

Strategies of Trust in the 1st Nuclear Era

Thomas Wellock

Historian

Thomas.wellock@nrc.gov



Strategies of Trust

- Trust the Experts (1955-71)

Strategies of Trust

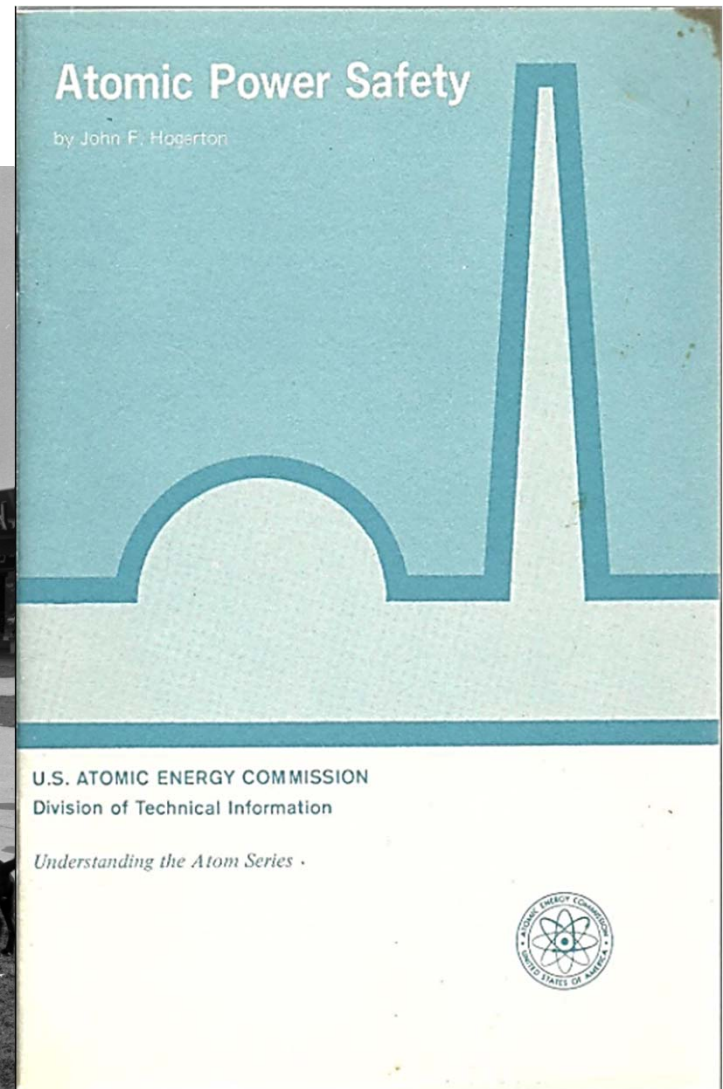
- Trust the Experts (1955-71)
- Trust the Numbers (1969-80)

Strategies of Trust

- Trust the Experts (1955-71)
- Trust the Numbers (1969-80)
- Earning Trust (1980-present)

Trust the Experts (1955-71)

- The AEC and promotion



Trust the Experts (1955-71)

