Appendix F

COL Items

COL Items	Title	Description
1.1-1A	Establish Rated Electrical Output	Unit 3 operates at an estimated gross electrical power output at rated power of approximately 1594 MWe (as shown in DCD Section 10.1). The estimated net electrical power output, which is dependent on site ambient conditions, the normal plant heat sink (NPHS) operation controls, and station electrical loads, is between approximately 1425 MWe and 1510 Mwe.
1.3-1A	Update Table 1.3-1	There are no updates to DCD Table 1.3-1 based on unit-specific information.
1.7-1-H	Final Design Configuration Confirmation	The final P&IDs used for construction will be available upon completion of the final design configuration. Design changes that result in revisions to the simplified diagrams will be incorporated in subsequent updates to this FSAR.
1.9-3-A	SRP and Regulatory Guide Applicability	This COL Item is addressed in Sections 1.9.1 and 1.9.2. Table 1.9-201 evaluates conformance with the SRP sections and BTPs in effect six months prior to the submittal of the COLA. Table 1.9-201 does not re-address conformance with the SRP for those portions of the facility design included in the referenced certified design. Similarly, Table 1.9-201 does not re-address SSAR conformance with the applicable RS-002 sections. In the table, the term “Conforms” means that no exception is being taken to the guidance in the SRP section/acceptance criteria as they apply to site-specific design information, operational aspects of the facility, or siting information in the FSAR that supplements the SSAR. The term “Not applicable” means that the SRP section/acceptance criteria do not apply to the ESBWR or Unit 3. Any differences with the SRP acceptance criteria are identified and justified, with references to the applicable FSAR section(s) that address the difference, as necessary.

COL Items	Title	Description
1.11-1-A	Address Table 1.11-1 Items that refer to Notes (2) and (7)	This COL item is addressed in Section 1.11 and Table 1.11-201.
1C.1-1-A	Handling of Safeguards Information	This COL item is addressed in Section 1C.1 and the Table 1C-201 entry for Generic Letter 82-39.
1C.1-2-A	Emergency Preparedness and Response Actions	This COL item is addressed in Section 1C.1 and the Table 1C-202 entry for IE Bulletin 2005-02.
2.0-1-A	Site Characteristics Demonstration	The applicant provided Table 2.0-201 in response to this COL item. Part 1 of Table 2.0-201 identifies each DCD site parameter value and the corresponding ESP and Unit 3 site characteristic values. In addition, Part 1 provides an evaluation, as applicable, of whether (1) ESP site characteristic values fall within DCD site parameter values; (2) Unit 3 site characteristic values fall within DCD site parameter values; and (3) Unit 3 site characteristic values fall within ESP site characteristic values.
2.0-2-A	Site Location and Description Information in Accordance with SRP 2.1.1	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the "COL Information" column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.
2.0-3-A	Site Specific Exclusion Area Authority and Control Information in Accordance with SRP 2.1.2	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the "COL Information" column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.

COL Items	Title	Description
2.0-4-A	Described the Population Distribution in Accordance with SRP 2.1.3	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the "COL Information" column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.
2.0-5-A	Identify Potential Hazards in the Site Vicinity, in Accordance with SRP 2.2.1 - 2.2.2	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the "COL Information" column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.
2.0-6-A	Evaluation of Potential Accidents in Accordance with SRP 2.2.3	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the "COL Information" column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.
2.0-7-A	Regional Climatology in Accordance with SRP 2.3.1	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the "COL Information" column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.

COL Items	Title	Description
2.0-8-A	Local Meteorology in Accordance with SRP 2.3.2	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the “COL Information” column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.
2.0-9-A	Onsite Meteorological Measurements Programs in Accordance with SRP 2.3.3	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the “COL Information” column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item..
2.0-10-A	Short-Term Diffusion Estimates for Accidental Atmospheric Releases in Accordance with SRP 2.3.4	Information on Unit 3 site characteristics is provided in Sections 2.1 through 2.5, which incorporate by reference, the corresponding SSAR sections. This information addresses NRC guidance in NUREG-0800 as identified in Table 2.0-2R. In the “COL Information” column, the COL Item from the DCD is replaced with information responding to the COL Item and identifying the FSAR section which addresses the SRP section invoked by the COL Item.

COL Items	Title	Description
2.0-11-A	Long-Term Diffusion Estimates in Accordance with SRP 2.3.5	This COL information item states that the COL applicant should supply site specific information in accordance with SRP Section 2.3.5. That is, the COL applicant should provide χ/Q and D/Q estimates for calculating concentrations in the air and the amount of material deposited on the ground as a result of routine releases of radiological effluents into the atmosphere during normal plant operation. The applicant responded to this COL information item by referencing the EAB (site boundary) long-term χ/Q and D/Q values in the ESP SSAR. The applicant also recalculated site specific, long-term χ/Q and D/Q values at specific receptors of interest (i.e. nearest resident, meat animal, and vegetable garden) using (1) the land-use census results reported in the Dominion NAPS 2006 Annual Radiological Environmental Operating Report (AREOR), and (2) ESBWR-specific vent building height and building cross-sectional area data. These new North Anna 3 long-term χ/Q and D/Q values at specific receptors of interest are in North Anna 3 COL FSAR Table 2.3-16R. The applicant also provided long-term χ/Q and D/Q values in each direction sector, for a set of radial distances out to 50 miles, in North Anna 3 COL FSAR Tables 2.3-208 through 2.3-215.
2.0-12-A	Hydraulic Description Maximum Ground Water Level in Accordance with SRP 2.4.1	The applicant incorporated by reference SSAR Subsection 2.4.1 to address DCD COL Item 2.0-12-A. The applicant provided updated site specific information to supplement SSAR Subsection 2.4.1.1, “Site and Facilities.”
2.0-13-A	Protection of Below-Grade Penetrations and Access Openings from Floods in Accordance with SRP 2.4.2	The applicant incorporated by reference ESP SSAR Subsection 2.4.2 to address DCD COL Item 2.0-13-A The applicant also provided updated site specific information to supplement ESP SSAR Subsections 2.4.2.2 ,“Flood Design Consideration,” indicating that the design plant grade elevation for safety-related SSCs is above the maximum flood level at the site, resulting from a probable maximum flood in Lake Anna’s watershed, the simultaneous failure of upstream storage reservoirs, and coincident wave action as discussed in the ESP SER.

