EPR COLA Matrix

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
1	**General and Financial Requirements**		
1.1	General Information	N/A	S
1.2	Financial Qualifications	N/A	S
1.3	Decommissioning Funding Assurance	N/A	G/S
1.4	Foreign Ownership/Control	N/A	S
2	**FSAR**		
1	Introduction and General Description of the Plant	X	G
1.1	Introduction	X(1)	G/S
1.1.1	Plant Location	0	S
1.1.2	Containment Type	X	G
1.1.3	Reactor Type	X	G
1.1.4	Power Output	X	G
1.1.5	Schedule	0	S
1.1.6	Format and Content	0	G
1.1.7	References	0	G
1.2	General Plant Description	X(1)	G/S
1.2.1	Principal Design Criteria, Operating Characteristics, Safety Considerations	X	G
1.2.2	Site Description	X(1)	G/S
1.2.3	Plant Description	X(1)	G/S
1.3	Comparisons with Similar Facility Designs	X	G
1.4	Identification of Agents and Contractors	X	G/S
1.4.1	Applicant - Program Manager	0	S
1.4.2	Other Contractors and Participants	X(1)	S
1.5	Requirements for Further Technical Information	X	G
1.6	Material Referenced	X(1)	G/S
1.7	Drawings and Other Detailed Information	X	G
1.7.1	Electrical and Instrumentation and Control Drawings	X(1)	G/S
1.7.2	Piping and Instrumentation Diagrams	X(1)	G/S
1.8	Interfaces with Standard Designs and Early Site Permits	X(1)	G/S
1.9	Conformance with Regulatory Criteria	X(1)	G
1.9.1	Compliance with Regulatory Guides	X(1)	G/S
1.9.2	Conformance with Standard Review Plan	X(1)	G/S
1.9.3	Generic Issues	X(1)	G/S
1.9.4	Operational Experience (Generic Communications)	X(1)	G/S
1.9.5	Advanced and Evolutionary Light Water Reactor Design Issues	X(1)	G
1.9.6	References	0	G
2	Site Characteristics	0	S

Deleted
Added
Changed

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
2.2.3	Evaluation of Potential Accidents	0	S
2.2.4	References	0	S
2.3	Meteorology	0	S
2.3.1	Regional Climatology	0	S
2.3.2	Local Meteorology	0	S
2.3.3	Onsite Meteorological Measurement Program	0	S
2.3.4	Short-Term Atmospheric Dispersion Estimates for Accident Release	0	S
2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Release	0	S
2.4	Hydrologic Engineering	0	S
2.4.1	Hydrologic Description	0	S
2.4.2	Floods	0	S
2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers	0	S
2.4.4	Potential Dam Failures, Seismically Induced	0	S
2.4.5	Probable Maximum Surge and Seiche Flooding	0	S
2.4.6	Probable Maximum Tsunami Flooding	0	S
2.4.7	Ice Effects	0	S
2.4.8	Cooling Water Canals and Reservoirs	0	S
2.4.9	Channel Diversions	0	S
2.4.10	Flooding Protection Requirements	0	S
2.4.11	Low Water Considerations	0	S
2.4.12	Groundwater	0	S
2.4.13	Pathways of Liquid Effluents in Ground and Surface Water	0	S
2.4.14	Technical Specification and Emergency Operation Requirements	0	S
~~2.4.15~~	~~References~~	~~0~~	~~S~~
2.5	Geology, Seismology, and Geotechnical Engineering	0	S
2.5.1	Basic Geologic and Seismic Information	0	S
2.5.2	Vibratory Ground Motion	0	S
2.5.3	Surface Faulting	0	S
2.5.4	Stability of Subsurface Materials and Foundations	0	S
2.5.5	Stability of Slopes	0	S
2.5.6	References	0	S
3	Design of Components, Equipment and Systems	0	G
3.1	Compliance with Nuclear Regulatory Commission General Design Criteria	X	G
3.1.1	Overall Requirements	X (1)	G

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
3.2.1	Seismic Classification	X(1)	G/S
3.2.2	System Quality Group Classifications	X(1)	G/S
3.2.3	References	X(1)	G/S
3.3	Wind and Tornado Loadings	X(1)	G/S
3.3.1	Wind Loadings	X(1)	G/S
3.3.2	Tornado Loadings	X(1)	G/S
3.3.3	References	X(1)	G/S
3.4	Water Level (Flood) Design	X(1)	G/S
3.4.1	Internal Flood Protection	X	G
3.4.2	External Flood Protection	X(1)	G/S
3.4.3	Analysis of Flooding Events	X(1)	G/S
3.4.4	Analysis Procedures	X	G
3.4.5	References	X(1)	G/S
3.5	Missile Protection	X	G
3.5.1	Missile Selection and Description	X(1)	G/S
3.5.2	Structures, Systems, and Components to be Protected from Externally Generated Missiles.	X(1)	G/S
3.5.3	Barrier Design Procedures	X	G
3.5.4	References	X(1)	G/S
3.6	Protection Against Dynamic Effects Associated with Postulated Rupture of Piping	X	G
3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside of Containment	X (1)	G/S
3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	X (1)	G/S
3.6.3	Leak-Before-Break Evaluation Procedures	X (1)	G/S
~~3.6.4~~	~~References~~	~~X(1)~~	~~G/S~~
3.7	Seismic Design	X	G
3.7.1	Seismic Design Parameters	0	G/S
3.7.2	Seismic System Analysis	0	G/S
3.7.3	Seismic Subsystem Analysis	X (1)	G/S
3.7.4	Seismic Instrumentation	X (1)	G/S
~~3.7.5~~	~~References~~	~~X(1)~~	~~G/S~~
3.8	Design of Category 1 Structures	X	G
3.8.1	Concrete Containment	X (1)	G/S
3.8.2	Steel Containment	X	G
3.8.3	Concrete and Steel Internal Structures of Concrete Containments	X (1)	G
3.8.4	Other Seismic Category 1 Structures	X (1)	G/S

