

TASK GROUP 5 NEW BUILD WASTES WORKPLAN 2009-10

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Scope of Group's Work

1. Task Group 5 (TG5) covers conditioning, packaging, interim storage and geological disposal of ILW and spent fuels from new build power stations, and related R&D. CoRWM's interest in new build higher activity wastes (HAW) has three aspects. One aspect is planning for the long-term management of the new build HAW, if such wastes are created. Another aspect is the potential interactions between the long-term management of new build HAW and that of existing and committed HAW. The third aspect is about how HAW management issues are considered in decisions on new build. CoRWM is neither for nor against new nuclear power stations.

Members of Group

2. The members of TG5 are: Marion Hill (lead), David Broughton, Margaret Burns, Mark Dutton, Fergus Gibb, Bill Lee, Lynda Warren. The other member with an interest is Simon Harley.

Tasks

3. TG5 has one specific task in CoRWM's 2009-10 Work Programme (CoRWM doc. 2515.2). This task is as follows.

Task 13: Advise on interim storage and geological disposal issues for ILW and spent fuels from new build nuclear power stations.

Deliverables

4. TG5's planned deliverables for 2009-10 are formal responses to the DECC consultations on (a) the draft National Policy Statement for new build nuclear power stations, and (b) funding arrangements for waste management and decommissioning at new build stations (paras 6-7). These responses will come from CoRWM as a whole; TG5 will do the preparatory work and take the lead in drafting and redrafting in the light of comments by all CoRWM members. In addition, CoRWM has agreed to prepare a statement of its current position on new build wastes and TG5 will lead on initial drafting of this.

5. Later in 2010 TG5 is planning to produce a position paper on new build wastes; this will be an input to the planned CoRWM Status Report to Government in October 2010 (CoRWM doc. 2635).

Context for TG5 Work

6. DECC is holding three public consultations related to new build wastes in 2009-10. One began on 10 November 2009 and is on the draft National Policy Statement (NPS) for new build nuclear power stations, including the Government's draft waste assessment (DECC, 2009a). The assessment addresses the question "whether effective arrangements exist or will exist to manage and dispose of the waste that will be produced by new nuclear power stations", a test set in the 2008 nuclear White Paper. There will be national and local stakeholder events associated with this consultation.

7. The other consultations are about funding arrangements for waste management and decommissioning at new build stations. DECC has already published three discussion papers on various aspects of these arrangements (DECC, 2008, 2009b, 2009c). One

consultation will be about DECC's cost model and methodology for establishing a fixed unit price for the disposal of new build spent fuel and ILW. The other consultation will be about draft Regulations to implement funding arrangement provisions in the Energy Act 2008.

8. The NDA has carried out "disposability" assessments for new build wastes. These are for the "requesting parties", ie the companies that have asked for their power station designs to be assessed by the regulators. These companies are Westinghouse, which owns the AP1000 design, and EDF and AREVA, who own the EPR design. There are two disposability assessments, one for each reactor design. Summaries were published in November 2009 (NDA, 2009a, b). In addition, NDA has published a paper describing the scope of the disposability assessments and a position statement on its work (NDA, 2008, 2009c).

9. HSE and the Environment Agency are carrying out the Generic Design Assessment (GDA) for the AP1000 and EPR. This is the initial stage in the regulatory process and will be followed by site specific assessments of applications for nuclear site licences and for environmental permits for the disposal of radioactive wastes. HSE issued its Step 3 GDA reports on 27 November 2009 (HSE, 2009a-h). The regulators held a national GDA PSE event in December 2009. EA will hold a public consultation on its GDA work in May 2010. There has already been some regulator PSE local to prospective sites for new reactors and there will be more in future. The GDA will be completed in 2011 (HSE & EA, 2009).

10. NGOs are raising a number of questions about the management of spent fuel from new build stations. Some of these are technical questions about the storage and disposal of high burn-up fuels. Others are wider questions about the costs of spent fuel management, the health detriment to future generations and whether these are outweighed by shorter term benefits of electricity production (eg Richards, 2009).

Planned TG5 Work

11. TG5 provided informal comments to DECC on two drafts of the NPS waste assessment. These comments were only about the factual accuracy and clarity of expression in the draft documents.

12. TG5 will take the lead in preparing formal CoRWM responses to two of the 2009-10 DECC consultations, namely the consultation on the NPS and the consultation on the DECC cost model and fixed unit price methodology (paras 6-7). A CoRWM decision will be needed on whether to respond to the consultation on the draft Regulations on funding, when the consultation document is issued.

13. TG5 will review the NDA disposability assessments (para 8). We are arranging to meet the requesting parties, possibly with NDA, to discuss issues arising from them and other aspects of the management of new build ILW and spent fuel.

14. TG5 has held discussions with HSE and EA about HAW management aspects of their GDA work (para 9).

15. In order to gain wider input to its work, TG5 has invited stakeholders to provide CoRWM with information on HAW management issues for new build. We issued the invitation via the e-bulletin in October 2009.

16. TG5 intends to draft a position paper on new build wastes in May-June 2010, send it to key stakeholders for factual comment and submit it to the CoRWM plenary meeting in August 2010. The plenary meeting will be invited to approve the use of the paper as input to CoRWM's 2010 Status Report to Government.

PSE

17. TG5 does not plan to hold any PSE events in 2009-10. It will work with TG6 to scrutinise any PSE of DECC and others that is specific to long-term management of new build HAW.

Technical Support

18. TG5 has identified a possible need for support in its scrutiny of funding for the long-term management of new build wastes and its relationship to funding of the long-term management of existing and committed wastes.