COL Items	Title	Description
2.0-14-A	Probable Maximum Flood on Streams and Rivers in Accordance with SRP 2.4.3	The applicant incorporated by reference ESP SSAR Subsection 2.4.3 to address DCD COL Item 2.0-14-A. The applicant also provided updated site specific information to supplement ESP SSAR Subsections 2.4.3, "Probable Maximum Flood on Streams and Rivers," indicating that the plant grade for safety-related components and structures is above the design-basis flood level.
2.0-15-A	Potential Dam Failures Seismically Induced in Accordance with SRP 2.4.4	The applicant incorporated by reference ESP SSAR Subsection 2.4.4 to address DCD COL Item 2.0-15-A..
2.0-16-A	Probable Maximum Surge and Seiche Flooding in Accordance with SRP 2.4.5	COL Item 2.0-16-A is addressed in Section 2.4.5.
2.0-17-A	Probable Maximum Tsunami in Accordance with SRP 2.4.6	COL Item 2.0-17-A is addressed in Section 2.4.6.
2.0-18-A	Ice Effects in Accordance with SRP 2.4.7	The applicant clarified that the emergency cooling water for Unit 3 is provided from the UHS, which is not affected by the ice conditions, and that the normal cooling systems for Unit 3 are non-safety-related systems. The applicant further clarified that there is no safety-related system interconnection or inter-system reliance between normal and emergency cooling.
2.0-19-A	Cooling Water Canals and Reservoirs in Accordance with SRP 2.4.8	The applicant incorporated by reference ESP SSAR Subsection 2.4.8 to address DCD COL Item 2.0-19-A. The applicant also provided updated site specific information to supplement ESP SSAR Subsection 2.4.8, related to the hydraulic design basis of cooling water canals and reservoirs.

COL Items	Title	Description
2.0-20-A	Channel Diversion in Accordance with SRP 2.4.9	DCD site parameter values for the ESBWR standard plant are identified in DCD Table 2.0-1 and DCD Tier 1, Table 5.1-1. ESP site characteristic values are identified in Appendix A of the ESP (Reference 2.0-203). The ESP design parameter values are identified as controlling values of parameters and design basis accident source term plant parameters in Appendix B of the ESP. Table 2.0-201 provides several evaluations: • Part 1 of Table 2.0-201 identifies each DCD site parameter value and the corresponding ESP and Unit 3 site characteristic values. In accordance with 10 CFR 52.79(b) and (d); and SRP Section 2.0, Part 1 of Table 2.0-201 evaluates, as applicable, whether: •• ESP site characteristic values fall within DCD site parameter values •• Unit 3 site characteristic values fall within DCD site parameter values •• Unit 3 site characteristic values fall within ESP site characteristic values.
2.0-21-A	Flooding Protection Requirements in Accordance with SRP 2.4.10	The applicant incorporated by reference ESP SSAR Subsection 2.4.10 to address DCD COL Item 2.0-21-A and provided updated site specific information to supplement ESP SSAR Subsection 2.4.10.
2.0-22-A	Cooling Water Supply in Accordance with SRP 2.4.9	DCD site parameter values for the ESBWR standard plant are identified in DCD Table 2.0-1 and DCD Tier 1, Table 5.1-1. ESP site characteristic values are identified in Appendix A of the ESP (Reference 2.0-203). The ESP design parameter values are identified as controlling values of parameters and design basis accident source term plant parameters in Appendix B of the ESP.
2.0-23-A	Groundwater	The applicant incorporated by reference ESP SSAR Subsection 2.4.12 to address DCD COL Item 2.0-23-A. The applicant provided updated site specific information to supplement or replace ESP SSAR Subsections 2.4.12.1.3.1, “Plant Operating Requirements;” 2.4.12.1.3.2, “Construction Requirements;” 2.4.12.3, “Groundwater Levels and Movement;” 2.4.12.2.4, “Hydrogeologic Properties of Subsurface Materials;” 2.4.12.3, “Monitoring or Safeguard Requirements;” 2.4.12.4, “Design Basis for Subsurface Hydrostatic Loadings;” and 2.4.12.5, “References.”

COL Items	Title	Description
2.0-24-A	Accidental Releases of Liquid Effluents in Ground and Surface Waters in Accordance with SRP 2.4.13	The applicant incorporated by reference ESP SSAR Subsection 2.4.13 to address DCD COL Item 2.0-24-A. The applicant provided updated site specific information to supplement ESP SSAR Subsections 2.4.13.1, "Groundwater," and 2.4.13.2, "Surface Water."
2.0-25-A	Technical Specifications and Emergency Operation Requirements in Accordance with SRP 2.4.14	The applicant provided Subsection 2.4.14 in the COL FSAR to address DCD COL Item 2.0-25-A and referenced Subsections 2.4.2 and 2.4.12 of the COL FSAR regarding design basis floods and maximum groundwater elevation and their impacts on safety-related SSCs. The applicant concluded that the combination of the DCD design and the plant grade elevation do not necessitate emergency procedures or technical specifications to prevent hydrological phenomena from degrading the UHS.
2.0-26-A	Basis Geologic and Seismic Information in Accordance with SRP 2.5.1	NAPS COL 2.0-26-A addresses the provisions of Table 2.0-1 of the ESBWR DCD, relating to the site specific geologic and seismic information to be provided.
2.0-27-A	Vibratory Ground Motion in Accordance with SRP 2.5.2	NAPS COL 2.0-27-A addresses the information provided in accordance with SRP Section 2.5.2 and requires confirmatory information to ensure that the (RB and FB), control building, and fire water service complex foundation input response spectra (FIRS) are enveloped by the ESBWR certified seismic design response spectra (CSDRS) referenced at the foundation level.
2.0-28-A	Surface Faulting in Accordance with SRP 2.5.3	This COL FSAR section also addresses DCD COL Item 2.0-28-A of Revision 5 to the ESBWR DCD. NAPS COL 2.0-28-A addresses the permanent ground deformation from tectonic or non-tectonic faulting. The ESBWR design requires the applicant to demonstrate that there is no potential for permanent ground deformation at the site area.
2.0-29-A	Stability of Subsurface Materials and Foundations in Accordance with SRP 2.5.4	NAPS COL 2.0-29-A provides supplemental information and additional borehole data from Unit 3 borings to address the provisions listed in ESBWR DCD Table 2.0-1, regarding stability of subsurface material and foundation requirements, (DCD COL Item 2.0-29-A).
2.0-30-A	Stability of Slopes in Accordance with SRP 2.5.5	NAPS COL 2.0-30-A addresses the provisions in COL Item 2.0-30-A listed in ESBWR DCD Table 2.0-1, regarding stability of slopes requirements.

