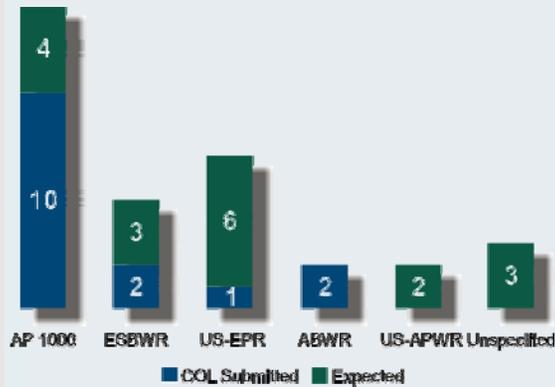


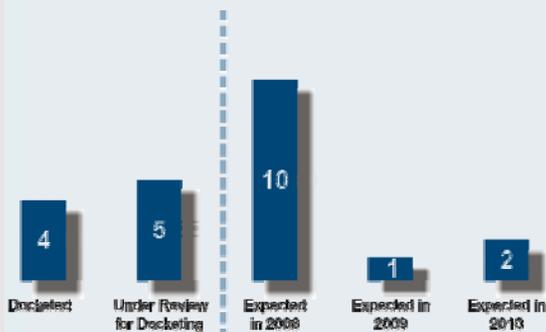
## Quick Statistics

Early Site Permits issued	3
Permits under review	1
Total COL applications submitted	9
COL applications docketed	4
Certified reactor designs	2
Reactor designs under review	4
Expected license applications	22
Expected number of reactors	33
Nuclear plant locations	20
Companies applying for COL	19

## Number of Planned Reactors (33)



## Status of License Applications (22)



## Announced Nuclear Locations

- Bellefonte (AL)—Tennessee Valley Authority
- Bruneau (ID)—Alternate Holding Energy
- Callaway (MO)—AmerenUE
- Calvert Cliffs (MD)—UniStar
- Clinton (IL)—Exelon
- Comanche Peak (TX)—Luminant (formerly TXU)
- Fermi (MI)—DTE Energy
- Grand Gulf (MS)—Energy
- Shearon Harris (NC)—Progress Energy
- Levy County (FL)—Progress Energy
- Nine Mile Point (NY)—UniStar
- North Anna (VA)—Dominion Energy
- River Bend (LA)—Energy
- South Texas Project (TX)—STP Nuclear
- V.C. Summer (SC)—SCE&G
- Susquehanna (PA)—PPL
- Turkey Point (FL)—Florida Power & Light
- Victoria County (TX)—Exelon Generation
- Vogtle (GA)—Southern Nuclear
- William States Lee III (SC)—Duke Energy

## Vendor Technology Under Consideration

### General Electric

- Advanced Boiling Water Reactor (ABWR), 1,356 MWe (*certified 10CFR52 App A*)
- Economic Simplified Boiling Water Reactor (ESBWR), 1,560 MWe

### Westinghouse

- Advanced Passive Pressurized Water Reactor (AP1000), Twin units 1,117 MWe each (*certified 10CFR52 App D*)

### AREVA

- United States Evolutionary Pressurized Water Reactor (US EPR), 1,600 MWe

### Mitsubishi Heavy Industry

- United States Advanced Pressurized Water Reactor (US APWR), 1,700 MWe



U.S. Department of Energy  
Office of Nuclear Energy

# Nuclear Power Deployment Scorecard

## Powering Future Decades



U.S. Department of Energy  
Office of Nuclear Energy

April 1, 2008

Updates available at  
<http://www.nuclear.gov>

## What's New

South Carolina Electric & Gas submitted a COL application on March 31, 2008 to build two AP1000s at its V.C. Summer site.

Southern Company submitted a COL application on March 31, 2008 to build two AP1000s at its Vogtle site.

On March 20, NRC announced two COLA public environmental scoping meetings:

- North Anna on April 16
- William States Lee on May 1

Unistar submitted the remainder of its COL application on March 17<sup>th</sup> for the reference US-EPR at their Calvert Cliffs site (environmental portion was submitted and docketed in January). The environmental scoping meeting was held March 19<sup>th</sup>.

On March 6, 2008, Senator Pete Domenici introduced Senate Bill S.2730 to create the Clean Energy Investment Bank, a government corporation to facilitate investment in clean energy projects (<http://thomas.loc.gov/>, enter S.2730).

On March 6, Toshiba announced the creation of a US subsidiary for its nuclear business, called Toshiba American Nuclear Energy Corporation.

On March 6, NRC announced it will hold an environmental scoping meeting for the Bellefonte COL on April 3.

## Legend

-  Implementation proceeding according to plan and schedule
-  Progress being made; however, issues or uncertainties exist that could impede progress
-  Unlikely to realize objectives absent significant management attention
-  No dates or end state established
-  Indicates change in status or progress since last evaluation
-  Regulatory Demonstration completed. No further government assistance is warranted.

## Nuclear Power Deployment Scorecard



### Early Site Permit (ESP)

- Three site permits issued by NRC (*Clinton, Grand Gulf, North Anna*)
- One site permit application under NRC review (*Vogtle*)
- Submission of three other ESP applications expected in 2010-2012



### Combined Construction and Operating License (COL)

#### License Applications Submitted to NRC

- Four COL applications docketed for review by NRC (*STP, Bellefonte, North Anna, and Lee*)
- Five COL applications submitted to NRC awaiting acceptance (*Grand Gulf, Harris, Calvert Cliffs, Vogtle, and V.C. Summer*)
- Submission of 13 additional COLs expected in 2008-2010
- Three applications expected in the 3<sup>rd</sup> quarter (*Callaway, Comanche Peak, and Levy County*)

#### Licenses to Build Issued by NRC

- NRC anticipates issuing COL 42 months after docketing



### Reactor Design Certification (DC)

- Two advanced reactor designs certified by NRC (*ABWR and AP1000*)
- Four reactor designs undergoing NRC certification review (*ESBWR, US-EPR, AP1000 amendment, and US-APWR*)



### New Nuclear Plant Orders

#### Long-Lead Equipment Orders

- Six utilities have ordered large long-lead nuclear component forgings with three reactor vendors
- No other long-lead equipment (e.g., heat exchanger and generator) have been ordered to date
- Japan Steel Works is only manufacturer of ultra-large forgings worldwide-capacity limited

#### Engineering, Procurement and Construction Contracts (EPC)

- No plant contracts signed to date; negotiations on-going among vendors and several utilities
- Plant engineering in progress; completion required to start construction



### New Nuclear Plant Construction, Operation & Deferral

- No utility has committed to constructing a new plant



### Federal Financial Incentives

#### Standby Support (Risk Insurance)

- Final 10 CFR Part 950 Rule issued August 11, 2006
- Standard Conditional Agreement issued September 2007 and instructions to request C.A. Dec. 2007

#### Production Tax Credits

- Internal Revenue Bulletin 2006-18 published May 2006
- Publish regulation for Production Tax Credit in FY08

#### Energy Facility Loan Guarantee

- Final 10 CFR Part 609 Rule amended January 18, 2008
- Solicitation for small scale loan guarantees closed December 2006
- No solicitation issued for nuclear plant loan guarantees
- \$18.5 billion approved for loan guarantees for nuclear plants December 2007