



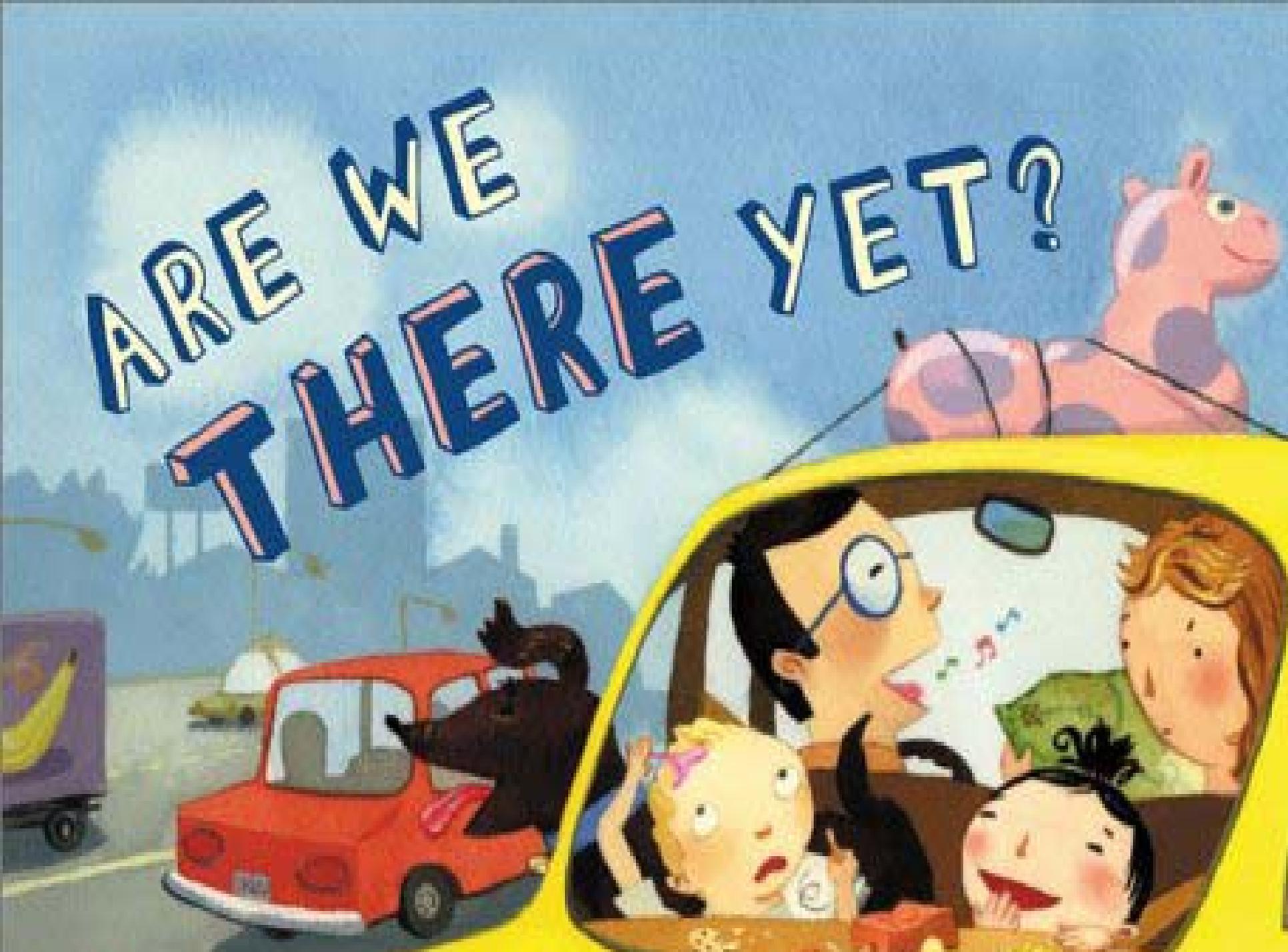
Are We There Yet?

Jeffrey S. Merrifield
Commissioner

U. S. Nuclear Regulatory Commission

March 8, 2005

ARE WE
THERE YET?