COL Items	Title	Description
2A.2-1-A	Confirmation of the ESBWR χ/Q Values	DCD Figure 2A-1 shows the locations of the sources and receptors for ESBWR control room determinations, also used in the Unit 3 evaluations. The dimensions of the diffuse source planes provided in DCD Table 2A-3 are determined as directed by RG 1.194, Regulatory Position 3.2.4.5, for the nearest receptor locations. ARCON96 calculations are performed for source/receptor pairs listed in DCD Table 2A-3 and Table 2A-4R using site-specific meteorological data. Results of the site-specific analysis are provided in Tables 2.3-202 through 2.3-207.
2A.2-2-A	Confirmation of the Reactor Building χ/Q Values	During refueling, doors or personnel air locks on the east sides of the Reactor Building or Fuel Building could act as a point source that could result in control room χ/Q values that are higher than the ESBWR χ/Q values for a release in the Reactor Building. Therefore, the doors are administratively controlled prior to and during movement of irradiated fuel bundles. The administrative controls are such that the doors and personnel air locks on the East sides of the Reactor Building or Fuel Building are promptly closed under conditions indicative of a fuel handling accident.
3.9.9-1-H	Reactor Internals Vibration Analysis, Measurement and Inspection Program	A vibration assessment program as specified in RG 1.20 is provided in DCD Appendix 3L and the following referenced GEH Reports. • NEDE-33259P, “ESBWR Reactor Internals Flow Induced Vibration Program” • NEDE-33312P, “Steam Dryer Acoustic Load Definition” • NEDE-33313P, “Steam Dryer Structural Evaluation” • NEDC-33408P, “ESBWR Steam Dryer Plant Based Load Evaluation Methodology” Information on a schedule in accordance with the five applicable scheduling portions of position C.3 of RG 1.20 (refer to Section C.2.5) for non-prototype internals is as follows. • In response to C.2.5, Item (1), the reactor internals design has been classified by GEH in DCD Section 3L.1 as non-prototype Category II.

COL Items	Title	Description
3.9.9-2-H	ASME Class 2 or 3 or Quality Group D Components with 60 Year Design Life	The applicant provided additional information in STD COL 3.9.9-2-H to address COL Information Item 3.9.9-2-H. The applicant stated that the piping stress reports identified in this DCD section will be completed within 6 months of completing ITAAC Table 3.1-1. The FSAR will be revised as necessary to address the results of this analysis.
3.9.9-3-A	Inservice Testing Programs	Each valve subject to inservice testing is also tested during the preservice test (PST) period. Preservice tests are conducted under conditions as near as practicable to those expected during subsequent inservice testing. Valves (or the control system) that have undergone maintenance that could affect performance, or valves that are repaired or replaced, are re-tested to verify performance parameters that could have been affected are within acceptable limits. Safety and relief valves and nonreclosing pressure relief devices are preservice tested in accordance with the requirements of the ASME OM Code, Mandatory Appendix I.
3.9.9-4-A	Snubber Inspection and Test Program	The applicant provided additional information in STD COL 3.9.9-4-A to address DCD COL Item 3.9.9-4-A. The applicant stated that a plant-specific table will be prepared in conjunction with closure of ITAAC Table 3.1-1, with specific snubber information listed in this section of the DCD. This information will be included as part of a subsequent FSAR update. The applicant also stated that the Inservice Testing Program for snubbers will be completed in accordance with milestones described in Section 13.4.
3.10.4-1-A	Dynamic Qualification Report	A schedule will be provided within 12 months after issuance of the COL that supports planning for and conducting of NRC inspections of seismic and dynamic qualification of mechanical and electrical equipment. The schedule will be updated every 6 months until 12 months before scheduled fuel loading. The Dynamic Qualification Report will be completed prior to fuel load. FSAR information will be revised, as necessary, as part of a subsequent FSAR update.

COL Items	Title	Description
3.11-1-A	Environmental Qualification Document (EQD)	A description of the environmental qualification program is provided in DCD Section 3.11. Implementation of the environmental qualification program, including development of the plant specific Environmental Qualification Document (EQD), will be in accordance with the milestone defined in Section 13.4.
4.3-1A	Variances from Certified Design	For both items, the applicant stated that there are no changes from the referenced certified design.
4A-1-A	Variances from Certified Design	For both items, the applicant stated that there are no changes from the referenced certified design.
5.2-1-A	Preservice and Inservice Inspection Program Description	The applicant provided information to address the PSI and ISI programs, applicable ASME Code Edition and Addenda, certification of nondestruction examination (NDE) personnel as amended by 10 C 50.55a, system leakage tests as amended by 10 CFR 50.55a, and the description of the PSI and ISI milestones.
5.2-2-H	Leak Detection Monitoring	Operators are provided with procedures for detecting, monitoring, recording, trending, and determining the sources of reactor coolant pressure boundary leakage. Examples of parameters that are monitored are sump pump run time, sump level, condensate transfer rate, and process chemistry/radioactivity. The procedures are used for converting different parameter indications for identified and unidentified leakage into common leak rate equivalents (volumetric or mass flow) and leak rate rate-of-change values, including indications from: 1) the drywell floor drain high conductivity water sump monitoring system, 2) the drywell air coolers condensate flow monitoring system, and 3) the drywell fission product monitoring system.
5.2-3-A	Preservice and Inservice Inspection NDE Description Accessibility Plan	The applicant provided information to address Class 1 austenitic or dissimilar metal welds and preservation of accessibility during construction to enable the performance of ISI examinations during the operational phase.
5.3.2-A	Materials and Surveillance Capsule	All Class 1 austenitic or dissimilar metal welds are included in the referenced certified design.