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
3.9.4	Control Rod Drive Systems	X	G
3.9.5	Reactor Pressure Vessel Internals	X	G
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves and Dynamic Restraints	X (1)	G/S
~~3.9.7~~	~~References~~	~~X(1)~~	~~G/S~~
3.10	Seismic and Dynamic Qualification of Mechanical and Electrical Equipment	X (1)	G/S
3.10.1	Seismic Qualification Criteria	X (1)	G/S
3.10.2	Methods and Procedures for Qualifying Mechanical, Electrical and I&C Equipment	X (1)	G/S
3.10.3	Methods and Procedures for Qualifying Supports of Mechanical and Electrical Equipment and Instrumentation	X	G
3.10.4	Test And Analysis Results and Experience Database	X (1)	G/S
3.10.5	References	X(1)	G/S
3.11	Environmental Qualification of Mechanical and Electrical Equipment	X (1)	G/S
3.11.1	Equipment Identification and Environmental Conditions	X (1)	G/S
3.11.2	Qualification Tests and Analysis	X	G
3.11.3	Qualification Test Results	X (1)	G/S
3.11.4	Loss of Ventilation	X	G
3.11.5	Estimated Chemical and Radiation Environment	X	G
3.11.6	Qualification of Mechanical Equipment	X	G
3.11.7	References	X(1)	G/S
3.12	ASME Code Class 1, 2 and 3 Piping Systems, Piping Components, and Their Associated Supports	X (1)	G/S
3.13	Threaded Fasteners (ASME Code Class 1, 2, and 3)	X (1)	G/S
App 3A	Criteria for Distribution System Analysis and Support	X	G
App 3B	Dimensional Arrangement Drawings	X	G
App 3C	Reactor Coolant System Structural Analysis Methods	X	G
App 3D	Methodology for Qualifying Safety-Related Electrical and Mechanical Equipment	X	G
~~App 3D, Attach A~~	~~Sample Equipment Qualification Data Package~~	~~X~~	~~G~~
~~App 3D, Attach B~~	~~Aging Evaluation Program~~	~~X~~	~~G~~
~~App 3D,~~	~~Effects of Gamma Radiation Doses Below 10^4 Rads on~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
4.2	Fuel System Design	X	G
~~4.2.1~~	~~Design Bases~~	~~X~~	~~G~~
~~4.2.2~~	~~Description and Design Drawings~~	~~X~~	~~G~~
~~4.2.3~~	~~Design Evaluation~~	~~X~~	~~G~~
~~4.2.4~~	~~Testing and Inspection Plan~~	~~X(1)~~	~~G~~
~~4.2.5~~	~~References~~	~~X~~	~~G~~
4.3	Nuclear Design	X	G
~~4.3.1~~	~~Design Bases~~	~~X~~	~~G~~
~~4.3.2~~	~~Description~~	~~X~~	~~G~~
~~4.3.3~~	~~Analytical Methods~~	~~X~~	~~G~~
~~4.3.4~~	~~Changes~~	~~X~~	~~G~~
~~4.3.5~~	~~References~~	~~X~~	~~G~~
4.4	Thermal and Hydraulic Design	X	G
~~4.4.1~~	~~Design Bases~~	~~X~~	~~G~~
~~4.4.2~~	~~Description of Thermal and Hydraulic Design of the Reactor Core~~	~~X~~	~~G~~
~~4.4.3~~	~~Description of Thermal and Hydraulic Design of the Reactor Coolant System~~	~~X~~	~~G~~
~~4.4.4~~	~~Evaluation~~	~~X~~	~~G~~
~~4.4.5~~	~~Testing and Verification~~	~~X~~	~~G~~
~~4.4.6~~	~~Instrumentation Requirements~~	~~X~~	~~G~~
~~4.4.7~~	~~References~~	~~X~~	~~G~~
4.5	Reactor Materials	X	G
~~4.5.1~~	~~Control Rod Drive System Structural Materials~~	~~X~~	~~G~~
~~4.5.2~~	~~Reactor Internal and Core Support Materials~~	~~X~~	~~G~~
~~4.5.3~~	~~References~~	~~X~~	~~G~~
4.6	Functional Design of Reactivity Control Systems	X	G
~~4.6.1~~	~~Information for Control Rod Drive System~~	~~X~~	~~G~~
~~4.6.2~~	~~Evaluations of the Control Rod Drive System~~	~~X~~	~~G~~
~~4.6.3~~	~~Testing and Verification of the Control Rod Drive System~~	~~X~~	~~G~~
~~4.6.4~~	~~Information for Combined Performance of Reactivity Systems~~	~~X~~	~~G~~
~~4.6.5~~	~~Evaluations for Combined Performance~~	~~X~~	~~G~~
~~4.6.6~~	~~References~~	~~X~~	~~G~~
5	Reactor Coolant Systems and Connected Systems	X	G
5.1	Summary Description	X	G
~~5.1.1~~	~~Schematic Flow Diagram~~	~~X~~	~~G~~
~~5.1.2~~	~~Piping and Instrumentation Diagram~~	~~X~~	~~G~~
~~5.1.3~~	~~Elevation Drawing~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	X	G
5.2.6	References	X (1)	G/S
5.3	Reactor Vessel	X	G
5.3.1	Reactor Vessel Materials	X (1)	G/S
5.3.2	Pressure-Temperature Limits, Pressurized Thermal Shock, and Charpy Upper Shelf Energy Data and Analyses	X (1)	G/S
5.3.3	Reactor Vessel Integrity	X	G
5.3.4	References	X (1)	G/S
5.4	Component and Subsystem Design	X	G
5.4.1	Reactor Coolant Pumps	X	G
5.4.2	Steam Generators	X (1)	G/S
5.4.3	Reactor Coolant Piping	X	G
5.4.4	Not Used in U.S. EPR Design	N/A	N/A
5.4.5	Not Used in U.S. EPR Design	N/A	N/A
5.4.6	Not Used in U.S. EPR Design	N/A	N/A
5.4.7	Residual Heat Removal System	X	G
5.4.8	Not Used in U.S. EPR Design	N/A	N/A
5.4.9	Not Used in U.S. EPR Design	N/A	N/A
5.4.10	Pressurizer	X	G
5.4.11	Pressurizer Relief Tank (PWR)	X	G
5.4.12	Reactor Coolant System High Point Vents	X	G
5.4.13	Safety and Relief Valves	X	G
5.4.14	Component Supports	X	G
5.4.15	References	X(1)	G/S
6	Engineered Safety Features	X	G
6.1	Engineered Safety Feature Materials	X(1)	G/S
6.1.1	Metallic Materials	X(1)	G/S
6.1.2	Organic Materials	X(1)	G/S
6.1.3	References	X(1)	G/S
6.2	Containment Systems	X	G
6.2.1	Containment Functional Design	X	G
6.2.2	Containment Heat Removal System	X	G
6.2.3	Secondary Containment Functional Design	X	G
6.2.4	Containment Isolation System	X	G
6.2.5	Combustible Gas Control in Containment	X	G
6.2.6	Containment Leakage Testing	X(1)	G/S
6.2.7	Fracture Prevention of Containment Pressure Vessel	X	G
6.2.8	References	X(1)	G/S

