



European
Commission

Fukushima: EU Perspective

WM 2012 – Panel 3

Ute Blohm-Hieber

Head of unit, Directorate-General for Energy

○ Reactions to Fukushima

Humanitarian aid and disaster relief

Monitoring of environment

Monitoring of imported agricultural products

***Comprehensive safety and risk assessments
of nuclear installations in the EU and beyond***

Review of safety legislation

Stress tests: features

They go beyond safety evaluations during the licensing process and periodic reviews

The aim: assess whether safety margins are sufficient to cover various unexpected events

Conducted on a voluntary basis in three-steps:

- **licensees (nuclear operators)**
- **independent national authorities (regulators)**
- **peer reviews**

Stress tests: scope

- **Definition based on - but not limited to – Fukushima**

- **Initiating events:**

Earthquake, flooding (incl. internal), bad weather, Large grid disturbance, forest fire, airplane crash...

- **Consequence of loss of safety functions from any initiating event conceivable at the site:**

Loss of electrical power, incl. station blackout; Loss of ultimate heat sink; Combination of both (dependent failures)

- **Severe accident management issues:**

Licensee's provisions related to means to protect from and to manage loss of core cooling function, means to protect from and to manage loss of cooling function in the fuel storage pool, means to protect from and to manage loss of containment integrity

Off-site support for maintaining the plant's safety functions

Stress tests: state of play

- **By end December 2011, regulators prepared final national reports**
- **Reports provided by:**
 - **all Member States operating NPPs + Lithuania**
 - **Switzerland and Ukraine**
- **Peer reviews of final national reports are ongoing and will end in April 2012**
- **The Commission report will be presented to the European Council in June 2012**

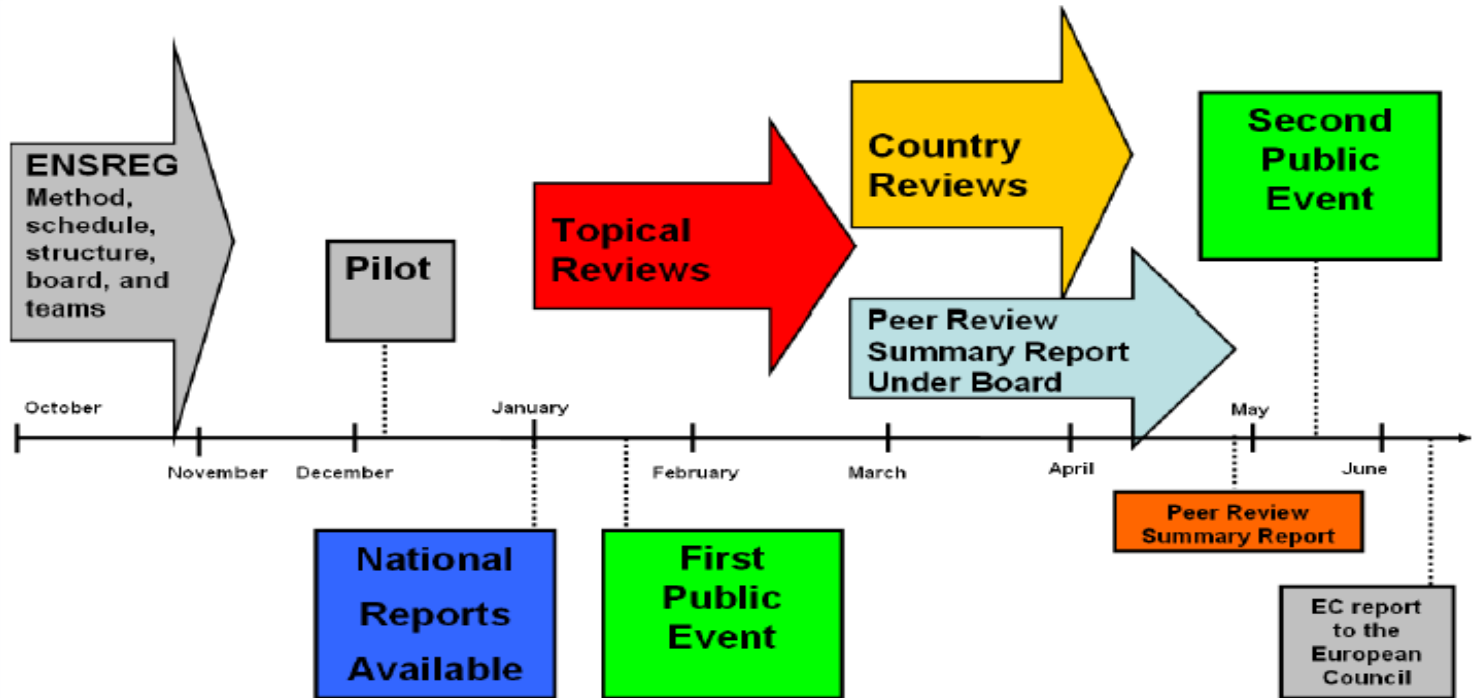


European Commission

Post-Fukushima
Stress tests
peer
review

Peer Review Timeline

Public Meeting



17 January 2012

ENSREG
European Nuclear Safety Regulators Group
Stress Test Peer Review Board

Peer reviews: features

They guarantee **credibility** and **accountability**

Peer review **teams**:

- experts from **Member States** and from the **European Commission**

Board supervising the process:

- national regulators, non nuclear countries, Commission; chaired by P. Jamet (ASN, FR; former IAEA Director of Nuclear Installation Safety)

Deliverables:

- **Topical Summary Reports**
- **Country Reports**
- **Peer Review Summary Report**

Stress tests: third countries

Switzerland and Ukraine participate fully

Armenia, Belarus, Croatia, Russia and Turkey have agreed to:

- undertake **voluntary assessments**, taking into account the **EU specifications**

Partnership with the IAEA to define and carry out similar assessments at a global level

Need to revise the international legal framework (IAEA Nuclear Safety Convention)

Revision of the EU safety framework

Public consultation (until 29 February):

http://ec.europa.eu/energy/nuclear/consultations/20120229_euratom_en.htm

3rd quarter 2012: Commission legislative proposals

Main areas for legislative improvements:

- **technical safety requirements**
- **nuclear safety governance**
- **emergency preparedness and response**

Perspectives for nuclear – Roadmap 2050

Further development is contingent on:

- sufficient level of nuclear **safety & security**
- **public** acceptance

Options for Member States:

- relying on **alternatives** (renewables and CCS)
- making use of all available **low carbon sources**