



Nuclear Energy Competitiveness and the ENEF Process

Jean-Pol PONCELET

Chairman of ENEF “Opportunities” Working Group

*Senior Vice President Sustainable Development
and Continuous Improvement, AREVA*

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ENEf WG on « Opportunities »: what we are aiming at



- ▶ Delivering a Consensus Report on Nuclear Energy Competitiveness: a **SWOT Analysis** (*Strength, Weakness, Opportunities and Threats*) in the Global Frame of Sustainable Development (Environment, Society, Economy)
- ▶ Examining the Ways and Means to **Translate the Cost Advantage of Nuclear Energy** into the Prices paid by the Final Consumers
- ▶ Establishing a **Roadmap** for the Responsible Use of Nuclear Energy in Europe, Covering in particular Legal and Financial Aspects
- ▶ Exploring **Other Applications of Nuclear Energy** and Nuclear Technologies, such as Water Desalination, Hydrogen Production for Cars, Industrial and Medical Use of Radioisotopes

ENEF WG on « Opportunities »: How We Operate



- ▶ Sub WG 1 “*Competitiveness*”: Chair D. Beutier, AREVA
- ▶ Sub WG 2 “*Financing*”: Chair K. Kainurinne, TVO
 - ◆ *Objective:* Discussing the Financial Aspects of a Nuclear Roadmap for the Responsible Use of Nuclear Energy in Europe
- ▶ Sub WG 3 “*Nuclear Legal Roadmap*”: Chair Ch. Raetzke, EON
 - ◆ *Objective:* Establishing a Nuclear Energy Roadmap to Improve the Legal Framework Including Greater Harmonization of Licensing Procedures
- ▶ Sub WG 4 “*Smartgrids*”: Chair P. Halberg, Vattenfall
 - ◆ *Objective:* Assessing and Making Recommendations for a More Secure, Efficient and Integrated EU Grid in Order to Address the Challenges of Climate Change and Energy Security

ENEF WG on « Opportunities »: Where We Are



- ▶ **Sub WG 1 “Competitiveness”:** Chair D. Beutier, AREVA
- ▶ **Sub WG 2 “Financing”:** Chair K. Kainurinne, TVO
 - ◆ **Current Task:** Issuing a Report structured as 1) Risks Matrix, 2) Mitigations, how Financing Model Can Cope with the Risks, 4) Impact of the Current Financial Crisis. First Steps on “Licensing”, “Completion” and “Political” Risks
 - ◆ The report could be presented in Bratislava May 2010
- ▶ **Sub WG 3 “Nuclear Legal Roadmap”:** Chair Ch. Raetzke, EON
 - ◆ **Current Task:**
 - Defining Specifications for a Survey on Licensing Procedures for New Nuclear Installations in EU Countries. The Survey should be Completed by January 2011.
 - Nuclear Civil Liability to be considered in cooperation with the Commission and BNLA
 - A Task Force on Competition Aspects is Preparing Guidelines for ENEF to Ensure Compliance with EU Competition Law Requirements
- ▶ **Sub WG 4 “Smartgrids”:** Chair P. Halberg, Vattenfall
 - ◆ **Current Task:** Focus First on the 2020 Perspective with a Deliverable at the 2010 Plenary Meeting

SWG-1 Intermediate Findings

Oct. 24th 2009 (1/2)



- ▶ A Consensus Document presenting the Conclusions that could be drawn from the Information collected and evaluated so far by the SG
- ▶ Doc highlights widespread recognition of **nuclear power as least cost option for base load electricity generation** (*Greenpeace still Contradicting the Competitiveness of Nuclear Power in Liberalized Markets*)
- ▶ Doc describes main **Strengths and Weaknesses** of Nuclear Energy as defined by Proponents and Opponents
- ▶ Doc recalls that Comparative Assessments are dependent on Countries' Specific Assumptions and Context and that a Good Governance in the broad sense is a key issue for a responsible use of nuclear energy

SWG-1 Intermediate Findings

Oct. 24th 2009 (2/2)



Key Strengths

(as stated by Proponents)

- ▶ **Best Economical Performance vis-à-vis its Competitors when used for Baseload Electricity Supply**
- ▶ **An Important Contributor to Fighting Climate Change and Increasing Energy Security**

Key Weaknesses

(as stated by Opponents)

- ▶ **Some Important Long-Term Sustainability Issues Not Solved yet, such as Implementation of Waste Management Solutions**
- ▶ **High Capital Costs, Long Term Investments, increasing Uncertainty in Generation Costs, Risks of Proliferation, Availability of Human Resources**

Status of the SWOT Report



- ▶ Chapters on **Strengths and Weakness** (Part 1) have been documented with data from a large variety of sources with often different objectives
- ▶ **Representatives of academia** in the SG are working together with the Chairman and the EC's secretariat on improving the report in order to achieve a robust, quality document which could serve as a reference
- ▶ The SG **aims to achieve Final Approval of the SWOT Analysis** (Part 1) for next ENEF Plenary (Spring 2010)
- ▶ Chapters on **Opportunities and Threats** (Part 2) will be completed with an *Energy Scenario Analysis* and the work of the other ENEF SGs (Waste, Legal Roadmap, Proliferation, Smart Grids)

Comparative Scenario Analysis



- ▶ To **Analyze Various Energy Scenarios for Europe** (up to 2030) in order to identify *Nuclear Energy's Threats and Opportunities* in the Frame of EU objectives (*i.e.* “20/20/20 in 2020”)
- ▶ **A Questionnaire** was built in order to compare several scenarios with the same format of input/output data
- ▶ **7 scenarios** will be included in the analysis including: EC/Primes, EP/ STOA, IEA World Energy Outlook, OECD/NEA, WEC, Eurelectric, Greenpeace
- ▶ A Call for Tender was published in the Official Journal and **EC is expected to select a contractor** by the end of the year to carry out the analysis
- ▶ Results expected in anticipation of **Spring 2011 Plenary**

The Debate Will Go On



“In many people's eyes, nuclear energy is an important component of any European strategy for a low-carbon energy mix. Of course, not all Member States will want to include nuclear energy in their own energy mix, but this issue deserves to be discussed, not least because of the implications for tackling climate change and improving energy security.”

José Manuel Barroso

at a BUSINESSEUROPE Conference, Oct. 28th 2009