Nuclear Law in the United States

By Arnie Gundersen
Fairewinds Associates, Inc
Burlington, Vermont, US
Two Jurisdictions For Licensing Nuclear Power Plants

- **Federal Law** For Licensing
- Nuclear Regulatory Commission Law
- Other Federal agencies

- **State Law** for Licensing
- Environmental Issues
The Nuclear Regulatory Commission
What Is It and What Does It Do?

- Before 1976, Atomic Energy Commission (AEC)
- AEC Mission to promote and regulate
- After 1976, Nuclear Regulatory Commission (NRC)
- NRC was created to regulate not promote – in theory
- In 1976, Department of Energy (DOE) was created to promote nuclear power
- Fairewinds has created a video about the fact that the NRC continues to promote the nuclear industry
  http://www.fairewinds.com/content/nuclear-oversight-lacking-worldwide
Who Is The NRC?

- Congress appoints 5 Commissioners who are vetted by the nuclear industry lobby, Nuclear Energy Institute (NEI) – *Amakudari*
- NRC 4,000 staff members
- ACRS – 17 member Advisory Committee on Reactor Safeguards – all members from industry or academia
- 104 reactors plus 20,000 other licensees
What Is The Nuclear Regulatory Commission’s Legal Authority?

- NRC predominantly has a safety role
- Code of Federal Regulations 10CFR contains all nuclear law
- Part 50 of 10CFR covers all nuclear reactors prior to the AP1000 approval
- 10CFR Part 52 covers the newest designs via one stop licensing – shortened & fast process
- 10CFR Part 100 covers emergency response
What Is The Federal Licensing Process?

- Atomic Safety and Licensing Board (ASLB) reviews License Extension & Power Uprates
- ASLB has never rejected an application
- Example of NRC bias – at the Yucca Mountain Waste Repository in the State of Nevada – 195 expert affidavits were rejected by the NRC!
- Expensive process for the public
- Intervenors Must Hire Attorney and Experts
- Time constraints on the process favor industry
- 2.206 Citizen Petition
State License Issues

- Environmental Issues
- Water Quality
- Seismic (?)
- Need for Power versus Conservation
- Benefit to State – Jobs and Taxes
- Citizens do not trust the NRC and turn to other methods of regulation
Civil Law and Radiation Damage

- Federal Law: Price Anderson Act – Total Cap on Damages $10,000,000,000 USD = 788,850,000,000 JPY
- Daubert Process
- Out of Court Settlements
- Limited Liability Corporations
States’ Rights and Vermont Yankee

- Federal Pre-emption – Federal Law Wins Over State Law
- Recent Federal Judge Decision Claims that the State of Vermont (VT) Overstepped its State’s Rights by evaluating Safety Issues.
- NRC = Safety Issues Belong to NRC
- State = Almost Everything Else
- State Believes nuclear reliability is within its jurisdiction
Arnie Gundersen has 40-years of nuclear power engineering experience. He is a former nuclear industry senior vice president, who earned his Bachelor and Master Degrees in nuclear engineering from RPI, holds a nuclear safety patent, and was a licensed reactor operator. During his career, Mr. Gundersen managed and coordinated projects at 70-nuclear power plants in the US.

Currently, Mr. Gundersen is the chief engineer and an expert witness for Fairewinds Associates, a paralegal services and expert witness firm founded in 2003 by its president Maggie Gundersen. He speaks on television, radio, and at public meetings regarding the lack of adherence around the world to important nuclear safety regulations and testifies about nuclear power plants in the US, Canada, and overseas. Mr. Gundersen also serves as a director for the non-profit organization Fairewinds Energy Education Corp.