



2



3



4



5



6



7





Roman ZDEBOR Temelín NPP 3&4 Completion Project Manager, Škoda JS a.s., Plzeň

MODERNIZED INTERNATIONAL REACTOR MIR-1200 – PROJECT NOT ONLY FOR CZECH POWER SUPPLY

basic information on the MIR – 1200 Consortium \ technical description of the MIR – 1200 reactor and its characteristics \ participation of the Czech nuclear industry

Roman Zdebor graduated at West-Bohemian University, Mechanical Faculty, Specialization Thermal and Nuclear Appliances (1992), and holds certificates in management, quality management and marketing from the respected training institutions. The whole Roman's professional life is connected with Škoda JS Company, where he started in marketing and strategy department, and reaching the number of management position. Since 2003 year he holds the position of Quality Management Director. Since 2005 he participated on the bid for NPP Belene Completion, finally as Bid Manager. In September 2009 Roman was appointed as Consortium Bid Project Manager for the Temelín NPP 3&4 Completion.



Rene BASTIEN Customer Project Manager, Westinghouse Electric Company

WESTINGHOUSE AP 1000: BULIDING ON THE PILLARS OF THE NUCLEAR RENAISSANCE

Westinghouse AP1000: built on the pillars of the nuclear renaissance \ passive safety and why is the AP1000 design so important

Rene Bastien has more than 29 years of experience in the nuclear industry with Westinghouse Electric Belgium, including work in fluid system design, emergency operating procedure development, training, project management and marketing. He holds a master's degree in engineering in Physics from the Liege University (ULg) and an engineering degree in industrial management from the Catholic University of Louvain (UCL). He managed the Safety & Systems Analysis group of the Belgian Westinghouse engineering department for more than 10 years and has been Customer Project Manager for Belgium, Czech Republic, Slovakia, Bulgaria, Romania and Ukraine for the last two years.



Thomas EPRON Director Central Europe, AREVA Group

THE EUROPEAN PRESSURIZED REACTOR, A FLEET UNDER CONSTRUCTION

The European Pressurized Reactor under construction in several countries is becoming a pillar of the European nuclear industry.

Thomas Epron graduated from ENMM of Nantes as Dual Merchant Marine Officer in 1995. He started his career in the merchant marine world. In parallel he obtained a degree in Strategy and in 2001, he joined Alstom T&D to participate to creation of the strategy and marketing department. End 2003, he was sent to the middle-east region to develop Alstom T&D activities, end 2007 was promoted to head the sales operations directorate of AREVA T&D in Paris. Early 2009, he joined AREVA's Business Development to look after Central Europe and became head of AREVA's office in Prague.



Igino Maria CHellini Project Director of Mochovce 34 Completion, Slovenské elektrárne, Inc., member of Enel Group, Bratislava

MOCHOVCE NPP CONSTRUCTION – THE WAY TO REACH THE ENERGY SELF SUFFICIENCY BY THE YEAR OF 2020

the role of Mochovce NPP in Centrel region \ the status of the Project

Igino Chellini, with a degree in Nuclear Engineering, is in ENEL since 2001. Before entering the Group Igino was Project Manager for an Italian Company (1992 – 1997) working on an Integrated Gasification and Combined Cycle Project and later for a large multinational (1997 – 2001) developing several power projects in Italy and Europe. Entering ENEL as Senior Business Developer, Igino was then Head of Origination and Integration in the GEM Division. He has spent the last six years in the nuclear sector with various responsibilities including Project Manager of the preparation of the First Medium Term and Long Term Strategic Plans for Slovenske Elektrarne, support to business development for technical due diligences connected to ENEL's acquisition program, Project Manager for feasibility assessments, Siting and technology development. Currently Project Director of Mochovce 3 and 4 completion, leading a team of 245 professionals employed for the management of the project.

moderator's summary, facilitated discussion, lunch break

3 FUTURE OF THE ENERGY BUSINESS AND TECHNICAL EDUCATION – HAVE WE MISSED THE BOAT?



1



2



3



4



5



6



7





František JANOUCH Royal Institute of Technology Stockholm, Charter 77 Foundation, Prague

AN URGENT NEED FOR THE ENERGY EDUCATION – ENERGY PRIMER

energy plays an extraordinary role in the modern society – is this fact properly understood by citizens and their politicians? \ should we not introduce a basic energy education already in schools – an energy primer? \ and should not our politicians pass an Energy Primer test before being allowed to run a country?

František Janouch, (born 1931), nuclear physicist, publicist, activists, author of many books. Janouch has been active in discussions on nuclear energy since the beginning of 1960's - that is for about a half a century.

His Alma Maters are Saint Petersburg State University (1949 – 1954, Diploma, 1954), Moscow State University (1955 – 1959, PhDr, 1960) and Charles University (RNDr, 1963, habilitation 1967). From 1960 he was a Head of Department of Theoretical Nuclear Physics, Nuclear Research Institute in Řež until 1971 when he was fired for political reasons. After several years of unemployment, he was permitted to leave for Scandinavia where he was offered a guest professorship of the Swedish Royal Academy of Science. After leaving Czechoslovakia, he was, as a punishment, stripped of his Czechoslovak citizenship (1975).

