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ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016  
Calvert Cliffs Nuclear Power Plant, Unit 3  
U.S. EPR RCOLA/SCOLA Standardization Matrix

As requested by Mr. Joseph Colaccino, Chief, U.S. EPR Projects Branch, this letter provides the U.S. EPR RCOLA/SCOLA Standardization Matrix. This matrix lists the COLA documents by subsection, and identifies whether the content of each subsection is generic for the U.S. EPR COLAs, site specific to individual applicants, or is a combination of both generic and site specific items. This letter does not generate any new regulatory commitments.

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Michael J. Yox at (410) 495-2436.

*I declare under penalty of perjury that the foregoing is true and correct.*

Executed on July 10, 2009

A handwritten signature in black ink, appearing to be "Greg Gibson", written over a horizontal line.

Greg Gibson

Enclosure: U.S. EPR RCOLA/SCOLA Standardization Matrix

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**Enclosure**

**U.S. EPR RCOLA/SCOLA Standardization Matrix**

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type <sup>1</sup>
<b>1</b>		<b>General Information</b>	
	All	All	S
<b>2</b>		<b>Final Safety Analysis Report</b>	
	1.0	Introduction and General Description of the Plant	G
	1.1	Introduction	M
	1.1.1	Plant Location	Sc
	1.1.2	Containment Type	G
	1.1.3	Reactor Type	G
	1.1.4	Power Output	G
	1.1.5	Schedule	Sc
	1.1.6	Format and Content	Gn
	1.1.7	References	S
	1.2	General Plant Description	Sc
	1.2.1	Principal Design Criteria, Operating Characteristics, and Safety Considerations	G
	1.2.2	Site Description	M
	1.2.3	Plant Description	M
	1.3	Comparisons with Similar Facility Designs	G
	1.4	Identification of Agents and Contractors	G
	1.4.1	Applicant – Program Manager	S
	1.4.2	Other Contractors and Participants	M
	1.5	Requirements for Further Technical Information	G
	1.6	Material Referenced	Sc
	1.7	Drawings and Other Detailed Information	G
	1.7.1	Electrical and Instrumentation and Control Drawings	Sc
	1.7.2	Piping and Instrumentation Diagrams	Sc
	1.8	Interfaces with Standard Designs and Early Site Permits	G
	1.8.1	COL Information Items	G
	1.8.2	Departures	Sc
	1.9	Conformance with Regulatory Criteria	Gn
	1.9.1	Conformance with Regulatory Guides	S
	1.9.2	Conformance with the Standard Review Plan	G
	1.9.3	Generic Issues	Gn
	1.9.4	Operational Experience (Generic Communications)	M
	1.9.5	Advanced and Evolutionary Light-Water Reactor Design Issues	Gn
	1.9.6	References	S
	2.0	Site Characteristics	Sc
	2.1	Geography and Demography	Sc
	2.1.1	Site Location and Description	S
	2.1.2	Exclusion Area Authority and Control	S
	2.1.3	Population Distribution	S
	2.1.4	References	S
	2.2	Nearby Industrial, Transportation and Military Facilities	Sc
	2.2.1	Location and Routes	S

<sup>1</sup> Explanation of abbreviations:

- G – Generic
- Gn – Generic except the name of the Applicant/Plant is in the text (in braces)
- M – Mixture of Generic and Site specific
- S – Site specific
- Sc – Site specific except the restatement of the COL item which is generic

