

# New Nuclear Plants Outlook

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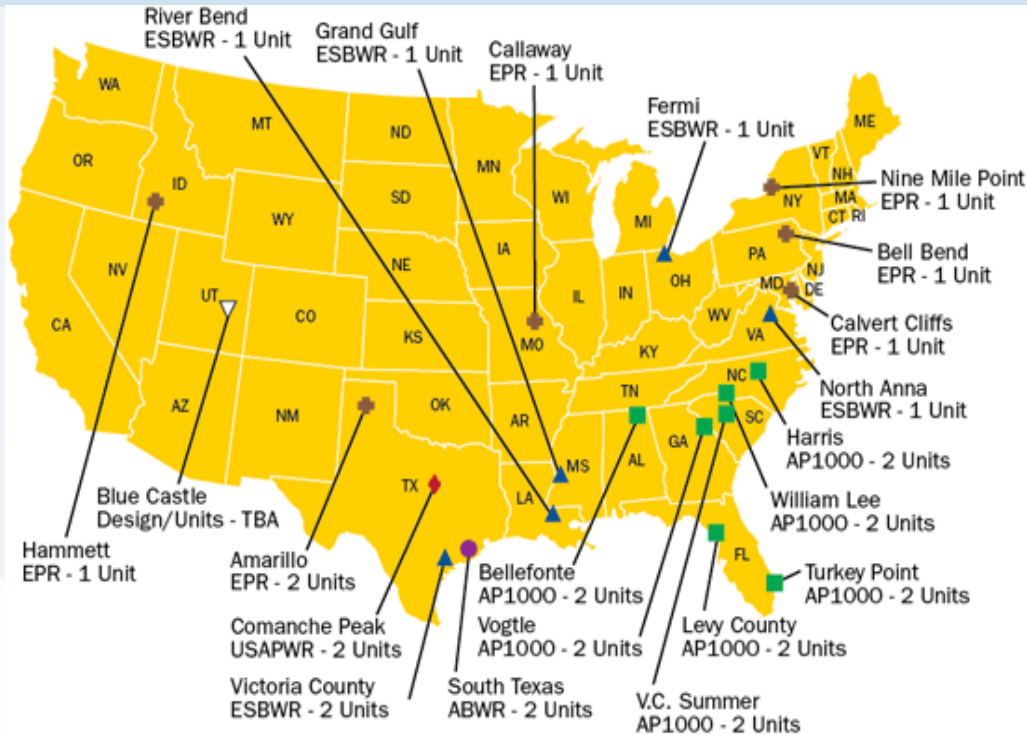
# New Nuclear Plants Global Status

- 43 plants under construction
  - ~ 37 GW
- 108 plants on order or planned in 24 countries
  - ~ 121 GW
- 266 projects under consideration in 27 countries
  - Statement of intent/proposal



