COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content		Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
1.0	**Introduction and Interfaces**	**1.0**	**Introduction and General Discussion**	**1.0**		**Introduction and General Description of the Plant**																	
1.0	Introduction and Interfaces	1.1	Introduction	1.1		Introduction	Construction and Startup Schedule		1.1-1						1			X	X				
1.0	Introduction and Interfaces	1.2	General Design Description	1.2		General Plant Description									129				X				
1.0	Introduction and Interfaces	1.3	Comparison with Similar Facility Designs	1.3		Comparison with Similar Facility Designs																	
1.0	Introduction and Interfaces	1.4	Identification of Agents and Contractors	1.4		Identification of Agents and Contractors													X				
1.0	Introduction and Interfaces	1.5	Summary of Principal Review Matters	1.5		Requirements for Further Technical Information																	
1.0	Introduction and Interfaces	1.6	Summary of Open Items	1.6		Material Referenced												X					
1.0	Introduction and Interfaces	1.7	Summary of Confirmatory Items	1.7		Drawings and Other Detailed Information													X				
1.0	Introduction and Interfaces	1.8	Index of Exemptions	1.8		Interfaces for Standard Design												X	X				
1.0	Introduction and Interfaces	1.9	Index of Tier2* Information	1.9		Compliance with Regulatory Criteria	Regulatory Guide Conformance		1.9-1									X	X	This is a DCD Rev. 16 item; the applicability is to confirmed.			
1.0	Introduction and Interfaces	X	X	1.9.3		Three Mile Island Issues	Post accident Radio-Iodine sampling capability per NUREG 0737			1.1													
					1.10													X	X				
					1A													X					
2.0	**Site Characteristics and Site**	**2.0**	**Site Envelope**	**2.0**		**Site Characteristics**				2.1								X	X	No TRs for Chap. 2			
X	X	2.1	Geography and Demography	2.1		Geography and Demography													X				
2.1.1	Site Location and Description	2.1.1	Site Location and Description	2.1.1		Combined License Information for Geography and Demography	Political subdivisions, natural and man-made features, highways, waterways, etc.	2.1.1-1	2.1-1														
2.1.1	Site Location and Description	2.1.1	Site Location and Description	2.1.1		Combined License Information for Geography and Demography	Exclusion area authority and control	2.1.2-1	2.1-1														
2.1.1	Site Location and Description	2.1.1	Site Location and Description	2.1.1		Combined License Information for Geography and Demography	Population distribution	2.1.3-1	2.1-1														
2.1.2	Exclusion Area Authority and Control	2.1.2	Exclusion Area Authority and Control	2.1.1		Combined License Information for Geography and Demography																	
2.1.3	Population Distribution	2.1.3	Population Distribution	2.1.1		Combined License Information for Geography and Demography																	

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content		Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
X	X	2.2	Nearby Industrial, Transportation, and Military Facilities	2.2		Nearby Industrial, Transportation, and Military Facilities													X					
2.2.1-2.2.2	Identification of Potential Hazards in Site Vicinity	X	X	2.2.1		Combined License Information for Identification of Site-specific Potential Hazards	Identification of potential hazards from nearby industrial, transportation and military facilities	2.2-1	2.2-1	2.2, 2.3														
2.2.3	Evaluation of Potential	X	X	X		X																		
X	X	2.3	Meteorology	2.3		Meteorology													X					
2.3.1	Regional Climatology	2.3.1	Regional Climatology	2.3.1		Regional Climatology	Regional climatology information	2.3.1-1	2.3-1															
2.3.2	Local Meteorology	2.3.2	Local Meteorology	2.3.2		Local Meteorology	Local meteorology information	2.3.2-1	2.3-2	2.4, 2.5, 2.6, 2.7,														
2.3.3	Onsite Meteorological Measurements Programs	2.3.3	Onsite Meteorological Measurements Program	2.3.3		Onsite Meteorological Measurement Programs	Onsite meteorological measurements program	2.3.3-1	2.3-3	2.9														
2.3.4	Short Term Dispersion Estimates for Accidental Atmospheric Releases	2.3.4	Short-Term (Accident) Atmospheric Relative Concentration	2.3.4		Short-Term Diffusion Estimates	Site specific χ/Q values consequences	2.3.4-1	2.3-4															
2.3.4	Short Term Dispersion Estimates for Accidental Atmospheric Releases	2.3.4	Short-Term (Accident) Atmospheric Relative Concentration	2.3.4		Short-Term Diffusion Estimates	Site specific χ/Q values consequences to control room operator dose limits during DBA	2.3.4-2	2.3-4															
2.3.4	Short Term Dispersion Estimates for Accidental Atmospheric Releases	2.3.4	Short-Term (Accident) Atmospheric Relative Concentration	2.3.4		Short-Term Diffusion Estimates	χ/Q values for each cum freq distribution then exceeds median value	2.3.4-3	2.3-4															
2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases	2.3.5	Long-Term (Routine) Diffusion Estimates	2.3.5		Long-Term Diffusion Estimates	Site specific long-term diffusion estimates	2.3.5-1	2.3-5															
2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine	2.3.5	Long-Term (Routine) Diffusion Estimates	2.3.5		Long-Term Diffusion Estimates	Annual average χ/Q values for 16 radial sectors to a distance of 50 miles	2.3.5-2	2.3-5															
X	X	2.4	Hydrologic Engineering	2.4		Hydrologic Engineering				2.10, 2.11									X					
2.4.1	Hydrologic Description	2.4.1	Hydrological Description	2.4.1		Combined License Information	Description of major hydrologic features	2.6-1	2.4-1															
2.4.2	Floods	X	X	X		X	Historical Flooding information	2.4.1-1	2.4-2															
2.4.3	Probable Maximum Flood (PMF) on Streams and	X	X	X		X																		
2.4.4	Potential Dam Failures	X	X	X		X																		
2.4.5	Probable Maximum Surge and	X	X	X		X																		
2.4.6	Probable Maximum	X	X	X		X																		
2.4.7	Ice Effects	X	X	X		X																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content		Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
2.4.8	Cooling Water Canals and Reservoirs	X	X	X		X	Historical Flooding information	2.4.1-1	2.4-3															
2.4.9	Channel Diversions	X	X	X		X																		
2.4.10	Flooding Protection	X	X	X		X																		
2.4.11	Low Water Considerations	X	X	X		X																		
2.4.12	Groundwater	X	X	X		X	Historical Flooding information	2.4.1-1	2.4-4															
2.4.13	Accidental Releases of Liquid Effluents in Ground and Surface Waters	X	X	X		X	Historical Flooding information	2.4.1-1	2.4-5															
2.4.14	Technical Specifications and Emergency Operation Requirements	X	X	X		X	Historical Flooding information	2.4.1-1	2.4-6															
X	X	2.5	Geological, Seismological, and Geotechnical Engineering	2.5		Geology, Seismology, and Geotechnical Engineering				2.12, 2.13									X					
2.5.1	Basic Geologic and Seismic Information	2.5.1	Basic Geologic and Seismic Information	2.5.1		Basic Geological and Seismic Combined License Information	Geological, seismological and geophysical information	2.5.1-1	2.5-1															
2.5.1	Basic Geologic and Seismic Information	2.5.1	Basic Geologic and Seismic Information	2.5.1		Basic Geological and Seismic Combined License Information	Geological, seismological and geophysical information	2.5.1-1	2.5-5															
2.5.2	Vibratory Ground Motion	2.5.2	Vibratory Ground Motion	2.5.2		Vibratory Ground Motion																		
2.5.2	Vibratory Ground Motion	2.5.2	Vibratory Ground Motion	2.5.2.1		Combined License Seismic and Tectonic Characteristics Information	Seismicity information and geologic and tectonic characteristics	2.5.2-1	2.5-2															
2.5.2	Vibratory Ground Motion	2.5.2	Vibratory Ground Motion	2.5.2.2		Site-Specific Seismic Structures	Static and dynamic analyses of nuclear island	2.5.5-1	2.5-12															
2.5.2	Vibratory Ground Motion	2.5.2	Vibratory Ground Motion	2.5.2.3		Sites with Geoscience Parameters Outside the Certified Design	Soil-structure interaction analyses	2.6-2	2.5-3															
2.5.3	Surface Faulting	2.5.3	Surface Faulting	2.5.3		Surface Faulting Combined License Information	Geological, seismological and geophysical information	2.5.3-1	2.5-4															
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	2.5.4		Stability and Uniformity of Subsurface Materials and Foundations																		
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	2.5.4.1		Excavation	Analyses of site specific properties of foundation soils	2.6-3	2.5-6															

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	X		X	Category I excavations, fills and slopes	2.5.4-1	2.5-7															
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	2.5.4.2		Bearing Capacity	information on allowable soil bearing capacities	2.6-4	2.5-10															
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	2.5.4.3		Settlement	Historical Flooding information and potential flooding factors	2.4.1-1	2.5-8															
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	2.5.4.4		Liquefaction	Soil liquefaction information	2.5.4.3-1	2.5-9															
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	2.5.4.5		Subsurface Uniformity	Impact of static and dynamic lateral earth pressures and hydrostatic ground water on plant	2.5.2-2	2.5-11															
2.5.4	Stability of Subsurface Materials and Foundations	2.5.4	Stability of Subsurface Materials and Foundations	X		X	Subsurface instrumentation	2.6-5	2.5-13															
2.5.5	Stability of Slopes	2.5.5	Stability of Slopes	2.5.5		Combined License Information for Stability of Slopes	Static and dynamic analyses of nuclear island	2.5.5-1	2.5-14															
X	X	2.5.6	Embankments and Dams	2.5.6		Combined License Information for Embankments and Dams	Static and dynamic analyses of embankments and dams	2.5.6-1	2.5-15															
3.0	**Design of Structures, Components, Equipment, and Systems**	**3.0**	**Design of Structures, Components, Equipment, and Systems**	**3.0**		**Design of Structures, Components, Equipment, and Systems**	Building and Structure Configuration, Layout and General Arrangement Updates						105		105									
X	X	X	X	X		X	Lateral Earth Pressure Loads			3.8										Interface item 3.8 is defined as "Not an interface" in DCD Table 1.8-1.				
X	X	X	X	X		X	Preoperational Piping Vibration Tes Parameters			3.9										Interface item 3.8 is defined as "Not an interface" in DCD Table 1.8-1.				
X	X	3.1	General	3.1		Conformance with NRC General Design Criteria																		
X	X	3.2	Classification of Systems, Structures, and Components	3.2		Classification of Systems, Structures, and Components												X						
3.2.1	Seismic Classification	3.2.1	Seismic Classification	3.2.1		Seismic Classification																		
3.2.2	System Quality Group Classification	3.2.2	Quality Group Classification	3.2.2		AP1000 Classification System																		
X	X	X	X	3.2.3		Inspection Requirements																		
X	X	X	X	3.2.4		Application of AP1000 Safety-Related Equipment and Seismic Classification System																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
X	X	3.3	Wind and Tornado Loadings	3.3		Wind and Tornado Loadings												X	X					
3.3.1	Wind Loadings	3.3.1	Wind Loadings	3.3.1		Wind Loadings	Wind and Tornado Site Interface Criteria	3.3.2.2-1	3.3-1						05 Rev. 2					One COL Action item for both wind and tornado loadings in FSER				
3.3.2	Tornado Loadings	3.3.2	Tornado Loadings	3.3.2		Tornado Loadings	Wind and Tornado Site Interface Criteria	3.3.2.2-1	3.3-1						05 Rev. 2					One COL Action item for both wind and tornado loadings in FSER				
X	X	3.4	External and Internal Flooding	3.4		Water Level (Flood) Design												X	X					
3.4.1	Internal Flood Protection for Onsite Equipment	3.4.1	Flood Protection	3.4.1		Flood Protection	Site-Specific Flooding Hazards Protective Measures	3.4.1.1-1	3.4-1											FSER Section 3.4.1.1 discusses external flooding				
3.4.2	Analysis Procedures	3.4.1	Flood Protection	3.4.2		Analyses and Test Procedures																		
X	X	3.5	Missile Protection	3.5		Missile Protection												X	X					
X	X	3.5.1	Missile Selection and Description	3.5.1		Missile Selection and Description																		
3.5.1.1	Internally Generated Missiles (Outside Containment)	3.5.1	Missile Selection and Description	3.5.1.1		Internally Generated Missiles (Outside Containment)																		
3.5.1.2	Internally Generated Missiles (Inside Containment)	3.5.1	Missile Selection and Description	3.5.1.2		Internally Generated Missiles (Inside Containment)																		
3.5.1.3	Turbine Missiles	3.5.1	Missile Selection and Description	3.5.1.3		Turbine Missiles																		
3.5.1.4	Missiles Generated by Tornadoes and Extreme Winds	3.5.1	Missile Selection and Description	3.5.1.4		Missiles Generated by Natural Phenomena																		
3.5.1.5	Site Proximity Missiles (Except Aircraft)	3.5.1	Missile Selection and Description	3.5.1.5		Missiles Generated by Events near the Site	External Missile Protection Requirements	3.5.1.5-1	3.5-1															
3.5.1.6	Aircraft	3.5.1	Missile Selection and Description	3.5.1.6		Aircraft Hazards																		
3.5.2	Structures, Systems, and Components to be Protected From Externally Generated Missiles	3.5.2	Protection From Externally Generated Missiles	3.5.2		Protection From Externally Generated Missiles																		
3.5.3	Barrier Design Procedures	3.5.3	Barrier Design Procedures	3.5.3		Barrier Design Procedures																		
X	X	3.6	Protection Against the Dynamic Effects Associated with the Postulated Rupture of Piping	3.6		Protection Against the Dynamic Effects Associated with the Postulated Rupture of Piping												X						
X	X	X	X	X		X	Operating Procedures to Minimize Water Hammer			3.2										Combined License Applicant Procedure--Requirement of AP 1000				
3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems	3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment	3.6.1		Postulated Piping Failures in Fluid Systems Inside and Outside Containment	Pipe Break Hazard Analysis	3.6.2.3-1	3.6-1						6, 7									

