

Regulatory Perspectives on Nuclear Safety

NRC Commissioner William C. Ostendorff
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Key Messages

A ***strong safety culture*** is needed

A ***credible regulator*** is important

International cooperation is
valuable

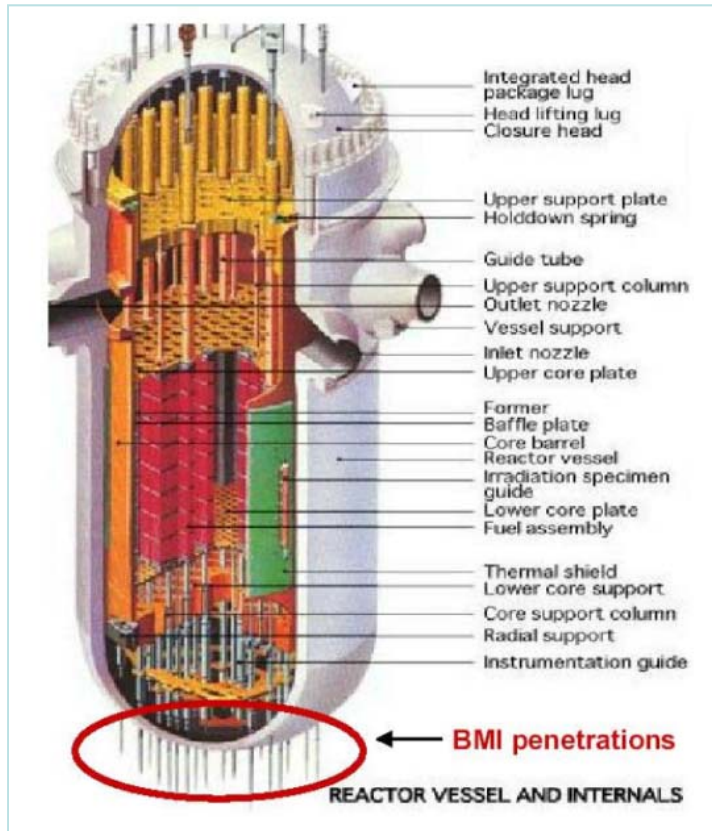
Safety Culture

- Nuclear power program lifetime can be up to ***100 years or more.***
- A ***sustainable*** national ***nuclear safety infrastructure*** is needed.
- ***Safety culture*** is the ***key foundation.***

