

REGULATORY OBSERVATION

REGULATOR TO COMPLETE

RO unique no.:	RO-ABWR-0020
Date sent:	29 September 2014
Acknowledgement required by:	20 October 2014
Agreement of Resolution Plan Required by:	31 October 2014
Resolution of Regulatory Observation required by:	<i>To be determined by the Hitachi-GE Resolution Plan</i>
TRIM Ref.:	2014/349255
Related RQ / RO No. and TRIM Ref. (if any):	N/A
Observation title:	UK- ABWR Internal Hazards Safety Case for the Main Steam Tunnel Room
Technical area(s) Internal Hazards	Related technical area(s) PSA, Fault Studies, Civil Engineering and External hazards, Structural Integrity, Mechanical Engineering Control and Instrumentation

Regulatory Observation

Summary

Hitachi-GE submitted its preliminary internal hazards assessment for the Main Steam Tunnel Room (MSTR). ONR recognises that this is a GDA Step 2 preliminary analysis and therefore currently lacks the arguments and evidence which would be expected to be provided in GDA Step 3 and 4. However it does give sufficient information for ONR to raise a concern about the absence of segregation of the main steam lines and feed water lines within the MSTR. This RO requires Hitachi-GE to: a) review the MSTR plant layout and give consideration to different options from the existing design, b) provide detail arguments and evidence to underpin the claims made and c) produce an ALARP justification for the MSTR. The outcome of this ALARP study should be a rigorous justification of the UK ABWR design.

Background and Regulatory Expectations

During the workshop meeting in Japan, in May 2014, Hitachi-GE presented at high level its preliminary internal hazards assessment in the MSTR. ONR gave preliminary feedback during the meeting. Subsequently, ONR provided detailed comments on the preliminary internal hazards assessment in the MSTR, which reflected ONR's regulatory expectations. ONR considers that the current case lacks the detailed arguments and evidence required to justify the claims made. An ALARP justification of this aspect of the UK ABWR design has not been presented.

Regulatory Observation Actions

RO-ABWR-00XX.A1: Review the Main Steam Tunnel Room plant layout and provide a robust ALARP justification of the internal hazards safety case in this area.

Hitachi-GE is required to review its plant layout of the MSTR and provide a robust ALARP justification of the internal hazards safety case in this area.

- Review the MSTR plant layout and give consideration to different options from the existing design;
- Provide detail arguments and evidence to underpin the claims made; and
- Provide an internal hazards ALARP justification for the MSTR.

Hitachi-GE is required to propose a strategy and delivery plan.

Resolution required by: To be determined by the Hitachi-GE Resolution Plan

REQUESTING PARTY TO COMPLETE

Actual Acknowledgement date:

RP stated Resolution Plan agreement date: