

## NRC LIAISON REPORT

### **NRC Regulatory Information Conference on March 9-11, 2010**

**New NRC Building:** The General Services Administration Friday signed the lease for construction and occupation of Three White Flint North, just across Marinelli Road from the current Headquarters complex. LCOR, Inc., will construct the 14-story building between the current White Flint Metro station entrance and the Metro parking garage. (Plans for developing the White Flint Sector call for the construction of an additional Metro station entrance farther north on Rockville Pike.)

**NRC Will Increase Oversight Of Oyster Creek Station Due To Unplanned Outages** "Oyster Creek Generation Station will be a target of increased oversight by the Nuclear Regulatory Commission because of a change in the plant's safety performance classification. The change is due to unscheduled outages within a given work period, according to NRC spokesman Neil Sheehan, who made the announcement Thursday, citing the agency's third-quarter Oyster Creek performance report. ... 'We have updated the performance indicators for Oyster Creek, and they now reflect that the plant's performance indicator for unplanned scrams per 7,000 critical hours has changed from green to white. If a plant has more than three unplanned scrams, or shutdowns, during the 7,000-hour period, it changes to white,' Sheehan said." The Press adds, "The unplanned scrams performance indicator is a rolling average, according to Sheehan, who added that Oyster Creek will remain at the white designation until it has operated without additional unplanned shutdowns for a sufficient period of time."

**Exelon's CEO Asks Lawmakers To Designate Nuclear Energy As A Renewable Source.** in his "Green Light" blog for GreenTechMedia.com (10/29, 8:10pm) Michael Kanellos writes on Exelon CEO John Rowe, who "suggested in a hearing in the US Senate that nuclear be included in renewable portfolio standards. That's one way to hit the 20 percent by 2020 mark in the typical RPS standard. Nuclear already accounts for nine percent of the total energy consumed in America, including petroleum, and 20.6 of the electricity generated." Rowe also wants "\$50 billion in loan guarantees. If anything, the hearings and debates over the energy bill may prod the long awaited showdown on nuclear to occur. Nuclear proponents and opponents have jostled over several topics in the past few years and several companies have begun to suggest new technologies--such as modular nuclear plants--to reduce some of the planning and financial risks associated with nuclear."

**Union Of Concerned Scientists Rips NEI's Legislative Requests.** In a news release, the Union of Concerned Scientists (10/29) faulted the "Taxpayer Handouts" requested by the Nuclear Energy Institute in its "proposal asking for billions of dollars in taxpayer subsidies and radical changes to the federal regulatory process that would shift even more risks and costs from the industry to the public." UCS takes issue with industry priority "to get a minimum of \$100 billion in new federal loan guarantees on top of the \$110 billion in loan guarantees already authorized by Congress." As "alarming are NEI's proposed shortcuts to the Nuclear Regulatory Commission's (NRC) new reactor licensing process. The industry, for example, wants to limit the NRC's ability to verify that a new reactor was built in strict accordance with its license before it starts operating." UCS Senior Staff Scientist Edwin Lyman said, "NEI's proposal could jeopardize public safety by barring the NRC from double-checking earlier findings, which could prove crucial with such a large, complex construction project as a nuclear power plant."

**China To Develop Fourth Generation Experimental Fast Reactor.** The Wall Street Journal (10/30, A14, Yang, 2.08M) reports on China's plans to begin building an 800 megawatt nuclear reactor – using what the piece says is "fourth generation" technology – scheduled to come online in 2020, the Journal says. China's Experimental Fast Reactor is believed to underscore how the country is looking to take the lead in development of such cutting-edge nuclear technologies, even as it plans a major increase in the number of units. The Experimental Fast Reactor is set to be located in Fujian province's Sanming city.

**Obama Announces Landmark Federal Investment In Grid:** President Obama Tuesday announced the largest federal investment ever in modernization of the U.S. electricity system—some \$3.4 billion awarded to 100 utilities, cities and smart grid companies to install advanced technology to better enable consumers to cut consumption and give transmission operators new capability to bring more renewables on to the grid, improve reliability and respond more quickly to power line outages. The White House said the grants—the largest federal hand-out yet under the American Recovery and Reinvestment Act—would leverage \$4.7 billion in private investment nationwide and create tens of thousands of jobs by deploying millions of smart meters, appliances and energy monitoring devices in homes that can respond to electronic signals from innovative communications, monitoring and software equipment to be woven throughout.

