

 CGN EDF General Nuclear System	REGULATORY OBSERVATION RESOLUTION PLAN RO-UKHPR1000-0041	Rev.: 0	Page: 1 / 8
		GDA-REC-GNSL-006591	

REGULATORY OBSERVATION Resolution Plan

RO Unique No.:	RO-UKHPR1000-0041
RO Title:	Disposability of Higher Activity Waste from the UK HPR1000
Technical Area(s)	Environmental
Revision:	Rev 0
Overall RO Closure Date (Planned):	
Linked RQ(s)	-
Linked RO(s)	-
Related Technical Area(s)	17. RadWaste, Decommissioning & Spent Fuel Management
Other Related Documentation	-

Scope of Work


Background

As part of the GDA submission, the Requesting Party (RP) is required to seek advice from Radioactive Waste Management Ltd (RWM) with regard to the disposal of Higher Activity Wastes (HAWs) and Spent Fuel (SF).

As part of seeking this advice, the RP has submitted information and data to RWM for assessment of the proposals for conditioning and packaging of HAW and SF that will be generated from the UK HPR1000. RWM has started assessing this information through their Disposability Assessment process known as the Letter of Compliance (LoC) [1]. During the first step of their assessment, which consists in assessing the data provided, RWM asked for clarifications and additional data and the RP had to provide these clarifications, correct some data and produce the additional data requested. This induced delays in the overall RWM programme and led to a substantial risk to the RP delivering against the key dates for the Environment Agency public consultation and the final GDA review.

To get confidence that this risk is adequately managed and mitigated by the RP, EA decided to issue Regulatory Observation (RO)-UKHPR1000-0041 "Disposability of Higher Activity Waste from the UK HPR1000 to:

- explain EA's regulatory expectations;
- seek assurance that the RP and RWM plans will be aligned going forward;
- seek assurance that the RWM submission will be updated to take account of the further engagement between CGN/GNSL and RWM;
- highlight what EA require for their public consultation review;
- ensure that the RP is exploring all potential options to accelerate and possibly decouple components of the Disposability Assessment, where feasible;
- highlight EA's requirements entering the final review stages of GDA;

 General Nuclear System	REGULATORY OBSERVATION RESOLUTION PLAN RO-UKHPR1000-0041	Rev.: 0	Page: 2 / 8
		GDA-REC-GNSL-006591	

- ensure that the RP is aware of EA's expectations with regard to updating the key supporting documents and producing a forward action plan for addressing any outputs from RWM's assessment.

Scope of work

General Nuclear System Limited (GNSL) has reviewed RO-UKHPR1000-0041 and produced the resolution plan presented hereafter to address the regulatory expectations identified in Actions 1 to 5 of this RO.

The resolution plan has been developed in accordance with the UK HPR1000 GDA project procedures and processes.

Deliverable Description

RO-UKHPR1000-0041.A1 – Update the Disposability Submission

In response to this Regulatory Observation Action, the RP should:

- Submit to the regulators an updated HAW Disposability Assessment Submission report which takes account the further discussion and engagement that has been ongoing with CGN and RWM.*

As part of the work undertaken by the RP during Step 3 of GDA, the RP produced the *UK HPR1000 HAW Disposability Assessment Submission* in August 2019. This report contains all the necessary data and input for RWM to undertake the assessment of the RP's proposals for conditioning and packaging of HAW and SF that will be generated from the UK HPR1000 operation and decommissioning.

RWM assessed the data provided in this report and requested clarification of some data and additional data for them to be able to do their assessment and provide their advice on the RP's proposals and on disposability of the HAW and SF to be generated by a UK HPR1000, during its full lifetime, including decommissioning.

To avoid slowing down the process the RP provided the requested information and clarification to RWM via dedicated quality controlled spreadsheets and/or through meetings, with the intent to update the *UK HPR1000 HAW Disposability Assessment Submission* to reflect these clarifications and additional data once all the data and inputs needed by RWM would be confirmed to all be adequate for RWM to carry out their disposability assessment process. This confirmation has been recently received by the RP and as a result the RP has started to update the *UK HPR1000 HAW Disposability Assessment Submission* with the aim to share a draft version with EA by mid-June (for information) and submit the final version to the regulators (and RWM for referencing purposes) by end of June 2020.

