



News Updates

- ◆ The Nuclear Regulatory Commission completed its Final Supplemental Environmental Impact Statement for a limited work authorization and Combined Licenses for the proposed Vogtle Units 3 and 4 reactors. The NRC concluded that there are no environmental impacts that would preclude issuing the LWA and COLs for construction and operation.
- ◆ Progress Energy Inc. has pushed back the scheduled completion of planned new nuclear reactors in Florida and North Carolina until after the year 2020. The power company's CEO stated that they are still committed to nuclear expansion.
- ◆ The Nuclear Regulatory Commission completed its Final Environmental Impact Statement for the proposed South Texas Project Units 3 and 4 and concluded that there are no environmental impacts that would preclude issuing Combined Licenses for construction and operation of the plant.
- ◆ The Nuclear Regulatory Commission told Dominion and Luminant that their license applications to build at North Anna and Comanche Peak will be delayed by some 18 months after Mitsubishi Heavy Industries (MHI's) made structural changes to its Advanced Pressurized Water Reactor design that requires performing new seismic analysis.

Combined Construction and Operating License (COL)

Summary: Eighteen COL applications have been docketed, twelve (totaling 20 nuclear units) of which remain under active NRC review. NRC suspended review of five applications due to changes in technology or economic considerations; one additional application was withdrawn and resubmitted as an ESP. A total of fourteen power companies have submitted 17 license applications for 26 units. The Reference COL (R-COL) application has been submitted for five reactor designs (ESBWR R-COL was recently transferred to Fermi since North Anna changed to the US-APWR); the 12 subsequent COLs (S-COLs) will incorporate the corresponding R-COL application by reference, noting any site-specific departures. No COLs have been issued to date.

| | UTILITY | SITE/LOCATION | | REACTOR/ NO. UNITS | COLA DATES | | REVIEW PHASE | | |
|-------------------------|---------------------------|---------------------|----|-----------------------|------------|----------|---------------------|-----------------------|-----------|
| | | | | | Submitted | Docketed | Safety ⁴ | Environ. ⁵ | |
| Active COL Applications | Southern Nuclear | Vogtle | GA | AP1000 ¹ | 2 | 3/08 | 5/30/08 | Ph. 4 | completed |
| | STP Nuclear Operating Co. | South Texas Project | TX | ABWR ¹ | 2 | 9/07 | 11/29/07 | Ph. 2 | completed |
| | Luminant (TXU) | Comanche Peak | TX | US-APWR ¹ | 2 | 9/19/08 | 12/2/08 | Ph. 2 | Ph. 3 |
| | UniStar (Constellation) | Calvert Cliffs | MD | US-EPR ¹ | 1 | 3/08 | 6/3/08 | Ph. 1 | Ph. 4 |
| | DTE Energy | Fermi | MI | ESBWR ¹ | 1 | 9/18/08 | 11/25/08 | Ph. 1 | Ph. 2 |
| | Dominion Energy | North Anna | VA | US-APWR | 1 | 11/07 | 1/28/08 | Ph. A | Ph. 2 |
| | Duke Energy | William States Lee | SC | AP1000 | 2 | 12/07 | 2/25/08 | Ph. A | Ph. 2 |
| | Florida Power and Light | Turkey Point | FL | AP1000 | 2 | 6/30/09 | 9/4/09 | Ph. A | Ph. 1 |
| | PPL (UniStar) | Bell Bend | PA | US-EPR | 1 | 10/10/08 | 12/19/08 | Ph. B | Ph. 2 |
| | Progress Energy | Shearon Harris | NC | AP1000 | 2 | 2/08 | 4/17/08 | Ph. A | Ph. 2 |
| | Progress Energy | Levy | FL | AP1000 | 2 | 7/30/08 | 10/6/08 | Ph. A | Ph. 3 |
| | SCE&G | V.C. Summer | SC | AP1000 | 2 | 3/08 | 7/31/08 | Ph. B | Ph. 3 |
| Suspended | Entergy (NuStart) | Grand Gulf | MS | Unspecified | 1 | 2/08 | 4/17/08 | Suspended | Suspended |
| | Entergy | River Bend | LA | Unspecified | 1 | 9/25/08 | 12/4/08 | Suspended | Suspended |
| | AmerenUE (UniStar) | Callaway | MO | US-EPR | 1 | 7/24/08 | 12/12/08 | Suspended | Suspended |
| | UniStar (Constellation) | Nine Mile Point | NY | US-EPR | 1 | 9/30/08 | 12/11/08 | Suspended | Ph. 1 |
| | TVA (NuStart) | Bellefonte | AL | AP1000 | 2 | 10/07 | 1/18/08 | Suspended | Suspended |

¹ Reference COL Application (R-COL)

⁴Safety Review: **R-COL Ph 1** Issue RAIs **Ph 2** SER w/Open Items **Ph 3** ACRS Review **Ph 4** Advanced SER/ No OI **Ph 5** ACRS Review **Ph 6** Final SER
S-COL Ph A Issue RAIs and supplemental RAIs **Ph B** Advanced SER/ No OI **Ph C** ACRS Review **Ph D** Final SER

⁵ Environmental Review Phases: **Ph 1** Environmental Scoping Report **Ph 2** Draft EIS **Ph 3** Public comment **Ph 4** Final EIS

Reactor Design Certification (DC)

Summary: Two reactor designs that are being considered for future builds are certified; three new designs and one amendment are under NRC review.