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type
	2.2.2	Descriptions	S
	2.2.3	Evaluation of Potential Accidents	Sc
	2.2.4	References	S
	2.3	Meteorology	Sc
	2.3.1	Regional Climatology	Sc
	2.3.2	Local Meteorology	Sc
	2.3.3	Onsite Meteorological Measurement Program	Sc
	2.3.4	Short Term Atmospheric Dispersion Estimates for Accident Releases	Sc
	2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases	Sc
	2.3.6	References	S
	2.4	Hydrologic Engineering	G
	2.4.1	Hydrologic Description	Sc
	2.4.2	Floods	Sc
	2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers	Sc
	2.4.4	Potential Dam Failures, Seismically Induced	Sc
	2.4.5	Probable Maximum Surge and Seiche Flooding	Sc
	2.4.6	Probable Maximum Tsunami Flooding	Sc
	2.4.7	Ice Effects	Sc
	2.4.8	Cooling Water Canals and Reservoirs	Sc
	2.4.9	Channel Diversions	Sc
	2.4.10	Flooding Protection Requirements	Sc
	2.4.11	Low Water Considerations	Sc
	2.4.12	Ground Water	Sc
	2.4.13	Pathways of Liquid Effluents in Ground and Surface Waters	Sc
	2.4.14	Technical Specification and Emergency Operation Requirements	Sc
	2.5	Geology, Seismology, and Geotechnical Engineering	S
	2.5.0 <sup>2</sup>	Summary	S
	2.5.1	Basic Geologic and Seismic Information	Sc
	2.5.2	Vibratory Ground Motion	Sc
	2.5.3	Surface Faulting	Sc
	2.5.4	Stability of Subsurface Materials and Foundations	Sc
	2.5.5	Stability of Slopes	Sc
	2.5.6	References	G M <sup>3</sup>
	3.0	Design of Structures, Components, Equipment and Systems	G
	3.1	Compliance with Nuclear Regulatory Commission General Design Criteria	G
	3.1.1	Overall Requirements	M
	3.1.2	Protection by Multiple Fission Product Barriers	G
	3.1.3	Protection and Reactivity Control Systems	G
	3.1.4	Fluid Systems	G
	3.1.5	Reactor Containment	G
	3.1.6	Fuel and Reactivity Control	G
	3.1.7	References	S
	3.2	Classification of Structures, Systems, and Components	G
	3.2.1	Seismic Classification	M
	3.2.2	System Quality Group Classification	Sc

<sup>2</sup> FSAR Section 2.5.0 is unique to the Callaway Plant Unit 2 COLA

<sup>3</sup> Callaway Plant Unit 2 COLA includes site specific text

## U.S. EPR RCOLA/SCOLA Standardization Matrix

GOLA Part	Subsection	Title	Information Type
	3.2.3	References	S
	3.3	Wind and Tornado Loadings	M
	3.3.1	Wind Loadings	M
	3.3.2	Tornado Loadings	M
	3.3.3	References	S
	3.4	Water Level (Flood) Design	M
	3.4.1	Internal Flood Protection	G
	3.4.2	External Flood Protection	S
	3.4.3	Analysis of Flooding Events	M
	3.4.4	Analysis Procedures	G
	3.4.5	References	S
	3.5	Missile Protection	G
	3.5.1	Missile Selection and Description	M
	3.5.2	Structures, Systems, and Components to be Protected from Externally Generated Missiles	G
	3.5.3	Barrier Design Procedures	G
	3.5.4	References	S
	3.6	Protection Against Dynamic Effects Associated with Postulated Rupture of Piping	G
	3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside of Containment	Gn
	3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	Gn
	3.6.3	Leak-Before-Break Evaluation Procedures	Gn
	3.7	Seismic Design	G
	3.7.1	Seismic Design Parameters	S
	3.7.2	Seismic System Analysis	M
	3.7.3	Seismic Subsystem Analysis	M
	3.7.4	Seismic Instrumentation	M
	3.8	Design of Category I Structures	G
	3.8.1	Concrete Containment	M
	3.8.2	Steel Containment	G
	3.8.3	Concrete and Steel Internal Structures of Concrete Containment	M
	3.8.4	Other Seismic Category I Structures	M
	3.8.5	Foundations	M
	3.8.6	References	S
	3.9	Mechanical Systems and Components	G
	3.9.1	Special Topics for Mechanical Components	Gn
	3.9.2	Dynamic Testing and Analysis of Systems, Components, and Equipment	M
	3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	M
	3.9.4	Control Rod Drive System	G
	3.9.5	Reactor Pressure Vessel Internals	G
	3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints	M
	3.10	Seismic and Dynamic Qualification of Mechanical And Electrical Equipment	S
	3.10.1	Seismic Qualification Criteria	M
	3.10.2	Methods and Procedures for Qualifying Mechanical, Electrical and I&C Equipment	Gn

