



May 31, 2007

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Serial No. COL-0118  
NRC Project No. 741

**DOMINION NUCLEAR NORTH ANNA, LLC  
NORTH ANNA COMBINED LICENSE PROJECT  
RESPONSE TO REGULATORY ISSUE SUMMARY 2007-08**

On April 16, 2007, the U.S. Nuclear Regulatory Commission (NRC) published Regulatory Issue Summary 2007-08, "Updated Licensing Submittal Information to Support the Design-Centered Licensing Review Approach." The RIS seeks voluntary information regarding the scheduling of ESP, COL, and DC application submissions, and the extent to which those submittals support the NRC's design-centered review approach.

Dominion's response to the RIS questions is provided in the enclosure. Please contact Ms. Gina Borsh at (804) 273-2247 ([regina.borsh@dom.com](mailto:regina.borsh@dom.com)) if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read "Eugene S. Grecheck". The signature is fluid and cursive.

Eugene S. Grecheck  
Vice President-Nuclear Support Services

Enclosure: As stated

Commitments contained in this letter: Identify Reference-COL application to NRC 90 days prior to submittal.

D079

NR0

cc: D. Matthews, NRC  
M. Shuaibi, NRC  
T. Kevern, NRC  
A. Cabbage, NRC  
K. Hughey, Entergy  
D. Hinds, GE  
G. Zinke, NuStart/Entergy  
T. Williamson, Entergy  
M. Campagna, GE  
D. Piepmeyer, GE  
S. Love, GE  
P. Campbell, GE  
R. Bell, NEI  
L. Kass, NEI  
T. Miller, DOE

## Response to RIS 2007-08

Each RIS 2007-08 question is presented below in bold with Dominion's response following in plain text.

### **1. a) Will the applicants be organized into DCWGs?**

On July 17, 2006, Dominion, in concert with NuStart and Entergy responded to NRC Regulatory Issue Summary 2006-06, dated May 31, 2006. The companies expressed their support for NRC's design-centered review approach and announced the formation with General Electric of the ESBWR Design-Centered Working Group (DCWG). In the same letter, the three companies announced their intent to submit COL applications for North Anna, Grand Gulf, and River Bend, respectively, that referenced the General Electric ESBWR standard design.

### **b) If so, what is the membership and who is the single point of contact designated for each DCWG?**

Current ESBWR DCWG membership remains as described in the response to Question 1.a. The ESBWR DCWG's single points-of-contact for policy and licensing matters were identified in Dominion's February 23, 2007 letter to NRC.

### **c) Have protocols been developed to provide coordinated responses for RAIs with generic applicability to a design center?**

The ESBWR DCWG is currently developing protocols for use in preparing coordinated responses to Reference COL RAIs.

### **2. Which applicant referencing the design will be designated as the R-COL applicant?**

The designation of a Reference COL (R-COL) application is not proposed at this time for the announced ESBWR COL application projects. These projects are working in cooperation with each other and General Electric to develop standard ESBWR-based COL applications. The projects have developed a joint process for controlling the origination and review of standard application material. The bulk of standardized material is within the scope of General Electric to supply and will be incorporated into the respective COL applications. Administrative controls are used to provide effective control and consistency in the standardized material. Identification of the R-COL applicant will be communicated to the NRC approximately 90 days prior to the submittal of the ESBWR applications.

**3. a) When (month and year) will each of the COL applications be submitted for review?**

Dominion intends to submit its COL application in November 2007.

**b) In addition, what is the design, site location, and the number of units at each site?**

The design is General Electric's ESBWR, currently undergoing design certification review. The site is the North Anna ESP site, which is described in the North Anna ESP application, dated September 23, 2003, through Revision 9. The North Anna COL application is for one ESBWR unit.

