

SPINLINE 3 Compliance Matrix for ISG-06 Appendix B.3

DI&C-ISG-06 App B.3: Documents for a Tier 3 Review			Corresponding Generic SPINLINE 3 Licensing Documents				Accession Number		Bib No.		RAI Question Number	Evaluation/Comments	Additional Information Needed			
Rolls-Royce Civil Nuclear interpretation of ISG-6 for the generic SPINLINE 3 digital safety I&C platform (rather than for a plant-specific LAR)																
Tier 3: Totally new system, extensive review effort expected. Thorough Review of all technical areas.			Document Title	P/NP	Document Number	When submitted to NRC										
Documents Expected Upon Application																
1	Commercial Grade Dedication Plan	The process employed to dedicate the generic SPINLINE 3 digital safety I&C platform is explained in the Dedication Plan. This Plan is based on the process defined in EPRI TR-106439 and approved by the NRC.	Dedication Plan for the Generic SPINLINE 3 Digital Safety I&C Platform	P	3 010 794 A	e-submittal 8 Jan 2010	ML100120134	41	Acceptable for safety review							
				NP	3 010 794 A-NP	e-submittal 8 Jan 2010	ML100120112		Acceptable for safety review							
2	D3 analysis (Including system modifications and plant specific architecture and use)	Generic ISG-2 compliance is addressed in LTR Section 3.7.2, which explains that D3 should be addressed in the context of a plant-specific application and the NPP's suite of safety and nonsafety I&C systems.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
3	System description	See 3a & 3b, below.														
3a	Detail to address ISG-04	Generic compliance with ISG-04, Rev. 1, is addressed in LTR Section 3.7.3.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
3b	Detail down to block diagram level	Descriptions and block diagrams of representative single division and system architectures are provided in LTR Section 4.2.4. SPINLINE 3 board-level block diagrams are included in Chapter 5 of the generic Reliability and Predictive Safety Analysis reports.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
			Generic Reliability and Predictive Safety Analysis reports	P	See separate HW analysis tab for detailed listing	e-submittal 23 Dec 2009	ML093570365-ML093570382	19-32	Acceptable for safety review							
				NP	MPR-3337 Rev 1	Delivered DHL 8 Jul 2009	ML092160044		Acceptable for safety review							
4	Design Analysis Report	The DAR reports the results of a critical design review of the SPINLINE 3 platform software. The DAR is intended to serve as the technical basis for dedicating the generic SPINLINE 3 Operational Support System (OSS), application-oriented library, and embedded software, which are components of the platform software developed previously. Much of the content normally included in a CDR Report is provided in the LTR. The DAR contains a mapping table to the related information in the LTR.	SPINLINE 3 Design Analysis Report	P	MPR-3337 Rev 1	Delivered DHL 8 Jul 2009	ML092160044	10	Acceptable for safety review							
				NP	MPR-3337 Rev 1- NP	TBD			Acceptable for safety review							
5	Design Report on Computer Integrity, Test and Calibration, and Fault Detection	Generic computer integrity, fault detection, and testability are addressed in LTR Sections 4.4 to 4.6. No calibration on SPINLINE 3 discrete boards is performed once they are installed in the equipment. Section 4.6.7 has information on periodic testing and calibration of analog inputs.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
6	Theory of Operation Description	The "theory of operation" of SPINLINE 3 hardware and software is described in LTR Chapter 4. The "theory of operation" of individual SPINLINE 3 boards is described in Chapter 5 of the Generic Reliability and Predictive Safety Analysis reports.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
			Generic Reliability and Predictive Safety Analysis reports	P	See separate HW analysis tab for detailed listing	e-submittal 23 Dec 2009	ML093570365-ML093570382	19-32	Acceptable for safety review							
				NP	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047		Acceptable for safety review							