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type
	3.10.3	Methods and Procedures for Qualifying Supports of Mechanical and Electrical Equipment and Instrumentation	G
	3.10.4	Test and Analysis Results and Experience Database	Gn
	3.10.5	References	S
	3.11	Environmental Qualification of Mechanical and Electrical Equipment	Gn
	3.11.1	Equipment Identification and Environmental Conditions	M
	3.11.2	Qualification Tests and Analysis	G
	3.11.3	Qualification Test Results	Gn
	3.11.4	Loss of Ventilation	G
	3.11.5	Estimated Chemical and Radiation Environment	G
	3.11.6	Qualification of Mechanical Equipment	G
	3.11.7	References	S
	3.12	ASME Code Class 1, 2, And 3 Piping Systems, Piping Components, and Their Associated Supports	G
	3.12.1	Introduction	G
	3.12.2	Codes and Standards	G
	3.12.3	Piping Analysis Methods	G
	3.12.4	Piping Modeling Techniques	Gn
	3.12.5	Piping Stress Analysis Criteria	M
	3.12.6	Piping Support Design Criteria	G
	3.12.7	References	S
	3.13	Threaded Fasteners (ASME Code Class 1, 2, and 3)	G
	3.13.1	Design Considerations	G
	3.13.2	Inservice Inspection Requirements	Gn
	3A	Criteria for Distribution System Analysis and Support	G
	3B	Dimensional Arrangement Drawings	G
	3C	Reactor Coolant System Structural Analysis Methods	S
	3D	Methodology for Qualifying Safety-Related Electrical and Mechanical Equipment	S
	3E	Critical Sections for Safety-Related Category I Structures	Sc
	3E.1	Nuclear Island Structures	G
	3E.2	Emergency Power Generating Buildings	G
	3E.3	Essential Service Water Buildings	G
	3E.4	UHS Makeup Water Intake Structure and UHS Electrical Building <sup>4</sup>	S
	4.0	Reactor	G
	4.1	Summary Description	G
	4.2	Fuel System Design	G
	4.3	Nuclear Design	G
	4.4	Thermal-Hydraulic Design	G
	4.5	Reactor Materials	G
	4.6	Functional Design of Reactivity Control Systems	G
	5.0	Reactor Coolant System and Connected Systems	G
	5.1	Summary Description	G
	5.2	Integrity of the Reactor Coolant Pressure Boundary	G
	5.2.1	Compliance with Codes and Code Cases	G
	5.2.2	Overpressure Protection	G
	5.2.3	Reactor Coolant Pressure Boundary Materials	G
	5.2.4	Inservice Inspection and Testing of the RCPB	G

<sup>4</sup> This section is named differently for each COLA to reflect site specific design differences