**4. What portions of the COL application (chapters, sections, subsections) will be relying on the DC?**

The COL application consists of ten parts. Most parts will rely on information contained in the ESBWR design control document. The parts include:

- Part 2, Final Safety Analysis Report (FSAR) – The FSAR will rely on the ESBWR design certification document (DCD) and will be supplemented as necessary to address additional information, such as COL information items.
- Part 3, Environmental Report (ER) – Information in the ER will also rely on DCD information, such as design descriptions and the DCD Appendix 1B severe accident mitigation design alternatives (SAMDA) discussion.
- Part 4, Technical Specifications – The plant-specific Technical Specifications will consist of the standard Technical Specifications for the ESBWR, as supplemented with plant-specific information.
- Part 7, Departures Report – The Departures Report will summarize the COL application's departures from the DCD.
- Part 9, Plant-Specific Probability Risk Assessment (PRA) Information – Part 9 of the COL application may contain information regarding the plant-specific PRA, which relies on GE's DCD and generic ESBWR PRA.
- Part 10, Inspections, Tests, Analyses, and Acceptance Criteria ITAAC – This part will rely on the ESBWR ITAAC, and supplement them with plant-specific ITAAC.

**5. What portions of the R-COL application (chapters, sections, subsections) will be referenced (i.e., replicated verbatim) in S-COL applications, and what portions of the application are likely to be site-specific?**

Details in response to this request are provided in the Appendix to this Enclosure.

6. **a) When (month and year) will applicants complete the detailed design information to be verified under those inspections, tests, analyses, and acceptance criteria that are directed at certification information (design acceptance criteria)?**

The detailed design information to be verified under inspections, tests, analyses, and acceptance criteria (ITAAC) that are directed at certification information (i.e., DAC) will be completed at varying times prior to fuel load, depending on the availability of the information. No DAC information is currently planned for submittal with the COLA.

- b) Will this information be completed in a design certification amendment application, in the R-COL application, in S-COL applications, in post-COL Final Safety Analysis Report updates, or a combination thereof?**

The detailed design information to be verified under ITAAC will likely be reflected in a combination of post-COL FSAR updates and other post-COL notifications.

#### **Site and Environmental Information**

7. **a) Do any applicants intend to apply for an ESP prior to submitting their COL applications?**

Dominion has already applied for an ESP for the North Anna site and anticipates that it will be issued shortly.

- b) If so, when (month and year) would the proposed ESP be submitted to the NRC for review?**

North Anna's ESP application was submitted to the NRC on September 25, 2003.

8. **For ESP applicants, is the applicant going to be seeking approval of either "proposed major features of the emergency plans" per 10 CFR 52.17(b)(2)(i), or "proposed complete and integrated emergency plans" per 10 CFR 52.17(b)(2)(ii)?**

As described in the North Anna ESP application, Dominion is seeking approval of certain proposed major features of the emergency plans per 10 CFR 52.17(b)(2)(i).

9. **Do the applicants plan to submit an environmental report or limited work authorization request prior to other portions of the COL application, and if so, when (month and year)?**

Dominion does not intend to submit an environmental report or limited work authorization request prior to submitting the North Anna COL application.

**10. What scope and schedule do applicants project for site characterization activities, such as core borings and testing of core samples?**

Site characterization activities are substantially complete at the North Anna ESP site. Sample analysis from recent core boring activities is ongoing but is expected to be completed this year.

**11. What interactions have taken place with local and State authorities and other Federal agencies to support licensing new reactors?**

Dominion has had interactions with local and state authorities, and other federal agencies, to support its ESP and COL activities. The agencies and purpose of the interactions are listed below:

- U.S. Geological Survey – information related to stream gauges
- U.S. Fish and Wildlife Service and Virginia Department of Game and Inland Fisheries – terrestrial and aquatic threatened and endangered species and critical habitat reviews
- Virginia Department of Conservation and Recreation, Natural Heritage Program – presence of rare plants and animals
- Virginia Council on Indians – cultural resources
- State Historic Preservation Office – cultural resources
- Hanover County – water resources
- Virginia Department of Environmental Quality, Virginia Department of Game and Inland Fisheries, and Virginia Department of Conservation and Recreation– Instream Flow Incremental Methodology study
- Virginia Department of Environmental Quality – CZMA certification
- U.S. Army Corps of Engineers – wetlands delineation
- Virginia Marine Resources Commission – downstream impacts
- Louisa, Spotsylvania and Orange County administration -- notifications