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated	3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	3.6.2		Determination of Break Locations and Dynamic Effects Associated with the Postulated Rupture of Piping																		
3.6.3	Leak-Before-Break Evaluation Procedures	X	X	3.6.3		Leak-Before-Break Evaluation Procedures	Leak-Before-Break Evaluation of as-Designed Piping	3.6.3.1-2	3.6-2						6, 8, 08 Rev. 1, 08 Rev. 2									
3.6.3	Leak-Before-Break Evaluation Procedures	X	X	3.6.3		Leak-Before-Break Evaluation Procedures	Leak-Before-Break Evaluation of as-Built Piping	3.6.3.1-1	3.6-3						6									
3.6.3	Leak-Before-Break Evaluation Procedures	X	X	3.6.3		Leak-Before-Break Evaluation Procedures	Primary System Inspection Program for Leal-Before-Break Piping	3.6.3.4-1	3.6-4															
X	X	3.7	Seismic Design	3.7		Seismic Design												X	X					
3.7.1	Seismic Design Parameters	3.7.1	Seismic Input	3.7.1		Seismic Input	Seismic Analysis of Dams	3.7.2.13-1	3.7-1						03 Rev.0, 03 Rev.1									
3.7.2	Seismic System Analysis	3.7.2	Seismic System Analysis	3.7.2		Seismic System Analysis									115									
3.7.3	Seismic Subsystem Analysis	3.7.3	Seismic Subsystem Analysis	3.7.3		Seismic Subsystem Analysis																		
3.7.4	Seismic Instrumentation	3.7.4	Seismic Instrumentation	3.7.4		Seismic Instrumentation	Site Seismic Sensor Location and			3.3														
3.7.4	Seismic Instrumentation	3.7.4	Seismic Instrumentation	3.7.4		Seismic Instrumentation	Earthquake Response Procedures			3.12														
3.7.4	Seismic Instrumentation	3.7.4	Seismic Instrumentation	3.7.4		Seismic Instrumentation	Post-Earthquake Procedures	3.7.5-2	3.7-2															
3.7.4	Seismic Instrumentation	3.7.4	Seismic Instrumentation	3.7.4		Seismic Instrumentation	Seismic Interaction Review	3.7.5-3	3.7-3						6									
3.7.4	Seismic Instrumentation	3.7.4	Seismic Instrumentation	3.7.4		Seismic Instrumentation	Reconciliation of Seismic Analyses of Nuclear Island Structures	3.7.5-1	3.7-4						6, 57, 57 Rev. 1, 85									
3.7.4	Seismic Instrumentation	3.7.4	Seismic Instrumentation	3.7.4		Seismic Instrumentation	Location of Free-Field Acceleration	3.7.5-4	3.7-5															
X	X	3.8	Design of Category I Structures	3.8		Design of Category I Structures												X						
X	X	X	X	X		X	Depth of Overburden			3.4														
X	X	X	X	X		X	Depth of Embedment			3.5														
3.8.1	Concrete Containment	3.8.1	Concrete Containment	3.8.1		Concrete Containment																		
3.8.2	Steel Containment	3.8.2	Steel Containment	3.8.2		Steel Containment	Containment Vessel Design Adjacent to Large Penetrations	3.8.2.4.1.2-1	3.8-1						9, 09 Rev. 1, 113									
3.8.3	Concrete and Steel Internal Structures of Steel or Concrete Containments	3.8.3	Concrete and Steel Containment Internal Structures	3.8.3		Concrete and Steel Internal Structures of Steel Containment																		
3.8.4	Other Seismic Category I Structures	3.8.4	Other Seismic Category I Structures	3.8.4		Other Category I Structures																		
3.8.5	Foundations	3.8.5	Foundations	3.8.5		Foundations	Specific Depth of Waterproofing			3.6														
3.8.5	Foundations	3.8.5	Foundations	3.8.5		Foundations	Foundation Settlement Monitoring			3.7														

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
3.8.5	Foundations	3.8.5	Foundations	3.8.5		Foundations	Passive Containment Cooling System Water Storage Tank Examination	3.8.6-1	3.8-2						6									
3.8.5	Foundations	3.8.5	Foundations	3.8.5		Foundations	As-Built Summary Report	3.8.6-2	3.8-3						6									
3.8.5	Foundations	3.8.5	Foundations	3.8.5		Foundations	In-Service Inspection of Containment Vessel	3.8.6-3	3.8-4						6									
X	X	3.9	Mechanical Systems and Components	3.9		Mechanical Systems and Components									106			X						
X	X	X	X	X		X	Reactor Internals Neutron Pads						29											
X	X	X	X	X		X	Control Rod Drive System						30											
X	X	X	X	X		X	Integrated Head Package Design						61											
3.9.1	Special Topics for Mechanical Components	3.9.1	Special Topics for Mechanical Components	3.9.1		Special Topics for Mechanical Components																		
3.9.2	Dynamic Testing and Analysis of Systems, Structures and	3.9.2	Dynamic Testing and Analysis of Systems, Structures and Components	3.9.2		Dynamic Testing and Analysis	Reactor Internal Vibration Program	3.9.2.3-1	3.9-1						10									
3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3		ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	Design Specification and Reports	3.9.2.4-1	3.9-2						6, 11a thru 11j, 12, 13									
3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3		ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	Snubber Operability Testing	3.9.8-1	3.9-3															
3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3		ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	Surge Line Thermal Monitoring	3.12.5.10-1	3.9-5															
3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	3.9.3		ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	Piping Benchmark Program	3.12.4.5-1	3.9-6						15, 100									
3.9.4	Control Rod Drive Systems	3.9.4	Control Rod Drive Systems	3.9.4		Control Rod Drive Systems																		
3.9.5	Reactor Pressure Vessel Internals	3.9.5	Reactor Pressure Vessel Internals	3.9.5		Reactor Pressure Vessel Internals	Reactor Internal Vibration Program	3.9.2.3-1	3.9-1						10									
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves,	3.9.6	Testing of Pumps and Valves	3.9.6		Inservice Testing of Pumps and Valves	Inservice, Preservice, and Motor-Operated Valve Testing Programs							2, 6, 18										

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves,	3.9.6	Testing of Pumps and Valves	3.9.6		Inservice Testing of Pumps and Valves	Inservice Inspection Requirements and Locations			3.10														
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves,	3.9.6	Testing of Pumps and Valves	3.9.6		Inservice Testing of Pumps and Valves	Maintenance of Preservice and Reference Test Data for Inservice Testing of Pumps and Valves			3.11														
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves,	3.9.6	Testing of Pumps and Valves	3.9.6		Inservice Testing of Pumps and Valves	Valve Inservice Testing	3.9.6.4-1	3.9-4															
X	X	3.9.7	Integrated Head Package	3.9.7		Integrated Head Package																		
3.9.7	Risk-Informed Inservice Testing	X	X	X		X																		
3.9.8	Risk-Informed Inservice Inspection of	X	X	X		X																		
3.10	Seismic and Dynamic Qualification of Mechanical and Electrical Equipment	3.10	Seismic and Dynamic Qualification of Seismic Category I Mechanical and Electrical Equipment	3.10		Seismic and Dynamic Qualification of Seismic Category I Mechanical and Electrical Equipment	Methodology for Qualifying AP1000 Safety Related Electrical and Mechanical Equipment						62											
X	X	X	X	X		X	Experience-Based Qualification	3.10-1	3.10-1						16									
3.11	Environmental Qualification of Mechanical and Electrical Equipment	3.11	Environmental Qualification of Mechanical and Electrical Equipment	3.11		Environmental Qualification of Mechanical and Electrical Equipment	Environmental Qualification Program							3	62, 62 Rev.1, 62 Rev. 2, 110			X						
X	X	X	X	X		X	Methodology for Qualifying AP1000 Safety Related Electrical and Mechanical Equipment						62							COL Info Item 3D				
X	X	X	X	X		X	Equipment Qualification File	3.11.2-1	3.11-1															
3.12	ASME Code Class 1, 2, and 3 Piping Systems, Piping Components	3.12	Piping design	X		X																		
3.13	Threaded Fasteners - ASME Code Class 1, 2, and	X	X	X		X																		
4.0	**Reactor**	**4.0**	**Reactor**	**4.0**		**Reactor**																		
X	X	4.1	Introduction	4.1		Summary description									119									
4.2	Fuel System Design	4.2	Fuel System Design	4.2		Fuel System Design	Changes to Reference Reactor Design	4.2.8-1	4.2-1						18									
4.3	Nuclear Design	4.3	Nuclear Design	4.3		Nuclear Design	Changes to Reference Reactor Design	4.2.8-1	4.3-1						18									
4.4	Thermal and Hydraulic Design	4.4	Thermal - Hydraulic Design	4.4		Thermal and Hydraulic Design	Changes to Reference Reactor Design	4.2.8-1	4.4-1						18									

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
4.4	Thermal and Hydraulic Design	4.4	Thermal - Hydraulic Design: Testing and Verification	4.4		Thermal and Hydraulic Design	Confirm Assumptions for Safety Analyses DNBR Limits	4.4-1	4.4-2						18									
X	X	4.5	Reactor Materials	4.5		Reactor Materials																		
4.5.1	Control Rod Drive Structural Materials	4.5.1	Control Rod Drive System Structural Materials	4.5.1		Control Rod Drive System Structural Materials									30									
4.5.2	Reactor Internal and core Support Structure Materials	4.5.2	Reactor Internal and Core Support Materials	4.5.2		Reactor Internal and Core Support Materials	Reactor internals design change					29			29, 29 Rev. 2									
4.5.2	Reactor Internal and core Support Structure Materials	4.5.2	Reactor Internal and Core Support Materials	4.5.2		Reactor Internal and Core Support Materials	Reactor internals materials								31									
4.6	Functional Design of Control Rod Drive System	4.6	Functional Design of Reactivity Control Systems	4.6		Functional Design of Reactivity Control Systems																		
X	X	X	X	X		X	Integrated head package design								61									
5.0	**Reactor Coolant System and Connected Systems**	**5.0**	**Reactor Coolant System and Connected Systems**	**5.0**		**Reactor Coolant System and Connected Systems**																		
X	X	5.1	Summary Description	5.1		Summary Description																		
X	X	5.2	Integrity of Reactor Coolant Pressure Boundary	5.2		Integrity of Reactor Coolant Pressure Boundary				3.10, 3.11					32, 33, 33 Rev. 1			X						
X	X	5.2.1	Compliance With Code and Code Cases	5.2.1		Compliance with Codes and Code Cases	ASME Code and Addenda	5.2.1.1-1	5.2-1															
5.2.1.1	Compliance With the Codes and Standards Rule, 10 CFR 50.55a	5.2.1.1	Compliance with 10 CFR 50.55a	5.2.1.1		Compliance with 10 CFR 50.55a																		
5.2.1.2	Applicable Code Cases	5.2.1.2	Applicable Code Cases	5.2.1.2		Applicable Code Cases																		
5.2.2	Overpressure Protection	5.2.2	Overpressure Protection	5.2.2		Overpressure Protection														COL Action Item 5.2.2.2-1 (P/T Limit Curves) is addressed in DCD COL information Item 5.3-1 (line 177).				
5.2.3	Reactor Coolant Pressure Boundary Materials	5.2.3	Reactor Coolant Pressure Boundary Materials	5.2.3		Reactor Coolant Pressure Boundary Materials																		
5.2.4	Reactor Coolant Pressure Boundary Inservice Inspection and Testing	5.2.4	RCS Pressure Boundary Inservice Inspection and Testing	5.2.4		Inservice Inspection and Testing of Class 1 Components																		
5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	5.2.5		Detection of Leakage Through Reactor Coolant Pressure Boundary																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
X	X	X	X	5.2.6		Combined License Information Items																		
X	X	X	X	5.2.6.1		ASME Code and Addenda																		
X	X	X	X	5.2.6.2		Plant-Specific Inspection Program	Plant Specific Preservice Inspection Program of Reactor Vessel Closure Head	4.5.1-1	5.2-2															
X	X	X	X	5.2.6.2		Plant-Specific Inspection Program	Plant Specific Inspection Program that addresses issues in NRC Order EA-03-009	4.5.1-2	5.2-2															
X	X	X	X	5.2.6.2		Plant-Specific Inspection Program	Plant Specific Inspection Program that references edition and addenda of ASME Code Section XI used for selecting and exempting components for testing.	5.2.4.1-1	5.2-2															
X	X	5.3	Reactor Vessel	5.3		Reactor Vessel												X						
5.3.1	Reactor Vessel Materials	5.3.1	Reactor Vessel Design	5.3.1		Reactor Vessel Design	Reactor Vessel Material Surveillance Program							5										
5.3.2	Pressure Temperature Limits and Pressurized Thermal Shock	5.3.2	Reactor Vessel Materials	5.3.2		Reactor Vessel Materials	Reactor Vessel Materials Surveillance Program	5.3.2.4-1	5.3-2						23									
5.3.3	Reactor Vessel Integrity	5.3.3	Pressure-Temperature Limits	5.3.3		Pressure-Temperature Limits	Reactor Vessel Pressure-Temperature Limit Curves	5.2.2.2-1	5.3-1						6									
5.3.3	Reactor Vessel Integrity	5.3.3	Pressure-Temperature Limits	5.3.3		Pressure-Temperature Limits	Surveillance Capsule Lead factor and Azimuthal Location Confirmation	5.3.2.2-1	5.3-3						23									
5.3.3	Reactor Vessel Integrity	5.3.3	Pressure-Temperature Limits	5.3.3		Pressure-Temperature Limits	Reactor Vessel Material Properties Verification	5.3.4.3-1	5.3-4						6, 24									
X	X	5.3.4	Pressurized Thermal Shock	5.3.4		Reactor Vessel Integrity																		
X	X	5.3.5	Reactor Vessel Integrity	5.3.5		Reactor Vessel Insulation	Reactor Vessel Insulation	19.2.3.3.1.3.2-1	5.3-5						24									
5.4	Reactor Coolant System Components and Subsystem Design	5.4	Components and Subsystem Design	5.4		Component and Subsystem Design				5.1					34, 35, 36			X						
5.4.1.1	Pump Flywheel Integrity (PWR)	5.4.1	Reactor Coolant Pump Assembly	5.4.1		Reactor Coolant Pump Assembly																		
5.4.2.1	Steam Generator Materials	5.4.2	Steam Generators	5.4.2		Steam Generators																		
5.4.2.2	Steam Generator Program	5.4.2	Steam Generators	5.4.2		Steam Generators	Steam Generator Tube Integrity	5.4.2.2.3-1	5.4-1															
X	X	5.4.3	RCS Piping	5.4.3		Reactor Coolant System Piping																		
X	X	5.4.4	Main Steamline Flow Restriction	5.4.4		Main Steam Line Flow Restriction																		