COL Items	Title	Description
6.2-1-H	Pipe Length from Containment to Inboard/Outboard Isolation Valve	DCD Tables 6.2-16 through 6.2-45 require an entry for the length of pipe from the containment to the inboard and outboard isolation valves. Pipe lengths will be determined as part of completion of the piping design ITAAC identified in DCD Tier 1, Table 3.1-1. The FSAR will be revised to reflect the pipe length information in a subsequent update.
6.4-1-A	CRHA Procedures and Training	Operators are provided with training and procedures for control room habitability that address the applicable aspects of NRC Generic Letter 2003-01 and are consistent with the intent of Generic Issue 83. Training and procedures are developed and implemented in accordance with Sections 13.2 and 13.5, respectively. The implementation milestones for training and procedures are provided in Sections 13.4 and 13.5, respectively.
6.4-2-A	Toxic Gas Analysis	Potential toxic gas sources are evaluated to confirm that an external release of hazardous chemicals does not impact control room habitability. These sources include: 1) offsite industrial facilities and transportation routes; 2) Units 1 and 2; and 3) Unit 3.
6.6-1-A	PSI/ISI Program Information	The applicant provided additional information in STD COL 6.6-1-A to address COL item 6.6-1-A. The applicant states: a) the Preservice inspection (PSI)/ISI program description for Class 2 and 3 components and piping is provided in DCD Section 6.6, b) no relief requests have been identified, c) the initial ISI program is to be based on the latest edition and addenda of the ASME Code incorporated by reference in 10 CFR 50.55a(b) on the date 12 months before fuel load, and d) the milestones for preservice and inservice program implementation are provided in FSAR section 13.4.

COL Items	Title	Description
6.6.2-A	PSI/ISI NDE Accessibility Plan Description	All Class 2 or 3 austenitic or dissimilar metal welds are included in the referenced certified design. During the construction phase of the project, anomalies and construction issues are addressed using change control procedures. Procedures require that changes to approved design documents, including field changes and modifications, are subject to the same review and approval process as the original design. Accessibility and inspectability are key components of the design process. Control of accessibility for inspectability and testing during licensee design activities affecting Class 2 and 3 components is provided via procedures for design control and plant modifications. UT will be the preferred NDE method for all PSI and ISI volumetric examinations; RT will be used as a last resort only if UT cannot achieve the necessary coverage. The same NDE method used during PSI will be used for ISI to the extent possible to assure a baseline point of reference. If a different NDE method is used for ISI than was used for PSI, equivalent coverage will be achieved as required by code.
8.2.4-1-A	Transmission System Description	The applicant provided detailed information on the designs of the plant site 500-kV switchyard, the four 500-kV and one 230-kV transmission lines connecting the plant switchyard to Dominion's transmission system, and the interface of the switchyard with the transmission grid. The applicant provided Figures 8.2-201 through 8.2-203, which show a one-line diagram of the electrical system from the switchyard to the onsite electrical system, physical arrangement of the offsite power source, and a map of offsite transmission lines, respectively.
8.2.4-2-A	Switchyard Description	The NAPS switchyard, prior to the point of interconnection with Unit 3, is a 500/230 kV, air-insulated, breaker-and-a-half bus arrangement. Unit 3 is connected to this switchyard by an overhead conductor circuit. The physical location and electrical interconnection of the switchyard is shown on Figure 8.2-201 and Figure 8.2-202.
8.2.4-3-A	Normal Preferred Power	The applicant provided additional information in FSAR Section 8.2.1.2, "Offsite Power System," describing details of normal preferred power and alternate preferred power.

COL Items	Title	Description
8.2.4-4-A	Alternate Preferred Power	The applicant provided additional information in FSAR Section 8.2.1.2, “Offsite Power System,” describing details of normal preferred power and alternate preferred power.
8.2.4.5-A	Protective Relaying	The 500 kV transmission lines are protected with redundant high-speed relay schemes with re-closing and communication equipment to minimize line outages. The 500 kV switchyard buses have redundant bus differential protection using separate and independent current and control circuits. Generating unit tie-lines and auxiliary transformer underground cable circuits are protected with redundant high-speed relay schemes. Transformers are protected with differential and over-current relay schemes.
8.2.4-6-A	Switchyard DC Power	The applicant provided additional information in FSAR Section 8.2.1.2.1, “Switchyard,” describing details of the switchyard, switchyard dc and ac power, and switchyard transformer protection.
8.2.4-7-A	Switchyard AC Power	The applicant provided additional information in FSAR Section 8.2.1.2.1, “Switchyard,” describing details of the switchyard, switchyard dc and ac power, and switchyard transformer protection.
8.2.4-8-A	Switchyard Transformer Protection	The applicant provided additional information in FSAR Section 8.2.1.2.1, “Switchyard,” describing details of the switchyard, switchyard dc and ac power, and switchyard transformer protection.
8.2.4-9-A	Stability and Reliability of the Offsite Transmission Power System	The applicant provided additional information in FSAR Section 8.2.2.1, “Reliability and Stability Analysis,” describing details of a transmission system study performed regularly to verify grid stability, switchyard voltage, and frequency. The purpose of the study is to confirm the transmission system capability and demonstrate formal agreement between the control room and the transmission operator.
8.2.4-10-A	Interface Requirements	The applicant provided additional information in FSAR Section 8.2.2.1, “Reliability and Stability Analysis,” describing details of a transmission system study performed regularly to verify grid stability, switchyard voltage, and frequency. The purpose of the study is to confirm the transmission system capability and demonstrate formal agreement between the control room and the transmission operator.

COL Items	Title	Description
8A.2.3-1-A	Cathodic Protection System	This COL item is addressed in Section 8A.2.1.
9.1.4-A	Fuel Handling Operations Handling of Heavy Loads	The NRC staff reviewed STD COL 9.1.4-A related to the fuel handling operations included under Section 9.1.4 of the North Anna 3 COL FSAR. DCD COL Item 9.1.4-A in Section 9.1.6, "COL Information," of the ESBWR DCD, Revision 5, states that the applicant will provide a description of programs that address the following:
9.1-5-A	Handling of Heavy Loads	The applicant provided additional information in STD COL 9.1-5-A to address DCD COL Item 9.1-5-A. The applicant described the scope of the heavy load handling procedures. The applicant stated that they will be developed prior to fuel load. The applicant stated that the fuel handling equipment is inspected for operating conditions before each refueling. The applicant described the criteria for inspection of special lifting devices and the inspection and testing of cranes. The applicant described the training and qualification standard for crane operators and the application of specific quality program controls for heavy load handling. The QA program is described in Section 17.5 of the COL FSAR.
9.2.1-1-A	Material Selection	Fiberglass reinforced polyester pipe is used for buried PSWS piping to preclude long-term corrosion. Appropriate chemical treatment is added to the PSWS basin to preclude long-term corrosion and fouling of the PSWS components based on site water quality analysis. PSWS materials are compatible with the PSWS water treatment regime.
9.2.5-1-H	Post 7-Day Makeup to Ultimate Heat Sink (UHS)	This COL Item is addressed in Section 9.2.5.
9.3.2-1-A	Post-Accident Sampling Program	This COL item is addressed in Section 9.3.2.2.
9.3.9-1-A	Implementation of Hydrogen Water Chemistry	The applicant provided additional information in STD COL 9.3.9-1-A to address DCD COL Item 9.3.9-1-A. The applicant stated that the HWC option is included in the plant's design.