**Plant Construction Requirements Information**

**12. a) Who are the vendors and consultants that are assisting in the preparation of the application?**

General Electric Company, Bechtel Power Corporation, and Enercon Services (through NuStart) and their subcontractors are assisting Dominion in the preparation of the North Anna COL application.

**b) The NRC requests that the potential applicants submit a list of entities that are providing input to and are preparing the COL application under a QA program.**

The entities and their subcontractors that are providing input to and are preparing the

COL application under a QA program are Dominion, General Electric Company, Bechtel Power Corporation, and Enercon Services (through NuStart).

Certain types of information, such as general administrative and financial information, emergency planning, and decommissioning information are prepared outside the scope of Dominion's Part 50 Appendix B QA program. The information is prepared employing appropriate administrative controls and management oversight to ensure quality.

**13. a) What information do the applicants have regarding the timing of construction, the ordering of long lead time components, and other commitments to construction?**

Dominion has not yet made a decision to construct a new nuclear unit at the North Anna site. However, as publicly announced on May 1, 2007, Dominion has signed a contract with General Electric Company to secure long-lead item components for a possible new nuclear unit.

**b) Furthermore, what vendors will be designing, manufacturing, fabricating, and testing safety-related components for eventual plant construction?**

As stated above, no construction decision has been made. If Dominion decides to construct a new nuclear unit, vendors for design, manufacturing, fabricating, and testing safety-related components would be identified through a competitive bid process. In an effort to be responsive to NRC's request, vendors known to Dominion who have design, manufacturing, fabricating, and/or testing capabilities are identified below. This list is not intended to represent a bidders list nor in any way indicate a preference or selection of any vendor for any purpose.

Vendors who have capabilities such as NRC describes include:

- General Electric – plant equipment
- Japan Steel Works – forgings
- Hitachi – fabrication services
- Toshiba – fabrication services
- Washington Group, Incorporated – engineering and construction services
- Black and Veatch Zachry Nuclear, LLC – engineering and construction services
- Kewitt Bibb – engineering and construction services
- Bechtel Power Corporation – engineering and construction services

<b>ESBWR FSAR Standardization Assessment</b>		
<b>Number of FSAR Sections</b>	<b>Percent of FSAR Sections</b>	<b>Section Type</b>
80	44%	Match DCD
53	29%	Standard (identical)
31	17%	Standard with a limited amount of site-specific information
11	6%	Standard with a moderate amount of site-specific information
7	4%	Site-specific
<b>182</b>	<b>100%</b>	<b>Total</b>



ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
<b>Part 1</b>	<b>General and Administrative Information</b>					
--	General Information	<b>Dominion NuStart Entergy</b>			<b>X (1)</b>	
--	Financial Information	<b>Dominion NuStart Entergy</b>				<b>X</b>
--	Other Information	<b>Dominion NuStart Entergy</b>			<b>X (1)</b>	
<b>Part 2</b>	<b>Final Safety Analysis Report</b>					
FSAR Chapter 1	Introduction and General Description					
1.1	Introduction	<b>Dominion NuStart Entergy</b>			<b>X (2)</b>	
1.2	General Plant Description	<b>GE</b>			<b>X (1)</b>	
1.3	Comparison Tables	<b>GE</b>			<b>X (1)</b>	
1.4	Identification of Agents and Contractors	<b>Dominion NuStart Entergy</b>			<b>X (2)</b>	
1.5	Requirements for Further Technical Information	<b>GE</b>	<b>X</b>			

<sup>1</sup> There are 4 types of ESBWR COLA sections:

- Match DCD. These sections are identical to the ESBWR DCD with no additional text, tables, or figures needed in the COLA. Based on DCD Revision 3.
- Standard sections are identical.
- Standard with site-specific. These sections are identical to the extent possible but also contain some site-and/or applicant-specific information. For the site/applicant-specific information, consistent wording and level-of-detail are used.
  - (1) – Standard section that contains a limited amount of site/applicant-specific information.
  - (2) – Standard section that contains a moderate amount of site/applicant-specific information.
- Site-specific sections are not standard and contain site/applicant-specific information.