Janouch's scholarly life is very rich. He has lectured at Charles University and Czech Technical University in Prague. He lectured also at many universities in Scandinavia, in Germany, in Italy, in France, and in many others. He worked at Manne Siegbahn Institute, at the Royal Institute of Technology in Stockholm, at Niels Bohr Institute in Copenhagen, at the Goethe University in Frankfurt, at CERN, etc. Janouch obtained several honorary doctorates and professorships: at the International Sakharov Environmental University in Minsk, Kiev State University of Technologies and Design, or the State Chemical University of Dnipropetrovsk. He has given hundreds of lectures on nuclear physics, nuclear energy, nuclear physics, history of science, and other disciplines at many international conferences and congresses, and also at many universities and scientific institutes in Europe, Asia, the North America, and Israel. F. Janouch is an author, co-author, or a publisher of at least thirty scientific, popular scientific, or fiction books which are published in many languages. Further, he has written hundreds scientific, popular and polemical papers and articles on nuclear physics, nuclear energy, on human rights, disarmament, energy and other topics. He also initiated the membership of Czechoslovakia in the European Physical Society and the participation of the Czech Republic in the transmutation program as well.

F. Janouch was a friend of the Soviet nuclear physicist and Nobel Peace Prize winner Andrey Sakharov, a man behind the Soviet hydrogen bomb and Tokamak fusion reactor. Among others, Janouch made Sakharov to write his famous essay "Nuclear Energy and Freedom of the West", and later published it in many countries in the West. During Sakharov exile to a city Gorky (now Nizhny Novgorod), Janouch alerted the world public opinion to protest against the Soviet attempts to silence and liquidate Andrey Sakharov. Janouch published tens of papers and articles on Sakharov in many leading world scientific journals such as the Nature, the Physics Today and The Bulletin of the Atomic Scientists, and in daily newspapers in many countries as well.

After his return to the Czech Republic, he was active not only as a scientist. He was a member of the Foreign Advisory Board of President Václav Havel. In 1992, Janouch was an Extraordinary and Plenipotentiary Ambassador and Head of the Czechoslovak delegation at the Helsinki Follow-up-Meeting. In the years 1996-2000, Janouch served as an EU Deputy Executive Director in the Science and Technology Center in Ukraine. Janouch was four times elected as a member of the Senate of the Academy of Science of the Czech Republic. In 2007, Janouch was appointed by the Czech Government as a Coordinator for the European Nuclear Energy Forum in Prague. Janouch also used his scientific knowledge as a member of opponent team of the report of the governmental Independent Energy Commission. He was awarded the Order of Merit of 1st Grade of the Czech Republic, he received Hlávka Medal, Charles University Medal and others recognitions and plaques.

During the time of his exile he was also very active politically and in human rights. He founded the Charta 77 Foundation (Stockholm, 1978) and since then is Chairman of this human right organization. Its original goal was to help the persecuted Czechoslovak dissidents and the Czechoslovak independent culture inside the country (samizdat) and abroad (Czech and Slovak émigré publishing houses). After being transferred in 1989 to Czechoslovakia, the Charta 77 Foundation became one of the largest and most influential foundations in the country. Among the legendary projects of the Charta 77 Foundation, Janouch was a leading spirit for, were the countrywide collection to the Míša account (named after the first Slovak patient Michail Budinsky from Martin, treated with the Leksell Gamma Knife in Stockholm) – a fundraising to purchase the Leksell Gamma Knife for Czechoslovakia and the Barriers account to change the situation of disabled citizens in Czechoslovakia. The collection to the Míša Fund became a legend in Czechoslovakia: millions of Czechoslovaks contributed towards it. During only 18 months over 90 million CZK, needed to buy the "Knife", were collected. The unique operation's equipment was purchased and situated at the Homolka Hospital in Prague. The Prague Leksell Gamma Knife became the most successful among the about 300 LGK operating now worldwide. Prior to its replacement in 2010 it treated 10455 patients – more than any other LGK in the world!

František Janouch regularly writes articles and polemics in press, where he speaks about the importance of energy and energy industry issues for the development of a modern society. He also takes part in the TV and radio discussions and lectures at several Czech and foreign universities.



Alexander TÓTH Nuclear Training Manager, Slovenské elektrárne, Inc., member of Enel Group, Bratislava

TRAINING OF THE NPP PERSONEL IN THE SE – ENEL

goal of nuclear training \\ why to improve training now ? \\ what to improve ? \\ how to do it ?

Alexander Tóth has 25 years experience in nuclear industry, mainly in operation, managing and assessment of operational safety, short experience in maintenance and nuclear training. He graduated at Electro-technical faculty of Slovak technical University in Bratislava, where he studied area focused on operation of nuclear power plants. Since 1985 he is an employee of Slovenské elektrárne, a.s. company. After specialized licensed operator's training he spent several years in operation at V-1 units of Nuclear Power Plant Bohunice working as a main control room operator. In middle 90-ties he worked as assistant to Bohunice power plant Director and Head of General Director Secretariat at SE, a.s., headquarters. He was assigned to position of Nuclear Safety and Radiation Protection Department Director when this unit was established at headquarters level. He has worked more than five years in International Atomic Energy Agency in Vienna, Division of Nuclear Installation Safety. As part of this position he took part in number of international reviews of operational safety – OSART program, and reviews of operational experience programs – PROSPER program, in various sites in the world. Coming back from his IAEA assignment to his mother company – SE, a.s., after the privatization and splitting of company he managed decommissioning projects of V-1 units financed by EBRD Bank at JAVYS, a.s., company. Later, he was one of the first members of Nuclear Oversight Unit, when this function was established at SE, a.s., headquarters level. Since 2009 he is assigned to a Nuclear Training Manager position, where he takes care of professional training of nuclear power plant employees.