7	Equipment Qualification Testing Plans (Including EMI, Temperature, Humidity, and Seismic to the degree to which these are affected by the plant specific application)	Summary information is in LTR Section 5.1. Details on the scope of qualification testing are in the Equipment Qualification (EQ) Plan. The Qualification Test Specimen specification provides details on the design of the equipment to be tested and the associated test data acquisition system.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
			Equipment Qualification (EQ) Plan	P	3 006 501C	Delivered DHL 8 Jul 2009	ML092160048	3	Acceptable for safety review							
				NP	3 006 501C-NP	Delivered DHL 8 Jul 2009	ML092160026		Acceptable for safety review							
			System Specification of the Qualification Test Specimen and Data Acquisition System	P	3 006 404C	Delivered DHL 8 Jul 2009	ML092160056	4	Acceptable for safety review							
8	Software QA Plan and Procedures	This is a duplicate of, and thus contained in 12, below	See Documents Expected Upon Application, Item 12						Acceptable for safety review							
9	System Description	There is no actual "system" in this generic SPINLINE 3 digital safety I&C platform application. Descriptions and block diagrams of representative single division and system architectures are provided in LTR Section 4.2.4. Generic component-level hardware descriptions are in LTR Section 4.3, the hardware data sheets are in LTR Appendix A, and in Chapter 5 of the board-level generic Reliability and Predictive Safety Analysis reports. Generic software descriptions are in LTR Sections 4.4 - 4.6. Also, see 6 above.	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
			Generic Reliability and Predictive Safety Analysis reports	P	See separate HW analysis tab for detailed listing	e-submittal 23 Dec 2009	ML093570365-ML093570382	19-32	Acceptable for safety review							
10	Hardware & Software Architecture Descriptions	Descriptions and block diagrams of representative single division and system architectures are in LTR Section 4.2.4. Board-level architectures are described in Chapter 5 of the generic Reliability and Predictive Safety Analysis reports	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review							
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025		Acceptable for safety review							
			Generic Reliability and Predictive Safety Analysis reports	P	See separate HW analysis tab for detailed listing	e-submittal 23 Dec 2009	ML093570365-ML093570382	19-32	Acceptable for safety review							
11	Preliminary Failure Mode and Effects Analysis (FMEA)	Generic board-level FMEAs are included in Chapters 7, 8 and 11 of the generic Reliability and Predictive Safety Analysis reports, which are intended to be used as input data to support system-level FMEA and reliability analyses for an NPP-specific SPINLINE 3 system. These are the final FMEAs, not preliminary, and are the same as listed in Documents Expected Within 12 Months of Requested Approval, Item 6.	Generic Reliability and Predictive Safety Analysis reports	P	See separate HW analysis tab for detailed listing	e-submittal 23 Dec 2009	ML093570365-ML093570382	19-32	Acceptable for safety review							
		Two QA Plans govern the following activities: Rolls-Royce Civil Nuclear SAS located in Meylan, France, is the supplier and qualifier of SPINLINE 3 hardware, software, and integrated systems. Data Systems & Solutions, LLC (DS&S), doing business as (dba) Rolls-Royce Civil Nuclear in the U.S., will deliver SPINLINE 3 systems to U.S. customers under the Huntsville NQA program.	Rolls-Royce Civil Nuclear SAS Quality Manual	P	8 303 186 P	Delivered DHL 8 Jul 2009	ML092160045	12	Acceptable for safety review							
				NP	8 303 186 P	Delivered DHL 8 Jul 2009	ML092160023		Acceptable for safety review							
			Instrumentation & Controls US Quality Manual	NP	500-9600000-10, ICQ-005-C	Delivered DHL 8 Jul 2009	ML092160024	5	Acceptable for safety review							
			Quality Audit Report	P	28-I&C US-2008	e-submittal 8 Jan 2010; again 22 Feb 2010	ML100120126	43	Acceptable for safety review							

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Tier 3: Totally new system, extensive review effort expected. Thorough Review of all technical areas.			Document Title	P/NP	Document Number	When submitted to NRC	Accession Number	Bib No.			