**Revision 3 Changes**

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
1.6	Material Incorporated by Reference	GE			X (1)	
1.7	Drawings and Other Detailed Information	GE			X (1)	
1.8	Interfaces for Standard Design	GE		X		
1.9	Conformance with SRP and Codes & Standards	Dominion NuStart Energy			X (2)	
1.10	Summary of COL Items	GE			X (2)	
1.11	Technical Resolutions of Task Action Plan Items, New Generic Issues, New Generic Safety Issues and Chernobyl Issues	GE			X (1)	
1.12	Construction Impacts on Existing Units	Dominion NuStart Energy				X
1A	Response to TMI Related Matters	GE		X		
1B	Plant Shielding to Provide Access to Vital Areas and Protective Safety Equipment for Post-Accident Operation	GE	X			
1C	Industry Operating Experience	GE			X (1)	
FSAR Chapter 2	Site Characteristics					
2.0	Site Characteristics	Dominion NuStart Energy				X
2.1	Geography and Demography	Dominion NuStart Energy				X
2.2	Nearby Industrial, Transportation, and Military Facilities	Dominion NuStart Energy				X
2.3	Meteorology	Dominion NuStart Energy				X
2.4	Hydrology	Dominion NuStart Energy				X
2.5	Geology, Seismology, and Geotechnical Engineering	Dominion NuStart Energy				X
FSAR	Design of Structures, Components,					

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
Chapter 3	Equipment, Systems					
3.1	Conformance with NRC General Design Criteria	GE	X			
3.2	Classification of Structures, Systems, and Components	GE			X (1)	
3.3	Wind and Tornado Loadings	GE	X			
3.4	Water Level (Flood) Design	GE	X			
3.5	Missile Protection	GE			X (1)	
3.6	Protection Against Dynamic Effects	GE		X		
3.7	Seismic Design	GE			X (1)	
3.8	Seismic Category I Structures	GE		X		
3.9	Mechanical Systems and Components	GE		X		
3.10	Seismic and Dynamic Qualification	GE		X		
3.11	Environmental Qualification	GE		X		
3A	Seismic Soil Structure Interaction Analysis	GE	X			
3B	Containment Hydrodynamic Load Definitions	GE	X			
3C	Computer Programs Used in the Design and Analysis of Seismic Category I Structures	GE	X			
3D	Computer Programs Used in the Design of Components, Equipment and Structures	GE	X			
3F	Response of Structures to Containment Loads	GE	X			
3G	Design Details and Evaluation Results of Seismic Category I Structures	GE	X			
3H	Equipment Qualification Design Environmental Conditions	GE		X		
3I	Designated NEDE-24326-1-P Material Which May Not Change Without Prior NRC Approval	GE	X			
3J	Evaluation of Postulated Ruptures in High Energy Pipes	GE		X		
3K	Resolution of Intersystem Loss of Coolant Accident	GE	X			
3L	Reactor Internals Flow Induced Vibration Program	GE	X			
FSAR Chapter 4	Reactor					