Konstantin JACOBY Project Leader, AREVA NP GmbH, Erlangen

COMBINED APPROACH OF PERSONAL TRAINING FOR MANAGEMENT AND MAINTENANCE OF NNEGC “ENERGOATOM” AT ZAPOROZHYE NPP

overview on and latest developments in the field of personnel training for NPP maintenance and management \\ cooperation between the Ukrainian State Enterprise NNEGC “Energoatom” and AREVA NP

Konstantin Jacoby started his professional career 1984 as assistant lecturer at the University of Munich, and 1987 he joined Siemens R&D Centre in Munich from where he moved 1995 to Siemens Power Generation Group (the former KWU), where he was for several years responsible for personnel training for nuclear and fossil fired power plants world-wide and for the company's NPP emergency response centre in Germany. After the process of merger and consolidation of the German and French NPP manufacturers he is in the position of Regional Director Marketing of the AREVA NP GmbH, 2003 – 2006 for Russia, since 2007 for CR & SR, since 2009 in the position of project manager in Ukraine and sales for AREVA NP business group of reactor services. He was graduated in mathematics and computer science at the University of Munich where he got also the PhD degree in applied mathematics.

moderator's summary, facilitated discussion, coffee break

4 KEY ASPECTS OF THE ENERGY OF THE FUTURE – TRENDS AND RISKS



1



2



3



4



5



6



7





Pavel ŠOLC Chief-Advisor, Ministry of Industry and Trade of the Czech Republic, Prague

CZECH STATE ENERGY STRATEGY – A TOOL TO SOLVE THE FUTURE ENERGY DEMAND

A long-term increase of dependence on imports in the area of energy and related security risks currently is a trend in most of EU member states. The objective of the Czech Republic strategy is to assure as high energy independence as possible namely by maintenance of 90 % of electricity generation from domestic sources and by keeping of overall import dependence within approximately 50 %. Development of nuclear power plays a key role in this strategy, which should reach after 2030 more than half of the electricity production, and in the relation to that also mining and processing of uranium would be extended. Nuclear power development in the region gives the reason to open a question concerning of building of capacities for the concentrate processing and the fuel fabrication.

In 1986 he graduated from the Czech Technical University, specialization Economics of Power Generation, and in 1992 from the University of Pennsylvania, specialization Modeling of Energy Systems. As a researcher he worked with ŠKODA Praha on the development of a new generation of conventional and nuclear power plants. In 1993 he started his carrier modeling electric power systems, designing of electricity market rules and developing long term strategies in the power sector, initially in ČEZ (Head of Strategic Planning and Analysis), and further in ČEPS (Czech Transmission System Operator, Director, System Trade Department, and Director, Corporate Strategy Department). His work during this period was focused mainly on cost/benefit analysis of new projects, analysis of operation, and study of impacts of liberalization on the resource structure of the power industry, analysis and design of auxiliary services market, pricing mechanisms for balancing market, and regulatory frameworks in the power sector in Czech Republic, the Slovak Republic and neighboring countries. He has been responsible for the development of the long term strategy of the Czech Transmission System Operator in an open electricity market environment. At present he is the chief-advisor to the Minister of Industry and Trade and is responsible for the update of the energy policy of the Czech Republic.



Jiří ŠEDIVÝ Former Chief of the General Staff of the Armed Forces of the Czech Republic, Prague

ADVANCED ECONOMIES AND THEIR SENSITIVITY TO SAFE AND RELIABLE ENERGY SUPPLY

both, free economic growth and state sovereignty strongly depend to the energy sufficiency \\ for the Czech Republic conditions the nuclear energy means the only possible long term alternative of the energy independence

General Šedivý was the first Czech student at the US Army War College (Pennsylvania). After his graduation in 1994, he took over command of the 4th Rapid Reaction Brigade. In 1996, he was deployed to Bosnia as the Commander of the Czech Army Contingent in IFOR. In 1997-8, he was appointed as the Inspector of Ground Forces of the Czech Armed Forces. He subsequently became the Chief of the Combat Training Division of the General Staff of the Army of the Czech Republic. He assumed command of Ground Forces in 1997. On May 1, 1998, he was appointed Chief of the General Staff, with the responsibility for military defense of the Czech Republic, Armed Forces preparation and training. His main task was the preparation and implementation of military measures related to the accession to NATO.

He retired on January 1, 2003. Subsequently, he founded his own advisory company "GENERALS" Ltd., working on defense and security projects, and worked in the supervisory bodies of several companies focused on defense matters. He is dealing with defense matters (2004-5 he was a consultant to the European Defense Integration project, done by the Center for Strategic and International Studies – Washington D.C.) and the protection of vital infrastructure of the state. A founding member of the Czech Euro Atlantic Council, he is regularly participating at conferences on security and defense matters and gives lectures at universities and for foreign partners.



Peter LÍŠKA Director of Nuclear Safety Division & Vice-Chairman of the Board of Directors, VÚJE, Inc. , Trnava

EU ENERGY STRATEGY EVALUATION, OPORTUNITIES FOR EFFECTIVE ENERGY OF THE FUTURE, WITH REGARD TO THE NUCLEAR ENERGY

evaluation of the past year's EU energy strategy from the point of view of energy capacities build-up, and energy research and development taking into account \\\indispensability of the acceleration to renew the EU energy policy with the emphasis given to the space for energy experts decision making

Peter Líška graduated at the Department of heat and nuclear power machines and equipment at Slovak University of Technology in Bratislava. Since 1976 he was working in SES Tlmače as the design engineer in the Department of calculation of steam boiler pressure parts. Since 1977 he was engaged in the research institute VUJE Trnava working in the Department of theoretic and experimental assessment of NPP operation, performed tests during the NPP V-1 power start up in the area of thermo-hydraulics. He also dealt with the issues concerning operation heat economy of NPP, achievement of rated heat capacity of reactors, etc. Since 1990 he led the Department of thermo-hydraulic analyses, he managed works concerning thermo-hydraulic analyses of bestestimate type and since 1995 he has been in position of director of Division of Nuclear Safety in company VUJE Trnava, Inc., and at the same time he is a Deputy Chairman of the Board of Directors. He was responsible for VUJE works in frame of project of Mochovce NPP units 1 and 2 Completion. In the frame of project of "Sequential reconstruction of NPP V-1" he was responsible for an accident localization system. He was also responsible for the contract of VUJE works for the Mochovce NPP units 3 and 4 Completion.