12	Quality Assurance Plan for Digital Hardware and Software	QA audit reports	DS&S 10CFR50 Appendix B / 10CFR21 Checklist, July 21 - 25, 2008	P	DS&S 10CFR50 Appendix B / 10CFR21 Checklist, July 21 - 25, 2008	e-submittal 8 Jan 2010; again 22 Feb 2010	ML100120130	44	Acceptable for safety review		
			Data Systems & Solutions RTS Business Unit - Entergy Supplier Audit Number SA08-007	P	SA08-007	e-submittal 8 Jan 2010; again 22 Feb 2010	ML100120133	45	Acceptable for safety review		
		Platform software QA Plans	Software Quality Plan (SQP) - MC3	P	8 303 429 E	e-submittal 23 Dec 2009	ML093620244	37	Acceptable for safety review		
			Software Modification Quality Plan	P	1 208 686 B	e-submittal 23 Dec 2009	ML093620234	35	Acceptable for safety review		
			Software Quality Plan - SCADE Operator Library	P	1 208 356 C	e-submittal 23 Dec 2009	ML093620232	34	Acceptable for safety review		
		A generic Application Software QA Plan Template is intended for use in preparing the Software QA Plan for a plant-specific SPINLINE 3 application	SPINLINE 3 Software Quality Assurance Plan - SQAP	P	8 307 208B	Delivered DHL 8 Jul 2009	ML092160054	6	Acceptable for safety review		
13	Preliminary Reliability Analysis	Generic board-level reliability analyses are included in Chapters 9 and 10 of the generic Reliability and Predictive Safety Analysis reports, which are intended to be used as input data to support system-level FMEA and reliability analyses for an NPP-specific SPINLINE 3 system. A summary table of board-level reliability data is included in LTR Section 5.2.1. These are the final reliability analyses, not preliminary, and are the same as listed in Documents Expected Within 12 Months of Requested Approval, Item 8. These board-level reliability analyses are intended to be an input to a system-level reliability analysis for a plant-specific SPINLINE 3 application.	Generic Reliability and Predictive Safety Analysis reports	P	See separate HW analysis tab for detailed listing	e-submittal 23 Dec 2009	ML093570365-ML093570382	19-32	Acceptable for safety review		
			Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2	Acceptable for safety review		
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025	2	Acceptable for safety review		
14	Safety Analysis	Platform software safety documentation only. Application software safety will be addressed in a plant-specific SPINLINE 3 application.	SPINLINE 3 Safety of Processing Unit Software	P	1 207 228 G	e-submittal 23 Dec 2009	ML093620225	33	Acceptable for safety review		
15	System Requirements	Platform software: The system requirements are provided in the Software Requirements Specification (see 17h). Application software: System requirements will be addressed in a dedicated document for a plant-specific SPINLINE 3 applications.	Software Requirement Specification - Operational System Software	P	1 207 108 J	e-submittal 2 Feb 2010	ML100330819	57	Acceptable for safety review		
16	System Test Plan	Two generic system test Plan templates apply. These are intended for use in preparing the system-level factory and site test Plans for a plant-specific SPINLINE 3 application	System Integration and Factory Test Plan (Generic)	P	8 307 245 A	Delivered DHL 8 Jul 2009	ML092160052	13	Acceptable for safety review		
				NP	8 307 245 A-NP	Delivered DHL 8 Jul 2009	ML092160028	13	Acceptable for safety review		
			System Installation and Site Test Plan (Generic)	NP	8 307 243 A	Delivered DHL 8 Jul 2009	ML092160027	14	Acceptable for safety review		
17	Software Life Cycle Documentation	See 17a to 17m, below							Acceptable for safety review		
17a	Vendor Software CM Plan	Platform software CM plan	Software Configuration Management Plan for SPINLINE 3 Software Sub-assemblies Managed by CM Tool	P	1 208 878 D	e-submittal 23 Dec 2009	ML093620238	36 4, 4a-4e	SCMP translation is challenging - RRCN tp revise and resubmit.	Revised SCMP List of Tools and Libraries Used by SW, 1 207 286 SW Design Control 8 303 350 [IL_Gest_Conf], 1 207 875 F [IL_Verif_.doc], 1 207 947 D [PRO_Concept_Log_C], 8 303 350 J	
		The generic CM Plan template for application software is intended for use in preparing the CM Plan for a plant-specific SPINLINE 3 application	SPINLINE 3 Software Configuration Management Plan - SCMP	P	8 307 209B	Delivered DHL 8 Jul 2009	ML092160049	7	Additional docs not needed until review of application software		
17b	Software Design Specification	Platform software design specification only. Application design specifications will be prepared for each plant-specific SPINLINE 3 application.	Software Preliminary Design - Core System Software	P	1 207 141 H	e-submittal 2 Feb 2010	ML100330838	59	Acceptable for safety review		
			Interface Specifications - Operational System Software and Application Software	P	1 207 110 J	e-submittal 2 Feb 2010	ML100330830	58	Acceptable for safety review		
17c	Software Development Plan	Platform software SDP	Software Development Plan	P	1 207 102 A	e-submittal 23 Dec 2009	ML093620283	39 2, 2a, 2b	The SDP implies that [CCGL_MC3], "General Specifications for MC3 Software," 1 207 101, contains details, but it was not provided and RRCN says it does not contain the details requested.		
