

CoRWM Open Plenary – Tuesday 28th November 2023

Timing: 10:00 – 12:00

Chair: Nigel Thrift (CoRWM Chair)

Members: Penny Harvey, Ray Kemp, Mark Kirkbride, Derek Lacey, Stephen Tromans, Simon Webb, Claire Corkhill, Catherine MacKenzie, Malcolm Joyce and Barry Lennox

**CoRWM
Secretariat**

DESNZ: Adam Draude, Josie Carlton and Shubhnit Seera

Apologies: Clare Bond

Agenda:

1. Meeting open, welcome, and introductory comments (Chair)

Chair's recent meetings

2. Declaration of Interests

3. Approval of Minutes from the September Open Plenary

4. Update on Subgroup Activities and Plans

Key topics:

- a. SG 1 Working with Communities (Penny Harvey)
- b. SG 2 GDF Geology and Delivery (Mark Kirkbride)
- c. SG 3 Planning and Regulation (Ray Kemp)
- d. SG 4 Scottish Government Activities (Clare Bond)
1. SG 5 Welsh Government Activities (Stephen Tromans)
- f. SG 6 Storage of Waste, Spent Fuel, and Materials (Derek Lacey)

5. **Presentation:** Speaker – Una Baker, Division of Radioactive Waste Management and Decommissioning (RWMD) OECD Nuclear Energy Agency (NEA) talk on **Waste Integration for Small and Advanced Reactor Design (WISARD)**

6. **Questions from the public**

7. **Any other business**

8. **Next Meeting:** 12th March 2024 Manchester

Close of Meeting

Agenda item 1. Meeting open, welcome, and introductory comments (Chair)

Chair's recent meetings

1. Nigel opened the meeting and welcomed Adam (head of secretariat) and Una Baker (guest speaker) he also acknowledged the observers who had attended the meeting either in person or online.
2. CoRWM are in the process of drafting a number of position papers on:
 - URLs (Underground Rock Laboratories)
 - Siting
 - Retrievability
 - Transport considerations
 - Sustainability
 - Interim storage

Agenda item 2. Declaration of Interests

3. Malcolm Joyce reported three new research grants funded by EPSRC concerning 'water in spent fuel', in collaboration with the NDA, Sellafield and NNL.

Agenda item 4. Approval of Minutes from the September Open Plenary

4. Approved.

Agenda item 5. Update on Subgroup Activities and Plans

SG1 Update

5. On 26th September, PH met (on Teams) with NWS geologist Fiona McEvoy and members of her team for follow up discussions from the September open plenary in Cardiff about engagement and communication plans and possibilities – engagement events planned for communities.
6. On 3rd October members of SG1 joined the meeting between NWS and SG3 to discuss the withdrawal from Allerdale.
7. On 3rd October PH met with Annabelle Lillycrop for an update on Community Engagement and responses from Community Partnerships to the down-selection of Allerdale.
8. On October 18th, PH and NT held a workshop on social science for senior members of NWS, with guest speakers Professor Ash Amin (Cambridge University) and Professor Sarah Whatmore (Oxford University). PH detailed the work of the both of them.
9. On November 22nd, PH attended a meeting of the NWS Community Engagement Advisory Panel. Key topic for discussion was the possible early Test of Public Support in Theddlethorpe, and down selection of Allerdale.
10. SG1 attended the 2-day NWS / CoRWM workshop in Harwell on 9/10 November where there was further discussion of the 'down selection' of

Allerdale, as well as existing and up-coming siting possibilities. (Not mentioned at plenary).

11. South Copeland Community Partnership invited CoRWM to attend public meetings in Millom (November 24th) and in Drigg (November 25th). PH and CC attended.
12. PH to write a note of the workshop and put on the website.
13. Tim Knowles and PH discussed how effectively the CPs represent the communities – with further work needed to get to a better stage.

SG2 Update

14. MK and DL are working on plans for CoRWM to regularly review published position papers.
15. SG2 are working on updating CoRWMs position on retrievability.
16. SG2 met with NWS on October 25th to discuss:
 - a. NWS provided an extensive and detailed series of presentations in relation to the GDF Siting programme in Cumbria, in particular:
 - i. Site Evaluation and the Allerdale decision
 - ii. Overview of the Decision-making framework (DMF) and how NWS use it.
 - iii. The siting factors used in the DMF, and overview of the approach taken in Allerdale
 - b. Site Characterisation – update on geological characterisation
 - c. Engineering and Safety Case update, focusing on how geological information was used in the Allerdale decision making process. This included NWS assessment of the required footprint size for a 24GW new build & legacy Inventory and their process to arrive at this.
17. Meeting scheduled with the EA in Birmingham (with SG3) to discuss URL; draft report issued to them in advance.
18. SG2 members attended the NWS workshop on November 9th and 10th.
19. Date agreed for mid Jan 24 for NWS to provide update to SG2 in relation to the West Cumbria seismic survey outputs and interpretation.
20. Pete Roche and SG2 members discussed the estimates around the waste per Kilowatt produced by concept LWR SMRs, with it too early to get an accurate sense of this figure – reactor vendors needed to publish data on their designs.

SG3 Update

21. RK gave a short presentation to the NWS Regulatory Stakeholder meeting on 20th September 2023. This gave initial reflections of the regulatory aspects of the CoRWM visit to the ANDRA facility at Bure in France. As a consequence, it also touched upon CoRWM's work on a Position Paper regarding Underground Research / Rock Laboratories.
22. SG3 then met with NWS on 3rd October 2023 to discuss:
 - The Allerdale Withdrawal
 - Progress on the GDF DCO process.
 - Update on GDF regulatory activity – key milestones, risks, and issues.