Mr. Líška is a member of Scientific and Technical Committee of Euroatom, which is the highest advisory EC body for the research in the area of nuclear power use (nuclear power, fusion, nuclear medicine, etc.). He is a member of the board of the OECD international research program CABRI Water Loop Project.

moderator's summary and facilitated discussion

At the end of the official Tuesday's program, a ceremony took place during which the **ENKO award** for the life time contribution in the energy field was handed over to Professor **František Janouch**

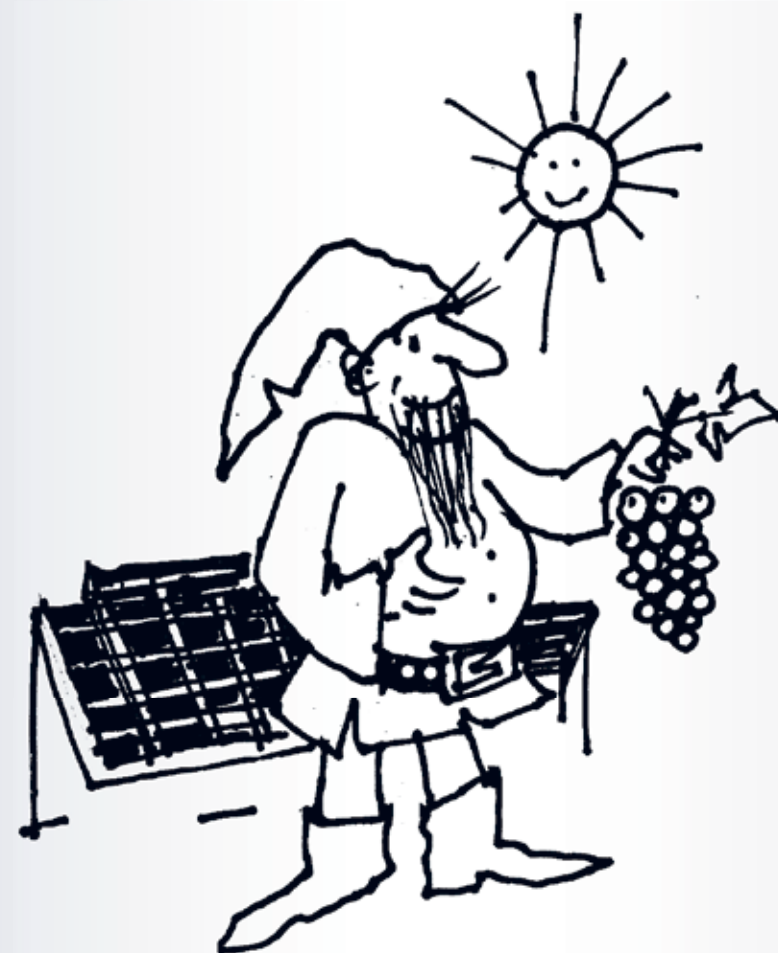


The ENKO award for the life time contribution
in the energy field

František JANOUC



5 FRUITS AND PRODUCTS OF THE SUN ENERGY TRANSFORMATION



1



2



3



4



5



6



7





Alojz MASARYK distant relative from the first Czechoslovak President, Skalica

FRUITS AND PRODUCTS OF THE SUN ENERGY TRANSFORMATION

Alojz Masaryk has more than 30 years deep experience in sun energy transformation to produce the top form of liquid energy carriers, and in particular with viniculture and vine production. In the old-timey king's town Skalica Alojz with partners established well known company VÍNO-MASARYK®. They keep the main goals – to offer the products of sun energy transformation, to cultivate the branch and increase the knowledge and awareness on the quality of domestic products of the sun energy transformation, and this way to contribute to the sustainability of solar energy development.

Afterwards the festive social evening was held in all premises of Pálffy Palace



6 ROADS TO THE ENERGY EFFECTIVE FUTURE



1



2



3



4



5



6



7





František PECHO Opening presentation of the moderator, topic introduction and discussion of the essential questions necessary to be solved

After graduating the Slovak University of Technology, Faculty of Electrical Engineering he started to work in SEP, š.p., later in ZSE, a.s. and SE, a.s. Since 1991 he was preparing the project Datagyr C500 – the system for long-distance data collection from electrometers. After system completion he managed its operation. He worked also in international committees and took part on connecting of Slovak transmission grid to European grid. After the institutionalizing of the transmission grid operator (SEPS Company) in 2001 he worked on position of managing director for investments, later for IT and telecommunications; he managed a Slovak dispatch centre and operation; at the same time he was Member of the Board of Directors. He took part on all important Company projects from the beginning till October 2006. Leaving the SEPS Company, he provided consultancy services in OKOnet, a.s. At the present time he works in the position of the development director of ALTERENERGO Inc., company building the renewable energy sources.