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type
	5.2.5	RCPB Leakage Detection	G
	5.2.6	References	S
	5.3	Reactor Vessel	G
	5.3.1	Reactor Vessel Materials	G
	5.3.2	Pressure-Temperature Limits, Pressurized Thermal Shock, and Charpy Upper-Shelf Energy Data and Analyses	Gn
	5.3.3	Reactor Vessel Integrity	G
	5.3.4	References	S
	5.4	Component and Subsystem Design	G
	5.4.1	Reactor Coolant Pumps	G
	5.4.2	Steam Generators (PWR)	G
	5.4.3	Reactor Coolant Piping	G
	5.4.4	Not Used in U.S. EPR Design	G
	5.4.5	Not Used in U.S. EPR Design	G
	5.4.6	Not Used in U.S. EPR Design	G
	5.4.7	Residual Heat Removal System	G
	5.4.8	Not Used in U.S. EPR Design	G
	5.4.9	Not Used in U.S. EPR Design	G
	5.4.10	Pressurizer	G
	5.4.11	Pressurizer Relief Tank	G
	5.4.12	Reactor Coolant System High Point Vents	G
	5.4.13	Safety and Relief Valves	G
	5.4.14	Component Supports	G
	5.4.15	References	S
	6.0	Engineered Safety Features	G
	6.1	Engineered Safety Features Materials	G
	6.1.1	Metallic Materials	Gn
	6.1.2	Organic Materials	Gn
	6.1.3	References	S
	6.2	Containment Systems	G
	6.2.1	Containment Functional Design	G
	6.2.2	Containment Heat Removal Systems	G
	6.2.3	Secondary Containment Functional Design	G
	6.2.4	Containment Isolation System	G
	6.2.5	Combustible Gas Control in Containment	G
	6.2.6	Containment Leakage Testing	G
	6.2.7	Fracture Prevention of Containment Pressure Vessel	G
	6.2.8	References	S
	6.3	Emergency Core Cooling System	G
	6.3.1	Design Bases	G
	6.3.2	System Design	G
	6.3.3	Performance Evaluation	G
	6.3.4	Tests and Inspections	G
	6.3.5	Instrumentation Requirements	G
	6.3.6	References	S
	6.4	Habitability Systems	S
	6.4.1	Design Basis	S
	6.4.2	System Design	S
	6.4.3	System Operational Procedures	M
	6.4.4	Design Evaluations	Sc
	6.4.5	Testing and Inspection	G



## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type
	6.4.6	Instrumentation Requirements	Sc
	6.4.7	References	S
	6.5	Fission Product Removal and Control Systems	G
	6.6	Inservice Inspection of Class 2 and 3 Components	G
	6.6.1	Components Subject to Examination	S
	6.6.2	Accessibility	G
	6.6.3	Examination Techniques and Procedures	G
	6.6.4	Inspection Intervals	S
	6.6.5	Examination Categories and Requirements	G
	6.6.6	Evaluation of Examination Results	G
	6.6.7	System Pressure Tests	G
	6.6.8	Augmented ISI to Protect Against Postulated Piping Failures	S
	6.6.9	References	S
	6.7	Main Steamline Isolation Valve Leakage Control System (BWRS)	G
	6.8	Extra Borating System	G
	7.0	Instrumentation and Controls	G
	7.1	Introduction	G
	7.2	Reactor Trip System	G
	7.3	Engineered Safety Features Systems	G
	7.4	Systems Required for Safe Shutdown	G
	7.5	Information Systems Important to Safety	G
	7.6	Interlock Systems Important to Safety	G
	7.7	Control Systems Not Required For Safety	G
	7.8	Diverse I&C Systems	G
	7.9	Data Communication Systems	G
	8.0	Electric Power	G
	8.1	Introduction	G
	8.1.1	Offsite Power Description	M
	8.1.2	Onsite Power System Description	G
	8.1.3	Safety-Related Loads	Sc
	8.1.4	Design Bases	G
	8.1.5	References	S
	8.2	Offsite Power System	G
	8.2.1	Description	Sc
	8.2.2	Analysis	M
	8.2.3	References	S
	8.3	Onsite Power System	G
	8.3.1	Alternating Current Power Systems	M
	8.3.2	DC Power Systems	G
	8.3.3	References	S
	8.4	Station Blackout	G
	8.4.1	Description	M
	8.4.2	Analysis	Gn
	8.4.3	References	S
	9.0	Auxiliary Systems	G
	9.1	Fuel Storage and Handling	G
	9.1.1	Criticality Safety of New and Spent Fuel Storage and Handling	M
	9.1.2	New and Spent Fuel Storage	M
	9.1.3	Spent Fuel Pool Cooling and Purification System	G
	9.1.4	Fuel Handling System	G
	9.1.5	Overhead Heavy Load Handling System	M