**FERC Seeks New Cyber Security Authority:** The Federal Energy Regulatory Commission is seeking authority to require that utilities take mandatory measures to guard against cyber-threats or other attacks on the U.S. electric grid, largely because the agency thinks U.S. utilities' voluntary response to the so-called "Aurora" threat in 2007 was inadequate, FERC's top security official told lawmakers, Joseph McClelland, director of FERC's Office of Electric Reliability, pushed for the new federal authority partly by criticizing industry's response to an advisory on the "Aurora"

vulnerability, the name given to a 2006 experiment in which Energy Department researchers showed it was possible to hack into a generator's control system and destroy the plant.

**NRC Flags Safety Problems With New Westinghouse Reactor:** Potentially delaying new reactor deployment plans by seven utilities, the Nuclear Regulatory Commission told Westinghouse Electric Co. Thursday that the protective shield around the company's flagship AP1000 reactor does not meet the agency's fundamental engineering and safety requirements and must be modified. "The NRC has determined that the proposed design of the [AP1000] shield building will require modifications in some specific areas to ensure its ability to perform its safety function under design basis loading conditions..." David Matthews, director of NRC's Division of New Reactor Licensing, said in a letter to Westinghouse. In a conference call with reporters Thursday, Matthews said the issue was "basic structural integrity... not being able to perform under design basis events..." Like other reactors' protective shells, the AP1000 shield building is designed to protect the reactor, its cooling system and other plant components from tornadoes, earthquakes, high wind and other dangers. It also encapsulates a free-standing vapor barrier around the reactor core and prevents any release of radiation during normal operations. Unlike protective shields on other reactors, however, the AP1000 shield building performs another vital function— supporting between 6 and 8.5 million pounds of cooling water stored in a doughnut-shaped tank on the shield building's roof. That is a key feature of the AP1000's oft-touted "passive" safety features that rely on natural forces, rather than active components, to drive safety systems. In this case, gravity, rather than motors, would propel cooling water into the plant's core in the event of an accident. However, the huge volume of water also poses a "significant challenge to the integrity of this structure," Matthews told reporters, making it more vulnerable to damage in the event of earthquakes or other challenges. NRC flagged the problem in reviewing a license amendment submitted by Westinghouse for the AP1000 which incorporates a variety of changes to an initial version of the reactor design that was certified by the agency in January 2006. NRC staff said Thursday that they cannot estimate how the shield building problems might affect their overall schedule for reviewing the amended AP1000; staff was to have completed safety evaluations in March, 2011.

**President Obama Names Apostolakis, Magwood To NRC:** President Obama last week named Massachusetts Institute of Technology professor George Apostolakis and former Clinton administration official William Magwood to the Nuclear Regulatory Commission, where they are to join Chairman Gregory Jaczko in the panel's three Democratic seats. Apostolakis is well known in NRC circles already as a member and former chairman of the commission's Advisory Committee on Reactor Safeguards, an independent expert panel that counsels the agency on its regulations and licensing activities. Magwood was assistant secretary for nuclear energy in the Energy Department during the Clinton administration and stayed in the role for more than four years in the subsequent Bush administration.