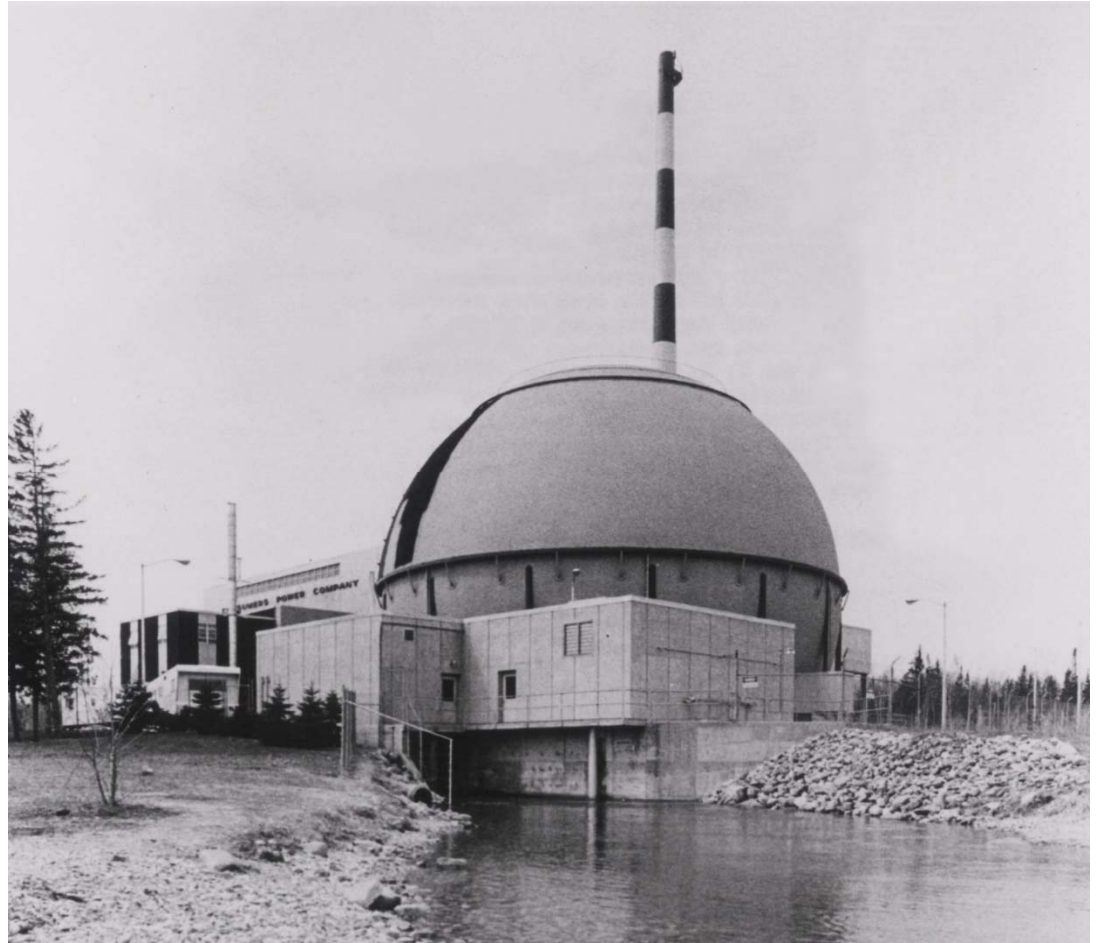
- Licensing
 - Fermi 1 LMFBR
 - 1957 legislation
 - Hearings required
 - ACRS evaluation made public
 - Educating the public



Fermi 1 Reactor Vessel Load

Trust the Experts (1955-71)

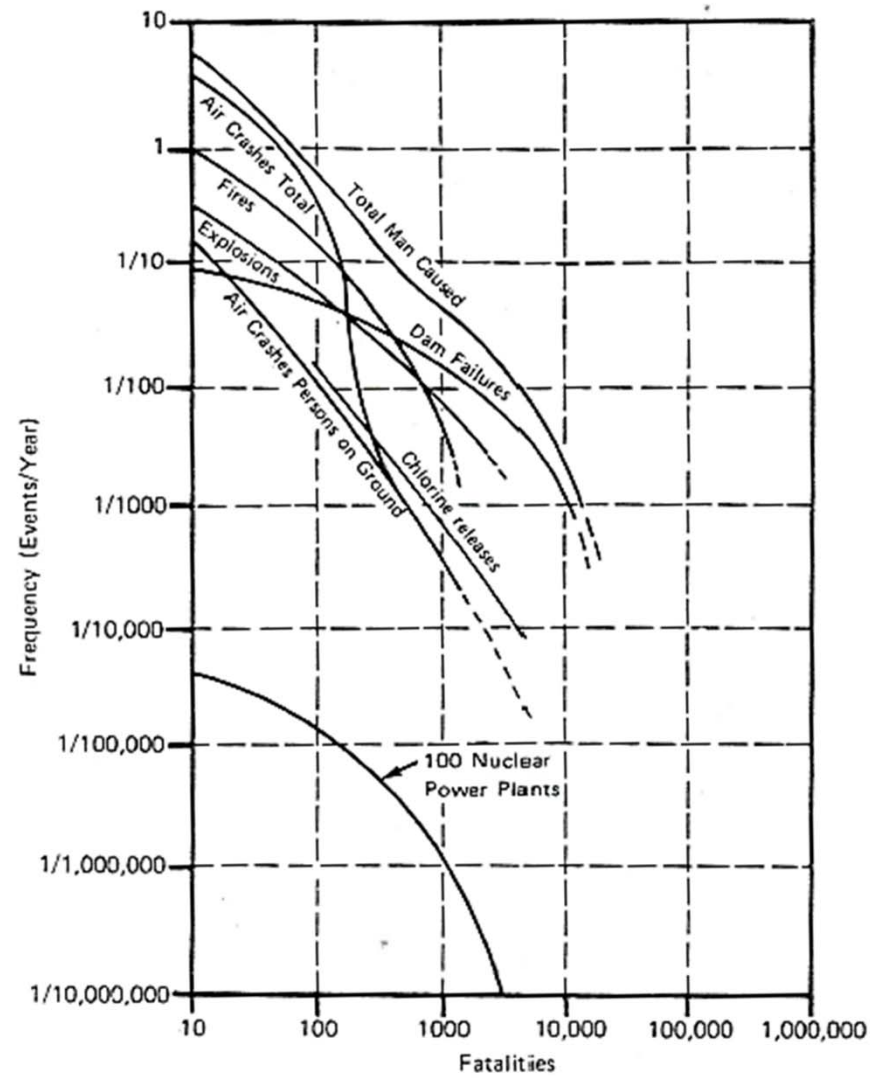
- Regulatory Surprise:
The China Syndrome
- Experts and the public
in the late 1960s.



