

# Office for Nuclear Regulation

An agency of HSE

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## WESTINGHOUSE AP1000® GENERIC DESIGN ASSESSMENT

### GDA ISSUE

### PRESSURE PART FAILURE

### GI-AP1000-IH-03 REVISION 0

<b>Technical Area</b>		<b>INTERNAL HAZARDS</b>	
<b>Related Technical Areas</b>		Structural Integrity Civil Engineering Mechanical Engineering	
<b>GDA Issue Reference</b>	<b>GI-AP1000-IH-03</b>	<b>GDA Issue Action Reference</b>	<b>GI-AP1000-IH-03.A1</b>
<b>GDA Issue</b>	Provide substantiation to support claims and arguments made within the area of pressure part failure.		
<b>GDA Issue Action</b>	Identify and substantiate all nuclear significant pipe whip restraints, barriers and shields claimed for the protection of redundant trains against the effects of pressure part failure. This substantiation should take consideration of the following: <ul style="list-style-type: none"><li>• Quantitative assessment of the consequences of postulated pipe failures (including high energy pipework that is not claimed as HSS derived from the pipe rupture analysis.</li><li>• Justification of the method applied to selection of the type of protection adopted e.g. pipe restraint, barrier or shield.</li></ul> 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. With agreement from the Regulator this action may be completed by alternative means.		

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### GI-AP1000-IH-03 REVISION 0

Technical Area		INTERNAL HAZARDS	
Related Technical Areas		Structural Integrity	
GDA Issue Reference	GI-AP1000-IH-03	GDA Issue Action Reference	GI-AP1000-IH-03.A2
<b>GDA Issue Action</b>	<p>Provide the updated safety case that details the identification and substantiation of all claims made in relation to Main Steam Isolation Compartments associated with pressure part failure. This substantiation should take consideration of the following:</p> <ul style="list-style-type: none"> <li>• Structural integrity claims made on the main steam line and feedwater line pipework.</li> <li>• Engineered design provisions in place to either prevent or mitigate the potential consequences of pipe failure within the two MSIV Compartments e.g. pressure relief paths, valve actuation etc.</li> <li>• Whether there is a requirement for passive features such as pipewhip restraints, barriers or shields.</li> </ul> <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>		