

WESTINGHOUSE AP1000® GENERIC DESIGN ASSESSMENT
GDA ISSUE
PCSR PRESENTATION OF CLAIMS ARGUMENTS AND EVIDENCE
GI-AP1000-EE-01 REVISION 0

Technical Area		ELECTRICAL ENGINEERING	
Related Technical Areas		None	
GDA Issue Reference	GI-AP1000-EE-01	GDA Issue Action Reference	GI-AP1000-EE-01.A1
GDA Issue	<p>Westinghouse is required to produce, within the PCSR, the claims arguments and evidence to substantiate the design of the complete plant electrical distribution system. The claims made for the electrical system need to be related to the overall safety claims for the plant.</p> <p>Chapter 18 of the PCSR does not meet the above requirements to demonstrate the safety and integrity of the design of the electrical distribution system. Clear safety claims are not presented and there is no structure of arguments and evidence to substantiate the design.</p>		
GDA Issue Action	<p>Westinghouse is required to produce a revised PCSR Chapter 18 to substantiate the design of the complete plant electrical distribution system. This needs to incorporate a structure of claims, arguments and evidence to demonstrate that the electrical system fully meets the requirements of its safety role as specified in the other chapters of the PCSR.</p> <p>ONR's expectations are that the PCSR should provide a rigorous justification for the completeness of the electrical power distribution system to perform its safety role. The current issue of Chapter 18 does not meet our regulatory expectations as follows:</p> <ul style="list-style-type: none"> • The PCSR does not provide a clear justification of the safety of the AP1000 electrical distribution system. References to other sections of the PCSR do not provide any detail to relate to the overall plant safety claims. • There is no clear structure of claims, arguments and evidence and it is difficult to determine what the actual safety claims are due to a considerable degree of ambiguity. • The electrical chapter of the PCSR principally addresses the reactor; the cooling ponds are not adequately covered. • The description of each constituent part of the electrical system has been presented as a Safety Assessment Principles (SAP) compliance document. The PCSR needs to consider the complete system and needs to substantiate this design rather than only addressing SAP compliance. <p>With agreement from the Regulator this action may be completed by alternative means.</p>		