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
4.1	Summary Description	GE	X			
4.2	Fuel System Design	GE		X		
4.3	Nuclear Design	GE		X		
4.4	Thermal and Hydraulic Design	GE		X		
4.5	Reactor Materials	GE		X		
4.6	Functional Design of Reactivity Control System	GE		X		
4A	Typical Control Rod Patterns and Associated Power Distribution for ESBWR	GE		X		
4B	Fuel Licensing Acceptance Criteria	GE	X			
4C	Control Rod License Acceptance Criteria	GE	X			
4D	Stability Evaluation	GE		X		
FSAR Chapter 5	Reactor Coolant System and Connected Systems					
5.1	Summary Description	GE	X			
5.2	Integrity of Reactor Coolant Pressure Boundary	GE		X		
5.3	Reactor Vessels	GE		X		
5.4	Component and Subsystem Design	GE		X		
FSAR Chapter 6	Engineered Safety Features					
6.1	Engineered Safety Feature Materials	GE		X		
6.2	Containment Systems	GE		X		
6.3	Emergency Core Cooling Systems	GE		X		
6.4	Control Room Habitability Systems	GE			X (1)	
6.5	Atmosphere Cleanup Systems	GE	X			
6.6	ISI of Class 2 and 3 Components	GE		X		
FSAR Chapter 7	Instrumentation and Controls					
7.1	Introduction	GE	X			
7.2	Reactor Trip System	GE	X			
7.3	Engineered Safety Features Systems	GE	X			
7.4	Safety-Related and Non-Safety Related Shutdown Systems	GE	X			
7.5	Safety-Related and Non-Safety Related	GE	X			

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
	Information Systems					
7.6	Interlock Systems	GE	X			
7.7	Control Systems	GE	X			
7.8	Diverse Instrumentation and Control Systems	GE	X			
7B	Software Quality Program for Hardware/Software Design and Development	GE	X			
FSAR Chapter 8	Electric Power					
8.1	Introduction	GE			X (1)	
8.2	Offsite Power System	Dominion NuStart Entergy			X (2)	
8.3	Onsite Power Systems	GE			X (1)	
8A	Miscellaneous Electrical Systems	Dominion NuStart Entergy		X		
FSAR Chapter 9	Auxiliary Systems					
9.1	Fuel Storage and Handling	GE		X		
9.2.1	Plant Service Water System	Dominion NuStart Entergy			X (2)	
9.2.2	Reactor Component Cooling Water System	GE	X			
9.2.3	Makeup Water System	Dominion NuStart Entergy			X (2)	
9.2.4	Potable and Sanitary Water Systems	Dominion NuStart Entergy			X (2)	
9.2.5	Ultimate Heat Sink	Dominion NuStart Entergy		X		
9.2.6	Condensate Storage and Transfer System	GE	X			
9.2.7	Chilled Water System	GE	X			
9.2.8	Turbine Component Cooling Water System	GE	X			

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site-Specific	Site-Specific
9.2.9	Hot Water System	GE	X			
9.2.10	Station Water Systems	Dominion NuStart Entergy			X (2)	
9.3.1	Compressed Air Systems	GE	X			
9.3.2	Process Sampling System	GE		X		
9.3.3	Equipment and Floor Drain System	GE	X			
9.3.4	Chemical and Volume Control System	GE	X			
9.3.5	Standby Liquid Control System	GE	X			
9.3.6	Instrument Air System	GE	X			
9.3.7	Service Air System	GE	X			
9.3.8	High Pressure Nitrogen Supply System	GE	X			
9.3.9	Hydrogen Water Chemistry System	GE		X		
9.3.10	Oxygen Injection System	GE			X (1)	
9.3.11	Zinc Injection System	GE		X		
9.3.12	Auxiliary Boiler System	GE	X			
9.4.1	Control Room Area Ventilation System	GE	X			
9.4.2	Fuel Building HVAC System (FBHVS)	GE	X			
9.4.3	Radwaste Building Heating, Ventilation and Air Conditioning System	GE	X			
9.4.4	Turbine Building HVAC System	GE	X			
9.4.5	Engineered Safety Feature Ventilation System	GE	X			
9.4.6	Reactor Building HVAC System	GE	X			
9.4.7	Electrical Building HVAC System	GE			X (1)	
9.4.8	Drywell Cooling System	GE	X			
9.4.9	Containment Inerting System	GE	X			
9.4.10	HVAC Component Information	GE	X			
9.5.1	Fire Protection System	GE			X (2)	
9.5.2	Communications Systems	GE			X (1)	
9.5.3	Lighting System	GE	X			
9.5.4	Diesel Generator Fuel Oil Storage and Transfer System	GE			X (1)	
9.5.5	Diesel Generator Jacket Cooling Water System	GE	X			
9.5.6	Diesel Generator Starting Air System	GE	X			
9.5.7	Diesel Generator Lubrication System	GE	X			