**Generic Letters: None after 2008-01 on Gas Accumulation issued in Jan 2008**

**Information Notices Issued in 2009**

<b>File Name</b>	<b>Date</b>	<b>Description</b>
<a href="#">in2009-26</a>	10/28/2009	Degradation Of Neutron-Absorbing Materials In The Spent Fuel Pool
<a href="#">in2009-24</a>	10/13/2009	Sources of Information Related to Potential Cyber Security Vulnerabilities
<a href="#">in2009-23</a>	10/08/2009	Nuclear Fuel Thermal Conductivity Degradation
<a href="#">in2009-22</a>	10/02/2009	Recent Human Performance Issues at Nuclear Power Plants
<a href="#">in2009-21</a>	09/30/2009	Incomplete Medical Testing For Licensed Operators
<a href="#">in2009-20</a>	10/07/2009	Degradation of Wire Rope Used in Fuel Handling Applications
<a href="#">in2009-18</a>	09/18/2009	Performance Of Required Shutter Checks And Reporting Of Gauge Shutter Failures
<a href="#">in2009-17</a>	08/28/2009	Reportable Medical Events Involving Treatment Delivery Errors Caused By Confusion Of Units For The Specification Of Brachytherapy Sources
<a href="#">in2009-16</a>	09/15/2009	Spurious Relay Actuations Result In Loss Of Power To Safeguards Buses
<a href="#">in2009-15</a>	08/28/2009	Varian Medical Systems Varisource High Dose-Rate Remote Afterloader Events: Source Retraction Problems
<a href="#">in2009-14</a>	08/17/2009	Painting Activities and Cleaning Agents Render Emergency Diesel Generators and other Plant Equipment Inoperable
<a href="#">in2009-12</a>	07/27/2009	Exempt Distribution Licensing Requirements For Irradiated Gemstones
<a href="#">in2009-11</a>	07/07/2009	Configuration Control Errors
<a href="#">in2009-10</a>	07/07/2009	Transformer Failures - Recent Operating Experience
<a href="#">in2009-09</a>	06/19/2009	Improper Flow Controller Settings Renders Injection Systems Inoperable And Surveillance Did Not Identify
<a href="#">in2009-08</a>	05/08/2009	NRC Rapid Change Notification of Licensees Following A Physical Attack Against A Facility

### Regulatory Issue Summary

Document Number	Date	Title
<a href="#">RIS 09-13</a>	09/28/2009	Emergency Response Data System Upgrade From Modem to Virtual Private Network Appliance
<a href="#">RIS 09-12</a>	09/23/2009	Uranium Recovery Policy Regarding Site Preparation Activities At Proposed, Unlicensed Uranium Recovery Facilities
<a href="#">RIS 09-11</a>	07/16/2009	Preparation and Scheduling of Operator Licensing Examinations
<a href="#">RIS 09-10</a>	06/19/2009	Communications Between The NRC And Reactor Licensees During Emergencies And Significant Incidents
<a href="#">RIS 09-09</a>	07/13/2009	Use of Multiple Dosimetry and Compartment Factors in Determining Effective Dose Equivalent From External Radiation Exposures
<a href="#">RIS 09-07</a>	05/07/2009	Status Update For The Implementation Of NRC Regulatory Authority For Certain Naturally Occurring And Accelerator-Produced Radioactive Material
<a href="#">RIS 09-06</a>	06/15/2009	Importance of Giving NRC Advance Notice of Intent to Pursue License Renewal

### Regulatory Guides Out For Comment

Task Number	Title	Publish Date
DG-1150	Qualification of Continuous Duty Safety-Related Motors for Nuclear Power Plants ( <a href="#">ML091200454</a> )	08/2009
DG-1176	Guidance for the Assessment of Beyond-Design-Basis Aircraft Impacts ( <a href="#">ML073170252</a> )	07/2009
DG-1178	Instrument Sensing Lines ( <a href="#">ML080510453</a> )	12/2008
DG-1189	An Acceptable Model and Related Statistical Methods for the Analysis of Fuel Densification ( <a href="#">ML081700257</a> )	12/2008
DG-1190	Manual Initiation of Protective Actions ( <a href="#">ML080720443</a> )	12/2008
DG-1191	Design, Fabrication, and Materials Code Case Acceptability, ASME Section III ( <a href="#">ML090900381</a> )	06/2009
DG-1192	Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1 ( <a href="#">ML090900445</a> )	06/2009
DG-1193	ASME Code Cases Not Approved for Use ( <a href="#">ML090900461</a> )	06/2009
DG-1195	Availability of Electric Power Sources ( <a href="#">ML080570075</a> )	05/2008
DG-1199	Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors ( <a href="#">ML090960464</a> )	10/2009