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type <sup>1</sup>
	9.2	Water Systems	G
	9.2.1	Essential Service Water System	M
	9.2.2	Component Cooling Water System	G
	9.2.3	Demineralized Water Distribution System	G
	9.2.4	Potable and Sanitary Water Systems (PSWS)	Sc
	9.2.5	Ultimate Heat Sink	M
	9.2.6	Condensate Storage Facilities	G
	9.2.7	Seal Water Supply System	G
	9.2.8	Safety Chilled Water System	G
	9.2.9	Raw Water Supply System	Sc
	9.3	Process Auxiliaries	G
	9.4	Air Conditioning, Heating, Cooling and Ventilation Systems	G M <sup>5</sup>
	9.4.1	Main Control Room Air Conditioning System	M
	9.4.2	Fuel Building Ventilation System	G
	9.4.3	Nuclear Auxiliary Building Ventilation System	G
	9.4.4	Turbine Building Ventilation System	G
	9.4.5	Safeguard Building Controlled-Area Ventilation System	G
	9.4.6	Electrical Division of Safeguard Building Ventilation System (SBVSE)	G
	9.4.7	Containment Building Ventilation System	G
	9.4.8	Radioactive Waste Building Ventilation System	G
	9.4.9	Emergency Power Generating Building Ventilation System	G
	9.4.10	Switchgear Building Ventilation System	G
	9.4.11	Essential Service Water Pump Building Ventilation System	G
	9.4.12	Main Steam and Feedwater Valve Room Ventilation System	G
	9.4.13	Smoke Confinement System	G
	9.4.14	Access Building Ventilation System	G
	9.4.15	UHS Makeup Water Intake Structure Ventilation System <sup>6</sup>	S
	9.5	Other Auxiliary Systems	G
	9.5.1	Fire Protection System	M
	9.5.2	Communication System	M
	9.5.3	Lighting System	G
	9.5.4	Diesel Generator Fuel Oil Storage and Transfer System	G
	9.5.5	Diesel Generator Cooling Water System	G
	9.5.6	Diesel Generator Starting Air System	G
	9.5.7	Diesel Generator Lubricating System	G
	9.5.8	Diesel Generator Air Intake and Exhaust System	G
	9A	Fire Protection Analysis	G
	9B	Fire Protection Analysis - Plant Specific Supplement	G <sup>7</sup>
	9B.1	Introduction	G
	9B.1.1	Regulatory Bases	Gn
	9B.1.2	Defense-In-Depth	G
	9B.1.3	Scope	M
	9B.2	Fire Protection Analysis Methodology	G <sup>7</sup>
	9B.2.1	General Design Criteria	G
	9B.2.2	Specific Elements	G
	9B.2.3	Assumptions	G

<sup>5</sup> Callaway Plant Unit 2 and Nine Mile Point 3 Nuclear Power Plant COLAs include site specific text

<sup>6</sup> This section is named differently for each COLA to reflect site specific design differences

