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EDF AND AREVA UK EPR GENERIC DESIGN ASSESSMENT GDA ISSUE OBSOLESCENCE OF SPPA T2000 PLATFORM

GI-UKEPR-CI-05 REVISION 2

Technical Area		CONTROL AND INSTRUMENTATION				
Related Technical Areas		None				
GDA Issue Reference	GI-UKEPR-CI-0)5	GDA Issue Action Reference	GI-UKEPR-CI-05.A1		
GDA Issue	The EDF and AREVA C&I architecture includes systems based upon SPPA T2000 (Siemens S5 based), but this platform is believed to be obsolete and will not be available for UK EPR.					
GDA Issue Action	 The EDF and AREVA C&I architecture includes systems based upon SPPA T2000 (Siemens S5 based), but this platform is believed to be obsolete and will not be available for UK EPR. The RP needs to define the platform that will be provided for the UK EPR and submit a Basis of Safety Case that fully addresses the change from the SPPA T2000 (Siemens S5 based) to the proposed system. A Basis of Safety Case in this context is expected, amongst others, to: define the safety principles and standards (i.e. company, national and international) that are to be adopted for the replacement systems (i.e. incorporating the replacement platform); justify how these safety principles and standards will be complied with at each step of the development and deployment of the replacement systems; 					
	 justify how functional and performance requirements will be satisfied; 					
	 demonstrate conformance with relevant ONR SAPs; 					
	 provide a full analysis of the impact of the replacement platform on the overall C&I design; and provide precise details of the change and demonstrate that the systems (covering all new components, tools and methods, etc.) are fit for purpose. 					
	It is understood that the proposed system is likely to be based on the Siemens S7 product and that the main impact of the change is the use of a different processor board. This will have an impact on the current SPPA T2000 (Siemens S5 based) based safety demonstration which may affect, amongst others, ability to reuse application code already developed, tool qualification, test records and proven in use arguments etc.					
	At first sight this may appear to be a site licensing issue but our reason for including it as a GDA Issue is because of the profound importance that the platform selection of the SAS and PAS has on the safety of the EPR. In particular the diversity of these systems with the TXS is fundamental and therefore our view that the selection criteria for a replacement platform technology should be reviewed as a part of the GDA process.					

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Technical Area		CONTROL AND INSTRUMENTATION				
Related Technical Areas		None				
GDA Issue Reference	GI-UKEPR-CI-05		GDA Issue Action Reference	GI-UKEPR-CI-05.A1		
	For further guidance see also T15.T01.45 in Annex 5 and T18.TO1.04 in Annex 8 of Step 4 C&I Division 6 Assessment Report, No. 11/022 Revision A (DRAFT). With agreement from the Regulator this action may be completed by alternative means.					

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