In response to this ROA, the RP will submit the *UK HPR1000 HAW Disposability Assessment Submission* to EA by end of June 2020, and will share with EA a draft version by mid-June 2020 for information.

 General Nuclear System	REGULATORY OBSERVATION RESOLUTION PLAN RO-UKHPR1000-0041	Rev.: 0	Page: 3 / 8
		GDA-REC-GNSL-006591	

RO-UKHPR1000-0041.A2 – Produce a Delivery Plan for the Disposability Assessment

In response to this Regulatory Observation Action, the RP should:

- *Provide an updated plan, which is aligned with the RP's and RWM's programmes, once RWM has obtained all the information needed to undertake the disposability assessment. The delivery dates within the plan should be credible.*
- *Consider how interactions between CGN, GNSL, Framatome and RWM could be made more efficient.*
- *The RP should submit an updated plan to the regulators when any changes to the plan affect the completion dates for the draft and final Disposability Assessment Reports.*

RO-UKHPR1000-0041.A5 – Update on Progress of the Disposability Assessment


In response to the Regulatory Observation Action, the RP should:

- *Invite the regulators to regular RWM engagement meetings;*
- *Provide updates via the Level 4 Radioactive Waste Management meetings.*
- *Inform the regulators of any significant delays or changes to the programme at earliest opportunity.*

In response to these two ROAs, the RP will produce (and implement) a *HAW and SF disposability assessment delivery strategy* that will present the RP's strategy for obtaining the advice from RWM with regard to the disposal of Higher Activity Wastes (HAWs) and Spent Fuel (SF) that are anticipated to be produced from operation and decommissioning of UK HPR1000. This strategy will notably presents

- The RP's organisation with respect to work related to HAW and SF disposability assessment;
- The work programme and delivery plan, including the RP's and RWM's programmes, with key linkages between the 2 programmes and the delivery plan. The programme and plan will be based on credible dates, with regard to the whole GDA process and considering the linkages between the RP's and RWM's programme and the delivery plan;
- The stakeholders management arrangements, including (not limited to):
 - how CGN, GNSL, Framatome and RWM interact effectively and efficiently,
 - how to engage and interact with EA/ONR, notably to ensure regulators are informed of any significant delays or changes to the programme at the earliest opportunity;
 - the meetings needs, scope, attendees and frequency;
- The process and conditions by which the RP would update and submit to EA (and ONR) the (updated) programmes/delivery plan when any changes affect the completion dates of the draft and final Disposability Assessment Reports produced by RWM as well as the completion dates of the key supporting documentation for which the Disposability Assessment output is a key input.
- Risk identification, management and escalation routes.

The key aspects/arrangements to be described in this strategy are now already developed and implemented by the RP, e.g. the delivery plan and work programmes, regular meeting (weekly and monthly) with RWM to

 General Nuclear System	REGULATORY OBSERVATION RESOLUTION PLAN RO-UKHPR1000-0041	Rev.: 0	Page: 4 / 8
		GDA-REC-GNSL-006591	

track progress and identify issues as they arise to manage them as quickly and effectively as possible, regular communication with the regulator via L4s or meetings with RWM, ad'hoc meetings (post RWM PRM or to discuss specific issue as soon as it is raised), risk identification and escalation process, etc. The strategy report will consolidate these arrangements and aspects and provide clarity on all relevant aspects and arrangement to ensure an adequate management of the work and the programme.

This strategy will be submitted by the 6th of July 2020, its implementation having been fully effective since end of February 2020.

RO-UKHPR1000-0041.A3 – Deliver a draft Disposability Assessment Report or produce a Disposability Summary Report to meet with the Environment Agency’s public consultation timescales.