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
6.4.1	Design Bases	X(1)	G/S
6.4.2	System Design	X(1)	G/S
6.4.3	System Operational Procedures	X(1)	G/S
6.4.4	Design Evaluations	X(1)	G/S
6.4.5	Testing and Inspection	X	G
6.4.6	Instrumentation Requirements	X(1)	G/S
6.4.7	References	X(1)	G/S
6.5	Fission Product Removal and Control Systems	X	G
~~6.5.1~~	~~Engineered Safety Feature (ESF) Filter Systems~~	~~X~~	~~G~~
~~6.5.2~~	~~Containment Spray Systems~~	~~X~~	~~G~~
~~6.5.3~~	~~Fission Product Control Systems~~	~~X~~	~~G~~
~~6.5.4~~	~~References~~	~~X~~	~~G~~
6.6	Inservice Inspection of Class 2 and 3 Components	X(1)	G/S
6.6.1	Components Subject to Examination	X(1)	G/S
6.6.2	Accessibility	X	G
6.6.3	Examination Techniques and Procedures	X	G
6.6.4	Inspection Intervals	X(1)	G/S
6.6.5	Examination Categories and Requirements	X	G
6.6.6	Evaluation of Examination Results	X	G
6.6.7	System Pressure Tests	X	G
6.6.8	Augmented ISI to Protect against Postulated Piping Failures	X	G
6.6.9	References	X(1)	G/S
6.7	Main Steam Line Isolation Valve leakage Control System (BWR)	N/A	N/A
6.8	Extra Borating System	X	G
7	Instrumentation and Controls	X	G
~~7.1~~	~~Introduction~~	~~X~~	~~G~~
~~7.1.1~~	~~Identification of Safety Related Systems~~	~~X~~	~~G~~
~~7.1.2~~	~~Identification of Safety Criteria~~	~~X(1)~~	~~G~~
~~7.1.3~~	~~Plant Control Systems~~	~~X~~	~~G~~
~~7.1.4~~	~~References~~	~~X~~	~~G~~
7.2	Reactor Trip System	X	G
~~7.2.1~~	~~Description~~	~~X~~	~~G~~
~~7.2.2~~	~~Analysis~~	~~X~~	~~G~~
~~7.2.3~~	~~References~~	~~X~~	~~G~~
7.3	Engineered Safety Feature Systems	X	G
~~7.3.1~~	~~Description~~	~~X~~	~~G~~
~~7.3.2~~	~~Analysis~~	~~X~~	~~G~~
~~7.3.3~~	~~References~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
7.6	Interlock Systems Important to Safety	X	G
~~7.6.1~~	~~Description~~	~~X~~	~~G~~
~~7.6.2~~	~~Analysis~~	~~X~~	~~G~~
~~7.6.3~~	~~References~~	~~X~~	~~G~~
7.7	Control Systems not Required for Safety	X	G
~~7.7.1~~	~~Description~~	~~X~~	~~G~~
~~7.7.2~~	~~Design Basis Information~~	~~X~~	~~G~~
~~7.7.3~~	~~Analysis~~	~~X~~	~~G~~
~~7.7.4~~	~~References~~	~~X~~	~~G~~
7.8	Diverse I&C Systems	X	G
~~7.8.1~~	~~System Description~~	~~X~~	~~G~~
~~7.8.2~~	~~Analysis~~	~~X~~	~~G~~
~~7.8.3~~	~~References~~	~~X~~	~~G~~
7.9	Data Communication Systems	X	G
~~7.9.1~~	~~System Description~~	~~X~~	~~G~~
~~7.9.2~~	~~Design Basis Information~~	~~X~~	~~G~~
~~7.9.3~~	~~Analysis~~	~~X~~	~~G~~
~~7.9.4~~	~~References~~	~~X~~	~~G~~
8	Electric Power	X	G
8.1	Introduction	X(1)	G/S
8.1.1	Offsite Power Description	X(1)	G/S
8.1.2	Onsite Power System Description	X	G
8.1.3	Safety-Related Loads	X(1)	G/S
8.1.4	Design Basis	X(1)	G/S
8.1.5	References	X(1)	G/S
8.2	Offsite Power System	X(1)	G/S
8.2.1	Description	X(1)	G/S
8.2.2	Analysis	X(1)	G/S
8.2.3	References	X(1)	G/S
8.3	Onsite Power Systems	X(1)	G/S
8.3.1	Alternating Current Power Systems	X(1)	G/S
8.3.2	DC Power Systems	X	G
8.3.3	References	X(1)	G/S
8.4	Station Blackout	X(1)	G/S
8.4.1	Description	X(1)	G/S
8.4.2	Analysis	X(1)	G/S
8.4.3	References	X(1)	G/S
9	Auxiliary Systems	X	G
9.1	Fuel Storage and Handling	X	G
~~9.1.1~~	~~New Fuel Storage~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
9.2.1	Essential Service Water System	X(1)	G/S
9.2.2	Component Cooling Water System	X	G
9.2.3	Demineralized Water Distribution System	X	G
9.2.4	Potable and Sanitary Water Systems	X(1)	G/S
9.2.5	Ultimate Heat Sink	X(1)	G/S
9.2.6	Condensate Storage Facilities	X	G
~~9.2.7~~	~~Plant Drainage System~~	~~X(1)~~	~~G/S~~
9.2.7	Seal Water Supply System	X	G
9.2.8	Safety Chilled Water System	X	G
~~9.2.9~~	~~Operational Chilled Water System~~	~~X~~	~~G~~
~~9.2.10~~	~~Service Water System (Conventional)~~	~~X(1)~~	~~G/S~~
9.2.9	Raw Water Supply System	X(1)	S
~~9.2.13~~	~~References~~	~~X(1)~~	~~G/S~~
9.3	Process Auxiliaries	X	G
~~9.3.1~~	~~Compressed Air Systems~~	~~X~~	~~G~~
~~9.3.2~~	~~Process and Post Accident Sampling Systems~~	~~X~~	~~G~~
~~9.3.3~~	~~Equipment and Floor Drainage System~~	~~X~~	~~G~~
~~9.3.4~~	~~Chemical and Volume Control System (Including Boron Recovery System) (PWR)~~	~~X~~	~~G~~
~~9.3.5~~	~~Standby Liquid Control System (BWR)~~	~~N/A~~	~~N/A~~
~~9.3.6~~	~~References~~	~~X~~	~~G~~
9.4	Air Conditioning, Heating, Cooling and Ventilation Systems	X	G
9.4.1	Main Control Room Air Conditioing System	X(1)	G/S
9.4.2	Fuel Building Ventilation System	X	G
9.4.3	Nuclear Auxiliary Building Ventilation System	X	G
9.4.4	Turbine Building Ventilation	X	G
9.4.5	Safeguard Building Controlled-Area Ventilation System	X	G
9.4.6	Electrical Division of Safeguard Building Ventilation System	X	G
9.4.7	Containment Building Ventilation System	X	G
9.4.8	Radioactive Waste Building Ventilation System	X	G
9.4.9	Emergency Power Generating Building Ventilation Systems	X	G
9.4.10	Switchgear Building Ventilation System	X	G
9.4.11	Essential Service Water Pump Building Ventilation System	X(1)	G/S
~~9.4.12~~	~~Ventilation System for Circulating Water Pump Building~~	~~X(1)~~	~~G/S~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
9.5.1	Fire Protection Systems	X(1)	G/S
9.5.2	Communication Systems	X(1)	G/S
9.5.3	Lighting System	X	G
9.5.4	Diesel Generator Fuel Oil Storage and Transfer System	X	G/S
9.5.5	Diesel Generator Cooling Water System	X	G/S
9.5.6	Diesel Generator Starting Air System	X	G/S
9.5.7	Diesel Generator Lubricating System	X	G/S
9.5.8	Diesel Generator Air Intake and Exhaust System	X	G/S
~~9.5.9~~	~~References~~	~~X (1)~~	~~G~~
App 9A	Fire Protection Analysis	X (1)	G/S
App 9B	Fire Protection Analysis -- Plant Specific Supplement	0	S
10	Steam and Power Conversion System	X (1)	G
10.1	Summary Description	X	G
~~10.1.1~~	~~General Description~~	~~X~~	~~G~~
~~10.1.2~~	~~Protective Features~~	~~X~~	~~G/S~~
~~10.1.3~~	~~References~~	~~X(1)~~	~~G/S~~
10.2	Turbine-Generator	X(1)	G/S
10.2.1	Design Bases	X	G
10.2.2	General Description	X	G
10.2.3	Turbine Rotor Integrity	X(1)	G/S
10.2.4	Safety Evaluation	X	G
10.2.5	References	X(1)	G/S
10.3	Main Steam Supply System	X	G
10.3.1	Design Bases	X	G
10.3.2	Description	X	G
10.3.3	Safety Evaluation	X	G
10.3.4	Inspection and Testing Requirements	X	G
10.3.5	Secondary Side Water Chemistry Program	X (1)	G/S
10.3.6	Steam and Feedwater System Materials	X (1)	G/S
10.3.7	References	X (1)	G/S
10.4	Other Features of Steam and Power Conversion System	X	G
10.4.1	Main Condensers	X (1)	G/S
10.4.2	Main Condenser Evacuation System	X	G
10.4.3	Turbine Gland Sealing System	X	G
10.4.4	Turbine Bypass System	X	G
10.4.5	Circulating Water System	X(1)	G/S
10.4.6	Condensate Polishing System	X	G
10.4.7	Condensate and Feedwater System	X	G

