Notes on

Ending the Global Security Threat of Nuclear Power. Lessons from the TPNW

Webinar

27.1.21

For good information on SMNRs look at Beyond Nuclear's website and search for SMR

- 1. The TPNW refocusses debate on the humanitarian aspect of nuclear weapons.
- 2. There is a lot of misinformation about nuclear power, in part promoted by influencers on social media who are <u>paid</u> to promote nuclear power.
- 3. Many governments object to nuclear power, as it is not compatible with sustainable development. That message needs to spread.
- 4. Nuclear weapons and civilian nuclear power are linked by a two way street
- 5. Nuclear weapons should be abolished and nuclear power should be controlled internationally, was a concept in the past. That idea has collapsed as NPT allows for building of nuclear power and then withdrawal from the treaty.
- 6. SMRs can still support nuclear weapon programmes.
- 7. Phase out of civilian nuclear energy at all levels is necessary to move towards a world free of nuclear weapons.
- 8. David Lowry noted that a UK minister has stated that SMRs will be available by the early 2030s.
- 9. The hybrid SMR/Wind turbine proposals for Anglesey are erroneously described as zero carbon.
- 10. SMRs are not entirely a civilian project as they are designed to benefit defence.
- 11. Expanding nuclear talent benefits defence. New submarines need the skill base from civilian nuclear power.
- 12. There is a government strategy to bring to an end the "artificial" distinction between civilian and military nuclear power, lead by the Nuclear Skill Strategy Group.
- 13. In the US, SMRs are to be used for national defence and space exploration.
- 14. SMRs are not that small. There are about 50 potential designs being floated at the moment and maybe just 1 or 2 will become commercially viable.
- 15. SMRs are vulnerable to attack and not sufficiently robust.
- 16. Gordon Edwards stressed that without Uranium there would be no nuclear weapons. Plutonium is produced by nuclear reactors and has a half life of 24,000 years. It is the basis for nuclear weapons. We must end production of plutonium.

- 17. Depleted uranium is used in conventional weapons and is also an important part of nuclear weapons. Most of the explosive power comes from depleted uranium 238 from civilian nuclear power stations.
- 18. If nuclear power had been developed before WWII took place, much of Europe would be uninhabitable.
- 19. Plutonium 239 starts as an atom of uranium.
- 20. Civilian nuclear industry reprocessing plants are very dangerous for the future. We can't have civilian power and no nuclear weapons.
- 21. SMRs use 20% enriched uranium, on the threshold of weapons grade uranium for bombs.
- 22. It only requires the political will to put this material into bombs.
- 23. The NPT safeguards the right to use nuclear bombs for peaceful purposes. These binding clauses can be disregarded
- 24. Suicide is not a defence or an energy policy either.
- 25. Bit by bit, it can become a matter of shame to have nuclear weapons, thanks to the TPNW.
- 26. Bradwell would use a Chinese reactor. CGN also builds nuclear weapons in China. Project may not get off the ground.
- 27. UK nuclear industry contracting and heading towards zero.
- 28. There is a need to choke off two technologies: Uranium enrichment and plutonium reprocessing.
- 29. The control of this nuclear threat can be seen as more urgent than the threat from climate change.
- 30. The massively long time periods involved before nuclear waste becomes in any sense safe are eye watering. If you waited a million years, the current stockpile of waste would still provide material for 100s of nuclear bombs.
- 31. Uranium 235 has a half life of 70 million years, we must stop producing it.
- 32. The anti nuclear movement has a feminist emphasis. Representation of diverse interests is given importance. Indigenous people given a voice. All this resulted in progressive language within the TPNW. The same approach is needed in the debate about civilian nuclear power.
- 33. There is international collaboration between the industry and the regulators over SMRs and this needs exposing. The Office of Nuclear Regulation, which is looking at a generic licence for these plants, refused a recent Freedom of Information request. It is a battle to keep the Regulator separate from the Industry.
- 34. In discussions of nuclear energy, it is vital to consider the whole cycle from mining through to spent fuel and stress that it is, in effect, colonising the future almost indefinitely.
- 35. Have hope and keep doing the work!