23. RK and SW also met with Ben Whittard (MD of Transport Solutions for Nuclear Transport Services (NTS)) to discuss NTS' systems approach to evaluating radioactive waste transport needs for the GDF.
SW and RK will be considering how best to update CoRWM perhaps with further work on regulation of the transport of radioactive materials.
24. SG3 members attended the NWS workshop on 9 and 10 November. RK again gave a short presentation regarding CoRWM's key "takeaways" from the visit to the ANDRA facility at Bure in France. This also touched upon CoRWM's work on the Position Paper regarding Underground Research / Rock Laboratories and French thinking regarding retrievability of waste from their future CIGEO facility.
25. This discussion led to a follow up meeting with NWS on 22 November to clarify how NWS see the role of an URL within their GDF Programme.
26. SG3 are to meet with EA and ONR in Birmingham on November 30th to discuss:
 - CoRWM's developing position on the need for a URL and the lessons learned from the recent visit to Bure, (the main item)
 - CoRWM's review of its position on retrievability
 - CoRWM's view on the need for regular publication of a developer's RD&D report
 - Topics on the CoRWM forward plan (23/24 and beyond) of relevance to regulators (which may well touch upon AMR / SMRs and radioactive waste management).
27. In addition to the above, SG3 members in this past period have been working actively with other CoRWM members on various aspects of work including the paper on waste implications of "new nuclear" (AMR / SMRs).

SG4 Update

28. CoRWM are intending to visit Dounreay in Spring 2024.
29. Malcolm Joyce attended a Stakeholder meeting held to look at technical feasibility of Near Surface Disposal on High Activity Waste

SG5 Update

30. The Stage 1 debate in the Senedd of the [Infrastructure \(Wales\) Bill \(senedd.wales\)](#) is due to take place on December 5. This Bill includes provision to designate a GDF as a 'significant infrastructure project' similar to an NSIP in England.
31. Stephen Tromans has been leading CoRWM efforts on a new paper on the wastes from potential AMR/SMR technologies. This may have issues for Wales, given plans for possible use of sites in Wales for new nuclear technologies.
32. CoRWM attended a site visit at Trawsfynydd on September 14th. To look at progress in decommissioning and interim storage of waste.
33. CoRWM are interested in a visit to Wylfa.
34. SG5 members attended the NWS workshop on November 9th and 10th.

SG6 Update

35. SG6 met with the NDA in Warrington on November 2nd to discuss:

- a. NDA Strategy sponsored storage activities including the Stores Export Schedules
 - b. CoRWM's SMR/AMR Paper
 - c. Introduction of CoRWM's storage review (including a recap of the NDA's 2009 Storage Review)
 - d. Update on near-surface disposal
36. Interim storage is the current main focus for SG6. Aim is to produce a report in the public domain by end 2024 with a view to influencing the next NDA strategy.
37. November briefing by NDA and NWS built on previous presentations and site visits – we are steadily building an understanding of the status quo and potential changes – developing a specific interest in thermal treatment as an alternative to cementitious treatment – potential to move from a decade of R and D to industrial implementation.
38. Currently making plans to
- review reports produced between 2008-2010 to assess the extent to which progress is being made and identify generic key questions; and
 - identify key questions in relation to interim storage at Sellafield, interim storage at Magnox stations, interim storage in Scotland and interim storage of spent fuel.

Agenda item 5. Presentation:

Speaker – Una Baker, Division of Radioactive Waste Management and Decommissioning (RWMD) OECD Nuclear Energy Agency (NEA) talk on **Waste Integration for Small and Advanced Reactor Design (WISARD)**

39. Una works in the NEA Division for Radioactive Waste Management to advance the back-end preparation for the next generation of nuclear reactors.
40. The NEA is developing a new Joint Project (JP) on Waste Integration for Small and Advanced Reactor Designs (WISARD), which will consider critical waste management topics for these new technologies as identified by Member Countries. These key topics include disposal options such as deep geological repository and borehole disposal routes; transportation infrastructure and methods; storage solutions; and spent fuel treatment techniques and recycling options.

Agenda item 6. Questions from the public

41. CC and UB discussed difficulties in lab scale testing when there is very little information of potentially used fuels. A lot of time is devoted to characterisation work in the early stage of the project to hone down the approach needed for the system.
42. UB stated WISARD would welcome NWS and GBN to participate in the project.

43. MJ asked how arbitrating in a scenario where WISARD and the vendor disagree with the safety aspects of their fuel choices. UB stated WISARD will not be providing guidance, majority approval will govern the decisions made.
44. BL and UB discussed the openness of the vendors in sharing information with each other. UB stated there have been no issues so far, much of the data is already accessible or 'informed approximations' can be made with participants input rather than sharing sensitive information.
45. UB stated that the project is part of the Organisation for Economic Co-operation and Development, but that information on the project side can only be shared with the NEA and other signatories on the project.
46. UB and PH discussed how WISARD could support public confidence – with UB hoping WISARD can be involved in working on more open projects with more public engagement.
47. Tim Knowles argued that there was a democratic deficit with the private nature of this project, questioning why the information could not be shared with the public. UB stated there is information in the public domain, but that with the concepts in an early stage, details are not in a state where they can be shared. DL stated that concepts are not by any means finalised, and that this work can inform the vendors on how to prepare their designs such that it is better developed when it can be shared. MK pointed to similarities with the Rolls Royce SMR GDA process, with information not fully in the public domain to protect novel technology.
48. CC highlighted that understanding on some of the AMR technology types may take decades to develop.
49. On funding, a lot of start-ups will need venture capital funding to stay afloat, but there is EU commission funding (with vendors needing to comply with their waste considerations).