

Westinghouse UK
AP1000® GENERIC DESIGN ASSESSMENT
Resolution Plan for GI-AP1000-FS-08
Fault Schedule for AP1000

MAIN ASSESSMENT AREA	RELATED ASSESSMENT AREA(S)	RESOLUTION PLAN REVISION	GDA ISSUE REVISION
Fault Studies	All other assessment areas	3	0

GDA ISSUE:	<p>Westinghouse is required to present their Fault Schedule to ONR and support as necessary ONR's subsequent assessment of it.</p> <p>The Fault Schedule is to be updated as appropriate following assessment by ONR and to incorporate any changes/additions to the AP1000® safety case resulting from GDA Issues.</p>
ACTION: GI-AP1000-FS-08.A1	<p>Westinghouse is required to present their Fault Schedule to ONR and support as necessary ONR's subsequent assessment of it.</p> <p>The Fault Schedule is to be updated as appropriate following assessment by ONR and to incorporate any changes/additions to the AP1000 safety case resulting from GDA Issues.</p> <p>A definitive Fault Schedule was not provided to ONR for assessment in GDA Step 4. At the end of March 2011, Westinghouse provided ONR with Rev 0 of the PCSR which included a new Fault Schedule. However this has not been assessed to date.</p> <p>Westinghouse shall develop a programme to facilitate ONR's assessment of this crucial part of the PCSR. It will allow for:</p> <ul style="list-style-type: none"> • Westinghouse to present their methodology and intent followed to produce the Fault Schedule; • Westinghouse to present to ONR the extent and scope of the Fault Schedule and their plans to update it in the future; • Sufficient time for ONR to assess the Fault Schedule; • Westinghouse to address any comments on the adequacy of the Fault Schedule; • Any revisions to the Fault Schedule as result of GDA Issues, design modifications or changes to the PCSR. <p>With agreement from the Regulator this action may be completed by alternative means.</p>

RELEVANT REFERENCE DOCUMENTATION RELATED TO GDA ISSUE	
Technical Queries	
Regulatory Observations	RO-AP1000-46 RO-AP1000-47 RO-AP1000-54
Other Documentation	

Scope of work:
Westinghouse must provide a comprehensive Fault Schedule that includes all faults within the design basis and presents the diverse means of protecting against all faults with a frequency of greater than 10^{-3} per year.

Description of work:
<p>Westinghouse provided a comprehensive fault schedule in the PCSR, UKP-GW-GL-793 Revision 0, at the end of March 2011. Chapter 8, Fault & Accident Analysis, provides an overview of the fault and accident analysis, identification of faults and hazards, and the fault schedule and fault group. The tabular Fault Schedule is presented in Appendix 8A.</p> <p>This work was received by ONR at the end of the assessment period and, therefore, could not be assessed during GDA. To resolve this issue Westinghouse will work closely with the ONR Assessors to address any questions that may arise during their review of the Fault Schedule.</p> <p>Following completion of the assessment and discussion period the PCSR will be updated, as necessary, to reflect any agreed changes. All Resolution Plan effort conducted that affects the Fault Schedule will be updated in a revision to the PCSR.</p>

Schedule/ programme milestones:
Please see the following page for the schedule.

#	Activity Name	2015												2016												2017
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	
1																										
2	FAULT STUDIES																									
3	FS.08 Fault Schedule																									
4	FS.08 Update of Fault Schedule																									
5	Present Fault Schedule to ONR																									
6	FS.08 PCSR Mark Ups-Submit to ONR																									
7	PCSR Mark Ups-ONR Review of Submittal																									

Methodology:

No new methodologies will be employed. The objective of this task is to review and confirm both the approach and results of the fault schedule documented in revision 0 of the PCSR and resolve any gaps between the fault schedule and ONR requirements. The impact of all GDA Issues on the Fault Schedule will be addressed. The effort performed in this Resolution Plan will be tied to the completion of the activity “Establish New Design Reference Point” in the Resolution Plan for GI-**AP1000**-CC-02 to ensure that all agreed design changes are incorporated in the final PCSR.

Justification of adequacy:

The Fault Schedule presented in the PCSR which reflects the work already provided in responses to Regulatory Observations 46, 47, and 54 captures all faults and claims identified during GDA Step 4. Changes that impact the Fault Schedule as a result of work completed on other GDA Issues will be included in the update to the Fault Schedule.

Impact assessment:

The following document is anticipated to be affected:

- The PCSR, chapters 8 & 9