<sup>7</sup> There is no text in this section, only the heading

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type <sup>1</sup>
	9B.3	Fire Area-by-Fire Area Evaluation	M
	9B.3.1	Turbine Building	G
	9B.3.2	Switchgear Building	G
	9B.3.3	Auxiliary Power Transformer Area	G
	9B.3.4	Generator Transformer Area	G
	9B.3.5	Warehouse Building <sup>8</sup>	S
	9B.3.6	Security Access Facility	M
	9B.3.7	Central Gas Supply Building	M
	9B.3.8	Grid Systems Control Building <sup>8</sup>	S
	9B.3.9	Fire Protection Building	G
	9B.3.10	Circulating Water System Cooling Water Structure <sup>8</sup>	S
	9B.3.11	Circulating Water System Pump Building	S
	9B.3.12	Essential Service Water Emergency Makeup System (ESWEMS) Pumphouse <sup>8</sup>	S
	9B.3.13	Circulating Water System Makeup Water Intake Structure	S
	9B.3.14	Desalinization/ Water Treatment Building <sup>9</sup>	S
	9B.4	References	S
	10.0	Steam and Power Conversion System	G
	10.1	Summary Description	G
	10.2	Turbine-Generator	G
	10.2.1	Design Bases	G
	10.2.2	General Description	G
	10.2.3	Turbine Rotor Integrity	Gn
	10.2.4	Safety Evaluation	G
	10.2.5	References	G
	10.3	Main Steam Supply System	G
	10.3.1	Design Bases	G
	10.3.2	System Description	G
	10.3.3	Safety Evaluation	G
	10.3.4	Inspection and Testing Requirements	G
	10.3.5	Secondary Side Water Chemistry Program	M
	10.3.6	Steam and Feedwater System Materials	Gn
	10.3.7	References	S
	10.4	Other Features of Steam and Power Conversion System	G
	10.4.1	Main Condensers	M
	10.4.2	Main Condenser Evacuation System	G
	10.4.3	Turbine Gland Sealing System	G
	10.4.4	Turbine Bypass System	G
	10.4.5	Circulating Water System	M
	10.4.6	Condensate Polishing System	G
	10.4.7	Condensate and Feedwater System	G
	10.4.8	Steam Generator Blowdown System (PWR)	G
	10.4.9	Emergency Feedwater System	G
	11.0	Radioactive Waste Management	G
	11.1	Source Terms	S
	11.2	Liquid Waste Management System	S
	11.3	Gaseous Waste Management Systems	S
	11.4	Solid Waste Management Systems	G

<sup>8</sup> This section is named differently for each COLA to reflect site specific design differences

<sup>9</sup> FSAR Section 9B.3.14 is unique to the Calvert Cliffs Nuclear Power Plant Unit 3 COLA

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type
	11.4.1	Design Basis	G
	11.4.2	System Description	G
	11.4.3	Radioactive Effluent Releases	Gn
	11.4.4	Solid Waste Management System Cost-Benefit Analysis	G
	11.4.5	Failure Tolerance	G
	11.4.6	References	G
	11.5	Process and Effluent Radiological Monitoring and Sampling Systems	G
	11.5.1	Design Basis	G
	11.5.2	System Description	Gn
	11.5.3	Effluent Monitoring and Sampling	G
	11.5.4	Process Monitoring and Sampling	G
	11.5.5	References	S
	12.0	Radiation Protection	G
	12.1	Ensuring that Occupational Radiation Exposures are as Low as is Reasonably Achievable (ALARA)	G
	12.1.1	Policy Considerations	G
	12.1.2	Design Considerations	G
	12.1.3	Operational Considerations	G
	12.1.4	References	S
	12.2	Radiation Sources	G
	12.2.1	Contained Sources	M
	12.2.2	Airborne Radioactive Material Sources	G
	12.2.3	References	G
	12.3	Radiation Protection Design Features	G
	12.3.1	Facility Design Features	G
	12.3.2	Shielding	G
	12.3.3	Ventilation	G
	12.3.4	Area Radiation and Airborne Radioactivity Monitoring Instrumentation	G
	12.3.5	Dose Assessment	M
	12.3.6	Minimization of Contamination	G
	12.3.7	References	S
	12.4	Dose Assessment	G
	12.5	Operational Radiation Protection Program	G
	12.5.1	References	S
	13.0	Conduct of Operations	G M <sup>10</sup>
	13.1	Organizational Structure of Applicant	G
	13.1.1	Management and Technical Support Organization	S
	13.1.2	Operating Organization	S
	13.1.3	Qualifications of Nuclear Plant Personnel	M
	13.1.4	References	S
	13.2	Training	G
	13.2.1	References	S
	13.3	Emergency Planning	G
	13.3.1 <sup>11</sup>	Callaway Plant Unit 2 Emergency Plan Departures from the U.S. EPR	S
	13.4	Operational Program Implementation	M