Containment at Big Rock Point

Trust the Numbers (1969-80)

- Chauncey Starr:
 - Quantify Risk
- AEC: Probabilistic Risk Assessment: WASH-1400



Adrift in the 1970s

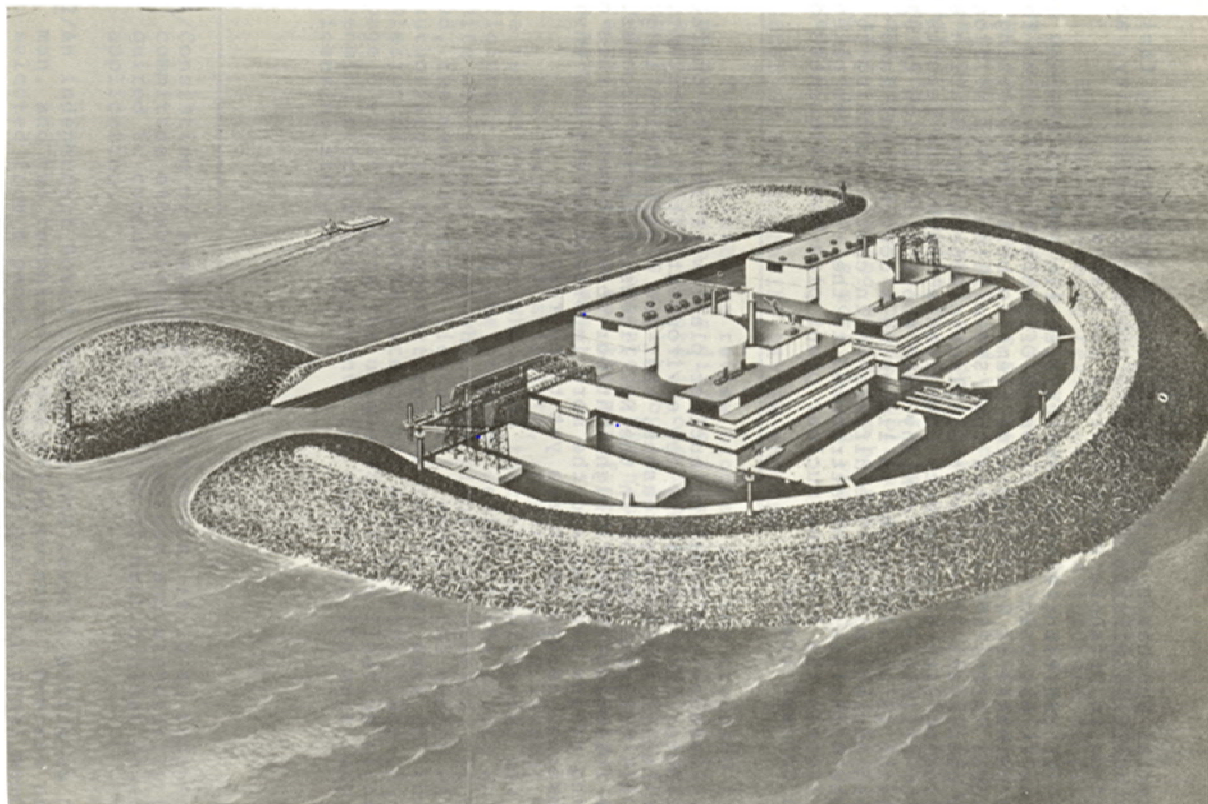
- Licensing: Who educates the public?
 - Shoreham hearings
- NEPA and Calvert Cliffs decision (1971)
 - Promotion vs public interest
- NRC and public engagement?