		The generic SDP template for application software is intended for use in preparing the SDP for a plant-specific SPINLINE 3 application	SPINLINE 3 Software Development Plan - SDP	P	8 307 211 B	Delivered DHL 8 Jul 2009	ML092160050	9	Acceptable for safety review		
17d	Software Installation Plan	Software is installed at the factory prior to Factory Acceptance Testing and again at the site prior to Site Acceptance Testing. The generic System Integration and Factory Test Plan and the System Installation and Site Test Plan templates are intended for use in preparing the corresponding Plans for a plant-specific SPINLINE 3 system. These Plans addresses both hardware and software installation.	System Integration and Factory Test Plan (Generic)	P	8 307 245 A	Delivered DHL 8 Jul 2009	ML092160052	13	Acceptable for safety review		
				NP	8 307 245 A-NP	Delivered DHL 8 Jul 2009	ML092160028	13	Acceptable for safety review		
			System Installation and Site Test Plan (Generic)	NP	8 307 243 A	Delivered DHL 8 Jul 2009	ML092160027	14	Acceptable for safety review		

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Tier 3: Totally new system, extensive review effort expected. Thorough Review of all technical areas.			Document Title	P/NP	Document Number	When submitted to NRC	Accession Number	Bib No.			
17e	Software Integration Plan	Platform software integration plan documents	Software Integration Test Plan and Report (SITR) - SCC (Core System Software)	P	1 207 204 E	e-submittal 2 Feb 2010	ML100330808	55	8	Acceptable for safety review	
		Software integration occurs during the processes governed by the V&V Plan. The generic application software V&V Plan template is intended for use in preparing the Plan for a plant-specific SPINLINE 3 system.	SPINLINE 3 Software Verification and Validation Plan - SVVP	P	8 307 210 B	Delivered DHL 8 Jul 2009	ML092160055			Acceptable for safety review	
17f	Software Management Plan	There is no separate Software Management Plan. As described in LTR Sections 6.3 and 6.4, software management is addressed in the SQAP and SDP. See 12 & 17c, above.	None					3, 3a, 3b		Acceptable for safety review	
17g	Software Project Risk Management Plan	There is no separate Risk Management Plan or Risk Management Report. As described in LTR Sections 6.3 and 6.4, risk management is addressed in each of the application software Plans. Should we add pointers to each of the risk management sections in the application SW Plans?	None							Acceptable to bein review, but LTR update needed Updated LTR	
17h	Platform Software Requirements Specification	Platform Software Requirements Specification	Software Requirement Specification - Operational System Software	P	1 207 108 J	e-submittal 2 Feb 2010	ML100330819	57		Acceptable for safety review	
17i	Application Software Requirements Specification	None. This is a plant-specific document for an application to be built on the generic SPINLINE 3 platform.	None							Acceptable for safety review	
17j	Software Safety Plan	As described in LTR Sections 6.3 and 6.4, software safety is addressed in the respective platform software and application software V&V Plans. See 17m, below. A safety assessment has been performed on the SPINLINE 3 processing unit.	SPINLINE 3 Safety of Processing Unit Software	P	1 207 228 H	e-submittal 23 Dec 2009	ML093620225	33		Acceptable for safety review	
17k	Software Test Plan	Platform software Test Plan Three generic Plan templates apply for plant-specific applications: V&V Plan (for unit, module and software integration testing); System Integration & Factory Test Plan and Installation & Installation and Site Test Plan (for system-level testing).	Software Integration Test Plan and Report (SITR) - SCC (Core System Software)	P	1 207 204 E	e-submittal 2 Feb 2010	ML100330808	55		Acceptable for safety review	