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
~~11.1.2~~	~~Design Basis Secondary Coolant Activity~~	~~X~~	~~G~~
~~11.1.3~~	~~Realistic Reactor Coolant and Secondary Coolant Activity~~	~~X~~	~~G~~
~~11.1.4~~	~~Core Source Term~~	~~X~~	~~G~~
~~11.1.5~~	~~Process Leakage Sources~~	~~X~~	~~G~~
~~11.1.6~~	~~References~~	~~X~~	~~G~~
11.2	Liquid Waste Management Systems	X	G
~~11.2.1~~	~~Design Bases~~	~~X~~	~~G~~
~~11.2.2~~	~~System Description~~	~~X(1)~~	~~G/S~~
~~11.2.3~~	~~Radioactive Releases~~	~~X(1)~~	~~G/S~~
~~11.2.4~~	~~References~~	~~X(1)~~	~~G/S~~
11.3	Gaseous Waste Management Systems	X	G
~~11.3.1~~	~~Design Bases~~	~~X~~	~~G~~
~~11.3.2~~	~~System Description~~	~~X~~	~~G~~
~~11.3.3~~	~~Radioactive Releases~~	~~X (1)~~	~~G/S~~
~~11.3.4~~	~~References~~	~~X(1)~~	~~G/S~~
11.4	Solid Waste Management System	X	G
11.4.1	Design Bases	X	G
11.4.2	System Description	X	G
11.4.3	Radioactive Releases	X (1)	G/S
11.4.4	Solid Waste Management System Cost-Benefit Analysis	X	G
11.4.5	Failure Tolerance	X	G
11.4.6	References	X(1)	G/S
11.5	Process and Effluent Radiological Monitoring and Sampling Systems	X	G
11.5.1	Design Bases	X	G
11.5.2	System Description	X (1)	G/S
11.5.3	Effluent Monitoring and Sampling	X	G
11.5.4	Process Monitoring and Sampling	X	G
~~11.5.5~~	~~Post Accident Radiation Monitoring~~	~~X~~	~~G~~
11.5.5	References	X (1)	G/S
12	Radiation Protection	X	G
12.1	Ensuring that Occupational Radiation Exposures are As Low As Reasonably Achievable (ALARA)	X	G
12.1.1	Policy Considerations	X	G
12.1.2	Design Considerations	X	G
12.1.3	Operational Considerations	X(1)	G

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
12.3.3	Ventilation	X	G
12.3.4	Area Radiation and Airborne Radioactivity Monitoring Instrumentation	X (1)	G
12.3.5	Dose Assessment	X(1)	G/S
12.3.6	Minimization of Contamination	X	G
12.3.7	References	X(1)	G/S
12.4	Dose Assessment	X	G
12.5	Operational Radiation Protection Program	X(1)	G
~~12.4.1~~	~~Organization~~	~~0~~	~~G~~
~~12.4.2~~	~~Equipment, Instrumentation, and Facilities~~	~~X(1)~~	~~G/S~~
~~12.4.3~~	~~Procedures~~	~~X(1)~~	~~G/S~~
~~12.4.4~~	~~References~~	~~X(1)~~	~~G/S~~
13	Conduct of Operations	0	G/S
13.1	Organizational Structure of the Applicant	X(1)	G/S
13.1.1	Management and Technical Support Organization	0	G/S
13.1.2	Operating Organization	0	G/S
13.1.3	Qualifications of Nuclear Power Plant Personnel	0	G/S
13.2	Training	X(1)	G/S
~~13.2.1~~	~~Plant Staff Training Program~~	~~0~~	~~G/S~~
13.2.1	Input to Section 1 of NEI 06-13A	0	G
~~13.2.2~~	~~Applicable NRC Documents~~	~~0~~	~~G~~
13.2.2	Input to Section 1.1 of NEI 06-13A	0	G
13.2.3	Input to Section 1.6 of NEI 06-13A	0	G
13.2.4	References	0	G
13.3	Emergency Planning	0	G/S
~~13.3.1~~	~~Combined License Application and Emergency Plan Content~~	~~0~~	~~G/S~~
~~13.3.2~~	~~Emergency Plan Considerations for Multi-Unit Sites~~	~~0~~	~~G/S~~
~~13.3.3~~	~~Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria~~	~~0~~	~~G/S~~
13.4	Operational Program Implementation	0	G/S
~~13.4.1~~	~~Onsite Review~~	~~0~~	~~G/S~~
~~13.4.2~~	~~Independent Review~~	~~0~~	~~G/S~~
~~13.4.3~~	~~Audit Program~~	~~0~~	~~G/S~~
13.5	Plant Procedures	0	G/S
13.5.1	Administrative Procedures	0	G/S
13.5.2	Operating and Maintenance Procedures	0	G/S
13.5.3	References	0	G/S
13.6	Security	0	G/S
13.7	Fitness for Duty	0	G

