Office for Nuclear Regulation

An agency of HSE

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WESTINGHOUSE AP1000® GENERIC DESIGN ASSESSMENT GDA ISSUE INTERNAL FLOODING SAFETY CASE GI-AP1000-IH-02 REVISION 0

| Technical Area | | INTERNAL HAZARDS | | |
|-------------------------|--|------------------|-------------------------------|--------------------|
| Related Technical Areas | | None | | |
| GDA Issue Reference | GI-AP1000-IH-02 | | GDA Issue Action Reference | GI-AP1000-IH-02.A1 |
| GDA Issue | There is a need to provide an updated internal flooding safety case as there are inconsistencies associated with claims made on barriers, drains and sumps, and flood calculations. | | | |
| GDA Issue Action | Provide an updated internal flooding safety case that considers the claims, arguments and evidence associated with internal flooding. As part of the production of the aforementioned case there is a need to consider the following aspects within the safety case: • All potential unmitigated flood sources taking into account bounding flood sources and volumes. • The barriers claimed to provide segregation of safety significant SSCs in the event of internal flooding. • Any claims made on drainage systems, sumps, drains, flow paths etc and arguments and evidence provided to demonstrate that they will be available for postulated internal flooding events. • Any claims made on pressure relief panels and compartment vents need to supported by arguments and evidence to demonstrate that they will be available for postulated internal flooding events. • Any ALARP claims made on operator actions in relation to the mitigation of potential flood events rather than assuming operator success as part of the deterministic case. 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. Or alternative means agreed by the Regulator. | | | |

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