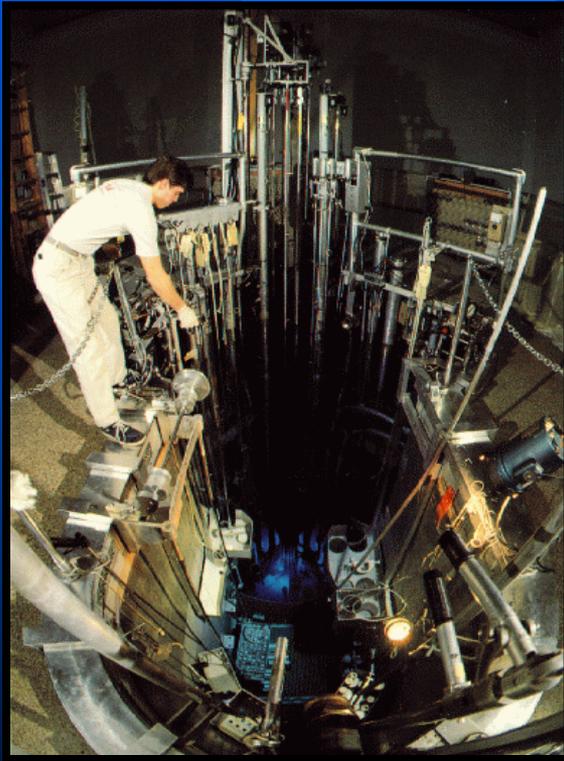


Are We There Yet?





Harnessing the Atom



Research



Medicine



Industrial
Uses



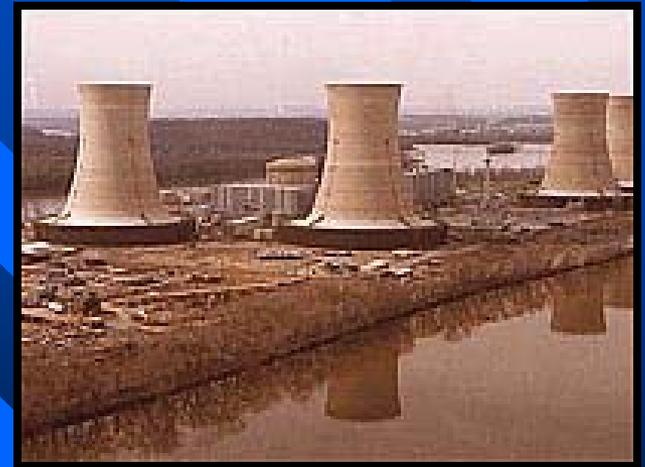
Energy



Troubles of the Past



SL-1 Reactor



TMI



Chernobyl



Regulatory Authority





New Plants

Mirage?

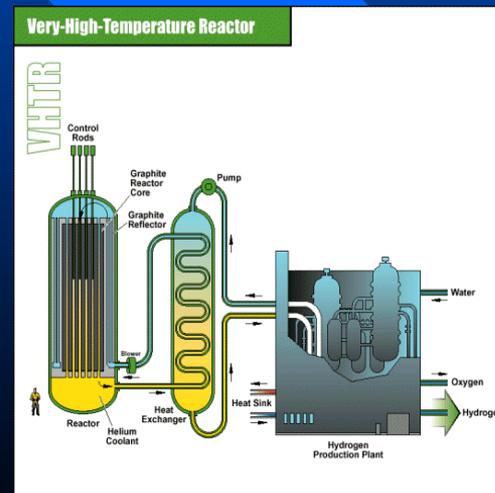
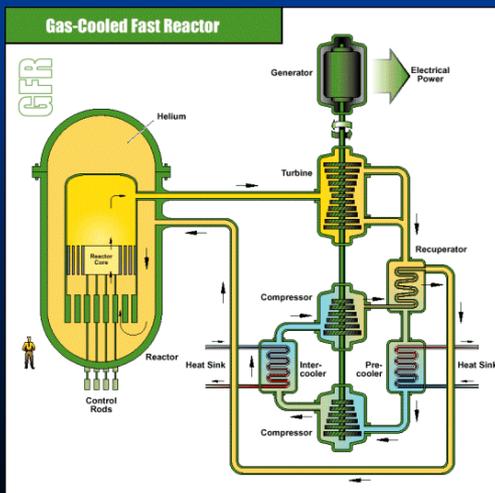
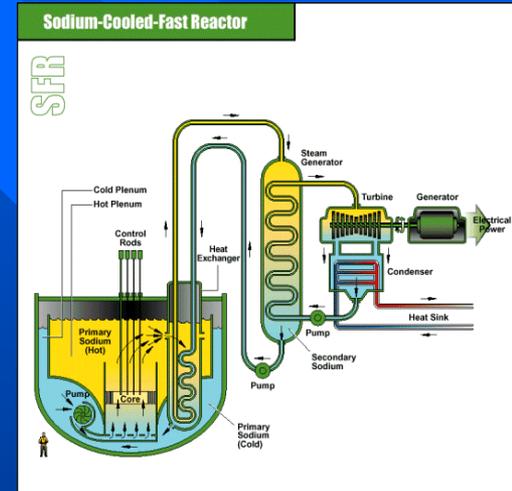
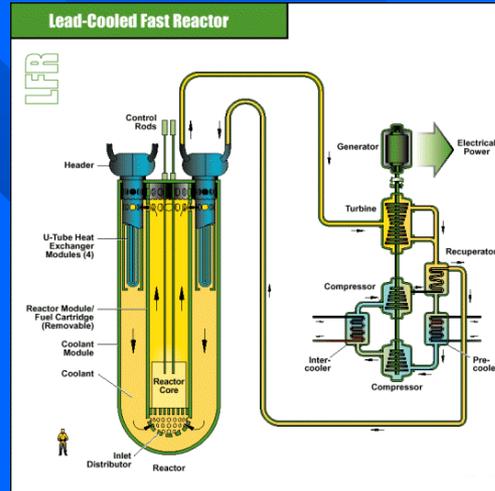


