

CENESS Non-proliferation Conference, 9:00, 8 September 2012

Nuclear Power after Fukushima: What are the “Must” Conditions for Further Development and Growth?

Remarks by session chair, John Carlson

- It is now 1½ years after Fukushima accidents
 - a massive earthquake and tsunamis led to meltdowns in 3 reactors, and substantial radiation releases
 - while the accidents were triggered by a natural catastrophe, the immediate cause was human error.
- The accidents revealed serious safety deficiencies on the part of the operator and the regulators, e.g.:
 - key safety upgrades for the reactor model, mandated by the NRC in the US, had not been followed in Japan, e.g. locating emergency generators in watertight buildings
 - concerns about the lack of regulatory independence in Japan, expressed in regular Nuclear Safety Convention reviews, also by the IAEA, had been ignored by Japanese authorities
 - deficiencies in emergency preparedness, including inability to make effective use of international assistance.
- The Japanese parliamentary commission into Fukushima described it as a disaster “Made in Japan”. But serious deficiencies in nuclear safety governance are apparent at the international level, not just in Japan:
 - lack of any mandatory process for applying manufacturers’ safety upgrades, long established in the aviation industry
 - lack of international standards
 - lack of any effective international oversight – e.g. mandatory peer reviews or safety inspections
 - lack of accountability and transparency.
- The two previous major nuclear accidents, TMI and Chernobyl, led to major improvements in nuclear safety governance
 - TMI – establishment in the US of INPO, strong peer review process
 - Chernobyl – Nuclear Safety Convention and related treaties.
- The response after Fukushima has so far been muted
 - WANO has agreed to mandatory peer reviews – though transparency uncertain
 - but governments are resisting strengthening of international oversight.
- There is similar resistance to strengthening international oversight in nuclear security
 - and the Iranian situation shows that “peaceful” nuclear programs can present proliferation risk.
- What must be done to rebuild public and political confidence in nuclear power?
- This is not only a nuclear safety issue
 - there are implications for nuclear governance more generally, in nuclear security and non-proliferation
 - a better balance is needed between national and international interests and responsibilities, with greater emphasis on international cooperation, collaboration and accountability.