

Quick Statistics

Early Site Permits issued	3
Permits under review	1
Total COL applications submitted	14
COL applications docketed	9
Certified reactor designs	2
Reactor designs under review	4
Expected license applications	23
Expected number of reactors	34
Announced plant locations	20
Companies applying for COL	20

Number of Planned Reactors (34)



Status of License Applications (23)



Announced Nuclear Locations

- 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

September 19, 2008

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

What's New

Luminant submitted a COL application for two US-APWR reactors at Comanche Peak near Glen Rose, TX on September 19. Luminant and Mitsubishi have agreed to form a joint venture to develop the facility.

Detroit Edison submitted a COL application to build an ESBWR at its Fermi facility near Newport, MI on September 18.

NRC announced September 16 that it will hold a public hearing for Southern's COL application at Vogtle.

On September 10, SCE&G requested permission from South Carolina state regulators to begin site work at V.C. Summer.

The Fresno Nuclear Group signed a letter of intent on August 19 to explore building a nuclear power plant coupled with a desalinization facility in Fresno County, CA.

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

- Nine COLAs docketed (*STP, Bellefonte, Harris, Grand Gulf, North Anna, Lee, Calvert Cliffs, Vogtle, and V.C. Summer*)
- Five COLAs submitted awaiting acceptance (*Callaway, Levy Co., Victoria Co., Fermi, Comanche Peak*)
- Submission of 9 additional COLs expected in 2008-2010
- Three applications expected through October (*Nine Mile Pt., River Bend, Bell Bend*)

Status of Reference R-COLs

- All five R-COLs have been submitted; three (*Bellefonte, North Anna, Calvert Cliffs*) have held public meetings and begun Phase 1 of the Safety Review. South Texas Project delayed due to vendor support issues



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
- Twenty-four reactor coolant pumps have been ordered for AP1000 units
- Japan Steel Works is only manufacturer of ultra-large forgings; worldwide-capacity limited

Engineering, Procurement, and Construction Contracts (EPC)

- Two EPC contracts initiated (*Vogtle and V.C. Summer*)
- 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 has resumed construction of Watts Bar Unit 2 with completion scheduled in 2013



Federal Financial Incentives

Standby Support (Risk Insurance)

- Final 10 CFR Part 950 Rule issued August 11, 2006
- Three Notices of Intent to Request a Conditional Agreement received by DOE

Production Tax Credits

- Internal Revenue Bulletin 2006-18 published May 2006

Energy Facility Loan Guarantee

- DOE issued solicitations for \$18.5 billion in loan guarantees for new nuclear facilities and \$2 billion for the nuclear fuel cycle on June 30, 2008
- Five power companies have responded to the Department's nuclear power facilities solicitation. One fuel cycle facility has submitted a full loan guarantee application
- As construction cost estimates rise, authorized amount for loan guarantees may be insufficient to catalyze follow-on nuclear construction fully financed by the private sector