DG-1203	Containment Performance for Pressure Loads ( <a href="#">ML082050539</a> )	12/2008
DG-1204	Guidance for ITAAC Closure Under 10 CFR Part 52 ( <a href="#">ML082960039</a> )	03/2009
DG-1205	Bypassed and Inoperable Status Indication for Nuclear Power Plant Safety Systems ( <a href="#">ML082140114</a> )	10/2008
DG-1211	Materials and Inspections for Reactor Vessel Closure Studs ( <a href="#">ML082820439</a> )	04/2009
DG-1213	Containment Isolation Provisions for Fluid Systems ( <a href="#">ML090230478</a> )	06/2009
DG-1215	Quality Assurance Program Requirements (Design and Construction) ( <a href="#">ML090150402</a> )	07/2009
DG-1217	Protection Against Turbine Missiles ( <a href="#">ML092250316</a> )	10/2009
DG-1218	Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants ( <a href="#">ML090420462</a> )	03/2009
DG-1220	Performance-Based Containment Leak-Test Program ( <a href="#">ML090490183</a> )	04/2009
DG-1221	Control of Stainless Steel Weld Cladding of Low-Alloy Steel Components ( <a href="#">ML090750044</a> )	06/2009
DG-1222	Control of Preheat Temperature for Welding of Low-Alloy Steel ( <a href="#">ML090750343</a> )	06/2009
DG-1223	Control of Electroslag Weld Properties ( <a href="#">ML090750626</a> )	06/2009
DG-1224	Control of the Processing and Use of Stainless Steel ( <a href="#">ML090750744</a> )	06/2009
DG-1225	Instrument Lines Penetrating the Primary Reactor Containment ( <a href="#">ML090970530</a> )	09/2009
DG-1226	An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis ( <a href="#">ML091200100</a> )	08/2009
DG-1227	An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications ( <a href="#">ML091200294</a> )	08/2009
DG-1229	Assuring the Availability of Funds for Decommissioning Nuclear Reactors ( <a href="#">ML091420223</a> )	06/2009
DG-1236	Initial Startup Test Program to Demonstrate Remote Shutdown Capability for Water-Cooled Nuclear Power Plants ( <a href="#">ML091210435</a> )	08/2009
DG-1237	Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors ( <a href="#">ML090080534</a> )	05/2009

## Regulatory Guides Issued

1.210	Qualification of Safety-Related Battery Chargers and Inverters for Nuclear Power Plants	--	<a href="#">06/2008</a>
1.211	Qualification of Safety-Related Cables and Field Splices for Nuclear Power Plants	--	<a href="#">04/2009</a>
1.212	Sizing of Large Lead-Acid Storage Batteries	--	<a href="#">11/2008</a>
1.213	Qualification of Safety-Related Motor Control Centers for Nuclear Power Plants	--	<a href="#">05/2009</a>
1.215	"Guidance for ITAAC Closure Under 10 CFR Part 52."	--	<a href="#">10/2009</a>
1.100	Seismic Qualification of Electric and Mechanical Equipment for Nuclear Power Plants  Draft EE 108-5, Proposed Revision 2, published 08/1987 <a href="#">DG-1175</a> , Proposed Revision 3, published 05/2008 <a href="#">Staff's responses to public comments</a> on DG-1175	3	<a href="#">09/2009</a>

## Status of Updating Software Related Regulatory Guides

1. Reg. Guide 1.169, "Configuration Management Plans for Digital Computer Software Used in Safety Systems in Nuclear Plants"
  - Work initiated in December
  - Background research complete
  - Briefing package presenting findings and regulatory position issues to be available end of January
  - Initial draft available by the end of 2010
  
2. Reg. Guide 1.170, "Software Test Documentation for Digital Computer Software Used in Safety Systems of Nuclear Power Plants"
  - Work initiated in December
  - Background research complete
  - Briefing package provided to NRC TM on comparison of the differences between 829-1998
  - Key Issue Discussed with NRC TM: Base updated RG on which version of IEEE 829, the soon to be completed 2008 version or on the 1998 version?