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
14.2.6	Test Records	X	G
14.2.7	Conformance of Test Program with Regulatory Guides	X	G
14.2.8	Utilization of Reactor Operating and Testing Experience in Test Program Development	X(1)	G/S
14.2.9	Trial Use of Plant Operating and Emergency Procedures	X(1)	G
14.2.10	Initial Fuel Loading and Initial Criticality	X	G
14.2.11	Test Program Schedule	X(1)	G
14.2.12	Individual Test Descriptions	X(1)	G
14.2.13	References	X(1)	G/S
14.2.14	COL Applicant Site-Specific Tests	X(1)	G/S
14.3	Inspection, Test, Analyses, and Acceptance Criteria	X(1)	G/S
14.3.1	Tier 1, Chapter 1, Introduction	X	G
14.3.2	Tier 1, Chapter 2, System Based Design Descriptions and ITAAC	X(1)	G
14.3.3	Tier 1, Chapter 3, Non-System Based Design Descriptions and ITAAC	X	G
14.3.4	Tier 1, Chapter 4, Interface Requirements	X	G
14.3.5	Tier 1, Chapter 5, Site Parameters	X	G
14.3.6	References	X(1)	G/S
15	Transient and Accident Analyses	X	G
~~15.0~~	~~Introduction~~	~~X~~	~~G~~
15.0.1	Radiological Consequence Analysis	X	G
15.0.2	Transient and Accident Analysis Methods	X	G
15.0.3	Design Basis Accidents Radiological Consequences Analyes	X(1)	G/S
15.0.4	Post Chapter 15 Events Cooldown	X	G
15.0.5	Compliance with Section C.I.15, "Transient and Accident Analyses," of Regulatory Guide 1.206	X	G
15.0.6	References	X	G
15.1	Increase in Heat Removal by the Secondary System	X	G
~~15.1.1~~	~~Decrease in Feedwater Temperature as a Result of Feedwater System Malfunction~~	~~X~~	~~G~~
~~15.1.2~~	~~Increase in Feedwater Flow as a Result of Feedwater System Malfunction~~	~~X~~	~~G~~
~~15.1.3~~	~~Increase in Steam Flow as a Result of Steam Pressure Regulator Malfunction~~	~~X~~	~~G~~
~~15.1.4~~	~~Inadvertent Opening of a Steam Generator Relief or Safety Valve~~	~~X~~	~~G~~
~~15.1.5~~	~~Steam System Piping Failures Inside and Outside of~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
~~15.2.5~~	~~Steam Pressure Regulator Failure (closed)~~	~~X~~	~~G~~
~~15.2.6~~	~~Loss of Non-Emergency AC Power to the Station Auxiliaries~~	~~X~~	~~G~~
~~15.2.7~~	~~Loss of Normal Feedwater Flow~~	~~X~~	~~G~~
~~15.2.8~~	~~Feedwater System Piping Breaks Inside and Outside Containment~~	~~X~~	~~G~~
~~15.2.9~~	~~References~~	~~X~~	~~G~~
15.3	Decrease in Reactor Coolant System Flow Rate	X	G
~~15.3.1~~	~~Single and Multiple Reactor Coolant Pump Trips~~	~~X~~	~~G~~
~~15.3.2~~	~~Flow Controller Malfunctions (BWR)~~	~~N/A~~	~~N/A~~
~~15.3.3~~	~~Reactor Coolant Pump Shaft Seizure~~	~~X~~	~~G~~
~~15.3.4~~	~~Reactor Coolant Pump Shaft Break~~	~~X~~	~~G~~
~~15.3.5~~	~~References~~	~~X~~	~~G~~
15.4	Reactivity and Power Distribution Anomalies	X	G
~~15.4.1~~	~~Uncontrolled Rod Cluster Control Assembly Withdrawal from a Subcritical or Low-Power Startup Condition~~	~~X~~	~~G~~
~~15.4.2~~	~~Uncontrolled Control Rod Assembly Withdrawal at the Limiting Power Level~~	~~X~~	~~G~~
~~15.4.3~~	~~Control Rod Misoperation (System Malfunction or Operator Error)~~	~~X~~	~~G~~
~~15.4.4~~	~~Startup of an Inactive Reactor Coolant Pump at an Incorrect Temperature~~	~~X~~	~~G~~
~~15.4.5~~	~~Flow Controller Malfunction Causing an Increase in BWR Core Flow Rate~~	~~N/A~~	~~N/A~~
~~15.4.6~~	~~Chemical and Volume Control System Malfunction that Results in a Decrease in the Boron Concentration in the Reactor Coolant~~	~~X~~	~~G~~
~~15.4.7~~	~~Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position~~	~~X~~	~~G~~
~~15.4.8~~	~~Spectrum of Rod Cluster Ejection Accidents in a PWR~~	~~X~~	~~G~~
~~15.4.9~~	~~Spectrum of Rod Drop Accidents (BWR)~~	~~X~~	~~G~~
~~15.4.10~~	~~References~~	~~X~~	~~G~~
15.5	Increase in Reactor Coolant Inventory	X	G
~~15.5.1~~	~~Inadvertent Operation of ECCS System During Power Operation~~	~~X~~	~~G~~
~~15.5.2~~	~~Chemical and Volume Control System Malfunction (or Operator Error) that Increases Reactor Coolant Inventory~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
~~15.6.4~~	~~References~~	~~X~~	~~G~~
15.7	Radioactive Release from a Subsystem or Component	X	G
~~15.7.1~~	~~Postulated Radioactive Releases Attributable to a Liquid Tank Failure~~	~~X~~	~~G~~
~~15.7.2~~	~~Design Basis Fuel Handling Accidents in the Containment and Spent Fuel Storage Buildings~~	~~X~~	~~G~~
~~15.7.3~~	~~Spent Fuel Cask Drop Accidents~~	~~X~~	~~G~~
~~15.7.4~~	~~References~~	~~X~~	~~G~~
~~15.7.5~~	~~Spent Fuel Cask Drop Accidents~~	~~X~~	~~G~~
~~15.7.6~~	~~References~~	~~X~~	~~G~~
15.8	Anticipated Transients without SCRAM	X	G
~~15.8.1~~	~~General Background~~	~~X~~	~~G~~
~~15.8.2~~	~~Anticipated Transients without Scram~~	~~X~~	~~G~~
~~15.8.3~~	~~Conclusion~~	~~X~~	~~G~~
~~15.8.4~~	~~References~~	~~X~~	~~G~~
15.9	Boiling Water Reactor Stability	X	G
15.10	Spent Fuel Pool Criticality and Boron Dilution Analysis	X(1)	G/S
~~App 15A~~	~~Evaluation Models and Parameters for Analysis of Radiological Consequences of Accidents~~	~~X~~	~~G~~
~~App 15B~~	~~Removal of Airborne Activity from Containment Atmosphere following a LOCA~~	~~X~~	~~G~~
16	Technical Specifications	X(1)	G/S
17	Quality Assurance and Reliability Assurance	X(1)	G/S
17.1	Quality Assurance During Design	X	G
17.2	Quality Assurance During the Operations Phase	X(1)	G/S
17.3	Quality Assurance Program Description	X	G
17.4	Reliability Assurance Program Guidance	X(1)	G/S
~~17.4.1~~	~~Introduction~~	~~0~~	~~G~~
17.4.1	Reliability Assurance Program Scope, Stages, and Goals	X	G
17.4.2	Reliability Assurance Program Implementation	X(1)	G/S
17.4.3	Organization, Design Control, Procedures and Instructions, Corrective Actions, and Audit Plans	X	G
17.4.4	Reliability Assurance Program Information Needed in a COL Application	0	G
17.5	Quality Assurance Program Guidance	X	G
17.5.1	QA Program Responsibilities	0	S
17.5.2	Updated SRP Section 17.5 and the QA Program	0	G/S

