

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 deferred	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	20

Number of Planned Reactors (34)



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

April 9, 2009

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

What's New

NRC issued a revised AP1000 review schedule on April 3, 2009, in response to Westinghouse's submission of DCD Revision 17. The final safety evaluation report is now scheduled December 2010 and rulemaking August 2011, a nine month delay. COL schedules are being evaluated. Seismic analysis review is the critical path.

Southern informed the NRC in a March 13, letter of plans to apply for a COL at an unnamed 'greenfield' site in late 2011.

NRC extended the environmental review of the Vogtle COL application on March 18, pending a final Commission decision on their ESP application.

NRC held a public meeting March 28, in Blair, S.C., to discuss the agency's process for reviewing environmental issues related to the V.C. Summer COL.

NRC issued a notice of opportunity to intervene for the Bell Bend COL on March 18. The deadline for the public to request a hearing is May 18, 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 (*Bellefonte, Calvert Cliffs, Comanche Peak, North Anna, South Texas Project*)



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 NRC-issued 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.