Ľubomír TOMÍK Director, CESys Ltd., Trnava

ENERGY SERVICES MARKET DEVELOPMENT – CHANGE BEST PROJECT INTELLIGENT ENERGY

energy efficiency services new market and new products for Energy market players

Director of consulting company CESys Ltd. working in the field of energy. After graduating ČVUT, Faculty of Engineering with specialization on nuclear energy he worked in SE, a.s. During establishing of Nuclear Regulatory Authority of the Slovak Republic he worked in the field of probabilistic safety assessment. He gained experience in abroad in number of industry and energy companies. During last years he worked as manager in foreign IT companies solving the opening and deregulation of Slovak energy market. During the period of 2002 – 6 he was managing director of CENS (Centre for Nuclear Safety), international company working on the region of Central and Eastern Europe. Regarding the SE, a.s., privatization he is author and coauthor of various studies performing energy market scenario modeling, i.e. Feasibility Study on NPP Mochovce 3 and 4 Completion for Ministry of Economy of the Slovak Republic.



Dušan ŠPELINA Managing Consultant, Logica Czech Republic s.r.o., Prague

NEW CHALLENGE OF ENERGY SERVICES MARKET

After years of more or less successful adaptation to new liberalized conditions energy sector faces major changes. There is an obvious attempt to capitalize on lessons learned from open markets and offer new services to customers which would be reflected synergy from multicommodity and cross-sector proposals. Another factor is also technology development such as new local sources of energy, smart metering or electro mobility. New technologies, together with the constant social pressure to energy efficiency and care for environment, are creating opportunities for the creation of entirely new energy services. Important role in this situation has effective regulation, the establishment of transparent rules and reliable central infrastructure.

Dušan Špelina graduated in 1995 from Faculty of Applied Sciences of University of West Bohemia in Pilsen. In Logica he works as Managing Consultant for energy and utilities sector. In the long term, he concerns with area of liberalized energy markets, optimization of enterprise process and application of information technology for utilities. He has taken part on many important Logica's projects in the Czech Republic as well as abroad, among others he participated in the design and building of the infrastructure of Electricity Market Operator in the Czech Republic.



Stanislav KUNDRÁT Manager, RWE Gas Slovensko Ltd. & Director of Division Key account management, VSE Inc., Košice

EFFECT OF THE MARKET LIBERALIZATION ON THE ENERGY SUPPLY SECURITY

Stanislav Kunderát graduated the University of Technology in Košice where he also started as a scientific worker. During his career he continued in various management functions in state administrative. In the period 1996 – 2004 he worked for companies Landys & Gyr and Siemens where he was responsible for project business marketing. Just before the electricity market liberalization he started to work for VSE, Inc., where he started on the post of sales manager to key customers. Since 2005 he has been holding a Head of the Key Account Management department. Since October 2008 he has been also appointed as authorized manager of RWE Gas Slovensko, Ltd.

He is responsible for the electricity and gas sales and for the management of relation to the biggest clients in Slovakia.



Vladimír KANAS Senior Manager, Siemens s.r.o., Bratislava

DEVELOPMENT OF "SMART GRIDS" IN THE ELECTROENERGY INDUSTRY

present conditions in the field of electro-energy sources and networks management in EU require the solution of new problems and relations raising on the energy market \\ Smart Grids is a way how to apply new philosophies and approaches for the utility companies

Mr . Vladimír Kanas graduated in 1973 at the Slovak University of Technology, Faculty of Electrical Engineering and Information Technology. In the long term he is dealing with the control systems and issues of the dispatch management in electro-power systems. After a period of project and design works in Energoprojekt, Inc. he was engaged in Landis & Gyr. Here he participated in management and technology activities linked with realization of the electric stations control systems for SEPS (Slovak Transmission Grid Co.). Then working in Energodata, Inc. he coordinated the construction of a new substation control system for SEPS/SED Žilina, and project ROVE for SE/ENEL (Generation Control + Trading Floor System). Since 2005 he works for the Sector Energy of Siemens in position of Senior Sales Manager and Project Manager. Besides the project management of substation control systems he also works on the power network control development and grid operation.



Jarosław WAJER Director in the Performance Improvement Department, Ernst & Young Warsaw Office