			SPINLINE 3 Software Verification and Validation Plan - SVVP	P	8 307 210 B	Delivered DHL 8 Jul 2009	ML092160055	8		Acceptable for safety review	
			System Integration and Factory Test Plan (Generic)	P	8 307 245 A	Delivered DHL 8 Jul 2009	ML092160052	13		Acceptable for safety review	
				NP	8 307 245 A-NP	Delivered DHL 8 Jul 2009	ML092160028	13		Acceptable for safety review	
			System Installation and Site Test Plan (Generic)	NP	8 307 243 A	Delivered DHL 8 Jul 2009	ML092160027	14		Acceptable for safety review	
17l	Software Tool Verification Program	Software tool verification documentation	Requirements for Software Development Tools	P	1 206 747 E	e-submittal 23 Dec 2009	ML093620258	38		Acceptable for safety review	
17m	Software V&V Plan and Procedures	Platform Software V&V Plan only. Procedures will be addressed in Item 14 under "Documents Expected Within 12 Months of Requested Approval".	Software Validation Test Plan (SVTP) - Operational System Software for Safety Class Units	P	1 207 146 G	e-submittal 2 Feb 2010	ML100330844	60 1, 1a,1b		Standard clauses addressed by topic, but some content is applicable to general SW development, not V&V per se. Asterisked documents should provide needed additional details. Rules for V&V of SW Components*, 1 207 107 SW Design Control*, 8 303 350 Development of Safety Class SW*, 1 206 076 '00, '01 Mod SDPs*, 1 208 645 A and 1 208 908 A [Pro_Concept_log_C]*, 8 303 350 K [IL_Gest_Conf]*, 1 207 875 B	
		The generic V&V Plan template for application software is intended for use in preparing the V&V Plan for a plant-specific SPINLINE 3 application	SPINLINE 3 Software Verification and Validation Plan - SVVP	P	8 307 210B	Delivered DHL 8 Jul 2009	ML092160055	8 5, 6, 7		RRCN response satisfactory to perform safety review	
18	Requirements Traceability Matrix	For the generic SPINLINE 3 platform, requirements traceability is provided in the form of compliance tables in: (1) LTR Chapter 3 (traceability to IEEE 603 and 7-4.3.2, 10CFR50Appendix B, ASME NQA-1, and Interim Staff Guide ISG-04 requirements), (2) the DAR Appendices (traceability to EPRI CDR process and BTP 7-14), and the Dedication Plan (traceability to EPRI TR-106439)	Licensing Topical Report (LTR)	P	3 008 503B	Delivered DHL 8 Jul 2009	ML092160047	2		Acceptable for safety review	
				NP	3 008 503B-NP	Delivered DHL 8 Jul 2009	ML092160025	2		Acceptable for safety review	
			SPINLINE 3 Design Analysis Report	P	MPR-3337 Rev 1	Delivered DHL 8 Jul 2009	ML092160044	10		Acceptable for safety review	
				NP	MPR-3337 Rev 1- NP	TBD			Acceptable for safety review		
Documents Expected Within 12 Months of Requested Approval											
1	Commercial Grade Dedication Report	This report documents how the original quality, design, and life cycle processes for the generic SPINLINE 3 digital safety I&C platform map to the dedication process defined in EPRI TR-106439.	Dedication Report for the Generic SPINLINE 3 Digital Safety I&C Platform	P	3 010 795	30 Sep 2010 (planned)					
				NP	3 010 795-NP	30 Sep 2010 (planned)					
2	Commercial Grade Dedication Procedures	This procedure implements the dedication process defined in EPRI TR-10643 and approved by the NRC	Quality Procedure for Dedication	P	8 307 288 A	e-submittal 8 Jan 2010	ML100120120	42			
			Checklist for Dedication in Accordance with the Process Defined in EPRI TR-106439	NP	8 307 304 A	e-submittal 8 Jan 2010	ML100120093	40			
3	Final Configuration Lists	A configuration list is provided for the Qualification Test Specimen (QTS).	QTS Master Configuration List	P	3 010 612 A	31 Mar 2010 (plaanned)					
4	Final Configuration Tables	This is the same as Item 3, above	See Documents Expected Within 12 Months of Requested Approval, Item 3.								