In response to this Regulatory Observation Action, the RP should:


- *Provide a copy of the draft Disposability Assessment report or a summary report of the current status of the Disposability Assessment to the Environment Agency by 6 July 2020;*
- *Provide the following information, if a summary report is to be produced then it should provide:*
 - *The current status of progress of RWM’s Disposability Assessment for all HAW and SF;*
 - *A forward action plan demonstrating how the RP will deliver the final assessment report before 30 April 2021;*
 - *A summary of any issues currently arising from the assessment, and any actions that can be taken to address these issues at the time of writing the summary report.*
- *If providing a draft assessment report, the report should contain the information requested for the summary report, or this should be supplied alongside the draft assessment report.*
- *Update the Integrated Delivery Plan.*

In response to this ROA, the RP will produce a report *UK HPR1000 HAW and SF Disposability Assessment – End June 2020 Status*. This report will presents:

- The current status (by end of June 2020) of progress of RWM’s Disposability Assessment for all HAW and SF;
- A forward action plan demonstrating how the RP will deliver the final assessment report before 30 April 2021;
- A summary of any issues currently arising from the assessment, and any actions that can be taken to address these issues at the time of writing the summary report.

This report will be supported by a ‘*Progress*’ letter that will be provided by RWM to GNSL by the 3rd of July that will provide:

- RWM progress up to June 2020;
- The list of issues, if any, identified by RWM up to June 2020;

 General Nuclear System	REGULATORY OBSERVATION RESOLUTION PLAN RO-UKHPR1000-0041	Rev.: 0	Page: 5 / 8
		GDA-REC-GNSL-006591	

- The work programme for the remaining work that RWM will have to undertake to issue the draft and final versions of the *Assessment Summary Report* and the *Disposability Assessment Report*¹.

The RP will submit the following to EA by the 6th of July:

- The report *UK HPR1000 HAW and SF Disposability Assessment – End June 2020 Status*;
- The RWM ‘Progress’ letter;
- The up to date version of the IDP (likely to be the end of June 2020 version).

RO-UKHPR1000-0041.A4 – Deliver the final Disposability Assessment report, key supporting documentation and a forward action plan

In response to this Regulatory Observation Action, the RP should:

- *Produce a signed final Disposability Assessment report by 30 April 2021;*
- *Provide all updated supporting documentation, for example the RWMCs, the Decommissioning Waste Management Proposal and any other supporting documents where the Disposability Assessment output is a key input to the relevant documents. This should be completed by 30 April 2021;*
- *Provide a forward action plan for addressing any issues raised by RWM within the Disposability Assessment report, with regard to the disposal of ILW (operational and decommissioning), SF and NFCC. This should be completed by 30 April 2021.*

In response to this ROA, the RP will submit to the EA:

- the signed final *Disposability Assessment report* as soon as it is received from RWM, before 30 April 2021;
- the updated version of all the supporting documents that are impacted by the outcomes of the RWM disposability assessment, including (likely) the IWS, the two RWMCs and the *Decommissioning Waste Management Proposal*. These reports, if impacted by the RWM disposability assessment, will be updated and submitted by 30 April 2021 at the latest;
- The report *Response to RWM Assessment Report on UK HPR1000 HAW and Spent Fuel Disposability* that will summarise the findings from the RWM assessment of the disposability of HAW and SF, and will present information on how and when the issues raised by RWM will be addressed. This report will be completed and submitted by 30 April 2021.

Impact on the GDA Submissions

The information will be appropriately incorporated into V1.1 and V2 of relevant PCER chapters, notably PCER Chapter 3 and Chapter 4.

¹ These are the two reports RWM will produce as a result of the assessment of the RP’s proposals for conditioning and packaging of HAW and SF that will be generated from the UK HPR1000 operation and decommissioning

 General Nuclear System	REGULATORY OBSERVATION RESOLUTION PLAN RO-UKHPR1000-0041	Rev.: 0	Page: 6 / 8
		GDA-REC-GNSL-006591	

The timescales to submit the reports that form part of the resolution plan are given in the Gantt Chart in Appendix A.
Timetable and Milestone Programme Leading to the Deliverables
See attached Gantt Chart in APPENDIX A.