Resolution: Since the 2008 version is nearly complete (second balloting), proceed to develop the preliminary draft of this updated RG based upon the 2008 version and wait until 829-2008 has been approved before preparing the final draft of this RG.  
Draft for Public Comment by Nov 2010

3. Reg. Guide 1.171, “Software Testing for Digital Computer Software Used in Safety Systems of Nuclear Power Plants”

- Work initiated in December
- Background research complete
- Briefing package presenting findings and regulatory position issues to be available in early February for discussion with NRC TM
- Key Issue Discussed with NRC TM: Proceed with preparation and discussion of Briefing Package and evaluate whether to proceed on updating this RG based upon any impacts from IEEE-829-2008, from new regulations, and/or IEEE-603 since IEEE 1008-1987 has not been updated.

Draft for Public Comment by Nov 2010

4. Reg. Guide 1.172, “Software Requirements Specifications for Digital Computer Software Used in Safety Systems of Nuclear Power Plants”

- Work to be initiated in February on updating this RG
- Initial draft available by the end of the year
- Draft for Public Comment by Nov 2010

5. Reg. Guide 1.173, “Developing Software Life Cycle Processes for Digital Computer Software Used in Safety Systems of Nuclear Power Plants”

- Work to be initiated in March on updating this RG
- On Hold for the revision
- Draft for Public Comment by Nov 2010



## Interim Staff Guidance Associated with Digital Instrumentation & Controls

Some links on this page are to documents in our [Agencywide Documents Access and Management System](#) (ADAMS), and others are to documents in Adobe Portable Document Format (PDF). ADAMS documents are provided in either PDF or Tagged Image File Format (TIFF). To obtain free viewers for displaying these formats, see our [Plugins, Viewers, and Other Tools](#) page. If you have questions about search techniques or problems with viewing or printing documents from ADAMS, please contact the [Public Document Room staff](#).

DI&C-ISG-01	Cyber Security  <a href="#">Interim Staff Guidance on Digital Instrumentation and Control, Cyber Security, December 31, 2007</a>
DI&C-ISG-02	Diversity and Defense-in-Depth (D3)  <a href="#">Revision 2, Interim Staff Guidance on Diversity and Defense-in-Depth Issues, June 5, 2009</a> <a href="#">Interim Staff Guidance on Diversity and Defense-in-Depth Issues, September 26, 2007</a>
DI&C-ISG-03	Risk-Informed Digital Instrumentation and Controls  <a href="#">Interim Staff Guidance on Review of New Reactor Digital Instrumentation and Control Probabilistic Risk Assessments</a>
DI&C-ISG-04	Highly Integrated Control Rooms – Digital Communication Systems  <a href="#">Revision 1, Interim Staff Guidance on Highly-Integrated Control Rooms – Communications Issues (HICRc), March 2009</a> <a href="#">Interim Staff Guidance on Highly-Integrated Control Rooms – Communications Issues (HICRc), September 28, 2007</a>
DI&C-ISG-05	Highly Integrated Control Rooms – Human Factors  <a href="#">Revision 1 to Interim Staff Guidance on Highly Integrated Control Rooms - Human Factors Issues (HICR-HF)</a> <a href="#">Interim Staff Guidance on Highly-Integrated Control Rooms – Human Factors Issues (HICR-HF), September 28, 2007</a>
DI&C-ISG-06	Licensing Process  Draft ISG Currently Under Revision

DI&C-ISG-07	Fuel Cycle Facilities  <a href="#">Interim Staff Guidance on Digital Instrumentation and Control Systems in Safety Applications at Fuel Cycle Facilities, June 1, 2009</a>
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## ***Plant Applications for License Renewal***

### **Completed Applications:**

(includes Application, Review Schedule, Supplemental Environmental Impact Statement, and Safety Evaluation Report)