<sup>10</sup> Callaway Plant Unit 2 COLA includes site specific text

<sup>11</sup> FSAR Section 13.3.1 is unique to the Callaway Plant Unit 2 COLA

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type <sup>1</sup>
	13.4.1	References	S
	13.5	Plant Procedures	G
	13.5.1	Administrative Procedures	M
	13.5.2	Operating and Maintenance Procedures	M
	13.5.3	References	S
	13.6	Security	G
	13.6.1	References	S
	13.7	Fitness for Duty	G
	13.7.1	References	S
	13.8	References	G
	14.0	Verification Programs	G
	14.1	Specific Information to be Addressed for the Initial Plant Test Program	G
	14.2	Initial Plant Test Program	G
	14.2.1	Summary of Test Program and Objectives	G
	14.2.2	Organization and Staffing	Sc
	14.2.3	Test Procedures	M
	14.2.4	Conduct of Test Program	G
	14.2.5	Review, Evaluation, and Approval of Test Results	M
	14.2.6	Test Records	G
	14.2.7	Conformance of Test Programs with Regulatory Guides	G
	14.2.8	Utilization of Reactor Operating and Testing Experience in Development of Initial Test Program	Sc
	14.2.9	Trial Use of Plant Operating and Emergency Procedures	G
	14.2.10	Initial Fuel Loading and Initial Criticality	G
	14.2.11	Test Program Schedule	G
	14.2.12	Individual Test Descriptions	G
	14.2.13	References	G
	14.2.14	COL Applicant Site-Specific Tests	S
	14.3	Inspection, Test, Analysis, and Acceptance Criteria	Gn
	14.3.1	Tier 1, Chapter 1, Introduction	G
	14.3.2	Tier 1, Chapter 2, System Based Design Descriptions and ITAAC	G M <sup>12</sup>
	14.3.3	Tier 1, Chapter 3, Non-System Based Design Descriptions and ITAAC	G
	14.3.4	Tier 1, Chapter 4, Interface Requirements	G
	14.3.5	Tier 1, Chapter 5, Site Parameters	G
	14.3.6	References	S
	15.0	Transient and Accident Analysis	G
	15.0.1	Radiological Consequence Analysis	G
	15.0.2	Computer Codes Used in Analysis	G
	15.0.3	Radiological Consequences of Design Basis Accidents	S
	15.0.4	Post Chapter 15 Events Cooldown	G
	15.0.5	Compliance with Section C.I.15, "Transient and Accident Analyses," of Regulatory Guide 1.206	G
	15.0.6	References	G
	15.1	Increase in Heat Removal by the Secondary System	G
	15.2	Decrease in Heat Removal by the Secondary System	G
	15.3	Decrease in Reactor Coolant System Flow Rate	G
	15.4	Reactivity and Power Distribution Anomalies	G