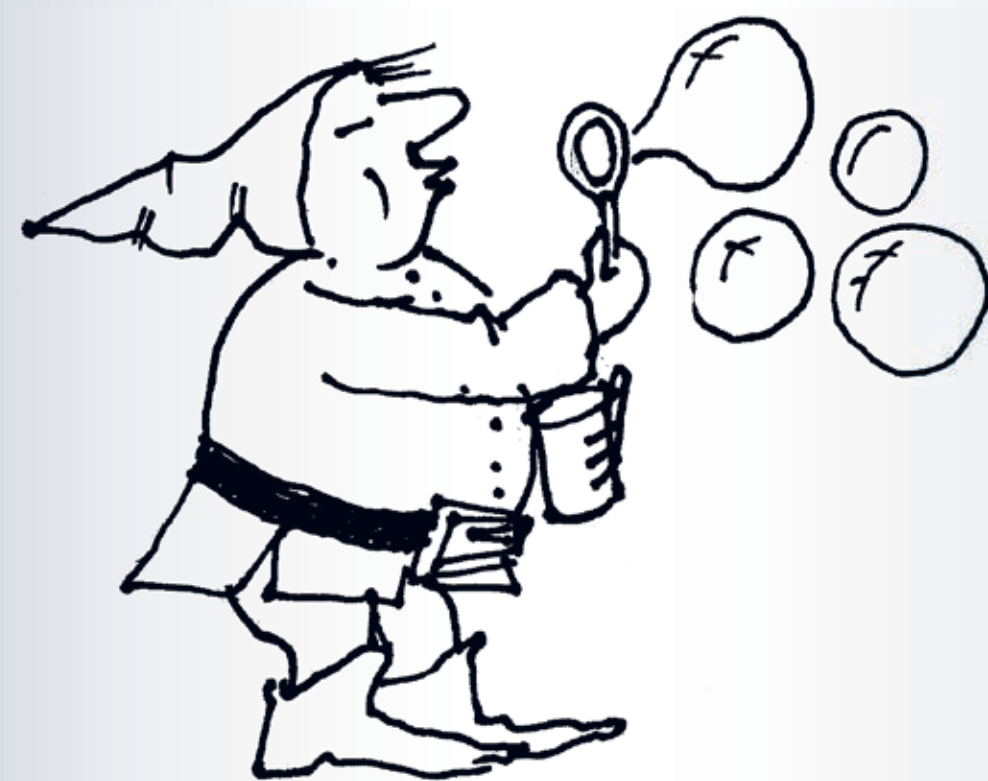
SMART METERING IMPLEMENTATION – SELECTED REGULATORY ISSUES

new power industry market model \\ estimated potential \\ barriers and regulatory aspects \\ solution to be implemented in Poland

Jarosław Wajer graduated from Gdansk University, Department of Management, Faculty of Computer Science & Econometrics. He is CFA Charter-holder, Fellow of ACCA, and Polish Chartered Accountant. He passed out a lot of business training at the most recognized business training providers and a lot of training at Ernst & Young and Arthur Andersen. In his Ernst & Young engagement he is participating on and leading number of due diligence, M&A, audits and similar projects worked out mainly for big players in energy industry, as PGE (the biggest vertically integrated utility in Poland), Endesa, ENEA, Iberdrola, Enron Nowa Sarzyna Power Plant etc.

moderator's summary, facilitated discussion, coffee break

7 RENEWABLES – THE SALVATION OR AN EXPENSIVE AND INEFFECTIVE BUBBLE?



1



2



3



4



5



6



7





Pavol LUNTER Proposal Manager, Siemens Wind Power, Siemens Ltd., Bratislava

GRID-FRIENDLY SIEMENS WIND TURBINES

capabilities of modern wind turbines enable fulfilling the grid code requirements \\ Siemens Wind Turbines add value for investors and operators of wind parks as well as grid operators

Pavol Lunter graduated the Slovak University of Technology in Bratislava, Faculty of Mechanical Engineering with specialization on thermal power industry and environment technology. Then he worked as a designer in the company IDO Hutný projekt. Since 2003 he has been working in Siemens, Ltd. initially as a project manager in the field of power generating equipment and renewable energy resources, currently as a proposal manager within Siemens Wind Power sales team in region EMEA Central.



Miroslav ZAJÍČEK Director of the Laboratory of Experimental Economics, University of Economics in Prague

TOP 5 GREEN NONSENSES

currently there is no measure in use of effectiveness of policies of lowering CO₂ emission \\ to evaluate such policies two variables can be principally used: total costs of cutting 1 ton of CO₂ emissions and total costs of evaluated policies – it reveals that often those policies that are the most costly ones in term of 1 tin of CO₂ are also the most widely used in terms of total costs \\ if one of the goals of energy policies is to cut CO₂ emissions, than evaluation of policies in terms of their effectiveness to achieve such a goal is necessary and those ineffective ones have to be cancelled

Miroslav Zajíček graduated at the University of Chicago, University of Economics in Prague and at the Law Faculty of the Charles University. He acquired broad professional experience in the area of network industries while being a consultant for Logica, market analyst at the Conseq Finance, in his private consulting practice and as a Senior Research Fellow for network industries at the Liberal Institute. He is an author of several complex electricity and gas liberalization proposals for the Czech Republic and he took an active part in building some of the market institutions in the Czech Republic.

He also works in the area of monetary policy and business cycles. Currently, he is a Director of the Laboratory of Experimental Economics at the Faculty of Economics and Public Administration of the University of Economics in Prague. He has a record of publications in professional and popular media.



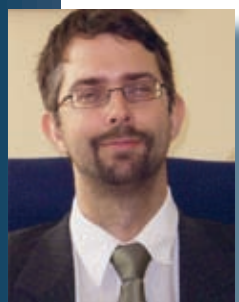
Guy DOYLE Chief Economist of Energy Unit, Mott MacDonald, Brighton

SMART CONSUMPTION AND RENEWABLES – A WAY TO REACH THE 20/20/20 TARGET

Basic principles and benefits of demand side management, Strengths and Weaknesses of RES dispatching and Constraints and Limitations to be lifted in order for the 20/20/20 target to be reached

Guy Doyle is Chief Economist of Energy Unit at Mott MacDonald with over 25 years experience of forecasting and analysing world energy markets. His role at Mott MacDonald involves advising on electricity, fuel and carbon market fundamentals in the context of commodity development, market design and regulatory frameworks. In recent years this has involved directing studies on the relative costs and the deployment constraints associated with different generation technologies, ranging from third generation nuclear, through conventional thermal to renewables. This work has included looking at current status as well as technology foresighting studies. Another recent area of focus has been the analysis of regulatory frameworks with a view to considering the attractiveness of investment for prospective developers and lenders. Guy's project work on policy and regulatory issues has covered all aspects of the electricity supply chain from emissions control, embedded generation deployment, nuclear, renewables and microgen deployment, smart metering and demand management. He has also led Power ink's electricity industry training programme, which has delivered more than 60 events since 1996, including workshops on electricity deregulation and carbon markets and climate change policy. Guy is a regular speaker at industry conferences and also a course tutor on Cass Business School's Energy and Finance Masters.

During his four years editing Power UK, the FT's (and now Platt's) newsletter on the UK electricity sector, he developed a detailed understanding of the regulatory process and the various stakeholders' interests. Prior to specialising in power markets, he focused on international coal and freight markets (at McCloskey Coal and IEA Coal Research), and before that analysis of end user sectors in European energy economy (at Global Insight). Guy holds a Doctorate in Energy Economics and a Masters in Environmental and Resource Economics. Guy's PhD thesis involved an assessment of the relative costs of the then government's nuclear strategy versus a number of renewable strategies.