[Calvert Cliffs, Units 1 and 2](#)  
[Oconee Nuclear Station, Units 1, 2 and 3](#)  
[Arkansas Nuclear One, Unit 1](#)  
[Edwin I. Hatch Nuclear Plant, Units 1 and 2](#)  
[Turkey Point Nuclear Plant, Units 3 and 4](#)  
[North Anna, Units 1 and 2, and Surry, Units 1 and 2](#)  
[Peach Bottom, Units 2 and 3](#)  
[St. Lucie, Units 1 and 2](#)  
[Fort Calhoun Station, Unit 1](#)  
[McGuire, Units 1 and 2, and Catawba, Units 1 and 2](#)  
[H.B. Robinson Nuclear Plant, Unit 2](#)  
[R.E. Ginna Nuclear Power Plant, Unit 1](#)  
[V.C. Summer Nuclear Station, Unit 1](#)  
[Dresden, Units 2 and 3, and Quad Cities, Units 1 and 2](#)

[Farley, Units 1 and 2](#)  
[Arkansas Nuclear One, Unit 2](#)  
[D.C. Cook, Units 1 and 2](#)  
[Millstone, Units 2 and 3](#)  
[Point Beach, Units 1 and 2](#)  
[Browns Ferry, Units 1, 2, and 3](#)  
[Brunswick, Units 1 and 2](#)  
[Nine Mile Point, Units 1 and 2](#)  
[Monticello](#)  
[Palisades](#)  
[James A. FitzPatrick](#)  
[Wolf Creek, Unit 1](#)  
[Harris, Unit 1](#)  
[Oyster Creek](#)  
[Vogtle, Units 1 and 2](#)  
[Three Mile Island, Unit 1](#)



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### **Applications Currently Under Review:**

[Pilgrim 1, Unit 1](#) - Application received January 27, 2006  
[Vermont Yankee](#) - Application received January 27, 2006  
[Susquehanna, Units 1 and 2](#) - Application received September 15, 2006  
[Indian Point, Units 2 and 3](#) - Application received April 30, 2007  
[Beaver Valley, Units 1 and 2](#) - Application received August 28, 2007  
[Prairie Island, Units 1 and 2](#) - Application received April 15, 2008  
[Kewaunee Power Station](#) - Application received August 14, 2008  
[Cooper Nuclear Station](#) - Application received September 30, 2008  
[Duane Arnold Energy Center](#) - Application received October 1, 2008  
[Palo Verde, Units 1, 2, and 3](#) - Application received December 15, 2008  
[Crystal River, Unit 3](#) - Application received December 18, 2008  
[Hope Creek](#) - Application received August 18, 2009  
[Salem, Units 1 and 2](#) - Application received August 18, 2009