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
X	X	5.4.5	Pressurizer	5.4.5		Pressurizer																		
5.4.6	Reactor Core Isolation Cooling System (BWR)	5.4.6	Automatic Depressurization System Valves	5.4.6		Automatic Depressurization System Valves																		
5.4.7	Residual Heat Removal (RHR) System	5.4.7	Normal Residual Heat Removal System	5.4.7		Normal Residual Heat Removal System									38									
5.4.8	Reactor Water Cleanup System (BWR)	5.4.8	Valves	5.4.8		Valves																		
X	X	5.4.9	Reactor Coolant System Pressure Relief Devices	5.4.9		Reactor Coolant System Pressure Relief Devices																		
X	X	5.4.10	RCS Component Supports	5.4.10		Component Supports																		
5.4.11	Pressurizer Relief Tank	5.4.11	Pressurizer Relief Discharge	5.4.11		Pressurizer Relief Discharge																		
5.4.12	Reactor Coolant System High Point Vents	5.4.12	Reactor Coolant System High-Point Vents	5.4.12		Reactor Coolant System High Point Vents																		
5.4.13	Isolation Condenser (BWR)	X	X	X		X																		
X	X	5.4.13	Core Makeup Tank	5.4.13		Core Makeup Tank																		
X	X	5.4.14	Passive Reactor Heat Removal Heat Exchanger	5.4.14		Passive Reactor Heat Removal Heat Exchanger																		
6.0	**Engineered Safety Features**	**6.0**	**Engineered Safety Features**	**6.0**		**Engineered Safety Features**																		
X	X	6.1	Engineered Safety Features Materials	6.1		Engineered Safety Features Materials												X						
6.1.1	Engineered Safety Features Materials	6.1.1	Structural Materials	6.1.1		Metallic Materials	Procedure Review for Austenitic Stainless Steels	6.1.1-1	6.1-1															
6.1.2	Protective Coating Systems (Paints) -	6.1.2	Protective Coating Systems (Paints) - Organic Materials	6.1.2		Organic Materials	Coatings Program	6.1.2-1	6.1-2															
	Containment Systems	6.2	Containment Systems	6.2		Containment Systems	Hydrogen Igniter Locations						37					X						
6.2.1	Containment Functional Design	6.2.1	Primary Containment Functional Design	6.2.1		Containment Functional Design	Inservice Inspection Requirements for the Containment			6.1														
6.2.1.1.A	PWR Dry Containments, Including Subatmospheric Containments	X	X	6.2.1.1		Containment Structure																		
6.2.1.1.B	Ice Condenser Containments	X	X	X		X																		
6.2.1.1.C	Pressure-Suppression Type BWR Containments	X	X	X		X																		
6.2.1.2	Subcompartment Analysis	X	X	6.2.1.2		Containment Subcomponents																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content		Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
6.2.1.3	Mass and Energy Release Analysis for Postulated Loss of Coolant Accidents (LOCAs)	X	X	6.2.1.3		Mass and Energy Release Analysis for Postulated Ruptures																	
6.2.1.4	Mass and Energy Release Analysis for Postulated Secondary System Pipe Ruptures	X	X	6.2.1.4		Mass and Energy Release Analysis for Postulated Secondary System Pipe Rupture Inside Containment																	
6.2.1.5	Minimum Containment Pressure Analysis for Emergency Core Cooling System Performance Capability	X	X	6.2.1.5		Minimum Containment Pressure Analysis for Performance Capability Studies of Emergency Core Cooling System (PWR)																	
X	X	X	X	6.2.1.6		Testing and Inspection																	
X	X	X	X	6.2.1.7		Instrumentation Requirements																	
6.2.2	Containment Heat Removal Systems	6.2.2	Containment Heat Removal Systems	6.2.2		Passive Containment Cooling System																	
6.2.3	Secondary Containment Functional Design	6.2.3	Shield Building Functional Design	X		X																	
6.2.4	Containment Isolation System	6.2.4	Containment Isolation System	6.2.3		Containment Isolation System																	
6.2.5	Combustible Gas Control in Containment	6.2.5	Containment Hydrogen Control System	6.2.4		Containment Combustible Gas Control																	
6.2.6	Containment Leakage Testing	6.2.6	Containment Leakage Testing	6.2.5		Containment Leak Rate Testing System	Containment Leakage Rate Testing Program							7						6.2.6			
X	X	X	X	X		X	Containment Leak Rate Testing	6.2.6-1	6.2-1														
6.2.7	Fracture Prevention of Containment Pressure Boundary	6.2.7	Fracture Prevention of Containment Pressure Boundary	X		X																	
X	X	6.2.8	In-Containment Refueling Water Storage Tank Hydrodynamic Loads	X		X																	
6.3	Emergency Core Cooling System	6.3	Passive Core Cooling System	6.3		Passive Core Cooling System	PRHR Hx Design						38					X		DCD COL info items 6.3-1 and 6.3-2 (COL Action items 6.2.1.8.1-1 and 6.2.1.8.2-1) are SPCV's purview (lines 229 and 230)				
6.4	Control Room Habitability System	6.4	Control Room Habitability System	6.4		Habitability System	Local Toxic Gas Services and Monitoring	6.4-3	6.4-1	6.2								X	X				
X	X	X	X	X		X	Procedures for Training for Control Room Habitability	6.4-1	6.4-2	6.2													
X	X	X	X	X		X	Main Control Room Inleakage Test Frequency	6.4-2	6.4-3	6.2					27, 27 Rev. 1								

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
X	X	X	X	X		X	Offsite environmental conditions assumed for main Control Room and technical support center habitability desigr			6.2										Site-specific parameters				
X	X	6.5	Fission Product Removal and Control Systems	6.5		Fission Product Removal and Control Systems																		
6.5.1	ESF Atmosphere Cleanup Systems	6.5.1	ESF Plant Atmosphere Filtration Systems	6.5.1		ESF Filter Systems																		
6.5.2	Containment Spray as a Fission Product Cleanup System	6.5.2	Containment Spray System	6.5.2		Containment Spray System	Containment Cleanliness Program	6.2.1.8.1-1	6.3-1											DCD COL info item 6.3-1 (COL Action item 6.2.1.8.1-1) is SPCV's purview.				
X	X	X	X	6.5.2		Containment Spray System	Verification of Containment Resident Particulate Debris Characteristics	6.2.1.8.2-1	6.3-2						26					DCD COL info item 6.3-2 (COL Action item 6.2.1.8.2-1) is SPCV's purview.				
6.5.3	Fission Product Control Systems and Structures	6.5.3	Fission Product Control Systems	6.5.3		Fission Product Control Systems																		
6.5.4	Ice Condenser as a Fission Product Cleanup System	X	X	X		X																		
6.5.5	Pressure Suppression Pool as a Fission Product Cleanup System	X	X	X		X																		
6.6	Inservice Inspection of Class 2 and 3 Components	6.6	Inservice Inspection of Class 2 and 3 Components	6.6		Inservice Inspection of Class 2 and 3 Components	Inservice and Preservice Inspection Program							1, 4				X						
6.6	Inservice Inspection of Class 2 and 3 Components	6.6	Inservice Inspection of Class 2 and 3 Components	6.6		Inservice Inspection of Class 2 and 3 Components	Inservice Inspection Requirements and Locations			3.10														
6.6	Inservice Inspection of Class 2 and 3 Components	6.6	Inservice Inspection of Class 2 and 3 Components	6.6		Inservice Inspection of Class 2 and 3 Components	Maintenance of Preservice and Reference Test Data for Inservice Testing of Pumps and Valves			3.11														
6.6	Inservice Inspection of Class 2 and 3 Components	6.6	Inservice Inspection of Class 2 and 3 Components	6.6		Inservice Inspection of Class 2 and 3 Components	Inspection Programs	6.6-1	6.6-1															
6.6	Inservice Inspection of Class 2 and 3 Components	6.6	Inservice Inspection of Class 2 and 3 Components	6.6		Inservice Inspection of Class 2 and 3 Components	Construction Activities	6.6-2	6.6-2															
6.7	Main Steam Isolation Valve Leakage Control System (BWR)	X	X	X		X																		
7.0	**Instrumentation & Controls**	**7.0**	**Instrumenta-tion & Controls**	**7.0**		**Instrumenta-tion & Controls**																		
7	Instrumentation and Controls - Overview of Review	X	X	X		X																		
Appendix 7.0 A	Review Process for Digital Instrumentation	X	X	X		X																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Setpoint Calculations for Protective Functions	7.1.7-1 7.2.7-1	7.1-1 7.1-2															
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Setpoint Calculations for Protective Functions	7.1.7-1 7.2.7-1	7.1-1						28									
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Mark-up of DCD Ch 7	NA	NA						80									
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Design criteria list			7.1														
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Site SW inst. power			7.2														
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Site SW inst. provisions			7.3														
7.1-T	Table 7-1 Regulatory Requirements, Acceptance Criteria, and Guidelines for Instrumentation and Control	7.1	Introduction	1-Appendix 1A		Conformance With Regulatory Guides	Resolution of Generic Open Items and Plant-Specific Action Items	7.1.7-1 7.2.3-1 7.2.3-3	7.1-2															
7.1	Instrumentation and Controls -- Introduction	7.1	Introduction	7.1		Introduction	Resolution of Generic Open Items and Plant-specific Action Items	7.1.7-1 7.2.3-1 7.2.3-3	7.1-2						42									
Appendix 7.1 A	Acceptance Criteria and Guidelines for Instrumentation and Controls Systems Important to Safety	7.1	Introduction	1- Appendix 1A 1.9.2		Conformance With Regulatory Guides Compliance with Standard Review Plan																		
Appendix 7.1 B	Guidance for Evaluation of Conformance to IEEE Std 279	NA	NA (AP1000 Conforms to IEEE 603)	1- Appendix 1A 1.9.2		Conformance With Regulatory Guides Compliance with Standard Review Plan														IEEE Std 279 replaced by IEEE Std 603				
Appendix 7.1 C	Guidance for Evaluation of Conformance to IEEE Std 603	7.1.3.2	Compliance with Industry Standards	7.1.4.2 1.9.2		Conformance With Industry Standards Compliance with Standard Rview Plan																		
Appendix 7.1 D	Guidance for Evaluation of the Application of IEEE Std 7-4.3.2	7.1.1	Acceptance Criteria	1.9.2		Compliance with Standard Review Plan																		
Appendix 7.1 D	Guidance for Evaluation of the Application of IEEE Std 7-	7.1.7	Commercial-Grade Item Dedication	1- Appendix 1A		Conformance With Regulatory Guides																		
Appendix 7.1 D	Guidance for Evaluation of the Application of IEEE Std 7-4.3.2	7.2.8	PMS Evaluation Findings and Conclusions	7.2		Reactor Trip System																		
Appendix 7.1 D	Guidance for Evaluation of the Application of IEEE Std 7-	7.5.3	Network Gateway (Real-Time to PMS)	7.1.2.8		Communication Functions																		
7.2	Reactor Trip System	7.2	Reactor Trip System	7.2		Reactor Trip System	FMEA for Protection System	7.2.3-2 7.2.6-1	7.2-1															

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16													New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
7.2	Reactor Trip System	7.2	Reactor Trip System	7.2		Reactor Trip System	FMEA and SHA for Protection and Safety Monitoring System (Summary Report)	7.2.3-2 7.2.6-1	7.2-1						43								
7.2	Reactor Trip System	7.2	Reactor Trip System	7.2		Reactor Trip System	I&C Design Changes	NA	NA						39					Per Ref.10: TR 39 addresses changes to PMS logic drawing and supporting text due to development of the AP1000 Plant Requirements and adoption of a new PMS platform. These are outcomes of the I&C design process. No effect on the design functions of the PM				
7.3	Engineered Safety Features Systems	7.3	Engineered Safety Features Actuation Systems	7.3		Engineered Safety Features																	
7.4	Safe Shutdown Systems	7.4	Systems Required for Safe Shutdown	7.4		Systems Required for Safe Shutdown																	
7.5	Information Systems Important to Safety	7.5	Safety-Related Display Information	7.5		Safety-Related Display Information																	
7.6	Interlock Systems Important to Safety	7.6	Interlock Systems Important to Safety	7.6		Interlock Systems Important to Safety																	
7.7	Control Systems	7.7	Control and Instrumentation Systems	7.7		Control and Instrumentation Systems	DAS Platform Technology & Remote Indication Change								97								
7.8	Diverse I &C Systems	7.1.6	Defense-in-Depth and Diversity Assessment of the AP1000 Protection System	7.1.1		The AP1000 Instrumentation and Control Architecture																	
7.9	Data Communication Systems	7.1.5	Instrumentation & Control System Architecture	7.1.1		The AP1000 Instrumentation and Control Architecture	AP1000 Instrumentation & Control (I&C) Data Communication and Manual Control of Safety Systems and Components								88								
7.9	Data Communication Systems	7.1.5	Instrumentation & Control System Architecture	7.1.1		The AP1000 Instrumentation and Control Architecture	AP1000 Protection and Safety Monitoring System Architecture Technical Report								89								
7.9	Data Communication Systems	7.5.2	Processing and Display Equipment	7.1.2.6		Main Control Room Multiplexers																	
7.9	Data Communication Systems	7.5.3	Network Gateway (Real-Time to PMS)	7.1.3.1		Distributed Controllers																	
7.9	Data Communication Systems	7.5.3	Network Gateway (Real-Time to PMS)	7.1.3.4		Real-Time Data Network																	
Appendix 7-A	General Agenda, Station Site	X	X	X		X																	
Appendix 7-B	Acronyms, Abbreviations, and Glossary	X	X	X		X																	
Branch Technical Positions																							