COL Items	Title	Description
9.3.9-2-A	Hydrogen and Oxygen Storage and Supply	The applicant provided additional information in NAPS COL 9.3.9-2-A to address DCD COL item 9.3.9-2-A. The applicant stated that the hydrogen supply system for the HWCS is integrated with the generator hydrogen supply system and is described in DCD Section 10.2.2.2.8.
9.3.10-1-A	Oxygen Storage Facility	This COL item is addressed in Section 9.3.10.2.
9.3.11-1-A	Determine Need for Zinc Injection System	This COL item is addressed in Section 9.3.11.2.
9.3.11-2-A	Provide System Description for Zinc Injection System	A Zinc Injection System is not utilized.
9.5.1-1-A	Secondary Firewater Storage Source	The applicant provided additional information in NAPS COL 9.5.1-1-A to address DCD COL Item 9.5.1-1-A. The applicant identified Lake Anna as the secondary source of water. The lake has a capacity well in excess of 550,000 gallons as specified in ESBWR DCD, Revision 5, and as per guidance given in RG 1.189 Regulatory Position 3.2.1.
9.5.1-2-A	Secondary Firewater Capacity	The applicant provided additional information in NAPS COL 9.5.1-2-A to address DCD COL Item 9.5.1-2-A. The applicant stated that tests will be performed to demonstrate that the secondary fire protection pump circuit supplies the required flow and pressure at the Turbine Building /yard interface boundary. DCD Section 14.2.8.1.39 which is incorporated by reference states that FPS tests are in accordance with the criteria in codes and standards listed in Table 9.5-1. Therefore, secondary pump curve tests and flow test will be in accordance with National Fire Protection Association (NFPA) 20.
9.5.1-4-A	Piping and Instrumentation Diagrams	The applicant provided additional information in NAPS COL 9.5.1-4-A to address DCD COL Item 9.5.1-4-A. The applicant provided Figures 9.5-201, 9.5-202 and 9.5-203 depicting the site-specific firewater supply piping.

COL Items	Title	Description
9.5.1.5-A	Fire Barriers	Mechanical and electrical penetration seals and electrical raceway fire barrier systems are qualified to the requirements delineated in RG 1.189 by a recognized testing laboratory in accordance with the applicable guidance of NFPA 251 and/or ASTM E-119. Detailed design in this area is not complete. Specific design and certification test results for penetration seal designs and electrical raceway fire barrier systems will be available for review at least six months prior to fuel receipt.
9.5.1-6-H	Smoke Control	The applicant provided additional information in STD COL 9.5.1-6-H to address DCD COL Item 9.5.1-6-H. The applicant stated that the procedures for manual smoke control will be developed as part of the Fire Protection Program implementation. The program will be operational for areas storing new fuel prior to receipt of the fuel. Other elements of the Fire Protection Program will be operational before initial fuel load.
9.5.1-7-H	Fire Hazards Analysis (FHA) Compliance Review	The applicant provided additional information in STD COL 9.5.1-7-H to address DCD COL Item 9.5.1-7-H. The applicant stated that the compliance review of the as-built design against the assumptions and requirements stated in the fire hazards analysis (FHA) will be completed in accordance with the milestone schedule in FSAR Section 13.4. ESBWR DCD, Revision 5 added the specific items to be reviewed.
9.5.1-8-A	Fire Protection (FP) Program Description	The applicant provided additional information in STD COL 9.5.1-8-A to address DCD COL Item 9.5.1-8-A. The applicant stated that the Fire Protection Program will be operational for areas storing new fuel before receipt of the fuel. Other elements of the Fire Protection Program will be operational prior to initial fuel load per FSAR Section 13.4.
9.5.1-10-H	Fire Brigade	Implementation of the fire brigade will be in accordance with the milestones in Section 13.4 for the Fire Protection Program.
9.5.1-11-H	Quality Assurance	Quality assurance controls are applied to the activities involved in the design, procurement, installation, and testing and the administrative controls of fire protection systems, in accordance with the measures outlined in Chapter 17.

COL Items	Title	Description
9.5.2.5-1-A	Emergency Notification System	The North Anna Emergency Notification System (ENS) is provided in the plant Emergency Plan. The ENS phone lines are routed directly to the local telephone company central office via fiber-optic phone lines through a telephone utility switch that is located on site in the telephone equipment building. The normal power for this device is non-safety related station power. The telephone system will lose its normal power supply during a loss of offsite power; however, the phone system is battery backed for a period of approximately eight hours. This design ensures that the ENS located at the site is fully operable from the site in the event of a loss of offsite power at the site and is in compliance with the requirements of NRC Bulletin 80-15 for the ENS. Automatic Ringdown Circuits (ARD) (described in the plant Emergency Plan) connect the plant to the local and state emergency offices, and are also normally powered from the non-safety related station power and backed with approximately eight hours of battery backup power. In addition to the connect ions to the local telephone company, a separate Company-owned and maintained fiber-optic network exists which provides communication between the station, the system operations center, and the NRC. This Company network is also capable of external long distant and local telephone calls.
9.5.2.5-2-A	Grid Transmission Operator	Transmission System Operator Communications Link: Voice communications with the grid operator are provided via a Company-owned and -maintained fiber optic transmission system that allows telephone communications with the entire Corporate System. Access to this mode of transmission is made via the plant telephone system. A dedicated handset is provided between the Control Room and the power system operator.
9.5.2.5-3-A	Offsite Interfaces (1)	The health physics network is described in the Emergency Plan.
9.5.2.5-4-A	Offsite Interfaces (2)	Communication from the Control Room, TSC, and EOF to NRC headquarters including establishment of Emergency Response Data Systems (ERDS) is described in the Emergency Plan.
9.5.2.5-5-A	Fire Brigade Radio System	The fire brigade radio system is part of the plant radio system described in DCD Section 9.5.2.2.