**<http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>**

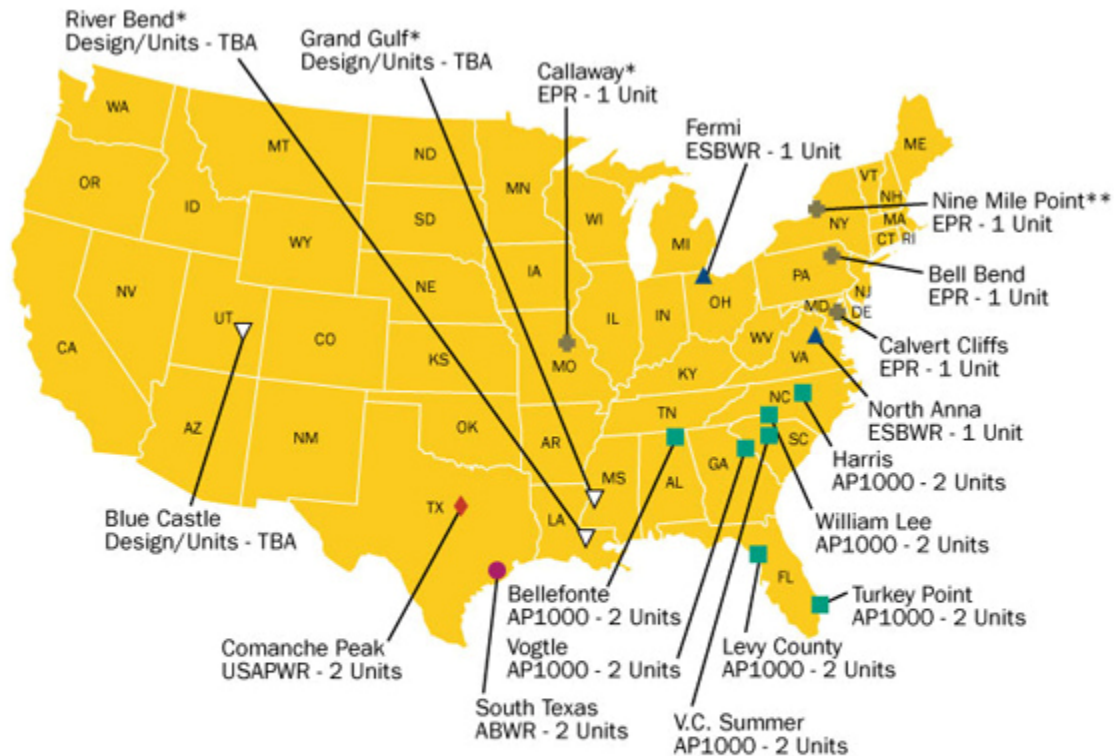
## COL Applications Received

The links in the table below provide information on the COL applications that the NRC has received to date. The activities associated with reviewing these applications are reflected in the individual links for docketed COL applications.

Proposed New Reactor(s)	Design	Applicant
<a href="#">Bell Bend Nuclear Power Plant</a>	<a href="#">U.S. EPR</a>	PPL Bell Bend, LLC
<a href="#">Bellefonte Nuclear Station, Units 3 and 4</a>	<a href="#">AP1000</a>	Tennessee Valley Authority (TVA)
<a href="#">Callaway Plant, Unit 2</a>	<a href="#">U.S. EPR</a>	AmerenUE
<a href="#">Calvert Cliffs, Unit 3</a>	<a href="#">U.S. EPR</a>	Calvert Cliffs 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC
<a href="#">Comanche Peak, Units 3 and 4</a>	<a href="#">US-APWR</a>	Luminant Generation Company, LLC (Luminant)
<a href="#">Fermi, Unit 3</a>	<a href="#">ESBWR</a>	Detroit Edison Company
<a href="#">Grand Gulf, Unit 3</a>	<a href="#">ESBWR</a>	Entergy Operations, Inc. (EOI)
<a href="#">Levy County, Units 1 and 2</a>	<a href="#">AP1000</a>	Progress Energy Florida, Inc. (PEF)
<a href="#">Nine Mile Point, Unit 3</a>	<a href="#">U.S. EPR</a>	Nine Mile Point 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC (UniStar)
<a href="#">North Anna, Unit 3</a>	<a href="#">ESBWR</a>	Dominion Virginia Power (Dominion)
<a href="#">River Bend Station, Unit 3</a>	<a href="#">ESBWR</a>	Entergy Operations, Inc. (EOI)
<a href="#">Shearon Harris, Units 2 and 3</a>	<a href="#">AP1000</a>	Progress Energy Carolinas, Inc. (PEC)
<a href="#">South Texas Project, Units 3 and 4</a>	<a href="#">ABWR</a>	South Texas Project Nuclear Operating Company (STPNOC)
<a href="#">Turkey Point, Units 6 and 7</a>	<a href="#">AP1000</a>	Florida Power and Light Company (FPL)
<a href="#">Virgil C. Summer, Units 2 and 3</a>	<a href="#">AP1000</a>	South Carolina Electric & Gas (SCE&G)
<a href="#">Vogtle, Units 3 and 4</a>	<a href="#">AP1000</a>	Southern Nuclear Operating Company (SNC)
<a href="#">William States Lee III, Units 1 and 2</a>	<a href="#">AP1000</a>	Duke Energy

## Location of Location of Projected New Nuclear Power Reactors

*For applications that have been received by the NRC, you may select a site name to view the NRC's website for the specific COL application. Websites for the remainder of the applications will be created when they are received.*



You may click on a design name to view the NRC's Web site for the specific design.