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
BTP 7-1	Guidance on Isolation of Low Pressure Systems from the High-Pressure Reactor	7.6	Interlock Systems Important to Safety	7.6		Interlock Systems Important to Safety														DCD 1.9.2 refers to WCAP-15799				
BTP 7-2	Guidance on Requirements of Motor-Operated Valves in the Emergency Core Cooling	7.6.2	Interlocks for Accumulator Isolation Valve	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-3	Guidance on Protection System Trip Point Changes for Operation with Reactor Coolant Pumps	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-4	Guidance on Design Criteria for Auxiliary Feedwater	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-5	Guidance on Spurious Withdrawals of Single Control Rods in Pressurized	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-6	Guidance on Design of Instrumentation and Controls Provided to Accomplish Changeover from Injection	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-7	Not Used	X	X	X		X																		
BTP 7-8	Guidance for Application of Regulatory Guide 1.22	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-9	Guidance on Requirements for Reactor Protection System	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-10	Guidance on Application of Regulatory Guide 1.97	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-10	Guidance on Application of Regulatory Guide 1.97	7.1.3.1	Compliance with SRP Accceptance Criteria	1-Appendix 1A		Conformance With Regulatory Guides																		
BTP 7-11	Guidance on Application and Qualification of Isolation Devices	7.1.3.1	Acceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-12	Guidance on Establishing and Maintaining Instrument Setpoints	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16													New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
BTP 7-13	Guidance on Cross-Calibration of Protection System Resistance Temperature	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-14	Guidance on Software Reviews for Digital Computer-Based Instrumentation and Control	7.1.3.1	Acceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-14	Guidance on Software Reviews for Digital Computer-Based Instrumentation	7.1.3.1	PMS Design Process Review	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-15	Not Used	X	X	X		X																	
BTP 7-16	Guidance on the Level of Detail Required for Design Certification	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-17	Guidance on Self-Test and Surveillance Test Provisions	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-18	Guidance on the Use of Programmable Logic Controllers in Digital Computer-Based Instrumentation	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-18	Guidance on the Use of Programmable Logic Controllers in Digital Computer-Based Instrumentation	7.1.7	Commercial-Grade Item Dedication	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-19	Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	
BTP 7-19	Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control	7.1.6	Defense-in-Depth and Diversity Assessment of the AP1000 Protection System	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																	

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
BTP 7-19	Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems	7.2.3 (PSAI 6.11)	Common Qualified Platform Design and COL Action Items	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
BTP 7-20	Not Used	X	X	X		X																		
BTP 7-21	Guidance on Digital Computer Real-Time Performance	7.1.3.1	Compliance with SRP Accceptance Criteria	1.9.2 (See WCAP-15799)		Compliance with Standard Review Plan																		
8.0	**Electric Power**	**8.0**	**Electric Power Systems**	**8.0**		**Electric Power**																		
8.1	Electric Power - Introduction	8.1	Introduction	8.1		Introduction													X					
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Transmission system design, test and inspection	8.2.3.3-1	8.2-1						79				X					
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Switchyard voltage and frequency	8.2.3-1	8.2-1						79									
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Grid stability analysis	8.2.3.1-1	8.2-2						79									
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Switchyard breaker settings	8.2.3.1-2	8.2-2						79									
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Grid stability analysis	8.2.3.1-3	8.2-2						79									
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Offsite power design criteria list			8.1					79									
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Offsite ac power design requirements			8.2					79									
8.2	Offsite Power System	8.2	Offsite Power System	8.2		Offsite Power System	Offsite transmission system analysis			8.3					79									
X	X	X	X	8.3		Onsite Power Systems												X	X					
8.3.1	AC Power Systems	8.3.1	AC Power Systems (Onsite)	8.3.1		AC Power Systems (Onsite)	Preop test procedures	8.3.1.2-1	8.3.2						79									
8.3.1	AC Power Systems (Onsite)	8.3.1	AC Power Systems (Onsite)	8.3.1		AC Power Systems (Onsite)	Grounding and lightning protection	8.3.1.6-1	8.3.1						79									
8.3.1	AC Power Systems (Onsite)	8.3.1	AC Power Systems (Onsite)	8.3.1		AC Power Systems (Onsite)	Penetration protective device testing	8.4.1-1	8.3.2						93					See also:RAI on TR93 5/10/07				
8.3.1	AC Power Systems (Onsite)	8.3.1	AC Power Systems (Onsite)	8.3.1		AC Power Systems (Onsite)	On-site ac design criteria list			8.4														
8.3.1	AC Power Systems (Onsite)	8.3.1	AC Power Systems (Onsite)	8.3.1		AC Power Systems (Onsite)	On-site ac requirements			8.5														
8.3.1	AC Power Systems (Onsite)	8.3.1	AC Power Systems (Onsite)	8.3.1		AC Power Systems (Onsite)	DG Room Coordination			8.6														
8.3.2	DC Power Systems (Onsite)	8.3.2	DC Power Systems (Onsite)	8.3.2		DC Power Systems (Onsite)																		
8.3.2	DC Power Systems (Onsite)	8.3.2	DC Power Systems (Onsite)	8.3.2		DC Power Systems (Onsite)	DC design criteria list			8.7														
8.3.2	DC Power Systems (Onsite)	8.3.2	DC Power Systems (Onsite)	8.3.2		DC Power Systems (Onsite)	DC for site SW system			8.8														
8.4	Station Blackout	8.5.2.1	Station Blackout	1.9.5.4		Additional Licensing Issue																		
Appendix 8-A	General Agenda,	X	X	X		X																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
BTP 8-1	Requirements on Motor-Operated Valves in the ECCS Accumulator	8.4.4	Power Lockout to Motor-Operated Valves	8.3.2 7.6		DC Power Systems (Onsite) Interlock Systems Important to Safety																		
BTP 8-2	Use of Diesel-Generator Sets for Peaking	8.3.1.2	Standby Diesel Generators	Table 8.1-1		Introduction																		
BTP 8-3	Stability of Offsite Power Systems	8.2	Offsite Power System	Table 8.1-1		Introduction	Grid stability analysis	8.2.3.1-3	8.2-2															
BTP 8-3	Stability of Offsite Power Systems	8.2	Offsite Power System	Table 8.1-1		Introduction	Offsite transmission system analysis			8.3														
BTP 8-4	Application of the Single Failure Criterion to Manually-Controlled Electrically-Operated	8.4.4	Power Lockout to Motor-Operated Valves	Table 8.1-1		Introduction																		
BTP 8-5	Supplemental Guidance for Bypass and Inoperable Status Indication for Engineered	8.1	Introduction	Table 8.1-1		Introduction																		
BTP 8-6	Adequacy of Station Electric Distribution System Voltage	8.2	Offsite Power System	Table 8.1-1		Introduction	Switchyard voltage and frequency	8.2.3-1	8.2-1															
BTP 8-6	Adequacy of Station Electric Distribution System Voltage	8.2	Offsite Power System	Table 8.1-1		Introduction	Transmission system design, test and inspection	8.2.3.3-1	8.2-1															
BTP 8-6	Adequacy of Station Electric Distribution System Voltage	8.2	Offsite Power System	Table 8.1-1		Introduction	Offsite power design criteria list			8.1														
BTP 8-6	Adequacy of Station Electric Distribution System Voltage	8.2	Offsite Power System	Table 8.1-1		Introduction	Offsite ac power design requirements			8.2														
BTP 8-7	Criteria for alarms and indications associated withh DG unit bypassed and inoperable	8.3.1.2	Standby Diesel Generators	Table 8.1-1		Introduction																		
9.0	**Auxiliary Systems**	**9.0**	**Auxiliary Systems**	**9.0**		**Auxiliary Systems**				9.1, 9.2, 9.3, 9.4,					103, 106									
9.1.1	Criticality Safety of Fresh and Spent Fuel Storage and Handling	9.1	Fuel Storage and Handling	9.1		Fuel Storage and Handling												X						
9.1.2	New and Spent Fuel	9.1.1	New Fuel Storage	9.1.1		New Fuel Storage																		
9.1.2	New and Spent Fuel Storage	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	New Fuel Rack structural dynamic and stress analysis	9.1.6-1	9.1-1						44									
9.1.2	New and Spent Fuel Storage	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Criticality Analysis for New Fuel Rack	9.1.6-2	9.1-2						67									
9.1.2	New and Spent Fuel Storage	9.1.2	Spent Fuel Storage	9.1.2		Spent Fuel Storage																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16													New Standard Content				Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
9.1.2	New and Spent Fuel Storage	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Spent Fuel Rack structural dynamic and stress analysis	9.1.6-3	9.1-3						54									
9.1.2	New and Spent Fuel Storage	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Criticality Analysis for Spent Fuel Racks	9.1.6-4	9.1-4						65									
9.1.3	Spent Fuel Pool Cooling and Cleanup System	9.1.3	Spent Fuel Pool Cooling and Purification	9.1.3		Spent Fuel Pool Cooling System																		
9.1.4	Light Load Handling System (Related to	9.1.4	Light-Load Handling System (Related to Refueling)	9.1.4		Light Load Handling System (Related to Refueling)																		
9.1.4	Light Load Handling System (Related to	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Inservice Inspection Program for load handling system	9.1.6-5	9.1-5															
9.1.4	Light Load Handling System (Related to Refueling)	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Operating radiation monitor to be mounted on any crane/fuel handling machine during fuel handling	9.1.6-6	9.1-6															
9.1.5	Overhead Heavy Load Handling Systems	9.1.5	Overhead Heavy-Load Handling Systems	9.1.5		Overhead Heavy Load Handling Systems																		
9.1.5	Overhead Heavy Load Handling Systems	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Inservice Inspection Program for load handling system	9.1.6-5	9.1-5															
9.1.5	Overhead Heavy Load Handling Systems	9.1.6	Combined License Information Items	9.1.6		Combined License Information for Fuel Storage and Handling	Operating radiation monitor to be mounted on any crane/fuel handling machine during fuel handling	9.1.6-6	9.1-6															
9.1.5	Overhead Heavy Load Handling Systems	9.2	Water Systems	9.2		Water Systems													X					
9.2.1	Station Service Water System	9.2.1	Service Water System	9.2.1		Service Water System																		
9.2.2	Reactor Auxiliary Cooling Water Systems	9.2.2	Component Cooling Water System	9.2.2		Component Cooling Water System																		
9.2.3	Demineralized Water Makeup System	9.2.3	Demineralized Water Treatment System	9.2.3		Demineralized Water Treatment System																		
9.2.4	Potable and Sanitary Water Systems	9.2.4	Demineralized Water Transfer and Storage System	9.2.4		Demineralized Water Transfer and Storage System																		
9.2.5	Ultimate Heat Sink	9.2.5	Potable Water System	9.2.5		Potable Water System																		
9.2.6	Condensate Storage Facilities	9.2.6	Sanitary Drainage System	9.2.6		Sanitary Drainage System																		
9.2.6	Condensate Storage Facilities	9.3	Process Auxiliaries	9.3		Process Auxiliaries												X						
9.3.1	Compressed Air System	9.3.1	Compressed and Instrument Air System	9.3.1		Compressed and Instrument Air System																		
9.3.2	Process and Post Accident Sampling	9.3.2	Plant Gas System	9.3.2		Plant Gas System																		
9.3.3	Equipment and Floor Drainage Systems	9.3.3	Primary Sampling System	9.3.3		Primary Sampling System																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
9.3.4	Chemical and Volume Control System (PWR) Including Boron Recovery System)	9.3.4	Secondary Sampling System	9.3.4		Secondary Sampling System.																		
9.3.5	Standby Liquid Control System (BWR)	9.3.5	Equipment and Floor Drainage System	9.3.5		Equipment and Floor Drainage Systems																		
9.3.5	Standby Liquid Control System (BWR)	9.3.5	Equipment and Floor Drainage System	9.3.7		Combined License Information	Air Systems (NUREG-0933 Issue 43)	9.3.1-1	9.3-1															
9.3.5	Standby Liquid Control System (BWR)	9.4	Air Conditioning, Heating, Cooling, and Ventilation System	9.4		Air-Conditioning, Heating, Cooling, and Ventilation System													X					
9.4.1	Control Room Area Ventilation System	9.4.1	Nuclear Island Nonradioactive Ventilation System	9.4.1		Nuclear Island Nonradioactive Ventilation System																		
9.4.2	Spent Fuel Pool Area Ventilation System	9.4.2	Annex/Auxiliary Buildings Nonradioactive HVAC System	9.4.2		Annex/Auxiliary Buildings Nonradioactive HVAC System																		
9.4.3	Auxiliary and Radwaste Area Ventilation System	9.4.3	Radiologically Controlled Area Ventilation System	9.4.3		Radiologically Controlled Area Ventilation System																		
9.4.4	Turbine Area Ventilation System	9.4.4	Balance-of-Plant Interfaces	9.4.4		Balance-of-Plant-Interface																		
9.4.5	Engineered Safety Feature Ventilation System	9.4.5	Engineered Safety Features Ventilation System	9.4.5		Engineered Safety Features Ventilation System																		
9.4.5	Engineered Safety Feature Ventilation System	9.4.5	Engineered Safety Features Ventilation System	9.4.12		Combined License Information	Ventilation systems and containment air filtration operations	9.4.1-1	9.4-1															
9.4.5	Engineered Safety Feature Ventilation System	9.5	Other Auxiliary Systems	9.5		Other Auxiliary Systems												X	X					
9.5.1	Fire Protection Program	9.5.1	Fire Protection Program	9.5.1		Fire Protection System	Fire Protection Program			9.7				8										
9.5.1	Fire Protection Program	9.5.1.1.a	Fire Protection Program (Regulatory Position C.1.a of BTP CMEB9.5-1)	9.5.1.8.1		Combined License Information	Fire protection program for structures, systems and components (SSCs)	9.5.1-1(a)	9.5-1															
9.5.1	Fire Protection Program	9.5.1.1.b	Fire Hazard Analysis (Regulatory Position C.1.b of BTP CMEB9.5-1)	9.5.1.8.2		Combined License Information	Fire Hazard Analysis for As-Built Plant Configuration	9.5.1-2	9.5-2															
9.5.1	Fire Protection Program	9.5.1.1.e	Implementation of Fire Protection Program (Regulatory Position C.1.e of BTP CMEB 9.5-1)	9.5.1.8.3		Combined License Information	Implementation of Fire Protection Program	9.5.1-1(b)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.2	Administrative Controls (Regulatory Position C.2 of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Administrative Controls to Maintain Performance of the Fire Protection Systems and Personnel	9.5.1-1(c)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.3	Fire Brigade (Regulatory Position C.3 of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Establish Fire Brigade	9.5.1-1(d)	9.5-3															