<sup>12</sup> Callaway Plant Unit 2 COLA includes site specific text

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type <sup>1</sup>
	15.5	Increase in Reactor Coolant Inventory	G
	15.6	Decrease in Reactor Coolant Inventory Events	G
	15.7	Radioactive Release from a Subsystem or Component	G
	15.8	Anticipated Transients Without Scram	G
	15.9	Boiling Water Reactor Stability	G
	15.10	Spent Fuel Pool Criticality and Boron Dilution Analysis	M
	15.10.1	References	S
	16.0	Technical Specifications	G
	17.0	Quality Assurance and Reliability Assurance	G
	17.1	Quality Assurance During Design	G
	17.2	Quality Assurance During the Operations Phase	G
	17.3	Quality Assurance Program Description	G
	17.4	Reliability Assurance Program	G
	17.4.1	Reliability Assurance Program Scope, Stages, and Goals	G
	17.4.2	Reliability Assurance Program Implementation	M
	17.4.3	Organization, Design Control, Procedures and Instructions, Corrective Actions, and Audit Plans	G
	17.4.4	Reliability Assurance Program Information Needed in a COL Application	M
	17.4.5	References	S
	17.5	Quality Assurance Program Guidance	G
	17.5.1	QA Program Responsibilities	M
	17.5.2	SRP Section 17.5 and the QA Program Description	M
	17.5.3	Evaluation of the QAPD Against the SRP and QAPD Submittal Guidance	M
	17.5.4	References	S
	17.6	Description of Applicant's Program for Implementation of 10 CFR 50.65, the Maintenance Rule	G
	17.6.1	Scoping Per 10 CFR 50.65(b)	G
	17.6.2	Monitoring Per 10 CFR 50.65(a)	G
	17.6.3	Periodic Evaluation Per 10 CFR 50.65(a)(3)	G
	17.6.4	Risk Assessment and Management Per 10 CFR 50.65(a)(4)	G
	17.6.5	Maintenance Rule Training and Qualification	G
	17.6.6	Maintenance Rule Program Role in Implementation of Reliability Assurance Program (RAP) in the Operations Phase	G
	17.6.7	Maintenance Rule Program Implementation	G
	17.6.8	References	S
	17.7	Maintenance Rule Program	G
	18.0	Human Factors Engineering	G
	18.1	Human Factors Engineering Program Management	Gn
	18.1.1	Human Factors Engineering Program Goals, Assumptions and Constraints, and Scope	M
	18.1.2	Human Factors Engineering and Control Room Design Team Organization	G
	18.1.3	Human Factors Engineering Processes and Procedures	G
	18.1.4	Human Factors Engineering Issues Tracking	G
	18.1.5	Technical Program	G
	18.1.6	References	S
	18.2	Operating Experience Review	G
	18.3	Functional Requirements Analysis and Function Allocation	G
	18.4	Task Analysis	G

## U.S. EPR RCOLA/SCOLA Standardization Matrix

COLA Part	Subsection	Title	Information Type
	18.5	Staffing and Qualifications	G
	18.6	Human Reliability Analysis	G
	18.7	Human System Interface Design	G
	18.8	Procedure Development	G
	18.9	Training Program Development	G
	18.10	Verification and Validation	G
	18.11	Design Implementation	G
	18.12	Human Performance Monitoring	Gn
	19.0	Probabilistic Risk Assessment and Severe Accident Evaluation	Sc
	19.1	Probabilistic Risk Assessment	G
	19.1.1	Uses and Application of the PRA	M
	19.1.2	Quality of PRA	G
	19.1.3	Special Design/Operational Features	G
	19.1.4	Safety Insights from the Internal Events PRA for Operations at Power	S S
	19.1.5	Safety Insights from the External Events PRA for Operations at Power	M
	19.1.6	Safety Insights from the PRA for Other Modes of Operation	S
	19.1.7	PRA Related Input to Other Programs and Processes	S
	19.1.8	Conclusions and Findings	G
	19.1.9	References	S
	19.2	Severe Accident Evaluations	G
	19.3	Open, Confirmatory, and COL Action Items Identified as Unresolved	G
<b>3</b>		<b>Environmental Report</b>	
	All	All	S
<b>4</b>		<b>Technical Specifications</b>	
	All	All	M
<b>5</b>		<b>Emergency Plan</b>	
	All	All	M S <sup>13</sup>
<b>6</b>		<b>LWA</b>	
	All	All	S
<b>7</b>		<b>DCD Departures</b>	
	All	All	S
<b>8</b>		<b>Safeguards</b>	
	All	All	S
<b>9</b>		<b>Proprietary &amp; SUNSI</b>	
	All	All	S
<b>10</b>		<b>ITAAC</b>	
	All	All	M
<b>11</b>		<b>Supporting Documents</b>	
	All	All	S

<sup>13</sup> Callaway Plant Unit 2 COLA includes site specific text