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
17.6.3	Periodic Evaluation per 10 CFR 50.65(a)(3)	0	G/S
17.6.4	Risk Assessment and Management per 10 CFR 50.65(a)(4)	0	G/S
17.6.5	Maintenance Rule Training and Qualification	0	G/S
17.6.6	Maintenance Rule Program Role in Implementation of Reliability Assurance Program (RAP) in the Operations Phase	0	G/S
17.6.7	Maintenance Rule Program Implementation	0	G/S
17.6.8	References	0	G/S
18	Human Factors Engineering	X	G
18.1	Human Factors Engineering Program Management	X(1)	G/S
18.1.1	Human Factors Engineering Program Goals, Scope, Assumptions and Constraints	X(1)	G/S
18.1.2	Human Factors Engineering, and Control Room Design Team Organization	X	G
18.1.3	Human Factors Engineering Processes and Procedures	X	G
18.1.4	Human Factors Engineering Issues Tracking	X	G
18.1.5	Technical Program	X	G
18.1.6	References	X(1)	G/S
18.2	Operating Experience Review	X	G
~~18.2.1~~	~~Combined License Information~~	~~0~~	~~G/S~~
~~18.2.2~~	~~References~~	~~X(1)~~	~~G/S~~
18.3	Functional Requirements Analysis and Function Allocation	X	G
18.4	Task Analysis	X	G
~~18.4.1~~	~~Task Analysis Scope~~	~~X~~	~~G~~
~~18.4.2~~	~~Task Analysis Implementation Plan~~	~~X~~	~~G~~
~~18.4.3~~	~~Job Design Factors~~	~~X~~	~~G~~
~~18.4.4~~	~~References~~	~~X~~	~~G~~
18.5	Staffing and Qualifications	X (1)	G/S
18.6	Human Reliability Analysis	X	G
18.7	Human System Interface Design	X	G
~~18.7.1~~	~~Implementation Plan for the Human System Interface Design~~	~~X~~	~~G~~
~~18.7.2~~	~~Safety Parameter Display System (SPDS)~~	~~X~~	~~G~~
~~18.7.3~~	~~Operation and Control Centers System~~	~~X~~	~~G~~
~~18.7.4~~	~~Human Factors Design for the Non-Human System Interface Portion of the Plant~~	~~X~~	~~G~~
~~18.7.5~~	~~References~~	~~X~~	~~G~~

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
~~App 18A.2~~	~~Minimum Inventory of Main Control Room Fixed Displays, Alarms, and Controls~~	~~X~~	~~G~~
~~App 18A.3~~	~~Remote Shutdown Workstation Displays, Alarms, and Controls~~	~~X~~	~~G~~
~~App 18A.4~~	~~Appendix 18A.4 References~~	~~X~~	~~G~~
19	Probabalistic Risk Assessment and Severe Accident Evaluation	X(1)	G/S
~~19.1~~	~~Introduction~~	~~X~~	~~G~~
19.1	Probabalistic Risk Assessment	X	G
~~19.1.1~~	~~Purpose and Scope~~	~~X~~	~~G~~
19.1.1	Uses and Application of the PRA	X(1)	G/S
~~19.1.2~~	~~Regulatory Requirements~~	~~X~~	~~G~~
19.1.2	Quality of PRA	X(1)	G
~~19.1.3~~	~~NRC Safety Goals and Compliance~~	~~X~~	~~G~~
19.1.3	Special Design/Operational Features	X	G
19.1.4	Safety Insights from the Internal Events PRA for Operations at Power	X(1)	G/S
19.1.5	Safety Insights from the External Events PRA for Operations at Power	X(1)	G/S
19.1.6	Safety Insights from the PRA for Other Modes of Operation	X	G
19.1.7	PRA Related Input to Other Programs and Processes	X	G
19.1.8	Conclusions and Findings	X	G
19.1.9	References	X(1)	G/S
~~19.2~~	~~PRA Results and Insights~~	~~X~~	~~G~~
19.2	Severe Accident Evaluations	X	G
~~19.2.1~~	~~Introduction~~	~~X~~	~~G~~
~~19.2.2~~	~~Uses of the PRA~~	~~X(1)~~	~~G~~
~~19.2.3~~	~~Evaluation of Full Power Operations~~	~~X(1)~~	~~G~~
~~19.2.4~~	~~Evaluation of Other Modes of Operation~~	~~X(1)~~	~~G/S~~
~~19.2.5~~	~~Summary of Important Results and Insights~~	~~X(1)~~	~~G~~
~~19.3~~	~~Severe Accident Evaluations~~	~~X~~	~~G~~
19.3	Open, Confirmatory, and COL Action Items identified as Unresolved	X	G
~~19.3.1~~	~~Severe Accident Preventive Features~~	~~X(1)~~	~~G/S~~
~~19.3.2~~	~~Severe Accident Mitigative Features~~	~~X(1)~~	~~G/S~~
~~19.3.3~~	~~Improvements in Reliability of Core and Containment Heat Removal Systems~~	~~X(1)~~	~~G/S~~
~~19.3.4~~	~~Core Melt Stabilization System~~	~~X~~	~~G~~
~~19.3.5~~	~~Severe Accident Heat Removal System~~	~~X~~	~~G~~