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
9.5.1	Fire Protection Program	9.5.1.4	Quality Assurance Program (Regulatory Position C.4 of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	QA Program for fire Protection Program	9.5.1-1(e)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.5.a	Building Design (Regulatory Position C.5.a of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Inspection and maintenance of fire doors, access to keys for the fire brigade and marking of exit routes	9.5.1-1(f)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.5.a	Building Design (Regulatory Position C.5.a of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Collection and sampling of water drainage that may contain radioactivity	9.5.1-1(g)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.5.d	Control of Combustibles (Regulatory Position C.5.d of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Use of compressed gases inside structures	9.5.1-1(h)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.5.g	Lighting and Communication (Regulatory Position C.5.g of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Portable Radio communication for fire brigade	9.5.1-1(i)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.7.a	Primary and Secondary Containment (Regulatory Position C.7.a of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Fire protection inside containment during refueling and maintenance	9.5.1-1(j)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.7.f	Remote Safety-Related Panels (Regulatory Position C.7.f of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Control of combustible materials at the remote safety-related panels	9.5.1-1(k)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.7.q	Cooling Towers (Regulatory Position C.7.q of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Fire protection for cooling towers	9.5.1-1(l)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.8.a	Storage of Oxygen_Acetylene Fuel Gases (Regulatory Position C.8.a of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Storage of welding gas cylinders	9.5.1-1(m)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.8.b	Storage Areas for Ion Exchange Resins (Regulatory Position C.8.b of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Storage of ion exchange resins	9.5.1-1(n)	9.5-3															
9.5.1	Fire Protection Program	9.5.1.8.c	Hazardous Chemicals (Regulatory Position C.8.c of BTP CMEB 9.5-1)	9.5.1.8		Combined License Information	Storage of hazardous chemicals	9.5.1-1(o)	9.5-3															
9.5.1	Fire Protection Program	19.1.8.1	General and Plant-Wide Requirements	9.5.1.8.7		Combined License Information	Fire detection/suppression and flooding control during maintenance	19.1.8.1-3	9.5-8															
9.5.1	Fire Protection Program	9.5.1.6	Fire Detection and Suppression (Regulatory Position C.6 of BTP CMEB 9.5-1)	9.5.1.8.4		Combined License Information	NFPA Code Deviations for FSAR	9.5.1-5	9.5-4															
9.5.1	Fire Protection Program	9.5.1.5.c	Alternative or Dedicated Shutdown Capability (Regulatory Positions C.5.b and C.5.c of BTP CMEB 9.5-1)	9.5.1.8.5		Combined License Information	Operator Actions Minimizing Spurious ADS Actuation	9.5.1-4	9.5-5						45									

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
9.5.1	Fire Protection Program	9.5.1.8	Special Protection Guidelines (Regulatory Position C.8 of BTP CMEB 9.5-1)	9.5.1.8.6		Combined License Information	Verification of field installed fire barriers	9.5.1-6	9.5-6															
9.5.1	Fire Protection Program	9.5.1.2	Administrative Controls (Regulatory Position C.2 of BTP CMEB 9.5-1)	9.5.1.8.7		Combined License Information	Procedures for fire watch during maintenance	9.5.1-3	9.5-8						46									
9.5.1	Fire Protection Program	9.5.1.9	Evaluation of Fire Protection Open Items and COL Action Items	9.5.1.8.8		Combined License Information	Fire Resistance Test Data for stairwell fire barriers	9.5.1-7	9.5-7						46									
9.5.1	Fire Protection Program	19.1.8.1	General and Plant-Wide Requirements	9.5.1.8.7		Combined License Information	Configuration control of fire/flood barriers	19.1.8.1-2	9.5-8															
9.5.2	Communications Systems	9.5.2	Communication Systems	9.5.2		Communication System																		
9.5.2	Communications Systems	9.5.2	Communication Systems	9.5.2.5.1		Offsite Interfaces	Offsite Interfaces	9.5.2-3	9.5-9															
9.5.2	Communications Systems	9.5.2	Communication Systems	9.5.2.5.2		Emergency Offsite Communications	Emergency Offsite Communications	9.5.2-1	9.5-10															
9.5.2	Communications Systems	9.5.2	Communication Systems	9.5.2.5.3		Security Communications	Security Communications	9.5.2-2	9.5-11															
9.5.3	Lighting Systems	9.5.3	Plant Lighting System	9.5.3		Plant Lighting System																		
9.5.4	Emergency Diesel Engine Fuel Oil Storage and Transfer System	9.5.4	Standby Diesel Generator Auxiliary Support Systems	9.5.4		Standby Diesel Fuel Oil System																		
9.5.4	Emergency Diesel Engine Fuel Oil Storage and Transfer System	9.5.4	Standby Diesel Generator Auxiliary Support Systems	9.5.4.7		Combined License Information	Cathodic protection for external tanks in contact with ground	9.5.9-1	9.5-12															
9.5.4	Emergency Diesel Engine Fuel Oil Storage and Transfer System	9.5.4	Standby Diesel Generator Auxiliary Support Systems	9.5.4.7		Combined License Information	Fuel oil storage tank installation and protection against fuel degradation	9.5.9-2	9.5-13															
9.5.5	Emergency Diesel Engine Cooling Water System	9.5.5	Standby Diesel Generator Cooling System	9.5.5		References																		
					9A													X	X					
9.5.6	Emergency Diesel Engine Starting System	9.5.6	Standby Diesel Generator Starting System	X		X																		
9.5.7	Emergency Diesel Engine Lubrication System	9.5.7	Standby Diesel Generator Lubricating Oil System	X		X																		
9.5.8	Emergency Diesel Engine Combustion Air Intake and Exhaust System	9.5.8	Standby Diesel Generator Combustion Air Intake and Exhaust System	X		X																		
X	X	9.5.9	Diesel Generator and Auxiliary Boiler Fuel Oil System	X		X																		
NEW	ESBWR Isolation Condenser																							

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
10.0	**Steam and Power Conversion System**	**10.0**	**Steam and Power Conversion System**	**10.0**		**Steam and Power Conversion**																		
X	X	10.1	Introduction	10.1		Summary Description									86, 127			X						
X	X	X	X	10.1.3		Combined License Information on Erosion-Corrosion Monitoring	Erosion-Corrosion Monitoring Program	10.5-1	10.1-1											Duplicate -see note				
X	X	X	X	10.1.3		Combined License Information on Erosion-Corrosion Monitoring	Erosion-Corrosion Monitoring Program	10.3.2-1	10.1-1															
10.2	Turbine Generator	10.2	Turbine Generator	10.2		Turbine - Generator												X						
10.2	Turbine Generator	10.2	Turbine Generator	10.2.6		Turbine Maintenance and Insp. COL Info	Turbine Maintenance and Inspection Program	10.5-2	10.2-1															
10.3	Main Steam Supply System	10.3	Main Steam Supply System	10.3		Main Steam Supply System												X						
10.3	Main Steam Supply System	10.3	Main Steam Supply System	10.3		Main Steam Supply System																		
X	X	10.4	Other Features	10.4		Other Features of Steam and Power Conversion System												X	X					
10.4.1	Main Condensers	10.4.1	Main Condensers	10.4.1		Main Condensers																		
10.4.2	Main Condenser Evacuation System	10.4.2	Main Condenser Evacuation System	10.4.2		Main Condenser Evacuation System																		
10.4.3	Turbine Gland Seal System	10.4.3	Turbine Gland Seal System	10.4.3		Gland Seal System																		
10.4.4	Turbine Bypass	10.4.4	Turbine Bypass System	10.4.4		Turbine Bypass System									6					< 3 yrs, As-Built Report				
10.4.5	Circulating Water System	10.4.5	Circulating Water System	10.4.5		Circulating Water System	Circulating Water supply	10.5-3	10.4-1											site-specific config, water chemistry				
10.4.6	Condensate Cleanup System	10.4.6	Condensate Polishing System	10.4.6		Condensate Polishing System																		
10.4.7	Condensate and Feedwater System	10.4.7	Condensate and Feedwater System	10.4.7		Condensate and Feedwater System	Condensate, Feedwater and Aux. Steam System Chemistry Control	10.5-4	10.4-2											Chemistry Control				
10.4.8	Steam Generator Blowdown	10.4.8	Steam Generator Blowdown System	10.4.8		Steam Generator Blowdown System																		
10.4.9	Auxiliary Feedwater System	10.4.9	Startup Feed Water System	10.4.9		Startup Feed Water System																		
X	X	10.4.10	Auxiliary Steam System	10.4.10		Auxiliary Steam System																		
X	X	X	X	10.4.11		Turbine Island Chemical Feed																		
X	X	X	X	10.4.12.3		Potable Water	Potable Water	10.5-5	10.4-3											Biocide				
X	X	X	X	X		X	AP1000 optimized condenser design								92									
11.0	**Radioactive Waste Management**	**11.0**	**Radioactive Waste Management**	**11.0**		**Radioactive Waste Management**																		
11.0	Radioactive Waste Management	11.0	Radioactive Waste Management	11.0		Radioactive Waste Management																		
11.1	Source Terms	11.1	Source Terms	11.1		Source Terms																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
11.2	Liquid Waste Management Systems	11.2	Liquid Waste Management System	11.2		Liquid Waste Management System	Mobile or temporary equipment used for storing or processing liquid radwaste conformance to RG 1.143.	11.2-1	11.2-1	11.1								X	X					
11.2	Liquid Waste Management Systems	11.2	Liquid Waste Management System	11.2		Liquid Waste Management System	Cost benefit analysis of population doses due to liquid effluents (compliance with 10CFR50, Appendix I).	11.2-2	11.2-2															
11.2	Liquid Waste Management Systems	11.2	Liquid Waste Management System	11.2		Liquid Waste Management System	Identification of Ion Exchange and Adsorbent Media.	11.2-3	11.2-3						48					DCD R16, 11.2.5.3, states this COL issue is fully addressed in Tr No. 48 (APP-GW-GLR-008).				
11.2	Liquid Waste Management Systems	11.2	Liquid Waste Management System	11.2		Liquid Waste Management System	Dilution and Control of Boric Acid Discharge - Planned discharge flow rate and controls for limiting the boric acid concentration in the circulating water system blowdown.	11.2-4	11.2-4						73					DCD R16, 11.2.5.3, states this COL issue is fully addressed in TR No. 73 (APP-GW-GLR-014).				
11.2	Liquid Waste Management Systems	11.2	Liquid Waste Management System	11.2		Liquid Waste Management System	Additional Liquid Radwaste Monitor Tanks and Radwaste Building Extension								116									
11.3	Gaseous Waste Management Systems	11.3	Gaseous Waste Management System	11.3		Gaseous Waste Management System	Cost benefit analysis of population doses due to gaseous effluents (compliance with 10CFR50, Appendix I).	11.3-1	11.3-1	11.2									X					
11.3	Gaseous Waste Management Systems	11.3	Gaseous Waste Management System	11.3		Gaseous Waste Management System	Identification of Adsorbent Media	11.3-2	11.3-2						48					DCD R16, 11.3.5.2, states this COL issue is fully addressed in TR No. 48 (APP-GW-GLR-008).				
11.4	Solid Waste Management Systems	11.4	Solid Waste Management System	11.4		Solid Waste Management System	Solid waste management system process control program for both wet and dry solid wastes	11.4-1	11.4-1	11.3				Process Control Program (PCP)				X		Op Prog. (SRP 13.4 Table 13.4–x Item 9)				
11.4	Solid Waste Management Systems	11.4	Solid Waste Management System	11.4		Solid Waste Management System	Interim Acceptance Criteria for Solidification Agents for Radioactive Solid Wastes									C-17				DCD states GI C-17 only applicable to mobile systems				
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems	11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling System	11.5		Radiation Monitoring	Plant Offsite Dose Calculation Manual (ODCM)	11.5-1	11.5-1	11.4				Offsite Dose Calc Manual (ODCM)				X	X					
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems	11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling System	11.5		Radiation Monitoring	Effluent monitoring and sampling - Conformance to (ANSI) N13.1-1969, RG 1.21, and RG 4.15.	11.5-2	11.5-2					Radiological Env.Mon.Prog. (REMP)						Op Prog. (SRP 13.4 Table 13.4–x Item 9)				

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems	11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling System	11.5		Radiation Monitoring	Address 10 CFR 50, Appendix I with regard to maximally exposed offsite individual doses and population doses attributable to liquid and gaseous effluents.	11.5-3	11.5-3					Radiological Eflnt TS/Std. Radiological Eflnt Cntls (RETS/SREC)						Op. Prog. (SRP 13.4 Table 13.4–x Item 9)				
12.0	**Radiation Protection**		**Radiation Protection**	**12.0**		**Radiation Protection**																		
12.1	Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable e	12.2	Ensuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable	12.1		Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable												X						
12.1	Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable e	12.2.1	Policy Consideration	12.1.3		COL Information (sec. 12.1.3)	ALARA and Operational Policies	12.2.1-1	12.1-1											Comply with RG 1.8, 8.8, and 8.10				
12.1	Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable e	12.2.3	Operational Considerations	12.1.3		COL Information (sec.12.1.3)	Alternatives to guidance in Reg Guides	12.2.3-1	12.1-1											follow RG section 12.2.3 or state alternatives				
12.2	Radiation Sources	12.3	Radiation Sources	12.2		Radiation Sources												X						
12.2	Radiation Sources	12.3.1	Contained Sources	12.2.3		COL Information (sec.12.2.3)	Additional Contained Radiation Sources	12.3.1-1	12.2-1	12.1														
12.3 - 12.4	Radiation Protection Design Features	12.4	Radiation Protection Design	12.3		Radiation Protection Design Features												X						
12.3 - 12.4	Radiation Protection Design Features	12.4	Radiation Protection Design	12.3.5.1		Administrative Controls for Radiological Protection	Administrative Controls for Radiological Protection	12.4.2-1	12.3-1											FSER Sec. 12.4 does not have a subsection on COL Info.				
12.3 - 12.4	Radiation Protection Design Features	12.4	Radiation Protection Design	12.3.5.2		Criteria and Methods for Radiological Protection	Criteria and Methods for Radiological Protection	12.4.4-1	12.3-2											FSER Sec. 12.4 does not have a subsection on COL Info.				
12.3 - 12.4	Radiation Protection Design Features	12.5	Dose Assessment	12.4		Dose Assessment												X						
12.5	Operational Radiation Protection Program	12.6	Health Physics Facilities Design	12.5		Health Physics Facilities Design	Radiation Protection Program							10				X						
12.5	Operational Radiation Protection Program	12.6	Health Physics Facilities Design	12.5.5		COL Information (sec.12.5.5)	Radiological Protection Organization and Procedures	12.6-1	12.5-1											FSER Ch. 12 does not have subsections to sect. 12.6				
					12AA													X	X					
13.0	**Conduct of Operations**	**13.0**	**Conduct of Operations**	**13.0**		**Conduct of Operations**																		
X	X	13.1	Organizational Structure of Applicant	13.1		Organizational Structure of Applicant												X	X					

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
13.1.1	Management and Technical Support Organization	13.1	Organizational Structure of Applicant	13.1		Organizational Structure of Applicant	Organizational Structure of COL Applicant	13.1-1	13.1-1															
13.1.2 - 13.1.	Operating Organization	13.1	Organizational Structure of Applicant	13.1		Organizational Structure of Applicant																		
X	X	13.2	Training	13.2		Training												X						
13.2.1	Reactor Operator Training and Requalification Program	13.2	Training	13.2		Training	Training Program for Plant Personnel	13.2-1	13.2-1															
13.2.2	Non-Licensed Plant Staff Training	13.2	Training	13.2		Training																		
13.3	Emergency Planning	13.3	Emergency Planning	13.3		Emergency Planning	Emergency Planning							14				X						
13.3	Emergency Planning	13.3	Emergency Planning	13.3		Emergency Planning	Features that may affect plans for coping with emergencies as specified in 10 CFR 50, Appendix Q			13.1														
13.3	Emergency Planning	13.3	Emergency Planning	13.3		Emergency Planning	Emergency Plan for the site	13.3-1	13.3-1															
13.3	Emergency Planning	13.3	Emergency Planning	13.3		Emergency Planning	Criteria for Activating the Emergency Operations Facility	13.3.3.3.5-1	13.3-2															
13.4	Operational Programs	13.4	Operational Review	13.4		Operational Programs												X						
13.4	Operational Programs	13.4	Operational Review	13.4		Operational Programs	Operational Review	13.4-1	13.4-1															
X	X	13.5	Plant Procedures	13.5		Plant Procedures												X						
13.5.1	Administrative procedures	13.5	Plant Procedures	13.5		Plant Procedures																		
13.5.1.1	Administrative Procedures - General	13.5	Plant Procedures	13.5		Plant Procedures	Plant Procedures	13.5-1	13.5-1						70									
13.5.1.2	Administrative Procedures-Initial Test Program	13.5	Plant Procedures	13.5		Plant Procedures																		
13.5.2.1	Operating and Emergency Operating Procedures	13.5	Plant Procedures	13.5		Plant Procedures																		
13.5.2.2	Maintenance and Other Operating Procedures	13.5	Plant Procedures	13.5		Plant Procedures																		
13.6	Physical Security	13.6	Security	13.6		Security	Physical Security Plan consistent with AP1000 plant			13.2								X						
13.6	Physical Security	13.6.1	Preliminary Planning	13.6		Security	Security Program							15										
13.6	Physical Security	13.6.2	Security Plan	13.6		Security	Security Plan	13.6.2-1	13.6-1						94, 96									
13.6	Physical Security	13.6.3	Plant Protection System	13.6		Security																		
13.6	Physical Security	13.6.4	Physical Security Organization	13.6		Security	Physical Security, Contingency Response, Guard training and Qualification Plans	13.6.2-2	13.6-1						49, 94, 96									
13.6	Physical Security	X	X	13.6		Security	Security Organization	13.6.4-1	13.6-1						94, 96									

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
13.6	Physical Security	13.6.5	Physical Barrier	13.6		Security	Protected Area	13.6.5.1-1	13.6-3						95									
13.6	Physical Security	X	X	13.6		Security	Bullet-Resisting Barriers and Vehicle Barrier system	13.6.5.4-1	13.6-3						95									
13.6	Physical Security	13.6.6	Access Requirements	13.6		Security	Access Control Measures	13.6.6-1	13.6-1						94, 96									
13.6	Physical Security	13.6.7	Detection Aids	13.6		Security	Detection Aids to Identify Unauthorized Attempt to Gain Access into Protected Area	13.6.7-1	13.6-3						95									
13.6	Physical Security	13.6.8	Security Lighting	13.6		Security	Security Lighting	13.6.8-1	13.6-3						95									
13.6	Physical Security	13.6.9	Security Power Supply System	13.6		Security	Security Power Supply System	13.6.9-1	13.6-3						95									
13.6	Physical Security	13.6.10	Communication	13.6		Security	Security Communication System	13.6.10-1	13.6-3						95									
13.6	Physical Security	13.6.11	Testing and Maintenance	13.6		Security	Testing and Maintenance of Plant Security System	13.6.11-1	13.6-3						95									
13.6	Physical Security	13.6.12	Response Requirements	13.6		Security	Security System Response to meet 10 CFR 73.55(h)	13.6.12-1	13.6-1						94, 96									
13.6	Physical Security	13.6.13	Combined License Information Items	13.6		Security	Verification of Location of Vital Equipment	13.6.13.1-1	13.6-2															
13.6	Physical Security	13.6.13	Combined License Information	13.6		Security	Response to 10 CFR 73.55 Criteria	13.6.13.2-1	13.6-3						95									
13.6	Physical Security	13.6.13	Combined License Information	13.6		Security	Nuclear Material Control Requirements	13.6.13.3-1	13.6-4															
					13.7													X						
					13AA														X					
14.0	**Initial Test Program and ITAAC-Design Certification**	**14.0**	**Verification Programs**	**14.0**		**Initial Test Program**	Identification of Special Features to be Considered in Development of the Initial Test Program			14.1														
X	X	X	X	X		X	Maintenance of Preoperational Test Data and Inservice Inspection Baseline Data			14.2														
X	X	14.1	Preliminary safety Analysis Report Information	14.1		Specific Information to be Included in Primary/Final Safety Analysis report																		
14.2	Initial Plant Test Program - Design Certification and New License Applicants	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	Initial Test Program							19				X	X					
14.2	Initial Plant Test Program - Design Certification and New License	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	Organization and Staffing	14.4-1	14.4-1															

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content		Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
14.2	Initial Plant Test Program - Design Certification and New License	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	Test Specifics and Procedures	14.4-2	14.4-2						71A, 71A Rev. 1								
14.2	Initial Plant Test Program - Design Certification and New License	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	Conduct of Test Program	14.4-3	14.4-3						71B, 71B Rev. 1								
14.2	Initial Plant Test Program - Design Certification and New License	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	Review and Evaluation of Test Results	14.4-4	14.4-4														
14.2	Initial Plant Test Program - Design Certification and New License Applicants	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	Testing Interface Requirements	14.4-5	14.4-5														
14.2	Initial Plant Test Program - Design Certification and New License	14.2	Initial Plant Test Program	14.2		Specific Information to be Included in Standard Safety Analysis report	First-Plant-Only and Three-Plant Only Tests	14.4-6	14.4-6						6								
14.2.1	Generic Guidelines for Extended Power Uprate Testing	X	X	X		X																	
14.3	Inspections, Tests, Analyses, and Acceptance Criteria	14.3	Tier 1 Information	14.3		Certified Design Material												X	X				
14.3.1	[Reserved]	X	X	X		X																	
14.3.2	Structural and Systems Engineering - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																	
14.3.3	Piping Systems and Components - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																	
14.3.4	Reactor Systems - Inspection, Tests, Analyses, and	X	X	X		X																	
14.3.5	Instrumentation and Controls - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																	
14.3.6	Electrical Systems - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																	

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
14.3.7	Plant Systems - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																		
14.3.8	Radiation Protection - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																		
14.3.9	Human Factors Engineering - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																		
14.3.10	Emergency Planning - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																		
14.3.11	Containment Systems - Inspection, Tests, Analyses, and Acceptance	X	X	X		X																		
14.3.12	Physical Security Hardware - Inspection, Tests,	X	X	X		X																		
X	X	14.4	Combined Licensee Applicant Responsibilities	14.4		Combined Licensee Applicant Responsibilities												X	X					
15.0	**Accident Analysis**	**15.0**	**Transient and Accident Analysis**	**15.0**		**Accident Analysis**																		
15	Introduction - Transient and Accident Analyses	X	X	X		X																		
15.0.1	Radiological Consequence Analyses Using Alternate Source Terms	X	X	X		X																		
15.0.2	Review of Transient and Accident Analysis Methods	15.1	Introduction	15.0		Accident Analyses																		
15.0.2	Review of Transient and Accident Analysis Methods	15.1.5	Steam Generator Middeck Plate Induced Level Measurement Uncertainty	7.0		Instrumentation and Control	Validity of Setpoint Calculations for Protective Functions	15.1.5-1	7.1-1						Rpt #28, APP-GW-GLR-024, WCAP-16361-P, WCAP-16361-NP					Related to DCD Section 7.1				
15.0.3	Radiological Consequences of Design Basis Accidents - for ESP, DC, and COL applications	15.3	Radiological Consequences of Accidents	App 15A		Evaluation Models and Parameters for Analysis of Radiological Consequences of Accidents																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
15.1.1 - 15.1.	Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in Steam Flow, and Inadvertent Opening of a Steam Generator Relief or Safety	15.2.1	Increase in Heat Removal from the Primary System	15.1		Increase in Heat Removal from the Primary System																		
15.1.5	Steam System Piping Failures Inside and Outside of Containment (PWR)	15.2.1	Increase in Heat Removal from the Primary System	15.1		Increase in Heat Removal from the Primary System																		
15.1.5.A*	Radiological Consequences of Main Steam Line Failures Outside Containment of a PWR	15.3.1	Radiological Consequences of Main Steam Line Failures Outside Containment of a PWR																					
15.2.1 - 15.2.	Loss of External Load; Turbine Trip; Loss of Condenser Vacuum; Closure of Main Steam Isolation Valve (BWR); and Steam	15.2.2	Increase in Heat Removal by the Secondary System	15.2		Increase in Heat Removal by the Secondary System																		
15.2.6	Loss of Nonemergency AC Power to the Station Auxiliaries	15.2.2	Increase in Heat Removal by the Secondary System	15.2		Increase in Heat Removal by the Secondary System																		
15.2.7	Loss of Normal Feedwater Flow	15.2.2	Increase in Heat Removal by the Secondary System	15.2		Increase in Heat Removal by the Secondary System																		
15.2.8	Feedwater System Pipe Breaks Inside and Outside Containment	15.2.2	Increase in Heat Removal by the Secondary System	15.2		Increase in Heat Removal by the Secondary System																		
15.3.1 - 15.3.	Loss of Forced Reactor Coolant Flow Including Trip of Pump Motor and Flow Controller	15.2.3	Decrease in Reactor Coolant System Flow Rate	15.3		Decrease in Reactor Coolant System Flow Rate																		
15.3.3 - 15.3.	Reactor Coolant Pump Rotor Seizure and Reactor Coolant Pump Shaft Break	15.2.3	Decrease in Reactor Coolant System Flow Rate	15.3		Decrease in Reactor Coolant System Flow Rate																		
15.4.1	Uncontrolled Control Rod Assembly Withdrawal from a Subcritical or Low Power Startup	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
15.4.2	Uncontrolled Control Rod Assembly Withdrawal at Power	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		
15.4.3	Control Rod Misoperation (System Malfunction or Operator Error)	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		
15.4.4 - 15.4.	Startup of an Inactive Loop or Recirculation Loop at an Incorrect Temperature, and Flow Controller Malfunction Causing an Increase in	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		
15.4.6	Chemical and Volume Control System Malfunction that Results in Decrease in Boron Concentration in the Reactor	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		
15.4.7	Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		
15.4.8	Spectrum of Rod Ejection Accidents (PWR)	15.2.4	Reactivity and Power Distribution Anomalies	15.4		Reactivity and Power Distribution Anomalies																		
15.4.8.A	Radiological Consequences of a Control Rod Ejection Accident (PWR)	15.3.3	Radiological Consequences of Rod Clusture Control Assembly Ejection	X		X																		
15.4.9	Spectrum of Rod Drop Accidents (BWR)	X	X	X		X																		
15.4.9.A*	Radiological Consequences of Control Rod Drop Accident (BWR)	X	X	X		X																		
15.5.1 - 15.5.	Inadvertent Operation of ECCS and Chemical and Volume Control System Malfunction that Increases Reactor Coolant	15.2.5	Increase in Reactor Coolant System Inventory	15.5		Increase in Reactor Coolant System Inventory																		
15.6.1	Inadvertent Opening of a PWR Pressurizer Pressure Relief Valve or a BWR Pressure Relief Valve	15.2.6	Decrease in Reactor Coolant Inventory	15.6		Decrease in Reactor Coolant Inventory													X					

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
15.6.2	Radiological Consequences of the Failure of Small Lines Carrying Primary Coolant Outside Containment	15.3.4	Radiological Consequences of the Failure of Small Lines Carrying Primary Coolant Outside Containment	X		X																		
15.6.3	Radiological Consequences of Steam Generator Tube Failure (PWR)	15.3.5	Radiological Consequences of Steam Generator Tube Rupture	X		X																		
15.6.4	Radiological Consequences of Main Steam Line Failure Outside Containment	X	X	X		X																		
15.6.5	Loss of Coolant Accidents Resulting From Spectrum of Postulated Piping Breaks Within the Reactor Coolant	15.2.6	Decrease in Reactor Coolant Inventory	15.6		Decrease in Reactor Coolant Inventory																		
15.6.5.A	Radiological Consequences of a Design Basis Loss-of-Coolant Accident Including Containment Leakage Contribution	15.3.6	Radiological Consequences of a Design Basis Loss-of-Coolant Accident Including Containment Leakage Contribution	X		X																		
15.6.5.B	Radiological Consequences of a Design Basis Loss-of-Coolant Accident Leakage From Engineered Safety Feature Components Outside Containment	15.3.6	Radiological Consequences of a Design Basis Loss-of-Coolant Accident Including Containment Leakage Contribution	X		X																		
15.6.5.D	Radiological Consequences of a Design Basis Loss-of-Coolant Accident: Leakage From Main Steam Isolation Valve Leakage	X	X	X		X																		
X	X	X	X	15.7		Radioactive Release from a Subsystem or Component													X					
15.7.3	Postulated Radioactive Releases Due to Liquid-Containing Tank Failures	15.3.8	Off-site Radiological Consequences of a Liquid Tank Failure	15.7.3		Release of Radioactivity to the Environment Due to a Liquid Tank Failure	Consequences of Tank Failure	15.3.8-1	15.7-1															

