

WESTINGHOUSE AP1000® GENERIC DESIGN ASSESSMENT

GDA ISSUE

SUBSTANTIATION AND ANALYSIS OF THE CONSEQUENCES OF DROPPED LOADS AND IMPACT FROM LIFTING EQUIPMENT INCLUDED WITHIN THE AP1000 DESIGN

GI-AP1000-IH-06 REVISION 0

Technical Area		INTERNAL HAZARDS	
Related Technical Areas		Mechanical Engineering Human Factors	
GDA Issue Reference	GI-AP1000-IH-06	GDA Issue Action Reference	GI-AP1000-IH-06.A1
GDA Issue	Substantiation and analysis of the consequences of dropped loads and impact from lifting equipment included within the AP1000 design.		
GDA Issue Action	<p>Identify and substantiate all claims made on SSCs associated against the effects of dropped load and impact. This approach should, in the first instance, consider the potential consequences of a dropped load or impact on a quantitative basis to determine significance of the dropped load or impact.</p> <p>This should then lead to detailed multi-legged arguments to demonstrate that the provisions in place to ensure that the risk to nuclear safety of a load drop or impact was ALARP and that such analysis may take into account:</p> <ul style="list-style-type: none"> • Claims on civil structures. • Additional physical protection. • Limits and conditions on the use of the lifting equipment. • Provision of detailed load path routes avoiding areas of highest nuclear significance. • Measures (both system based and administratively controlled) in place to ensure the potential for impact of the load is minimised. <p>The list above should not be considered to be exhaustive and the items detailed above are provided as a means to inform Westinghouse of my expectations.</p> <p>With agreement from the Regulator this action may be completed by alternative means.</p>		