EPR COLA Matrix

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
1	Risk Evaluation	X(1)	G/S
2	Inspections, Tests, Analyses and Acceptance Criteria (ITAAC)	N/A	G/S

Part Chapter Section Sub-Section	TITLE	DC Pointer (See notes in Footer)	Site Specific (S) Generic (G)
Part 3	Environmental Report		
1.0	Introduction		G/S
1.1	Proposed Action		G
1.2	Project Description		NA
1.2.1	Ownership and Applicant		S
1.2.2	Site Location		S
1.2.3	Reactor Information		G
1.2.4	Cooling System Information		G/S
1.2.5	Transmission System Information		S
1.2.6	Proposed Action and Constraints		S
1.2.7	Major Activity Start And Completion Dates		S
1.3	Status of Reviews, Approvals And Consultations		S
1.3.1	Federal Agencies		G/S
1.3.2	State Agencies		S
1.3.3	Local Agencies		S
2.0	Environmental Description		NA
2.1	Site Location		S
2.2	Land		NA
2.2.1	The Site and Vicinity		S
~~2.2.1.1~~	~~The Site~~		
~~2.2.1.2~~	~~Vicinity~~		
2.2.2	Transmission Corridors and Offsite Areas		NA
2.2.2.1	Existing Cooridors		S
2.2.2.2	Proposed Transmission Syastem Modification		S
2.2.2.3	Land Use		S
2.2.3	The Region		S
2.3	Water		NA
2.3.1	Hydrology		S
2.3.1.1	Surface Water Resources		S
2.3.1.2	Groundwater Resources		S
2.3.2	Water Use		S
2.3.2.1	Surface Water Use		S
2.3.2.2	Ground Water Use		S
2.3.3	Water Quality		S
2.3.3.1	Surface Water		S
2.3.3.2	Groundwater Resources		S
2.4	Ecology		NA
2.4.1	Terrestrial Ecology		G/S
2.4.1.1	Terrestial Habitats		G/S
2.4.1.2	Important Terrestrial Specicies and Habitats		S
2.4.1.3	Habitat Importance		S
2.4.1.4	Disease Vector and Pest Species		G/S
2.4.1.5	Wildlife Travel Cooridors		G/S
2.4.1.6	Existing Natural and Man-Induced Ecologoical Effects		S
2.4.1.7	Ongoing Ecological and Biological Studies		S
2.4.1.8	Regulatory Consultation		S

2.4.1.9	Offsite Transmission and Access Corridors		S
~~2.4.1.2~~	~~Transmission Corridor Habitats and Communities~~		
2.4.2	Aquatic Ecology		NA
2.4.2.1	Aquatic Habitats		S
2.4.2.2	Identification of Important Estuarine Specifies		G/S
2.4.2.3	Habitat Importance		S
2.4.2.4	Other Preexisting Environment Stresses		S
2.4.2.5	Transmission and Access Cooridors		S
~~2.4.2.1~~	~~Surface Water (Chesapeake Bay)~~		
~~3.2.4.1.2~~	~~Transmission Corridor Habitats and Communities~~		
2.5	Socioeconomics		G/S
2.5.1	Demography		NA
2.5.1.1	Current Demographic and Economic Characteristics		G/S
2.5.2	Community Characteristics		S
2.5.2.1	Area Economic Base		S
2.5.2.2	Area Political Structure		S
2.5.2.3	Area Social Structure		S
2.5.2.4	Housing		G/S
2.5.2.5	Local Educational System		G/S
2.5.2.6	Area Recreational Opportunities		S
2.5.2.7	Region Tax Structure and Distribution		S
2.5.2.8	Local Land Use Plans		S
2.5.2.9	Area Public Faciulities and Social Services		G/S
2.5.2.10	Transporatation		S
~~2.5.2.1~~	~~Economy~~		
~~2.5.2.2~~	~~Transportation~~		
~~2.5.2.3~~	~~Taxes~~		
~~2.5.2.4~~	~~Land Use~~		
~~2.5.2.5~~	~~Aesthetics and Recreation~~		
~~2.5.2.6~~	~~Housing~~		
~~2.5.2.7~~	~~Community Infrastructure and Public Services~~		
~~2.5.2.8~~	~~Education~~		
~~2.5.3~~	~~Historic Properties~~		
~~2.5.4~~	~~Environmental Justice~~		
2.6	Geology		S
2.6.1	Geological Setting		S
2.6.2	Stratigraphy		S
2.6.3	Geologic Impact Evaluation		S
2.7	Meteorology and Air Quality		NA
2.7.1	General Climate		G/S
2.7.2	Regional Air Quality		S
2.7.3	Severe Weather Phenomena		S
2.7.4	Local Meteorology		S
2.7.5	Maximum Terrain Heights and Topograhic Maps		S
2.7.6	Atmospheric Dispersion Factors		NA
2.7.6.1	Long-Term Routine Effluent Atmospheric Dispersion and Deposition Values		S
2.7.6.2	Fiftieth Percentile Atomospheric Dispersion Factors		S