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
15.7.4	Radiological Consequences of Fuel Handling Accidents	15.3.7	Radiological Consequences of Fuel Handling Accidents	15.7.4		Fuel Handling Accidents																		
15.7.5	Spent Fuel Cask Drop Accidents	X	X	15.7.5		Spent Fuel Cask Drop Accidents																		
15.8	Anticipated Transients Without Scram	15.2.9	Anticipated Transients Without Scram	15.8		Anticipated Transients Without Scram																		
					15A														X					
15.9 (new)	BWR Core Stability	X	X	X		X																		
15.x (new)	Spent Fuel Pool Criticality and Boron Dilution Analyses	X	X	X		X																		
16.0	**Technical Specifications**	**16.0**	**Technical Specifications**	**16.0**		**Technical Specifications**																		
16	Technical Specifications	16.1	Introduction	16.1		Technical Specifications	Tech Specification Preliminary Information	16.2-1	16.1-1						74A, 74A Rev. 1, 74C, 74C Sup. 1			X		not in the FSER - but is related to section 16.2 (Evaluation)				
16	Technical Specifications	16.1	Introduction	16.1		Technical Specifications	Tech Spec for Design Changes	16.2-1	16.1-1															
16	Technical Specifications	16.1	Introduction	16.1		Technical Specifications	Administrative requirements associated with the Technical Specifications			16.2														
16	Technical Specifications	16.2	Evaluation	16.2		Design Reliability Assurance Program	Administrative requirements associated with reliability information maintenance			16.1														
16	Technical Specifications	16.2	Evaluation	16.2		Design Reliability Assurance Program	Site and operator related information associated with the Reliability Assurance Program (D-RAP)			16.3														
16	Technical Specifications	16.2	Evaluation	16.2		Design Reliability Assurance Program														not in the FSER - related to section 16.2 (Evaluation)				
16	Technical Specifications	16.2	Evaluation	16.3		Investment Protection	Procedure to control operability of investment systems, structures, and components	22.5.9-1	16.3-1	16.3					74B			X		This item is in DCD 1.8-2, but not in "F" COL Action Items				
16.1	Risk-Informed Decision Making: Technical Specifications	X	X	X		X																		
17.0	**Quality Assurance**	**17.0**	**Quality Assurance**	**17.0**		**Quality Assurance**																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References		
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x	
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
17.1	Quality Assurance During the Design and Construction Phases	17.1	Quality Assurance During the Design and Construction Phases	17.1		Quality Assurance During the Design and Construction Phases	QA program for design, procurement, fabrication, installation, construction, and testing	17.1-1	17.5-1, 17.5-2										X	COL Action item 17.1-1 and 17.5-1 appear similar. COL info item 17.5-1 address QA program for design phase and 17.5-2 address QA program for procurement, fabrication, installation, construction, and testing.				
17.2	Quality Assurance During the Operations Phase	17.2	Quality Assurance During the Operations Phase	17.2		Quality Assurance During the Operations Phase	QA program for operations	17.2-1, 17.5	17.5-4					16						COL Action items 17.2-1 and 17.5-4 appears same from the COL item description. They are combined here.				
17.3	Quality Assurance Program Description	17.3	Quality Assurance During the Design Phase	17.3		Quality Assurance During Design, Procurement, Fabrication, Inspection, and/or Testing of NPP Items	QA program for design, procurement, fabrication, installation, construction, and testing	17.5-1	17.5-1, 17.5-2						109					See COL action item 17.1-1.				
17.4	Reliability Assurance Program (RAP)	17.4	Reliability Assurance Program During the Design Phase	17.4		Design Reliability Assurance Program	Design reliability Assurance Program/Site Specific List of Systems, Structures, and Components	17.5-2	17.5-3											COL Info item is defined N/A				
17.4	Reliability Assurance Program (RAP)	17.4	Reliability Assurance Program During the Design Phase	17.4		Design Reliability Assurance Program	Changes to DRAP Component List,								132, APP-GW-GLN-132									
17.4	Reliability Assurance Program (RAP)	17.4	Reliability Assurance Program During the Design Phase	17.4		Design Reliability Assurance Program	Operational Reliability Assurance Program Integration with Quality Assurance program	17.5-3	17.5-8															
					17.5													X						
					17.6													X						
					17.7													X	X					
					17.8													X	X					
17.5	Quality Assurance Program Description - Design Certification, Early Site	X	X	X		X																		
17.6	Maintenance Rule	17.5	Combined Licensee Information Items	17.5		Combined Licensee Information Items	Maintaining Reliability of Risk-Significant SSCs	17.5-5	17.5-5, 17.5-6					17	117			X		COL info item is defined N/A				
17.6	Maintenance Rule	17.5	Combined Licensee Information Items	17.5		Combined Licensee Information Items	Maintenance Activities Relevant to Maintenance Rule	17.5-6	17.5-7					17	117					COL info item is defined N/A				
18.0	**Human Factors Engineering (HFE)**	**18**	**Human Factors Engineering**	**18**		**Human Factors Engineering Introduction**																		
18.0	Human Factors Engineering	18.1	Review methodology	18.1		Overview																		
18.0	Human Factors Engineering	18.2	HFE Program Management	18.2		HFE Program Management	EOF design	18.2.3.1-1	18.2-2										X					
18.0	Human Factors Engineering	18.2	HFE Program Management	18.2		HFE Program Management	HFE Program implementation	18.2.4-1	18.2-1						72, 90									
18.0	Human Factors Engineering	18.2	HFE Program Management	18.2		HFE Program Management	Coordinate facilities with HFE eval.			18.5														
18.0	Human Factors Engineering	18.3	Operating Experience Review	18.3		Operating Experience Review																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
18.0	Human Factors Engineering	18.4	Functional Requirements Analysis and Function Allocation	18.4		Functional Requirements Analysis and Allocation																		
18.0	Human Factors Engineering	18.5	Task Analysis	18.5		AP1000 Task Analysis Implementation Plan	Role of MCR positions	18.5.3-1	18.5-2						52, 52 Rev. 1									
18.0	Human Factors Engineering	18.5	Task Analysis	18.5		AP1000 Task Analysis Implementation Plan	Use TA for procedures & training	18.5.3-2	18.5-1						81									
18.0	Human Factors Engineering	18.5	Task Analysis	18.5		AP1000 Task Analysis Implementation Plan	Implement TA process	18.5.3-3	18.5-1						81									
18.0	Human Factors Engineering	18.6	Staffing and Qualifications	18.6		Staffing	Implement staffing analysis	18.6.3-1	18.6-1									X						
18.0	Human Factors Engineering	18.6	Staffing and Qualifications	18.6		Staffing	Op. staff per HF evaluation			18.1														
18.0	Human Factors Engineering	18.7	Human Reliability Analysis	18.7		Integration of HRA with HFE	Validate HRA assumptions	18.7.3-1	18.7-1									X						
18.0	Human Factors Engineering	18.7	Human Reliability Analysis	18.7		Integration of HRA with HFE	Execute HRA-HFE plan	18.7.4-1	18.7-1						59									
18.0	Human Factors Engineering	18.8	Human-System Interface Design	18.8		Human-System Interface Design	Execute HSI design plan	18.8.1.4-1	18.8-1						82									
18.0	Human Factors Engineering	18.8	Human-System Interface Design	18.8		Human-System Interface Design	HSI design per HFE eval.			18.4														
18.0	Human Factors Engineering	18.8	Human-System Interface Design	18.8		Human-System Interface Design	Closure strategy for HFE items								91									
18.0	Human Factors Engineering	18.8	Human-System Interface Design	18.8		Human-System Interface Design	Technical Support Center (TSC)					TSC			107									
18.0	Human Factors Engineering	18.9	Procedure Development	18.9		Procedure Development	Execute procedure plan	18.9.3-1	18.9-1						70, 70 Rev. 1			X						
18.0	Human Factors Engineering	18.9	Procedure Development	18.9		Procedure Development	Op. procedures per HFE eval.			18.3														
18.0	Human Factors Engineering	18.10	Training Program Development	18.10		Training Program Development	Execute training plan	18.10.3-1	18.10-1									X						
18.0	Human Factors Engineering	18.10	Training Program Development	18.10		Training Program Development	Op. training per HF evaluation			18.2														
18.0	Human Factors Engineering	18.10	Training Program Development	18.10		Training Program Development	Op. training and requal.; and non-licensed training							11, 12, 13										
18.0	Human Factors Engineering	18.11	Human Factors Verification & Validation	18.11		Human Factor Engineering Verification & Validation	Execute V&V plan	18.11.4-1	18.11-1						84									
	Human Factors Engineering	18.14	Minimum Inventory	18.12		Inventory																		
18.0	Human Factors Engineering	18.12	Design Implementation	18.13		Design Implementation																		
18.0	Human Factors Engineering	18.13	Human Performance Monitoring	18.14		Human Performance Monitoring	COL responsible for HPM	18.13-1	18.14-1									X						
18.0	Human Factors Engineering	18.15	Summary and Conclusions	X		X																		
18.0	Human Factors Engineering	18.16	Tier 2* information	X		X																		

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
19.0	**Severe Accidents**	**19.0**	**Severe Accidents**	**19.0**		**Probabilistic Risk Assessment**																		
19.0	Probabilistic Risk Assessment and Severe Accident Evaluation for New Reactors	X	X	X		X														Some of the PRA action items apply to the entire PRA analysis presented in DCD Sections 19.1 to 19.59 and 5 appendices. DCD sections are not listed separately here.				
APP A 19	Probabilistic Risk Assessment and Severe Accident	19	Severe Accidents	19		Probabilistic Risk Assessment																		
APP A 19.1	Probabilistic Risk Assessment	19.1	Probabilistic Risk Assessment	19.1 to 19.59		Probabilistic Risk Assessment												X						
APP A 19.1	Probabilistic Risk Assessment	19.1.1.1	Background and NRC Review Objectives	19.1 to 19.59		Probabilistic Risk Assessment	Revise Design-specific PRA to account for site-specific information	19.1.1.1-1	19.59.10-2				19.59.10		6, 102									
APP A 19.1	Probabilistic Risk Assessment	19.1.1.1	Background and NRC Review Objectives	19.1 to 19.59		Probabilistic Risk Assessment	Design PRA update with plant-specific experience	19.1.1.1-2	19.59.10-2				19.59.10		6, 102									
APP A 19.1	Probabilistic Risk Assessment	19.1.3.1.4	Importance from the Risk Importance Studies	18.7		Integration of HRA with HFE	Use of risk-important operator tasks in control room design, procedures and training programs	19.1.3.1.4-1	18.7-1											Relates to DCD Sections 18.7 and 13.2				
APP A 19.1	Probabilistic Risk Assessment	19.1.3.1.4	Importance from the Risk Importance Studies	18.7		Integration of HRA with HFE	Confirm findings from integrated system validation during MCR	19.1.3.1.4-2	18.7-1											Relates to DCD Section 18.7				
APP A 19.1	Probabilistic Risk Assessment	19.1.5	Safety Insights from the External Events Risk Analyses	19.58		Winds, Floods, and Other External Events	Evaluation of As-Built Plant Versus Design in AP1000 PRA and Site-Specific PRA External Events	19.1.5-1	19.59.10-2						6, 101									
APP A 19.1	Probabilistic Risk Assessment	19.1.5.2	Internal Fires Risk Analyses	19.57		Internal Fire Analysis	Internal Fire Analyses	19.1.5.2.1-1	19.59.10-3				19.59.10		6, 102									
APP A 19.1	Probabilistic Risk Assessment	19.1.5.3	Internal Flooding Risk Analyses	19.56		PRA Internal Flooding Analysis	Search for Internal Flood Vulnerabilities	19.1.5.3-1	19.59.10-3				19.59.10		6, 102									
APP A 19.1	Probabilistic Risk Assessment	19.1.8.1	PRA Input to the DC Process-General and Plant-Wide requirements	19.58		Winds, Floods, and Other External Events	Reevaluate the Qualitative Screening of External Events using the Updated PRA	19.1.8.1-1	19.59.10-2						6, 101									
APP A 19.1	Probabilistic Risk Assessment	19.1.8.1	PRA Input to the DC Process-General and Plant-Wide requirements	9.5.1		Fire Protection System	Configuration Control of Fire/Flood Barriers	19.1.8.1-2	9.5-8											Interfaces with DCD Section 9.5.1, Fire protection System, where compensatory measures are defined.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.1	PRA Input to the DC Process-General and Plant-Wide requirements	9.5.1		Fire Protection System	Adequate Fire Detection and Suppression Capability during Maintenance Activity.	19.1.8.1-3	9.5-3											Interfaces with DCD Section 9.5.1, Fire protection System, where compensatory measures are defined.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.1	PRA Input to the DC Process-General and Plant-Wide requirements	13.5		Plant Procedures	Implementation of Maintenance Guidelines as per Shutdown Evaluation Report.	19.1.8.1-4	13.5-1											Interfaces with DCD Section 13.5, Plant procedures, where maintenance guidelines will be developed.				

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16													New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
APP A 19.1	Probabilistic Risk Assessment	19.1.8.1	PRA Input to the DC Process-General and Plant-Wide requirements	9.5.1		Fire Protection System	Control of Transient Combustibles	19.1.8.1-5	Table 19.59-18, Item 48											Interfaces with DCD Section 9.5.1, Fire protection System, where control of transient combustibles will be defined.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.3	PRA Input to the DC Process-- Containment and Shield buildings	13.5 13.2		Training, Plant Procedures	Procedures and Training to Close Containment Hatches and Penetrations	19.1.8.3-1	13.5-1, 13.2-1											Interfaces with DCD Sections 13.2 and 13.5, Training and Plant Procedures.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.7	PRA Input to the DC Process-- Reactor Coolant System	13.5 13.2		Training, Plant Procedures	Procedures and Training for Use of Non-Safety-Related Wide Range Pressurizer Level Indication	19.1.8.7-1	13.5-1, 13.2-1											Interfaces with DCD Sections 13.2 and 13.5, Training and Plant Procedures.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.16	PRA Input to the DC Process-- Normal Residual Heat removal System	13.5		Plant Procedures	Policies to Maximize Availability of RNS Valve V-023 during Cold Shutdown and Refueling	19.1.8.16-1	13.5-1											Interfaces with DCD Section 13.5, Plant procedures.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.16	PRA Input to the DC Process-- Normal Residual Heat removal System	13.5		Plant Procedures	Administrative Control for RNS valve V-023 Inadvertent Opening	19.1.8.16-2	13.5-1											Interfaces with DCD Section 13.5, Plant procedures.				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.16	PRA Input to the DC Process-- Normal Residual Heat removal System	18.7		Integration of HRA with HFE	Control Room Design to Account for RNS Valve V-023 Inadvertent Opening	19.1.8.16-3	18.7-1											Interfaces with DCD Section 18.7				
APP A 19.1	Probabilistic Risk Assessment	19.1.8.16	PRA Input to the DC Process-- Normal Residual Heat removal System	13.5		Plant Procedures	Procedures to Respond to Low Hot Leg Level Alarms	19.1.8.16-4	13.5-1											Interfaces with DCD Section 13.5, Plant procedures.				
APP A 19.2	Severe Accident Evaluation	19.2	Severe Accident Performance	19.34 to 19.50		Probabilistic Risk Assessment																		
APP A 19.2	Severe Accident Evaluation	19.2.3.3.1.3.2	Reactor Pressure Vessel Thermal Insulation	5.3.5		Reactor Vessel Insulation	Design of the Reactor Vessel Insulation System	19.2.3.3.1.3	5.3-5											Interfaces with DCD Section 5.3.5				
APP A 19.2	Severe Accident Evaluation	19.2.3.3.7.3	Equipment Survivability-- Basis for Acceptability	App. 19 D		Equipment Survivability	Equipment Survivability	19.2.3.3.7.3	19.59.10-5						68									
APP A 19.2	Severe Accident Evaluation	19.2.5	Accident Management	19.1 to 19.59		PRA	Develop and Implement Severe Accident Management Guideline	19.2.5-1	19.59.10-4						66									
APP A 19.1	Probabilistic Risk Assessment	19.3	Shutdown Evaluation	App. 19E		Shutdown Evaluation														Safety Insights from other modes are addressed in 19.1. FSER COL Action Items 19.3.2.1-1, 19.3.2-1, and 19.3.7-1 are covered by SRP 13.5.1.1, COL Item 13.5-1, TR 70. DCD Table 19.59-18, item 47.				
APP A 19.1	Probabilistic Risk Assessment	19.3.2.1	Design Features that Mitigate Shutdown Risk-- Decay Heat Cooling System	13.5		Plant Procedures	Plant Procedures	19.3.2.1-1	13.5-1											Interfaces with DCD Section 13.5, Plant procedures. FSER COL Action Items 19.3.2.1-1, 19.3.3-1, and 19.3.7-1 are covered by SRP 13.5.1.1, COL Item 13.5-1, TR 70. DCD Table 19.59-18, item 47.				