Source WNA Jan 2008

# Proposed New Nuclear Plants



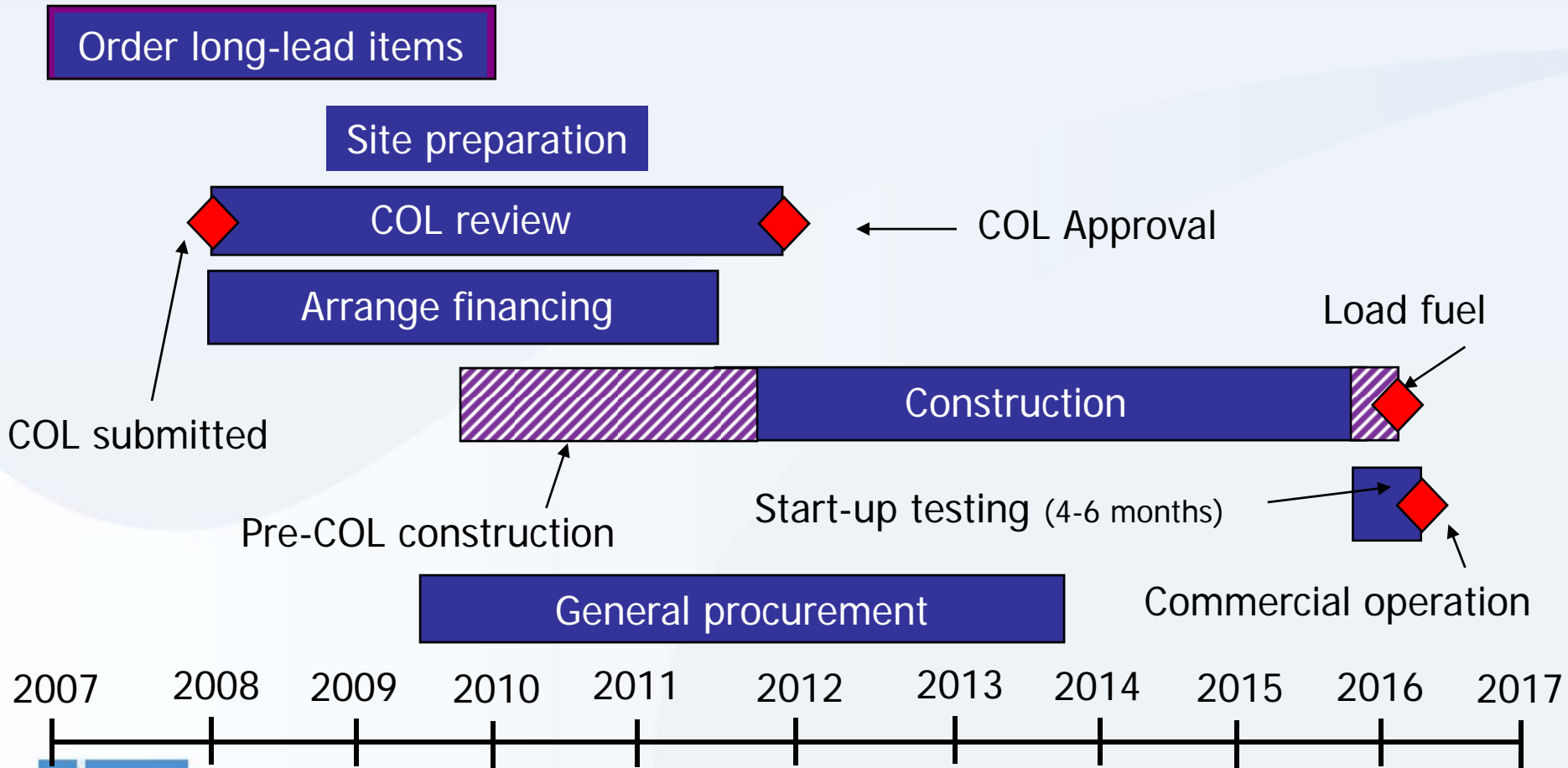
- 17 Applications
- 26 Units
- 5 Designs

You may click on a design name to view the NRC's Web site for the specific design.

● ABWR   ■ AP1000   ● EPR   ▲ ESBWR   ◆ USAPWR   ▽ Design/Units - TBA



# Short-Term



# Licensing & Construction Then and Now

THEN	NOW
Design as you build	Plant designed before construction begins
Changing regulatory standards and requirements	More stable process: NRC approves site, design, construction & operation before construction begins and significant capital is placed "at risk"
No design standardization	Standard NRC-certified designs – 70+% Standard
Inefficient construction management practices	Lessons learned from overseas projects Modular construction practices
Main opportunity public intervention when plant is essentially complete	More opportunities to intervene at well-defined points in process. Intervention at the end of the process must be based on objective evidence that acceptance criteria, defined in the license, have not been, and will not be met



# US Commercial Outlook to 2020

- First 4 – 8 plants expected to start commercial operations in 2016
  - Others under construction
  - Building rate and projects adjusted based on the success of the first few projects
- Potential for new plants
  - 15 - 20 in 2020; 35+ in 2030
  - If first projects are successful



# Equipment & Commodities for First Eight Plants (Examples)

- Cable – over 1800 miles
- Nuclear grade valves – 4000 to 24000
- Pumps -- 1000 to 2000
- Nuclear grade piping – 30 – 150 miles
- Concrete – over 3 million cubic yds
- Electrical components -- Over 700,000
- Structural & reinforcing steel -- 500,000 tons
- Large and small heat exchangers -- 500 to 1300



# Support for New Nuclear & Expanded US Manufacturing Base

- Bipartisan political support
- Strong public support
- Solid support from labor
- Strong support from other industries
- Growing support from environmental community



# The Future

- New nuclear power plants will be built
  - Need for power, environmental limitations and need for long-term stability in electricity prices
- Opportunity is there -- will US-based manufacturers be able to take advantage?