Safety Culture



Safety Culture



Reactor vessel bottom mounted instrumentation (BMI) penetration



Boric acid white residue on leaking reactor vessel penetration



Repaired reactor vessel penetration

Safety Culture

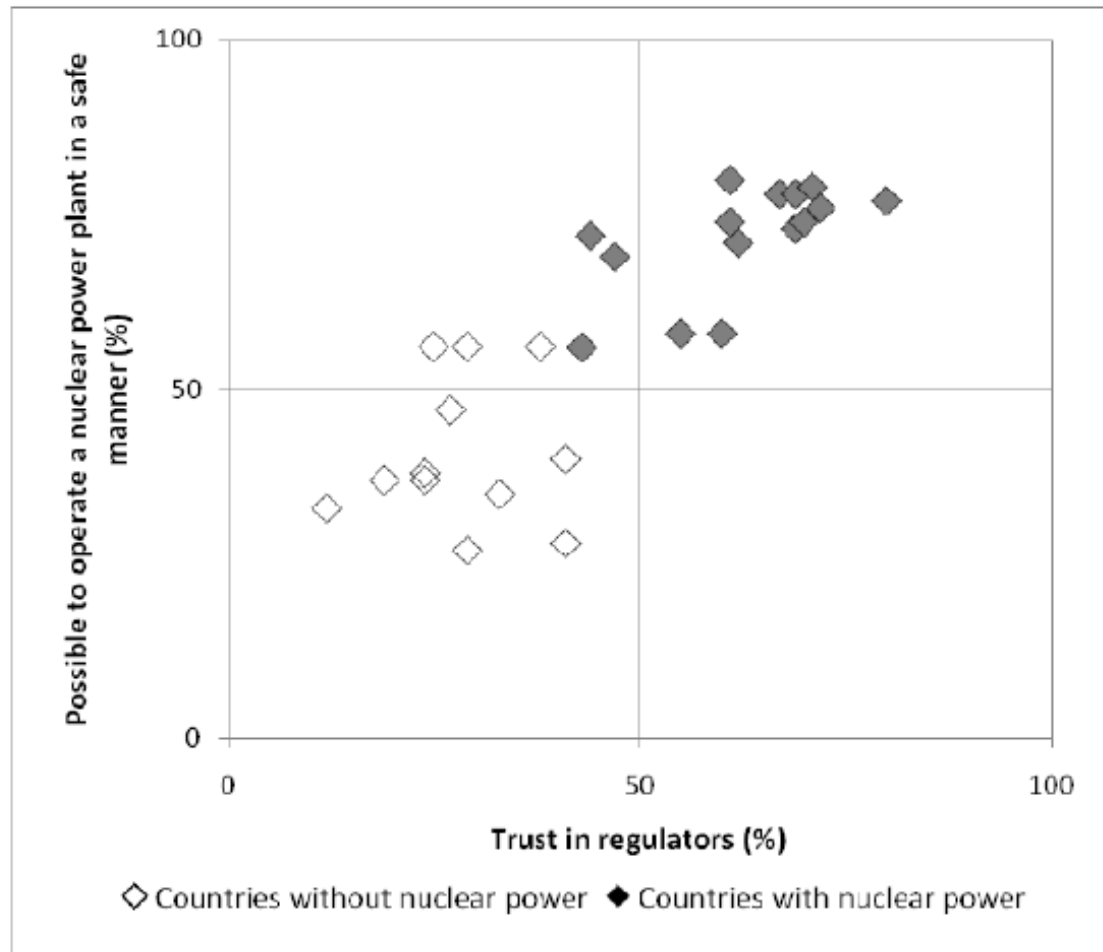


US Air Flight 1549

Credible Regulator




Credible Regulator



Source: Eurobarometer (2007).

Strong correlation between *trust in the regulator* and the belief that nuclear power plants can be operated in a safe manner

Credible Regulator



U.S. NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Principles of Good Regulation

The NRC adheres to the following Principles of Good Regulation


Independence: Nothing but the highest possible standards of ethical performance and professionalism should influence regulation. However, independence does not imply isolation. All available facts and opinions must be sought openly from licensees and other interested members of the public. The many and possibly conflicting public interests involved must be considered. Final decisions must be based on objective, unbiased assessments of all information, and must be documented with reasons explicitly stated.

Openness: Nuclear regulation is the public's business, and it must be transacted publicly and candidly. The public must be informed about and have the opportunity to participate in the regulatory processes as required by law. Open channels of communication must be maintained with Congress, other government agencies, licensees, and the public, as well as with the international nuclear community.

Efficiency: The American taxpayer, the rate-paying consumer, and licensees are all entitled to the best possible management and administration of regulatory activities. The highest technical and managerial competence is required, and must be a constant agency goal. NRC must establish means to evaluate and continually upgrade its regulatory capabilities. Regulatory activities should be consistent with the degree of risk reduction they achieve. Where several effective alternatives are available, the option which minimizes the use of resources should be adopted. Regulatory decisions should be made without undue delay.

Clarity: Regulations should be coherent, logical, and practical. There should be a clear nexus between regulations and agency goals and objectives whether explicitly or implicitly stated. Agency positions should be readily understood and easily applied.

Reliability: Regulations should be based on the best available knowledge from research and operational experience. Systems interactions, technological uncertainties, and the diversity of licensees and regulatory activities must all be taken into account so that risks are maintained at an acceptably low level. Once established, regulation should be perceived to be reliable and not unjustifiably in a state of transition. Regulatory actions should always be fully consistent with written regulations and should be promptly, fairly, and decisively administered so as to lend stability to the nuclear operational and planning processes.



Independence
Openness
Efficiency
Clarity
Reliability

Credible Regulator

Risk communication and outreach:



Shared responsibility of
regulator and industry

Promote understanding
of risks and the bases for
regulatory activities

International Cooperation

Over 50 years of
worldwide nuclear
power plant
***operating
experience***

=

Knowledge and
lessons learned
to be shared
through
international
cooperation

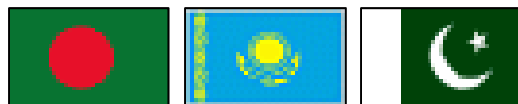
International Cooperation



Countries participating in the ANSN



Supporting countries and organizations



Other countries connected to the ANSN

Knowledge networks
can be
effective tools
for learning

International Cooperation

US Integrated Regulatory Review Service Mission October 2010



Thank You

Questions

Comments

Discussion