Objects in the mirror are
closer than they appear



Reactors: The Next Generation?

Liquid Metal



Gas-Cooled



Concept Vs. Standard





Over-promising

“It is not too much to expect that our children will enjoy electrical energy in their homes too cheap to meter.”

Lewis Strauss – AEC Chairman, 1954

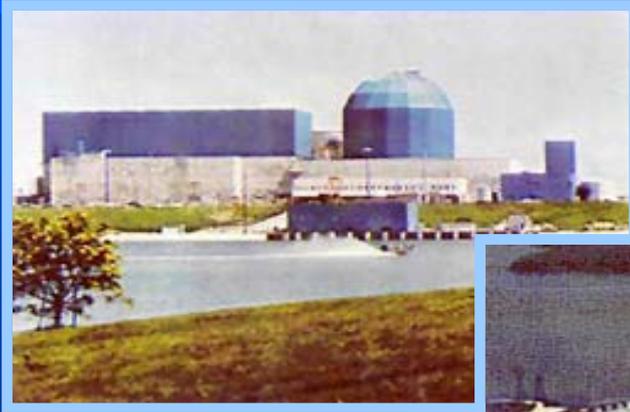
The chances of a severe accident are
“extremely improbable.”

Chauncey G. Suits - GE Director of Research, testifying before Congress in 1955

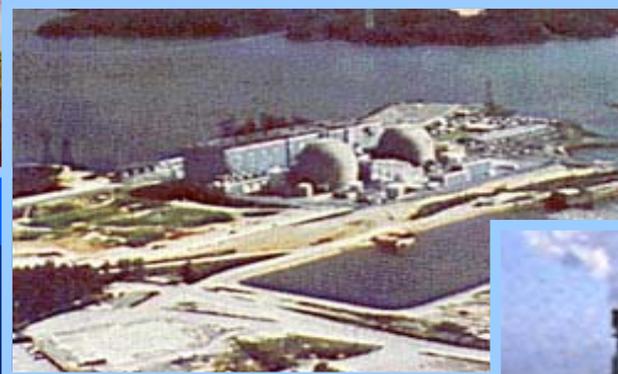


Agency Resource Challenges

Early Site Permits



Clinton



North Anna

Design Certification

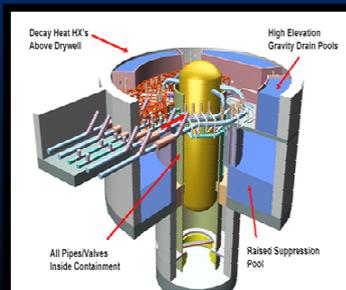


AP1000

Pre-Application Reviews



EPR



ESBWR



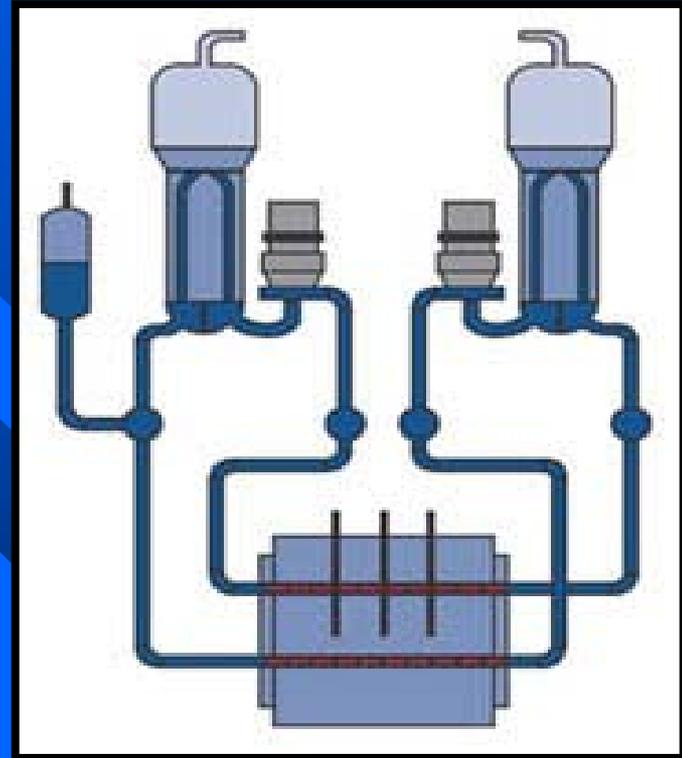
Grand Gulf



Resource Commitments?