5	Final Design Description	For the generic SPINLINE 3 platform, this item applies to the QTS description, which is provided in Documents Expected Upon Application, Item 7.	See Documents Expected Upon Application, Item 7								
6	Final FMEA	Final SPINLINE 3 board-level FMEAs were delivered as Documents Expected Upon Application, Item 11.	See Documents Expected Upon Application, Item 11								

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I&C-ISG-06 App B.3: Documents for a Tier 3 Review			Corresponding Generic SPINLINE 3 Licensing Documents						RAI Question Number	Evaluation/Comments	Additional Information Needed
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7	Final Logic Diagrams	None. Final logic diagrams will be prepared for each plant-specific <i>SPINLINE 3</i> application.	None								
8	Final Reliability Analysis	Final <i>SPINLINE 3</i> board-level reliability analyses were delivered as Documents Expected Upon Application, Item 13.	See Documents Expected Upon Application, Item 13								
9	Final Report on Acceptance of Commercial Grade Dedication	This is the same as the Dedication Report, Item 1, above.	See Documents Expected Within 12 Months of Requested Approval, Item 1								
10	Final System Configuration Documentation	This is the QTS configuration documentation, which includes the QTS Master Configuration List in Item 3, above, and the hardware and wiring drawings, which are available for audit in Items 3 & 4, below.	See Documents Expected Within 12 Months of Requested Approval, Item 3. Also see Documents to be Available for Audit, Items 3 and 4								
11	Final Factory Acceptance Test Reports	For the generic <i>SPINLINE 3</i> platform, there is a FAT performed on the QTS. The completed FAT Procedure is the same as the FAT Report. A summary is included in Item 15, below. The completed FAT Procedure is available for audit in Item 6, below.	See Documents Expected Within 12 Months of Requested Approval, Item 15. Also see Documents to be Available for Audit, Item 6.								
12	Installation Test Plans and Procedures	The generic System Installation and Site Test Plan template is intended for use in preparing the Plan for a plant-specific <i>SPINLINE 3</i> system. This Plan addresses both hardware and software installation. Installation procedures are prepared only for a plant-specific application.	See Documents Expected Within 12 Months of Requested Approval, Item 17d								
13	Qualification Test Procedures	A set of Qualification Test Procedures define the details of the specific tests performed on the Qualification Test Specimen (QTS) in accordance with the EQ Plan	EQ Test Procedures	P	See separate EQ Testing tab for detailed listing	31 Mar 2010 (plaanned)					
14	Quality Assurance Procedures for Digital Hardware and Software	RRCN SAS 10CFR50 App B QA procedures are identified in LTR Table 3.2-1.	Selected RRCN SAS 10CFR50 App B QA procedures for digital hardware and software	P	TBD	TBD					
		DS&S LLC 10CFR50 App B QA procedures are identified in LTR Table 3.2-2.	Selected DS&S LLC 10CFR50 App B QA procedures for digital hardware and software	P	TBD	TBD					
15	Summary of Final Environmental Qualification Testing	Summary EQ Test Report will summarize the results reported in the individual completed qualification test procedures. The individual completed test reports are listed in Documents to be Available for Audit, Items 1 and 6, below.	Summary EQ Test Report	P	TBD	30 Sep 2010 (planned)					
				NP	TBD	30 Sep 2010 (planned)					
16	Summary of Factory Acceptance Testing (FAT)	For the generic <i>SPINLINE 3</i> platform, there is a FAT performed on the QTS. A summary of the FAT is included in Item 15, above	See Documents Expected Within 12 Months of Requested Approval, Item 15.								
17	System Test Procedures	For the generic <i>SPINLINE 3</i> platform, these are the QTS test procedures in Item 13, above.	See Documents Expected Within 12 Months of Requested Approval, Item 13.								
18	Software Life Cycle Documentation	See 18a - 18d, below									
18a	Software Management Implementing Procedures	Software management implementing procedures supporting the various platform software Plans.	Selected RRCN SAS 10CFR50 App B QA procedures	P	TBD						
18b	Software Project Risk Management Report	As described in LTR Sections 6.3 and 6.4, risk management is addressed in each of the application software Plans. There is no separate Risk Management Plan or Risk Management Report. ISL Update: See No. 65 above.	None - ISL Update: No longer the case, based on RAI response								
18c	Software Test Procedures	Platform software test procedures only. Application software test procedures are prepared for a plant-specific application.	Selected RRCN SAS 10CFR50 App B QA procedures	P	TBD						
18d	Software Tool Analysis Report	Platform software tool analysis documentation.	See Documents Expected Within 12 Months of Requested Approval, Item 17l.								