● ABWR   
 ■ AP1000   
 ⊕ EPR   
 ▲ ESBWR   
 ◆ USAPWR   
 ▽ Design/Units - TBA

\*Review Suspended  
 \*\*Review Partially Suspended

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<a href="#">Bellefonte Nuclear Station, Units 3 and 4</a>	<a href="#">AP1000</a>	Tennessee Valley Authority (TVA)
<a href="#">Callaway Plant, Unit 2</a>	<a href="#">U.S. EPR</a>	AmerenUE
<a href="#">Calvert Cliffs, Unit 3</a>	<a href="#">U.S. EPR</a>	Calvert Cliffs 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC
<a href="#">Comanche Peak, Units 3 and 4</a>	<a href="#">US-APWR</a>	Luminant Generation Company, LLC (Luminant)
<a href="#">Fermi, Unit 3</a>	<a href="#">ESBWR</a>	Detroit Edison Company
<a href="#">Grand Gulf, Unit 3</a>	<a href="#">ESBWR</a>	Entergy Operations, Inc. (EOI)
<a href="#">Levy County, Units 1 and 2</a>	<a href="#">AP1000</a>	Progress Energy Florida, Inc. (PEF)
<a href="#">Nine Mile Point, Unit 3</a>	<a href="#">U.S. EPR</a>	Nine Mile Point 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC (UniStar)
<a href="#">North Anna, Unit 3</a>	<a href="#">ESBWR</a>	Dominion Virginia Power (Dominion)
<a href="#">River Bend Station, Unit 3</a>	<a href="#">ESBWR</a>	Entergy Operations, Inc. (EOI)
<a href="#">Shearon Harris, Units 2 and 3</a>	<a href="#">AP1000</a>	Progress Energy Carolinas, Inc. (PEC)
<a href="#">South Texas Project, Units 3 and 4</a>	<a href="#">ABWR</a>	South Texas Project Nuclear Operating Company (STPNOC)
<a href="#">Turkey Point, Units 6 and 7</a>	<a href="#">AP1000</a>	Florida Power and Light Company (FPL)
<a href="#">Virgil C. Summer, Units 2 and 3</a>	<a href="#">AP1000</a>	South Carolina Electric & Gas (SCE&G)
<a href="#">Vogtle, Units 3 and 4</a>	<a href="#">AP1000</a>	Southern Nuclear Operating Company (SNC)
<a href="#">William States Lee III, Units 1 and 2</a>	<a href="#">AP1000</a>	Duke Energy

## ***Issued Design Certifications***

The NRC staff has issued the following design certifications:

<b>Design</b>	<b>Applicant</b>
<a href="#">Advanced Boiling Water Reactor (ABWR)</a>	General Electric (GE) Nuclear Energy
System 80+	Westinghouse Electric Company
Advanced Passive 600 (AP600)	Westinghouse Electric Company
<a href="#">Advanced Passive 1000 (AP1000)</a>	Westinghouse Electric Company

## ***Design Certification Applications Currently Under Review***

The staff is currently reviewing the following design certification applications:

<b>Design</b>	<b>Applicant</b>
<a href="#">AP1000 Amendment</a>	Westinghouse Electric Company
ABWR Design Certification Rule (DCR) Amendment	South Texas Project Nuclear Operating Company
<a href="#">Economic Simplified Boiling-Water Reactor (ESBWR)</a>	GE-Hitachi Nuclear Energy
<a href="#">U.S. Evolutionary Power Reactor (U.S. EPR)</a>	AREVA Nuclear Power
<a href="#">U.S. Advanced Pressurized-Water Reactor (US-APWR)</a>	Mitsubishi Heavy Industries, Ltd.

### ***Issued Early Site Permits***

The NRC staff has issued the following ESPs:

Site	Applicant
<a href="#">Clinton ESP Site</a>	Exelon Generation Company, LLC
<a href="#">Grand Gulf ESP Site</a>	System Energy Resources Inc.
<a href="#">North Anna ESP Site</a>	Dominion Nuclear North Anna, LLC
<a href="#">Vogtle ESP Site</a>	Southern Nuclear Operating Company

### ***Early Site Permit Applications Currently Under Review***

The staff is currently reviewing the following ESP applications:

Site	Applicant
None currently under review	