Ralph Nader and William Doub (AEC)

Strategies of Disengagement

- State Action
 - Siting/Energy Agencies
 - Nuclear power on the ballot



FURNISHED BY OFFSHORE POWER SYSTEMS, INC.

FIGURE 1. ARTIST'S CONCEPT OF TWO FLOATING NUCLEAR POWERPLANTS.

Westinghouse Floating Reactor Concept

Earning Trust (1980-present)

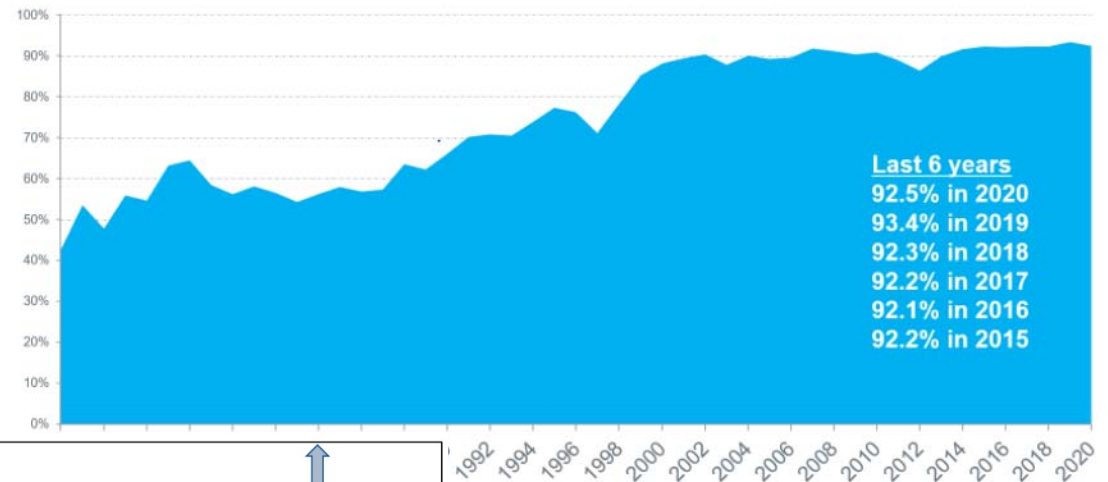
NRC: Principles of Good Regulation

- Independence
- Openness
- Efficiency
- Clarity
- Reliability

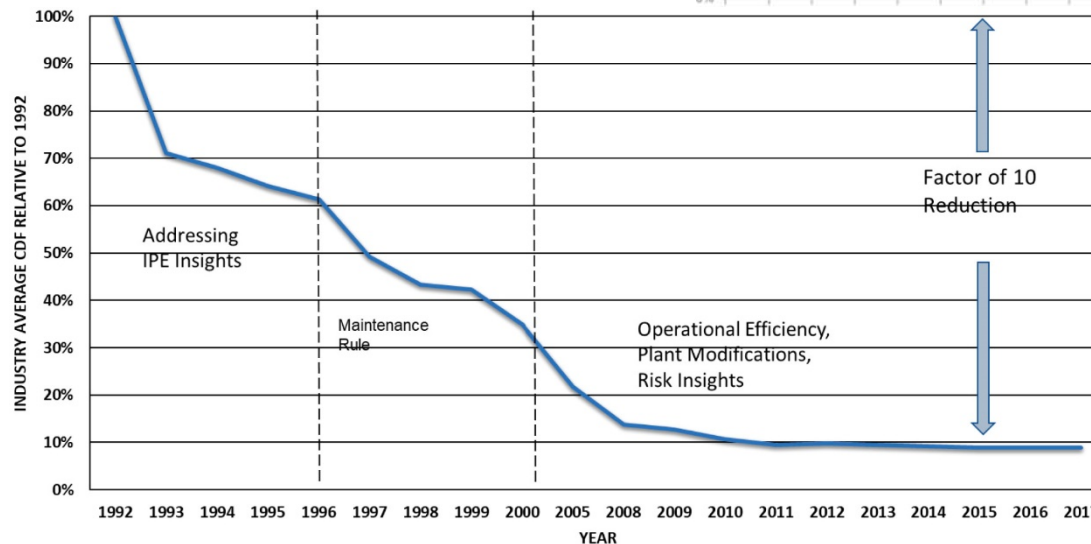
Earning Trust (1980-present)

- Industry: Efficiency and Safety

U.S. Nuclear Capacity Factors



©2021 Nuclear Energy Institute 7



Credit: Nuclear Energy Institute 2019, 2021, U.S. NRC RIC Conference