- GE ABWR – Certified in 1997 (10CFR52 App A).
- Westinghouse AP1000 – Certified 2006 (10CFR52 App D). An amendment was sent in May 2007; under NRC review with rulemaking currently scheduled September 2011.
- GE ESBWR – Under NRC certification review, application docketed December 2005; rulemaking scheduled for September 2011.

- AREVA US-EPR – Submitted December 12, 2007, and docketed February 25, 2008; rulemaking expected in February 2012.
- Mitsubishi Heavy Industries US-APWR – Submitted December 31, 2007, and docketed February 29, 2008; rulemaking expected 2012.



Early Site Permits (ESP)

Summary: Four ESPs issued; two under review:

- The following ESPs have been issued: Exelon – Clinton (IL), 3/15/07; Entergy – Grand Gulf (MS), 4/5/07; Dominion – North Anna (VA), 11/ 27/07; Southern – Vogtle site (GA), 08/26/09.
- On March 25, 2010, Exelon submitted an ESP application for its Victoria County site. This replaces a COL withdrawn July 2009.
- PSEG submitted an ESP application for its nuclear plant site in Salem County, New Jersey, on May 26, 2010, which was docketed August 4, 2010
- NRC anticipates two further ESP applications at Blue Castle and Callaway.

New Nuclear Plant Orders

Summary: Four plant construction contracts have been initiated; nine power companies have ordered large component forgings from three reactor vendors for potential nuclear plants; one vendor ordered other large equipment; two vendors are building large fabrication facilities.

Long-Lead Equipment Orders: Toshiba and Westinghouse have placed large forging orders; Westinghouse has also ordered reactor coolant pumps and containment liner plates.

- Progress, SCE&G, and Southern have contracted with Westinghouse for long-lead component forgings.
- NRG Energy signed an agreement with Toshiba for long-lead component forgings.
- Japan Steel Works is expanding capacity; AREVA, Doosan, BWXT, and Russia's Uralmash-Izhora Group (OMZ) are among those reportedly developing large forging capabilities.
- Areva and Northrop Grumman have begun to build a facility in Newport News, Virginia, to manufacture heavy components for the EPR, scheduled to begin production in 2013
- Shaw and Westinghouse built a 410,000-square-foot facility at the Port of Lake Charles, Louisiana, to produce structural, piping, equipment, and other modules for the AP1000 technology.

Plant Construction Contracts: Engineering, Procurement, and Construction (EPC) contracts signed for four plants; a term sheet for a future EPC contract has been signed for one plant.

- Southern Nuclear with Westinghouse and Shaw Group for two AP1000s at Vogtle.
- SCE&G and Santee Cooper with Westinghouse for two AP1000s at V.C. Summer.
- Progress Energy with Westinghouse and Shaw Group for two AP1000s at Levy County.
- STPNOC with Toshiba for two ABWRs at South Texas Project.
- TVA has signed a conditional contract with AREVA for Engineering and Development to complete construction of Bellefonte Unit 1.

New Plant Construction, Operation, Deferral

Summary: Site preparatory work is in progress for Vogtle, V.C. Summer nuclear projects. TVA is proceeding with the completion of the Watts Bar 2 reactor and re-considering completion of Bellefonte 1 and 2.

New Nuclear Plants under Construction: The NRC issued a Limited Work Authorization to Southern Nuclear Operating Company for the Vogtle nuclear plant site near Augusta, Georgia.

- Safety-related construction for Vogtle began March 2010 with placement of engineered backfill in accordance with the Limited Work Authorization.
- Watts Bar 2, near Spring City, Tennessee, resumed at an estimated total cost of \$2.5 billion with a scheduled completion date of 2013.
- Construction permits have been reinstated for Bellefonte Units 1 and 2 near Scottsboro, Alabama; the TVA Board approved \$248 million for Unit 1 construction and awarded engineering contract to Areva. TVA's FY11 plans call for initial engineering and design of the plant.
- Construction of some reactor designs to be built in the US is underway in other countries: four AP1000s in China, two APWRs in Japan, one EPR in Finland and another in France; four ABWRs are in operation in Japan and four are nearing completion in Japan and Taiwan.

New Nuclear Plant Begin Operation: None.

Federal Financial Incentives

Summary: EAct 2005 incentives are at various stages of development: two rules issued and one notice published.

Standby Support: Rule issued, no contract issued.

- Final Rulemaking Issued August 2006.

Production Tax Credits: Notice issued.

- Internal Revenue Bulletin 2006-18 published May 2006.
- Treasury/IRS may issue additional guidance on Tax Credits for new nuclear plants; however, a date has not been set.

Nuclear Energy Facility Loan Guarantees: Congress granted DOE authority to issue \$20.5 billion in guaranteed loans.

- DOE issued solicitations for \$18.5 billion in loan guarantees for new nuclear power facilities and \$2 billion for the "front end" of the nuclear fuel cycle on June 30, 2008.
- DOE offered a \$2 billion loan to AREVA to support the Eagle Rock Enrichment Facility in Idaho Falls, Idaho.
- DOE and Southern have reached a deal on a conditional commitment agreement for \$8.33 billion in loan guarantees for the construction and operation of two AP1000 reactors at Vogtle. Due to the current limited guarantee authority, DOE has narrowed the remaining power facilities under consideration for loan guarantees to three applicants, which are planning to build a total of five reactors.