# RIC 2004
# New Reactors/Advanced Reactors
# Session W7

**Department of Energy Initiatives Supporting COL Applications**

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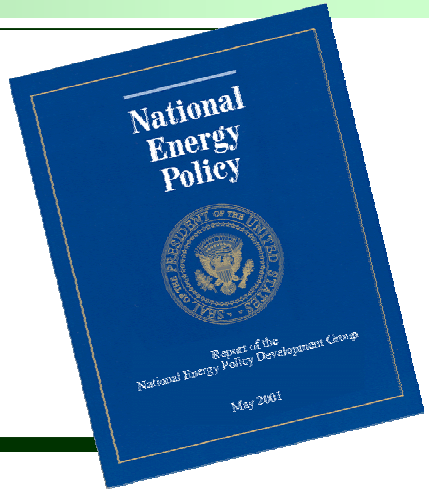
# The U.S. National Energy Policy and Nuclear Power

**"The NEPD Group recommends that the President support the expansion of nuclear energy in the United States as a major component of our national energy policy."**

*Report of the National Energy Policy Development Group, May 2001*

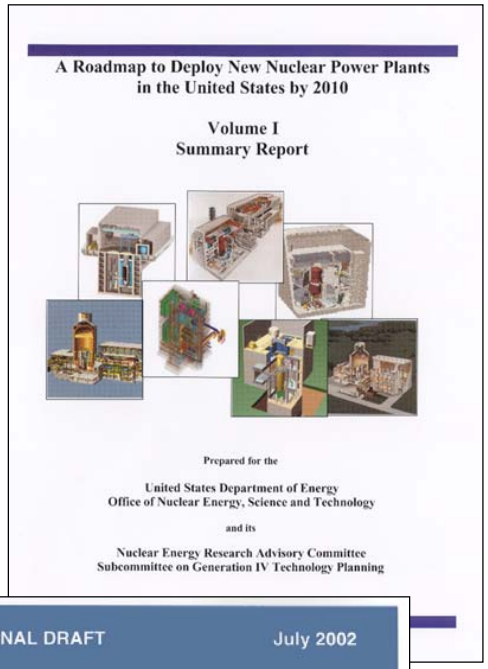


**Selected Recommendations:**

- Support uprating and relicensing existing nuclear power plants
- Support licensing new nuclear reactors
- Develop advanced nuclear fuel cycles and next generation technologies
- Reconsider advanced reprocessing and fuel treatment technologies

# Barriers to New Nuclear Plants

- **Nuclear Waste Disposal**
- **Accident Indemnification**
- **Commissioning Uncertainty**
- **High Initial Capital Investment**
- **Economic Competitiveness**
  - Long construction durations
  - Deregulated market



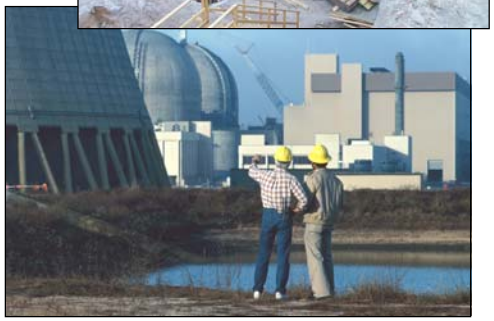
# Government Has Made Good Progress

| Challenge | Action |
| --- | --- |
| Establish Yucca Mountain Repository | President has signed House Joint Resolution 87 allowing DOE to seek a license for Yucca Mountain |
| Extend Price-Anderson | President signed Omnibus Bill to extend Price-Anderson coverage for an additional year, expect further extension in future energy legislation |
| Support New Nuclear Reactors | DOE has launched the Nuclear Power 2010 Initiative, working with industry |
| Economic Competitiveness | Senate Energy Legislation proposed Production Tax Credits for first few nuclear plants |

# DOE Initiatives

*Nuclear Power 2010*

- **"Early Site Permit" (ESP) Demonstration Projects initiated**
  - Three ESP applications filed for NRC approval
    - Dominion Energy - North Anna
    - Entergy - Grand Gulf
    - Exelon - Clinton
  - TVA Site Suitability Study of new location on Bellefonte Site
- **Generic Construction & Operating License (COL) project initiated -- EPRI/NEI**
  - Develop COL application preparation guidance
  - Develop generic resolution of COL issues



# DOE Initiatives

*Nuclear Power 2010 (cont.)*

- **New Nuclear Plant Licensing Demonstration Projects**
  - Solicitation issued in November -- for proposals outlining a power company plan of activities leading to an order for and license to build a new nuclear power plant
    - Combined Construction and Operating License
    - Advanced Reactor Design Completion
    - Project Cost and Financial Analysis
    - Siting Analysis and Permits
  - Pre-submission Briefing held on December 11, 2003
  - Open Solicitation Period through December 2004