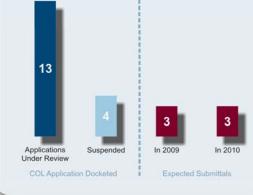
### **Quick Statistics**

Early Site Permits issued	3
Permits under review	1
COL applications submitted	17
No. reactors submitted	26
COL applications docketed	17
No. reactors docketed	26
Docketed but suspended	4
Total expected license applications	23
Expected number of reactors	34
Certified reactor designs	2
Reactor designs under review	4
Announced plant locations	21
Companies applying for COL Number of Planned Reactors	20



## Status of License Applications (23)



#### Announced Nuclear Locations

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

#### **Vendor Technologies 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

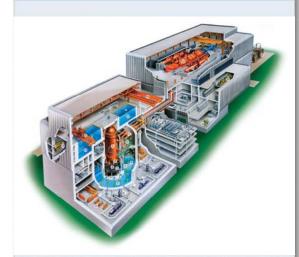
 United States Advanced Pressurized Water Reactor (US APWR) - 1,700 MWe



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** 

## May 11, 2009

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

## What's New

TVA and NuStart announced on May 1 and April 30, 2009, respectively, their intent to transfer the Westinghouse AP1000 reference application (R-COL) from Bellefonte to Vogtle.

NRC announced Atomic Safety and Licensing Board (ASLB) panels to preside over hearings for the following COL applications:

- Ameren UE Callaway, on May 1
- STPNOC South Texas Project, on April 2

Progress Energy announced a 20-month delay the Levy County construction schedule on May 1, 2009, upon NRC's determination that excavation and foundation preparation work can only begin after a COL is granted.

On May 1, NRC announced the opportunity for the public to request a hearing on TVA's Operating License application for Watts Bar Unit 2 near Spring City, TN.

NRC held a public meeting in Homestead, FL on April 23, to discuss the Progress Energy COL application for two AP1000 reactors at Turkey Point, expected to be submitted 2009.

An ASLB heard oral arguments on a request for a hearing for the Levy County COL proceeding on April 20, in Bronson, FL.

Exelon informed NRC on March 13 of its selection of the ABWR for Victoria County, replacing the original ESBWR; submittal of a COLA revision expected 3<sup>rd</sup> quarter 2009.

## 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

- Thirteen COLAs docketed and under review
- Three docketed COLAs suspended pending technology decision
- One docketed COLA is delayed as the power company focuses on a previously submitted COLA
- Submission of 6 additional COLs expected in 2009-2010

#### Status of Reference R-COLs

• All five R-COLs have been submitted and are undergoing NRC review (Calvert Cliffs, Comanche Peak, North Anna, South Texas Project, Vogtle)

## Reactor Design Certification (DC)

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

## New Nuclear Plant Orders

### Long-Lead Equipment Orders

- Nine utilities have ordered large, long-lead nuclear component forgings from three reactor vendors
- Four steel containment shells and 24 reactor coolant pumps have been ordered for AP1000 units
- Two domestic large component facilities being built
- Japan Steel Works is the only manufacturer of ultra-large forgings; worldwide-capacity limited
- Engineering, Procurement, and Construction Contracts (EPC)
- Four EPC contracts initiated (Vogtle, V.C. Summer, STP and Progress)
- Plant engineering is in progress; completion required to start construction

## New Nuclear Plant Construction, Operation, & Deferral

- No utility has committed to constructing a new advanced reactor
- TVA resumed construction of Watts Bar 2 and construction permits for Bellefonte 1 & 2 were reinstated

## Federal Financial Incentives

- Standby Support (Risk Insurance)
- Final 10 CFR Part 950 Rule issued August 11, 2006
- Two active Notices of Intent to Request a Conditional Agreement; a third notice has been withdrawn. One formal request under review by DOE.

#### Production Tax Credits

- Internal Revenue Bulletin 2006-18 published May 2006
- IRS considering revised guidance

#### Nuclear Power Loan Guarantees

- The Department is authorized to guarantee \$18.5 billion in loans for nuclear power projects. First NRCissued COL not expected before mid-2011.
- Fifteen power companies have submitted Part II applications by the December 19, 2008 deadline, requesting a total of \$93 billion in loans to be guaranteed. The applications cover 10 sites with a total of 16 reactors, capable of providing 22 GW in generating capacity.
- DOE has narrowed the new reactors eligible to receive loan guarantee to five applicants.