19	V&V Reports	Platform software V&V only. Application software V&V reports are prepared for a plant-specific application.	Software Validation Test Report (SVTR) - Operational System Software for Safety Class Units	P	1 207 232 F	e-submittal 2 Feb 2010	ML100330814		56		
Documents to be Available for Audit											
1	Completed FAT Procedure & Reports	For the generic <i>SPINLINE 3</i> platform, there is a FAT performed on the QTS prior to the start of EQ testing. The completed FAT procedure is the FAT report and is available with the rest of the completed EQ test procedures.	See Documents to be Available for Audit, Item 6								
2	Configuration Management Reports	The generic platform software is under configuration management. The plant-specific application software is under CM at the time the software is produced	Platform software CM reports	P	TBD						
3	Detailed System and Hardware Drawings	For the generic <i>SPINLINE 3</i> platform, this is the same as the hardware drawings for the QTS.	Equipment Mounting Details for Seismic Testing	P	3 009 634 A						
			Interconnection of Qualification Test Specimen and Data Acquisition System	P	3 010 520 A						
4	Final Circuit Schematics	Circuit schematics of <i>SPINLINE 3</i> boards are available for audit.	Board circuits schematics	P	TBD						
		The only system-level schematics applicable to the generic platform review are the schematics for the QTS and associated data acquisition system	Qualification Test Specimen wiring diagrams	P	3 008 630 B						
			Data Acquisition System wiring diagrams	P	3 010 140 A						

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			Document Title	P/NP	Document Number	When submitted to NRC	Accession Number	Bib No.			
Tier 3: Totally new system, extensive review effort expected. Thorough Review of all technical areas.											
5	Final Software Integration Report	For the generic SPINLINE 3 platform, this is the same as Documents Expected Upon Application, Item 17e	See Documents Expected Upon Application, Item 17e								
6	Individual Completed Test Procedures & Reports	Completed Qualification Test Specimen (QTS) FAT and equipment qualification (EQ) test procedures and reports	Completed EQ Test Procedures	P	See separate EQ Testing tab for detailed listing						
7	Individual V&V Problem Reports up to FAT	Platform software V&V problem reports only. Application software V&V problem reports are prepared for a plant-specific application.	Platform software V&V problem reports	P	TBD						
8	Software Code Listings	(1) Generic platform software, which is dedicated for use in plant-specific SPINLINE 3 applications, and (2) the fit-for-purpose software used only in connection with QTS testing as defined in the EQ Plan	Platform software code listing	P	TBD						
			QTS software listing	P	TBD						
9	Vendor Build Documentation	For the generic SPINLINE 3 platform, the hardware build documents are the same as the QTS design documentation in 3 and 4, above. The QTS software is non-safety, fit-for-purpose software intended for use only in connection with EQ testing. The build documentation for this non-safety software is the same as the QTS software listing in 8, above.	See Documents to be Available for Audit, Items 3, 4, and 8								
Additional documents not identified in ISG-06 Appendix B.3 but required by other NRC documents											
1	Training Plan (required by BTP 7-14)	The generic Training Plan template is intended for use in preparing the Plan for a plant-specific SPINLINE 3 system. This Plan addresses both hardware and software training.	System Training Plan	NP	8 307 242 A	Delivered DHL 8 Jul 2009	ML092160022	15			
2	Operations & Maintenance Plan (required by BTP 7-14)	The generic Operations & Maintenance Plan template is intended for use in preparing the Plan and the Operating & Maintenance Manuals (OMMs) for a plant-specific SPINLINE 3 system. This Plan addresses both hardware and software operations and maintenance.	System Operations and Maintenance Plan	P	8 307 244 A	Delivered DHL 8 Jul 2009	ML092160053	16			
				NP	8 307 244 A-NP	Delivered DHL 8 Jul 2009	ML092160029	16			
3	Cyber Security Plan (required by Reg Guide 1.152 and ISG-01)	The generic Cyber Security Plan addresses Rolls-Royce Civil Nuclear cyber security activities and integration of these activities with the customers cyber security program for a plant-specific application. This Plan is fully developed for each plant-specific SPINLINE 3 system.	Cyber Security Plan	P	8 307 255 A	Delivered DHL 8 Jul 2009	ML092160046	17			
4	Setpoint Analysis Support (recommended by EPRI 107330, Section 4.2.4)	The generic Setpoint Analysis Support document is intended to support an application-specific setpoint analysis	Setpoint Analysis Support	P	3 009 397 A	Delivered DHL 8 Jul 2009	ML092160051	11			