COL Items	Title	Description
9.5.4-1-A	Fuel Oil Capacity	Procedures require that the quantity of diesel fuel oil in the standby diesel generator (SDG) fuel oil storage tanks is monitored on a periodic basis. The diesel fuel oil usage is tracked against planned deliveries. Regular transport replenishes the diesel fuel oil inventory during periods of high demand and ensures continued supply in the event of adverse weather conditions. These procedures ensure sufficient diesel fuel oil inventory is available on site so that the SDGs can operate continually for seven days with each operating at its calculated design load, with appropriate design margins. The procedures will be developed in accordance with the milestone and processes described in Section 13.5.
9.5.4-2-A	Protection of Underground Piping	The only underground component of the ADGs fuel oil storage and transfer system is carbon steel piping. A corrosion protection system is provided for external surfaces of buried piping systems. The buried sections of the piping are provided with waterproof protective coating and an impressed current type cathodic protection to control external corrosion.
9A.7-1-A	Yard Fire Zone Drawings	The applicant provided additional information in STD COL 9A.7-1-A to address DCD COL Item 9A.7-1-A. STD COL 9A.7-1-A provides fire zone drawings for the site-specific portions of the Yard.
9A.7-2-A	Fire Hazards Analysis of the Site Specific Areas	The applicant provided additional information in STD COL 9A.7-2-A to address DCD COL Item 9A.7-2-A. NAPS COL 9A.7-2-A commits to performing a detailed FHA of the Yard area that is outside the scope of the certified design
10.2-1-A	Turbine Maintenance and Inspection Program	The applicant provided supplemental information to address COL Items 10.2-1-A and COL 10.2-2-A. The applicant stated that the probability of turbine missile generation will be calculated using bounding material properties. The analysis will be completed in the second quarter of 2009 and the FSAR will be revised to incorporate the maintenance and inspection frequencies as part of a subsequent FSAR update.

COL Items	Title	Description
10.2-2-A	Turbine Missile Probability Analysis	The probability of turbine missile generation will be calculated based on bounding material property values until actual material test specimens are available for testing. The bounding analysis will be completed in the second quarter of 2009 and the FSAR will be revised to reflect this analysis as part of a subsequent FSAR update.
10.4-1-A	Leakage (Circulating Water into the Condenser)	This applicant provided threshold values and recommended operator actions for chemistry excursions in the condensate system to address this COL item.
11.2-1-A	Implementation of IE Bulletin 80-10	The COL item addresses LWMS subsystems interfaces and connections that are considered nonradioactive, but could later become radioactive through improper interfaces with radioactive systems using the guidance and information in IE Bulletin 80-10.
11.2-2-A	Implementation of 10 CFR 20.1406	The COL item addresses compliance with 10 CFR 20.1406 as it relates to the implementation of operational procedures for LWMS treatment subsystems.
11.4-1-A	SWMS Processing Subsystem Regulatory Guide Compliance	This COL item is addressed in Section 11.4.2.3.5.
11.4-2-A	Compliance with IE Bulletin 80-10	This COL item is addressed in Section 11.4.2.3.5.
11.4-3-A	Process Control Program	This COL item is addressed in Section 11.4.2.3.5.
11.4-4-A	Temporary Storage Facility	This COL item is addressed in Section 11.4.1.
11.4-5-A	Compliance with 10 CFR 20.1406	This COL item is addressed in Section 11.4.1.
11.5-1-A	Sensitivity or Subsystem Lower Limit of Detection	The COL item addresses the derivation of lower limits of detection or detection sensitivity levels for each effluent PRMS subsystem, following the requirements of the ODCM for North Anna 3.
11.5-2-A	Offsite Dose Calculation Manual	The COL item addresses the development of a plant- and site-specific ODCM for calculating offsite doses resulting from liquid and gaseous effluents. The milestones for the development and implementation of the ODCM are addressed under a license condition in FSAR, Section 13.4 of the North Anna 3 COL.
11.5-3-A	Process and Effluent Monitoring and Sampling Program	The COL item addresses the implementation of a site-specific monitoring and sampling program as described in the ODCM for North Anna 3.

COL Items	Title	Description
11.5-4-A	Site-Specific Offsite Dose Calculation	The COL item addresses compliance with the design objectives of Appendix I to 10 CFR Part 50 in controlling doses to a hypothetical maximally exposed member of the public and populations living near North Anna 3.
11.5-5-A	Instrumentation Sensitivities	The sensitivities, sampling and analytical frequencies and bases for each gaseous and liquid sample are described in the ODCM. Refer to Section 11.5.4.5 for a discussion regarding ODCM development and implementation.
12.1-1-A	Regulatory Guide 8.10	The applicant references draft NEI 07-03 for addressing compliance with RG 8.10 in COL FSAR subsection 12.1.4 to resolve DCD COL Item 12.1-1-A.
12.1-2-A	Regulatory Guide 1.8	The applicant references draft NEI 07-03 for addressing compliance with RG 1.8 in COL FSAR Subsection 12.1.4 to resolve DCD COL Item 12.1-2-A.
12.1-3-A	Operational Considerations	The applicant references draft NEI 07-03 to resolve DCD COL Item 12.1-3-A addressing criteria and conditions by which various operating procedures and techniques will be implemented to ensure that occupational exposures are ALARA using the guidance of NUREG 1736.
12.1-4-A	Regulatory Guide 8.8	The applicant references draft NEI 07-03 for addressing compliance with RG 8.8 in COL FSAR subsection 12.1.4 to resolve DCD COL Item 12.1-4-A.
12.2-2-A	Airborne Effluents and Doses	The applicant provided updated information to supplement the DCD with the site-specific parameters for addressing DCD COL Item 12.2-2-A, airborne effluent releases and doses to members of public. This information addresses compliance with the regulatory dose limits in Sections II.B and II.C of Appendix I to 10 CFR Part 50; compliance Section II.D of Appendix I to Part 50; airborne effluent concentration limits in Table 2 (Column 1) of Appendix B to 10 CFR Part 20; and dose limits in 10 CFR Parts 20.1301 and 20.1302. Compliance with the requirements in Section II.D of Appendix I to Part 50 for airborne effluents is addressed in FSAR Section 11.3.1.