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
APP A 19.1	Probabilistic Risk Assessment	19.3.3	Temporary RCS Boundaries	13.5		Plant Procedures	Plant-specific Procedures for freeze Seals	19.3.3-1	13.5-1											Interfaces with DCD Section 13.5, Plant procedures. FSER COL Action Items 19.3.2.1-1, 19.3.3-1, and 19.3.7-1 are covered by SRP 13.5.1.1, COL Item 13.5-1, TR 70. DCD Table 19.59-18, item 47.				
APP A 19.1	Probabilistic Risk Assessment	19.3.7	Outage and Planning Control	13.5		Plant Procedures	Outage Planning and Control Program	19.3.7-1	13.5-1											Interfaces with DCD Section 13.5, Plant procedures. FSER COL Action Items 19.3.2.1-1, 19.3.3-1, and 19.3.7-1 are covered by SRP 13.5.1.1, COL Item 13.5-1, TR 70. DCD Table 19.59-18, item 47.				
APP A 19.1	Probabilistic Risk Assessment	19.4	Design Improvements under 10 CFR 50.34(f)	X		X																		
APP A 19.1	Probabilistic Risk Assessment	19A	Seismic Margin Analysis	19.55		Seismic Margin Analysis																		
APP A 19.1	Probabilistic Risk Assessment	19.A.2	Calculation of HCLPF Values	19.55		Seismic Margin Analysis	As-Built SSC HCLPF Comparison to Seismic Margin Evaluation	19A.2-1	19.59.10-1						6, 101									
APP A 19.1	Probabilistic Risk Assessment	19.A.2	Calculation of HCLPF Values	19.55		Seismic Margin Analysis	Seismic Walkdown to Ensure Conformance to Seismic Margin Evaluation	19A.2-2	19.59.10-2						6, 101									
19.1	Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk Informed	X	X	X		X																		
19.2	Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General	X	X	X		X																		
		20	**GENERIC ISSUES**																					
1.0	Introduction and Interfaces	20	Generic Issues	1.0		Introduction and General Description of the Plant														generic issues are addressed in both Chapter 1 and Chapter 20 of the FSER				
1.0	Introduction and Interfaces	20	Generic Issues	1.9		Compliance with Regulatory Criteria																		
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5		Advanced Light Water Certification Issues																		
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Bulletins and generic letters identified in WCAP-15800 as procurement, procedural, maintenance /surveillance issues, or those identified as "Part of COL."	20.7.1-1								Procurement, procedural, maintenance /surveillance issues, or those identified as "Part of COL."				See WCAP15800				

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review														Closure References			
March-07		Sept. 2004		Rev. 16														New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Recommendations in Bulletin 80-15 on loss of emergency notification system as a result of loss offsite power	20.7.4-1								Loss of emergency notification system as a result of loss offsite power				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Fuel storage and handling items in DCD Tier 2, Section 9.1.6 (GL-96-04)	20.7.4-2								Fuel storage and handling				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Site-specific safety analyses using guidelines in GL-83, Supplement 1	20.7.4-3								Site-specific safety analyses				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Plant-specific emergency operating procedures that address boron dilution events in accordance with GL 85-05	20.7.4-4								Plant-specific emergency operating procedures that address boron dilution events				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Boric acid corrosion program that complies with GL 88-05	20.7.4-5								Boric acid corrosion program				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Emergency offsite communication system that complies with GL 91-14	20.7.4-6								Emergency offsite communication system				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Verification of compliance with GL 92-01 for plant-specific belt line material properties	20.7.4-7								Plant-specific belt line material properties				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Compliance of emergency planning with BL 80-15 (GI 93-01)	20.7.4-8								Emergency planning				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Preoperational and startup testing of rod control system in compliance with GL 93-04	20.7.4-9								Preoperational and startup testing of rod control system				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Test safety-related logic circuits to comply with GL 96-01	20.7.4-10								Safety-related logic circuits				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Confirmatory criticality analysis for spent fuel pool storage racks to comply with GL 96-04	20.7.4-11								Criticality analysis for spent fuel pool storage racks				See WCAP15800				
1.0	Introduction and Interfaces	20	Generic Issues	1.9.5.5		Operational Experience	Steam generator tube surveillance program in compliance with GL 97-06	20.7.4-12								Steam generator tube surveillance program				See WCAP15800				
		21	**TESTING AND COMPUTER CODE EVALUATION**																					
X	NONE	X	NONE	X		NONE																		
		22	**REGULATORY TREATMENT OF NON-SAFETY SYSTEMS**																					

COL Application Referencing AP1000 - Finality Matrix

SRP section #	SRP section title	FSER section #	FSER section title	DCD section #	FSAR section #	DCD section title	AP1000 COL Issues for NRC Review													Closure References			
March-07		Sept. 2004		Rev. 16													New Standard Content			Rev. xx	Supp. # x		
							COL issue title	FSER COL action item no.	DCD COL info. item no.	Interfaces for standard design (Item no.)	DAC/ITAAC for NRO review	Generic design change	Plant specific design departure	Operational program	Tech. Rpt. no.	Generic Issue	ESP action item	STD	PS	Comment	DC FSER section	SSER section	Other	RG 1.206, C.III - to be added later
X	X	X	X	16.3		Investment Protection	Procedure to control operability of investment systems, structures, and components	22.5.9-1	16.3-1	16.3										redundant; see DCD section 16.3. FSER Item 22.5.9-1 is DCD COL Info Item 16.3-1, DCD Section 16.3.2.				
ADDITIONAL TECHNICAL REPORTS NOT CORRELATED TO CHAPTERS																							
X	X	X	X	X		X	Hydrogen Igniter Locations					37, 37 Rev.1			37, 37 Rev.1									
X	X	X	X	X		X	Cyber Security					104			104									
X	X	X	X	X		X	Site Interface Temperature limits					108			108									
X	X	X	X	X		X	CCS and SWS Changes required for increased heat loads					111			111									
X	X	X	X	X		X	Structural verification for enhanced shield buildings					112			112									
X	X	X	X	X		X	AP1000 Boiler sizing and design					114			114									
X	X	X	X	X		X	CVS PAMS instrument criteria					118			118									
X	X	X	X	X		X	Cathodic protection					120			120									
X	X	X	X	X		X	Spent fuel pool level and dose					121			121									
X	X	X	X	X		X	Offsite and control room dose changes					122			122									
X	X	X	X	X		X	Core makeup tank narrow level instrument change					123			123									
X	X	X	X	X		X	Removal of PWS and WWS retention basin					124			124									
X	X	X	X	X		X	Correction to Tier 1 ITAAC 2.2.4					125			125									
X	X	X	X	X		X	Nuclear island response to aircraft impact					126			126									
X	X	X	X	X		X	AP1000 reactor internals flow induced vibration assessment program					128			128									
X	X	X	X	X		X	Editorial format change related to "COL applicant" and COL information items					130			130									
X	X	X	X	X		X	Incorporation of AP600 DCPs					131			131									
TOTALs							346	254	243	63	0	19	12	18	138	14			42				

section were taken from DCD Table 1.8 -1.

M. ITAAC

ITAAC reference number from DCD Tier 1. ITAAC information is presently listed separately in a separate matrix.

N. Generic Design Change

These are generic design changes for AP1000 that were obtained from the AP1000 listing of technical reports submitted with DCD Rev. 16.

O. Plant Specific Design Departure

These will not be available until a COL applicant makes a submittal.

P. Operation Program

SRP Section 13.4 identifies 19 specific operational programs that need to be addressed by the licensee. These operational programs have been inserted into the matrix under the appropriate SRP section.

Q. Tech Report #

Vendor or applicant technical report numbers associated with specific DCD sections has been entered in this column. These were also obtained from the AP1000 listing of technical reports submitted with DCD Rev. 16.

R. Generic Issue

This column was used to record open Generic Issue numbers. The title of the generic issue was captured in the COL Issue Title column. These were obtained from Chapter 20 of the FSER.

S. ESP action items

This is not applicable to the generic AP1000 design, but ay be used for plant specific SOL applications for the AP1000.

T. and U. New Standard Content

T. STD. An X in the STD Column indicates that the section is also expected to include standard content in addition to the DC and that the additional information will be used by both the Reference COL application and subsequent COL applications.

U. PS. A U in the PS column indicates that the section is also expected to include plant specific content that will be specific to each COL application.

V. Comments

This column for added information on other items in the row.

X., Y., Z. Closure references

The use of these 3 columns will be determined later.

AB. RG 1.206

The use of this column will be determined later.

Discussion of the AP1000 Matrix

This matrix was developed to provide NRC with a summary of all open items and issues associated with the certified AP1000 design, that will need to be reviewed by NRC/NRO as part of the COL application process. The matrix was developed using the reference material listed on sheet 2 (reference tab) of the spreadsheet. It is important to note that NRC directed that the newly submitted Rev. 16 of the AP1000 DCD be used for the matrix, as opposed to the certified Rev. 15 of the DCD. The matrix on the tab "Updated AP1000 matrix" is the base, complete matrix that was originally developed. Then sorts were done to re-order the matrix by SRP section number, FSER section number, and DCD section number and these were placed on separate tabs. This version was submitted as final to NRC June 29, 2007. Subsequently BNL received minor comments from 3 technical branches. These comments were incorporated into the base matrix, arranged by DCD section, however the other sorts were not developed at this time.

The columns on the left side of the matrix (blue header) represent the relevant sections of the SRP, FSER, and DCD. These do not always agree with one another in the base documents and it is not intended to be a complete listing of all sub-sub-sections of each document. At the least, the matrix should contain a row for each subsection of the DCD to the first decimal point (e. g., 2.1, 2.2, 2.3, etc.). The one exception was Chap. 19 which had 59 subsections 19.1 through 19.59. If a section title was repeated, it was not always copied into multiple lines, to avoid unnecessarily overloading the matrix and making it more difficult to read. Where there were no corresponding sections (say in the SRP) an "X" was placed in the cell.

The columns in the middle of the matrix (yellow header) represent the open COL issues needing NRO review. The types of issues captured are: COL action items from the FSER, COL information items from the DCD, interfaces for standard design from the DCD, ITAAC for NRO review (on a separate spreadsheet), generic design changes (from the AP1000 listing of technical reports –TRs), operational programs (as summarized in SRP section 13.4), and AP1000 TRs based on Westinghouse 5/26/2007 submittal letter to NRC. The column “COL issue title” is for the title of whatever issue is contained in that row. A separate row has been added for each issue, unless two issues are very closely related, such as a TR report that specifically addresses a COL information item. Some TRs were not able to be tied to a particular DCD section based only on the title, and so at this time they have been grouped at the bottom of the matrix after FSER Chapter 22. When the reports become available they can be moved to the correct row location. Blank spaces in this part of the matrix are equivalent to” zero” or “none” – e.g., if there was no COL Action Item associated with a specific SRP/ DCD section the corresponding cell would remain blank.

Columns not populated at this time are: plant specific design departures and ESP action items as there are none of either.

The columns to the right of the matrix, relating to closure references and RG 1.206 are for later use and have not been used at this time.

The green row at the bottom of the matrix, sums up the number of rows containing each of the COL issues to give an overall rough estimate of the effort associated with reviewing those issues.

Short discussion of each column:

A & B: SRP Section Number and Title
The SRP section number and title were identified in the March 2007 version of NUREG-0800 from the NRC website. They are listed corresponding to the DCD section.
C& D: FSER Section Number and Title
These columns contain the FSER Section Number and Title that correspond to the DCD section. The correspondence is to be based on subject matter rather than section numbers, although in most instances, the numbering also matches the SRP section numbering.
E & G: DCD Section Number and Title
The Rev. 16 DCD sections are the main basis for the matrix columns. They contain the DCD Number and Title.
F. FSAR Section # This is the section number for the new AP1000 FSAR.
I. COL Issue Title
The columns in the middle of the matrix (yellow header) represent the open COL issues needing NRO review. This column contains the subject or title of the COL issue, whether the COL issue is a information item, action item, technical report, Interface, etc.
J. FSER COL action item no.
This column contains the Action Item No., as contained in FSER, App. C.
K. DCD COL information item no.
This column contains the information Item No., as contained in both DCD Table 1.8 -2 and FSER, App. C.
L. Interfaces for Standard Design (Item No.)
This column was used to note DCD sections having Interface Requirements. The item no. and the corresponding DCD section were taken from DCD Table 1.8 -1.

References

SRP	NRC Standard Review Plan, NUREG-0800, March 2007
SER	Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design (NUREG-1793), Sept., 2004.
SSER	Suplemental SER -(TBD)
DCD	AP1000 Design Control Document, Rev. 16
RG 1.206	US NRC Regulatory Guide 1.206, draft