2.7.7	Noise		S
2.8	Related Federal Project Activities		G/S
2.8.1	Land Aquistion and Use of Electrical Transmission Corridors		S
2.8.2	Cooling Water Source and Supply		S
2.8.3	Other Federal Actions Affecting Construction or Operation		S
2.8.4	Federal Agency Plans Used to Justify The Need For Power		S
2.8.5	Planned Federal Projects Continfgent on Plant Construction or Operation		S
2.8.6	Non-Federal Potential Impacts		S
3.0	Plant Description		NA
3.1	External Appearance and Plant Layout		G/S
3.2	Reactor Power Conversion System		G/S
3.3	Plant Water Use		G/S
3.4	Cooling System		G/S
3.5	Radwaste Systems and Source Term		G
3.5.1	Source Terms		G
3.5.2	Radioactive Liquid Processing Systems		G/S
3.5.3	Radioactive Gaseous Treatment Systems		G
3.5.4	Solid Radioactive Waste System		G/S
3.5.5	Process and Effluent Monitoring		G/S
3.6	Non-radioactive Waste Systems		G/S
3.6.1	Effluents Containing Chemicals or Biocides		G/S
3.6.2	Sanitary System Effluents		S
3.6.3	Other Effluents		G/S
3.7	Power Transmission System		S
3.7.1	Substation and Connecting Circuits		S
3.7.2	Electrical Design Parameters		S
3.7.3	Noise Levels		G/S
3.7.4	Structure Design		S
3.7.5	Inspection and Maintenance		S
3.8	Transportation of Radioactive Materials		G/S
4.0	Environmental Impacts of Construction		S
4.1	Land Use Impacts		G/S
4.1.1	The Site and Vicinity		G/S
4.1.1.1	The Site		S
4.1.1.2	The Vicinty		S
4.1.2	Transmission Corridors and Offsite Areas		S
4.1.3	Historic Properties		S
4.2	Water-Related Impacts		G/S
4.2.1	Hydrologic Alterations		S
4.2.1.1	Description of Surface Water Bodies and Groundwater Aquifers		S
4.2.1.2	Construction Activities		S
4.2.1.3	Water Sources and Amounts Needed for Construction		S
4.2.1.4	Surface Water Receiving Construction Effluents that Could Affect Water Quality		S
4.2.1.5	Construction Impacts		S

4.2.1.6	Identification of Surface Water and Grouund Water Users		S
4.2.1.7	Proposed Practices to Limit or Minimize Hydrologic Alterations		S
4.2.1.8	Compliance with Applicable Hydrological Standards and Regulations		S
4.2.1.9	Best Maagement Practices		S
4.2.2	Water Use Impacts		S
~~4.2.3~~	~~Water Quality Impacts~~		S
4.3	Ecological Impacts		S
4.3.1	Terrestrial Ecosystems		S
4.3.1.1	Vegetation		S
4.3.1.2	Fauna		S
4.3.1.3	Wetlands		S
4.3.1.4	Other Projects Within the Area with Potential Impacts		S
4.3.1.5	Consultation		S
4.3.1.6	Migigation Measures		
4.3.2	Aquatic Ecosystems		S
4.3.2.1	Impacts to Impoundments and Streams		S
4.3.2.2	Impacts to Chesapeake Bay		S
4.4	Socioeconomic Impacts		NA
4.4.1	Physical Impacts		S
4.4.1.1	Public and Workers		S
4.4.1.2	Noise		S
4.4.1.3	Dust and Other Emissions		S
4.4.1.4	Buildings		S
4.4.1.5	Transportation Routes		S
4.4.1.6	Aesthetics and Recreation		S
4.4.2	Social and Economic Impacts		S
4.4.2.1	Study Methods		S
4.4.2.2	Construction Labor Force Needs, Copmposition and Estimates		S
4.4.2.3	Demography		S
4.4.2.4	Housing		S
4.4.2.5	Employment and Income		S
4.4.2.6	Tax Revenue Generation		S
4.4.2.7	Land Values		S
4.4.2.8	Public Services		S
4.2.2.9	Public Facilities		S
4.4.3	Environmental Justice Impacts		S
4.5	Radiation Exposure to Construction Workers		S
4.6	Measures and Controls to Limit Adverse Impacts During Construction		G/S
4.7	Nonradiological Health Impacts		S
5	Environmental Impacts of Station Operation		
5.1	Land-Use Impacts		S
5.1.1	The Site and Vicinity		S
5.1.2	Transmission Corridors and Outside Areas		S
5.1.3	Historic Properties and Cultural Resources		S
5.2	Water-related Impacts		S
5.2.1	Hydrologic Alterations and Plant Water Supply		S

5.2.2	Water Use Impacts		S
5.2.3	Water-Quality Impacts		S
~~5.2.4~~	~~Future Growth~~		
5.3	Cooling System Impacts		S
5.3.1	Intake System		S
5.3.1.1	Hydrodynamic Descriptions and Physical Impacts		S
5.3.1.2	Aquatic Ecosystems		S
5.3.2	Discharge System		S
5.3.2.1	Thermal Discharge and Physical Impacts		S
5.3.2.2	Aquatic Ecosystems		S
5.3.3	Heat Dissipation Systems		S
5.3.3.1	Heat Dissipation to the Atmosphere		S
5.3.3.2	Terrestrial Ecosystems		S
5.3.4	Impacts to Members of the Public		S
5.4	Radiological Impacts of Normal Operation		S
5.5	Environmental Impacts of Waste		S
5.6	Transmission System Impacts		S
5.6.1	Terrestrial Ecosystems		S
5.6.2	Aquatic Ecosystems		S
5.6.3	Impacts to Members of the Public		S
5.7	Uranium Fuel Cycle Impacts		G
5.8	Socioeconomic Impacts		S
5.8.1	Physical Impacts of Station Operation		S
5.8.2	Social and Economic		S
5.8.3	Environmental Justice Impacts		S
5.9	Decommissioning		G/S
5.10	Measures and Controls to Limit Adverse Impacts During Operation		G/S
5.11	Transportation of Radioactive Materials		G/S
5.12	Non-radiological Health impacts		G/S
6.0	Environmental Measurements and Monitoring Programs		NA
6.1	Thermal Monitoring		S
6.2	Radiological Monitoring		S
6.3	Hydrological Monitoring		S
6.4	Meteorological Monitoring		S
6.5	Ecological Monitoring		S
6.5.1	Terrestrial Ecology and Land Use		S
6.5.2	Aquatic Ecology		S
6.6	Chemical Monitoring		S
6.7	Summary of Monitoring Programs		S
7.0	Environmental Impacts of Postulated Accidents Involving Radioactive Materials		G/S
7.1	Design Basis Accidents		G/S
7.2	Severe Accidents		G/S
7.3	Severe Accident Mitigation Alternatives		G/S
7.4	Transportation Accidents		G/S
8.0	Need for Power		S
9.0	Alternatives to the Proposed Action		NA
9.1	No-Action Alternative		G/S
9.2	Energy Alternatives		G/S

9.3	Alternative Sites		S
9.4	Alternative Plant and Transmission Systems		G/S
10.0	Environmental Consequences of the Proposed Action		NA
10.1	Unavoidable Adverse Environmental Impacts		G/S
10.2	Irreversible and Irretrievable Commitments of Resources		G/S
10.3	Relationship Between Short-Term Uses and Long-Term Productivity of the Human Environment		G/S
10.4	Benefit-Cost Balance		S
10.5	Cumulative Impacts		S

Deleted
Added
Changed