COL Items	Title	Description
12.2-3-A	Liquid Effluents and Doses	The applicant provided updated information to supplement the DCD with the site-specific parameters for addressing DCD COL Item 12.2-3-A, liquid effluent releases and doses to members of public. This information addresses compliance with the regulatory dose limits in Section II.A of Appendix I to 10 CFR Part 50; compliance with Section II.D of Appendix I to Part 50; liquid effluent concentration limits in Table 2 (Column 2) of Appendix B to 10 CFR Part 20; and dose limits in 10 CFR Parts 20.1301 and 20.1302. Compliance with the requirements in Section II.D of Appendix I to Part 50 for liquid effluents is addressed in FSAR Section 11.2.1.
12.2-4-A	Other Contained Sources	The applicant provided additional information under STD COL 12.2-4-A that addresses the resolution of DCD COL Item 12.2-4-A, which states: "The COL applicant will address any additional contained radiation sources (including sources for instrumentation and radiography) not identified in Subsection 12.2.1.5."
12.3-2-A	Operational Considerations	STD COL 12.3-2-A addresses the operational considerations for airborne radiation monitoring, such as the procedures for operations and calibration of the monitors, as well as the placement of the portable monitors. The applicant references draft NEI 07-03 for addressing the resolution of DCD COL Item 12.3-2-A.
12.3-3-H	Controlled Access	STD COL 12.3-3-H addresses controlled access to "Very High Radiation Areas" (VHRAs). The applicant references draft NEI 07-03 for addressing the resolution of DCD COL Item 12.3-3-H.
12.5-1-A	Equipment, Instrumentation, and Facilities	This COL item is addressed in Appendix 12BB.
12.5-2-A	Compliance with Paragraph 50.34(f)(2)(xxvii) of 10 CFR 50 and NUREG-0737 Item III.D.3.3	STD COL 12.5-2-A describes accident portable instruments to measure radio-iodine concentrations. The applicant is responsible to describe accident portable instruments to measure radio-iodine concentrations in compliance with the requirements of 10 CFR Part 50.34(f)(2)(xxvii) and the guidance in NUREG-0737 Item III.D.3.3. The applicant references draft NEI 07-03 as a means to address the needs of this standard COL item.

COL Items	Title	Description
12.5-3-A	Radiation Protection Program	This DCD COL item requires the applicant to provide a description of the operational Radiation Protection Program. The applicant references draft NEI 07-03 as a means to address the needs of this standard COL item.
13.1-1-A	Organizational Structure	Fire protection staffing and organization of the fire brigade are described in Section 13.1.
13.2-1-A	Reactor Operator Training	Descriptions of the training program and licensed operator requalification program for reactor operators and senior reactor operators are addressed in Appendix 13BB. A schedule showing approximate timing of initial licensed operator training relative to fuel loading is addressed in Section 13.1. Requalification training is implemented in accordance with Section 13.4.
13.2-2-A	Training for Non-Licensed Plant Staff	This COL item is addressed in Section 13.2.2 and Appendix 13BB.
13.3-1-A	Identification of OSC and Communication Interfaces with Control Room and TSC	This COL Item is addressed in Section 13.3 and in Emergency Plan Sections II-F and II-H.
13.3-2-A	Identification of EOF and Communication Interfaces with Control Room and TSC	This COL item is addressed in Section 13.3 and in Emergency Plan Sections II-F and II-H.
13.3-3-A	Decontamination Facilities	This COL item is addressed in Section 13.3 and in Emergency Plan Section II-J.
13.4-1-A	Operation Programs	This COL item is addressed in Section 13.4.
13.4-2-A	Implementation Milestones	This COL item is addressed in Section 13.4.
13.5-1-A	Administrative Procedures Development Plan	Administrative procedures are developed in accordance with the nominal schedule presented in Table 13.5-202.
13.5-2-A	Plant Operating Procedures Development Plan	Operating Procedures are developed in accordance with Section 13.5.2.1 and Maintenance Procedures are developed in accordance with Section 13.5.2.2.6.1.
13.5-3-A	Emergency Procedures Development	Operating Procedures are developed in accordance with Section 13.5.2.1 and Maintenance Procedures are developed in accordance with Section 13.5.2.2.6.1.

COL Items	Title	Description
13.5-5-A	Procedures Included in Scope of Plan	The format and content of procedures are controlled by administrative procedure(s). Procedures are organized to include the following components, as necessary: • Title Page • Table of Contents • Scope and Applicability • Responsibilities • Prerequisites • Precautions and Limitations • Main Body • Acceptance Criteria • Check-off Lists • References
13.5-5-A	Procedures Included in Scope of Plan	The format and content of procedures are controlled by administrative procedure(s). Procedures are organized to include the following components, as necessary: • Title Page • Table of Contents • Scope and Applicability • Responsibilities • Prerequisites • Precautions and Limitations • Main Body • Acceptance Criteria • Check-off Lists • References
13.5-6-H	Procedures for Calibration, Inspection, and Testing	The licensee will demonstrate through a one time test, analysis, or a combination of tests and analyses, that no single postulated security event will disable the capability of both the Central and Secondary Alarm Stations. This demonstration will be completed prior to the milestone for Physical Security Plan implementation (Table 13.4-201).

COL Items	Title	Description
13.6-6-A	Key Control	A key control program will be developed and implemented prior to the milestone for Physical Security Plan implementation (Table 13.4-201).
13.6-7-A	Secondary Alarm Station Design	Physical Security Plan
13.6-8-H	CAS and SAS Redundancy	The licensee will demonstrate through a one time test, analysis, or a combination of tests and analyses, that no single postulated security event will disable the capability of both the Central and Secondary Alarm Stations. This demonstration will be completed prior to the milestone for Physical Security Plan implementation (Table 13.4-201).
13.6-9-A	Operational Alarm Response Procedures	Operating alarm response procedures will be developed and implemented in accordance with milestone defined in Section 13.5.2.1.
13.6-10-A	Operational Surveillance Test Procedures	The establishment of these surveillance test procedures and frequencies will be completed in accordance with the milestone for Physical Security Plan implementation (Table 13.4-201).
13.6-11-A	Maintenance Test Procedures	The establishment of these testing and maintenance milestones will be completed in accordance with the milestone for Physical Security Plan implementation (Table 13.4-201).
13.6-12-A	Operational Response Procedures to Security Events	As part of the Security Plan, the licensee will develop an integrated response strategy to a confirmed security event that provides for manual actuation of plant systems by the operators to an evolving scenario necessitating escalating operator response. This action will be completed prior to the milestone for Physical Security Plan implementation (Table 13.4-201).
13.6-13-A	Operational Alarm Response Procedures	This action will be completed prior to the milestone for Physical Security Plan implementation (Table 13.4-201).
13.6-14-A	Administrative Controls to Sensitive Cabinets	Administrative procedures will be developed prior to the milestone for Physical Security Plan implementation (Table 13.4-201) to control work being performed in cabinets containing the control circuitry (contact elements) for the systems listed in Table 4-1 of NEDE-33391.