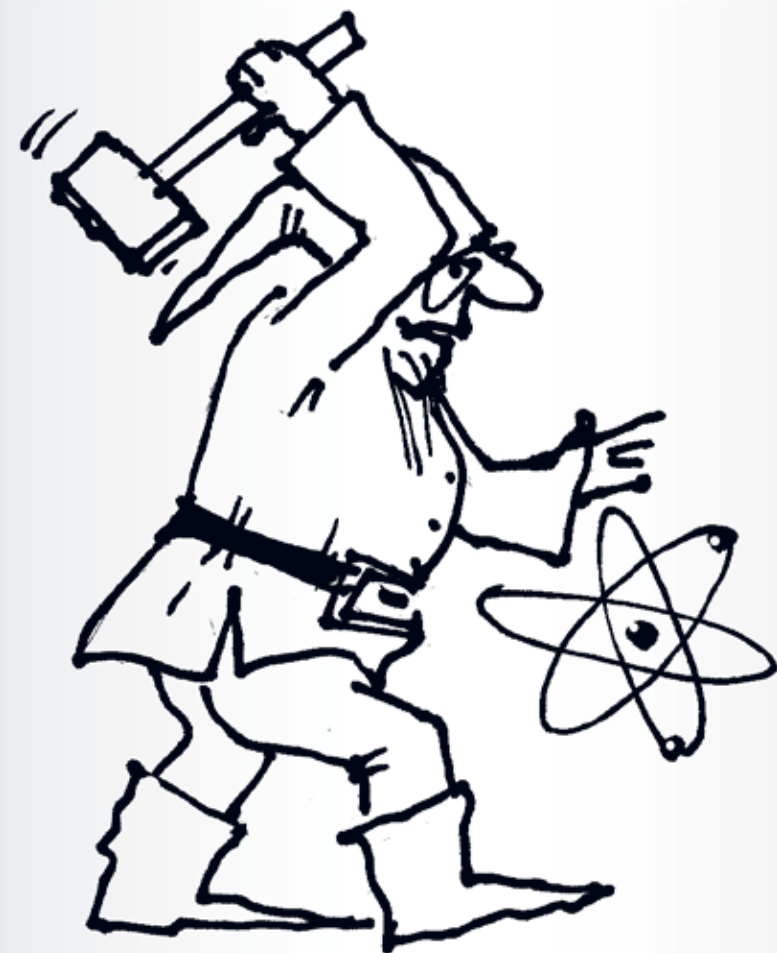
Ľuboslav KOSÍR Consultant – Project Finance & Infrastructure Department, Dexia banka Slovensko a.s., Bratislava

RENEWABLES – INVESTMENT OPPORTUNITY OR RISK ?

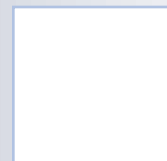
onomy University in Bratislava; focused on banking and investment sector. The whole professional career he is dealing to the project and corporate financing of the energy sector. Working with Dexia bank Slovakia almost seven years, he is responsible for the analyses, development and financing of energy projects. During past years he has participating on the development of number of the big energy projects concerning PPC, cogeneration and renewables implementation.

moderator's summary, facilitated discussion, lunch break

2 NUCLEAR ENERGY – SOLUTION OR JUST A BOOM ? – PART 2



1



2



3



4



5



6



7





Jozef MIŠÁK Director for Strategy, Nuclear Research Institute Řež

ADVANCED REACTOR GENERATIONS – WAY TO THE INDISPENSABILITY OF THE NUCLEAR ENERGY

In the context of energy options, “sustainable” is more demanding than “renewable,” since it implies the ability to provide energy for indefinite time periods (on a geological time scale) in a way that is environmentally friendly, delivery-reliable, and economically viable. Nuclear energy from fission can meet all these requirements implementing a new generation of fast-neutron reactors which transforms uranium into a truly inexhaustible energy source. Actions are needed today to develop this already proven technology to a industrial level.

He graduated from the Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering. His more than 37 years long performance in the field of nuclear power industry is focused on research and engineering support for safety principals implementation during design and operation of NPPs. He has long lasting experience from several leading positions in the field of nuclear safety. During 1971 – 1993 he worked in VUJE (NPP Research Institute). During 1993 – 1997 he worked as the first Chairman of Nuclear Regulatory Authority of SR. Till 2004 he was with IAEA in Vienna, where he worked in the field of elaboration of safety standards and guidelines for NPP accident analysis. At the present time he is the director for strategy at the Nuclear Research Institute in Řež.

PROJECT DEVELOPMENT OF THE NEW NUCLEAR POWER PLANT IN JASLOVSKÉ BOHUNICE SITE

Slovak Nuclear Power Company, Inc. has been established by mother companies JAVYS and CEZ Bohunice with a purpose of preparation, construction and operation of nuclear power plant on the Jaslovske Bohunice site \ status of preparation, particularly the feasibility study, and further steps planned for short term future



Štefan ŠABÍK Chairman of the Board of Directors & Chief Executive Officer, Slovak Nuclear Power Company, Inc. (JESS), Bratislava

After finishing his studies at the Slovak University of Technology, Faculty of Mechanical Engineering, Štefan Šabík has coupled his professional life with a nuclear power. First he started in Slovenské elektrárne, Inc., working in Mochovce NPP. Here he was working in positions of investment technician, assistant of director, head of personnel department, head of personnel training department, head of staff affairs and remuneration section and Deputy Director for human resources and services, finally as Human Resources Director of SE Headquarters. From 2007 to 2009 he was engaged in Nuclear and Decommissioning Company in the position of the Acting Director of the Management Division. At present he is appointed by the Chairman of the Board of Directors and CEO of the Slovak Nuclear Power Company, plc.