Summary of TG5 Workplan

19. The following table summarises the planned work of TG5 for the second half of 2009-10, with a forward look to the first half of 2010-11. **Milestones and deliverables are in bold. Items that involve discussion at a CoRWM plenary meeting are in bold italics.**

	<i>Work Item</i>	<i>Timing</i>
1	Invite stakeholders and the public to send CoRWM information on HAW management issues for new build	October 2009
2	Meeting with HSE and EA GDA team to discuss HAW management issues	December 2009
3	<i>Initial plenary discussion on new build wastes (NPS waste assessment, disposability issues, funding long-term management)</i>	<i>December 2009</i>
4	Review NDA disposability assessments, discuss issues arising with requesting parties (and possibly NDA)	December 2009 – February 2010
5	<i>Prepare formal CoRWM response to DECC consultation on draft NPS and CoRWM statement of its current position on new build wastes</i>	<i>January – February 2010</i>
6	<i>Prepare formal CoRWM responses to DECC consultations about funding arrangements for new build waste management and decommissioning</i>	<i>February – March 2010</i>
7	Draft position paper on new build wastes	May – June 2010
8	Send draft position paper out for factual comments (to NDA, regulators, sponsors and all those who provided information)	June – July 2010
9	<i>Finalise position paper and submit to plenary</i>	<i>August 2010</i>

References

DECC, 2008. *Pre-consultation discussion paper no. 1: on a methodology to determine how the fixed costs of building a geological disposal facility should be apportioned to and shared between operators of new nuclear power stations.* Office of Nuclear Development, October 2009.

DECC, 2009a. *Consultation on draft National Policy Statements for Energy Infrastructure.* November 2009.

DECC, 2009b. *Pre-consultation discussion paper no. 2: on a methodology for establishing an indicative fixed price for the disposal of intermediate level waste and spent fuel from new nuclear power stations.* Office for Nuclear Development, January 2009.

DECC, 2009c. *Pre-consultation discussion paper no. 3: Establishing a fixed unit price for the disposal of intermediate level waste and spent fuel from new nuclear power stations – a worked example.* Office for Nuclear Development, May 2009.

HSE, 2009a. *Public Report on the Generic Design Assessment of New Nuclear Reactor Designs, Westinghouse Electric Company LLC AP1000 Nuclear Reactor. Report of the System Design and Security Review of the AP1000 Nuclear Reactor June 208 – October 2009 (Step 3 of the Generic Design Assessment Process).* November 2009.

HSE, 2009b. *Nuclear Directorate Generic Design Assessment – New Civil Reactor Build. Step 3 Radioactive Waste and Decommissioning Assessment of the Westinghouse AP1000.* Division 6 Assessment Report No. AR 09/023-P. November 2009.

HSE, 2009c. *Nuclear Directorate Generic Design Assessment – New Civil Reactor Build. Step 3 Civil Engineering and External Hazards Assessment of the Westinghouse AP1000.* Division 6 Assessment Report No. AR 09/034-P. November 2009.

HSE, 2009d. *Nuclear Directorate Generic Design Assessment – New Civil Reactor Build. Step 3 Security Assessment of the Westinghouse AP1000.* Division 5 Assessment Report No. AR 09/042-P. November 2009.

HSE, 2009e. *Public Report on the Generic Design Assessment of New Nuclear Reactor Designs, AREVA NP SAS and EDF SA UK EPR Nuclear Reactor. Report of the System Design and Security Review of the UK EPR Nuclear Reactor June 208 – October 2009 (Step 3 of the Generic Design Assessment Process).* November 2009.

HSE, 2009f. *Nuclear Directorate Generic Design Assessment – New Civil Reactor Build. Step 3 Radioactive Waste and Decommissioning Assessment of the EDF and AREVA UK EPR.* Division 6 Assessment Report No. AR 09/033-P. November 2009.

HSE, 2009g. *Nuclear Directorate Generic Design Assessment – New Civil Reactor Build. Step 3 Civil Engineering and External Hazards Assessment of the EDF and AREVA UK EPR.* Division 6 Assessment Report No. AR 09/039-P. November 2009.

HSE, 2009h. *Nuclear Directorate Generic Design Assessment – New Civil Reactor Build. Step 3 Security Assessment of the EDF and AREVA UK EPR.* Division 5 Assessment Report No. AR 09/043-P. November 2009.

HSE & EA, 2009. *Generic Design Assessment Progress Report, Reporting Period 1 July 2009 – 30 September 2009.* www.hse.gov.uk/newreactors/index.htm.

NDA, 2008. *Disposability Assessment of Solid Waste Arisings from New Build*. Radioactive Waste Management Directorate, April 2008.

NDA, 2009a. *Geological Disposal. Generic Design Assessment: Summary of Disposability Assessment for Wastes and Spent Fuel arising from Operation of the UK EPR*. NDA Technical Note no. 11261814. October 2009.

NDA, 2009b. *Geological Disposal. Generic Design Assessment: Summary of Disposability Assessment for Wastes and Spent Fuel arising from Operation of the Westinghouse AP1000*. NDA Technical Note no. 11339711. October 2009.

NDA, 2009c. *Management of Waste from New Nuclear Power Stations. Position Statement*. Radioactive Waste Management Directorate document RWMDPP01, February 2009.

Richards, H, 2009. *High Burn-up Spent Fuel: Nuclear Power's Poisoned Chalice*. Presentation to the Welsh Assembly Government Department for Environment, Sustainability and Housing, Ministerial Policy Board Meeting 9 March 2009. (Available on the WAG website.)