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
9.5.8	Diesel Generator Combustion Air Intake and Exhaust System	GE	X			
9A	Fire Hazards Analysis	GE			X (1)	
9B	Summary of Analysis Supporting Fire Protection Design Requirements	GE	X			
FSAR Chapter 10	Steam and Power Conversion Systems					
10.1	Summary Description	GE	X			
10.2	Turbine Generator	GE		X		
10.3	Turbine Main Steam System	GE	X			
10.4	Other Features of Steam and Power Conversion System	GE			X (2)	
10A	Alternative Design for Steam and Power Conversion System	GE		X		
FSAR Chapter 11	Radioactive Waste Management					
11.1	Source Terms	GE	X			
11.2	Liquid Waste Management System	GE			X (1)	
11.3	Gaseous Waste Management System	GE	X			
11.4	Solid Waste Management System	GE			X (1)	
11.5	Process Radiation Monitoring System	GE			X (1)	
FSAR Chapter 12	Radiation Protection					
12.1	Ensuring That Occupational Radiation Exposures Are ALARA	Dominion		X		
12.2	Plant Sources	GE			X (1)	
12.3	Radiation Protection	GE		X		
12.4	Dose Assessment	GE	X			
12.5	Operational Radiation Protection Program	Dominion			X (1)	
12.6	Minimization of Contamination and Radwaste Generation	GE	X			
12A	Calculation of Airborne Radionuclides	GE	X			
FSAR Chapter 13	Conduct of Operations					
13.1	Organizational Structure of Applicant	NuStart			X (1)	

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
13.2	Training	Dominion		X		
13.3	Emergency Planning	Dominion		X		
13.4	Operational Program Implementation	NuStart		X		
13.5	Plant Procedures	NuStart		X		
13.6	Physical Security	Dominion		X		
FSAR Chapter 14	Initial Test Program					
14.1	Initial Test Program For Preliminary Safety Analysis Reports	GE	X			
14.2	Initial Plant Test Program For Final Safety Analysis Reports	GE			X (1)	
14.3	Selection Of Tier 1 Criteria and Processes	GE		X		
FSAR Chapter 15	Safety Analyses					
15.0	Analytical Approach	GE		X		
15.1	Nuclear Safety Operational Analysis	GE	X			
15.2	Analysis of Anticipated Operational Occurrences	GE		X		
15.3	Analysis of Infrequent Events	GE		X		
15.4	Analysis of Accidents	GE			X (1)	
15.5	Special Event Evaluations	GE		X		
15A	Event Probability Analyses	GE		X		
15B	LOCA Inventory Curves	GE	X			
FSAR Chapter 16	Technical Specifications	GE		X		
FSAR Chapter 17	Quality Assurance					
17.0	Introduction	Dominion			X (1)	
17.1	Quality Assurance During Design and Construction	Dominion NuStart Entergy			X (1)	
17.2	Quality Assurance During the Operations Phase	NuStart			X (1)	
17.3	Quality Assurance Program Document	NuStart			X (1)	
17.4	Reliability Assurance Program During	NuStart		X		



ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
	Design Phase					
17.5	Quality Assurance Program Description	NuStart			X (1)	
17.6	Maintenance Rule Program	NuStart		X		
FSAR Chapter 18	Human Factors Engineering					
18.1	Overview	GE	X			
18.2	HFE Program Management	GE	X			
18.3	Operating Experience Review	GE	X			
18.4	Functional Requirements Analyses and Function Allocation	GE	X			
18.5	Task Analysis	GE	X			
18.6	Staffing and Qualifications	GE	X			
18.7	Human Reliability Analysis	GE	X			
18.8	Human-System Interface Design	GE	X			
18.9	Procedure Development	GE	X			
18.10	Training Program Development	GE	X			
18.11	Human Factors V&V	GE	X			
18.12	Design Implementation	GE	X			
18.13	Human Performance Monitoring	GE	X			
18.14	Inventory of Controls and Instrumentation	GE	X			
FSAR Chapter 19	PRA and Severe Accidents					
19.1	Introduction	GE		X		
19.2	PRA Results and Insights	GE	X			
19.3	Severe Accidents Evaluations	GE	X			
19.4	PRA Maintenance	GE	X			
19.5	ITAACs, Action Items, & Other Commitments	GE		X		
19.6	Conclusions	GE	X			
19A	Regulatory Treatment of Non Safety Systems (RTNSS)	GE	X			
19B		GE	X			
19C		GE	X			
<b>Part 3</b>	<b>Environmental Report</b>					

ESBWR Standardization Matrix						
Part Chapter Section	Title	Lead Organization Preparing Section	Standardization Assessment <sup>1</sup>			
			Match DCD	Standard	Standard With Site- Specific	Site- Specific
ER Chapter 1	Introduction	Dominion NuStart Entergy				X
ER Chapter 2	Environmental Description	Dominion NuStart Entergy				X
ER Chapter 3	Plant Description	Dominion NuStart Entergy				X
ER Chapter 4	Environmental Impacts of Construction (North Anna) Environmental Effects of Construction (Grand Gulf, River Bend)	Dominion NuStart Entergy				X
ER Chapter 5	Environmental Impacts of Station Operation (North Anna) Environmental Effects of Station Operations (Grand Gulf, River Bend)	Dominion NuStart Entergy				X
ER Chapter 6	Environmental Measurements and Monitoring Programs	Dominion NuStart Entergy				X
ER Chapter 7	Environmental Impacts of Postulated Accidents Involving Radioactive Materials	Dominion NuStart Entergy				X
ER Chapter 8	Need for Power	Dominion NuStart Entergy				X
ER Chapter 9	Alternatives to the Proposed Action	Dominion NuStart Entergy				X
ER Chapter 10	Environmental Consequences of the Proposed Action	Dominion NuStart Entergy				X

<b>ESBWR Standardization Matrix</b>						
<b>Part Chapter Section</b>	<b>Title</b>	<b>Lead Organization Preparing Section</b>	<b>Standardization Assessment<sup>1</sup></b>			
			<b>Match DCD</b>	<b>Standard</b>	<b>Standard With Site- Specific</b>	<b>Site- Specific</b>
<b>Part 4</b>	<b>Technical Specifications</b>	<b>GE</b>			<b>X (1)</b>	
<b>Part 5</b>	<b>Emergency Plan</b>	<b>Dominion NuStart Entergy</b>				<b>X</b>
<b>Part 6</b>	<b>LWA/Site Redress Plan</b>	<b>Dominion NuStart Entergy</b>			<b>X (2)</b>	
<b>Part 7</b>	<b>Generic DCD Departures Report</b>	<b>Dominion NuStart Entergy</b>			<b>X (1)</b>	
<b>Part 8</b>	<b>Safeguards/Security Plans</b>					
--	Physical Security Plan	<b>Dominion NuStart Entergy</b>			<b>X (1)</b>	
--	Training and Qualification Plan	<b>Dominion NuStart Entergy</b>			<b>X (1)</b>	
--	Safeguards Contingency Plan	<b>Dominion NuStart Entergy</b>			<b>X (2)</b>	
<b>Part 9</b>	<b>Plant-Specific PRA</b>	<b>GE</b>			<b>X (1)</b>	
<b>Part 10</b>	<b>ITAAC</b>	<b>GE</b>			<b>X (1)</b>	