Ivo KOUKLÍK Vice-Chairman of the Board of Directors & Technical Director, Slovak Nuclear Power Company, Inc. (JESS), Bratislava

After graduating the Czech Technical University, Faculty of Nuclear Science and Physical Engineering in 1983, Ivo Kouklík worked in Dukovany NPP in several positions beginning as reactor operator, from 1998 in top management positions (Safety and Investment Director, Responsible Manager for reorganization of Temelin and Dukovany NPPs, Dukovany NPP Director). Further he held the positions of the ČEZ Nuclear Safety Division Director, and the ČEZ Engineering and Technical Development Director. Since 2006 he worked as Project Manager responsible for Temelin Units 3&4 development. Currently he is the Technical Director and Vice Chairman of the Board of JESS, a.s. – company preparing New Bohunice Unit. He took part on IAEA missions OSART, ASSSET and PROSPER for several NPPs (Gravellines, Kozloduj, Pakš, Kashiwazaki-Kariwa). He spent three months training with US NRC.

STRATEGY OF THE BACK-END OF NUCLEAR ENERGY LIFE CYCLE IN THE SLOVAK REPUBLIC

update of the strategy of back-end part of nuclear energy peaceful use \ what is being changed in the strategy, what are its basic movements \ strategy implementation and activities of the National Nuclear Fund Manager Board, which should move towards the revision of relevant legal rules \ results of economic considerations, which became the main outputs of strategy \ depth of historical fund deficit, necessity of its coverage



Ján TIMULÁK Chairman of the Board of Directors & Chief Executive Officer, DECOM, a.s., Trnava

J. Timulák graduated in 1974 at the Slovak University of Technology, Chemical and Technology Faculty, specialization: processes and equipment of chemical technology. In 1983 he achieved PhD degree in nuclear chemistry. After finishing his studies he started to work in the Research Institute of Pharmaceuticals in Hlohovec. During 1975 to 1982 he was in position of the head of the radiochemical laboratory (Povodí Váhu, Piešťany). In the period of the years 1982 – 92 he worked in VUJE Trnava, Inc., as research officer, further he got the position of the Head of Radioactive Waste Management Research Department. Since 1992 he has been working in the company DECOM Slovakia, Ltd., where in 2000 he was appointed to be a director. After the change of legal form of the company J. Timulák became the Chairman of the Board of Directors and CEO.



Peter SALZER Project Manager, DECOM, a.s., Trnava

Peter Salzer graduated in 1972 at the Chemical and Technology University in Prague; specialization: nuclear fuel technology and radiochemistry. Starting his career he dealt with an activation analysis and use of radionuclides in the Institute of Radioecology and use of nuclear techniques. Since February 1993 he became the inspector of nuclear safety working in the Department of radioactive waste treatment of the newly established regulatory authority UJD SR. Besides he addressed also issues of radioactive waste disposal and connecting factors of interface of the nuclear safety and the radiation protection. Since 1977 he has been working for the company DECOM, Inc. where he has been involved in the area of radioactive waste management in various projects supporting both, the operator and regulatory body. As an expert he takes part in various international projects, actions and missions organized by IAEA in the area of radioactive waste disposal in shallow ground repositories, and in the area of system's and infrastructure issues of the radioactive waste management. Since 2002 he is an authorized person for EIA procedure, and since January 2007 he is a trustee in the board of National Nuclear Fund of the Slovak Republic.

moderator's summary and facilitated discussion

congress ending

CONGRESS
PROMOTERS:



Æ ERASMUS

www.jmm.cz
www.erasmus-info.sk
www.cesys.sk

















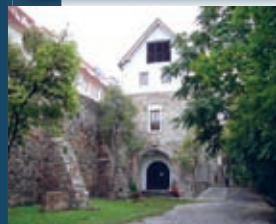
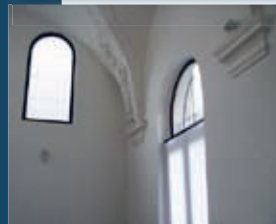












Pálffy Palace Zámocká Street Bratislava

When we are talking about Zámocká Street, we shouldn't forget that up to now there is a torso of the Pálffy Palace summer wing still having significant artistic, historical and architectonical values.

According to available historical sources the Pálffy Palace in the extramural settlement was built in time of Bratislava castle reconstruction, which was decided on the basis of a special act in 1635 by the Ugrian Concilium. This enables to Pavol Pálffy, a leader of the castle reconstruction, to build a large palace on the so called Schlosgrund. In order to assure a better building material supply to the building site, he opened a service road, which became later Zámocká Street. This street was then settled by Jewish settlers coming to the town from former manors of Mikuláš Pálffy.

In 1870 the town based on the deed of donation became the owner of the Palace and built up here artillery casern, orphanage and social flats for poor people. After 1900 the Palace complex was gradually cleansed and on its place a college on Svoradova Street and a contemporary primary school Palisády were built. In 1985 the preserved part of the Palace – the summer wing – was placed on the register of listed buildings.

(Young Wolfgang Amadeus Mozart during his visit of Bratislava had a concert exactly in Pálffy Palace under the castle hill and not at Ventúrska Street, like a memorial plaque is incorrectly informing.)

Source: <http://www.bratislavskenoviny.sk/12879/obnova-mesta/podari-sa-zachranit-torzo-palffyho-palacaa>