COL Items	Title	Description
13.6-15-A	Administrative Controls to Sensitive Cabinets	Administrative procedures will be developed prior to the milestone for Physical Security Plan implementation (Table 13.4-201) that will require two persons, each of whom are qualified to perform the intended work, to be present during the performance of any work on systems listed in Table 4-1 of NEDE-33391.
14.2-1-A	Description—Initial Test Program Administration	In FSAR Section 14.2.2.1, "Startup Administrative Manual (SAM)," the applicant provided the following: "A description of the ITP administration is provided in Appendix 14AA. The SAM will be developed and made available to the NRC 60 days prior to scheduled start of the preoperational test program."
14.2-2-H	Startup Administrative Manual	In FSAR Section 14.2.2.1, "Startup Administrative Manual (SAM)," the applicant provided the following: "A description of the ITP administration is provided in Appendix 14AA. The SAM will be developed and made available to the NRC 60 days prior to scheduled start of the preoperational test program."
14.2-3-H	Test Procedures	In FSAR Section 14.2.2.2, "Test Procedures," the applicant provided the following: "Approved test procedures for satisfying the commitments of this section will be developed and available for review no later than 60 days prior to their intended use for preoperational tests and no later than 60 days prior to scheduled fuel loading for power ascension tests."
14.2-4-H	Test Program Schedule and Sequence	In FSAR Section 14.2.7, "Test Program Schedule and Sequence," the applicant provided the following: "The detailed testing schedule will be developed and made available for review prior to actual implementation. The schedule may be updated and continually optimized to reflect actual progress and subsequent revised projections. The implementation milestones for the ITP are provided in Section 13.4."
14.2-5-A	Site Specific Tests	In FSAR Section 14.2.9, "Site Specific Preoperational and Startup Tests," the applicant addressed the following two COL items for site specific test procedures:
14.2-6-H	Site Specific Test Procedures	In FSAR Section 14.2.9, "Site Specific Preoperational and Startup Tests," the applicant addressed the following two COL items for site specific test procedures:

COL Items	Title	Description
14.3-1-A	Emergency Planning ITAAC	The requirements for inclusion of Emergency Planning ITAAC (EP-ITAAC) in a COLA are provided in 10 CFR 52.80(a). In SRM-SECY-05-0197, the NRC-approved generic EP-ITAAC for use in COL and ESP applications. This set of EP-ITAAC was considered in the development of the plant-specific EP-ITAAC, which are tailored to the ESBWR design. The plant-specific EP-ITAAC are included in a separate part of the COLA.
14.3-2-A	Site Specific ITAAC	In Section 14.3.9, "Site Specific ITAAC," the applicant stated the following: The selection criteria and methodology provided in this section of the referenced DCD were utilized as the site specific selection criteria and methodology for ITAAC.
14.3A-1-1	Establish a Schedule for Design Acceptance Criteria ITAAC Closure	In Appendix 14.3A, "Design Acceptance Criteria ITAAC Closure Process," Section 14.3A.1, "Design Acceptance Criteria ITAAC Closure Options," the applicant stated, "Unit 3 is scheduled to be the first standard ESBWR plant licensed and will use the standard approach. A Design Acceptance Criteria ITAAC closure schedule will be provided for Unit 3 within one year after ESBWR design certification."
16.0-1-A	COL Applicant Bracketed Items	The applicant provided additional information in Part 4 of the COL application of the North Anna Unit 3 COL application to address DCD COL Item 16.0-1-A. The applicant replaced information denoted by brackets in the GTS with the site-specific information.
16.0-2-H	COL Holder Bracketed Items	The applicant provided additional information in Part 4 of the COL application of the North Anna Unit 3 COL application to address DCD COL Item 16.0-2-H. The applicant replaced information denoted by brackets in the GTS with the site-specific information.
17.2-1-A	QA Program for the Construction and Operations Phases	The applicant provided additional information to address DCD COL Items 17.2-1-A and 17.2-2-A. The applicant indicated that the QA program in place during the construction and operations phases, including adapting the design to specific plant implementation, is described in Section 17.5 of the North Anna 3 COL FSAR.

COL Items	Title	Description
17.2-2-A	QA Program for Design Activities	The applicant provided additional information to address DCD COL Items 17.2-1-A and 17.2-2-A. The applicant indicated that the QA program in place during the construction and operations phases, including adapting the design to specific plant implementation, is described in Section 17.5 of the North Anna 3 COL FSAR.
17.3-1-A	Quality Assurance Program Document	This COL Item is addressed in Section 17.3.
17.4-1-H	Operation Reliability Assurance Activities	The applicant provided additional information in STD COL 17.4-1-H. The COL information item requires the applicant to address the operation reliability assurance activities. The applicant provided supplemental information in Section 17.4.1 of the COL FSAR to describe the operational reliability assurance activities.
18.13-1-H	Milestone for HPM Implementation	The COL Holder is responsible to provide a milestone for the implementation of the HPM program. The applicant indicated that an HPM program will be implemented prior to the beginning of the first licensed operator training class.
19.2.6-1-H	Seismic High Confidence Low Probability of Failure Margins	In FSAR Section 19.2.3.2.4, the applicant provided supplementary information to address DCD COL Item 19.2.6-1-H. The applicant stated that an analysis of as-built structure, system, and component (SSC) high confidence low probability of failure (HCLPF) will be performed prior to fuel load and will be compared to those assumed in the ESBWR seismic margin analysis to determine if any new vulnerabilities have been introduced.