PBMR



ACR-700



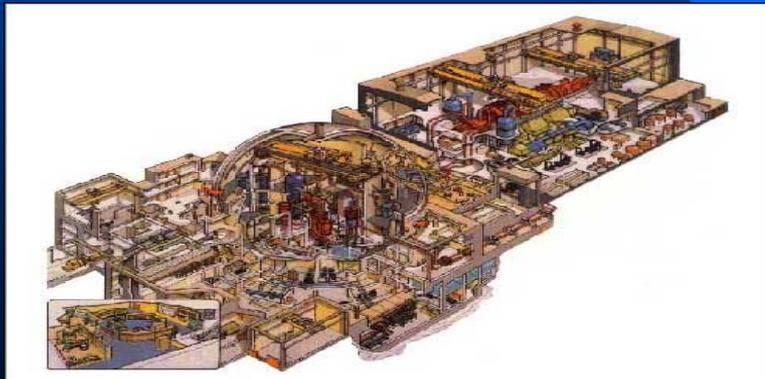
Advanced Designs



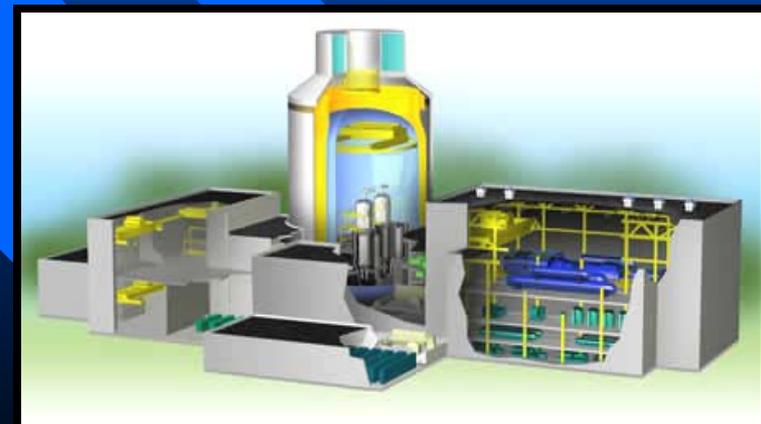
ABWR



AP600



System 80+



AP1000



Fitness-For-Duty

Worker Fatigue



Drug/Alcohol Testing





ITAAC

Inspections, Tests, Analyses and Acceptance Criteria

Roadmap for licensees and the staff to ensure requirements have been met

Used to address aspects of program implementation needed to make licensing decisions

Interaction with industry to narrow the scope





Security – Stability & Normalcy

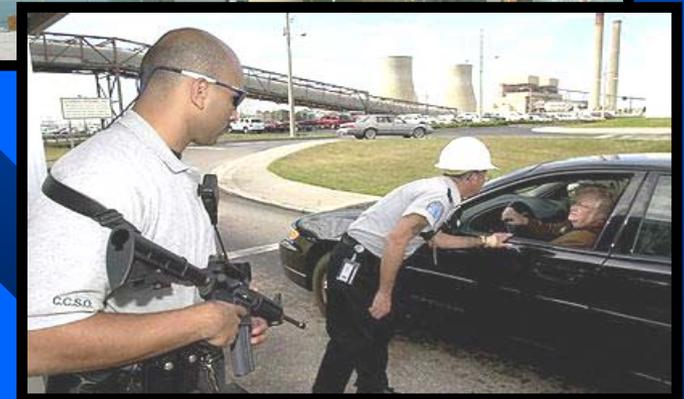
- **Design Basis Threat Order**

- April 2003 - issued
- October 2004 –implementation

- **Force-on-Force Exercises**

- Final Transition
- Every 3 years

- **Normal & Stable security regime**



Are We There Yet?

Well...